

INDEX of PATENTS

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1927





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CONTENTS

	Page.
Decisions Printed in the Official Gazette in 1927	3
Alphabetical List of Patentees.	5
Alphabetical List of Disclaimers	693
Alphabetical List of Inventions.	695
List of Disclaimers Arranged by Inventions	1018



DECISIONS PRINTED IN THE OFFICIAL GAZETTE IN 1927.

Appleby. Ex parte. 361 O. G. 661.

Arsem. Ex parte. 362 O. G. 645.

Au. Ex parte. 362 O. G. 44.

Baliman and Evers. Ex parte. 361 O. G. 3, 428.

Baliman and Evers. Ex parte. 361 O. G. 3, 428.

Baliman and Evers. Ex parte. 361 O. G. 3, 428.

Brewster. In re. 365 O. G. 3

Brewster. In re. 365 O. G. 3

Breyden v. Flake et al. McDill v. Flake et al. 364

O. G. 4.

O. G. 23.

Clark. In re. 359 O. G. 741.

Clark. In re. 359 O. G. 741.

Clark. In re. 359 O. G. 741.

Clark. In re. 356 O. G. 235.

Devine v. Peau. 361 O. G. 429.

Doble. In re. 356 O. G. 4.

Doble. In re. 356 O. G. 4.

Ducas v. Seymour. 364 O. G. 3.

Ex la re. 194 O. G. 513.

Fekete and Essex Motors v. Robertson, Commissioner of Patents of the United States. 358 O. G. 3.

Fine. Ex parte. 364 O. G. 511.

Foltz. In re. 359 O. G. 500.

Gay. Ex parte. 364 O. G. 1019.

Gay. Ex parte. 364 O. G. 1019.

Gay. Ex parte. 364 O. G. 237.

Hermann. 364 O. G. 247.

Hawkins. In re. 365 O. G. 230.

Herbener. In re. 355 O. G. 479.

Herbandez v. Robertson, Commissioner of Patents. 304

O. G. 247.

Hawkins. In re. 360 O. G. 230.

Herbener. In re. 355 O. G. 230.

Herbener. In re. 355 O. G. 377.

Heuser v. Welss. 364 O. G. 747.

Heuser v. Welss. 364 O. G. 747.

Heuser v. Welss. 364 O. G. 247.

Heuser v. Welss. 364 O. G. 748.

Long v. Greene. Greene v. Gray. 356 O. G. 577.

Heuser v. Welss. 364 O. G. 247.

Heuser v. Welss. 364 O. G. 247.

Heuser v. Welss. 364 O. G. 748.

Long v. Greene. Greene v. Gray. 356 O. G. 577.

Heuser v. Welss. 364 O. G. 248.

Hormann v. O. G. 249.

Hormann v.

Martin v. Gubelmann. 364 O. G. 1020. Marx v. Brown. 365 O. G. 235. Mead v. Abbott v. Gammeter v. Wilhelmi. 363 O. G. 693. Martin v. Gubelmann. 364 O. G. 1020.

Marx v. Brown. 365 O. G. 235.

Mead v. Abbott v. Gammeter v. Wilhelmi. 363 O. G.

Medd v. Abbott v. Gammeter v. Wilhelmi. 363 O. G.

Medd v. Abbott v. Gammeter v. Wilhelmi. 363 O. G.

Meyer. In re. 364 O. G. 514.

McChaire. In re. 365 O. G. 248.

McCullough. Ex parte. 355 O. G. 185.

McKay. Ex parte. 363 O. G. 891.

McLalan Stores Company v. Conrad & Company, Inc.

Moore, Ex parte. 364 O. G. 775.

Muir v. Mallory. 364 O. G. 775.

Muir v. Mallory. 364 O. G. 776.

My Own Company v. The Janszen Grocery Company.

Joyn Company v. The Janszen Grocery Company.

O'Brier v. Gonelli. 361 O. G. 5.

Olm v. Cather. 360 O. G. 499.

Overland Motor Company v. Packard Motor Car Company and Wire Wheel Corporation of America. 363 O. G.

211.

Parks. In re. 356 O. G. 752.

Parks. and Miller Ex parte. 361 O. G. 891.

Postum Cereal Company, Incorporated, v. California Fig. Nut Company, 358 O. G. 811.

Prescott and Rummier v. Michelin. 361 O. G. 4.

Reinhard. In re. 359 O. G. 247.

Reinhard. In re. 359 O. G. 247.

Sachs v. Bull. 357 O. G. 788.

Sachs v. Bull. 357 O. G. 788.

Sawyer v. Strauss. 363 O. G. 695.

Schiller and Westcott (two cases). In re. 358 O. G. 274.

Schaich. Ex parte. 363 O. G. 694.

Smither Myers. 384 O. G. 718.

Smither Myers. 384 O. G. 718.

Smither Myers. 384 O. G. 738.

Smither In re. 369 O. G. 38.

Smither In re. 369 O. G. 38.

Velander. Ex parte. 360 O. G. 369.

Stringham. Ex parte. 367 O. G. 788.

Stringham. Ex parte. 367 O. G. 789.

Velander. Ex parte. 369 O. G. 380.

Velander. Ex parte. 360 O. G. 261.

Vial and Starkey. Ex parte. 360 O. G. 261.

Vial and Starkey. Ex parte. 360 O. G. 261.

Vial and Starkey. Ex parte. 360 O. G. 261.

Vial and Starkey. Ex parte. 360 O. G. 477.

Williams v. Clemons. 365 O. G. 477.



ALPHABETICAL LIST

OF

PATENTEES FOR THE YEAR 1927.

Note.--Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Disclaimers follow in separate indexes, but precede the Alphabetical List of Inventions.

A. B. See Elevator Company. (See Jackson, Joseph R.,

jr., assignor.)

A. B. Stove Company. (See Reedy, Alfred J., assignor.)

A C Spark Plug Company. (See Champion, Albert, assignor.) C Spark Plug Company. (See Gustafson, Edwin,

C Spark Plug Company. (See Gustatson, Edwin, assignor.)
C Spark Plug Company. (See McKinley, Charles W., assignor.)
C Spark Plug Company. (See Rabezzana, Hector, as-

signor.)
A. G. Brown, Boveri & Cie. (See Trey, Karl, assignor.)
A. G. Brown, Boveri & Cie. (See Trey, Karl, assignor.)
A. G. Rir Handels- und Industriewerte Glarus. (See Niemann, Erich, assignor.)
A. G. tir Handels- und Industriewerte Glarus. (See Richter, Affred, assignor.)
A/S. Krystal. (See Isaachsen, Isak, assignor.)
A/S. Krystal. (See Isaachsen, Isak, assignor.)
Bantas Kjelerensningsmiddel Ideal. (See Lillejord, A/S. Thunes mek. Verksted. (See Hanssen, Christian M., assignor.)

Richter, Alfred, assignor.)

A/S. Krystal. (See Isaachsen, Isak, assignor.)

A/S. Thoresk Explerensuingsmiddel Ideal. (See Lillejord, A/S. Thones mek. Verksted. (See Hanssen, Christian M., assignor.)

A/S. Thones mek. Verksted. (See Hanssen, Christian M., assignor.)

Anb. Ernest F. (See Berg. W. H., Whitman, and Aab.)

Anb. Ernest F. (See Berg. W. H., Whitman, and Aab.)

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Anb. Ernest F. (See Berg. W. H., Whitman, and Aab.)

Anb. Ernest F. (See Berg. W. H., Whitman, and Aab.)

Anb. Ernest F. (See Berg. W. H., Aligning machine for connecting rods assemblies. 1,643,595; Sept. 27.

Aachener Maschinenbau-Gesellschaft m. b. H. (See Roder-Durg, Jacob, assignor)

Brown Erlectric & Manufacturing Company. Locomotive headight. 1,631,112; June 7.

Anlborg, Christian, Pittsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company. Electrode for electrolytic condensers. 1,637,328; Aug. 2.

Anlborg, Christian, Pittsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company. Insulator. 1,637,328; Aug. 2.

Anlborg, Christian, Pittsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company. Bectric switch. 1,638,905; Aug. 16.

Aalborg, Christian, Pittsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company. Oli switch and controlling mechanism. 1,632,508; Dec. 13.

Alborg, Christian, Pittsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company. Company. Electric and Manufacturing Company. Plectric switch. 1,638,905; Aug. 30.

Alborg, Christian, Pittsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company. Only and Manufacturing Company. Recrision Pritsburgh, and O. A. Colby, Irwin, Fing Company. Electric switch. 1,638,905; Aug. 30.

Albo

Albey, Charles J., Skowhegan, Me. Blower for saws. 1,623,859; Apr. 5.
Abbey, Neison D., assignor to The Etna Machine Company, Toledo, Ohio. Swaging machine. 1,617,890; Feb. 15.

Abbott, Adrian O., jr., assignor to Morgan & Wright, Detroit, Mich. Apparatus for manufacturing tire cashings. 1,618,794; Feb., 22 signor to Morgan & Wright, Abbott, Adrian O., jr., assignor to Morgan & Wright, 1,635,240; July 12. Abbott, Adrian O., jr., assignor to Morgan & Wright, Detroit, Mich. Vacuum shaping machine for straight-side tires. 1,635,241; July 12. Abbott, Adrian O., jr., assignor to Morgan & Wright, Detroit, Mich. The shaping apparatus. 1,635,242; Abbott, Adrian O., jr., assignor to Morgan & Wright, Detroit, Mich. The shaping apparatus. 1,635,242; Abbott, Adrian O., jr., assignor to Morgan & Wight, Morgan & Wight, State of the Sta

July 12.

Abbott, Adrian O., jr., assignor to Morgan & Wright, Detroit, Mich. Vacuum shaping machine for tires. 1.635,243; July 12.

Abbott, Carl M., assignor to Martin Copeland Company, Providence, R. L. Vernier-adjusting device for radio-providence, R. L. Vernier-adjusting device for radio-providence, Pittsfield, Mas, assignor to General Electric Company. Electric heater. 1,651,468; Jan. 11.

Abbott, Charles C., Pittsfield, Mass., assignor to General Electric Company. Electric heater. 1,651,661; Dec. 6.

Abbott, Charles M., Watertown, assignor to Samuel Cabot, Inc., Boston, Mass. Method and apparatus for dipping John Charles M., Watertown, assignor to Samuel Cabot, Inc., Boston, Mass. Method and apparatus for dipping John Charles M., Watertown, assignor to Samuel Cabot, Inc., Boston, Mass. Shingle-abrading machine. 1,633,563; June 28.

1.633,563; June 28.

Abbott, Chorles R., Los Angeles, Calif. Marble-polishing buffer. 1,619,961; Mar. 8.

Abbott, Earl, Goshen, Ind. Radius-rod and front-axie bracing means. 1,614,639; Jan. 18.

Abbott, Everett W., Houston, Tex. Milling tool. 1,636,032; Jun 19.

London, England. Power-transmis-Abbott, Geoffrey 37,402; Aug. 2.

Abbott, Harry L. (See Trevor, W. W., and Abbott.) Abbott, Harry L. (See Trevor, W. W., and Abbott, Harry B., Glassboro, N. J. Composition of matter adapted to be used for building materials. 1,520,312; Mar. 8.

Abbott, Henry H., New York, N. Y., assignor to American T.,637,403 aug. 1,627,403.

Abbott, John E., Spring Valley, Calif. Container for milk bottles. 1,625,138; Apr. 19.

Abbott, John E., Spring Valley, Calif. Container for milk bottles. 1,625,138; Apr. 19.

Abbott Laboratories. (See Hansen, Norman A., assignor.)

signor.)

Abbott Laboratories, The. (See Raiziss, George W., as-Abbott Laboratories. (See Raiziss, G. W., and Proskouris-

koff, assignors.)
Abbott Laboratories. (See Vliet, E. B., and Volwiler, assignors.)

Abbott Laboratories. (See Volwiler, Ernest H., assignor.)
Abbott, Lyle S., Chicago, Ill., assignor to Chicago Fire
Brick Company. Fire arch for furnaces. 1,612,795;
Jan. 4.

Abbott, Lyle S., assignor to Chicago Fire Brick Company, Chicago, III. Fire-box arch block. 1,624,198; Apr. 12. Abbott, Lyle S., assignor to Chicago Fire Brick Company, Chicago, III. Sectional fire-box arch. 1,624,199; Apr. 12.

Abbott, Lyle S., assignor to Chicago Fire Brick Company, Chicago, Ill. Fire receiving wall. 1,624,200; Apr. 12. Abbott, Robert H. (See Buchana, J. R., and Abbott, Abbott, Royal K., Cranston, assignor to Respro Inc., Providence, R. I. Artificial leather. 1,642,394;

Sept. 13.

Sept. 13.
Abbott. Walter R., Loulsville, Ky. Heating system. 1.654,396: Dec. 27.
Abbott. William E., Rochdale, and J. R. Elecy, Little-horough, assignors to George Specter Monitor & Combined C

oel, August, assignor to Atlas-Werke Pohler & Co., Leipzig-Stotteritz, Germany. Device for charging and discharging compressed air containers. 1.630.156; discharging compressed

Leipzig-Stotteritz, Germany. Device for charging and discharging compressed air containers. 1,630,155: May 24.
May 25.
May 26.
May 26.
May 27.

Abelt, Ernst, Karnap, near Essen-on-the-Ruhr, Germany, assignor to The Libbey Glass Company, Toledo, Ohio, Device for cutting glass tubes or rods. 1,624,197; Apr. 12.

Device for cutting glass tubes or rods, 1,624,197; Apr. 12.
Abendroth Brothers. (See Hansen, John, assignor.)
Abendroth, Wilhelm, Berlin-Charlottenburg, assignor to
Siemens-Schuckertwerke Gesellschaft mit beschränkter
Haftung, Berlin-Siemensstadt, Germany, Arragement
or system for the generation of steam. 1,632,575;
June 14.

Abercrombie, David T., Brooklyn, N. Y. Tent pole. 1,623,153; Apr. 5.
Abercrombie, David T., Brooklyn, N. Y. Tent. 1,623,154;

Apr. 5.
Aberle, Carl F., St. Louis, Mo. Building construction.
1,616,433; Feb. 8.
Abernathy, Lee R., Lead, S. Dak. Apparatus for the destructive distillation of oil shale. 1,618,038; Feb. 15.
Abernethy, James L., Park Rüce, and L. E. Mumbower, Chicago, Ill. Wrench. 1,627,003; May 3.
Abington Textile Machinery Trustees. (See Greenhill, Pluk E., assignor.)

assignor.)

Abington Textile Machinery Works. (See Clark, Ernest, assignor.)

Abinston Textile Machinery Works. (See Goldsmith, William H., assignor.)

Aboarab, Michael J., Brooklyn, N. Y. Pillow top. Des. 74,131. Dec. 27.

Aboal T. Dec. 12.

Aboal T. D

Abraitis, Jan. 11. Abram. Otto.

Abraitis, Tony, Detroit, Mich. Hammer. 1,614,055;
Jan. 11.

Abram. Olo. (See Foresmin, R. K., and Anna.)

Abram. Henry J., R. T. Liddicost, and F. H. Stevens.

Anna. Arbor Mich. Aerial toy. 1,618,856; Feb. 22.

Abrams, Herman, Philadelphia, assignor to Crescent Brass

Mfg. Co., Reading, Pa. Column for lighting fixtures.

Des. 73,018; July 12.

Abrams, Herman, Philadelphia, assignor to Crescent Brass

Mfg. Co., Reading, Pa. Column for lighting fixtures.

Abrams, Herman, Philadelphia, assignor to Crescent Brass

Mfg. Co., Reading, Pa. Column for lighting fixtures.

Des. 73,020; July 12.

Abrams, Herman, Philadelphia, assignor to Crescent Brass

Mfg. Co., Reading, Pa. Column for lighting fixtures.

Des. 73,020; July 12.

Abrams, Herman, Philadelphia, assignor to Crescent Brass

Mfg. Co., Reading, Pa. Column for lighting fixtures.

Des. 73,021; July 12.

Abrams, Loc. Reading, Pa. Belge arm for lighting fixtures.

Des. 73,633; Oct. 18.

Abrams, Louis G., New York, N. Y. Window screen.

1,617,316; Feb. 15.

Abrams, Samuel, and J. Neff, Chicago, Ill. Master tem-plate for laying out patterns. 1,635,300; July 12. Abrams, Solomon, Hayward, Callf. Foldable bed. 1,637,345; Aug. 2. Barramson, George A., Sherwood, Minn. Trap. 1,616,882;

Feb. 8.
Abramson, Nathan, Brooklyn, N. Y. Flashing plug. 1,619,778; Mar. 1.
Abreu, Joaquin S., San Francisco, Calif. Acroplane. O. Absolute Con-Tac-Tor Corporation. (See Phelan, Louis A. M., assignor.)
Accessories Manufacturing Company. (See Bramming, Carl, assignor.)

Accountograph Company, The. (See Schinke, Edward C.,

assignor.)
Aceves, Julius G., New York, N. Y., assignor to Crocker-Wheeler Company, Ampere, N. J. Supply circuits for radio sets. 1,622,170; Mar. 22.
Ach, Ernest M., assignor to The Samuel Ach Company, Cincinnati, Ohio. Lady's trimmed hat. 1,631,945; June 7.
Ach, Samuel, Company, The. (See Ach, Ernest M., as-

Ach, Samuel, Company, The. (See Ach, Ernest M., assignor).
According to Security (See Ach, Ernest M., assignor).
According the James T. (1972).
According the James T. (1972).
According the James T. (1972).
According to James T. (1972).
Acker, Aaron C., assignor to The Newell Mfg. Co. Inc., Ogdensburg. N. Y. Curtain-rod bracket. 1,649,275;
Nov. 15.

Ogdensburg, N. Y. Curtain-rod bracket. 1,639,275; Nov. 15.
Acker, Frederick C. (See Nill, E. A., and Acker.)
Acker, George H., assignor, to The Cleveland Worm and Gear Company, Cleveland, Ohio. Machine element.
Acker, George H., assignor, to The Cleveland Worm and Gear Company, Cleveland, Ohio. Machine element.
Ackeret, Herbert, assignor to The Massillon-Cleveland-Akron Sign Company, Massillon, Ohio. Display Stand. 1,622,711; May 3.
Ackerenan, Albert H., Chicago, Ill., assignor to Catalytic Chemical Company. Process and material for treating gasoline and hydrocarbons. 1,653,032; Dec. 20.
Ackerenan, Albert H., Chicago, Ill., Regent for treating materials containing hydrocarbons and making the same. 1,654,154; Dec. 27.
Ackerman, Albert H., Chicago, Ill., assignor to Catalytic Chemical Company, Denver, Colo. Reagent for treating materials containing hydrocarbons and making the same. 1,654,154; Dec. 27.
Ackerman-Blaesser-Fezzey, Inc. (See Ackerman, Edward L., assignor).

the same. I,654,155; Dec. 27.
Ackerman-Blaesser-Fezzey, Inc. (See Ackerman, Edward L., assignor.)
Ackerman-Blaesser-Fezzey, Inc. (See Ackerman, E. L., and Zwierina, assignors.)
Berney C., and Zwierina, assignors.)
Edward L., assignor.)
Ackerman, Chester W., Bainbridge, assignor of two-fifths to R. L. Russell and one-fifth to H. J. Thrasher, Chardon, Ohio. Fuel-supply tank. 1,653,607; Dec. 27.
Ackerman, Edward L., Romeo, assignor to Ackerman, Edward L., and A. Zwiersina, assignors to Edward L., and L., Edwinson, Edward L., and L., Edward L., assignor to Ackerman, Edward L., and L., Detroit, Mich. Clutch device. 1,651,052; Nov. 29.
Ackerman, L., 651,052; Nov. 29.
Ackerman, George W., New York, N. Y., Grille. Des. 73,769; Nov. 8.
Ackerman, Hannibal R., Merrill, Wis. Snagless fishhook. 1,620,758; Mar. 8.
Ackerman, Frank, and H., Gould, New York, N. Y., Adjustable leather-strip cutter. 1,622,725; Mar. 29.
Ackermann, Frank, and H., Gould, New York, N. Y., Adjustable leather-strip cutter. 1,622,255; Mar. 29.
Ackermann, Frank, and H., Gould, New York, N. Y., Adjustable leather-strip cutter. 1,622,255; Mar. 29.
Ackermann, Frank, and H., Gould, New York, N. Y., Adjustable leather-strip cutter. 1,622,255; Mar. 29.
Ackermann, Frank, and H., Gould, New York, N. Y., Adjustable leather-strip cutter. 1,622,255; Mar. 29.
Ackermann, Frank, and H., Gould, New York, N. Y., Adjustable leather-strip cutter. 1,622,255; Mar. 20.
Ackermann, Google George On-the-Rhine, Germany, Leckermann, Hugo, Godesberg-on-the-Rhine, Germany.

Ackermann, Gustave A., Chicago, fil. Die. 1,680,314; Nov. 22.
Ackermann, Hugo, Godesberg-on-the-Rhine, Germany. Charger for presses. 1,652,383; Dec. 13.
Ackermann, Hugo, Godesberg-on-the-Rhine, Germany. Dricks, or the like. 1,652,884; Dec. 13.
Ackers, Arthur E. (See Lousdule, George L., assignor.) Ackley, Amos. (See Plum, S. H., 2d, and Ackley, Ackley, Charles S., Brooklyn, N. Y. Device for placing waves in hair. 1,652,761; Dec. 13.
Ackley, Raymond E., assignor to R. R. Donnelly & Sons Company, Chicago, Jil. Mechanism for printing book Company, Chicago, Jil. Mechanism for printing book Ackley, Raymond E., assignor to R. R. Donnelly and Sons Company, Chicago, Jil. Book binding and covering machine. 1,642,866; Sept. 20.
Ackroyd. Charles, Los Angeles, Calif. Trammel. 1,017,602; Feb. 15.
Ackley, Raymond Charles, Los Angeles, Calif. Trammel. 1,017,602; Feb. 15.
Acker Charles, Los Angeles, Calif. Trammel. 1,017,602; Feb. 15.
Acme Card Company. (See Wright, William E., assignor.) Acme Card System Company. (See Clark, William C., assignor.)

Acme Card System Company. (See Johnston, Frank H., assignor.)
Acme Clutch Company. (See Geist, Walter, assignor.)
Acme Devices Corporation. (See Sibley, Wesley B., as-

Acme Devices Corporation. (see Siney, weary B₁₁, assignor.).

Acme Knitting Machine & Needle Company. (See Murphy, G., and Simond, assignors.)

Acme Knitting Machine & Needle Company. (See Stroud, P. G., and Simond, assignors.)

Acme Machine Products Company. (See Munger, Barl A., assignor.)

Acme Machinery Company, The. (See Smith, Charles E., assignor.)

assignor.)
Acme Partition Company. (See Grant, W. C., Thomas, and Drew, assignors.)
Acme Printing Appliance Co., The. (See Daane, Arthur J., assignor.)
Acme Products Company. (See Logan, William B., as-

Acme Rayon Corporation, The. (See Huttinger, Charles A., assignor.)
Acme Road Machinery Company. (See Cookinbam, Ed-

Acme Road Machinery Company. (See Cookinham, Edward F., assignor.)
Acme Wire Co., The. (See Archer, Harry W., assignor.)
Acme Wire Co., The. (See Date, Oswald, assignor.)
Acosta, Joseph W. L., San Francisco, Calif. Vacuum
Acosta, Manuel. (See Burke, C., and Acosta, Januel. (See Burke, C., and Acosta, Calif. Vacuum
Acting Machiner, Company, Com

Acurso, Joseph, fr., Visalis, Calit. Refrigerator dispuscase. 1,612,790; Jan. 4.

Acushnet Process Company. (See Young, Philip E., assignor). Omms D., fr., Quincy, Mass., assignor to Standard Thermometer Company. Portland, Me. Speedometer-fastening means. 1,622,897; Mar. 29.

Adair, Thomas D., fr., Dorchester, assignor, by meane assignments, to L. L. Elden, Brookine, and D. S. Boyden.
Boston, Mass. Transformer. 1,634,440; July 6.

Boston, Mass. Transformer. 1,634,440; July 6.

Silp. 1,641,467; Sept. 6.

Adair, William E., Milwaukee, Wis. Vehicle headlight.
1,652,494; Dec. 13.

Adam, Aifred G. Slox City, Low. Electrical swivel
Adam, Harry C. S. Cuts, Mo. Crystal detector.
1,633,059; June 21.

Adam, Nell. (See Gail, J. B., and Adam.)

Adams, Arthur H., La Grange, Ill. Playing ball and
making same. 1,641,144; Sept.

Adams, Same. 1,641,144; Sept.

Adams, Arthur H., La Grange, Ill., assignor to Western
Electric Company, Incorporated, New York, N. Y.

Strand-working machine. 1,618,402; Feb. 22.

Adams, Arthur H., La Grange, Ill., assignor to Western
Electric Company, Incorporated, New York, N. Y.

Strand-working machine. 1,618,402; Feb. 22.

Adams, Asthur H., La Grange, Ill., assignor to Western
Electric Company, Incorporated, New York, N. Y.

Strand-working machine. 1,618,402; Feb. 22.

Adams, Ash, assignor to Lamore Tile Machine Company.

Company. Swiveling chair. 1,637,846; Aug. 2.

Adams, Ash, assignor to Lamore Tile Machine Company.

Chilles Company. Incorporated, New York, N. Y.

Adams, Schward H., Penumatic core for block ma
Adolf, assignor.)

Adams, Edward M., Lennoxville, Quebec, Canada. Pulley.

1,641,614; Oct. 4.

Adams, Edward T., Beloit, Wis., assignor to Fairbanks,

Morse & Co., Chicago, Ill. International Motor Com
pany, New York, N. Y. Mechanical motion. 1,617,832;

1,632,642; Feb. 22.

Adams, Edward T., Beloit, Wis., assignor to Fairbanks,

Morse & Co., Chicago, Ill. Internal motion. 1,617,832;

1,641,614; Oct. 4.

Adams, Gleward T., Beloit, Wis., assignor to Fairbanks,

Morse & Co., Ch

Adams, philabeth B. (Sec. Antonio, Tex. Concrete, mortar, and plaster mixer. 1,624,705; Apr. 12.

Adams Grease Gun Corporation. (See Richmond, Jesse P., assigno

assignor: Jury E. assignor to The W. G. Nagel Electric dams, Hiry E. assignor to The W. G. Nagel Electric Adams, T. Toledo, Oilo. Rheastat. J. Jils. 897: Mar. 1. Adams, Harry E. and H. L. Decker, assignors to The W. G. Nagel Electric Company, Toledo, Ohio, Control means for liquid-level indicators. 1.649.885: Nov. 22.

Adams, Henry, Plainfield, N. J. Method and apparatus for fuel burning. 1,603,509; May 31. Adams, Henry T., Chicago, Ill. Ring book. 1,639,361; Aug. 16. Adams, John B., et al. (See Atkinson, Howard, assignor.)

Aug. 16.

Adams, John B., et al. (See Atkinson, Howard, assignor.)

Adams, John B., Berhampore, Wellington, New Zealand,

Buoyant wearing apparel for swimming or life-saving

purposes. 1.629,429; May 17.

Adams, John B., assignor to B. Egley, Wellington, New

Zealand. Life belt. 1,625,971; Apr. 26.

Adams, John W. (See Brandes, P. H., and Adams.)

Adams, John W. (See Brandes, P. H., and Adams.)

Boston, Mass. Brush. 1,618,742; Feb. 22.

Adams, Julias F., deceased, Pittburgh, Par, A. A. Lauer,

administratrix. Gas heater. Des. 71,772; Jan. 4.

Adams, Leonard, Buffalo, N. Y. Telescoping radio loop or antenna. 1,642,350; Sept. 13.

Adams, Lloyd S., et al. (See Bobbitt, Conrad E., assignor.)

Adams, Louis M. (See Goff, Jess, assignor.)

Adams, Louis M. (See Goff, Jess, assignor.)

Adams, Louis M. (See Burlingham, Mr., and Lovell, Burlingham, Inc. (See Burlingham, W., and Lovell, assignors.)

Adams, Morton L., Seattle, Wash. Lubricator. 1,619,779;

Mar. 1.

Adams Multiple Air Turbine Corporation. (See Adams, Omer T., assignor.)

Gee Fuller, T. S., and Adams.)

Adams, Nathan H., Schenectady, N. Y., assignor to General Electric Company. Fabricating thermoelectric units. 1,618,743; Feb. 22.

Adams, Nathan H., Schenectady, N. Y., assignor to General Electric Company. Thermoelectric generator. 1,618,744; Feb. 22.

eral Electric Company. Thermoelectric generator. 1,618,744; Feb. 22.
Adams, Nathan H., Schenectady, N. Y., assignor to General Electric Company. Thermoelectric generator. 1,618,745; Feb. 22.
Adams, Nena M., Chicago, Ill. Hair wrapper. 1,633,507; June 21.
Adams, Omer T., assignor to Adams Multiple Air Turbine Corporation. Los Angeles, Calif. Wind motor. 1,633,459; July 10.
App. 5.
Adams, Salabh M., Sidney, Nebr. Weeding machine.

Apr. 5.
Adams, Ralph M., Sidney, Nebr. Weeding machine.
1,647,680; Nov. 1.
Adams, Reed, Detroit, Mich. Printing press. 1,633,584;
June 28.
Adams, Robert, assignor to B. C. Wilson. Los Angeles,
Calif. Self-closing tongs. 1,647,977; Nov. 8.
Adams, Robert, assignor to W. W. Wilson. Los Angeles,
Calif. Multiple-size tongs. 1,625,551; Dec. 13.
Adams, Adams, Decadate, R. I. Roofing shingte.
1 282,240. 1,11719.

geles, Cailf. Multiple-size tongs. 1,682,551; Dec. 13.
Adams, Robert B., Lonsdale, R. I. Roofing shingle.
1,636,548; July 19.
New York, N. Y. Removing shine
and gloss from worn fabric. 1,656,412; Nov. 22.
Adams, Roger, J. M. Davidson, Urbana, Ill., and I.
Gubelmann, South Milwaukee, assignors to The Newport Company, Carroliville, Wis. Preparing nitroamino
benzoyl o-bezzoic acid and its derivatives. 1,614,584; benzoyl Jan. 18.

benzoyl o-benzole acid and its derivatives. 1,614,584; Jan. 18.

Adams, Ross W. (See Anderson E., and Adams.) Adams, Soren S., Asbury Park, N. J. Folding ornament. Adams, Soren S., Asbury Park, N. J. Folding ornament. Adams, Soren S., St. Louis, Mo. Manufacturing automobile license plates. 1,629,494; May 24.

Adams, Thomas, Sheboygan, Wis. Safety device for wringers. 1,624,706; Apr. 12.

Adams, Thomas C., assignor to The McClintock Complete of the Complete o

assignor.)

assignor.)

Adams White Brush Co. (See Adams, Joseph, assignor.)

Adams, Wilbur C. (See De Groote, M., and Adams.)

Adams, William G., Roanoke, Va. Safety razor. 1,617,189;

Feb. 8.

Adams, William G., Roanoke, Va. Safety razor.

1.653,081; Dec. 20.

Adams, William H., Renyon, R. I. Induction coil for radio apparatus. 1,640,172; Aug. 23.

Adams, William H., assignor to Eastern Finishing Works.

May Senyon, R. I. Frinted fabric. Des. 72,539;

May Senyon, R. I. Printed fabric. Des. 72,539;

Adams, William H., assignor to Western Flostric

May 3.

Adams, William J., Jr., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric-current transmission. 1,616,162; Feb. 1.

Adams, William J., Irvington, N. Y., and A. Haddock, East Orange, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Shielding and balancing means. 1,624,469; Anr. 12.

Adams, William S. (See Cole, C. M., and Adams.)

Adamsky, Cornelius, Circlinatt, Ohlo. Book or pamphlet trimming device. 1,635,165; July 2.

Adamsky, Callan A. (See Fairchild, E. E., Adamson, and Morley)

Adamson, Allan A., assignor to G. H. Harris, Rochester, N. Y. Cigar box. 1,621,704; Mar. 22. Adamson, Allan A., assignor to G. H. Harris. Rochester, N. Y. Manufacture of cigar boxes and the like.

Manufacture of ciga. 1,638,719; Aug. 9. Adamson, Acthur R., Los Angeles, Calif. Shredding ma-chine. 1,629,138; May 17.

Adamson, Charles E., Muncle, assignor of one-half to J. S. Renner, Huntington, Ind. Self-heating sadiron. 1.636,162; July 19. Adamson, Kelth F., Fort Bragg, N. C., and H. J. Symbaugh, Troy, N. Y. Automatic gun. 1,648,469; Adamy, Arthur L., Reed City, Mich. Railroad tie. 1.645.514; Oct. 18. Adco, Limited. (See Richards, E. H., and Hutchinson, Adeo, Limited. (See Numerus, assignors.)
Addicks, Diedrich C., Ragland, Ala. Disintegrating machine. 1,643,938; Oct. 4.
Addie. Thomas H., Philadelphia, Pa. Plug cock.
1,623,062; Mar. 15.
Add-Index Corporation. (See Broman, Charles E., as-

Add-Index Corporation. (See Broman, Unaries E., assignor.)
Addis, Wendell A., assignor to Greenfield Tap and Dic Corporation, Greenfield, Mass. Centerless grinding machine. 1.616.236; Feb. 1.
Additon. Forrest, Flowery Branch, Ga. Wardrobe. 1.647,031; Oct. 25.
Addieburg, James T. and L. M. Fox, Greeneville, Tenn. Addeburg, James T. and L. M. Fox, Greeneville, Tenn. Addressograph Company. (See Duncan, Joseph S., as-Addressograph Company. (See Duncan, Joseph S., as-

Addressograph Company. (See Duncan, J. S., and Hubbard, assignors.)

Addressograph Company. (See Hubbard, Henry E., as-

signor.)
Adduci, John B., Boston, Mass. Shock absorber.
1,640,340; Aug. 30.
Adelmann, Hans, assignor to Ham Boiler Corporation,
New York, N. Y. Ham boiler. 1,613,131; Jan. 4.
Adducin Addenment.
Ader. Nelville J., Port Arthur, Tex. Trousers-pocket
construction. 1,618,039; Feb. 15.
Aderer, Adolph, Los Angeles, Calif. Traffic signal for
motor vehicles. 1,614,766; Jan. 18.
Aderer, Hugo, East Orange, N. J. assignor to J. F.
Jelenko & Co., New York, N. Y. Fracture splint.

Aderer, Adolph, Los Angeles, Calif. Traffic signal for motor vohicles. 1,614,766; Jan. 18.

Aderer, Hugo, East Orange, N. J., assignor to J. F. 1,628,005; Aug. 9.

Adie, Harry P., and P. Gilpin, Cleveland, Ohio. Motor. 1,628,005; Aug. 9.

Adie, Harry P., and P. Gilpin, Cleveland, Ohio. Motor. 1,628,005; Apr. 19.

Adkins, George, Carnegle, Okla. Trailer hitch. 1,617,283; Feb. 8.

Adkins, John J., Southport, N. C. Back brush. 1,628,023; Adkins, John J., Southport, N. C. Back brush. 1,628,023; Adkins, John J., Southport, N. C. Back brush. 1,628,023; Adkins, John J., Southport, N. C. Back brush. 1,628,023; Adkins, John J., Southport, N. C. Back brush. 1,628,023; Adkins, John J., Southport, N. C. Back brush. 1,628,023; Adkins, John J., Southport, N. C. Back brush. 1,628,023; Adkins, John J., Southport, J. C. Lander, J. Lander

Jan. 11.

Adler, Stephen R., New York, N. Y. Lubricating composition and making the same. 1,536,376; July 26.

Aller, Victor E., Los Angeles, Calif. Ring for a banjo.

Aller, E. Los Angeles, Calif. Ring for a banjo.

Aller, E. Los Angeles, Calif. Ring for a banjo.

Aller, Stephen S., New Brighton, Pa. Circular saw. 1,619,736; Mar. 1.

Adolph Carl F., London, assignor to New Wilson Electrical Manufacturing Co. Ltd., London. England.

Manueto-microphonic relay. 1,647,329; Nov. 1.

Adregen S. Divlore, Buffalo, N. Y. Water motor.

Adrena Maschinenbauges m. b. H. (See Krell, Joseph, assignor.)

ssignor.)
an Corporation, The. (See Lowe, Jacob J., as-Adrian signor.)
Adrian Corporation, Inc., The. (See Adrian, Matthew B.,

assignor.)
Adrian, Matthew B., Milwaukee, Wis. X-ray machine,
1.619,992; Mar, 8.
Adrian, Matthew B., assignor to The Adrian Corporation,
Inc., Milwaukee, Wis., Method and apparatus for X-ray
work, 1.642,916; Sept. 20.
Adriance Machine Works, Inc., (See Ross, Hugh M., asSigner), also G. Attanta, Gr., assignor, to W. L. Chen.

Adsit, Charles G., Atlanta, Ga., assignor to W. J. Cum-mings, Chicago, III. Drive for automotive vehicles, 1,652,083; Dec. 6.

y, Pater-10

Adsit, George, assignor to B. Eastwood Company, Paterson, N. J. Quilling machine. 1,627,820; May 10. Adsit, George and D. Davis, assignors to Benjamin Eastwood Company, Paterson, N. J. Winding machine. 1,647,681; Nov. 1.
Adt. John B., Company. (See Zeun, Louis H., assignor.) Advance Machine Company. (See Antoine, A. D., and Gehet, assignor.) Advance Parcholite Company. (See Richardson, M. H., and Gehett, assignors.)

Advance-Rumely Company. (See Krenzke, John G., assignor.)
Advance-Rumely Company, The. (See Mainland, J., and Nyberg, assignors.)
Advance-Rumely Company. (See Secor, John A., as-

signor.)
Advance-Rumely Company. (See Worthington, Wayne H.,

assignor.)
Advertising Samplers, Inc. (See Hamel, William W., assignor.)
Aeolian Company, The, (See Dunham, Franklip G., as-

signor. signor.) Aeolian Company, The. (See Starkle, John W., assignor.) Aeolian Company, The. (See Volare, Fred, assignor.) Aerial Service Corporation. (See Mummert, Harvey C.,

Aerial Service Corporation. (See Mummert, Harvey C., assignor.)
Aerial Service Corporation. (See Mummert, H. C., and Meade, assignors.)
Aeromarine Plane and Motor Company. (See Chilton. Rolind, assignor.)
Aeromator Company. (See Scholes, Daniel R., assignor.)
Aeromator Company. (See Scholes, Daniel R., assignor.)

ero toy & Manufacturing Co. (See Lunz, Franz, assignor.)

erovox Wireless Corporation. (See Siegel, Samuel, assignor.)

signor.)
Aerovox Wireless Corporation. (See Siegel, Samuel, assignor.)
Aetna Automatic Oil Burner, Incorporated. (See Scheminger, John. Jr., assignor.)
Aftel, Herman A., Maplewood, N. J., assignor to American Checken and Telegraphy 1, 612, 848. Jan. 4.
Aftel, Herman A., Maplewood, N. J., assignor to American Telephone and Telegraph Company. Multiplex Helphone and Telegraph Company. Ostarier telegraph system. 1, 617, 934. Feb. 15.
Aftel, Herman A., Maplewood, N. J., assignor to American Checken and Checken School Company. Distribution of intelligence. A62, 2777. Jun. 2.
Aftel, Herman A., Maplewood, N. J., and R. W. Denrdorff. Kensington, Calif. assignors to American Telephone and Telegraph Company. Multiplex telegraphy by plase discrimination. 1, 617, 936. Feb. 15.
Aftel, Herman A., Maplewood, N. J., and R. W. Denrdorff. Kensington, Calif. assignors to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 438; Oct. 25.
Aftel, Herman A., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 438; Oct. 25.
Aftel, Herman A., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 648; Oct. 28.
Aftel, Herman A., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 6489; Oct. 28.
Aftel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 6489; Oct. 28.
Aftel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 6489; Oct. 28.
Aftel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 6489; Oct. 28.
Aftel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 6489; Oct. 28.
Aftel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Harmonic generator. 1, 646, 6489; Oct. 29.
Aftel, Herman A., Ridgewood, N. J., ass

Age, George S., Longview, Wash. Vine inter. 1,026,412; May S.
Agersdörfer, Fritz Chrilotienburg, Germany. Rotary
1,226,116; Apr. 26.
Actiow. Harry, New York, N. Y., assignor to The New
York Lighting Fixture Mrg. Co. Chandeller. Des.
72,053; Feb. 22.
Aglow, Harry, New York, N. Y., assignor to The New
Polite. The Co. Lighting-fixture backplate. Lighting Fixture Mrg. Co. Lighting-fixture backRelation of the Co. Marry, New York, N. Y., assignor to Arteraft
Metal Stamping Corporation. Lighting fixture. Des.
72,055; Feb. 22.
Aglow, Harry, New York, N. Y., assignor to The New
York Lighting Fixture Mrg. Co. Chandeller. Des.
72,077; Mar.
Aglow, Harry, New York, N. Y., assignor to The New
York Lighting Fixture Mrg. Co. Lighting-fixture backplate. Des. 72,078; Mar. N. Y. Mcchanically-operated
Grapher, Des. 72,078; Mar. N. M. Mcchanically-operated
Grapher, Des. 76,148,001; Sept. 20.
Agnew, Anne E., Seattle, Wash. Candle. Des. 73,770;
Nov. 8.

Agnew, Anne E., Seattle, Wash. Candle. Des. 73,771; Agnew, Anne E., Seattle, Wash. Candle. Des. 73,772;

Agnew, Anne E., Scattle, Wash. Candle. Des. 73,772; Nov. 8.

Agnew, Francis E., Huntington Park, assignor to M. A. Barberton, Santa Barbern, Calif. Centrifugal impact pulverizer. 1,835,453; July 12.

Agnew, Francis E., Los Angeles, assignor to M. A. Brotherton, Santa Barbara, Calif. Centrifugal impact pulverizer. 1,636,033; July 19.

Agnew, James G., and R. K. Pond, assignors, by mesne assignments, to F. L. Olmsted, trustees, Annapolis, Md. Badge or similar article. Des. 72,339; Apr. 8.

1,641,245; Sept. C. Langer, C. L. Prult-pressing machine. 1,641,245; Sept. C. Lane, Atlanta, Ga. Printing-press attachment. 1,644,388; Nov. 1.

Agrillo, John, and J. Daly, San Jose, Calif. Vehicle wheel the Langer of the Company of t

A'Hearn, Frank M., and E. F. Richardson, Greenville, Pa. Wheel machining apparatus . 1,837,391 Aug. 2. Abl. Niels K., Philadelphia, Pa. Vegetable silicer. 1,636,583; July 19. Ahlberg, Alfred, Indianapolis, Ind. Stove. 1,655,532 : Dec. 20.

Ahlburg, Frank, et al. (See Gilmore, Forrest E., assignor.)

signor.)
Ahlburg, Frank, Los Angeles, Calif. Process of and apparatus for coating articles. 1,618,159; Feb. 22.
Ahles, Albert P., assignor to Fort Stanwix Tool and Die Co., Rome, N. Y. Foldable stool. 1,652,922; Dec. 13.
Aligren, John H., Los Angeles, Calif. Massage apparatus. 1,612,899; Jan. 4.
Aligren, John M., and J. V. Bretaud. assignors to American Rubber Products Company, Detroit, Mich. Molding apparatus. 1,630,157; May 24.
Ahlheim, Peter, St. Louis, Mo. Bake oven. 1,636,795; July 20.

Ahlm, Chabination Charles E. F., Cleveland Heights, Obio. Com-tion railroad car and power unit. 1,613,864;

Ablim, Charles E. F., Cleveland, Ohio. Transmission gearing. 1,634,6468; June 28.

Alim, Charles E. F., Cleveland, Ohio. Transmission gearing. 1,634,6468; June 28.

Ablim, Charles E. F., Cleveland, Ohio. Transmission gearing. 1,634,168; June 28.

Alim, Charles E. F., Cleveland, Ohio. Transmission gearing. 1,634,168; June 28.

Ablim, Charles E. F., assignor to Automotive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., assignor to Automotive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., assignor to Automotive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., assignor to Automotive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., assignor to Automotive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., assignor to Automotive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., East Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., East Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., East Cleveland, Ohio. Transmission gearing. 1,620,857; Mar. 15.

Ablim, Charles E. F., East Cleveland, Ohio. Transmission gearing. 1,620,858; Mar. 25.

Ablim, Charles E. F., East Cleveland, Sassignor to Automotive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,627,638; Mar. 25.

Ablim, Charles E. F., Minneapolis, Minn. Ablim, Barthelment for containers. 1,647,009; Oct. 25.

Ablim, Charles E. F., Minneapolis, Minn. Assignor to Gawonetive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,627,638; Mar. 25.

Ablim, Charles E. F., Minneapolis, Minn. Assignor to Gawonetive Patent Holding Company, Cleveland, Ohio. Transmission gearing. 1,627,638; Mar. 25.

Ablim, Charles E. F., Minneapolis, Minn. Assignor to Gawo

Ablvin, John E., Joliet, Ill. Edge planer. 1,639,420;

Aug. 16. M., New York, N. Y. Glider. 1,644,623; Oct. 4.

Oct. 4.

Abrendts, George R., assignor to The Atlas-Globe China Company, Niles, Ohio. Plate or similar article. Des. 73,219; Aug. 9.

Abrendts, George R., assignor to The Atlas-Globe China Company, Niles, Ohio. Casserole. Des. 73,220; Aug. 9.

Abrendts, George R., assignor to The Atlas-Globe China Company, Niles, Ohio. Sugar bowl or similar article. Des. 73,221; Aug. 9.

Abrendts, George A., assignor to The Atlas-Globe China Company, Niles, Ohio. Pitcher. Des. 73.222: Aug. 9. Ahrendts, George R., assignor to The Atlas-Globe China Company, Niles, Ohio. Casserole or similar article. Des. 73.465; Sept. 20.
Ahrendts, George R., assignor to The Atlas-Globe China Company, Niles, Ohio. Cup or similar article. Des. 73.649; Oct. 4.
Alchele, Ernest, Lighton, N. J. Electrical circuit breaker Alchele, Ernest, Light, 132. (11.
Aichele, Ernest, Light, 132. (11.
Aichele, Ernest, Irvington, N. J. Composition of matter. 1.648.109; Nov. 8.
Alchele, Ernest, Irvington, assignor of one-half to O. Kuhn, A. G. Birkenmeler, and J. Becker, Newark, N. J. Repeating electrical-circuit interrupter. 1,614.223; Jan. 11.

Alchele, Ernest, Irvington, assignor of one-half to O. Kuhn, A. G. Birkenmeler, and J. Becker, Newark, N. J. Repeating electrical-circuit interrupter. 1,614,223; J. Belen and J. Becker, Newark, N. J. Repeating electrical-circuit interrupter. 1,614,223; J. Belen and J. Belen and

Sept. 13.

Alnsworth. Chester D., Wollaston, assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass. Electrically-operated switch. 1.650.172; Nov. 22.

Alnsworth Manufacturing Company. (See Potter, Albert T., assignor.)

Aird, Clarence W., See Riches, C. H., and Aird, Alrd, Clarence W., assignor to The Brantford Oven & Rack Co. Limited Brantford, Ontario, Canada. Oven. 4, 1635.592; July 12.

Airo, Sally, assignor to The Manufacturing Company, Detroit, Mich. Wall bracket for a lighting fix-party of the Company, Detroit, Mich. Wall bracket for a lighting fix-party of the Company, Detroit, Mich. Beam-light fixture. Des. 72,125; Mar. 8, 41r Reduction Company. (See Kühni, Hans, assignor.)

nany, Detroit, Mich. Beam-light nature. Des. 16,126, Mar. S.
Air Reduction Company. (See Kühni, Hans, assignor.)
Air Reduction Company. (See Van Nuys, Claude C., as-

signor.)
Air Reduction Company. (See Walker, George L., assignor.) r Reduction Company. (See Wilkinson, Walter, as-Air

Air Reduction Company, The, (See Morley, Earl M., assignor.)
Air-Scale Company, The, (See Burney, Charles D., assignor.)
assignor.)
assignor.)

Airship Guarantee Company. (See Wallis, Barnes N.,

Alriship Guarantee Company. (See Wallis, B. N., and Burney, assignors.) Alriship Guarantee Company Limited. (See Burney, Charles D., assignor.) Alriubler (Corporation. (See Anderson, Arvid E., as-

Alruibher Corporation. (See Kennedy, William, assignor.)
Alruibber Corporation. (See Kennedy, William, assignor.)
Alruibber Corporation. (See Kennedy, William, assignor.)
Alrichison. Peter. New Rochelle. assignor to American
Bank Note Company, New York, N. Y. Paper-wetting
machine. 1,653.610. Dec. 27.
Altelli, Silvio M., Newark, N. J. Envelope. 1,640.687.
Aug. 20.
Alax Ellectric Hammer Corporation. (See Brumell,
Henry P., assignor.)

Ajax Electric Hammer Corporation. (see Brumen, Henry P., assignor.) Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.) Ajax Spring Stabilizer Company. (See Schlesser, Fred,

Ajax Trucks Limited. (See Kimber, Walter E., assignor.)

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Akashi, Kazue, Tokyo, Japan. Beam compass. 1,619,392; Akacui, Manada Mar. I. Mar. I. Ake, Clarence J., Vallejo, Calif. Device for the atomiza-tion and injection of liquids. 1,622,266; Mar. 29. Åkerlind, Hilmer G. A. (See Thunberg, E. J., and Akerlind.) kers, Ernest, C. C. Mims, F. L. Moutray, and L. P. Miller, Huntsville, Tex. Oil-saving device. 1,626.494; Akers, Ers Miller, H Akers, Ernest, C. C. Mims, F. L. Moutray, and L. P. Miller, Huntaville, Tex. Oil-saving device. 1,626.494; Apr. 26.
Akers, Johnny G. C., Wallace, Nebr. Amusement device. 1,654,281; Dec. 27.
Akers, Johnny G. C., Wallace, Nebr. Amusement device. 1,654,281; Dec. 27.
Akers, Milton K., assignor to The Hobart Manufacturing Company, Troy, Ohio. Hopper for coffee grinders or the like. Des. 72,349; Apr. 6.
Akers, Milton K., assignor to The Troy Metal Products Company, Troy, Ohio. Frame for food mixer. Des. 73,464; Sept. 20.
Akita, Norman B., Wilmington, N. C., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car Truck. 1,650,174; Nov. 22.
Akitt, Norman B., Wilmington, N. C., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,650,174; Nov. 22.
Akitt, Norman B., Wilmington, N. C., assignor to The Truck. 1,650,175; Nov. 22.
Akron Metallie Gasket Company, The. (See Kinzel, Arch H., assignor.)
Akron Rubber Mold and Machine Company. (See Michelson, Albert S., assignor.)
Akron Standard Mold Company, The. (See Fleiter, A. J., and Miller, assignors.)
Akron Standard Mold Company, The. (See Glevin, Wade S., Akron Metaller and Mold Company. (See Galvin, Wade S., Akron Metaller Mold Company.) assignor.) Akron Standard Mold Company, The. (See Greer, Wil-Halm E. assignor.) Company, The. (See Greer, Wil-Akron Standard Mold Company, The. (See Hudson, C. B., and Bostwick, assignors.) Akron Standard Mold Company, The. (See Reichard, Harold D., assignor.) Akron Standard Mold Company, The. (See Sigler, Ward Akron Tyreelder Company, The. (See Wheelock, Herbert K., assignor). Akrond Tyreelder Company, The. (See Wheelock, Herbert K., assignor). Akroyd. Haroid A. (See Poultney, E. C., Gilling, and Akroyd.) Akridebulaget Arkos. (See Lundgren, Fridoly H., assignor.) Aktiebolaget Ars. (See Hasait, Max, assignor.) Aktiebolaget Atlas Diesel. (See Danielsson, Axel U. S., Aktiebolaget Baltic. (See Risberg, Johannes V. M., assignor. Aktiebolaget Casselvexel. (See Cassel, Gunnar E., assignor.)
Aktiebolaget Ferrolegeringar. (See Berlin, David W., as-Aktiebolaget Filmfotofon, (See Berglund, Šven O. F. Attlebonager Frimitotoon. (See Pergand, 1972)
Attlebolager Formator. (See Granstett, Erik, assignor.)
Attlebolager Formator. (See Nordenfelt, P., and Granstett, assignors.)
Attlebolager Gaematare. (See Johanson, Georg K. V., Aktiebolaget Gasmatare. (see Jonanson, veorg K. assignor.)
Aktiebolaget Gerh. Arehns Mekaniska Verkstad. (See Ekström, G. C., and Johnson, assignors.)
Aktiebolaget Gerh. Arehns Mekaniska Verkstad. (See Diskström, G. C., Öström, and Johnson, assignors.)
Aktiebolaget Karlstads Mekaniska Verkstad. (See Uligren, Johan D., assignor.)
Aktiebolaget Knappfabriken. (See Bladh, Johan A., assignor.) Aktiebolaget Ljungströms Angturbin. (See Broberg, I., Eriksson, and Sjölin, assignors.)

Aktiebolaget Ljungströms Angturbin. (See Broberg, I., Eriksson, and Sjölin, assignors.)

Aktiebolaget Ljungströms Angturbin. (See Eriksson, Aktiebolaget Ljungströms Angturbin. (See Eriksson, Aktiebolaget Ljungströms Angturbin. (See Ljungström, Fr, and Andersson, assignors.)

Aktiebolaget Ljungströms Angturbin. (See Ljungström, F., and Broberg, assignors.)

Aktiebolaget Ljungströms Angturbin. (See Ljungström, F., and Broberg, assignors.)

Aktiebolaget Ljungströms Angturbin. (See Ljungström, F., Britsson, and Broberg, assignors.)

Aktiebolaget Stille-Werner. (See Brunskog, V. H. M., and Nordin, assignors.) Akthebolaget Stille-Werner. (See Brunskog, V. H. M., and Nordin, assignors.) Akthebolaget Svenska Kullagerfabriken. (See Cassel, Akthebolaget Svenska Kullagerfabriken. (See Hultgren, A. G. B., and Thoren, assignors.) Akthebolaget Svenska Kullagerfabriken. (See Löfquist, Azel F. T., assignor.) Akthebolaget Vaporackumulator. (See Bäckström, Sigurd

M., assignor.)
Aktiebolaget Vaporackumulator. (See Constam, Ernst,

assignor.)

Aktiebolaget Vaporackumulator. (See Ruths, Johannes, assignor.) Aktiengeselischaft Brown, Boveri and Cie. (See Faber, assignor.)
Aktiengeselischaft Brown, Boveri and Cie. (See Faber, Fun, assignor.)
Aktiengeselischaft Brown, Boveri & Cie. (See Jonas, J., and Niggeler, assignor.)
Aktiengeselischaft Brown, Boveri & Cie. (See Jonas, J., and Niggeler, assignor.)
Aktiengeselischaft Brown, Boveri and Cie. (See Keller, Robert, assignor.)
Aktiengeselischaft Brown, Boveri & Cie. (See Kubler, Johnnes, assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Roebel, Ludwig, assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Wichert, Alfred, assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Wichert, Alfred, assignor.)
Aktiengesellschaft Brown, Boveri & Company. (See Brost, assignor.)
Aktiengesellschaft Brown, Boveri & Company. (See Broger, Johann, assignor.)
Aktiengesellschaft Brown, Boveri & Company. (See Broger, Johann, assignor.)
Aktieselskapet Norsk Staal Elektrisk-Gas-Reduktion. (See Edwin, Dm.), assignor.)
Aladdin Hydraulic Jack Company. (See Shevlin, Joseph F., assignor.) P., assignor.)
Aladdin Manufacturing Company. (See Sacksteder, Overton, jr., assignor.)
Alaj, Antoine L., Chicago, Ill. Combination dish and cover. 1,635,918; July 12.
Alarcon. Manuel, Gallup, N. Mex. Gymnastic toy. 1,629,945; May 24.
Alaska Pelly and Paper Company. (See Keenan, C. J., Kennedy, and Kirsch, assignors.)
Alaska Reitgerator Company, The. (See Buit, Ralph, Alaska Reitgerator Company, The. Albach, Frank, assignor to Fred Medart Manufacturing Company, St. Louis, Mo. Springboard. 1,639,323; Company, St. Louis, and Aug. 16. Albach, George F., ir., Bayonne, assignor to Schwarzenbach-Huber Co., Union City, N. J. Adjustable guide for winding machines. 1,643,914; Sept. 27 Albanese, Oreste, Boston, Mass. Locking device for motor vehicles. 1,613,637; Jan. 11. Albee, William H., assignor to B. A. Corbin & Son Company, Mariboro, Mass. Cutting machine. 1,635,166; Tally 19. Albee, Will pany, Ma July 12. Albee, William H., assignor to B. A. Corbin & Son Com-puny, Mariboro, Mass. Machine, and making box-toe blanks. 1,645,845; Oct. 18. Albee, William H., assignor to Koebler Manufacturing Company, Mariboro, Mass. Football cleat. 1,648,872;

Company, Mariboro, Mass. Football cleat. 1,648,842; Nov. 8.

Albee, William H., assignor to Koebler Manufacturing Company, Mariboro, Mass. Making football cleats to Albee, William H., assignor to Koebler Manufacturing Company, Mariboro, Mass. Applying football cleats to shoes. 1,651,572; Dec. 6.

Alben, Frank L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Centering Alben, Frank L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Drive mechanism for electric locomotives. 1,645,272; Oct. 11.

Alber, Fred C., Cleveland, Ohio. Window ventilator. 1,616,297; Feb. 1.

Alber, Walter L., Chicago, Ill. Hollow tile partition tie Albers, Henry F., Lakewood, Ohio. Supporting bracket. 1,647,330; Nov. 1.

Albershem, Walter J., and H. S. Konheim, New York, N. Y. Safety apparatus for elevators. 1,613,215; Jan. 4. N. Y. Jan. 4. Jan. 4.
Albersheim, Walter J., and H. S. Konheim, New York, N. Y. Overload stopping device for elevators. 1,613,216; Jan. 4.
Albert, August. (See Pfleger, J., and Albert). Albert, August. (See Pfleger, J., and Albert). Albert, Frank J., West New York, N. J. Device for ellminating the printing of impressions on impressions that the state of the printing of the property of the prop 1,649,643; Nov. 15.
Albertine, Herman, East Rutherford, N. J., assignor to Charles P. Rogers and Company (Inc.). Force-feed lubricating apparatus. 1,638,356; June 21.
Sistematical Company (Inc.). Force-feed lubricating apparatus. 1,638,357; June 21.
Alberts, Melvin H., Battle Creek, Mich. Traffic-gate structure. 1,638,157; Aug. 16.
Alberts, Melvin H., Chicago, III. Traffic gate. 1,689,158; Aug. 16. Alberts Mfg. Co., et al. (See Bogdonoff, Glenn, assignor.) Albersard, Joseph, Paris, France. Aeroplane. 1,627,004; May 3, Albin, Herman, St. Louis, Mo. Passenger car. 1,625,443; Apr. 19.

Albrecht, Christian A., Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Typographical composing machine. 1,625,686; Apr. 19. Albrecht, Louis C., assignor to The American Warming & Ventilation C., assignor to Handledo, Ohio. Reversible ventilation. 1,648,796; Nov. 8. Albrecht, Robert, assignor to Hamilton Beach Mfg. Co., Racine, Wis. Motor mounting. 1,617,784; Feb. 15. George B. Smart & Company, Inc., New York, N. Y. Sheet feeder. 1,618,624; Feb. 22. Albrecht, William F., Sait Lake City, Utab. Faucet. 1,635,673; July 12, Geo Engelmann, M., and Albright. Jahr. 1,635,673; July 12, Geo Engelmann, M. and Albright. Jahr. 1,635,673; July 12, Geo Engelmann, M., and Albright. Albright, Hamy I., Akron. Ohio. Device for attaching lamps to vases. 1,613,260; Jan. 4vice for attaching Electric Company, Incorporated, New York, N. Y. Method and apparatus for coating cores. 1,615,431; Jan. 25.

Jan. 25.
Albright, Victor A. T., Bedford, Ind. Mold. 1,648,651;
Sept. 27.
Alburtis, Edward W., El Dorado Springs, Mo. Animal
trap. 1,614,450; Jan. 18.
Alcaraz, Vicente M., San Juan, P. R. Closure-member
securing and bowing device. 1,622,898; Mar. 29.
Alcizax, Alcides M., Brooklyn, assignor to Meter Service
Corporation, New York, N. Y. Housing. 1,646,739;
Oct. 25.

Oct. 25. Alcock, Horace E., et al. (See Weber, Isaac E., as-

Alcock, Horace E., et al. (See Weber, Isaac E., assignor), William B., Detroit, Mich. Packing strip for
sipping materials. 1,627,223; May 3.
Aldeborgh, Erik H., assignor to Standard Gage Co., Inc.,
Poughkeepsie, N. Y. Adjustable limit-plin gage.
1,636,643; July 19.
Aldeen, Gedor W., assignor to National Lock Co., RockNov. Mil. Washing and drying apparatus. 1,647,763:
Nov. Mil.

Aldeen, Gedor W., assignor to Fyrac Manufacturing Co., Rockford, Ill. Portable windshield cutter. 1,651,353;

Dec. 6.

Aldeen, Gedor W., assignor to National Lock Co., Rockford, Ill. Hinge. 1,650,413; Nov. 22.

Aldeen, Gedor W., assignor to National Lock Co., Rockford, Ill. Latch. 1,650,414; Nov. 22.

Aldeen, Gedor W., assignor to National Lock Co., Rockford, Ill. Hinge. 1,652,509; Dec. 13.

Aldeen, Wilhelm G., assignor to National Lock Co., Rockford, Ill. Countersinking machine. 1,624,648; Apr. 12.

Aldeen, Wilhelm G., assignor to National Lock Co., Rockford, Ill. Hinge-making machine. 1,630,885; May 31.

Aldeen, Hinge-making machine. 1,630,885; May 31.

Aldeen, Herbert W., and G. Hingfred assignors to The Lompany Eptrust. 1,647,119.

1.547.115. Nov. 1.
Alden, Horbert W., and G. Hufferd assignors to The Timken-Detroit Azle Company, Detroit, Mich. Brake for automobiles. 1,631.445; June 7.
Alden, James H., Wahoo, Nebr. Price marker. 1,643.267; Sept. 20.

Sept. 20.

Alden, Milton, Springfield, Mass. Support for vacuum tubes. 1,622,267; Mar. 20.

Alden, Milton, Springfield, Mass. Electrical connecter. 1,651,660; Dec. 6.

Alden, William H., Jr., Bryn Athyn, Pa. Mail-bandling machine. 1,641,406; Sept. 6.

Aldendorff, Fritz., Wilmersdorf, near Berlin, Germany. Aldendorff, Fritz, Berlin, Wilmersdorf, Germany, assignor of one-fourth to P. Kolisch, New York, N. Y. Electromechanically-controlled telephone system. 1,625,779; Apr. 26.

mechanically-controlled telephone system. 1,020,410; Apr. 26.
Aldendorff, Fritz, Berlin-Wilmersdorf, Germany, assignor of one-fourth to P. Kolisch, New York, N. Y. Automatic switch. 1,629,646; May 24.
Aldendorff, Fritz, Wilmersdorf, near Berlin, Germany, assignor of one-fourth to P. Kolisch, New York, N. Y. Aldendorff, Fritz, Wilmersdorf, near Berlin, Germany, assignor of one-fourth to P. Kolisch, New York, N. Y. Automatic switching, 1,641,145; Sept. 6.
Alder, Vernor, Auburn, Victoria, Australia, Air-admission-control device for internal-combustion engines on motor-driven vehicles. 1,650,587; Nov. 29.
Alderdor, Walter, Brooklyn, assignor to Alfred W. 1,642,257; Sept., New York, N. Y. Metal furnace. Alderdor, Sterling W. Akron, Ohlo. Manufacture of tire beads. 1,633,620; June 28.
Alderman, Fairchild Company. (See Fairchild, E. E., Adamson, and Morley, assignors).
Alderman, Tenas W. (See Milchell, R. J., Babbitt, and Aldiss, William J. (See Mallert, C. S., and Aldis), Aldobitt Company. (See Harrington, Clinton O., assignor.)

Aldrich, Aline L., Merion Station, Pa. Portable carrier. 1.638,794; Aug. 9. Aldrich, Alonzo, Beloit, Wis. Machine for making paper. 1,617,734; Feb. 15.

assignor.)

Alemite Die-Casting & Mig. Co. (See Guiltorg, John S., assigno).

assignoid Signe, New York, N. Y. Station indicator. 1,615,158; Jan. 18.

Alexander, Albert D., assignor to M. V. Alexander, Fredericksburg, Va. Bushing extractor. 1,636,796; July 26.

Alexander, Alfred C., and O. K. Hagen, Beloit, Wis. Gasoline gauge 1,653,688; Dec. 27.

Alexander, Carl Z., West Livingston, N. J., assignors, N. J., assignors, N. J., Sectional steam boiler, 1,627,639; May 3.

Alexander, Carl Z., West Livingston, and E. S. Alexander, Newark, assignors, by mesne assignments, to E. C. Seward, Jersey City, N. J. Steam-boiler attachment. 1,637,721; Aug. 2.

1,637,721; Aug. 2.

Alexander, Clinton B., Washington, D. C. Casing and making the same. 1,631,611; June 7.

Alexander, Clive M., Tulsa, Okla. Baffle tower. 1,651,354; Dec. 6.

Alexander, Clive M., Tulsa, Okia. Baffle tower. 1.651.334:
Alexander, Don M., Denver, Colo. Road sign. Des. 72.880; June 21.
Alexander, Earl S. (See Alexander, Carl Z. and E. S.)
Alexander, Frank, Rochester, Ind. Cue-tip drier.
1.643.402; Sept. 27.
Alexander, Frederick. East St. Louis, III. Clothesline fastener. 1.633.722; June 28.
1.632.168; June 14. Bonne Terre, Mo. Aeroplane.
1.632.168; June 14. Bonne Terre, with the standard of the letter of the standard of th

mechan Mar. 1.

Alexander, Johann, Zehlendorf, Berlin, Germany, as-signor to General Electric Company. Mercury rectifier. 1,643-1,46; Sept. 20. Alexander, John E. (See Youngchild, Casper E., as-

signor.)
Alexander, John E., Port Edwards, Wis. Drying material.
1,645,366; Oct. 11.
Alexander, John E., Port Edwards, Wis., and S. A. Staege,
Pittsburgh, Pa.; said Staege assignor to said John B.
Alexander, Automatic circuit breaker for drying machines and the like. 1,623,611; Apr. 5.
Alexander, John E., Fort Edwards, and C. E. Youngchild,
Nekoosa, Wis., said Youngchild assignor to said Alexander, Cleaning means for drum driers. 1,621,706;
Marchader, Cleaning means for drum driers. 1,621,706;

Nekcoss, ander Cleaning means for urana ander. Cleaning means for urana 22. Alexander, Louis A., Toledo, Ohio. Timer. 1,614.449; Jan. 18. Alexander, Jan. 18. Alexander, Louis A., Toledo, J. R., and Alexander, alexander,

Alexander, Luther. (See Alford, J. R., and Alexander.) Alexander, Mabel V. (See Alexander, Albert D., as-

Alexander, Ralph I., Kankakee, assignor to Inland Engineering Company, Chicago, Ill. Mobile machinery, 1.631.184 June 7.

Alexander, Ralph I., Kankakee, and A. H. Exton. Chicago, Heights, assignors to Inland Engineering Company, Chicago, Ill. Traction equipment for mobile machinery, 1,631.182; June 7.

Alexander, Ralph I., Kankakee, and A. H. Exton, Chicago, Heights, assignors to Inland Engineering Company, Chicago, III. Steering mechanism for mobile machinery. 1,631,183; June 7.
Alexander, Robert, O. Sakland, Calif. Painting on velvet or other cut pile fabric. 1,623,771; Apr. 5.
Alexander, Robert L., and H. W. Wishart, assignors to Climax Engineering Co., Clinton, Iowa. Water-cooled oil separator. 1,621,707; Mar. 22.
Alexander, Robert L., W. Wishart, and H. H. Waters, assignors to Climax Engineering Co., Clinton, Iowa. Cooling and Collinax Engineering Co., Clinton, Iowa. Cooling Complexed Complexes and Condensers. 1,613,600; June 1,600; Alexander, Verne P., assignors of O. J. Hervond.

July 12.

Alfani, Guido, Firenze, and L. Mazza, G
Selector for automatic telephone exchanges.

Mar. 15. Genoa, Italy. s. 1,620,620;

Mar. 15.

Alfano, Matthew A., Garfield, and S. Bohenek, Passale, N. J. Line tightener. 1,646,336; Oct. 18.

Alfaeres, Emanuel J., New York, N. Y. Form for setting vault lights, 1,624,304; Apr. 12.

Alfaeres, Emanuel J., New York, N. Y. Separable vault light cans frame. 1,628,663; Apr. 26.

Light cans frame. 1,628,663; Apr. 26.

Alfaeres, Emanuel J., New York, N. Y. Fruit and vegetable succeer. 1,615,734; Jan. N. Y. Fruit and vegetable 1,632,576; June 14.

Alfonso, Ernest M. Brooklyn, N. Y. Canapression, favored 1,610,20; Ernest M. Brooklyn, N. Y. Lock favored 1,610,20; Ernest M. Brooklyn, N. Y. Lock favored 1,610,20; Ernest M. Brooklyn, N. Y. Loc

Sept. 20.
Alfonzo, Ernest M., Brooklyn, N. Y. Compression faucet.
1,039,781; Mary 1.
1,031,499; June 7.
Alford, Ambrose. (See Hitchcock, George E., assignov.)
Alford, George D., San Jose, Calif. Fireplace. 1,644,219;

Allord, John R., and L. Alexander, Henderson, Tex. Radiator-repair stand. 1,834,227; June 28.
Alfred, Theodore C., Lancaster, Ohio. Rotary cutting head. 1,628,870; May 17.
Algrain, Paul, La Croyere, Belgium. Azle for tramway, railway, and other vehicles. 1,618,040; Feb. 15.
Albeit, Henry A., Boston, Mass. Store furniture. 1,645,470; Oct. 11.
Alibert, Emile, Paris, France. Nail box for nalling machines. 1,634,226; June 28.
Allbert, Emile, Paris, France. Automatic releasing and braking device for nailing machines. 1,638,906; Aug. 16.

Albert, Emile, Paris, France. Automatic releasing and braking device for nailing machines. I,638,966; Aug. 16.
Allkakos, Nick, New York, N. Y. Automatically adjustable spring bracket. I,629,671; May 24.
Allahough, Willias W. Silverdie, A. Preventing the Allahough, Willias W. Silverdie, 1617,788; Feb. 15.
Allahverdian, Wagna, Urica, N. Y. Lineman's climbing iron. I,932,988; June 14.
Allalouf, Vital, New York, N. Y. Ash tray or article of similar nature. Des. 72,540; May 3.
All-American Radio Corporation. (See Dulzo, Edward All-American Radio Corporation. (See Webler, Carleton T., assignor.)

T. usedgnot.)

T. usedgnot.

Allan, Dato M., Halifax, Nova Scotia, Canada, assignot of Stendard Development Company. Distillation. 1,621,229; Mar. 2,100.

Allan, Hugh L., and J. Moore, Eurmah, British India, assignors to The Burmah Oil Company Limited, Glasgow, Scotland. Wax sweating and crystallzing apparatus. 1,64,232; J. bec. 27.

Allan, William G., Toronto, Ontarlo, Canada, assignor, by mesne assignments, to F. G. Clark. Electrolytic apparatus and electrode therefor. 1,620,662; Mar. S. Allan, William G., Toronto, Ontarlo, Canada, assignor, by mesne assignments to F. G. Clark. Welding and Alland, Maurice, Allantic City, N. J. Fountain pen. 1,617,140; Feb. 8.

Alland, Maurice, Atlantic City, N. J. Fountain pen. 1,619,323; Mar. 1.

Alland, Maurice, Atlantic City, N. J. Razor. 1.624.707;

Alland, Maurice, Atlantic City, N. J. Razor. 1,022,100 r. Apr. 12.
Alland, Maurice, Atlantic City, N. J. Magazine pencil. 1,646,740; Oct. 25.
Alland, Maurice, Atlantic City, N. J. Shaving brush. 1,651,355; Dec. 6.
Alland, Affred J., Eldridge, Calif. Motor-vehicle direction in the control of the control of

Clear Windshields, Inc. (See Demand, Joseph, as-

All Clear Windshields, Inc. (See Demand, Joseph, assignor.)
Alleut, Chester T., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Rheostat.
1.647,331; Nov. 1.
1.647,331; Nov. 1.
2. (See Gordon, Albert B., assignor.)
Allegheny Steel Company. (See Brautigam, Harold S., assignor.)
Allegheny Steel Company. (See Caugherty, William E., assignor.)
Allegheny Steel Company. (See Lucas, C. J., and Ponce, assignor.)
Allegheny Steel Company. (See Chite, Other M., assignor.)

Allen, Arthur F. Aramsung, July 5.
Allen, Arthur W. (See Herman, J., Allen, and Newitt.)
Allen Auto Specialty Company, The. (See Allen, Wililiam A., assignor.)
Allen, Carlion H., Dayton, Ohio. Process and apparatus for making paper or the like. 1,620,860;

Allen, Carlton H., Dayton, Ohio. Process and apparation of the control of the con

Atien, Charles B., Atlanta, Ga. Carburetor. 1,633,429;
June 21

June 21

Attention H. (See Mortla, J. L., and Allen.)

Aton, Charles H., Pittsburgh, Pa. Pinting raised figures
and the like. 1,641,143; Sept. 6.

Allen, Charles H., Pittsburgh, Pa. Combined telephone
and wireless receiver. 1,650,925; Nov. 29.

Allen, Charles H., and G. S. Soseman, assignors to The
Allen Charles H., and G. S. Soseman, assignors to The
Allen Charles Company, Chicago, Ill. Headlight. 1,651,984;

Allen, Charles M., Warcester, Mass. Measuring the rate of the control of the cont

Oct. 25.
Allen, Edward B., Newtown, Conn., assignor to The Singer Manufacturing Company. Elizabeth, N. J. Work-clamping mechanism for sewing machines. 1,650,588; Nov. 29.
Allen, Ernest, Groveland, Calif. Milk-can holder and contents dispenser. 1,639,249; Aug. 16.

Allen, Francis K., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Handle for a burial casket. Des. 71.598; Jan. 25.
Allen, Frank B., Lower Merion Township, Montgomery County, Pa., assignor, by mesne assignments, to F. H. Dunker, Chewary construction. 1,613.601; Jan. 11.
Allen, Frank B., Lower Merion Township, Montgomery County, Pa., assignor to F. H. Dunbar, Cleveland, Ohio. Ash-handling equipment. 1,634.228; June 28.
Allen, Frank B., Lower Merion Township, Montgomery County, Pa., assignor to F. H. Dunbar, Cleveland, Ohio. Hopper construction. 1,633.662; June 28.
Allen, Fred D., Portsmouth, Va. Demountable rim. 1,631.965; June 28.
Allen, Frederick C., Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Milling machine. 1,926.599; May 3.
Alen, Frederick C., Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Boring machine. 1,637.7637 Aug. 2.
Allen, George B., Atlanta, Ga. Golf game. 1,623,518; Apr. 6.
Allen, George W., assignor to B. F. Sturtevant Company, Hyde Frat, Mass. Blower. 1,628.216; May 10.
Alen, George W., assignor to B. F. Sturtevant Company, Hyde Frat, Mass. Blower. 1,628.216; May 10.
Alen, Grovenor N., assignor to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 72,541; May 31.
Allen, Grovenor N., assignor to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 73,634; Oct. 18.
Allen, Hydroston, Oneida, N. Y. Dish or similar article. Des. 73,634; Oct. 18.
Allen, Hydroston, Oneida, N. Y. Dish or similar article. Des. 73,634; Oct. 18.
Allen, Hydroston, Oneida, N. Y. Dish or similar article. Des. 73,634; Oct. 18.
Allen, Hydroston, Oneida, N. Y. Dish or similar article. Des. 73,634; Oct. 18.
Allen, Hydroston, Oneida, N. Y. Dish or similar article. Des. 73,634; Oct. 18.
Allen, Hydroston, Oneida, N. Y. Dish or similar article. Des. 73,634; Oct. 18.
Allen, Hydroston, Oneida, N. Y. Dish or similar article. Des. 73,634; Oct. 18.
Allen, Hydroston, Oneida, N. Y. Dish or similar article. Des. 73,634; Oct. 18.

Dec. 13.

Allen, John, Greensburg, Ind. Poultry-dipping mechanism. 1,037,096; July 26.

Allen, John F., assignor to L. C. Brammar, Ironton, Ohio, Milk bottle. 1,653,098; Dec. 27.

Aleo, John H. (See Riged). Samuel S., assignor.)

Allen, John R. (See Stackhouse, J. H., and Allen, John S., Worcestet, Mass. Puzzle. 1,655,022; July 8.

Allen, John H. (See Riegel, Samuel S., assignor.)
Allen, John R. (See Stackhouse, J. H., and Allen.)
Allen, John R. (See Stackhouse, J. H., and Allen.)
Allen, John R. (See Stackhouse, J. H., and Allen.)
Allen, Joseph H., assignor to Inland Glass Company, Chicago, III. Dispensing apparatus for liquid hydrocarbons. 1,632,815; June 21.
Allen, Joseph H., assignor to Inland Glass Company, Chicago, III. Dispensing apparatus for liquid hydrocarbons. 1,632,815; June 21.
Allen, Middred C., Highland Park, III. Child's garment. 1,625,184; Apr. 19.
Allen, Middred C., Highland Park, III. Child's garment. 1,625,184; Apr. 19.
Allen, Order S., Cleveland, Ohio. Telephone stand. 1,648,645; Nov. 15.
Allen, Percy, North Wyng, assignor to North Wayne, 1,620,645; Nov. 15.
Allen, Percy, North Wyng, assignor to North Wayne, 1,620,624; Mar. 15.
Allen, Percy J. (See Johnstone, J., and Allen.)
Allen, Robert C., Essington, Pa., assignor to Westinghouse Electric and Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade lashing, 1,621,618; Mar. 2, assignor to Westing

signor.)
Allen, Samuel E., Poughkeepsie, assignor to The De Laval
Separator Company, New York, N. Y. Gradually speeding up engine-driven machines. 1,645,979: Oct. 18.
Allen. Samuel B., Poughkeepsie, assignor to The De Laval
Separator Company, New York, N. Y. Liner stretcher
for teat cups of milking machines. 1,648,436; Nov. 8.
Allen. 3eton J., Vincland, N. J. Last for making shoes.
1,634,815; July 5.

Allen, Seton J., Vineland, N. J. Shoe. 1,634,816; July 5. Allen, Sherman W., Albany, Ala. Quilting frame. 1,616,563; Feb. 8. Allen, Thorno J., administrator. (See Allen, Charles S.) Allen, Thomas W., assignor to Proctor & Schwartz, In-

Allen, Thomas W., assignor to Freeden Allen, Thomas W., assignor to Freeden Allen, Thomas W., assignor to Freeden Allen, Thomas W., assignor to Garnett machine 1,630,158; May 24.
Allen, Victor M., Waverly, N. Y. Glareshield for motor vehicles. 1,617,931; Feb. 15.
1,630,594; May Y.
Allen, Welsey P., and B. H. Fincher, Mannsville, Okla. Cultivator. 1,621,764; Mar. 22.
Allen, William A., New York, N. Y. Attachment means for controlling apparatus. 1,628,761; May 17.
Allen, William A., Yonkers, assignor to The Allen Auto Specialty Company, New York, N. Y. Radiator shuter. 1,615,781; Jan. 25.
Allen, William A., Bridgeport Conn., assignor to Crane Co., Chleago, Ill. Tank drain valve. 1,652,510; Dec. 15.

Allen, William E., Eridgeport Conn., assignor to Crane Co., Chicago, Ill. Tank drain valve. 1,652,510; Dec. 13.
Allen, William F., Nashville, Tenn. Heater. Re16,677; July 12.
Allen, William H., Detroit, Mich. Coating process. 1,631,428; Jan. 1. Detroit, Mich. Removal of coatings. 1,631,428; Jan. 2. Detroit, Mich. Removal of coatings. 16,633,070 Aug. 16.
Allen, William H., Detroit, Mich. Regenerating caustic alkall solutions. 1,647,764; Nov. 1.
Allen, William H., Nacogdoches, Tex. Valve lifter. 1,621,820; Mar. 22.
Allenlite Company, The. (See Allen, C. H., and Soseman, assignors.)

Altenier Company and S. M. C. Keitner, and O. C. Col-lins, Memphis, Tenn.; said Allensworth and said Col-lins assignors to N. A. Carter and L. Waltin, Earle, Ark. Which attachment for tractors. 1,654,106; Ark. W Dec. 27.

Dec. 27.

Allerheiligen, Albert H., C. Erichsen, and L. F. Crain, Missouri Valley, Iowa. Temperature control for internal-combustion motors. 1,646,338; Oct. 18.

Allert., Cornelius. (See Williams, Sylvester J., assignor.) Allerton, Oscar J., assignor to The Florsheim Shoe Company, Chicago, Ill. Apparatus for coating articles. 1,651,393; Dec. 6.

Allerton, Robert Pump and Machinery Corporation, New York, N. Y. Pump, 1,616,672; Peb. 1.

Alles, Peter, Bloomfield, N. J. Window seat. 1,650,315; Nov. 22.

Alles, Peter, Bloomfield, N. J. Window sent. 1,650,31b; Nov. 22.
Alley, John H., assignor to The American Motor Body Corporation. Philadelphia, Pa. Alr-cooled clutch. 1,635,353; July 12.
Allgemeine Gesellschaft für Chemische Industrie m. b. H. (See Jodeck, Panl, assignor.)
Alliance Machine Company, The. (See Yanney, George M., assignor.)
Alliance Holer, assignor.)
Alliance Toy & Specialty Company, The. (See Dooley, William, assignor.)
Alliance Toy & Specialty Company, The. (See Lewis, Owen L., assignor.)
Alliance Toy & Specialty Company, The. (See Lewis, Owen L., assignor.)
Alliance Vitrified China Company. (See Hashagen, August, assignor.) gust, assignor.)
Allied Metal Industries, Inc. (See Finch, Harry, assignor.)

signor.) Allied Metal Industries, Inc. (See Holdeman, Harry R.,

assignor.)
Allied Packers, Inc. (See Appleton, Joseph H., assignor.)
Allied Packers, Inc. (See Ralston, David S., assignor.)
Allied Process Corporation. (See Czochralski, Johann,

assignor.)
Allied Process Corporation. (See Czochralski, J., and
Welter, assignors.)
Allied Process Corporation. (See Weldmann, Hans, asignor.) led Process Corporation. (See Welter, Georg, as-

signor.)
Allinger, Albert A., Richmond Hill, assignor to American
Game & Toy Corporation, Brooklyn, N. Y. Game apparatus. 1.628,461; May 10.
Allingham, Sidney, London, assignor to Robert Boby
Limited, Bury St. Edmunds, England. Machine for
harvesting flax and other plants. 1,631,612; June 7.
Allis-Chalmers Manufacturing Company. (See Agthe,
The Chalmers Manufacturing Company. (See Bond, John
S., assignor.)
Allis-Chalmers Manufacturing Company. (See Bond, John
Strand, Hans P., assignor.)

Allis-Chalmers Manufacturing Company, (See Dabl Strand, Hans P., assignor.)
Allis-Chalmers Manufacturing Company, (See Davis, Rae W., assignor.)
Allis-Chalmers Manufacturing Company, (See Dimberg Paul C., assignor.)
Allis-Chalmers Manufacturing Company, (See Feind. Robert F., assignor.)
Allis-Chalmers Manufacturing Company, (See Kane, John J., assignor.)
Allis-Chalmers Manufacturing Company, (See Kane, John J., assignor.)
Allis-Chalmers Manufacturing Company, (See Klenk, George, assignor.)

Allis-Chalmers Manufacturing Company. (See Knight, Earle R., assignor.) Allis-Unalmers Manufacturing Company. See Newhouse, Ray C., assignor.)
Allis-Chaimers Manufacturing Company. (See Nichols, Louis C., assignor.)
Allis-Chaimers Manufacturing Company. (See Pfau, Arnold, assignor.)
Allis-Chalmers Manufacturing Company. (See Powell, William H., assignor.)
Allis-Chalmers Manufacturing Company. (See Schmidt, Allis-Chalmers Manufacturing Company. (See Schmidt, Frutz, assignor.)
Allis-Chalmers Manufacturing Company. (See Shaw. Allis-Chalmers Manufacturing Company. (See Sprado, Carl G., assignor.)
Allis-Chalmers Manufacturing Company. (See Steen, Carl W., assignor.)
Allis-Chalmers Manufacturing Company. (See Steen, Carl W., assignor.) Charles W., assignor.)
Allis-Chalmers Manufacturing Company. (See Taylor,

Charles B., assignor.)

Allis-Chalmers Manufacturing Company. (See Faylor, Charles B., assignor.) Amst-Chaimers Manufacturing Company. (See Weimer, Hugo W., assignor.) Allison, Charles F., Wells, assignor of one-half to H. B. Peatling, Salina, Kans. Vehicle end gate. 1,635,163; July 12.

Peatling, Salina, Kans. Vehicle end gate. 1,635,163; July 12.
Allison, Clifford E., assignor to Williamette Iron and Steel Works, Portland, Oreg. Holsting apparatus. 1,634,529; July 5.
Life, Marchael Pearley, Calif. Cooking utensil. 1,616,435; Jeb. 8.
Allison, Eva K., Los Angeles, Calif. Condiment holder. Des. 73,514; Sept. 27.
Allison, Fred, Highland Park, assignor to Ford Motor Company, Detroit, Mich. Starting system for internal-combustion engines. 1,620,747; Mar. 15.
Allison, Fred, Highland Park, assignor to Ford Motor Company, Detroit, Mich. Starting system for internal-combustion engines. 1,620,747; Mar. 15.
Allison, Harvey, New York, N. Y. Weighing device. 1,628,762; May 17.
Allison, Harvey, New York, N. Y., assignor to W. J. O'Leary, Montreal, Quebec, Canada. Walking toy. 1,617,698; Feb. 15.
Lift, Ges. Hollison, Harry S., assignor, J. Hilman, David W., Toronto, Ontarlo, Canada. Siphon for fush tanks. 1,618,362; Feb. 22.
Allman, John H., trustee. (See Hansson, Soren, assignor.)
Allmann Svenska Elektriska Aktiebolaget. (See Petersen, Wilhelm H., assignor.)

Alimanna Svenska Elektriska Aktiebolaget, sen, Wilhelm H., assignor.) Alimanna Svenska Elektriska Aktiebolaget, Adolf, assignor.) Allmanna Syenska Elektriska Aktiebolaget. (See Rooth, (See Stenk-

Adolf, assignor.)
Allmanna Svenska Elektriska Aktiebolaget. (See Stenkvist, Emil, assignor.)
Allmanna Svenska Elektriska Aktiebolaget. (See Ytterberg, Arle, assignor.)
Allmanna Svenska Elektriska Aktiebolaget. (See Ytterberg, Arle, assignor.)
Allmanna assignor.)
Alland assignor. (See Schortt, James, assignor.)
Alland assignor. (See Schortt, James, assignor.)
Alland assignor. (Allord W. Newark, N. J. Process and apparatus for making anger rings. 1,635,364; July 12 or.)
Allsopp, Cilford W. Newark, N. J. Process and apparatus for making anger rings. 1,635,364; July 12 or.)
Allimes, Alfred, South Medford, Mass. Cuttin, 21 or.,
Alltimes, Alfred, South Medford, Mass. (Lutin, 21 or.)
Alltimes, Alfred, South Medford, Mass. (Lutin, 21 or.)
Alltimes, Alfred, South, Medford, Bass. (Lutin, 21 or.)
Alltimes, Alfred, South, Medford, Mass.
Alltimes, Alfred, South the Medford, Mass.
Alltimes, Alltimes

Allyne-Zerk Company, The. (See Bystirky, Joseph. assignor.)

Alm, Joseph E., San Francisco. Calif. Expansible belt connecter. 1,639,250; Aug. 16.

Alma, Carl E. (See Alma, Maximilian and C. E.)

Alma, Maximilian and C. E., Ylenna, Austria. Repositioning device for swinging coupling heads on railroad vehicles. 1,632,942; June. 21.

Almany, Lawrence M., and A. J. Smith, Pittsburgh, Pa. Steam turbine. 1,613,008; Jan. 4.

Almen-Crosby Motors Company. (See Almen, John O., assignor.)

Almen John O., Seattle, Wash., assignor to Almen-Crosby Motors Company, Inc. Vaive mechanism for internal-combustion engines. 1,637,017; July 26. Almquist, Grace E., La Porte, Tex. Hairpin. 1,617,980; Feb. 15.

Aluquist, Leopold, New York, N. Y., and V. Willoughby, Ridgewood, N. J., assignors to American Car and Found-ry Company, New York, N. Y. Mine car. 1,616,564; Feb, 8.

F.CD. S. Milton L. (See Demarest, C. S. and Almaulst.) Almquis, D.ch. A., Jophin, Mo. Mail box. 1,626,320; Almy, Charles F. H., Edgewood, assignor to Almy Water-Tube Boiler Co., Providence, R. I. Water-tube heater. 1,614,767; Jan. 18.

Almy Water-Tube Boiler Co. (See Almy, Charles F. H.

Almy Water-Tube Boiler Co. (See Almy, Charles F. H...
assignor.)
Alpina Kase A.-G. (See Sutter, Ernst, assignor.)
Alsaker, Alfred, assignor to The betta-Star Blectric Co.,
Chicago, Ill. Clamping means. 1,638,230; Aug. 9.
Alsberg, Julius, New York, N. X., assignor to B. Heller
& Company, Chicago, Ill. Curing meats. 1,635,301;
Alsberg, Julius, New York, N. Y., assignor to B. Heller
& Company, Chicago, Ill. Sausage meat and producing
same. 1,645,302; July 12.
Alsberg, Julius, New York, N. Y., and P. J. Raiph,
Alsberg, Julius, New York, N. Y. and P. J. Raiph,
Apparatus for analyzing gases. 1,633,381; June 28.
Alschuler, Ernest, New York, N. Y. Blectrical connecter.
1,617,474; Feb. 15.
Alsfasser, Joseph, Chicago, Ill. Bracket. 1,642,352;
Sept. 0.

1,617,474; Feb. 15.
1,845tasser, Joseph, Chicago, Ill. Bracket. 1,642,352; Sept. 6.
1,85pt. 6.
1,85

Signor.)
Alterthum, Hans. (See Koref, F., and Alterthum.)
Altgelt, Herman E. (See Altgelt, Rudolph J, and H. E.)
Altgelt, Herman E., assignor to Oliver Chilled Plow
Works, South Bend, Ind. Plow structure. 1,613.596;
Jan. 11.
Altgelt, Herman E., assignor to Oliver Chilled Plow
Works, South Bend, Ind. Cultivator. 1,637,925;

Jan. 11.
Aligelt, Herman E., assignor to Oliver Chilled Plow
Works, South Bend, Ind.
Cultivator, 1,637,925;
Aug. 2.
Aligelt, Herman E., assignor to Oliver Chilled Plow
Yorks, South Bend, Ind.
Cultivator, 1,642,801;
Sept. 20.
Aligelt, Rudolph J., assignor to Oliver Chilled Plow
Works, South Bend, Ind. Hitch device, 1,613,597;
Jan. 11.
Aligelt, Rudolph J. and H. E., assignors to Oliver Chilled
Flow
Works, South Bend, Ind. Plow, 1,618,593;
Aligelt, Rudolph J. and H. E., assignors to Oliver Chilled
Flow
Works, South Bend, Ind. Plow, 1,618,593;
Althous Hanny, (See Gebberg J. R. and Althous)

Fib. 22.

Althaus, Henry.

(See Gebhard, J. B., and Althaus.)

Alther, Joseph G. (See Egloff, G., and Alther.)

Alther, Joseph G. (See Egloff, G., and Alther.)

Althurari, George, and J. A. Campbell, Parsons, Kans.

Altman, Fred E. (See S. Geler, F. S., and Altman.)

Altman, Fred E. (See Frederick, C. W., and Altman.)

Altorfer, Alpheus W., Peoria, III. Washing machine.

1.632.866; June 21.

Altorfer, Alpheus W., Peoria, III. Washing-machine tub.

1.648.530; Nov. 8.

Altorfer, Alpheus W., Peoria, III. Washing machine.

1.626.664; Apr. 26.

Altorfer, Peoria, III. Washing machine.

1.626.664; Peoria, III. Washing machine.

1.626.364; Peoria, III. Washing machine.

signor.)
Altorfer, Lehmann & Cie., Zentralheizungsfabrik. (See Sekinger, Otto, assignor.)
Altopter, Franz W., Chiego. III. Fretted musical instrudient of the second of th

Aluminate signor.) Aluminium Welding Works Ltd. (See Winter, Paul, as-

assignor.)
Aluminum Company of America. (See Barnitt, Jesse B., assignor.)
Aluminum Company of America. The, (See Collins, Rollin E., assignor.)
Aluminum Company of America. (See Guyot, Marius, assignor.)
Aluminum Company

signor.)
Aluminum Company of America, The. (See Magill,
Charles E., assignor.)
Aluminum Company of America. (See Norton, Allen
B., assignor.)

Aluminum Company of America. (See Pedersen, Harald, assignor.)
Aluminum Company of America. (See Sharp, John E., assignor.)
Aluminum Company of America. (See Stay, T. D., and
Tessier, assignors.)
Aluminum Company of America. (See Shumaker, Frank D., assignor.) uminum Company of America. (See Varney, Theodore, assignor.)
Aluminum Company of America. (See Welty, George D., assignor.)
Aluminum Cooking Utensil Co., The. (See Wilson, John Aluminum Cooking Utelisis Co., Lie. (See Filiat), Aluminum Plant and Vessel Company Limited, The. (See Seligman, Richard, assignor.)

Aluminum Products Company. (See Hastings, William A., assignor.)
Aluminum Products Company. (See McClure, Elmer P., assignor.)
Aluminum Seal Corporation. (See Nordstrom, Elof, as-

signor.) Alumoyd Sign & Signal Co. (See Thompson, Ray A., Alumoyd Sign & Signal Co. (See Thompson, Ray A., assignor.) assignor. Alvarrado, Alherto M., Durango, Mexico. Violin bridge Alvarrado, Alherto, C., Berkeley, Calif. Wire fastener. 1,617,735; Feb. 15.
Alver, Victor, Brooklyn, assignor to F. J. Kline, Long Island City, N. Y. Paper fastener. 1,650,002; Nov. 22.

Nov. 22.
Alvera, Josef. (See Wenz, J., Alvera, and Brunhühner.)
Alvery, Benjamin H., Louisville, Ky. Automobile top.
1,613,429; Jan. 4.
Alvey Manufacturing Company. (See Bobn, William J.,
assignor.)
Alvord, Barl B., assignor to The Grasselli Chemical
Company, Cleveland, Ohio. Production of sodium hydrosuiphide and valuable by-products. 1,650,106;
Nov. 22.

Company, Cleveland, Obio. Production of sodium hydrosulphide and valuable by-products. 1,650,106; Nov. 22.

Alworth, Greydon N., South Milwaukee, Wis. Automatic line indicator for typewriters. 1,640,337; Aug. 23.

Alworth, Greydon N., South Milwaukee, Wis. Automatic line indicator for typewriters. 1,640,337; Aug. 23.

See Pietcher, State and Chemical Works, Inc., The. (See Pietcher, State and Chemical Works, Inc., The. Amann, Adolf, Schomberg, near Wildbach, Germany. Instrument sterilizer. 1,647,070; Oct. 25.

Amann, Adusts, and E. Fonrobert, Wiesbaden, assignors of the Firm Chemische Fabriken Dr. Kurt Albert, Germany. Making condensation products from mono-and dieyclic phenols and aidebydes. 1,614,171; Jan. 11.

Amann, August, and E. Fonrobert, Wiesbaden, assignors, G. M., B. H., Amoneburg, near Biebrich-on-the-Rhine, Germany. Condensation product of ketones and phenols. 1,614,172; Jan. 11.

Amann, August, and E. Fonrobert, Wiesbaden, assignors, Improvement of natural resins. 1,623,901; Apr. 5.

Amans, Alexander E., Lacey, Wash. Dirigible headlight. 1,635,393; July 12 an Manuel, Cuba. Stalk-cutting at Inchment for plows. 1,637,926; Aug. 2.

Amato, John, et al. (See Amato, Luciano, assignor.)

Amato, Luciano. (See Selden, J. L., and Amato.). Amato, Luciano, Suth Berkeley, assignor to one-third to J. L. selden, Oakhand, and one-third to J. Amato. Mar. 29.

Ambler Assetsos Company. (See Applin, Harry, as Ambler, Asbestos Company. (See Applin, Harry, as Ambler Asbestos Company. (See Applin, Harry, as Ambler Asbestos Company. (See Applin, Harry, as Ambler Asbestos Company. (See Mattison, Richard V., assignor.)

signor.) Ambler Asbestos Company. (See Mattison, Richard V.,

Ambier, George B, assignor). Ambier, George B, Company. (See Frey, Ralph E., assignor). Ambier, George B, assignor to F. A. Whitney Carriage Company, Loominster, Mass. Folding gocart. 1,653,533; Dec. 20.

Ambler, Robert R. Akron, Obio, assignor to The R. F.
Goodrich Company, New York, N. Y. Method and machine for covering factible strips, 1,632,816; June 21.
Ambrosini, Virgilio, Harrington, Wash. Car replacer.
1,638,634; July 19.
Ambrose, Frank F., Los Angeles, Calif. Screw pump.
1,635,534; Juc. 20.
Ambrose, Roy B., and J. W. Patterson, Pittsburgh, Pa.
Fluid metr. 1,635,355; July 12.
Amdur, Noah W., New Rochelle, assignor to Sun-Ray
Lighting Products, Inc., New York, N. Y. Universal
Joint, 1,635,164; July 12.
Amdur, Sannel S., assignor to Taylor Instrument
Companies, Rochester, N. Y. Filter. 1,630,287;
May 31.

Amdursky, Samuel S., assignor to Taylor Instrument Companies, Rochester, N. Y. Hygrometric apparatus. 1,635,697; July 12.

Amdursky, Samuel S., assignor to The Taylor Instrument Companies, Rochester, N. Y. Apparatus for regulating wax-sweating systems. 1,636,730; July 26.

Amdyce Corporation. (See Dunlap, F. L., and Ewer, assignors.)

Gity, Mo. Fabric cement. 1,643,437; Sept. 27.

Amend, August M., Manila, P. I., assignor to Atlantic Gulf & Pacific Company of Manila. Water gate. 1,654,476; Dec. 27.

Amend, Otto P., New York, N. Y. Cracking or converting oils. 1,613,736; Jan. 11.

Amend, Sewis W., Casper, Wyo. Shock absorber. 1,654,476; Dec. 27.

Amend, August M., Manila, P. I., assignor of Atlantic Gulf & Pacific Company of Manila. Water gate. 1,654,476; Dec. 27.

Amend, Otto P., New York, N. Y. Cracking or converting oils. 1,613,736; Jan. 11.

American Aggregate Company. (See Hayde, Stephen J., assignor.)

American Arch Company. (See Himmelright, Raleigh J., assignor.)

assignor.)
American Arch Company. (See Willett, Alfred H., as-

signor.)
American Auto Laundry Equipment Company. (See Gates, William J., assignor.)
American Auto Rim Lock Corporation. (See Hoecker, Albert C., assignor.)
American Auto Trimming Company. (See Best, Frank A.,

American Auto Trimming Company. (See Best, Frank A., assignor.)
American Juto Trimming Company. (See Plumb, Minderlan Automatic Lock and Lift Company. (See Bennett, George E., assignor.)
American Autopartis Company. (See Lavigne, Henry W., assignor.)
American Autoparts Company. (See Frater, William H.,

American Bank Note Company. (See Pater, William R., assignor.) American Bank Note Company. (See Reinhardt, James

American Bank Note Company. (See Reinhardt, James H., assigner.) American Battery Products Corporation. (See MacKen-zie, William A., assignor.) American Bemberg Corporation. (See Elsaesser, E., and Hartmann, assignors.) American Bemberg Corporation. (See Meyer-Gaus, Karl, assignor.) American Blower Company. (See Rowe, William A., as-

siguer.)
American Bottle Company. (See Doe, Alfred G., assigner.)
American Bottle Company, The. (See Curran, Jerome

P., assignor.)
American Bottle Company, The. (See Stewart, Gayle D., assignor.)

assignor.)
American Brake Company, The. (See Williamson, Frederick G., assignor.)
American Brake Shoe and Foundry Company, The. (See De France, Murrell R., assignor.)
American Brake Shoe & Foundry Company, The. (See Nelson, Albert, assignor.)
American Brake Shoe & Foundry Company, The. (See Pogne, Robert B., assignor.)
American Brass Company, The. (See Bassett, William H., jr., assignor.) American Brass Company, The. (See Coe, James R.,

assignor.)
American Brass Company, The. (See Dayls, Charles H., assignor.)
American Buckle Co., The. (See Hodge, Robert J., as-

Signor.)

American Cable Company. (See Briggs, Arobert J., assignor.)

American Cable Company. (See Conner, Edward A., assignor.)

American Cable Company. (See Rosenberg, Ralph H.,

assignor.)
American Can Company. (See Bachelder, Luther C., assignor.) American Can Company. (See Bryant, Harvey L., as-

signor.)
American Can Company. (See Butler, William F., assignor.)

Signor.) Can Company. (See Casper, G. H., and Dil-American Can Company. (See Corey, Harry R., as-signor.) American Can Company. (See Eberhart, Fellx, assignor.) American Can Company. (See Edwards, John R., as-

signor.)
American Can Company. (See Egenolf, Jacob F., as-

signor.) American Can Company. (See Fleischer, Paul W., as-Can Company.

(See Graf, Henry G., assignor.) (See Gray, James A., assignor.) (See Hothersall, John M., as-American Can Company. American Can Company. American Can Company. (See Huntar, Felix, assignor.)

signor.) American Can Company. (See Korwan, Harry B., as-

signor.)
American Can Company. (See Loesel, Nicholas, assignor.)

American Can Company. (See Magill, Donald G., assignor.) American Can Company. (See McCann, Leland R., assignor.)
American Can Company.
American Can Company.
American Can Company.
American Can Company. (See Miller, Henry, assignor.) (See Murch, John II., assignor.) (See Nordquist, Ronald E. J., assignor.)
American Can Company. (See Odquist, Victor, assignor.) (See Peters, John F., assignor.) (See Pittelkow, August, as-American Can Company. American Can Company. signor.) (See Rudolph, Franklin, as-American Can Company. Can Company (See Schultz, Edward, as-Americar American Can Company, (See Stewart, James A., assignor.) Can Company. (See Stollberg, Charles, as-(See Taylor, William E., as-American Can Company. signor.) American Can Company. (See Tevander, Swan N., as-(See Widell, Magnus E., as-American Can Company. American Can Comp dolphi, assignors. (See Widell, M. E., and Ru-Can Company. Can Company. (See Young, John M., assignor.) American Can Perforator Company, The. (See Lyman, Walter H., assignor.) American Car and Foundry Company. (See Abel, Joseph Watter H., assignor.)
American Car and Foundry Company. (See Abel, Joseph American Car and Foundry Company. (See Almquist, L., and Willoughby, assignors.)
American Car and Foundry Company. (See Bates, Richard A., assignor.)
American Car and Foundry Company. (See Bolson W., assignor.)
American Car and Foundry Company. (See Campbell, Edmund D., assignor.)
American Car and Foundry Company. (See Constantine, Alphonse A., assignor.)
American Car and Foundry Company. (See Cooper, W. E., and Willoughby, assignors.)
American Car and Foundry Company. (See Dietrichson, american Car and Foundry Company. (See Elder, Thomas W., fr., assignor.)
American Car sand Foundry Company. (See Elder, Thomas W., fr., assignor.) American Car and Foundry Company. (See Field, Henry Thomas W., jr., assignor.)

American Car and Foundry Company. (See Field, Henry Clyde H., assignor.)

American Car and Foundry Company. (See Fields, Henry Clyde H., assignor.)

American Car and Foundry Company. (See Gibbs, Frederick H., assignor.)

American Car and Foundry Company. (See Johnson, Warren V., assignor.)

American Car and Foundry Company. (See Johnson, W. V., and Kepner, assignors.)

American Car and Foundry Company. (See Johnson, W. V., and McDowell, assignors.)

American Car and Foundry Company. (See Kassberg, Thodore C., assignor.)

American Car and Foundry Company. (See Kassberg, Adolph, assignor.)

American Car and Foundry Company. (See Kuhl, Robert J., assignor.)

American Car and Foundry Company. (See Lucas, Car and Foundry Company. (See Lucas, Lander, Lan American Car and Foundry Motors Company. (See Hawkes, Arthur G., assignor.) American Casting and Manufacturing Corporation. (See Dietze, Emil, assignor.) American Cast Iron Pipe Company. (See Moore, J. W., American Cast Iron Pipe Company.

American Cast Iron Pipe Company.

American Cellulose and Chemical Manufacturing Company Limited. (See Ellis, George H., assignor.)

American Chain Company. (See Campbell, Andrew C., American Chain Company. (See Fageol, Rollie B., assignor.) American Chain Company. (See Goetz, Oscar H., as-

umerican Chain Company. (See Pratt, Alphonso C., assignor.)
merican Chain Company, Inc. (See Kirk, Robert W., American Coach & Body Company, The. (See Larsen, American Coal Chute Co., The. (See Koller, John, assignor.)
American Coalinoil Corporation. (See Greenstreet,
Charles J., assignor.)
American Coating Mills. (See Colbert, C. C., and Preston, American Coating Anns. (See Colort, C., and Preston, assignors.)
American Coke & Chemical Company. (See Kus, Thomas G., assignor.)
American Copper Products Corporation. (See Staples, II. A., and Beach, assignors.) II. A., and Beach, assignors.)

American Crayon Company, The. (See Daniels, Charles E., assignor.)

American Creosoting Company. (See Austin, H. E., and Cook, assignors.)

American Creosoting Company, The. (See Fulks, Elbridge B., assignor).

American Cuptor Corporation. (See Weckbaugh, Joseph V., assignor).

(See Barsky, George, as-American Cyanamid Company. (See Barsky, George, as-bignor.)
American Cyanamid Company. (See Barsky, G., and Freise, assignors.)
American Cyanamid Company. (See Bierman, H. C., and Speirs, assignors.)
American Cyanamid Company. (See Buchanan, G. H., and Griffith, assignors.)
American Cyanamid Company. (See Buchanan, G. H., Grimth, Assignors.)
American Cyanamid Company.
and Osborne, assignors.)
American Cyanamid Company.
(See Buchanan, G. H.,
assignor.)
(See Christmann, Ludwig
J., assignor.)
(See Collins, Charles D., assignor.) American Cyanamid Company. (See Cooper, Kenneth F., American Cyanamid Company, assignor.) American Cyanamid Company, signor.) American Cyanamid Company. (See Cox. George E., as-(See Kilbourne, Kenneth American Cyanamid Company.

Acrissignor, Inamid Company.
Buchanan, assignors,
American Cyanamid Company.

assignor.

American Cyanamid Company.

(See Moffett, Ernest C.,
American Cyanamid Company. signor.)
American Cystoscope Makers, Inc. (See Wappler, Rein-American Cystoscope Makers, Inc. (See hold H., assignor.) American District Steam Company. Everett R., assignor.) American Dressler Tunnel Kilns, Inc. George E., assignor.) American Dressler Tunnel Kilns, Inc. (See Benedict, (See Crawford. American Dressler Tunnel Kilns, Inc. (See Dressler, Philip D., assignor.)
American Dressler Tunnel Kilns, Inc. (See Dressler, Philip D., assignor.)
American Dressler Tunnel Kilns, Inc. (See Dressler, Paul A., assignor.)
American Dressler Tunnel Kilns, Inc. (See Meeban, Paul A., assignor.)
American Dressler Tunnel Kilns, Inc. (See Merics, Paul A., assignor.)
American Drey Cleaning Company. (See Aydelotte, John American Electric Company. (See Erickson, Charles J., assignor.) (See Dressler. assignor.) assignor.)
American Electric Fusion Corporation. (See von Henke, Edmund J., assignor.)
American Electric Motor Company, (See Daun, C. L., and Keller, assignors.)
American Electrical Heater Company. (See Kuhn, F., American Electrical Heater Company. (See Thomas, L. H., and Kuhn, assignors.)
American Encaustic Tiling Company. (See Lillibridge, Harry D., assignor.), American Encaustic Tiling Company. (See Prouty, Theodore C., and W. O., assignors.)

American Encaustic Tiling Company. (See Prouty, Theodore C., and W. O., assignors.) American Engineering Company. (See Preston, Herbert E., assignor.)
American Engineering Company. (See Schultz, John L.. assignor.)
American Engineering Company. (See Smith, George E., assignor.

American Engineering Company. (See Weingartner, Anthony E., assignor.)

American Fibre Corporation. (See Baldwin, E. F., and Woods, assignors.)

American Flange e., assignor.)

American Flange & Manufacturing Company. (See Mortis, assignor.)

American Flange & Manufacturing Co. (See Schwartz, Mortis, assignor.)

American Flange for Manufacturing Company. (See Becker, American Flyes (See Mortis, assignor.)

American Flyes (See Machine Company, The. (See Barnes, Herman L., assignor.)

American Foundry Equipment Company. (See Coble, Dayil C., assignor.)
American Foundry Equipment Company, The. (See Minich, Verne E., assignor.)
American Foundry Equipment Company, The. (See Minich, V. E., and Moore, assignors.)
American Foundry Equipment Company, The. (See Rith, Elmer A., Ir., assignor.)
American Foundry Equipment Company, The. (See Smith, Harry, assignor.)
American Forg Equipment Company, The. (See Detmer, Daying Company, The. (See Mith, Harry, Assignor.)
American Game & Toy Corporation (See Allinger, Albert A., assignor.)
American Gasaccumulator Company. (See Dalen, Gustaf, assignor.) American Gasaccumulator Company. (See Johanson, Georg K. V., assignor.)

American Gasaccumulator Company. (See Medén, Elof American Gasaccumülator Company. (See Medén, Elof H., assignor).

Amotican Gasaccumülator Company. (See Oestnaes, Vic-American Gasa Accumulator Company. (See Oestnaes, Victor L., assignor.) American Gas Construction Company. (See Tenney, C. I., and Thayer, assignora.) assignor.)
American Gas Machine Company. (See Hanson, Hans C., assignor.) American Gas Machine Company. (See Olsen, Walter, American Glass Works, Incorporated. (See Ready, William, J., assignor.)

American Glue Company. (See Campbell, Charles H., as-Glue Company. (See Underwood, George R., American Gypsum Company. (See Ott, Albert J. and C. L., assignors.) American Gypsum Company. (See Clark, Sidney C., asmerican Gypsun Company. (See Kohlmeyer, george, assignor.)

George, assignor.)

Comparation. The. et al. (See American George, as George, assignor.)

American Hardware Corporation, The, et al. (See Christoph, George W., assignor.)

American Hardware Corporation, The. (See Hurd. Norman B., assignor.)

American Hardware Corporation, The. (See Rinple, Percy H., assignor.)

American Hardware Corporation, The. (See Telch, Ernest L., assignor.) assignor.) American Hoist & Derrick Company. (See Sommer, Wil-American Hoist & Detrick Company. (See Sommer, William, assignor.)
American Hydrocarbon Co. Inc. (See Clayton-Kenneth E., assignor.)
American Incubators, Inc. (See Watson, H. L., and Heldrich, assignors.)
American Iron & Machine Works, Inc. (See Murphy, Orrille E., assignor.) American Iron & Machine Works, 19c. Orville E., assignor.) American Katalite Corporation. (See Sokal, Edward, as-American Kron Scale Company. (See Holm, John, assignor.) American Lace Paper Co. (See Conrad, Fred A., as-American Lady Corset Company. (See Siegel, Joseph, assignor.) American Lakes Paper Company. (See Kress, Otto, assignor.) American Lakes Paper Company. (See Seaborne, Charles R., assignor.) American Lakes Paper Company. (See Weber, Herman R., assignor.)

American Lakes Paper Company. (See Weber, Herman G., assignor.)

American Laindry Machinery Company, The. (See Carroll. Emil J., assignor.)

American Laundry Machinery Company, The. (See Obline)

American Laundry Machinery Company, The. (See Daly, Michael E., assignor.)

American Laundry Machinery Company, The. (See Daly, Michael E., assignor.)

American Laundry Machinery Company, The. (See Daly, Michael E., assignor.)

American Laundry Machinery Company, The. (See Dreher, A. J., and Benjamin, assignors), The. (See Marchinery Company, The. (See Singles, John P., assignor.)

American Laundry Machinery Company, The. (See Taylor.)

American Laundry Machinery Company, The. (See Taylor.)

American Laundry Machinery Company, The. (See Taylor.)

American Laundry Machinery Company, The. (See Waream, Charles E., assignor.) American Lead Pencil Company. (See Roche, John, as-signor.) American Liquid Meter Company. (See Bassler, Carlos J. assignor.) American Lithocraphic Company. (See Intemann, Wil-liam, assignor.) American Lock Nut Company. (See Hawley, Bates E., assignor.)

American Lock Nut Company. (See Lafever, George, assignor.)
American Locker Company. (See Johnson, Harvey L., American Lurgi Corporation. (See Müller, Georg, assignor.)
American Machine and Foundry Company. (See Armstrong, Harry Y., assignor.)
American Machine & Foundry Company. (See Bronander, Witheim B., assignor.)
American Machine & Foundry Company. (See Bronander, W. B., and Leury, assignors.)
W. B., and Leury, assignors.)
W. B., and Leury, assignors. (See Di Ianni, Individual Company. (See Di Ianni, Individual Company.) American Machine & Foundry Company. (See Gwinn, George W., assignor.) American Machine & Foundry Company. (See Halstead, John F., assignor.) ichine & Foundry Company. (See Hawkins, achine & Foundry Company. American Wilford Machine & American Machine & Foundry Company. (See Hawkins, Wilford J., assignor.)
American Machine & Foundry Company. (See Ogden. American Machine and Foundry Company. (See Schmitt, Frank R., assignor.)
American Machine and Foundry Company. (See Stein, John A., assignor.)
American Machine and Foundry Company. (See Stein, John A., assignor.) Glice, assignors.)

American Manganese Steel Company. (See Clark, John O., assignor.)

American Manganese Steel Company. (See Estes, American Manganese Steel Company. (See Listes, Clarence H., assignor.) American Manganese Steel Company. (See Mullally, Walter J., assignor.) American Manganese Steel Company. (See Nagle, Perry ssignor.) can Manganese Steel Company. (See Pfeil, Henry American Manganese Steel Company. (See Pfeil, Henry C., assignor.)

American Manganese Steel Company. (See Psilander, American Manganese Steel Company. (See Fishander, Charles A., assignor.) American Manganese Steel Company. (See Rorabeck, Claude, assignor.) American Manufacturing Company. (See Filedner, John, assignor.) nerican Manufacturing Company. (See Lindeken, assignors)
American Manufacturing Company,
August T., assignor.)
American Marine Device Corporation. (See Lenz, C. S.,
American Marine Device Corporation. (See Hammer, Charles,
and Jupp, assignors)
Amagany. (See Hammer, Charles, American Marine Device Corporation and Jupp, assignors.)

American Metal Cap Company. (See Hammer, Charles, American Metal Cap Company. (See Hammer, Al-American Metallurgical Corporation. (See Hanson, Albert J., assignor.) American Meter Company. (See Gaugh, Wilford A., as-American Meter Company. (See Kaiser, William II., assignor.) American Meter Company. (See Kerstein, Ernest A., American Meter Company. (See Linderman, Garrett B., jr., assignor.)
American Meter Company. (See Tomlinson, Kenneth C., assignor.) nerican Meter Company. (See Wilson, George D., American American Mills Co., The. (See Smith, Julius B., assignor.) American Mine Door Co., The. (See Prince, Harry, assignor.) American Mirror Works, et al. (See Hurewitz, Joseph.) American Moistening Company. (See Armstong, Joseph. American assignor American Moistening Company. (See Comins, Frank B. assignor.)
American Moistening Company. (See Comins, F. B., and Armstrong, assiguors.) merican Monorail Company, The. (See Harris, Frank American assignor.) can Morgan Company. (See Morgan, Edmund C., American Morgan Company. (See Morgan, John Assignor.)
American Motor Body Corporation, The. (See Alley. John H., assignor.)
American Motor Body Corporation, The. (See Hansen, Connad T., assignor.)
American Motor Body Corporation, The. (See Stubblebine, R. F., and Dolan, assignors.)
American Motor Body Corporation, The. (See Wetzel. Edward A., assignor.)
American Motor Equipment Corporation. (See Carson. Joseph P., assignor.)
American Multigraph Company, The. (See Bates, Albert H., assignor.) American Multigraph Company, The. (See Bates, American Multigraph Company, The. (See Chisholm, Clifton, assignor.) American Multigraph Company, The. (See Chisholm. Clifton, assignor.)
American Multigraph Company. The. (See Chisholm. Cand Colquhoun, assignors.)
American Multigraph Company, The. (See Delehanty. Robert J., assignor.)
American Multigraph Company, The. (See Delehanty. Robert J., assignor.)
American Multigraph Company, The. (See Goldrick, Albert R., assignor.)

American Multigraph Company, The. (See Kline, Victor H., assignor.)
American Multigraph Company, The. (See Macklin, Justin W. assignor.) American Multigraph Company, The. (See Mackin, Jus-tin W., assignor.) Company, The. (See Morse, Law-rence H., assignor.) American Multigraph Company, The. (See Osborn, Henry C., assignor.) American Multigraph Company, The. (See Schultz, August L., assignor.) American Narrow Fabric Company. (See Hazelton, Carl J., assignor.)
American-National Company, The. (See Weber, John, American National Red Cross, The. (See Clark, N. D., and Armstrong., assignors.) American Nuplax Corporation. (See Homberg, Fellx. American Optical Company. (See Baker, Nelson M., as signor.) American Optical Company. (See Baker, N. M., and ignors.) American Optical Company. (See Bell, Eugene E., assignor.)

American Optical Company. (See Currier, Bernard P., American Optical Company. (See De Zeng, Henry L., assignor.)
American Optical Company. (See Fisher, Lyle H., assignor.) American Optical Company. (See Fraser, Frank, assignor.)
American Optical Company. (See Gagnon, Louis L., assignor.) American Optical Company. (See Gunning, William A., assignor.)
American Optical Company. (See Gunning, W. A., and Shields, assignors.)
American Optical Company. (See Hill, Harry W., assignor.)
American Optical Company. (See Kelley, William J., as-American Optical Company. (See Laabs, Max A., assignor.)
American Optical Company. (See Lancaster. John T., American Optical Company, (See Maynard, Albert E .. American Optical Company, (See Ohlwiler, Clarence II., assignor.)
American Optical Company. (See Peterson, Frank E., assignor.)
American Optical Company. (See Poeton, L., and Morey, American Optical Company. (See Sangren, Harry A., assignor.)
American Optical Company. (See Schumacher, Elmer L., American Optical Company, assignor.)
American Optical Company. (See Tillyer, Edgar D., assignor.)
American Optical Company. (See Tillyer, E. D., and Baker, assignors.)
American Optical Company. (See Tillyer, E. D., and Moulton, assignors.) merican Optical Company. American signor.) (See Tully, George L., assignor.)
American Optical Company. (See Wrighto assignor.)
American Paper Goods Company, The.
Henry B., assignor.) (See Wrighton, William J., Henry B., assignor.)
American Piano Company. (See Russell, Guy M., assignor.)
American Piano Company. (See Stoddard, Charles F., assignor.) (See Cooley, assignor.)
American Platinum Works. (See Ledig, Kurt K., assignor.)
American Plumbing and Heating Co. (See Hardacker, William E., assignor.)
American Plumbing & Heating Company. (See Crosby, Raiph H., assignor.)
American Protein Corporation. (See Bunker, John W. M., assignor.)
American Radiator Company. (See Howell, Frank B., assignor.) American Radiator Company. (See Mallory, Harry C., assignor.) merican Radiator Company. (See Mertzanoff, André American Radi M., assignor. M., assignor.)

American Radiator Company. (See Praud, Henri, assignor.)

Padiator Company. (See Sutton, William S., American Radiator Company. (See Sutton, William S., assignor.) assignor.)

American Radlator Company. (See Ward, M. H., and Aurand, assignors.)

American Re-Enforced Paper Company. (See Howard, Charles II., assignor.) Charles II., assignor.)
American Reflex-Lite Company. (See Harmon, George A., assignori American Cond Machinery Company, (See Abbe, George American Road Machinery Company, (See Abbe, G. C., and Williamson, assignors.) American Road Machinery Company, (See Pellette, Robert S., assignor.)

American Rolling Mill Company, The. (See Cushman, Allerton S., assignor.)
American Rolling Mill Company, The. (See Tytus, John B., assignor.)
American Rubber Company. (See Teague, Merwyn C., assignor.) American Rubber Products Company, (See Ahlgren, J. American Rubber Fronticts Company.

M., and Bretaud, assignors.)

American Safety Device Company.

American Safety Device Co. (See Pitou, Eugene, assignor.) Safety Equipment Corporation. (See Olson, American, assignor.)
American Safety Razor Corporation. (See De Mesquita, Julius B., assignor.)
American Safety Razor Corporation. (See Kaufman, Joseph, assignor.) Joseph, assignor.)
American Sales Book Company. (See Bottle, Edward K., assignor.) American Sales Book Company. (See Johnston, Clarence American Sales Book Company. (See Johnston, Clarence L., assignor.) American Sales Book Company. (See Pringle, William A., assignor.) American Schaeffer & Budenberg Corporation. (See American Schaeffer & Budenberg Corporation. (See Blum, Eugen, assignor.)
American Schaeffer & Budenberg Corporation. (See Hopkins, Frank H., assignor.)
Nelson, Albin J., assignor.)
American Schaeffer & Budenberg Corporation. (See American Schaeffer & Budenberg Corporation. (See American Schaeffer & Budenberg Corporation. (See See Herbert, assignor.)
Walter S., assignor.)
Walter S., assignor.)
assignor. assignor.) American Seeding Machine Company, The. (See Jones, Henry D., assignor.)
American Separator Company, The. (See Collins, Thomas, Jr., assignor.)
American Sheet and Tin Plate Company. (See McArthur, Arthur R., assignor.)
American Shoe Machinery Company. (See Martin, Giles W. O., assignor.)
American Signal Corporation. (See Turck, Albert G., Assignor.)

American Smelting and Refining Company. (See Call. Benjamin G. assignor.)

American Smelting and Refining Company. (See Canon. Espey T., assignor.)

American Smelting and Refining Company. (See Chisholm, Oliver P., assignor.)

American Smelting and Refining Company. (See Cregan, John F., assignor.)

American Smelting and Refining Company. (See Brobs, Smelting and Refining Company. (See Forbes, See Chisholm, Charles A. H., assignor.)

American Smelting and Refining Company. (See Richards, Shelbert H., assignor.)

American Smelting and Refining Company. (See Richards, Smelting and Refining Company.)

American Smelting and Refining Company. (See Richards, Smelting and Refining Company.)

American Smelting and Refining Company. (See Richards, Smelting and Refining Company.) assignor.) American Soda Fountain Company. (See Harper, John L., assignor.)
American Soda Fountain Company. (See Jenney, T., and Miner, assignors.)
American Specialty Co. (See Coley, George F., assignor.)
American Specialty Co. (See Skelly, Bernard H., assignor.) American Stamping Co. (See Ordway, Donald P., assignor.)
American Steam Pump Company. (See Sommer, Karl G., assignor.)
American Steam Pump Company. (See Yates, De Witt E., assignor.) Steel Foundries. (See Blakeslee, Jerome, assignor.)
American Steel Foundries. (See Hedgcock, William C., assignor.)
American Steel Foundries. (See Kayler, Frank H., assignor.)
American Steel Foundries. (See Kinne, Edmund P., as-American Steel Foundries. (See Lamont, John A., as-American Steel Foundries. (See Oelkers, Alfred H., as-American Steel Foundries. (See Whitney, Loren L., assignor.)
American Steel Foundries. (See Williams, William E., assignor. American Steel Pipe and Tank Co. (See Kilbam, Oliver W., assignor.) American Steel Products Co. (See Wells, Edward L., assignor.) American Steel Wheel Corporation. (See Jayne, Ames assignor.)
American Steel Wheel Corporation. (See Busey. A. American Steel and Wire Company, The. (See Busey. American Steel and Wire Company, The. (See Busey. American Steel and Wire Company, The. (See Tangring, Olof. assignor.)
American Steel and Wire Company of New Jersey, The. (See Cocker, John A., assignor.)

American Steel and Wire Company of New Jersey, The.

(See Hindmarsh, Fercy J., assignor.)

American Steel and Wire Company of New Jersey, The.

(See Hoeftmann, Alexander O., assignor.)

American Steel and Wire Company of New Jersey, The.

(See Howe, James E., assignor.)

(See Howe, James E., assignor.)

(See Horison, Charles L., assignor.)

American Steel and Wire Company of New Jersey, The.

(See Marison, Charles L., assignor.)

American Steel and Wire Company of New Jersey, The.

(See Rarden, Albert S., assignor.)

American Steel and Wire Company of New Jersey, The.

(See Rarden, Albert S., assignor.)

American Steel and Wire Company of New Jersey, The.

American Steel and Wire Company of New Jersey, The.

American Steel Larder Assignor.) American Sterilizer Company. (See Woods, G. H., Denison, and Wiley, assignors.)
American Stove Company. (See Meacham, Benjamin E., American Stove Company.
assignor.)
American Stove Company.
assignor.)
American Stove Company.
signor.)
American Stove Company.
signor.
American Stove Company.
signor.) (See Nicolaus, Frederic G., (See Possons, Minard A., as-(See Roy, Joseph, assignor.) (See Stockstrom, Arthur, as-American Stove Company. signor.) American Stove Company. American Sundries Co. (See Stockstrom, Louis, as-American Stove Company. (See Wild, Alfred, assignor.)
American Sundries Co. (See Lawner, Nicholas, assignor.)
American Sundries Co. (See Lawner, Nicholas, assignor.)
American Telephone and Telegraph Company. (See Abbott, Henry H., assignor.)
American Telephone and Telegraph Company. (See Affel, Herman A., assignor.)
American Telephone and Telegraph Company. (See Affel, Herman A., assignor.)
American Telephone and Telegraph Company. (See Armstrong, Frank C., assignor.)
American Telephone and Telegraph Company. (See Armstrong, Frank C., assignor.)
American Telephone and Telegraph Company. (See Bailey, Rand S., assignor.)
American Telephone and Telegraph Company. (See Bailey, Rand S., assignor.)
Bascom, Henry M., assignor.)
American Telephone and Telegraph Company. (See Bailey, Rand S., assignor.)
American Telephone and Telegraph Company. (See Bailey, Rand S., assignor.)
Bascom, Henry M., assignor.)
American Telephone and Telegraph Company. (See Billekwell. O. B., and Herman, assignors.)
American Telephone and Telegraph Company. (See Blackwell. O. B., and Herman, assignors.)
American Telephone and Telegraph Company. (See Bown, Ralph, assignor.)
American Telephone and Telegraph Company. (See Bown, Ralph, assignor.)
American Telephone and Telegraph Company. (See Campoll.) (See Cam (See Wild, Alfred, assignor.) (See Lawner, Nicholas, assignor.)

American Telephone and Telegraph Company. (See Fish. Lewin B., assignor.)
American Telephone and Telegraph Company. (See Fitz-patrick, Paul G., assignor.)
American Telephone and Telegraph Company. (See American Telephone and Telegraph Company. (See Firlend, O. A., and Dustin, assignors.)
American Telephone and Telegraph Company. (See Gannett, D. K., and Kirkwood, assignors.)
American Telephone and Telegraph Company. (See Gordon, C. S., and Lowe, assignors.)
American Telephone and Telegraph Company. (See Gordon, C. S., and Lowe, assignors.)
American Telephone and Telegraph Company. (See Green, Irving W., assignor.)
American Telephone and Telegraph Company. (See Green, Irving W., assignor.)
American Telephone and Telegraph Company. (See Ham-Itolan, Introd.)
American Telephone and Telegraph Company. (See Ham-Itolan, Introd.)
American Telephone and Telegraph Company. (See Ham-Itolan, Harold S., assignor.)
American Telephone and Telegraph Company. (See Horman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Horman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Horman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Horman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Horman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Horman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Incilia, Alfred H., assignor.)
American Telephone and Telegraph Company. (See Incilia, Alfred H., assignor.)
American Telephone and Telegraph Company. (See Marmerican Telephone and Telegraph Company. American Telephone and Telegraph Company. (See Fish,

American Telephone and Telegraph Company. (See Strieby, M. E., and Fetter, assignors.)
American Telephone and Telegraph Company. (See Thompson, George K., assignor.)
American Telephone and Telegraph Company. (See Toomey, John F., assignor.)
American Telephone and Telegraph Company. (See Toomey, John F., assignor.)
American Telephone and Telegraph Company. (See Urhoff, Leslie S., assignor.)
American Telephone and Telegraph Company. (See Vernam, Gilbert S., assignor.)
American Telephone and Telegraph Company. (See Watson, Edward F., assignor.)
American Telephone and Telegraph Company. (See Watson, Edward F., assignor.)
American Telephone and Telegraph Company. (See Wernam, Gilbert S., and Ferry, assignor.)
American Telephone and Telegraph Company. (See Weaver, Allan, assignor.)
American Telephone and Telegraph Company. (See Weaver, Allan, assignor.)
American Telephone and Telegraph Company. (See Wight, Sumner B., assignor.)
American Telephone and Telegraph Company. (See Wight, Sumner B., assignor.)
American Telephone and Telegraph Company. (See Zobel. Otto J., assignor.)
American Telephone and Telegraph Company. (See Zobel. Otto J., assignor.)
American Tattle Company, The. (See Payson, A. E., and Hastedt, assignors.) signor.) American Thread Company, The. (See Snyder, Rex V., Ansisprot.)
American Ticket Scale Company, The. (See Salvet, New Yo.,
American Tobacco Company, The. (See Dalton, J. T.,
and Corson, assignors.)
American Tool Works Company, The. (See Robinson, Albert E., assignor.) American Tool Works Company, The. (See Sosa, Augus-American Tool Works Company, The. (See Sosa, Augustus M., assignor.)
American Transformer Company. (See Schermerhorn, John L., assignor.)
American Tube and Stamping Co., The. (See Keating, Daniel A., assignor.)
American Tupe Founders Company. (See Plum, Stephen H., 2d, assignor.)
American Sasignor.)
American Valve and Enameling Corporation. (See Wulf, Charles A., assignor.)
American Valve and Enameling Corporation. (See Wulf, Charles A., assignor.)
American Valve and Meter Company, The. (See Anderson, Frank C., assignor.) Son,
American Voith Contact Company.

(See Priem, Paul,
American Voith Contact Company. (See Priem, Paul, American Warming & Ventilating Company, The. (See Albrecht, Louis C., assignor.) American Welding and Manufacturing Company. (See Klaus, Pred R., assignor.) Assignor, Window Company. (See Lewis, Claude A., as-merican, Window Company. signor.)
American Wire Cord Tire Company, The. (See Weigel, Daniel M., assignor.)
American Wiremold Company, The. (See Frederickson, American Wiremoul Compuny, and the President Ofto A., assignor.)
American Woodlite Corporation. (See Wood, William G., assignor.)
American Woodworking Machinery Company. (See Perkius, Hiram A., assignor.)
American Wringer Company. (See Keltie, George R., assignor.) American Wringer Company. (See Keitie, George R., assignor.)
American Writing Paper Company. (See Armstrong, James H. A., assignor.)
American Writing Paper Company. (See Harrigan, Herman R., assignor.)
Ames, Adelbert, jr., (See Ames, Blanche A. and A., jr.)
Ames, Adelbert, jr., Hanover, N. H. Optical aid to the visual berception of depth or rotundity. 1,636,450; July 48.

Ames, Adelbert, fr., Tewksbury, Mass. Photograph and making the same. I.625.501; May 3. Ames, B. C., Co. (See Ames. Warren, assignor.) Ames, B. C., Co. (See Robbins, Chester C., assignor.) Ames, Blanche A., Boston, Mass., and A. Ames, Jr., Hano-yer, N. H. System of color standards. I,1627.91; ver, N. Jan. 4. Ames, Butler, Lowell, Mass. Comb and making the same. 1.637.249; July 26.
Ames, Charles F., et al. (See Frederick, Rheuel H., assame.
Ames, Charles F., et al., signor.)
Ames, Charles F., Brooklyn, assignor of one-fifth to A.
Ames, Charles F., Brooklyn, assignor of one-fifth to A.
H. E. Berchem and one-fifth to H. S. Schanck, New
York, N. Y. Vacuum-producing apparatus. 1,623,083;
Apr. 5.

(See Bockenoogen, I. E., and Ames.) Assignue, Andrew George K., et al. (See Rystedt, Ingemar K., assignor). Andrew C., assignor to Ternstedt Manufacturing Company, Detroit. Mich. Window-regulator operator and clutch, 1,613,009; Jan. 4. Ames, Earl R. (See Boekenoogen, I. E., and Ames.)
Ames, George H., Brooklyn, N. Y. Barrel closs
1,630,510; May 31.
Ames, Howard B. (See Weaver, J. C., and Ames.)

Ames, James W., Montclair, N. J. Utilizing waste rubber. 1,624,913; Apr. 19.

Anes, John G., Los Angeles, Calif. Glarcless headdight. 1,613,370; Jan. 4; Barnet D. C. Ames Co., Waltham, Ames, Warren, assignor to B. C. Ames Co., Waltham, Calif. Glarder gauge. 1,617,005; Feb. 8.

Ames, Warren, assignor to B. C. Ames Co., Waltham, Ames, Warren, assignor to B. C. Ames Co., Waltham, Calif. Glarder gauge. 1,617,284; Feb. 8.

Amet, Edward H., Redondo Beach, Calif. Motion-picture screen. 1,631,240; June 7.

Amet, Edward H., Redondo Beach, Calif. Motion-picture-control of the screen. 1,631,240; June 7.

Amics, Joseph H. Philadelphia, Pa. Hardening and toughening broken-mineral aggregates, consisting of trap rock, Ilmestones, sandstones, and types of shale rocks. 1,645,891; Oct. 18.

Samuel S., assignor, and J. America. (See Sadtler Samuel S., assignor).

Amics, James T., Baton Rouge, La. Automobile jack. 1,642,891; July 5.

1,634,891; July 5.

Al. J., assignors, J. Baton Rouge, La. Automobile jack. 1,642,811; July 5.

Amann, Albert H., assignor to Jostam Manufacturing Co., Chicago, Ill. Recoil pad for guns. 1,642,835; Sept. 20.

Ammann, Albert H., assignor to Jostam Manufacturing Co., Chicago, Ill. Recoil pad for guns. 1,642,835; Sept. 20.

Ammann, Albert H., Readling, Pa. Pattern-plating attachment for circular-knitting machines. 1,642,761; Sept. 20. tachment for circular-knitting machines, 1,022,04., Sept. 20.
Ammon, Fred, Waukegan, Ill. Seat adjuster. 1,640,812; Aug. 30.
Amodio, Robert, assignor of one-half to H. C. d'Annunzio, 1,025,014; Apr. 19.
Amoroso, Silvio, Boston, Mass. Foot accelerator for motor cars. 1,615,926; Feb. 1.
Amory, William N., New York, N. Y., assignor to Arch-Cushion Corporation. Resilient support for vehicle bodies. 1,634,895; July 5.
Amos, Cyril F., Rochester, England. Electric timing switch. 1,644,100; ct. 4,6 Deal, Indianapolis, Ind. Inkvending device. 1,615,354; Jan. 25.
Ampilon Corporation of America, The. (See Harris, Arthur W., assignor).
Amsec Products, Inc. (See Hardy, Charles. assignor).
Amsler, August, assignor to Ewak A.-G., Bern, Switzerland. Collapsible container. 1,614,709; Jan. 18.
Ausler, August, assignor to Ewak A.-G., Bern, Switzerland. Traveling crane. 1,614,709; Jan. 18.
assignor.)
Amsler-Morton Company, The. (See Morton, A., assignor).
Amsler-Morton Company, The. (See Morton, A., assignor). Amsler-Morton Company, The. (See Morton, William A., assignor.)

Amsler, Walter O., assignor to The Amsler-Morton Company, Pittsburgh, Pa. Recuperator. 1,624,128; Apr. 12.

Amster, Samuel, Richmond, Ky. Tobacco wax and producing the same. 1,624,155; Apr. 12.

Amsterdam Cutlery Company. (See Wilkes, C. H., and Calhoun, assignors.)

Amundsen, Ivar. Oslo, Norway. Refrigerating machine of the absorption type. 1,632,887; June 14.

Amundsen, Ivar., Oslo, Norway. Refrigerating plant.

Amundsen Engineering Corporation of California. (See Wood, E. K., and Metzger, assignors.)

Anaconda Copper Mining Company. (See Larison, Eldon L., assignor.)

Anaconda Copper Mining Company. (See Larison, E. L., don L., assignor.)
Anaconda Copper Mining Company. (See Larison, E. L.,
Frick, and Caro, assignors.)
Anaconda Sales Company. (See Gillis, Julius H., assignor.) Anaconda Sales Company. (See Robinson, Thomas, assignor.) signor.)
Anakin, Arthur E., Long Beach, Calif., assignor, by
mesme assignments, to Safeway Lock Company. Lock,
Anason R. Hender D., Striling, N. J. Motor-whelled fan
mechanism. 1.651,336; Dec. 6.
Anchor Cap and Closure Corporation. (See Durkee,
Chauncey H., assignor.)
Anchor Cap & Closure Corporation. (See Jueger, Max. as-Anchor Cap & Closure Corporation. (See Podel, Abraham, assignor.)
Anchor Cap and Closure Corporation. (See Ramsey, George, assignor.) Anchor Concrete Machinery Co. (See Olsen, Eugene F., assignor.) Anchor Manufacturing Company. (See Katz, Frank, assignor.) Auchor Post Fence Company. (See Thomson, Herbert G., assignor.) ider, George K., et al. (See Rystedt, Ingemar K., as-

Andersen, Esten, Chicago, Ill. Rafter-framing tool. 1,644,624; Oct. 4.
Andersen, Fred C., Bayport, Minn. Window and door frame. 1,648,712; Nov. 8.
Andersen, Fred C., and E. C. Madson, Bayport, and G. A. Chapman, Minneapolis, assignors to Andersen Lumber Company, Bayport, Minn. Casement sash frame. 1,628,772; Apr. 5.
Andersen, Hans F. (See Pedersen, F. B., and Andersen Landersen, Hans F. (See Pedersen, F. B., and Andersen).

Andersen, Hans P. (See Pedersen, F. B., and Andersen, Johan M., assignor to Albert & J. M. Anderson Manufacturing Company, Boston, Mass. Railway signaling system. 1,624,087; Apr. 12.
Andersen, Johan M., assignor to Albert & J. M. Andersen Manufacturing Company, Boston, Mass. Time switch. 1,626,262; Apr. 26.
Andersen, Lauritz W., Waterbury, Conn. Detachable Lauritz W., Waterbury, Conn. Detachable Lauritz W., Waterbury, Conn. Shade holder. 1,631,613; June 7.
Andersen Lauritz W., Waterbury, Conn. Shade holder. 1,631,613; June 7.
Andersen Lumber Company. (See Andersen, F. C., Madson, and Chapman, assignors.)
Company, Chicago, M. Cylinder for printing Presses. 1,626,562; May 3.
Andersen, Niels K. (See Harvey, A. L., and Andersen.) Andersen, Charles, Wagner, S. Dak. Musical instrument. 1,626,513 No. Anderson, Charles, Wagner, S. Dak. Musical instrument. 1,626,437,13 No. 43,44 Naderson, Albert & J. M., Manufacturing Company. (See Anderson, Johan M., assignor.)
Anderson, Alexander C. (See Kennedy, D., and Anderson, Alfred Duncellin Els. Pulley wheel. 1,638,720. derson.)
Anderson, Alfred, Dunedin, Fla. Pulley wheel. 1,638,720;

Anderson, Alfred, Dunedin, Fia. Pulley wheel. 1,638,720; Aug. 9.

Anderson, Alfred B., New Haven, Conn. Ventilator and the like. 1,644,701; Oct. 11.

Anderson, Andrew G., Wollaston, assignor to Carr Fastener, Company, Cambridge, Mass. Fastener, Company, Cambridge, Mass. Fastener, Company, Cambridge, Mass. Fastener, 1,651,337; Nov. 29.

Anderson, Andrew G., Wollaston, assignor to Carr Fastener Company, Cambridge, Mass. Fastener, 1,651,337; Nov. 29.

Anderson, Andrew G., Wollaston, Mass., assignor, by mesne assignments, to The Bassick Manufacturing Company Cambridge, Mass. Fastener, 1,631,327; Nov. 29.

Anderson, Andrew G., Wollaston, Mass., assignor, by mesne assignments, to The Carry of the Carry o

Anderson-Barngrover Mig. Co., token Land Anderson.)
Anderson, Carl. (See Blume, E. E., and Anderson.)
Anderson, Carl. E., Strafford, assignor to The Bryant
Electric Company, Bridgeport, Conn. Electric switch.
Anderson, Carl. E., East Orange, assignor to Eastern Tool
& Mig. Co., Bloomfield, N. J. Butfon loop. 1,628,638;
May 17.
Anderson, Carl J., Chicago, Ill. Lock for elevator doors.
1,615,607; Jan. 25.
Anterson, Carl L., et al. (See Swenson, Carl E., as-

Anderson, Carl L., et R. (See Sweam, C.)

Anderson, Carl M., assignor of one-half to M. Chonkich,
Baltimore, Md. Cooling system for motor vehicles.

Baltimore, Md. Cooling system for motor vehicles.

Androgon, Charles E., Elizabeth, N. J. Faucet. 1,650,589:

Nov. 29,

Anderson, Charles E., Sioux Falls, S. Dak. Smoker's

tray. 1,637,978; Aug. 2,

Anderson, Charles L., Reno, Nev. Aviation. 1,639,833;

Ang. 2,

Ang.

Hay. 1,637,918; Aug. 2.
Anderson, Charles M., Reno, Nev. Aviation. 1,639,833;
Aug. 23.
Aug. 23.
Charles M., Salt Lake City, Utah. Flow meter. 1,625,683; Apr. 19.
Anderson, Charles O., Omaha, Nebr. Load-adjusted brake mechanism. 1,627,305; May 3.
Anderson, Charles R., Dallas, Tex. Bushing-removing tool. 1,649,437; Nov. 15.
Anderson, Charles W., Milan, Ohio. Drain trap. 1,634,530; July 3.
Anderson, Charles W., Milan, Ohio. Steering range for nutomobiles. 1,651,174; Nov. 29.
Anderson, Clarence G., Ottumwa, Iowa. Comb. 1,642,916; Sept. 20.
Anderson, Clarence M. S., et al. (See Gerau, George B., assignor.)
Anderson, Claude M., Guys Hill, Jamaica, British West Indies. Lantern, 1,632,577; June 14.

Anderson, Daniel G., Los Angeles, Calif. Extension leaf for tables. 1.641.518; Sept. 6.
Anderson, David E., assignor to General Motors Corpora1.634.131; June 28.
Anderson, David E., assignor to General Motors Corporation, Detroit, Mich. Internal-combustion engine,
1.634.702; Oct. 11.
Anderson, David L., assignor to Intertype Corporation, Brooklyn, N. assembling elevator gate for typoAnderson, David W., Scottsville, Va. Flashing brick or block, 1,617.141; Feb. 8.
Anderson, Edgar, W., assignor to Invincible Metal Furniture Company, Manitowoc, Wis. Safe deposit vault.
Anderson, Edward, assignor to The A. A. SimondsDayton Company, Dayton, Ohio. Bond for elastic grinding wheels and applying the same, 1,631.113; June 7.
Anderson, Edward, and R. W. Adams, Minneapolis, Minn.

Anderson, Edward, and R. W. Adams, Minneapolis, Minn. Vegetable and soap slicing machine. 1,519,557; Mr. Lebutto, C. B. Golden, Crafton, Fra. Automatic control valve. 1,627,628; May 10. Anderson, Emil F., assignor to International Harvester Company, Chicago, Ili. Straw spreader. 1,639,447; Aug. 16.

Aug. 16.
Anderson, Emma C., Spokane, Wash. Dressing carrier.
1.614.535; Jan. 18.
Anderson, Eric W., Chicago, Ill. Hydraulic jack.
1.644.101; Oct. 4.
Antierson, Ernest D. New York, and C. Beckmann, deceased; F. V. Kelly administrator, Brooklyn, N. Y. Ma-Anderson, Ernest G. K., assignor, by mesa, essignments, to Appleton Electric Co., Chicago, Ill., Rewinding reel.
1,626.376; App. 26.
Anderson, Ernst G. K., Chicago, Ill., assignor to Appleton Electric Company. Controlling switch for spotlights and the like. 1,632.754; June 14.
To Appleton Electric Co., Chicago, Ill., Electric switch.
1,042.522; Sept. 18.
Anderson, Evald. Alhambra, assignor to International

1.642.528; Sept. 18.

Anderson, Evald, Alhambra, assignor to International Precipitation Company, Los Angeles, Calif. Gas scrubber, 1.632.262; June 14.

Anderson, Evald, Alhambra, assignor to International Precipitation Company, Los Angeles, Calif. Method and apparatus for supplying fibrous material in aligned condition. 1.638.977; July 26.

Anderson, Evald, Alhambra, assignor to International Precipitation Company, Los Angeles, Calif. Apparatus for electrical separation of suspended particles from gases. Anderson, Fromeroc, Canadler, Minn. Stove attachment. 1.650.859; Nov. 29.

Anderson, Frank C., assignor to The American Valve and Meter Company, Cincinnati, Ohio, Switch-interlocking device. 1,622.019; Mar. 22.

Anderson, Frank O. (See Atkins, D., jr., Anderson, and Lindsey, Jr., Anderson, and Lindsey).

Lindsey.)

Anderson, Fred, Minden, Nebr. Sanitary adjustable milk stool. 1.613.779; Jan. 11. Anderson, Frederick V., assignor to The V. D. Anderson Company, Cleveland, Ohlo. Press or expeller. 1,640,342; Aug. 30.

Aug. 30.

Anderson, Fritz A., assignor, by mesne assignments, to The Burdick Corporation, Milton, Wis. Electric lamp. 1,651,175, Nov. 29.

Anderson, George A. (See Pierce, R. H., and Anderson, Anderson, George A. (Washington, D. C., assignor to The Anderson, George M., Washington, D. C., and S. Hilder, Biscuit. 1,621,863; Mar. 22.

Anderson, George M., Washington, D. C., and S. Hilder, Glen Carlyn, Va., assignors to The Shredded Wheat Company, Ningara Falls, N. Y. Packing biscuit. 1,618,503; Feb. 22.

Ninderson, George P. (See Clark, O. A., and Anderson, Medicano, George P., Carlotto, A., and Anderson, 1,648,290; Sept. 27.

Anderson Gordon W. (See Condit, T. M., and Anderson,)

Anderson, Gordon W. (See Condit. T. M., and Anderson.) Anderson, Graig W., Columbus, Ohlo, Hair curler and waver, 1,631,781; June 7., Anderson, Grenville T., Flushing, N. Y., and C. V. Taplin, East Grange, N. J., assignors to American Telephone and Telegraph Company. Testing device, 1,612,849; Jan. 4.

Jan. 4.

Anderson, Gustaf A., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Truck side frame. 1619,688; Mar. 100,000.

Anderson, Gustaf A., Baltimore, Md., assignor, by mesne frame. 1,623,036; Apr. 5.

Anderson, Gustaf A., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Truck side frame. 1,623,037; Apr. 5.

Anderson, Gustaf A., Baltimore, Md., assignor, by mesne assignments, to The Stuffer, and the stuffer frame. 1,623,037; Apr. 5.

Anderson, Gustaf A., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Truck side frame. 1,623,670; Apr. 5.

Auderson, Gustaf A., Baltimore, Md., assignor, by mesne assignments, to The symington Company. Car truck. 1,628,298; May 10.
Auderson, Gustaf B., Minneapolis, Minn. Power-propelled runner attachment for motor vehicles. 1,631,114; Auderson, Gustaf P., Post, Flori, Post, Anderson, Gustaf P., Post, Flori, Post, Po

June 7.

Anderson, Gustav R., East Elmhurst, New York, N. T.

Antiskid device 1,615,154; Jan. 18.

Anderson, Harlor E., Kenosha, Wis. Doorcheck.
1,621,305; Mar. 15.

Anderson, Harold C., Miami, Fla. Wrench. 1,618,904;

Anderson, Harold N., Cleveland, Ohio. Toothed gear.
1,619,963; Mar. 8.

Anderson, Harold N., Cleveland, Ohio. Toothed gear.
1,619,963; Mar. 8.

Anderson, Harry F., Marion, Ind., assignor of one-half to
J. Boyce, Laketon, Mich. Sign. 1,616,163; Feb. 1.

Anderson, Harry S., Los Angeles, Cailf. Steam generator. 1,634,004; July Hansson. Soren, assignor.)

Anderson, Harry T., Butler, Pa. Connecting bar and making the same. 1,615,821; Feb. 1.

Anderson, Harry T., Butler, Pa. Railway car. 1,634,008; June 28.

anderson, Harry T., Butler, Pa. Connecting bar and making the same. 1,615,821; Feb. 1.

Anderson, Harry T., Butler, Pa. Railway car. 1,634,008; June 28.

Anderson, Jarry T., Butler, Pa. Railway car. 1,634,008; June 28.

Anderson, Jarry T., Butler, passignor to Standard Steel mechanism. 1,616,434; Feb. 2.

Anderson, Hirlander A., assignor to Mahr Manufacturing Company, Minneapolis, Minn. Preheating torch. 1,614,640; Jan. 18.

Anderson, Hirland C., New York, N. Y. Tire protector. 1,600,000; Jan. 18.

Anderson, Hirland C., New York, N. Y. Punctureproof pneumatic tires. 1,636,978; July 26.

Anderson, Hirland C., New York, N. Y. Resilient wheel. 1,650,885; Nov. 29.

Anderson, Homer G., East Orange, Manufacture of incompany of the part of the property of the part of the property of the part of

Sept. 6.

Sept. 6.

Anderson, John A., assignor to B. S. Gray, trustee, Geneseo, Ill. Automatic take-up bolt. 1,651,240; Nov. 29.

Anderson, John C. A., Wilmette assignor to Reliance 1,626,377; Apr. 26.

Anderson, John E. (See Hartmann, Carl, assignor). Anderson, John E. (See Hartmann, Carl, assignor). Anderson, John F. Oakland, Calif. Can exhauster. 1,641,367; Sept. 6.

Anderson, John N. (See Colby, Lawrence W., assignor). Anderson, John N., Hebohen, M., assignor to Offs Elevator Company, New York, N. Y. Brake. 1,640,972; Aug. 30.

Aug. 30.

Anderson, John R., Moline, Ill. Spine stretcher. 1,614,641; Jan. 18.

Anderson, John R., Moline, Ill. Amusement device. 1,619,325; Mar. 1.

(See Smulski, Theodore J., assignor.) Anderson, John W. Hamilton, Ontario, Canada. Refrigeration device. 1,627,629; Jan. 10.

Anderson, Joseph F., Kanass City, Kans. Lubricating oil. 1,619,964; Mar. 8.

Anderson, Lawrence, Anderson, Ind. Electric headlight control. 1,654,067; Dec. 27.

Anderson, Loris R., Brooklyn, N. Y. Advertising sign. Control. Anderson Manufacturing Company. (See Paul, Howard C., assignor.)

C., assignor. Martin E., assignor to The Clymer Manufac-turing Company, Denver, Colo. Spotlight. 1,612,860: Jan. 4.

Anderson, Mervyn F., and T. F. Clark, Hoboken, N. J. Brake. 1,625,584; Apr. 19.

Anderson, Mildred N., Sunta Cruz, Calif. Holder for thread, cord, tape, etc. 1,648,437; Nov. 8. Anderson, Newton M., Bedford, Ind. Mixing machine. 1,621,345; Mar. 15. Anderson, Nils A., Brooklyn, N. Y. Wrench. 1,645,570; Oct. 18. Anderson, Noah D., Brainerd, Minn. Razor. 1,632,778;

Anderson, Noah D., Brainerd, Minn. Razor. 1,632,778; June 21. Anderson, Oscar, Crosby, Minn. Folding chair. 1,642,477; Sept. 13

Oscar O., Sioux Rapids, Iowa. Float valve.

1,823,374; Apr. 5.
Anderson-Pitt Corporation, The. (See Pitt, Frederick D., assignor.)
Anderson-Pitt Corporation, The. (See Pitt, F. D., and Anderson-Pitt Corporation, The. (See Pitt, F. D., and Anderson, R., and Sons Limited. (See Young, Edward

Anderson, R., and Sons Limited. (See Young, Edward Anderson, R., and Sons Limited. (See Young, Edward Anderson, R. C. (See Fontaine, Robert A., assignor.) Anderson, R. C. (See Fontaine, Robert A., assignors.) Anderson, Ralph H., Spokane, Wash. Football-game apparatus. 1,648,601; Nov. S.
Anderson, Raymond M., and S. M. Udale, assignors to G. M. Holley, Detroit, Mich. Vaportzer. 1,635,808; July 12.
Anderson, Robert D., Shreveport, La. Exhaust fan or blower. 1,623,650; Apr. 52.
Anderson, Roy F., assignor to Hayes-Ionia Company, Grand Rapids, Mich. Automobile visor. 1,644,662; Oct. 11.
Rufus L. Orlando, Fla. Headlight-defecting attachment. 1,635,509; June 21.
Anderson, Russell G., Lackewood, assignor to The Cleveland Worm and Gear Company, Cleveland, Ohio. Hob for worm gears. 1,648,470; Nov. S.
Anderson, Russell W., Detroit, Mich. Advertising stand. 1,635,394; July 12.
Anderson, Samuel R., St. Louis, Mo. Aircraft. 1,647,978; Anderson, Sidmer M., St. Valence, A., and Anderson.

Anderson, Sidney A. (See Marsh, A., and Anderson, Sidney E., Maplewood, N. J., assignor, by mesne assignments, to Western Electric Company, Inco-porated. Electromagnetic coupling device. 1,616,002; Anderson, Sievert T., Chicago, Ill. Tent-nole speket

Feb. 1.
Anderson, Sievert T., Chicago, Ill. Teut-pole socket.
1.022,273 Mar. 29.
Resignor to New Monarch Machine
e Stamping Company, Des Moines, Iowa. Loader attachment for tractors. 1,619,786; Mar. 1.
Anderson, Sven V., Philadelphia, Pa. Advertising novelty.
1.022,020; Mar. 22.
Anderson, Thomas F. (See Carpenter, R. F., and AnderJohnson Mar. 2018, Anderson, Thomas F.

son.) Thomas F. assignor to The R. F. Carpenters on Thomas F. assignor to The R. F. Carpenter administrativing Company. Cleveland, Ohio. Sectional partition. 1.649.886; Nov. 22.
Anderson, Thomas H., assignor to M. E. Bernhardt, New York, N. Y. Cigar cutter. 1.625.870; May 10.
Anderson, V. D., Company, The. (See Anderson, Frederick V., assignor).
Anderson, Victor T., assignor of one-fourth to H. H. Randolph, doing business as Little Bear Specialties Company, Ransas City, Mo. Hatrack. 1,849.207; Anderson, Waldemar E., Montelair, N. J., assignor to Westinghouse Lamp Company. Theftproof lamp. 1,651.357; Dec. 6.
Anderson, Walter S., assignor to E. Holley, Detroit, Mich. Vent plug for permanent molds. 1.627.879; May 10. Anderson, William. (See McLaughlin, P. T., and Anderson, William. (See McLaughlin, P. T., and Anderson, William. (See McLaughlin, P. T., and Anderson).

Son.; Anderson, William, Hebburn-on-Tyne, and H. W. Clothier, Wallsend-on-Tyne, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, Metal-clad elec-tric switch gear of the draw-out type. 1,620,792; Mar. 15.

Mars M. William A. Kanorado, Kans. Device for exAnderson, William A. Kanorado, Kans. Device for exmethod wheel rims. 1,632,263; June 14.
Anderson, William A., Huutington Park, assignors to
The Technical Glass Company, Incorporated, Los Angeles, Callif, Furniture knob. 1,639,159; Aug. 16.
Anderson, William C., Bark River, Mich. Traction-wheel
cleat. 1,636,731; July 26, m. N. Y. Automatic operatcleat. 1,636,731; July 26, m. N. Y. Automatic operatnotes on, William J., Brooklyn N. Y. Automatic operatvalve-actuating rod for internal-combustion engines.
1,613,815; Jan. 11.
Anderson, William T., Tulsa, Okla. Nutcracker.
Milliam T., Tulsa, Okla. Nutcracker.
Anderson Axel H. assignor to Baker-Yawter Company.
Benton Harbor, Mich. Filing case. 1,021,934; Mar. 15.
Andersson, Lars J., Halustad, Sweden. Belt fastener.
1,629,933; May 24.
Andersson, Nils F. F. (See Ljungström, F., and Andersson.)

Andrade, Cipriano, jr., New York, N. Y. Differential. 1.628,907; May 3. New York, N. Y. Control element for clutches. 1.635,599; July 12. Andrade, Cipriano, jr., New York, N. Y. Roller clutch. 1.639,674; Aug. 23.

Andre, Karl R., Lynwood, Calif. Rotary casing swage.
1,641,513 Sept. 6.
1,641,516 Sept. 6.
1,641,541 Sept. 6

Brake Company, Chicago, Ili. Brake. 1,024,089; Aug. 30.
Andres, William J., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ili. Brake-operating mechanism. 1,654,657; Dec. 27.
Andresen, Halvor, et al. (See Andresen, Halvor, as-

signor.)

Andresen, Halvor, New York, N. X., assignor, by mesne assignments, to said H. Andresen, Christiania, Norway, and O. O. Howard, Rockport, Mass. Internal-combustion engine. 1,654,156; Dec. 27.

Andresen, Herman P., Chicago, Ill. Combination heater Andresen, Herman P., Chicago, Ill. Combination heater forms Barrel Company, San Francisco, Calif. Attaching device for receptacle bails. 1,639,975; Aug. 28.

Andresen, Julius C., 2014. H. F. Marien, assignors to California Barrel Company, San Francisco, Calif. Attaching device for receptacle bails. 1,639,975; Aug. 28.

Andresen, Totto, Vindern, near Oslo, Norway. Magazine grinder. 1,647,682; Nov. 1.

Andrew, Frank C., London, England. Apparatus for June 7.

Andrew, Frank C., London, England. Apparatus for

June 7.

Andrew, Frank C., London, England. Apparatus for fumigating, deodorizing, and the like treatment of air. 1614,817; Jan. 18.

Andrew, Frederick W., Andalusia, Pa., and M. Tibbetts, Detroit, Mich., assignors to Packard Motor Car Company, Detroit, Mich. Lock mechanism. 1,625,065;

pany, Detroit, Mich. Lock mechanism. 1,626,065; Apr. 26. Andrew, Harold, Princeton, Ill. Device for detecting and measuring the unevenness of a surface. 1,633,841;

measuring the unevenness of a surface. 1,633,841; June 28 Handlew, Landlew, Landlew,

ndrews, Arthur G., Rockford, Ill., assignor to The Wash-burn Company, Worcester, Mass. Dish drier. 1,646,179;

Nov. 29.
Andrews, Arthur G., Rockford, Ill., assignor to The Washburn Company, Worcester, Mass. Dish drier. 1,646,179; Andrews, Benjamin, Houston, Tex. Sulphur mining. 1,648,210; Nov. 8.
Andrews, Charles, Jr., Rockford, Ill., assignor to The Washburn Company, Worcester, Mass. Heater. 1,617,787; Peb. 15.
Andrews, Charles, Jr., Rockford, Ill., assignor to The Washburn Company, Worcester, Mass. Heater. 1,617,787; Peb. 16.
Andrews, Charles B. assignor to Taylor-Wharton Iron Ford Garden, Christy, New York, N. 20.
Andrews, Chauncey C., administrator. (See Andrews, MacMundy.)
Andrews, Chester E. (See Canon, F. A., and Andrews.)
Andrews, Christy, New York, N. Y. Ornamentations. Christy, New York, N. Y. Ornamentations. Andrews, Edward F., assignor to Andrews-Hammond Corporation, Chicago, Ill. Electrode for rectifiers and electrolytic condensers. 1,637,795; Aug. 2.
Andrews, Edward F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohlo. Heel-washer-stacking machine. 1,622,243; Mar. 22.
Andrews, Harry D., Cincinnati, Ohlo. Display device. 1,630,917; May 31.
Andrews, Isaac, Spartanburg, S. C. Loom harness support. 1,637,796; Aug. 2.
Andrews, Isaac, Spartanburg, S. C. Loom harness. 1,464,571; Oct. 18.
Andrews, Jarvis M. (See Troland, L. T., and Andrews.)
Andrews, Jarvis M. (See Troland, L. T., and Andrews.)
Andrews, Jarvis M., Wollaston, assignor, by mesne assignments, to Technicolor Motion Picture Corporation, films. 1,613,303; Jnn. 4.
Andrews, Jarvis M. (See Troland, L. T., and Andrews.)
Andrews, Jarvis M. (See Troland, L. T., and Andrews.)
Andrews, Jarvis M., Wollaston, assignor, by mesne assignments, to Technicolor Motion Picture Corporation, films. 1,613,303; Jnn. 4.
Andrews, Land. Sand. Pulverizing apparatus for cinematographic films. 1,613,303; Jnn. 4.
Andrews, Land. Company. (See Rohmer, Gabriel E., assignor).

Lead Company. (See Rohmer, Gabriel E., as-

Andrews, Linwood M., Chicago, Ill. Stand mirror. Des. 274,48; May 31.

124,748; May 31.

(See Abbadessa, Vincenzo, assignor.)

Andrews, Goldmandy, deceased, Morley, Mich.; C. C.

Nov. I.

Nov. 1.

Andrews, Louis A. (See Abbadessa, Vincenzo, assignor.)
Andrews, MacMundy, deceased, Morley, Mich.; C. C.
Andrews administrator. Sputum-cup holder. 1,627,427;
Andrews, MacMundy, deceased, Morley, Mich.; C. C.
Andrews, Nathaniel R., Yonkers, and J. J. Neuman,
New York, N. Y. Centrifugal extractor-operating plant.
1,615,433; Jan. 25.
Andrews, Thaddeus H., Casper, Wyo. Automatic drainfor water-cooled engines. 1,639,277; Nov. 15.
andrews, Thaddeus H., Casper, Wyo. Automatic drainfor water-cooled engines. 1,639,277; Nov. 15.
and one-fourth to C. W. Johnston, Curtis, Nebr., and one-fourth to C. W. Johnston, Tatt, Call. Railway mower.
1,629,984; May 24.
Andrich, Kurt, Frankfort-on-the-Main, Germany, assignorto Roessler & Hasslacher Chemical Company, New York,
1,613,2095; Jan. 25.
Andrus, George P., Aberdeen, Wash. Bombing gun for aircraft. 1,036,451; July 19.
Andruszkiewicz, Leon, Thorp, Wis. Device to hold cows' tails,
Andred, Martines, B., Norgar, by mesne assignments,
Angel, Dennis M., North St. Paul, Minn. Ashlar-setting clamp. 1,621,656; Mar. 22.
Angel, Herbert, Brooklyn, assignor to The Western UnionTelegraph Company, New York, N. Y. Receiving perforator, 1,629,465; May 24.
Angel, Herbert, Brooklyn, assignor to The Western UnionTelegraph Company, New York, N. Y. Receiving perforator, 1,629,465; May 24.
Angel, Herbert, Brooklyn, assignor to The Western UnionTelegraph Company, New York, N. Y. Refilable pencil.
1,614,860; Jan. 18.
Angelletti, Joseph M., New York, N. Y. Refilable pencil.
1,614,860; Jan. 18.
Angelletti, Joseph M., New York, N. Y. Lock. 1,646,674; Oct. 25.
Angelin, Luigl, Rome, Italy, Arrangament for hydralicAngelin, Creste, Rome, Italy, Arrangament for hydralicAngelin, Creste, Rome, Italy, Arrangament for hydralicAngelin, Creste, Rome, Italy, Arrangament for hydralic-

Angellilo, Fedele, New York, N. Y. Lock. 1,646,674; Oct. 25.
Angelini, Luigi, Rome, Italy. Carburetor. 1,652,228; Angelini, Oreste, Rome, Italy. Arrangement for hydraulicinternal reaction propulsion. 1,631,783; June 7.
Angell, Charlie J., Plains, Kans. One-way disk plow 1,615,499; Jan. 25.
Angell, Chester M., assignor to Vesta Battery Corporations of the control o

Angler, Edward H. See Wheldon, William M., assignor.)
Angler, Edward H., Framingham, Mass. Packaging toric articles. 1,640,021; Aug. 23.
Angler, Edward H., Framingham, Mass. Packaging toric Angler, Edward H., Framingham, Mass. Crinkling paper. 1,643,147; Sept. 20.
Anglada, Domingo, New York, assignor to Wolf Safety Lamp Co. of America, Inc., Brooklyn, N. Y. Illuminating and signal lamp. 1,617,432; Feb. 1,600, by messignments, to Arch Cushion Corporation. Shock-absorbing device. 1,643,507; Sept. 27.
Angle. Edward H., Pasadena, Calif. Orthodonte appliance. 1,622,256; Mar. 29.
Angle. Glona Da Dayton, Ohio. Crank-case construction. Angle, Glenn D., Dayton, Ohio. Intake-manifold arrangement for W-type internal-combustion engines. 1,622,172; Mar. 22.

Dayton, Obio.

Engine-cylinder valve1,633.023; July 5.

Angle, Glenn D. Detroit, Mich.

Articulated connecting
rod. 1,637,979; Aug. 2.

Angle, Glenn D., Detroit, Mich. Cam-shaft and accessory drive for engines. 1,653,689; Dec. 27.
Angle, Glenn D., Detroit, Mich., and H. E. Morehouse. Dayton, Ohio. Valve-port arrangement for international combustion engines. 1,663,471: July 5.
Anglemyer, Carl M., Dayton, and W. P. Coffman, Durkirk, assignors to The Edgemont Machine Company, Dayton, Ohio. Clutch. 1,627,006; May 3.
Angle-American Mill Company, The. (See Taylor, John

Anglo American E. assignor.) Anglo-California Trust Company, trustee. (See Miner, Claude 6., assignor.) Anglo Shan Corporation Ltd. (See Ratignier, Marius,

Angula Carlon Corporation Ltd. (See Ratignier, Marius, assignor).

Angrove, Samuel, Providence, R. I. Valve lifter. I,616,432; Feb. S.

Angus, Arthur R., Westminster, London, England. Control of trains. 1,624,624; Apr. 12.

Angus, London, 1,624,624; Apr. 12.

Angus, London, 1,624,624; Apr. 13.

Angus, London J., 1,666,11,147; J.

Angus, Arpdd, Balham, London, England. Playing percussion musical instruments. 1,621,489; Mar. 15.

Anida, Renjamin H., Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich. Distributor mounting. 1,631,185; June 7.

Animated Picture Products Co. (See Schwartz, Isidore, assignor).

Ing. 1,051,150; June 1.

Ing. 1,051,150; June 1.

Ing. 1,051,150; June 1.

Aninger. Priedrich, Markt Triebendorf, Czechoslovakin. Shuttle-changing device for looms. 1 630,918; May 31.

Ankarlo. Victor E. Duluth, Minn., assignor of five per cent to J. O.

Bodin, Duluth, Minn, and five per cent to J. O.

Bodin, Duluth, Minn, and five per cent to G. M.

Schucht, Milwaukee, Wis. Connecting-rod bearing.

1,644,974; Oct. 11.

Ankele, Moritz A., Danville, Ill. Rail-clamp signal.

Ankele, Holth, Severin C., Los Angeles, Calif. Fish-cleaning machine. 1,614,587; Jan. 18.

Anker-Holth, Severin C., Los Angeles, Calif. Fish-positioning machine. 1,614,588; Jan. 18.

Anker-Werke Aktiengesellschaft. (See Hennig, Albert, assignor).

assignor.)

assignor.)
Anlauf, Herman, and T. J. Warhurst, San Antonio, Tex.
Coupling, 1,62,2,216; Mar. 22.
Anliker, Fordinand, Sharon, Pa., and R. J. Wittmer.
Cleveland Heights, Ohlo, assignors to National MalleCleveland Heights, Ohlo, assignors to National MalleClar couplor. 1,647,498; Now J.
Annen, James E., assignor to The National Paper Can
Company, Milwaukee, Wis. Making paper containers.
1,636,584; July 19.
Annis, James B., Kansas City, Mo. Device for measuring
Annis, James B., Kansas City, Mo. Device for measuring
"Ansaldo" Societa Anonima. (See Soliani, Nator, assignor.)

signor.)
Anschutz, Edward C., assignor of one-half to F. S. and J. M. Glaser, Cleveland, Ohio.
Box-clampling device.
1.642.665; Sept. 20.
Ansco Photoproducts, Inc. (See Bornmann, Carl, assignor.)

Ansco Photoproducts, Inc. (See Lessler, Lew W., as-

signor.)
nsco Photoproducts, Inc. (See Lessler, L. W., and

Anseo Photoproducts, Inc. (See Lessier, Lew W., assignor.)
Angeo Photoproducts, Inc. (See Lessier, L. W., and Bornmann, assignors).
Anseo Photoproducts, Inc. (See Slocum, Benjamin A., Anseo, Harry R. (See Bloss, R. R., Strout, and Ansel, Ansel, Harry R. (See Bloss, R. R., Strout, and Ansel, Ansieh, Herman K., Foronto, Ontario, Canada, assignor to Westinghouse Electric & Manufacturing Company, 1981.

Service mechanism, 1613382; Feb. 15.

Ansingh, Herman K., Toronto, Ontario, Canada, assignor to Westinghouse Electric & Manufacturing Company, Electrical Switch, 1623-954; Apr. 12.

Ansingh, Herman K., Toronto, Outario, Canada, assignor to Westinghouse Electric & Manufacturing Company, Electrical Switch, 1623-954; Apr. 12.

Anson, Edward E., Charksville, Ohio, Gate, 1,635,878; July 12.

Anson, Edward E., Charksville, Ohio, Gate, 1,635,878; July 12.

Auson, Ruben, assignor of one-half to W. A. Femmer, Truxton, Mo.

Church Church, Church Contribution chest. Des. 732-248; Aug. 16.

Ansonia O & C Company, The. (See Clauss, George E., assignor).

Ansonia O & C Company, The. (See Clauss, George E., assignor).

Ansonia O & C Company, The. (See Clauss, George E., Anstiss, George P., Onk Park, assignor to G. S. Blakeslee & Co., Cicero, Ill. Dishwashing machine. 1,635,638; July 12.

Anstotz, Charles, and W. Saupe, New York, N. Y. assignors to Ohmer Fare Register Company, Davton, Olio.

Diving means for taximeters. 1,635,638; July 12.

nstotz, Charles, and W. Saupe, New York, N. Y., as-signors to Ohmer Fare Register Company, Dayton, Ohio. Driving means for taximeters. 1,635,698; July 12.

Antai and hel for the use on shoes. 1,651,445; Dec. 27.

Anthonisen, Georg B., Minneapolis, Minn. Rail or rolled member. 1,613,498; Jan. 4. Authony, Charles A., assignor to Metal Package Corporations of the company of the company. Anthony Company. (See Anthony, Mark, assignor.) Anthony Company. (See Anthony, W. C. and Mackinosi, assignors.) (See Benedict, Charles H., assignor.) Anthony Company. (See Benedict, Charles H., assignor.) (See Benedict, Charles H., assignor.) (See Manthony, Mark, assignor.) (See Benedict, Charles H., assignor.) (Anthony Company, (See Benedict, Charles H., assignor.) Anthony, Daniel L., assignor of one-half to H. E. Cott-man and one-half to E. P. Morgan, El Paso, Tex. Braider attachment for sewing machines. 1,622,171. Mar. 22.

Braider attachment for sewing machines. 1,022,11; Marior, David S., San Antonio, Tex. Flour mill. 1,645,847; Oct. 18.
Anthony, Eugene, King County, Wash. Combined electric plug and controller. 1,613,261; Jan. 4.
Anthony, John E., and D. B. Baker, assignors to International Harvester Company, Chicago, Ill. Steering mechanism for tretures. 1,613,863; Jan. 1,626,667; Apr. 26.
Anthony, Mark, Clermont, Fla., assignor to Anthony Company, Streator, Ill. Crank. 1,629,469; May 24.
Anthony, William C., and W. B. Mackintosh, assignors to Anthony Company, Streator, Ill. Cank. 1,629,469; May 24.
Anthony, William C., and W. B. Mackintosh, assignors to Anthony Company, Streator, Ill. Steering gear. 1,630,046 (May 24.
Anthony, Company, Streator, Ill. Steering gear. 1,630,046 (May 24. assignors.) Anthracite Separator Company. (See Pardee, Frank, as-

signor.) Antisell, Alfred B., New York, N. Y. Valve. 1,647.823; Nov. 1.

Nov. 1.

Antoine, Aifred D., Chicago, and A. E. Gebert, Wilmette, assignors to Advance Machine Company, Chicago, Ill. Vending machine. 1,627,647, May 10.

Antoine, Victor, Lambermont, near Ensival, Belgium. Elimining water from the pulp on the wire of Anton, Frederick A. Topcks, Kans. Sanitary freezer container. 1,647,169; Nov. 1.

Antoncich, Frederick A., Topcks, Kans. Sanitary freezer container. 1,647,169; Nov. 1.

Antoncich, Frederick A., Topcks, Kans. Cantiago, Lagoritary freezer container. 1,647,169; Nov. 1.

Antoncich, Frederick A., Topcks, Kans. Cantiago, Production of Company (Company), Nov. 1.

Antoncich, Frederick A., Topcks, Kans. Sanitary freezer Container. 1,647,1343; May 3.

Antoncich, Mass. Projecting mechine. 1,627,1343; May 3.

Antoncte, Joseph B. (See Underwood, Jesse J., assignor.)

Signor.)
Antonio, Ramon G., Manila, P. I. Clip and pencil for fountain pens. 1.630.413; May 31,
Antonnian, Eunice M., Boston, Mass. Garment.

Eunice Eunice 12. ntoonian, 1,624,570;

1,624,570; Apr. 12.
Antossi, Adolph, Brooklyn, N. Y. Air supply for tumblers.
1,624,650; Apr. 12.
Antrobus, Mary, London, England. Seat. Des. 72,126;

Antrobus, Mary, London, England. Bedstead. Des. 72,127; Mar. 8.
Antrobus, Mary, London, England. Table. Des. 72,128; Mar. 8.

Mar. 8.

Antrobus, Mary, London, England. Chair. Des. 72,464;
Apr. 19.

Antrobus, Mary, London, England. Sideboard. Des. 72,465; Apr. 19.

T.Z.465; Apr. 19.

T.Z.464; Apr. 19.

T.Z.464

cutting cutting the control of the cutting cut

Apel, Albert, Stockton, Calif. Harvesting machine, 1502,806 [Dec. 13. Apeldom, Guille, 13. Apeldom, Guille, 13. Apeldom, Guille, 14. Apeldom, Guille, 14. Apeldom, Guille, 14. Apeldom, Artificial Silk Ltd. (See Levy, Leonard apeldom).

Aprx (Leftiss) Artinean Site Ltd. (See Levy, Leonard Apex Electrical Manufacturing Company, The. (See Frantz, Walter A., assignor.) Apex Electrical Manufacturing Company, The. (See Mc-Clatchle, Stanley, assignor.) Apex Spering Cover Company, Tho. (See Skok, Lawrence,

Aprel David. (See Schaeffer, E. H. and Apfel.)
Apfelbeck, Hugo, Falkaenan, Czechoslovakia. Press for
making briquettes. 1,620,621; Mar. 15.
Apollo Holding Corporation. (See McCrery, H. E., Jesser,
and Montgomery, assignors.)
Apollo Plano Co. (See Rauworth, Edwin S., assignor.)
Apostoloff, Serge, Brooklyn, assignor to Union Dry Battery
Corporation of America, New York, N. Y. Electric cell.
1,617,230; Feb. 8.

Appel, Daniel, assignor to The Cleveland-Akron Bag Company, Cleveland, Ohio. Making paper bags. 1,621,049; Mar. 15

pany, Cleveland, Ohio. Making paper bags. 1,621,049; Mar. 15. Appel, Daniel, assignor to The Cleveland-Akron Bag Company, Cleveland, Ohio. Machine for making paper bags. Appelian, Henri G., and J. J. Van Horen, London, assignors of one-half to R. J. Walker, Leicester, England, Frame for bicycles. 1,626,775; May 3. Apperson, Graham. (See Raley, O., and Apperson.) Apple. Vincent G., Dayton, Ohio. Machidor, Pressing Company, Company,

Apple, vincent G., Dayton, Onto. Armature. 1,642,051: Sept. 13.

Applebaum. Isaac, Philadelphia, Pa. Folding container. 1,653,690; Dec. Philadelphia, Pa. Folding container. 1,653,690; Dec. 27.

Appleby, James A., assignor to C. C. Wakefield & Company Limited, London, England. Grease guo. 1,643,761; Sept. 27.

Appleby, Thomas, assignor of one-third to C. D. Ehret, 1,619,911; Mar. 8.

Appleby, Thomas, Philadelphia, assignor to A. A. Kent. Ardmore, Pa. Method of and apparatus for producing oscillations. 1,651,012; Nov. 29.

Appleford Counter Check Book Company. (See Waugh, William R., assignor).

William R., assignor).

William R., assignor).

Appleguist, Charles O., Ambridge, Pa. Can opener. 1,613,499; Jan. 4.

Appleton Electric Co. (See Anderson, Ernst G. K., assignor).

Signut.)

Appleton, Joseph H., Oshkosh, Wis., assignor to Allied Packers, Inc., Chicago, III. Apparatus for reshaping hams. 1,633,157; June 21.

Appleton, Joseph H., Port Washington, and F. H. Kriz, assignors to Leach Company, Oshksh, Wis. Machine for making links or similar articles. 1,641,951; Sept. 13.

Appleton Manufacturing Company. (See Sparry, Her-Appleton Manufacturing Company.)

Appleton Manufacturing Company. (See Van Nortwick, John assignor.)
Appleton, Russell V., Pittsburgh, Pa., assignor of forty and one-half per cent to A. Welty, sixteen and one-cent to F. Welty, Chicago, Ill. Centrifugal frequency-time-element relay. 1,650,176; Nov. 22.
Applin, Harry, Ambler, Pa., assignor to Ambler Asbestos Company. Shingle machine. 1,623,612; Apr. April. Julius. (See Bastinn, C. L. and Applit.)
April. Julius. (See Bastinn, C. See Shook, Alexander M., assignor.)

signor.)

Aquila, Authony, Iselin, N. J. Card holder. 1,629,331;

May 17

Anthony, Iselin, N. J. Price-card holder.
1,645,640; Oct. 18

Aram. Otto, Philadelphia, Pa., assignor to Westinghouse
Electric and Manufacturing Company. Stoker.
1,624,651; Apr. 12.

Aram. Otto. Philadelphia, Pa., assignor to Westinghouse
Electric and Manufacturing Company. Underfeed stoker. 1,630,774; May 31.

Aram. Otto. Philadelphia, Pa., assignor to Westinghouse
Latella, Salanda, Palanda, P

Arbetter, Esther H., administratrix. (See Arbetter,

Wolf.)
Arbetter, Wolf, deceased, Boston, Mass.; E. H. Arbetter, administratrix, New York, N. Y. Blindstitch sewing machine. 1615,782, Jan. 25. Way. Viscera retainer for use in abdominal operations. 1,618,261; Feb. 22. Arbogast, William H., assignor to W. McElwee, Dunmore, W. Va. Wrench. 1,647,071; Oct. 25. Arbon, Paul, Tulka, Okla. Making drilling jars. 1,637,511; Aug. 2.

Signor.)

Arbuckle, Samuel F., Detroit, Mich., assignor to Monogram Lens Corporation, New York, N. Y. Lighting apparatus. 1,622,938; Mar. 29.

Arbuckle, Samuel F., Detroit, Mich., assignor to Monogram Lens Corporation, New York, N. Y. Headlamp shield. 1,635,879; July 12.

Arca Regulators, Inc. (See Lindsay, Thomas, assignor.)

Arca Regulators, Inc. (See Söderberg, Sten E. E., assignor.)

signor.)
Arcade Manufacturing Company. (See Rubin, Adolph, Arcade Manufacturing Company. (See Tscherning, Henry.

assignor.)

Arch-Cushion Corporation. (See Amory, William N., assignor.)

Arch-Cushion Corporation. (See Anglada, Joseph A.,

Arch-Cushion Corporation. (See Angiada, Joseph A., assignor.)
Archaouloff., Vadime, Boulogne-sur-Seine, France. Cylinder head of internal-combustion engines combined with fuel injectors. 1,635,158; June 21.
Archer, Farl W. Cambridge, Ohio. Light-control sys-British and the combined of the combined of

Archer, Mobert L. (See Spalding, J. E., and Archer.) Archer Rubber Company. (See Emery, Herbert W., assignor.) Archer, Thomas P., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Handle assembly. 1,618,097; Archer, Thomas P., and F. M. Edgar, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Combination remote control and pull-to handle assembly. 1,638,231; Aug. 9. Archer, Thomas P., and F. M. Edgar, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Windshield regulator. 1,653,977; Dec. 27. Archer, Thomas P., and E. M. Edgar, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Windowregulator. 1,653,977; Dec. 27. Archer, Thomas P., and E. M. Heintz, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Windowregulator. 1,625,185; Apr. 13. Archibald. William M. Jacksconville, Fla. Door-closing Archidacano. Nicholas, Boston, Mass. Fruit and vegetable squeezer. 1,653,831; Dec. 27. Archila, Fulgencio, Bogota, Colombia. Waterproof case. 1,619,782; Mar. 1. Archida Fulgencio, Bogota, Colombia. Electric sign. 1,622,467, Mag. 24. Archipenko, Alexander, New York, N. Y. Apparatus for displaying changeable pictures. 1,626,496; Apr. 26. Archidectural Tron Works. (See Friedman, Harry, as-Arctic Dairy Products Company. (See Zoller, Harper-Arctic Dairy Products Company.)

Arctic Dairy Products Company. (See Zoller, Harper F., assignor.)
Arctic Nu-Air Corporation. (See Sternberg, Irving C.,

Arcturus Radio Co., The. (See Brockway, Carl P., assignor.)

Arcturus Radio Co., The. (See Brockway, Carl P., assignor.)

Ardent, A. G. (See Häggi, Ida, assignor.)

Ardent, A. G. (See Häggi, Ida, assignor.)

Ardent, Armonas R., Forest Hills, assignor to The Ferdinand Strauss Corporation, New York, N. Y. Mechanical ligare toy. Ida/1912; Jan. 18.

Arden Thomas R., Forest Hills, assignor to The Ferdinand Control of Proceedings of the Process of the Process

Arey, Ralph G., assignor to Worcester Bilt-Rite Company, Worcester, Mass. Windshield cleaner. 1,639,018; Aug. 16.

Aug. 16.
Argentographica (U. S. A.) Limited. (See de'Sperati.
Mariano, assignor.)
Aridor Company, The. (See Brown, A., and Peck, as-(U. S. A.) Limited. (See de'Sperati.

Arthor Company, The. (See Moyer, Paul S., assignor.)
Aridor Company, The. (See Moyer, Paul S., assignor.)
Aridor Company, The. (See Peck, R. G., and Brown, as-

Arimond, Frederick, Central Tanamo, Cuba. Saw. 1.652,084; Dec. 6. Ario, Rudolf, Brooklyn, N. Y. Moving van. 1,627,135; May 3.

May 3.

Aris, Guillermo, Barcelona, Spain. Dyeing and printing with phenylamine black. 1,643,233; Sept. 20.

Arizona Minerals Corporation. (See Lindsay, Frederick K., assignor.)

Arkanass Oak Flooring Company, et al. (See Gardner, L., assignor.)

Occur E., assignor.)

Company, Charles J. A., assignor.

signor.) Safety Bag Company. (See Goodlett, Nicholas M.,

assignor.) Arkell Safety Bag Company. (See Robinson, Francis T., assignor.)
Arkell Safety Bag Company. (See Wandell, Kurt, as-

signor.)
Arkell & Smiths. (See Tooker, J. N., and Harley, as-

Arkell & Shutus. Use Sciences, Ill., assignor to Western Signors.)
Arkema, Harold P., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for treating dies. 1,630,775; May 31.
Arkfeld, John, Norfolk, assignor to L. Arkfeld, Omaha, Nebr. Animal drinking trough. 1,644,660; Oct. 11.
Arkfeld, Lyman. (See Arkfeld, John, assignor.) Chicago, Madel W., Los Angeles, Calif. Control St. 38, 434, 430. Feb. 8.

1,616,839; Feb. 8. rmand Company. The. (See Murphy, George S., as-signor.) Armand Armaturen- & Maschinenfabrik A.-G. vorm. J. A. Hilpert.

Armaturen- & masemmentaprik A.-G. vorm. J. A. Hilpert. (See Neumann, Fritz, assignor.)

Armbrust, Charles W., Albany, N. Y., assignor to International Life Saving Water Making Cup Corporation, Washington, D. C. Water-collecting device. 1,648,438;

Washington, D. C. Water-collecting device. 1,648,438; Ambiratic, Anthony, Houston, Tex. Laundry assorter. 1,618,260; Feb. 22.

1,618,260; Feb. 22.

Armbruster, Charles E. H., Denver, Colo. Macular reflectoscope. 1,651,661; Dec. 6.

Armbruster, Fred C. (See Bradt, Edward L., assignor, Armbruster, Fred C. (See Bradt, Edward L., assignor, Darmen, Rozella C., Rochester, N. Y. Connecter for electric conductors. 1,648,887; Nov. 15.

Armington, Arthur P., Willoughby, assignor to The Euclid Crane & Hoist Company, Euclid Village, Ohio. Auxiliary vim and attaching same. 1,619,175; Mar. 1.

Armbraster, Marchael St. (See Bradt), Nov. Variable-spacing platen clutch for typewriters. 1,632,361; June 14.

Armistead, Hubert M., San Francisco, Calif., assignor to Manifold Impressions Corporation, Carson City, Nev. Manifolding attachment for typewriters. 1,632,362; June 14.

Mamitoiums
June 14.
Armistead, Hubert M., San Francisco, Calif., assignor to
Manifold Impressions Corporation, Carson City, Nev.
Ribbon-carrying arm for manifolding typewriters.

Manifold Impressions Corporation, Carson City, New, Ribbon-carrying arm for manifolding typewriters, 1,634,605; July 5.

Armitage, Nillam D., New Bedford, Mass. Internal-combustion engine. 1,945,471; Oct. 11.

Armour Fertilizer Works. (See Meyers, Herbert H., as-graph).

Armour Fertilizer Works. (See Meyers, Herbert H., assignor.)
Armour, Richard, Los Angeles, Calif. Forging tool.
1,621,673; Mar. 22.
Arms, Edward W., assignor to W. & L. E. Gurley, Troy,
N. Y. Microscope attachment for surveying instruments. 1,629,373; May 17.
Arms, Ray W., assignor to Roberts and Schaefer Compand, 1407
18520, Ill. Dry-separating apparatus.
Armstrong, Alan. Whitley Bay, assignor to Pilkington
Brothers Limited, Liverpool, England. Apparatus for
the production of welded-wire fabrics. 1,643,291;
Sept. 27.
Armstrong, Alma B. (See Clark, N. D., and Armstrong.)

Armstrong, Alma B. (See Clark, N. D., and Armstrong.) Armstrong Bros. Tool Co. (See Fletcher, Joseph C., as-

Armstrong Bros. Tool Co. (See Welter, Sebastian J., assignor.)

assignor.) Churles C., Huntington, W. Va. Cooking Armstrong, (582.202; c.e. 13. Armstrong, Charles M., Est Lunsing, Mich. Plant pro-tector. 1, 645.446; Dec. 27. Armstrong, Clara S. (See Armstrong, Paul B., assignor.) Armstrong Cork Company. (See Buseh, Herman F., as-

signor.)

Armstrong Cork Company. (See Chadwick, Eric H., as-

Armstrong Cork Company. (See Cover, Lester E., as-

Armstrong Cork Company. (See Humphreys, Charles F.

Armstrong Cork Company. (See Humphreys, C. F., and

McCarthy, assignors.) Armstrong Cork Company. (See Humphreys, Harry S., Armstrong, Edward R. (See Morey, W. W., and Arm-

Armstrong, Edward R., Holland Mich. Traction appliance for automobiles. 1,613,598; Jan. 11.

Armstrong, Edward R., Holland, Mich. Sied attachment for automobiles. 1,629,061; May 17.

Armstrong, Edwin J., assignor, by mesne assignments, to Erie Steam Shovel Company, Erie, Pa. Traveling track sprocket. 1,643,598; Sept. 27.

Armstrong, Edwin J., assignor to Erie Steam Shovel Company, Erie, Pa. Method of and mechanism for Company, Erie, Pa. Method of and mechanism for Stramp Company, Erie, Pa. Method of and mechanism for Armstrong, Edwin J., assignor to Armstrong, Edwin J., assignor to Armstrong, Team C., Little Neck, N. Y., assignor to American Telephone and Telegraph Company, Sighting instrument for measuring angles. 1,640,435; Aug. 30. ments, to L C Smith & Corona Typewriter Inc., Syracuse, N. Y. Typewriting machine. 1,619,013; Mar. 1. Armstrong, Frederick A., Sawtelle, Calif. Muffler cettout. 1,626,908; May 3. Armstrong, Frederick A., Sawtelle, Calif. Muffler cettout. 1,628, St. Mules. Australia. Shock-absorber shackle. Armstrong, George J., Burkburnett, Tex. Sand pump. Re16,708; Aug. 16. Armstrong, George W., Fremont, Ohio, assignor to Nartional Carbon Company, Inc., Depolarizer for primary batteries. 1,624,648; Apr. 12. Armstrong, Harry H., Los Angeles, Calif. Conversion Armstrong, Harry H., Los Angeles, Calif. Recovering condensable vapors from gases, 1,621,621; Mar. 22. Armstrong, Harry H., Los Angeles, Calif. Recovering condensable vapors from gases, 1,621,621; Mar. 22. Armstrong, Harry Y., Syracuse, N. Y., assignor, by mesne assignments, of one-half to American Machine and Apr. 26.

Apr. 26.
Armstrong, Harry Y., Syracuse, N. Y., assignor, by mesne assignments, of one-half to American Machine and Foundry Company. Wrapping machine. 1,626,370;
Apr. 26.

Foundry Company. Wrapping machine. 1,525,347; Apr. 26.

Armstrong, Howard, Humberstone, Ontario, Canada. Beg trustrong, Jonner. 1,613,552; Jan. 4.

Trustrong, James H. A. Holyoke, Mass., assignor to American Writing Paper Company. Method and apparatus for making paper baving the appearance of handmade paper. 1,616,211; Feb. 1.

Armstrong, John. (See Brutofski, S. J., and Armstrong.) Armstrong, John. J., Crockett, Calif. Machine for washing sugar trays. 1,617,833; Feb. 15.

Armstrong, John J., Crockett, Calif. Tray-setting device. 1,617,844; Feb. 15.

Armstrong, John L., Chicago, Ill., assignor to The National Lock Washer Company, Newark, N. J. Company, 23.

Armstrong, Joseph. (See Comins. F. B., and Armstrong.)

bined sash holder and window release. 1,640,004; Aug. 23. Joseph. (See Coming, F. B., and Armstrong, Joseph, Allston, assignor to American Moistening Company, Boston, Mass. Portable psychrometer. 1,636,350; July 19. Armstrong, Julian, Evanston, III. Cover for baskets and the like. 1,650,003; Nov. 22. heater. 1,615,819; Feb. 1. heater. 1,615,819; Feb. 1. heater. 1,615,819; Feb. 1. Armstrong, Lyman P., San Jose, Calif. Clamping device. 1,632,108; June 14. Armstrong, Lyman P., San Jose, Calif. Fastener. 1,641,835; Sept. 6. P., San Jose, Calif. Bed bottom. 1,641,836; Sept. 6. Armstrong, Morgan K., Winnetka, III., assignor, by mesne assignments, to United States Gypsum Company. Nail-penetrable wall board. 1,641,611; Sept. 6. Armstrong, Flux B., assignor 1,643, Jun. 2, Armstrong, Fercy A. E., New York, N. X. Alloy impact-tool steel. 1,045,213; Oct. 11. Armstrong, Percy A. E., New York, N. X. Preventing displacement in rollers for roller bearings. 1,646,847; Oct. 28.

Oct. 25.

Armstrong, Raymond W., and I. E. McCabe, Chicago, III.

Joint between electrical conductors. 1,640,869; Aug. 30.

Armstrong, Victor C., Hackensack, N. J., assignor to The

Rail Joint Company, New York, N. J., assignor to The

Rail Joint Company, New York, N. J., assignor to The

Rail Joint Company, New York, N. Y. Reversible head
free rail Joint. 1,862,807; Dec. 13.

Armstrong, Victor C., Hackensack, N. J., assignor to The

Rail Joint Company, New York, N. Y. Balanced splice

Armstrong, W. M., et al., trustees. (See Cutler, William

C., assignor M., et al., trustees. (See Cutler, William

C., assignor.)

Armstrong, Wesley, J., assignor to McKinnon Dash Company, Euffalo, N. Y. Apparatus for testing radiator cores. 1,613,247; Jan.

Arnatt, Philippe, Parls, France. Keyless combination lock mechanism for padiocks door locks, and the like. 1,621,148; Mar. 15.

Arnit, Enrest A., Sloux City, Iowa. Automobile trunk. Ref 1,666; June 2.

Ref 1,666; June 2.

Sasignor to The Galion Iron Works. & Mfg. Co., Galion, Ohio. Road-grader axle assembly. 1,624,127; Apr. 12.

Arndt, Max M., Manitowoc, Wis. Flying machine. 1,623,613; Apr. 5.

Arneson, Theodore J., Baker, Oreg. Eye-testing apparatus. 1,622,215; Mar. 22.
Arnest, Harry L., Vignia Highlands, Va. Brush-adfusting means for generators of automobiles. 1,640,917:

Arbest, Harry L., Vignita Hightanix, va. 1640,317

Arbest, Galenas for generators of automobiles, 1640,317

Arbest, Calvin C., Gainesville, assignor of one-half to H.

L. Collins, Fort Worth, Tex. Meter-box ild and lock
therefor. 1,616,298; Feb. 1.

Arbest, Florence, and L. Wespiel, San Francisco, Calif.

Arbest, Florence, and L. Wespiel, San Francisco, Calif.
Pot-holder rack, Des. 72,129; Mar. 8.

Arney, Arrie B., McClue, Ohio. Electric pulsator.
1,641,368; Sept. 6.

Arnold, Adelside F., et al. (See Friedman, William, asArnold, Carl, Nuremberg, Germany. Motor mechanism
for toy boats. 1,627,073; May 3.

Arnold, Carl, Nuremberg, Germany. William, assignor.)

Arnold, Edgar, Kent, Ohio. Planter. 1,637,980; Aug. 2.

Arnold, Botto, Tex. 27.

Arnold Electric Company. (See Flegel, Harrison D., assignor.)

Arnold Electric Company. (See Flegel, Harrison D., assignor.)

Arnold Electric Company. The. (See Poplayski, Stephen
J., assignor.)

And dietric Company, The. (See Poplawski, Stephen 1, assignor.)
Arnold, Enos F., Long Beach, Calif. Inclinometer. 1,627,136; May 3.
Arnold, Enos E., Lynchburg, Va. Sign. 1,650,177; Nov. 22.
Arnold, F. R., & Company. (See Friedman, William).
Arnold, Frank D., Humboldt, Iowa. Sound amplifier. 1,635,303; July 12.
Arnold, Frank D., Humboldt, Iowa. Phonograph. 1,641,388 and 1.
Lifeti, 1,641,388 and 1,641,388 a

Nov. 1. Issue of pictures by Section 1. 1,041,105, Arnold, Hubert, Calgary, Alberta, Canada. Merchandise carrier. 1,430,047; May 24.
Arnold, James E., Groton, Conn., assignor of one-half to F. F. Carr, Boston, Mass. Supplying fuel to hydrocarbon engines. 1,617,736; Feb. 1,618.
Arnold, John W., et al. (See Friedman, William, assignor.)

Arnold, Lester R., Worcester, Mass., assignor, by mesne assignments, to E. C. Bowers and C. L. Feldman, re-ceivers. Card clothing, 1,653,596; Dec. 20. Arnold, Marvin L. (See Becchtel, David W., assignor.) Arnold, Midted C., et al. (See Friedman, William, as-

Arnold, Mildred C., et al. (See Friedman, William, assignor.)
Arnold, Philip S., assignor of one-fifth to C. E. Wisner,
Detroit, Mich. Indicating micrometer. 1,615,060;
Arnold Print Works. (See Porter, John, assignor.)
Arnold, Robert B. (See Gross, P. M., and Arnold,
Arnold, Roy J. (See Smith, R. E., Arnold, and Gay.)
Arnold, Roy J. (See Smith, R. E., Arnold, and Gay.)
Arnold, Samuel, 3d. Ben Avon, Pa. Operating electric
furnaces. 1,629,196; May 17.
Arnot, John M., Bury, England. Steam-heated cylinder
and the life and draining the same. 1,633,723;
Arns. Harvy M., Glendale, Ohio, assignor to H. G. KottenArns. Harvy M., Glendale, Ohio, assignor to H. G. Kotten-

June 28,
Arns, Harry M., Glendale, Ohio, assignor to H. G. Kottenbrook, Cincinnati, Ohio. Advertising device. 1,641,468;
Sept. 6. reasie, San Francisco, Calif. Shoe overall
Arnstein, Karl, assignor to the Firm: Luftschiffbau Zeppelln Gesellschaff mit beschränkter Haftung, Friedrichshaffen, Germany. Airship with structural compensating surfaces. 1,614,519; Jan. 18.
Arnstein, Karl, assignor to Luftschiffbau Zeppelin GesellArnstein, Karl, assignor to Luftschiffbau Zeppelin Gesellarnstein, Karl, assignor to Luftschiffbau Zeppelin Gesellmany. Hull construction of rigid alreships. 1,620,507;
Mar. 8.

many.

Mar. 8.

Arnstein, Karl, assignor to the Firm Luftschifthau Zeppelin Gesellschaft mit beschränkter Haftung, Friedrichshafen-on-the-Bodensee, Germany, Airship frame 1,623,951; Apr. 5.

Arnstein, Karl, assignor to Luftschiftbau Zeppelin Gesellschaft mit beschränkter Haftung, Friedrichshafen, Germany, Stabilizing apparatus for rigid airships. Stabilizing apparatus for rigid airships.

Arnstein, Karl, assignor to Luftschiftbau Zeppelin Gesellschaften, Karl, assignor to Luftschiftbau Zeppelin Gesellschaften, Bodensee, Germany, Rigid airships. 1,631,908; June 7.

Aron, William P., Dallas, Tex., assignor to Aron Electric Razor Company, Wilmington, Del. Electrical safety razor. 1,625,015; Apr. 19.

1,625,015; Apr. 19.

1,627,015; Apr. 19.

1,628,015; Apr. 17.

1,628,11; June 14.

1,628,015; Apr. 17.

1,628,11; June 14.

1,628,015; Apr. 19.

1,629,639; Apr. 19.

1,629,639; Apr. 19.

1,629,639; Mar. 1.

1,639,639; Mar.

May 17.

Arrow Electric Company, The. (See Nero, Arvid H., assignor.)

Arrowood, Milton W., Wilmette, Ill. Coal-grinding mill.

1,628,039 May 10.

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Art Cage Manufacturing Company. (See Markow, Ber-

Art Cage Manufacturing Company. (See Markow, Bernard, assignor.)
Art Cage Mfg. Co. (See Sintow, Ely W., assignor.)
Art Cage Manufacturing Company. (See Zimmerman, Hymen, assignor.)
Artcolor Motion Picture Company. (See Miller, Frederic

R., assignor.)
Arteraft Company, The. (See Thurman, Tandy B., assignor.)

Arteraft Metal Stamping Corporation. (See Aglow, Harry, assignor.) Arteraft Metal Stamping Corporation. (See Shapiro,

Arterstf Metal Stamping Corporation. (See Shapiro, Saul, assignor.)
Arteraft Metal Stamping Corporation. (See Shapiro, Theodore, assignor.)
Arter, Jakob, Obberengstringen, and E. Schelling, Dietlkon, Switzetland. Power-transmitting device. 1,629,902; May 24.
Artesian Well Engineering Co., The. (See Jacobson, Courad C., assignor.)
Arthur-Fowler Co. (See Fowler, Paul L., assignor.)
Arthur, Glenn W., Osborn, Ohlo. Corn shocker. 1,645,212; Oct. 11.

Arthur, Harrison N., Methuen, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Device to prevent rotation of bobbins in looms. 1,652,598; Dec. 13. Dec. 13.
Arthur, James F., Dickson City, Pa. Circulating-tube connection. 1.639.251; Aug. 16.
Arthur, James F., Dickson City, Pa. Circulating tube. 1,639.252; Aug. 16.

Arthur, Paul, assignor to Lyon & Healy, Inc., Chicago, III. Banjo Des 74,233; Dec 27, Arthur, Paul, assignor to Frank Holton & Co., Elkhorn, Wis. Key-valve pad for musical instruments. 1,635,775; July 12, Arthur, Wulls U., Alken, S. C. Seed separator. 1,613,553;

Artistic Brass & Bronze Works, Inc. (See Poritz, Frederlek M., assignor.)
Artistic Bronze Company, The. (See Swem, Daniel D.,

ssignor.) izan Factories, Inc. (See Macrten, Christian, jr.,

Metal Construction Company. (See Bush, Ellis C., assignor.)

Art Metal Construction Company. (See Lombard, Homer W., assignor.)

V., assignor.) Metal Radiator Cover Co. (See Faber, Guy S., as-

Arton, John A., Chicago, Ill. Convertible furniture. 1,637,797; Aug. 2.
Art Specialty Company, The. (See Kaden, Harry E.,

assignor.) Artstone Burial Vault Co. (See Tanner, Oscar A., as-

Artstone Burial Valit Co. (see Tanner, Oscar A., assignon). Standard Co. (see Tanner, Oscar A., assignon). The Company. The Company of the Company. The Company of the Beaverland Corporation, Lowville, N. Y. Rottle-cap machine. 1,683,534; July 12.
Artz, William J. (See Ryan, Alva L., assignor.) Artz, William J. Sheet-material toy. I,620,053; Brimingham, Ala. Sheet-material toy. I,620,053;

Arvedson, George F., Carpentersville, Ill. Garden implement. 1,639,643; Aug. 23.

Arvey Manufacturing Co., The. (See Hall, Richard E.,

ment. 1,838,0830; also.
Arvey Manufacturing Co., The. (See Hall, backers.
Arvey Manufacturing Co., The. (See Hall, backers.
Arvey Manufacturing Co., The.
1,616,021; Feb. 1,
Asbestos Spinning and Weaving Corporation. (See
Trainor, Edward J., assignor).
Trainor, Edward J., assignor, Mersey, England. Camgrinding machine. 1,622,755; Mar. 29.
Asbury, Dorsey F., Washington, D. C. Valve-operating
mechanism. 1,612,792; Jan. 4.
Asbury, Harry E., assignor to The Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa.
Can opener. 1,617,142; Feb. 8.
Ascheim, Jules, New York, N. Y. Riding boot. 1,648,101;
Nov. 8.

Can opener. 1,617,142: Feb. 8.
Ascheim, Jules, New York, N. Y. Ridling boot. 1,648,101;
Nov. 8.
Ascher, Louis K., assignor, by mesne assignments, to The
Humidity Control Company, Indianapolis, Ind. Vacuum return boller feed. 1,635,660; July 12.
Ascherl, Michael, Cleveland, Ohio. Spray appllance.
1,652,422 Dec. 13.
Ascherl, Michael, Cleveland, Ohio. Spray appllance.
1,652,422 Dec. 18.
Aschine, Fred E., assignor to General Motors Research
Corporation, Dayton, Ohio. Internal-combustion engine.
1,619,965; Mar. 8.
Aschine, Fred E., assignor to General Motors Research
Corporation, Dayton, Ohio. Carburetor. 1,651,359;
Dec. 6.

Aseltine, Fred E. assignor to General Motors Research Corporation, Dayton, Ohio. Carburetor. 1,651,359; Dec. 6.

Red E. assignor to General Motors Corporation Corporation Comparing combustible mixtures. 1,649,278; Nov. 15.

Asenjo y Perez del Rio, Francisco F., Madrid, Spain. Rall. 1,652,850; Dec. 13.

Ash, Charles S., (See Robinson, R. D., and Ash.).

Ash, Charles S., Royal Oak, Mich. Constructing suspension wheels. 1,622,268; Mar. 2.

Ash, Horace W. Winchester, Mass. Storing and handling and emptying asphalt tanks. 1,654,359; Dec. 27.

Ash, Horace W., Winchester, Mass. Apparatus for beating and emptying asphalt tanks. 1,654,359; Dec. 27.

Ash, Horace W., Winchester, Mass. Apparatus for beating and emptying asphalt tanks. 1,654,359; Dec. 27.

Ash, Louis R., Kanasa City, Mo. Center lock for bascule Ash, Louis R., Kanasa City, Mo. Center lock for bascule Ash, Louis R., Kanasa City, Mo. Center lock for bascule Ash, Louis R., H. C. Tammen, and H. G. Hunter, Kanasa City, Mo. Bascule bridge. 1,633,565; June 28.

Ashbaugh, Chester R., Albert City, Iowa. Tractor control device. 1,651,986; Dec. 6.

Ashbaugh, John H., Pittsburgh, Pa., assignor to West-Robust, Nature 1, Nature 1, 1900, 1900.

baugh.)

Ashbugh. John H. Pittsburgh. Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,621,050; Mar. 15.

Ashbugh. John H. Pittsburgh. Pa., assignor to Westinghouse Electric & Manufacturing Company. Overlond protective device. 1,638,819; Aug. 16.

Ashbugh. John H. Pittsburgh. Pa., assignor to Westingholancing regulator. 1,654,317; Dec. 27.

Ashbugh. John H., Wilkinsburg, Pa., assignor to Westingholancing regulator. 1,654,317; Dec. 27.

Ashbugh. John H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,644,360; Dec. 27.

Ashbraok, Robert F., Waterbury. Conn. Mechaulcaldrawing demonstrator. 1,639,448; Aug. 16.

Ashby, Brodie H., et al. (See Liles, Thomas O., assignor.)
Ashby, Heber L., Mammoth, assignor of one-half to J. E.
Clark, Spanish Fork, Utah. Breaking-in machine.
1,651,310; Nov. 29.
Ashcroft, Edgar A., Waye, near Ashburton, assignor to
1,653,605; Dec. 20.
Ashdown, Sydney, Victoria, British Columbia, Canada
Automatic releasing choker hook. 1,643,631; Sept. 27.
Ashdown, Sydney, Victoria, British Columbia, Canada.
Logstin hook. 1,643,661; Sept. 27.
Ashdown, Sydney, Victoria, British Columbia, Canada.
Logstin hook. 1,643,661; Sept. 27.
Ashdown, Ernest W., assignor to William Bros. Boller
& Mfg. Co., Minneapolis, Minn. Baffie wall. 1,652,157;
Dec. 18.

Ashenfarb, Barnet, et al. (See Hurewitz, Joseph, as-

signor.)

Ashenhuret, Harold S., assignor, by mesne assignments, to insuiex Corporation, Chicago, Ili. Making cellular blocks. 1,613,639; Jan. 11.

Ashenhuret, Harold S., assignor, by mesne assignments to insulex Corporation, Chicago, Ill. Horizontal wall construction. 1,654,029; Dec. 27.

Asher Manufacturing Company. (See Olson, Werner O., assignor.)

Asherman, Max, New York, N. Y. Attachment for ladies' bags. 1,627,224; May 3. Ashford, Alfred J., assignor of one-half to S. L. Stough, Kinston, N. C. Electric switch. 1,646,440; Oct. 25. Ashing, Charles W., Laurel, 10wa. Grain sprouter.

Ashing, Charles W., 1,637,250; July 26.

1,637,250; July 26.

Ashkenns, Abraham Brocklyn, N. Y. Adjustable partition support. 1,631,949; Dec. 6. Y. Removable panel and interchanging means. 1,651,941; Dec. 6.

Ashleman, Adolph E., and T. E. Haney, Waco. Tex. Crank lock for box-car doors. 1,621,966; Mar. 22.

Ashleman, Adolph E., and T. E. Haney, Waco. Tex. Signal. 1,646,675; Oct. 25.

Ashleman, Adolph E., and T. E. Haney, Waco. Tex. Salley, Olic C. (See Low. S., and Ashley,)

Article C. (See Low. S., and Ashley,)

Ashleman, Herbert H., et al. (See Robm. James T., assignor.)

Ashman, James, Central City, Pa. Twin steel crosstie.
1,620,181; Mar. 8.
Ashmore, Frank F., and M. W. Crum, assignors of onethird to C. P. Hawkins. Quenemo, Kans. Automobile
awning. 1,655,196: Dec. 20.
Ashmun, Harry S. (See Titcomb, L. R. and Ashmun.)
Ashtabula Bow Socket Company, The. (See Leach.
Sagito J., assignor.)

Sagito J., assignor.)
Ashtabula Dow Socket Company, The. (See Lewis, F. K., and Allen, assignors.)
Ashtabula Bow Socket Company, The. (See Lewis, F. K., and Roath, assignors.)
Ashton, Diriond. (See Hunt, J. E., and Ashton.)
Ashton, Donald G., Cushing, Okla. Belt tightening and
Ashton, Denset, Swampscott, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. Heelhreats scouring wheel. 1.647.260. Nov. 1.
Ashton, Richard A. (See King, N., and Falls
Ashton, Elemany, A. (See King, N., and Falls
LG32,018; June 14.
Ashton, Sidnor C. Kapens City, Ma.

Ashton, Sidney C., Kansas City, Mo. Oil-well pump. 1,624,821; Apr. 12.

Ashton Valve Company, The. (See Motherwell, J. W., and Baker, assignors.)
Ashton Valve Company, The. (See Priest, Walter F., assignor)

signor.) Askania-Werke Aktiengesellschaft vormals Centralwerk-statt Dessou und Carl Bamberg-Friedenau. (See von Schubert, Erich, assignor.)

Schubert, Erren, assignor)
Askania-Werke Aktiengesellschaft vormals Centralwerkstatt Dessau und Carl Bamberg-Friedenau. (See Wühnsch, Brich P. G., assignor.)
Aske, Irving E., Duluth, Minn. Heater or fumer. 1,613,438. Sept. 27.

Leonard E., Duluth, Minn. Electric heater or orizer. 1,616,247; Feb. 1. Leonard E., Duluth, Minn. Heater or fumer. 13,439; Sept. 27. vaporizer.

1.438.430; Sept. 21. Askelson, Benjamin A. Muzenod, Suskatchewan, Caudda, Musical instrument, 1.643.044; Sept. 20. Askenasy, Paul, and E. Elöd, Karlsruhe, Buden, Germany, Production of arsente acid and its solutions. 1,050,860;

Nov. 29.

Asman, Lionel. (See Karcher, L. C., and Asman.) Asmus. Charles R., Columbus, Ohio. Laundry appliance. 1,627,648; May 10. Asmus, Hugo C., Kansas City, Mo. Ice pick. 1,623,375; Apr. 5.

Asmussen, Heinrich. (See Ledig, W., and Asmussen.) Aspden, Raiph L., Chorley, England. Variable condenser. 1.631.453; June 7.

Aspinwall, Louis M., Pittsburgh, Pa., assignor to West inghouse Electric & Manufacturing Company. Electromagnetic switch. 1,614,173; Jan. 11.

Company, Detroit, Mich. Light-fixture wall bracket back. Des, 71,820; Jan. 11.

Light-fixture wall bracket back. Des, 72,130; Mar. 8.

Aspinwall, Robert S., assignor to Lincoln Manufacturing Company, Detroit, Mich. Electric droplight fixture. Des. 72,130; Mar. 8.

Aspinwall, Robert S., assignor to Lincoln Manufacturing Company, Detroit, Mich. Electric droplight fixture. Des. 72,130; Mar. 8.

Aspinwall, Robert S., assignor to Lincoln Manufacturing Company, Detroit, Mich. Electric droplight fixture. Des. 72,131; Mar. 8.

Aspinwall, Robert S., assignor to Electro-diving Devices, Inc., Philadelphia, Pa. Balanced wheel drive. 1,616,343; Feb. 1.

Asprooth, Axel H., Baltimore, Md., and A. M. Leoni; said Leoni, assignor to Electro-Motive Devices, Inc., Philadelphia, Pa. Balanced vera-raile drive. 1,619,051; Mar. 1.

Asselin, Olivier, Ottawa, Ontario, Canada. Ice-cream-

Mar. 1.

Asselin, Olivier, Ottawa, Ontario, Canada. Ice-creamcone holder. 1,615,209; Jan. 25.

Associated Engineers Company. (See Graves, R. M.,
and D'Olive, assignors.)

Associated Lead Manufacturers Limited. (See Waring,
Horace, assignor.)

Associated Silver Company. (See Lashar, Thomas B.
and T. H., assignors.)

Assorati. Anti-nor, New York, N. Y. Snap fastener.
1,643,836; Oct. Brooklyn, N. Y. Shoe-polishing cabinet.
1,644,096; Jan. 11.

Asten, Eduard V., Eupen, Belgium. Frocess and device
for drying paper and the like fibrous webs. 1,615,210;
Jan. 25.

Aston. S., et al. (See Davis, Paul, assignor.)

Jan. 25.
Aston, S., et al. (See Dayis, Paul, assignor.)
Astoria Importing and Manufacturing Co. Inc. (See
Straub, Christopher, assignor.).
Astrom, Carl P., East Orange, N. J., assignor to M. H.
Treadwell Company, Dumping car. 1,612,153; Jan. 4.
Astrom, Carl P., East Orange, N. J., assignor to M. H.
Treadwell Company, New York, N. Y. Hot-metal container. 1,616,014; Feb. 1.
Astrom, John. (See Neumann, August, assignor.)
Astrom, John. (See Neumann, August, assignor.)
Bec. 6.

Astrom, John, Fort Wayne, Ind. Filter. 1,651,797; Dec. 6.

Astrom, John, Rort Wayne, Ind. Filter. 1,651,797; Dec. 6.

Astrom, John, assignor to Fort Wayne Engineering & Astrom, John, and V. L. Tannehill, Fort Wayne, Ind. Astrom, John, and V. L. Tannehill, Fort Wayne, Ind. Static eliminator. 1,625,445; Apr. 19.

Astrom, John, and V. L. Tannehill, Fort Wayne, Ind. Static eliminator. 1,625,445; Apr. 19.

Astrom, Peter E., Gottenborg, Sweden. Cleaning device. 1,625,930; Apr. 26.

Atchison, Ario G.: Sonita Barbara, Calif. Camera atchieved the Control of Control of California (California) (Californ

Akkins, Charles H., assignor to Akkins and Company, Inc., Palmer, Mass. Differential pressure valve, 1,625,780; Apr. 26. Akkins and Company. (See Akkins, Charles H., assignor.) Akkins, Dudley, fr., F. O. Anderson, and E. E. Lindsey, Minneapolis, Kans. Ditch-maintaining drag. 1,637,073:

Atkins, E. C., & Company. (See Gommel, Dewey E., as-

signor.)

Atkins, George C. (See Clemence, John D., assignor.)

Atkins, George C. (See Clemence, John D., assignor.)

Atkinson, C. (See Clemence, John D., assignor.)

Atkinson, C. (Carles B., Avalon, Pa. Game board.

1.615.927; Feb. 1.

Atkinson, Frederick A., and O. J. Pickard, assignors to Joseph Pickard's Sons Co., Philadelphia, Pa. Pilewire 1.663.7365; Dec. 27.

Atkinson, Frederick C., Indianapolis, Ind. Leather dressing and tanning material. 1,622,127; Mar. 22.

Atkinson, Frederick C., Indianapolis, Ind. Material for commutator brushes. 1,644,703; Oct. 11.

Atkinson, Harry E., Traverse City, Mich. Connecter for 1,653,833; Dec. 27.

Atkinson, Howard, et al. (See Atkinson, Howard, assignor.)

Atkinson, Howard, assignor, by mesne assignments, of cight-tenths to H. Atkinson, on-tenth to F. K. Holmers, and the control of the con

Atlantic Refining Company, The. (See Lewis, Joseph W.,

jr., assignor.) Atlantic Steel Company. (See Lawton, Mortimer P., assignor. Box Company. (See Redemski, Albert J., as-

signor.) Atlas Elevator Devices Co. (See Weigele, Edmund.)
Atlas-Globe China Company. (See Ahrendts, George R.,

assignor.) Atlas-Globe China Co., The. (See Habermann, Henry, assignor.)
Atlas Metal Parts Company. (See Seyfert, John P., assignor.)

Atlas Plywood Corporation. (See Buck, Ralph M., assignor.)

Atlas Portland Cement Company, The. (See Croll, Andrew G., assignor.) Atlas Powder Company. (See Creighton, Henry J., as-

Athas Powder Company. (See Djidics, Alexander, as-Athas Powder Company. (See Grant, Harry L., assignor.) Atlas Powder Company. (See Huyett, Daniel D., as-

signor.) las Powder Company. (See Jessen, Charles C., as-Atlas signor.) Atlas Powder Company. (See Shipley, Stanley D., assignor.)
Atlas Powder Company. (See Shipley, S. D., and Given,

assignors.) Atlas Powder Company. (See Wilcoxon, F., and Grotta,

Atlas. Towder Company. (See Wilcoxon, F., and Grotta, assignors.)
Atlas Press Company. (See Collins, James G., assignor.)
Atlas. Werke Pohler & Co. (See Abel, Aurust, assignor.)
Atmospheric Mitrogen Corporation. (See Bramwell,
Atmospheric Nitrogen Corporation. (See Humphrey, Herbert A., assignor.)
Atmospheric Nitrogen Corporation. (See Kuniskern, Walter H., assignor.)
Atmospheric Nitrogen Corporation. (See Kniskern, Walter H., assignor.)
Atmospheric August (See Hope, Edward, assignor.)
Attmospheric Ritrogen Corporation. (See Ratiskern, Walterway, L. (See Hope, Edward, assignor.)
Attheboro Braiding Co. (See Burlingame, Fred E., assignor.)
Attrider. Oliver H., (See Harris, H. M., and Attridge.)

Attleboro Braiding Co. (See Burlingame, Fred E., assignor).
Attridge, Oliver H. (See Harris, H. M., and Attridge, Attwood, Charles E. Wollaston, Mass., assignor to Post-Attwood, Charles E. Wollaston, Mass., assignor to Post-Ing equipment. 1.626.442; Apr. 26.
Attwood, Stanley H. (See Coatalen, L. and Attwood, Attwester, Mark A. (See Jones, Charles E., and Attweste.) Atwater, Anna, Lakewood, Ohio. Cooking utensil.
Atwater, Anna, Lakewood, Ohio. Cooking utensil.
Atwater Ken Manufacturing Company. (See Kingsford, Russell T., assignor).
Atwater Kent Manufacturing Company. (See MacFadden, Wilford C., assignor).
Atwater Kent Manufacturing Company. (See Miller, John M., assignor). See Wilson, R. E. and Atwell.)
Atwell, Harold V., Holliston, Mass. Extracting fats. 1.648,102; Nov. 8.
Atwell, Harold V., Whiting, Ind. Extracting fats. 1.648,02; Nov. 8.
Atwell, Harold V., Sesignor, to Standard Oil Company.
Whiting, Ind. Seal. 1.626,348; May 10.
Atwell, Harold V., assignor to Standard Oil Company, Whiting, Ind. Seal. 1.628,348; May 10.
Atwell, Harold V., assignor to Standard Oil Company, Whiting, Ind. Seal. 1.628,348; May 10.
Atwell, Harold V., assignor to Standard Oil Company, Whiting, Ind. Seal. 1.628,348; May 10.

Atwood, Charles E., Binghamton, N. Y. Ground brake
1,631,115; June 7.

Atwood, Cifford R., H. Berg, and O. R. Junkins, FairAtwood, Cifford R., H. Berg, and O. R. Junkins, FairAtwood, Edwin H., W. E. Wanner, C. A. Kiehle, and
E. H. Wright, Olean, assignors to Vacuum Oil Company,
New York, N. Y. Cleaning machine for containers,
1,046,570; Oct. 25.

Atwood, Francis C., Newton, assignor to Comstock &
Wescott, Inc., Boston, Mass. Separating fibrinous material from fuids. 1,614,337; Jan. 11.

Atwood, Francis L., Anderson, Ind. Plug gauge.
Atwood, Harry N., Monson, Mass. Vehicle wheel.
1,653,331; Dec. 13.

Atwood, Harry N., Monson, Mass. Vehicle wheel.
1,653,331; Dec. 20.

Atwood, Harry N., Monson, assignor to Rubwood, Inc.,
Lawrence, Mass. Vehicle body. 1,633,159; June 21.

Atwood, Harry N., Monson, assignor to Rubwood, Inc.,
Lawrence, Mass. Submarine craft. 1,633,817;
Aug. 16.

Aug. 16 Atwood. twood. Harry N., Monson, assignor to Rubwood, Inc., Lawrence, Mass. Forming submarine hulls. 1,638,818;

Aug. Atwood, Aug. 16.
Atwood, Harry N., Monson, assignor to Rubwood, Inc.,
Lawrence, Mass. Shoe heel. 1,640,686; Aug. 30.
Atwood, Harry N., Monson, assignor to Rubwood, Inc.,
Lawrence, Mass. Machine foundation. 1,647,428;

Nov. 1.
Atwood, Hart W., Portland, Oreg. Heating device.
1.631.614; June 7.
Atwood Machine Company, The. (See Bradley, Edward

assignor.

E., assignor. Atwood Machine Company, The. (See Bradley. E. E., and Rowe. assignors.)
Atwood Machine Company. (See Chase, Herbert C., assignor.)

Atwood, William J. (See Schatz, William A., assignor.) Atwood, Winfield A., Schenectady, N. Y., assignor to General Electric Company. Instrument shunt. 1,614,174: assignor to Gen-unt. 1,614,174; eral Ele Jan. 11

Atwood, Winfield A., Schenectady, N. X., assignor to General Electric Company. Electric switch. 1,622,448; May 10.

Au, Carl H., assignor of one-half to J. C. Hoyt, Washing-Au, Carl H., assignor of one-half to J. C. Hoyt, Washing-Au, Carl H., assignor of one-half to J. C. Hoyt, Washing-Au, Carl H., assignor of one-half to J. C. Hoyt, Washing-ton, D. C. Reciprocating mechanical movement. 1,645,273; Oct. 11.

Auberlin, William, Northfield, Ohio. Airship anchorage. 1,622,197; May 17.

Aubert, Jean M. L. A., Paris, France. River dam. Auburn Automobile Company. (See Crawford, James M., assignor.)

1.624.571; Apr. 12.
Auburn Automobile Company. (See Crawford, James M., assignor.)
Auchter, Charles G., Pittsburgh, Pa. Fortune-telling game board. Des. 72.689; May 24.
Auchter, Charles G., Pittsburgh, Pa. Fortune-telling game board. Des. 72.689; May 24.
Auchter, Abort F. (See Moyer, Pa. 19.
Auchter, Abort F. (See Moyer, Charles) Auchter, Parker Parker, Parker Parker, Parker Parker, Parker Parker, Parke

Aucustine Roy W. Oak Park, III. assigner to Western Electric Company, Incorporated, New York, N. Y. De-tecting metal particles in nonmetallic material 1,640,524; Aug. 30. Aulbach, Charles J., assignor to Passaic Metal Ware Com-pany, Passaic, N. J. Sealed container. 1,613,589;

Aulbach, Charles J., assignor to Passaic Metal Ware Company, Passaic, N. J. Covered receptacle. 1,621,487;

Mar. 22.
 Aulbach, Charles J., assignor to Passaic Metal Ware Company, Passaic, N. J. Container, 1,630,687; May 31.
 Auld, D. L., Company. (See Auld, Fredrick, H., as-

signor.) Auld, D. L. Company, The. (See Brooks, Stanley G., as-

Auld, D. L. Company, The. (See Brooks, Stanley U., assignor).
All Standard Company, The. (See Hyatt, Raymond D., Auld, Fredrick H., Columbus, Ohio. Inlaid work of curved formation and producing the same. 1,641,955; Sept. 13.
Auld, Fredrick H., Columbus, Ohio. Ornamental articles of manufacture and producing the same. 1,643,045; of manufacture and producing the same. 1,643,045;

Aud, Freutr.

of manufacture and producing the same. 1,045,040 of panufacture, and producing the same. 1,045,040 of panufacture, assignor to The D. L. Audd Company, Commons, other Sign. 1,623,6249; May 10, and Fredrick H., assignor to D. L. Audd Company, Columbus, Ohio. Switch plate. 1,643,599; Sept. 27. Aulenback, James R., Bridgewater, Nova Scotia, Canada. Reamer. 1,635,067; July 5.
Auletta, Alfred, et al. (See Luther, John A., assignor.) Auli, Wilson, fr., assignor, by mesne assignments, to Dublifer Condenser Corporation, New York, N. X. Variable electrostatic condenser. 1,625,163; bec. 13.
Ault, Forest F., Wilmette, assignor to The Borrownian Drocess for effecting regeneration. 1,630,612; May 31.
Ault & Wiborg Company, The. (See Bragdon, Charles R., assignor.)
Aumack, Howard W., Jersey City, N. J. Clothes rack.

Company of America, Chicago, 19. Mechanism and process for effecting regeneration. 1.630,512; May 31. Ault & Wiborg Company, The. (See Bragdon, Charles IL, assignor) W., Jersey City, N. J. Clothes rack. 1.644.503; Oct. 4.

1.644.504; Oct. 4.

1.644.504; Oct. 4.

1.644.505; Oct. 4.

1.6

Sept. 6.
Austin, Edward F., and A. F. Phelps, Pittsburgh, Pa.
Power-transmittling apparatus. 1.622,076; Mar. 22.
Austin, George B., Jungo. Nev. Demountable rim for
tires. 1.646,677; Oct. 25.
Austin, George C., Seattle, Wash., assignor, by mesne assignments, of one-half to S. C. Carter Co., Inc., LosAngeles, Calif. Piston. 1.623,328: Apr. 6.
Austin, George H., Reading, assignor, by mesne assignments, to Samuel Ward Manufacturing Company, Boston, Mass. Bookbinding machine. 1.640,918; Aug. 30.
Austin, Australia, Australia, Australia, Aug. 30.
Australia, 233: Mr. Australia, Australia, Aug. 30.
Australia, 233: Mr. Australia, Australia, Aug. 30.
Australia, 233: Mr. Australia, Australia, Australia, Aug. 30.
Australia, 233: Mr. Australia, Australia,

ton. Mass. Bookbinding machine. 1,040,948; Aug. 30. Austin. Gilbert E., Atascadero, Calif. Novelty doil. 1.619,393; Mar. 1. Austin, Harold E., Louisville, Ky., and J. C. Cook, Jeffersonville, Ind., assignors to American Creosoting Company, Louisville, Ky. Rail-lifting device. 1,629,468;

May 24.

Austin, Herbert, Bromsgrove, England. Spoked wheel of metal. 1,617,786; Feb. 15.

Austin, Herbert, Bromsgrove, England. Window and wind screen. 1,618,746; Feb. 22.

Austin, Herbert, Bromsgrove, England. Worm and worm-wheel transmission. 1,622,987; Mar. 29.

Austin, Herbert, Bromsgrove, England. Window for motor vehicles. 1,626,129; Apr. 26.

Austin, Herbert, Bromsgrove, England. Window for motor vehicles. 1,626,129; Apr. 26.

Austin, Herbert, Bromsgrove, assignor to The Austin Motor Commany Limited, Northindia near Birnincham, England. Change-speed gear. 1,635,526; July 12.

Austin, John B., assignor to Una Welding and Bonding Company, Cleveland, Obio, Apparatus for uniting metals, 1,651,344; Nov. 29.
Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Swell-shutter-controlling mechanism, 1,639,324; Aug. 16.
Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Organ action. 1,640,306; Aug. 23.
Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Organ action. 1,640,306; Aug. 23.
Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Organ stop action. 1,640,307; Aug. 23.

Aug. 23. Austin Machinery Corporation. (See Loken, Truls, assignor.)
Austin Machinery Corporation. (See Rosselle, George T.,

Austin Manufacturing Co. (See Beatty, W. T., Davis, and Wilson, assignors.)

Austin Manufacturing Co. (See Wilson, Fred D., asustin Manufacturing Co. (See Whson, Field E., as signor.)
ustin Motor Company Limited, The. (See Austin, Her-

Austin Motor Company Zamene, bert, assignor, Canton, Ohio, assignor to United Engineering & Foundry Company, Pittsburgh, Fa. Casting. 1648471; Nov. & Assignor Company, The. (See Austin, John T., as-Austin Organ Company, The. Casting.

signor.)
Austin, Raymond L., assignor to Bovaird & Seyfang Manufacturing Company, Bradford, Pa. Control mechanism, 1.637,722; Aug. 2.
Austin, Ray, London, England. Illuminated sign. 1.644,663; Oct. 11.
Austin, Sameel G., Cambridge, Ohio. Surgical table. 1.648,631; Nov. 8.
Austin, Walter M., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Gonpany, Contact Austin, Walter S., Grand Rapids, Mich. Spring suspension for vebicles. 1.646,180; Oct. 8.
Austin, Walter S., Grand Rapids, Mich. Spring suspension for vebicles. 1.646,180; Oct. 8.
Austin, Walliam S., South Paris, Me. Seed and fertilizer distributor. 1.651,312; Nov. 29.
Austral Window Company. (See Myers, Winter W., assignor.)

signor.)
Australian Bitumenous Compounds Limited. (See Renou, Frederick G., assignor.)
Australian Lanoline Proprietary Limited. (See Avery, John, assignor.)
Austrain, Valentin. (See Pumpurin, O., and Austrin.)
Austrin, Valentin. (See Pumpurin, O., and Austrin.)
Austrin, Valentin. (See Gaisman, H. J., and Schumacher, assignors, Vort, assignor to E. L. Auth, Brook-Auth, Emma L. (See Auth, Charles, assignor.)
Auth, Emma L. (See Auth, Charles, assignor.)
Auth Ernma L. (See Richardson, Henry F., assignor.)
Auto Brakeometer Corporation. (See McKinney, Francis B., assignor.)
Autocali Company, The. (See Richmond, Louis E., as-

B., assignor.) Autocall Company, The. (See Richmond, Louis E., assignor.)

Autocar Company, The. (See Brumbaugh, Andrew K., assignor.)
Auto Fabrics Products, Inc. (See Osten, Joseph W., as-

Auto Fabrics Products, Inc. (See Osten, Joseph W., assignor.)
Auto Loading Device Manufacturing Company. (See Feddermann, George C., assignor.)
Automat Equipment Corporation. (See Zsoldos, Julius, assignor.)
Automat Molding & Folding Company, The. (See Aldrich, J. P., and Morris, assignors.)
Automatic Appliance Company. (See Mapel, Lewis A., assignor).
Automatic Bottle Machine Corporation, The. (See McNish, Alexander, assignor).
Automatic Car Lock Company. (See Hicks, James A., assignor).

Automatic Display Company. (See Blumie, Frank W., assignor.) Automatic Electric Control Company, The. (See Dodge, Electric Control Company, The. (See Dodge, Owen, assignor Automatic Electr Electric Inc. (See Bellamy, John L. as-

Automatic Electric Inc. (See Benson, William A., assignor.) Electric Inc. (See Blessing, John G., assignor.) Electric Inc. (See Engsberg, Ralph W., as-Automatic Electric Inc.

signor.) Automatic Electric Inc. Automatic Electric Inc. (See Erickson, John, assignor.) (See Erickson, J., and Obergfell,

Automatic Electric Inc. (See Fahrenfeld, Fred W., assignors, Automatic Electric Inc. (See Gardner, John E., assignor). Inc. (See Gardner, J. E., and

signor.)
Automatic
Bellamy,
Automatic Bellamy, assignors.)
Automatic Electric Inc. (Automatic Electric Inc. (Sutomatic Electric Electric Inc. (Sutomatic Electric Electric Inc. (Sutomatic Electric Electric Electric Electric Electric El (See Gould, Roy F., assignor.) See Hudd, Alfred E., assignor.) (See Hudd, A. E., and Bound,

Automatic Electric Inc. (See Hada, A. E., and Boans, Automatic Electric Inc. (See Lomax, Clarence E. Automatic Electric Inc. (See Lomax, Clarence E. Automatic Electric Inc. (See Madsen, Fred T., assignor.)

Automatic Electric Inc. (See Martin, Talbot G., assignor.) Automatic Electric Inc. (See McElyea, Harley B., assignor.)
Automatic Electric Inc. (See Mercer, R., and Tench, as-

signors.) Automatic signor.) Automatic signor.) Electric Inc. (See Nelson, Martin L., asc Electric Inc. (See Obergfell, Herbert F., as-

(See Ostline, John E., assignor.) (See Pracht, Carl J., assignor.) (See Ray, Arthur J., assignor.) (See Ray, A. J., Madsen and Automatic Automatic Electric Inc. Electric Inc. Automatic

Electric Inc. Electric, Inc. Automatic Electric, Inc. Obergfell, assignors.) Automatic Electric Inc. (See Richardson, Rodney G., assignor.) Automatic

Electric Inc. (See Richardson, R. G., and Bellamy, Automatic Electric Inc. (See Ruggles, Leonard L., assignor Automatic Electric Inc.

(See Schwartz, Michael, assignor.) Automatic Electric Inc. (See Sengebusch, Hans, as-Automatic Electric Inc. (See Simmons, George H., as-

Automatic Electric Inc. (See Sipe, Clinton R., assigner) Automatic Electric Inc. (See Smith, Arthur B., as-

Automatic Electric Inc. (See Smith, E. D., and Perkins, Automatic Electric Inc. (See Stehlik, Rudolph F., as-

signor.) Automatic Electric Inc. Automatic Electric Inc. (See Tanke, Emil, assignor.) (See Thomas, A., and Stewart, assignors.) Automatic

(See Walker, Edwin O., as Electric Inc. signor.) Automatic Electric Inc. Electric Inc. (See Wicks, John, assignor.) (See Willis, Bernard D., as-

signor.) Automatic Electric Washer Co. (See Nelson, John, assignor, 1

signor.)
Automatic Fuel Saving Company. (See Gray, George C. G., assignor.)
Automatic Gas Steam Radiator Company. (See Blackmore, George W., assignor.)
Automatic Guard and Signal Corporation, The. (See
Jacobson, Ole A., assignor.)
Automatic Lock and Closer Company. (See Hill, E. L.,
Automatic Lock and Closer Company. (See
Peaden, William H., assignor.)
Automatic Merchandizer, Inc., The. (See Lea, Charles,
assignor.)

assignor.) Automatic atomatic Molding & Folding Company, The. Aldrich, J. P., and Morris, assignors.) atomatic Motion Picture Display Co. (See B (See

Automatic John P., Automatic (See Burnett.

Automatic Motion Picture Display Co. (See Burnetty John P., assignor.)
Automatic Musical Instrument Company. (See Green, Clifford H., assignor.)
Automatic Paper Machinery Company. (See Marcalus, Nicholas, assignor.)
Automatic Recording Safe Company. The. (See Fisher, Charles, assignor.)
Automatic Scale Company, The. (See Blick, Ernest L., assignor.) Nicholas, assignor.)
Automatic Recording Safe Company, The. (See Fisher, Charles, assignor.)
Automatic Scale Company, The. (See Blick, Ernest L. Automatic Scale Company, The. (See Blick, Ernest L. Automatic Sale Company, The. (See Thomas-Harold D., assignor.)
Automatic Signal & Sign Company, The. (See Myers. Parke G., assignor.)
Automatic Straight Air Brake Company. (See Hamilton. Earle Hamilton. Straight Air Brake Company. (See Gensmer, Theodore, assignor.)
Automatic Transmission Company. (See Gensmer, Theodore, assignors.)
Automatic Transmission Company. (See Gensmer, T., and Farmer, assignors.)
Automatic Transmission Company. (See Gensmer, T., and Farmer, assignors.)
Automatic Chest Company, The. (See Hawley, Charles Automatic Chest Company, The. (See Hawley, Charles Automatic Chest Company, The. (See Mowbray, James W., assignor.)
Automotive Corporation, The. (See Mowbray, James W., automotive Devices, Inc. (See Miles, F. J., and Thompassignor.)

assignor.)
Automotive Devices, Inc. (See Miles, F. J., and Thompson, assignors.)
Automotive Patent Holding Company. (See Ahlm. Charles E. R., assignor.)
Automotive Valves Co., The. (See Burtnett, Everett R., assignor.)
Valves Co., The. (See Burtnett, E. R., and Burnell, assignors.)
Automotive Valves Corporation, The. (See Burtnett. Everett R., assignor.)
Automotive Valves Corporation, The. (See Burtnett. J., assignor.)
Automotive Valves Corporation, Company. (See La Joie, Hubert J., assignor.)

Auto Pneumatic Action Company. (See La Joie, H. J., and Urquhart, assignors.) Auto Pneumatic Action Company, The. (See Urquhart,

Auto Predmatic Action Company, 1 ne; (See Organical Ubert, assignor.)
Autopoint Company, (See Kaufmann, M. M., Lynn, and Dell, assignors.)
Autopoint Company, (See Keeran, Charles R., assignor.)

Research Corporation. (See Bijur, Joseph, as-Auto Research Corporation. (See Bloom, Edgar J., as-

signor.)
Auto Roller Awning Manufacturing Company, The. (See Clementi. C. L. and Hildebrandt, assignors.)
Autostrop Patents Corporation. (See Gaisman, Henry J., assignor.)
Autostrop Patents Corporation.
Autostrop Patents, assignors. (See Gaisman, H. J., and Schumacher, assignors.)
Auto Wheel Coaster Company. (See Weyers, Howard L.,

assignor.) nty, Frank, New York, N. Y. Mandrel. 1,639,019; Aug. 16.

Auty. Frank, New York, N. Y. Mandrel. 1,689,019; Aug. 16.
Avak, L. S., & Co. (See Goddu, William, assignor, Avakian, Bagdusar, Arlington, R. I. Mechanical pencil. 1,028,039; May 17.
Avakian, Bagdusar, Arlington, R. I. Mechanical pencil. 1,028,039; May 17.
Sept. 13.
Averill, Charles C., Houston, Tex., assignor to Wm. S. Barnickel & Company, Webster Groves, Mo. Conditioning crude-oil emulsions. 1,617,737; Feb. 15.
Averill, Charles C., Houston, Tex., assignor to Wm. S. Barnickel & Company, Webster Groves, Mo. Treating petroleum emulsions. 1,617,738; Feb. 15.
Averill, Charles C., Houston, Tex., assignor to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking water-in-oil emulsions. 1,617,739; Feb. 15.
Averill, Charles C., Houston, Tex., assignor to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,617,740; Feb. 15.
Averill, Charles C., Houston, Tex., assignor to Wm. S. Protoleum emulsions. 1,617,741; Feb. 15.
Averill, Earl A., Mount Vernon, N. Y., assignor to Locomotive Feed Water Heater Company. Feed-water heater, 1,617,891; Feb. 15.
Averill Mfg. Co. (See Hopf, Rudolph A., assignor.)
Averill, Mes G., assignor to The Ohio Brass Company, Magnedal, Ohio, Car-coupler systems. 1,699,717; Averill, Millam H., assignor to Joseph Pollak Tool and

Aug. 23.

Averill, William H., assignor to Joseph Pollak Tool and
Stamping Company, Boston, Mass. Folding display
rack. 1,922,612; Mar. 29.

Avery, Anthony, Royal Oak, Mich. Speedway. 1,613,866;
Jan. 11.

Jan. 11. Avery, Archie 1,643,148;

Jan. 11.
Avery, Archie S., Two Rivers, Wis. Band-saw dresser.
1,643,148; Sept. 20.
(See Ray, Charles T., assignor.)
Avery, B. F., & Sons, G. See Ray, Charles T., assignor.)
Avery, B. F., & Sons, G. See Ray, Charles T., assignor.)
Avery, Charles T., assignor to Ford Motor Company of Grawing glass. 1,616,405; Feb.
1, Avery, Clarence W., Detroit, and D. O. Moody, Highland Park, assignors to Ford Motor Company, Detroit, Mich.
Article made from a rubber composition. 1,642,660; Sept. 20.
Archiver, N. Y., Dumping apparatus. 1,654,032; Dec. 27.

Sept. 20. Sept. 20. Avery, Courtney C., assignor, Auburn, N. Y. Dumpling apparatus.

Dec. 21. Sept. 20. Se

spray for expediting the ripening of fruit. 1,636,452; July 19.
Avery, Henry A., Groton, assignor, by messe assignments. to L C Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,621,488; Mar. 22.
Avery, John, Armadiel, assignor to Australian Lanoline Proprietary Limited, Melbourne, Victoria, Australia. The like 1,638,937; Auz. 10 or fatty substances and new like. 1,638,937; Auz. 16. or fatty substances and relike. 1,638,937; Auz. 18.
Avery, John L. Long Beach, Calif. Direct-reading outside and inside calipres. 1,650,926; Nov. 29.
Avery, True M., Glens Falls, assignor to Union Bag & Paper Corporation. Hudson Falls, N. Y. Bag making and printing machine. 1,618,041; Fbb. 15.
Avery, True M., Glens Falls, assignor to Union Bag & Paper Corporation. Hudson Falls, N. Y. Bag-delivery Avery, True M., assignor to Union Bag & Paper Corporation. Hudson Falls, N. Y. Machine for stapling handles on bags. 1,624,854; Apr. 12.
Avery, U. Sherman, Union Hill, and A. K. Trout, Bradley Beach, N. J., assignors to Waverly Wovelty Co., Inc., 1626,363; Apr. 26.
Aviles, Florentino, Corozal, British Honduras. Key for water training, 1,614,175; Jan. 11.

1.626,380; Apr. 26, Aviles. Florentino, Corozal, British Honduras. Key for water tanks. 1,614,175; Jan. 11. Avis, Angust, Malang, Java, Dutch Fast Indies. Enginestarting device. 1,632,264; June 14. Avis, Samuel W. West Hartford, assignor to The Fuller Brush Company, Hartford, Conn. Feeding device. 1,646,571; Oct. 25. Avandaglio, Gluseppe. (See Ganlo, O., Avondoglio, and Avondoglio, Gluseppe. (See Ganlo, O., Avondoglio, and Grassis.)

vorio. Luigi, Rome, Italy. Balloon capable of being employed as a captive observation balloon and as a dirigible. 1,029,374; May 17.

Avriett, Giles L., et al. (See Walston, Joseph A., as-Awoki, Kametaro, New York, N. Y. Saucer. 1,614,338; Jan. 11.

Jan. 1.1.

Asherg. Edward. Spokane. Wash. Ticket cabinet. 1.632 265; June 14.

Axe. Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Window construction. 1,616,248; Feb. 1.

Axe. Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Window-sash construction. 1,637,733; Aug. 23.

Axe. Roy T., assignor to The O. M. Edwards Company Inc. Syracuse, N. Y. Window sash and lock construction. 1,640,173; Aug. 23.

Axe. Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Window sash and lock construction. 1,640,173; Aug. 23.

Axe. Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Multiple-window construction. 1,640,25; Dec. 6.

Inc., Syracuse, N. Y. Multiple-window construction.
1,651,362; Dec. 6. Los Angeles, Calif., assignor to
Excison Melbert F. Lossay, Los Angeles, Calif. Sparetone of the Company of the C

signor.) Axeison Machine Co. (See Axelson, J. C., and Jardh, as-

signors.)
Axelson Machine Company. (See Barnwell, Dwight H., assignor.)
Axelson Machine Company. (See McKown, Randall C.,

Axiel Besearch Laboratories, Inc. (See Axieu, France, assignor.)
Axiel, Saimuel T. (See Bollinger, Harry U., assignor.)
Ayars, Charles H., assignor to Ayars Machine Company,
Salem, N. J. Canning machine. 1,614,065; Jan. 11.
Ayars, Charles H., assignor to Ayars Machine Company,
Salem, N. J. Can-filling machine. 1,621,864; Man. 22.
Xalem, N. J. Vegetable-topping machine. 1,635,569:
July 12.
Ayars, Charles H., assignor to Ayars Machine Company,
Salem, N. J. Machine for preparing fruits for canning,
1,640,745; Aug. 30.
Ayars Machine Company. (See Ayars, Charles H., assignor).

Ayers Machine Company. (See Ayars, Charles H., assignor.)
Aydelotte, John T., assignor to American Dry Cleaning Company, Salt Lake City, Utab. Dry Cleaning, 1.615,897; Feb. 1.
Ayer Company, The. (See Harris, Thomas S., assignor.)
Ayer, Louis H., Chicago, Ill. Bonding pin. 1,626,909;
May S., Artheles E., Cleves, Ohio, Blow-out patch for Ayers, John A., Lima, Ohio. Soil-breaking machine. 1,631,290; July 26.
Ayers, John E., Hartford, Conn. Bottle holder for bottle-washing machines. 1,652,597; Dec. 13.
Ayers, John E., Hartford, Conn. Adjustable jet for bottle-washing machines. 1,652,597; Dec. 18.
Ayers, Joseph G., Fr., Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich. Roller bearing. 1,651,7663; Feb. 15.
Ayers, Joseph G., W. H. Chapman, Montclair, and M. E. Berlowitz, Belleville, N. J., assignor to General Motors Corporation, Detroit, Mich. Rouging machine. 1,651,768; Dec. 6.
Ayers, Joseph G., W. H. Chapman, Montclair, and M. E. Berlowitz, Belleville, N. J., assignors to General Motors Corporation, Detroit, Mich. Gauging machine. Ayers, Loven W., San Bernardino, Calif. Centrifugal casting appliance. 1,639,253; Aug. 16.
Ayling, George W., Springfield, Ill. Kite. 1,633,510; June 21.
Ayling, George W., Springfield, Ill. Kite. 1,633,510; June 21. signor.)

Ayling, George W., Springness,
June 21.
Ayling, Henry S., assignor to United Conveyor Corporation, Chicago, Ill. Conveyer fitting. 1,614,770;
Jan. 18.
Jan. 18.

assignor.)

Ayotte, Joseph R., Chienge, Hl. Interchangeable wrench or other handler. [651,301; Dec 6. Ayotte, Ayotte, Ayotte, Ayotte, Ayotte, Ayotte, Ayotte, Ayotte, Ana F., El Paso, Tex. Steering-wheel lock 1,621,051; Mar. 15. Ayres, Chulde E., Axtell, Nebr. Colander. 1,621,823; Mar. 22.

Ayres, Eugene E., fr., Chester, assignor to The Sharples Specialty Company, Philadelphia, Pa. Resolving water-in-oil emulsions. 1,646,339; Oct. 18.

Ayres, Frank W., Colby, Kans. Chassis. 1,625,972; Ayr. 28.
Ayres, Harry T., Durango, Colo. End connection and shock absorber for vehicle springs. 1,623,631; Apr. 5.
Aywad, Hachig A, West New York, N. J. Swimming bag. 1,634,318; July 5.
Aywad, Hachig A, West New York, N. J. Valve for New Holes, 1,634,314; July 6.
Azamber, John, Pittsburg, Kans. Fly swatter. 1,628,486; May 10.
Azarraga, Luis, Hempstead, N. Y. Night aerial advertising, 1,652,989; Dec. 20.
Azor Motor Manufacturing Company, The. (See Orr, William V., assignor.)
Azzara, Polo C., Cresson, Pa. Spike, 1,642,006: B & H Engineering Laboratories, (See Barrows, Ira C., assignor.)
B. & H. Utility Products, Inc. (See Burlelgh, James K., assignor.) B. & H. Unity Frounces, and assignors.)
B-S. Manufacturing Products Corporation. (See Feeley, M. R., Stern, and Braden, assignors.)
B. & S. Manufacturing Products Corporation. (See Stern, C., and Braden, assignors.)
B. & T. Coil Former & Tool Co. Inc. (See Bender, George, assignor.)
Baut, Feter, Zeeland, Mich. Poultry perch. 1,630,020;
Alic. 16. George, assignor.)

Baar, Peter, Zeeland, Mich. Poultry perch. 1,630,020;
Aug. 16.

Baare, Edwin M., St. Louis, Mo. Lamp-shade holder.
1,616,735; Feb. 8.

Minn. Automatic ignition-control
Bass, Lowrence F., and E. H. McMahon, Whittier.
Calif. Gas regulator for burners. 1,615,535; Jan. 25.

Baatz, Margaret C., Irvington, assignor to Chas. R. De
Bevoise Company, Newark, N. J. Brassière.
1,618,043; Feb. 15.

Babb, Joseph E. (See Willock, H. H., Caplan, and Babb.)

Babb, Jaseph E. (See Willock, H. H., Caplan, and Babb.)

Babb, Jaseph E. (See Willock, H. H., Caplan, and Babb.)

Babb, Jaseph E. (See Willock, H. H., Caplan, and Babb.)

Babb, Jaseph E. (See Willock, H. H., Caplan, and Babb.)

Babb, Jaseph E. (See Willock, H. H., Caplan, and Babb.)

Babb, Jaseph E. (See Willock, H. H., Caplan, and Babb.)

Babbit, Jedwin V., Fairhaven, Mass. Soldier toy.
1,625,039; Apr. 5.

Babbitt, Bdwin V., Fairhaven, Mass. Toy soldier.
1,650,781; Nov. 29.

Babbitt, Elwin J., Holland, Mich. Fishing line.
1,014,642; Jan. 18.

Babbitt, John F., assignor to J. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor to J. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor to J. V. Pilcher, Louisville, Ky.

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Babbitt, John F., assignor to J. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor, L. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor, L. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor, L. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor, L. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor, L. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor, L. V. Pilcher, Louisville, Ky.

Babbitt, John F., assignor, L. V. Pilcher, Louisville, Ky. man.)

Babcock, Arthur E., Dolores, Colo. Safety starting crank for internal-combustion engines. 1,630,505; May 31.

Babcock, Asa M., Lorain, Ohio. Spring motor. 1,634,864; Babcock Printing Press Manufacturing Company, The. (See English, F. S., and Perry, assignors.)

Babcock Printing Press Manufacturing Company, The. (See Manlowe, Daniel J., assignor.)

Babcock Printing Press Manufacturing Company, The. (See Perry, T. L. and English, assignor.)

S., assignor.) Babcock & Wilcox Company, The. (See Coleman, John, assignor.)
Babcock & Wilcox Company, The. (See Coleman, John, assignor.)
Babcock & Wilcox Company. (See Dickson, George H., ssignor.) assignor.) Babcock & Wilcox Company, The. (See Harter, Isaac, assignor.) Babcock & Wilcox Company, The. (See Hartnett, George J. assignor.) Babcock & Wilcox Company, The. (See Hoxle, William Babcock & Wilcox Company, The. Babcock & Wilcox Company, The.

D, assignor.)
Babcock & Wilcox Company, The.
man, assignor.)
Babcock & Wilcox Company, The.
See Jacobus, D. S.,
and Frait, assignors, The.
(See Jacobus, D. S.,
and Frait, assignors, The.
(See Moone, William
(See Jacobus, D. S.,
and Frait, assignors, The.
(See Moone, William
(See Hubbard, North Bacock Wilcox Company, The. (See Kemnal, James, assignor.)
Babcock Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.) Balcock & Wilcox Company, The. (See Lewis, Nathan E., assignor.) E. assignor.)

Babcock & Wilcox Company, The. (See Lewis, N. E., and Williams, assignors.)

Babcock & Wilcox Company, The. (See Roszak, Charles L., assignor.)

Babcock & Wilcox Company. (See Webster, Hosea, Babcock & Wilcox Company.) assignor.) Wilcox Company, The. (See Wester, Sydney F., assignor.) Babcock & Wilcox Company, The. (See Witz, Henri E., assignor.)

Babekuhl, William, Los Angeles, Calif. Lock for railroad cars. 1,646,181, Oct. 18, doc. 18, d assignor: J. Philadelphia, Pa. Document-binding clamp. 1,644.625; Oct. 4: Babka, Joseph J., Berwyn, Ill. Oil atomizer. 1,620,625; Baba. 13. Campany, et al. (See Sebell, Harry, asboom Can Company, et al. (See Sebell, Harry, as-Basson, Henry B., assignor to Pine Tree Milking Ma-chine Company, Chicago, III. Fall cover for milking machines. 1,653,765 Dec. 27. Baccellieri, Raffaele, Philadelphia, Pa. Press. 1,639,791; Baccellieri, Raffaele, Philateipina, Pa. Pices, 1,00,10-, Aug. 23.
Bach, James S., Toronto, Ontarlo, Canada. Sound amplifier, 1,653,144; Dec. 20.
Bacconstance, P., Milburn, N., J., assignor to Thermokept 1,650,416; Nov. 22.
York, N. Y. Sealing cans. 1,650,416; Nov. 22.
Bach, Oscar B., New York, N. Y. Lamp. Des. 72,132; Bach, Oscar B., New York, N. Y. Candlestick. Des. 72,133; Mar. 8. Bach, Oscar B., New York, N. Y. Candlestick. Des. 72,133; Mar. 8. New York, N. Y. Candlestick. Des. 72,134; Mar. 8. Bach, Oscar B., New York, N. Y. Table. Des. 72,135; Bach, Oscar B., New York, N. Y. Torchère. Des. 72,136; Mar. 8. Back, Usear B., New York, N. Y. Chair. Des. 72,137;
Bach, Oscar B., New York, N. Y. Console table. Des.
12, 338; Apr. 5. 72,338; Apr. 5.
Bach, Oscar B., New York, N. Y. Torchère. Des. 72,341; Apr. 5. Bach, Oscar B., New York, N. Y. Table. Des. 72,342; Apr. 5. Bach, Oscar B., New York, N. Y. Highboy, Des. 72,343; Apr. 5. Bach, Oscar B., New York, N. Y. Table. Des. 72,344; Apr. 5. ach, Oscar B., New York, N. Y. Torchère. Des. 72,345; Apr. 5. Bach, Oscar B., New York, N. Y. Lamp. Des. 72,346; Apr. 5. Ich, Oscar B., New York, N. Y. Table, Des. 72,659: May 17.
1ch, Oscar B., New York, N. Y. Table. Des. 72,660;
May 17.
1ch, Oscar B., New York, N. Y. Table. Des. 72,661; May 17. Ich, Oscar B., New York, N. Y. Table. Des. 72,662; Bach. May 17. ch, Oscar B., New York, N. Y. Secretary. Des. 72,975; July 5. Ich, Oscar B., New York, N. Y. Lamp. Des. 73,466; Sept. 20. Bach, Oscar B., New York, N. Y. Torchère. Des. 73,467; Sept. 20.
Bach. Oscar B., New York, N. Y. Candlestick. Des. 73,468; Sept. 20.
Bach. Oscar B., New York, N. Y. Lamp. Des. 73,469; Bach, Oscar B., New York, N. Y. Bridge lamp. Des. 73,470; Sept. 20.
Bach, Oscar B., New York, N. Y. Ash tray. Des. 73,471;
Bach, Oscar B., New York, N. Y. Ash tray. Des. 73,471; A 70. Sept. 20. Tors, N. F. Britge lamp. Des. Bach, Oscar B., New York, N. Y. Lamp. Des. 73,471; Sept. 20. Bach, Oscar B., New York, N. Y. Lamp. Des. 73,472; Sept. 20. Bach, Oscar B., New York, N. Y. Table. Des. 73,550; Oct. 4. Grar B., New York, N. Y. Table. Des. 73,550; Oct. 4. Bach, Oscar B., New York, N. Y. Table. Des. 73,551; Oct. 4. Bach, Oscar B., New York, N. Y. Cabinet. Des. 73,552; Oct. 4. Bach, Oscar B., New York, N. Y. Cabinet. Des. 73,553; Bach, Oscar B., New York, N. Y. Cabinet. Des. 73,553; Bach, Oscar B., New York, N. Y. Console table. Des. 73,595; Oct. 11. Bach, Oscar B., New York, N. Y. Celestal for lighting fixtures. Des. 73,992; Dec. 6. Bach, William F., Cleveland Heights, Obio. Hanger for wall radiators. J. 630,319; May 31. Bachgard Company, New York, N. Y. Finger-gauge-truing device. 1,648,572; Nov. 8. Bacher, Rollin L., Cleveland Heights, assignor to American Can Company, New York, N. Y. Finger-gauge-truing device. 1,648,572; Nov. 8. Bacher, Rollin L., Cleveland Heights, assignor to The United States Air Compressor Company, Cleveland, Ohio. Pumping system. 1,617,095; Feb. 3. Bacher, Rollin L., Cleveland Heights, assignor to American Can Lan Landen, Bessie T., executivity, (See Bachman, Frank E.) Bachman, Dessie L., E., et al. (See Wotruba, Charles, assignor.)
Bachman, Charles L., et al. (See Wotruba, Charles, assignor.)
Bachman, Frank E., deceased, Port Henry, N. Y.; B. T.
Bachman, executrix. Recovery of titanic acid, inon, and magnesia from titaniferous ores. 1,618,795; Feb. 22.

Bachmann, Frank, assignor to The Dorr Company, New York, N. X., Separation of solids from liquids. 1,627,550; May 10.
Bachofen, Jacob. (See Dunning, W. E., and Bachofen.) Bachofen, Novelty Fabric Inventions, Inc. (See Bachofen, Theodor, Westbrook, Me., assignor to Bachofen Novelty Fabric Inventions, Inc.
Making pile abrics. Theodor, L., Westbrook, Me. Apparatus for piece dyeing. 1,644,460; Oct. 4.
Bachofen, Theodor J., Westbrook, Me. Piece dyeing. 1,644,462; Oct. 4.
Back, Kobert, and G. A. Cooper, assignor to The Wahl Dack, Robert, and G. A. Cooper, assignor to The Wahl Dack, Robert, and G. B. Brooklyn, N. Y. Making fireproof backer, Christian B., Brooklyn, N. Y. Making fireproof electric insulated cables. 1,650,972; Nov. 29.
Backer, Christian B., Brooklyn, N. Y. Making fireproof electric insulated cables. 1,650,972; Nov. 29.
Backer, Ernst, St. Gail, Switzerland. Attachment to folding combs, brushes, and the like. 1,651,746; Dec. 6.

Backhaus, Arthur A., Baltimore, Md., assignor to U. S. Industrial Alcohol Co. Revivifying carbon used in purifying ethylene. 1.619,326; Mar. 1. Backhaus, Arthur A., Baltimore, Md., assignor to U. S. Industrial Alcohol Co. Revivifying carbon. 1,619,327;

partifying chylene. 1,619,226; Mar. 1.
Backhus, Arthur A., Baltimore, Md., assignor to U. S.
Industrial Alcohol Co. Revivitying carbon. 1,619,327;
Mar. 1.
Backlund, Isaac A., Satra, Sweden. Damper regulator.
1,618,044; Feb. 15.
Backstay Machine & Leather Company, The. (See
Backstrom, Fridolph F., Chicago, Ill. Toothpick holder.
1,618,027; Feb. 22.
Backstrom, G. V. (See Brown, Perry O., assignor.)
Backstrom, G. V. (See Brown, Perry O., assignor.)
Backstrom, Sigurd, M., assignor to Aktiebolaget Vaporation of the State of State of

May 24.

Badger, Arthur C., Newton, Mass. Nonfreezing fire extinguisher. 1,644-363: Sept. 27.

Badger Manufacturing Corporation. (See Starck, Willlam A., assignot.)

Badger, Roy L., Youngstown, Ohlo. Low-water alarm.

1615-661: Jan. 18.

1615-661: Jan. 18.

1616-662: Aug. Co. (See Tanguay, Arthur G., as-

signor.)

Raiger, Walter L. Ann Arbor, Mich., assignor to Swenson Evaporator Company, Harvey, Ill. Evaporating apparatus. 1.612.961; Jan. 4.

Badger, William R., Hubbard, Ohio. Dental plate retainer, 1.619.647; Mar. 1.

Badger, William R., Hubbard, Ohio. Dental articulator. 1.639.625; Aug. 16.

Badgley, Gerald J., Brooklyn, N. Y., assignor to Duplex of the company of the co

France. Vertical drying and dehydrating apparatus. 1633.382; Dec. 20.
Baehne, Walter, West New York, N. J. Tobacco case. 1,622,407; Mar. 29.
Baehr, Albert M. (See Fleming, W. K., and Baehr.)
Baentsch, Fellx, Serlin-Charlottenburg, and A. Sober. Relix, Serlin-Charlottenburg, and A. Sober. Sober. Relix, Serlin-Charlottenburg, and A. Sober. Relix, Berlin-Charlottenburg, and A. Sober. Relix, Serlin-Charlottenburg, and A. Sober. Berlin-Charlottenburg, and A. Sober. Relix, Serlin-Charlottenburg, and A. Sobe

Apr. 5.

Bacthe, Edward C., Waller, Tex. Pulverizer attachment for cultivators. 1,614,590; Jan. 18. Battz, Henry, St. Louis, Mo. Heating element. 130,010; Nov. 15. Battiti, Achille A., Chicago, Ill. Vulcanizer. 1,619,231;

Baffetti, A.

Bagnmery, Alexander, South River, N. J. Safety eigar Bagnmery, 1,658,431, June 21. Bagnmery, 1,658,431, June 21. Bagnmery, 1,658,431, June 21. Cedar Rapids, Iowa Flush valve for Pasteurizers, 1,624,572; Apr. 12. Bagby, Rajbh B., assignor to J. G. Cherry Company, Cedar Rapids, Iowa. Pasteurizing apparatus. 1,624,573; Apr. 12.

1,624,573; Apr. 12,

Bager. Frederic E., South Milwaukee, assignor to The T. L. Smith Company, Milwaukee, Wis. Ffextble seal Frederic E., South Milwaukee, Wis. Ffextble seal Bor mixers. 1,640,174; Aug. 23,

Bor mixers. 1,640,174; Aug. 23,

Bor mixers. 1,640,174; Aug. 23,

Milwaukee, Wis. Creeping traction mounting for railway-type excavators. 1,616,673; Feb. 8.

Bager. William M., W. Lehman, and F. C. Ruhloff, South Milwaukee, Wis. Dipper for exeavating machinery. 1,642,189; Sept. 13.

Bager. William M., W. Lehman, and F. C. Ruhloff, 1,642,191; Sept. 13.

Bager. William M., W. Lehman, and F. C. Ruhloff, 1,642,191; Sept. 13.

Bagley, James, assignor, by mesne assignments, to A. L. Ffeiffer, Bedford, Mass. Pile wire. 1,625,783; Apr. 26.

Bagley, James K., et al. (See Williamson, Aubrey C., assignor.)

Bagley and Sewall Company, The. (See Valentine, Charles W., assignor.)
Bagnall, Anna M., executrix. (See Hamilton, W. E., and Bagnall.)

Bagnall, Ernest J. (See Hamilton, W. E., and Bagnall, Bagnall, John. and P. G. Copeman. Toronto. Ontaclo. Chando. Device for making signs. 1.647.824; Nov. I. Bagnanl, Giuseppe, San Francisco, Caill. Endless drier Bahan, William H., Greenville, S. C. Crank-shaft gear for looms. 1.615.920; Jan. 11. Bahan, William H., Greenville, S. C. Crank-shaft gear for looms. 1.616,406; Feb. 1. Boyter, Greenville, S. C. Bahan, William H., Greenville, S. C. Crank-shaft gear for looms. 1.616,406; Feb. 1. H. Boyter, Greenville, S. C. Lidis,045; Feb. 15. (See Wilson R. E. and Robike)

1.618.046; Feb. 15.

Rahlike, William H. (See Wilson, R. E., and Bahlke.)

Rahlinann, Erwit F. Milwauke, Wis. Target-throwing

Bahmann, Erwit F. Milwauke, Wis. Target-throwing

Bahmson, Frederic F., Winston-Salem, N. C. Humidifier.

1.622.482; Mar. 29.

Bahr, August T. J., Kansas City, Mo., assignor to G. B.

Rooney, Fairview, Kans. Collapsible thre rim.

1.643.534; Sept. 27.

Bahr, Fritz. (See Skaupy, F., Pirani, Bahr, and Fehse.)

Bahr, Fritz. Chaitottenburg, Germany, assignor to Gen
ton Collapsible and Collapsible and Collapsible and Collapsible

1.632.678; June 4.

Baler, Ludwig S., assignor to Ice Cream Smack Products

Company, Portland, Oreg. Machine for making ice
cream containers. Rel6.788; Nov. 22.

Baier, Walter, New York, N. Y. Tool. 1,630.414;

May 31.

Baile, Roland P., Medford, Md. New food and process of

Baile, Roland P., Medford, Md. New food and process of production. 1,615,822; Feb. 1. Balley, Albert S. (See Brown, Ryneer E., assignor.) Bailey, Alex D. (See Grunert, A. E., and Bailey.)

Bailey, Austin, Freehold, N. J., assignor to American Telephone and Telegraph Company. Volume indicator. Bailey, Broadus, Greenville, S. C. Cleaning composition and making same. 1.635,244; July 12. Bailey, Charles W., Lynn, assignor to J. H. Stewart, Lynnfield, Mass. Buffing machine. 1.653,940; Dec. 27. Bailey, Claude B., W. W. McCord, and C. Wilkins, Wyandotte, assignor, by mesne assignments, to McCord 1.626,110; Apr. 26. Co., Detroit, Mich. Gacket. 1.626,110; Apr. 26. Bailey, David R., Sacramento, assignor to California Almond Growers Exchange, San Francisco. Calif. Apparatus for treating food products. 1,625,070; Apr. 19. Bailey, Edwin W. M., Amesbury, Mass. Window-glass Bailey, Elmer C. L. (See Ruff, E., and Bailey,) Bailey, Elmer M., Harensville, Kans. Shade and curtain bracket. 1,613,780; Jan. 11. Bailey, Frank, and F. H. Jackson, Southwark, England. Apparatus for straining fluids. 1,615,609; Jan. 25. Bailey, Glompany Theedo, Ohlo. Word-loiding means. 1,617,562; Feb. 15. Bailey, Growd M., Congon, M., Saccase M., Saccase M., Congon, C., Charley, C., Charley, C., Cast Peoria, Ill. Seed or fertilizer Gundon, T., Gracemont, Okla. All-weather top for automobiles. 1,636,453; July 19. Bailey, Henry A. (See Finkle, William P., assignor.) Bailey, James G., Delevan, assignor to Universal Broadcaster Mfg. Co., East Peoria, Ill. Seed or fertilizer Guster Mfg. Co., East Peoria, Ill. Broadcast distributing machine. 1,629,249; May 17. Bailey, James G., Delevan, assignor to Universal Broadcaster Mfg. Co., East Peoria, Ill. Broadcast distributing machine. 1,629,249; May 17. Bailey, James G., Delevan, assignor to Universal Broadcaster Mfg. Co., East Peoria, Ill. Broadcast distributing machine. 1,629,249; May 17. Bailey, James G., Delevan, assignor to Universal Broadcaster Mfg. Co., East Peoria, Ill. Broadcast distributing machine. 1,629,249; May 17. Bailey, James G., Delevan, assignor to Universal Broadcaster Mfg. Co., East Peoria, Ill. Broadcast distributing machine. 1,629,249; May 17. Bailey, James G., Delevan, assignor

machine. A., John A.,

Bailey, Joseph O. Hey, Joseph O. matchie, 1,025,239, 311, 11, 201f. Automobile gate. 1 650,814; Nov. 29. Bailey, Joseph O., Atlanta, Ga. Mounting for antifriction bearings. 1,622,483; Mar. 29. Bailey Moter Company. (See Eisenschitz, Robert, as-Bailey Meter Company.) signor.)

Bailey Meter Company. (See McNairy, Jacob W., as-

ley Meter Company. (See Thompson, Louis W., as-ley Meter Company. (See Thompson, Louis W., asignor.) ley Meter Company. (See Wilkinson, James, as-

signor.)
Bailey Meter Company. (See Woolley, Rew E., assignor.)
Bailey. Neal, Tulsa, Okla. Key holder. 1,647,390;

Balley. Neal, Túlsa, Okla. Key holder. 1,647,390; Nov. I.
Balley, Percy S., Marblehead, Mass., assignor to General Electric Company. Reflector. 1,626,438; Apr. 26.
Wester Company. Reflector. 1,626,438; Apr. 26.
Wester Company. Straightforward trunking system. 1,638,430; Aug. 9.
Balley, Rand S., Montelair, N. J., assignor to American Telephone and Telegraph Company. Straightforward trunking system. 1,638,430; Aug. 9.
Balley, Raymond K., Mogales, Ariz. Nut-bowl fitting. 1,639,627; Aug. 16.
Balley, Rivinson K., Mogales, Ariz. Nut-bowl fitting. 1,632,635; Dec. 13, 32.
Balley, Thomas, Christchurch, Canterbury, New Zealand. 1,652,635; Dec. 13, 28.
Balley, William E., Mansfield, Ohio, Combination double-boiler and steamer. 1,647,209; Nov. 1.
Balley, William E., Canton, Ohio, assignor to The Hoover Company. Die-casting machine. 1,654,675; Dec. 27.
Balley, William R., Campany. (See Tobin, John M., Balley, William M., Company. (See Tobin, John M., Balley, William M., Company. (See Tobin, John M., Balley, William R., Elmburst III., Automobile, bed

Booler Hild Steamer. 16-1/209; Nov. 1. The Hoover Company Description of the Mover Company. See Tobin, John M., assignor.)

Bailey, William R., Eimhurst, III. Automobile bed. 1.622,516; Apr. 19.
Bailey. William R., Eimhurst, III. Automobile bed. 1.622,516; Apr. 19.
Baily, Call. Canden, N. J. Brassière anchor. Baily, Milner B., Dunlap, III. Scrubbing machine. 1.627,263; May 3.
Baily, Robert W., Pittsburgh, Pa. Floor clip. 1.622,697; Mar. 29.
Baily, Thaddeus F., Alliance, Ohio. Annealing machine. 18.
Baily, Thaddeus F., Alliance, Ohio. Electrode control for are furnaces. 1.634.483; July 5.
Baily, Thaddeus F., Alliance, Ohio. Electric annealing hood. 1.643.600; Sept. 27.
Bain. Benjamin F., Pittsburgh, Pa. Game board. 1.638.651; Ang. 9.
Bain. Carl C., assignor to Wolverine Supply and Manufacturing Company, Pittsburgh, Pa., Vaccuum sweeper. 1.621.919; Mar. 22.
Bain, John, et al. (See Geake, William H. G., assignor.) Bain. Carl C., assignor to Wolverine Supply and Manufacturing Company, Pittsburgh, Pa., Vaccuum sweeper. 1.621.919; Mar. 22.
Bain, John, et al. (See Geake, William H. G., assignor.) Bainchidge, George K., and S. W. Reynolds, Ripon, Calif. Container. 1.641.408; Sept. 6.
Bainter, Milrord. Columbus. Ohio. assignor to S. Obermayer Company, Chicago, III. Furnace arch. 1.644.106; Oct. 4.

Bair-Collins Company. (See Stoiberg, Anders J., as-Bair-Collins Company. (See Scouters, Andreas or, signor.)
Baird, Dudley. (See Harriey, H. J., Fowler, and Baird.)
Baird, Dudley. (See Harriey, H. J., Fowler, and Baird.)
Baird, George W. (See Enkler, F. S., and Baird.)
Baird, George W. (See Enkler, F. S., and Baird.)
Baird, Glen W., and A. Lamb, Drummond, Idaho. Motordriven toothbrush. J. (531,394; June 7.
ratus. 1.631,571; June 7.
Baird, L. D., et al. (See Hendrickson, Dan C., assignor.)
Baird Machine Company, The. (See Lewis, Arthur J.,
assignor.)

assignor.)
Baits, Stuart G. (See Fekete, S. I., and Baits.)
Bajac Manufacturing Co. (See Batcheller, Hugh W., assignor.)

Bakelite Corporation. (See Backeland, Leo H., assignor.)

Bakelite Corporation. (See Bender, Howard L., as-

Bakelite Corporation. (See Rossi, Louis M., assignor.) Baker, Andrew J., St. Louis, Mo. Dirigible headlight.

Bakeilte Corporation: (see Rossi, Louis M., assigner, Baker, Andrew J., St. Louis, Mo. Drigible headlight. 1,615,435; Jan. 25.

Baker, Arnold W., Cooper Hill, Mo. Pulley block. 1,665,278; July 19.

1,666,278; July 19.

1,666, 278; July 19.

1,669, 10.

1,660, 10.

1,660, 10.

1,660, 10.

1,660, 10.

1,660, 10.

1,660, 10.

1,660, 10.

1,660, 10.

1,662, 159; 10.

1,662, 159; 10.

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Dec. 13.

Baker, Arthur R., assignor to I. T. Swartz, Indianapolis, Ind. Oil burner. 1,613,781; Jan. 11.

Baker, Arthur R., assignor to I. T. Swartz, Indianapolis, Ind.

Thermostat control. 1,638,907; Aug. 16.

Baker, Arthur R., assignor to I. T. Swartz, Indianapolis, Ind.

Fastening clamp. 1,646,636; Oct. 25.

Baker, Arthur R., assignor to I. T. Swartz, Indianapolis, Ind. Oil burner. 1,646,637; Oct. 25.

Baker, Bertram F., Tannersville, N. Y. Dispensing-tube 1,020,743; Mar. 15.

Baker Bertser Glass Company. (See Scohy, John R., assignor).

Baker Brothers Glass Company. (See Scohy, John R., assignor.).
Baker Brothers Glass Company of Okmulgee, Oklahoma. (See Waters, Thomas F., assignor.).
Baker, Butler, Haymarket, Va. Shait and cross-bar connection. 1,613,611; Jan. 4.
Baker, Butler, Haymarket, Va. Clothes form. 1,630,820; May 31.

Casing Shoe Company. (See Baker, Reuben C.,

Baker Casing Shoe Company, (See Baker, Reuben C., assignor.)
Baker, Charles H. New Haven, Conn. Toy telephone. 1.651.080; Nov. 29.
Baker, Charles H., assignor to Firestone-Apsley Rubber Company, Hudson, Mass. Overshoe and manufacturing the same. 1.644.364; Oct. 4.
Baker, Clair A., Detroit, Minn. Ventilating screen for automobiles. 1.658.610; Aug. 9.
Baker, Clair A., Detroit, Minn. Ventilating screen for automobiles. 1.658.610; Aug. 9.
Baker & Company. (See Brainin, Clement S., assignor.) Baker & Company. (See Brainin, Clement S., assignor.) Baker & Company. (See Coby. E. A., Maeulen, and Van Allen, assignors.) Baker, David, Los Angeles, Calif. Interliner. 1,620,054; Mar. 8.
Baker, David, Los Angeles, Calif. Interliner. 1,620,054; Mar. 8.
Baker, David, B. (See Anthony, J. E., and Baker.)

Baker, David B. (See Anthony, J. E., and Baker.) Baker, David B., Chicago, Ill., assignor to International Harvester Company. Internal combastion engine.

Baker, David B., Chicago, Ill., assignor to International Harvester Company. Internal combastion engine.
Baker, Edgar N., assignor to The Robbins & Myers Com-pany, Springfield, Ohio. Electric motor. 1,627,949; May 10.
Baker, Edward C. (See Baker, George B., H. B., and E. C.)

Baker. Edward C. (See Baker, George B., H. B., and E. C.)

Baker. Edwin, Winn, Me. Ice-cream-cone holder.

1.643-735; Sept. 27.

Baker. Frederick W., Stourbridge, England. assignor to T., 200 Miles.

Baker. Frederick W., Stourbridge, England. assignor to T., 200 Miles.

Baker. Frederick W., Stourbridge, England. assignor to T., 200 Miles.

Baker. Erle K., assignor to Baker Wheel & Rim Company, Chicago, III. Hub construction for demountable wheels.

1.613-253; Jan. 25.

Baker. Erle K., assignor to Baker Wheel & Rim Company, Detroit, Miles.

Baker. Erle K., assignor to Baker Wheel & Rim Company, Detroit, Miles.

Baker. Erle K., assignor to Baker Reduction Gear Company, Detroit, Mich. Planetary reduction gear.

Baker. Frank A. (See Adler, Harry, assignor.)

Baker. Frank A. (See Adler, Harry, assignor.)

Baker. Frank B., and W. L. Taylor, assignors to Chapin-Miles.

Baker. Frank E., and W. L. Taylor, assignors to Chapin-machine.

1.641-132; Aug. 30.

Baker. Frank B., and W. L. Taylor, assignors to Chapin-machine.

1.641-131; Aug. 30.

Baker. Frank W., Saraeuse, N. Y. Garment-pressing machine.

1.641-131; Aug. 30.

Baker. Frank W., Sast Aurora, N. Y. Windmill.

1.638-797; July 26.

Baker. Frank W., Sast Aurora, N. Y. Windmill.

1.638-797; July 26.

Baker. Frank W., Sast Aurora, N. Y. Windmill.

1.638-797; July 26.

Baker, Frederick W., Stourbridge, England, assignor to Trinity Wheel Corporation. Vehicle wheel. 1,619,802; Mar. 8.

Baker, Frederick W., Stourbridge, England, assignor to Trinity Wheel Corporation. Demountable wheel rim. 1,622,270; Mar. 29.
Baker, George B., H. B., and E. C., Brockton, Mass. Tack machine. 1,618,628; Feb. 22.
Baker, George E., Chicago, Ill. collapsible tube with an Corporation, 1,637,530 and 2.
Baker, George, 1,637,530 and 2,637,530 and 2.

unlösable cap. 1,637,896; Aug. 2.
Baker, George O., assignor to Feed Water De-Scaling Corporation. New York, N. Y. Water purifier. 1,647,495; Nov. 1.
Baker, George R., and W. E. Prescott, London, and C. W. Gilderdale, New Earswick, assignors to Rowntree and Gilderdale, New Earswick, assignors to Rowntree and Programment of the Corporation of the Corpora

Baker, Herbert B. (See Baker, George B., H. B., and B. C.)
Baker, Hubert E., assignor to Manning, Maxwell & Moore, Muskegon, Mich. Traveling crane. 1,652,265;
Dec. 13.
Baker Ice Machine Company of Texas. (See Hilliard, John J., assignor.)
Baker, J. L. (See Hoeschen, Henry A., assignor.)
Baker, Jesse H., Phoenix, Ariz. Auto bumper-clamp luggage carrier. 1,648,211; Nov. 8.
Baker, Jose B., Phoenix, Ariz. Auto bumper-clamp luggage carrier. 1,648,231; Nov. 8.
Bapparatus: 1,648,234; Sept. 20.
Baker, John, Brooklyn. N. Y. Boat-propelling mechanism 1,643,535; Sept. 27.
Baker, John C., Lake Bluff, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Making breaker arms. 1,625,697 Apr. 13.
Baker, John F., Mannsfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Furnace. 1,638,908; Aug. 16.
Baker, John F., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Rotary furnace. 1,638,908; Aug. 16.
Baker, John H., Detroit, Mich. Boiler. 1,646,382; Baker, Joseph, Sons and Perkins Company Incorporated.

Gurnace 1,638,909; Aug. Mich. Boller. 1,630,002, Bader, Joseph, Sons and Perkins Company Incorporated. (See Baker, George S., assignor.)
Baker, Lesile M., Bvanston, Ill. Valve mechanism. 1,613,012; Jan. 4.
Baker, Linnaeus B., assignor to Wayne Company, Fort Wayne, Ind. Liquid-dispensing apparatus. 1,622,581; Baker, Linnaeus B., assignor to Wayne Company, Fort Wayne, Ind. Safety mechanism for dispensing apparatus. 1,634,817; July 5.
Baker, Linnaeus B., assignor to Wayne Company, Fort Wayne, Ind. Liquid measuring and dispensing apparatus. 1,637,251; July 26.
Baker, Linnaeus B., assignor to Wayne Company, Fort Wayne, Ind. Liquid measuring and dispensing apparatus. 1,637,251; July 26.
Baker Manufacturing Company, The. (See Staley, Raleigh H., Bassan England. Apparatus for cutting

ratus. A.0-7,201; July 20.

Baker Manufacturing Company, The. (See Staley, Raleigh H., assignor. Berland. Apparatus for cutting Baker, Mark, Boston. England. Apparatus for cutting States and States. (See Danks, R. L., and Baker,)
Baker, Max L. (See Danks, R. L., and Baker,)
Baker, Max L. (See Danks, R. L., and Baker,)
Baker, Mio A., Los Angeles, Calif. Fabricating structural members. 1,619,232; Mar. 1.
Baker, Mio A., Los Angeles, Calif. Drilling apparatus. 1,622,084; Apr. 5.
Baker, Nelson M. (See Tillyer, E. D., and Baker.)
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Opthalmic-rim stretcher. 1,632,266; June 4.
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Bevel-edging machine. 1,631,501; Dec. 6.

Southbridge, Mass. Bevei-engthy machine. A. 1947-195.

Dec. 6.
Baker, Nelson M., and F. Fraser, assignors to American
Optical Company. Southbridge, Mass. Ophthalmic
mounting. 1.635-881; July 12.
Baker, Norman G., Muscatine, Iowa. Tracker bar.
Baker. Osciri II. New York, N. Y. Milk bottle.
1.623-459; Jap. 5.
Baker, Otts M. C., assignor of one-fourth to J. de Paolo,
Jeannette, Pa. Septic tank. 1.641.469; Sept. 6.
Baker-Perkins Company. (See Baker, George S., assignor.)

Baker-Perkins Company. (See Engels, Eugene O., assignor.)
Baker Perkins Company. (See Gase, Eugene, assignor.) Baker-Perkins Company. (See Harber, Laurence S., assignor.) Baker-Perkins Company. (See Head, R., and Prescott,

Baker-Perkins Company. (See Hickley, Harry W., as-

Baker Perkins Company. (See Michallat, Francis J., assignor.) Baker Perkins Company. Baker-Perkins Company. (See Pletscher, Carl, assignor.) (See Prescott, William E., as-

signor.)
Baker Perkins Company.
Baker Perkins Company.
Baker Perkins Limited,
signor.) (See Reiger, Carl S., assignor.) (See Tiedke, Hans F., assignor.) (See Dewhurst, Frank, as-

Baker-Raulang Company, The. (See Hertner, J. H., and Remde, assignors.)

Baker-Raulang Company, The. (See Remde, Edward H...

assignor.) Baker-Raulang Company, The. (See Stahl, Edward J., assignor.)
Baker-Raulang Company, The. (See Stoner, Frank, as-

Baker Reduction Gear Company. (See Baker, Erle K., assignor.)

Baker, Reduction Gear Company. (See Baker, Erle K., assignor.)
Baker, Reuben C., Coalinga, Calif., assignor to Baker Casing Shoe Company. Well-drill-pips float couplings. (1988) 1988. (19 signor.)
Baker-Vawter Company. (See Read, Howard W., as-

signor.)
Baker-Vawter Company. (See Steenrod, William J., as-

signor.)

Baker, Walter, assignor to Speeder Machinery Corporation, Fairfield, Iowa. Tread member for traction devices. 1617,015; Feb. 15.

Baker, Walter R. G., Schenectady, N. Y., assignor to General Electric Company. Electric condenser. 1,631,665; June 7.

Baker Wheel & Rim Company. (See Baker, Erle K., as-

Signor.)
Baker, William D., Trona, Calif. Nonglare road and car
illuminating headlight. 1.642,190; Sept. 13.
Baker, William E., et al., trustees. (See Baker, William

Baker, William E., et al., trustees. (See Baker, William E., assignor to W. E. Baker and G. A. Baker, William E., assignor to W. E. Baker and G. A. Baker and G. A. Baker, William E., assignor to W. E. Baker and G. A. Baker, William H., Montreal, Quebec, Canada. Cioth-roll mounting for looms. 1,635,024; July 5.
Baker, William H., Montreal, Quebec, Canada. Cioth-roll mounting for looms. 1,635,024; July 5.
Baker, William H., Montreal, Quebec, Canada, and J. Dewhurst, Methuen, Mass.; said Baker assignor to said Dewhurst, Methuen, Gase, Hongon, Gellium, J. Sakerles Service Corporation. (See Johnson, Olaf W., assignor).
Bakke, Laurits K. O., Emmetsburg, Iowa.

Tripping

Bakeries Service Corporation. (See Johnson, Olaf W., assignor.)
Bakke, Laurits K. O., Emmetsburg, Iowa. Tripping mechanism for binders. 1.620,055; Mar. 8.
Bakken, Andrew H., Edgewood Burk, Pa., assignor to Circuit breaker. 1.649,011; Nov. 15.
Bakker, Manton, Grundy Center, Iowa. Ear-corn cleaner. 1,621,575; Mar. 22.
Bakula, Frank A., assignor to Gross Chandeller Co., St. Louis, Mo. Lighting fixture. Des. (33.887; Nov. 22.
Bakula, Frank A., assignor to Gross Chandeller Co., St. Bakula, Frank A., assignor to Gross Chandeller Co., St. Bakula, Frank A., assignor to Gross Chandeller Co., St. Bakula, Frank A., assignor to Gross Chandeller Co., St. Bakula, Frank A., assignor to Gross Chandeller Co., St. Bakula, Frank Milwaller, Comparison of Gross Chandeller Co., St. Balachowsky, Dmitry, and P. Caire, Paris France. Utilizing hydrocarbons in internal-combustion engines and apparatus therefor. 1,630.048; May 24.
Balana, John J., Canton, Ohio. Axle drive. 1,613.371; Jan. 4.
Balace St. Frank, Milwaukee, Wis. Valveless two-cycle motor. 1,630.100; Aug. 16.
Balcerzak, Frank, Milwaukee, Wis. Valveless two-cycle motor. 1,630.100; Aug. 16.
Balcerzak, Frank, Milwaukee, Wis. Combined cap remover and milk-bottle top. 1,642,396; Sept. 13.

alch, Burdge M., assignor to The Miller Rubber Company, Akron, Ohio. Cutting sponge rubber. 1,617,511; Feb. 15. Feb. 15. Balcom, Charles A. (See Reynolds, Joy S., assignor.) Baldauf, Richard. (See Fecher, F. F., Danheiser, and Baldauf), Baldwin, Carter, Wilmington, Del. Picture. 1,628,640; Baldwin, Clarence D., Bellingham, Wash. Embroidery-hoop clamp. 1,631,355; June 7. Baldwin Company, The. (See Tower, Herschel E., as-

The company, The. (See Tower, Herschei E., asmillion.

Baldwin, Donald C., New York, N. Y. Picture hanger.

1,637,981; Aug. 2.

Baldwin, Earl F., and F. E. Woods, assignors to American Fibre Corporation, Gardner, Mass. Winding mechanisms of the Corporation, Gardner, Mass. Winding mechanisms of the Corporation of t

Baldwin, James L., Chicago, Ill. Clutch. 1,032au-, June 14.
Baldwin, James L., Chicago, Ill. Clutch. 1,032au-, June 14.
Baldwin, James P., Los Angeles, Calif. Shock absorber. 1,638,232; Aug. 9.
Baldwin, James P., Los Angeles, Calif. Shock absorber. 1,638,234; Aug. 9.
Baldwin, James P., Los Angeles, Calif. Shock absorber. 1,638,235; Aug. 9.
Baldwin, James P., and R. A. Keese, Los Angeles, Calif., said Keese assignor to said Baldwin. Shock absorber. 1,638,233; Aug. 9.
Baldwin, Leslie A., University City, Mo., and E. R. Schaeffer A. W. Varier, N. V. Device for preventing electrical ignition of stored inflammable fluids. 1,617,638; Feb. 15.
Baldwin Locomotive Works, The. (See Hance, Lawrence W., assignor.)

Baldwin Locomotive Works, The. (See McCarroll, William J., assignor.)
Baldwin Locomotive Works, The. (See Neebe, Lawrence L., assignor.)
Baldwin Locomotive Works, The. (See Rushton, Kenneth, Baldwin Locomotive Works, The. (See Shannon, Ellwood

Baldwin Locomotive Works, The. (See Rushton, Kenneth, assignor.)
Baldwin Lacomotive Works, The. (See Shannon, Ellwood M., assignor.)
Baldwin Lacomotive Works. (See Vauclain, Samuel M., assignor.)
Baldwin Locomotive Works, The. (See Wille, H. V., Campbell, and Etherington, assignors.)
Baldwin Locomotive Works, The. (See Wille, H. V., Campbell, and Etherington, assignors.)
Baldwin, Mary, Jackson Heights, N. Y., assignor of one many states of the st

July 26.
Ball, Ben A., assignor to American Textile Co., Inc., Fawtucket, R. I. Lace. Des. 73.681; Oct. 25.
Fawtucket, R. I. Lace. Des. 73.682; Oct. 25.
Ball, Ben A., assignor to American Textile Co., Inc., Pawtucket, R. I. Lace. Des. 73.682; Oct. 25.
Ball, Ben A., assignor to American Textile Co., Inc., Fawtucket, R. I. Lace. Des. 73.684; Oct. 25.
Ball, Ben A., assignor to American Textile Co., Inc., Fawtucket, R. I. Lace. Des. 74,044; Dec. 13.

Ball Brothers Company. (See Schram, Alexander L.,

assignor.)
Ball, Carl L. (See Reynolds, J. W., and Ball.)
Ball, Charles M., jr., Denver, Colo. Drink mixer.
1,633,470; June 2 & Hurst, J. E., and Ball.)
Ball, Ball, Carl H. S., and Ball.
Ball, Ball, Ball, Gall. See Ball.
Ball, Guy M., Dayton, Ohio. Quenching Suid. 1,635,025;
July 5.

Ball, Harry V., Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y. Adjustable ink-pump rail. 1,644,724; Oct. 11.
Ball, John H., Kirkwood, Mo. Card-holding muntin clasp. 1,648,108; Nov. 8.
Ball, John P., Chicago, Ill. Marine wall construction. 1,629,470; May 24.
Ball, Joseph A., Cambridge, assignor to Technicolor Motton Fricture Corporation, Boston, Mass. Cinematoton Plant of the Corporation, Boston, Mass. Making composite color pictures. Calif., assign in to Section Plant Corporation, Boston, Mass. Making composite color pictures. 1,641,566; Sept. 6.
Ball, Joseph S., assignor of one-half to J. N. Miller, Denver, Colo. Railway brake mechanism. 1,620,508; Mar. 8.

Denver, Colo. Rallway brake frequention.

Mar. 8.

Ball, Percy B., assignor to R. Wallace & Sons Mfg. Co.,
Wallingtord, Conn. Hand mirror or similar article.

Des. 72,056; Feb. 22.

Ball, Rowland Z., Los Angeles, Callf. Tortilla machine.

1,613,867; Jan. 11.

Ball, Samuel S., Bethlehem, Pa. Apparatus for compressing ingots. 1,633,970; June 28.

Ballamos, Elizabeth. Csee Reason, Walter M., assignor.)

Ballantine, Stuart, White Haven, Pa., assignor to Electrical Company of the Compan

cutcheon plate for radioreceivers. Des. 72,138; Mar. 8. Ballard, Arthur H., Boston, Mass. Window. 1,614,942; Jan. 18. Ballard, Arthur H., Boston, Mass. Aeropiane runway. Ballard, Arthur H., assignor to Ballard Oven Corporation, Boston, Mass. Baking oven. 1,625,761; Apr. 19. Ballard, Brnest S., Eureka, Calif. Printing form and producing same. 1,643,048; Sept. 20. Ballard, Harrie A., Boston, Mass., assignor to United Shoe machine. 1,623,226; Apr. 5. Ballard, Harrie A., Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Channeling machine. 1,623,226; Apr. 5. Ballard, Harrie A., Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Channeling machine. 1,623,226; Apr. 5. Ballard, Harrie A., Boston, Mass., assignor to United Shoe Machinery Company, Boston, Mass. Innersole-forming machine. 1,643,515; Oct. 18. Ballard, Harrie A., Boston, Mass., assignor to United Shoe Machinery Company, Boston, Mass. Innersole-forming machine. 1,623,624; Dec. 13. Ballard, Harrie A., Boston, Mass., assignor to United Shoe ming machine. 1,622,604; Dec. 13. Ballard, Herbert T., Norristown, Pa. Pattern-producing means for knitting machines. 1,613,304; Jan. 4. Ballard, Herbert T., Norristown, Pa. Pattern-producing means for knitting machines. 1,613,304; Jan. 4. Ballard, Milton H., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Controlling means for machines. 1,620,001; Mar. 8. Ballard, Milton H., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Starting and Ballard, Milton H., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Starting and Ballard, Milton H., Dynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Starting and Shilard, Milton H., Dynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Starting and Shilard, Milton H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Starting and Shilard, Milton H., Beverly, Mass., assignor to

signor.) allard Service Corporation. (See Goodridge, George E.,

Ballash, Joseph L., assignor to The Cleveland Stone Company, Cleveland, Ohio. Grinding machine. 1,644,812

Balle, Gerhard. (See Daimler, K., Marschall, and Balle.) Ballenger, Edgar G., Atlanta, Ga. Recording dial for radiosets. 1,617,191; Feb. 8. Balletto, Paul. Long Island City, N. Y. Separator. 1,650,480; Nov. 22. Balley, James C., Akron, Ohio. Tire and rim. 1,637,599; Ballip, Fredgrick A. Los Angales Call. Dishungation

Aug. 2.
 Ballin, Frederick A., Los Angeles, Calif. Dishwashing machine. 1,633,803; June 28.
 Ballman, Edward C. (See Mattern, P. J., and Walter, assignors.)

Ballman, Edwin C., St. Louis, Mo. Attachment plug. 1,636,798; July 26. Balloon Rubber Heel Company. (See Norwood, Harry G.,

assignor.)
Ballot, Ernest M., Parls, France. Valve-operating mechanism. 1,633,882; June 28.

Ballot, Ernest M., Paris, France. Braking device for vehicles. 1,640,919; Aug. 30. Ballot, Ernest M., Paris, France. Suspension for vehicles. 1,564,447; Dec. 27. Ballou, B. A., & Co. (See Ballou, Frederick A., jr., as-

Signor.)
Ballou, B. A., & Co. (See Ballou, F. A., and Stafford, assignors.)
Ballou, B. A., & Co. (See Morehouse, Eugene, assignor.)
Ballou, Frederick A., fr., assignor to B. A., Ballou & Co., Inc., Frovidence, R. I. Display card. 1,617,742: Inc., Feb. 1

Providence, assignors to B. A. Ballou & Co., Inc., Providence, assignors to B. A. Ballou & Co., Inc., Providence, R. I. Ornamentation for shoes. 1,650,104;

weber.) Balmer, I Mar. 29. Irvin, Aledo, Ill. Jumping jack. 1,622,562;

Bahmer. Irvin, Aledo, Ill. Jumping jack. 1,622,562; Mar. 29.

Balmer, John H., Maplewood, N. J. Combination bathroom fixture. Des. 72,543; May 3.

Balmer, John H., Maplewood, N. J. Combination bathroom fixture. Des. 72,644; May 3.

Balmer, John H., Maplewood, N. J. Combination bathroom fixture. Des. 72,691; May 3.

Balmer, John H., Maplewood, N. J. Combination bathroom fixture. Des. 72,691; May 2.

Balmer, John H., Maplewood, N. J. Combination bathroom fixture. Des. 72,691; May 2.

Balleth to I. Pacozdi, and one-cighth to I. Pacozdi, Niagara Falls, Ontario, Canada, Resilient wheel for bicycles. 1,630,920; May 31.

Balph, Wilmer G., East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Switchbourd. 1,626,860; May 3.

Ballslik, John G., Melbouries, to The American Fiatilite Company. Cincinnati, Ohio. Light-projecting reflector. 1,633,363; Aug. 16.

Ballston, Frederick M., Madison, Wis. Marker for pavements. 1,623,297; Apr. 5.

Balton, Clyde C., New York, N. Y. Typewriting machine. 1,631,631; Mag. 1.

Baltimore & Ohio Raifroad Company. (See Dennis, Olive Baltimore & Ohio Raifroad Company). (See Dennis, Olive Halmore, & Ohio Raifroad Company). (See Dennis, Olive Baltimore Paper Company). (See Berkowitz, Eugene B., assignor.)

Baltimore Paper Company. (See Beravouts, Business, assignor.)
Baltzer, Henry P., Hamburg, N. Y. Adjustable securing device for trusses. 1,640,229; Aug. 23.
Baltzley, Louis E., Glen Ridge, N. J. Closure. 1,620,316; Mar. 8.
Baltzley, Louis E., Glen Ridge, N. J. Traffic signal. 1,632,211; June 14.
Baltzley, Louis E., Glen Ridge, N. J. Adjusting device. 1,632,212; June 14.
Baltz, Ramon R., Kingston, Pa. Dyeing fur. 1,648,889; Nov. 15.

Baltit, Ramon K., Kingston, Pa. Dyeing für. 1,048,899; Nov. 15. Balzano, James, New York, N. Y. Valve-locking attach-ment. 1,650,481; Nov. 22. Balzarini, Felice. (See Fountain, A., Balzarini, and

Balzarini, Felice. (See Fountain, A., Laurdry Mathiel.)
Balzer, Fritz, Moline, assignor to Troy Laundry Machinery Co., Ltd., Chicago, Ill. Cylinder construction. 1.622,275; Mar. 29.
Balzer, Fritz, Moline, assignor to Troy Laundry Machinery Co., Ltd., Chicago, Ill. Garment press. 1.625,071; Apr. 19.
Balzer, Fritz, Moline, assignor to Troy Laundry Machinery Company. Ltd., Chicago, Ill. Door mechanism for Company. Ltd., Chicago, Ill. Door mechanism for Ltd., Chicago, Ill. Door mechanism for Company. Ltd., Ltd., Chicago, Ill. Door mechanism for Company. Ltd., Ltd., Chicago, Ill. Door mechanism for Company. Ltd., Ltd., Chicago, Ill., Ltd., Ltd.,

Rurke, Los Abgetes, cam. Aug. 30, non W., and J. M., Ballon, Los Angeles, Calif. Ballot, Los Angeles, Calif. Ballot, Los Angeles, Calif. Bamber, John J., and M. W. Collins, Wilkes-Barre, Pa. Liquid-dispensing apparatus. 1,631,454; June 7, Bamber, Joseph, and J. I. Mundell, Groton, Conn. Mechanical baseball game. 1,617,789; Feb. 15.

Bamberger, Otto, Dulsburg, Germany. Tube mill and process, 1.617,936; Feb. 15. Bamberger, Peter, Denver, Colo. Improving the tone of stringed instruments. 1.622,484; Mar. 29. Bamberger, Udo, Eberswalde, near Berlin, Germany. Crane. 1.653,834; Dec. 27. Bambin, Aurelio, Seward, Pa. Aeroplane. 1,631,187; June 7. Bambini, Aurelio, and C. Nascivera, McKees Rocks, Pa. Knife guard. 1,614,772; Jan. 18. Bamford, Cyrll J. (See Bamford, Joseph and C. J.) Bamford, Frank L., assignor to C. M. Hall Lamp Company, Detroit, Mich. Lamp catch. 1,626,583; May 3. pany; Detroit, Mich. Light. 1,652,192; Dec. 18. Bamford, Joseph and C. J., Uttoxeter, England. The for haymaking and like machinery. 1,631,435; June 7. Banach, Martha, New York, N. Y. Hair waver. 1,618,144; Feb. 16.

Ballett, Martina, New York, N. I. Hall waver. 1,018,142; Bourd. Ceci E., London, England. Tent or shelter. 144,664; Oct. 11.
Banbury, Ferniey H., assignor, by mesne assignments, to Farrel-Birmingham Company, Incorporated, Ansonia, Conn. Heat-exchange roll. 1,631,502; Dec. 6.
Bancel, Paul A., Nutley, and J. F. Kirgan, Phillipsburg, assignors to Ingersoll-Rand Company, Jersey City, N. J. Surface condenser. 1,627,265; May 3.
Bancel, Paul A., Nutley, assignor to Ingersoll-Rand Company, Jersey City, N. J. Surface condenser. 1,627,265; May 3.
Bancel, Paul A., Nutley, assignor to Ingersoll-Rand Company, Jersey City, N. J. Surface condenser. 1,627,467; May 10, except the Martix-drying cabinet and tenting matrices. 1,649,647; Nov. 15.
Bandf, Peter, Chicago, Ill. Antiseptic adhesive tape. 1,630,596; May 31.
Bandf, Peter, Chicago, Ill. Antiseptic adhesive tape. 1,630,596; May 31.
Bangf, Peter, Chicago, Ill. Adhesive tape. 1,630,597; May 31.
Bang, Henry, assignor of two-fifths to T. Carstensen,

Bang, Henry, assignor of two-fifths to T. Carstensen, Chicago, Ill. Freight-ear door. 1,623,652; Apr. 5. Bang, Otto D., Los Angeles, Calif. Measuring device. 1.647,556; Nov. 1.

Daug. Otto D., Los Angeles, Calif. Measuring device.
1.647,565; Nov. 1.
Bangert, Heinrich, Dusseldorf, Germany. Furnace.
1.649,648; Nov. 15.
Bangerter, Adolf, New Brighton, N. Y. Mechanical toy.
Bangs, Ridwin Q., assignor to Hamilton Beach Mfg. Co.,
Racine, Wis. Motor mounting. 1,645,680; Oct. 18.
Bangs, Ralph C. (See Franke, H. C., and Bangs,
Bangser, William, New York, N. Y., assignor to Mainin
Speed Control Corporation. Mounting for sewing-machine motors. 1,632,781; June 21.
Banigan, Thomas B. (See Bassett, H. P., and Banigan,)
Edward C., Berkeley, Calif. Sprinkler stand.
1,649,649; Nov. 15.
Bank C. Harming, C. Berkeley, Calif. Sprinkler stand.
1,649,649; Nov. 15.
Bank of America, The, et al., executors. (See Sperry,
Lawrence, B.)
Banka, John H., Battle Creek, Mich. Rim tool.

Lawrence, B.)

Banka, John H., Battle Creek, Mich. Rim tool.

1.638,676; Aug. 9.

Banker, Garrett N., Kew Gardens, N. Y. Remedy for seasichness, 1534,315; July 5.

1.634,281; July 5.

Bankers Savings & Credit System Company, The. (See Habart, Joseph, assignor.)

Bankers Savings & Credit System Company, The. (See Moffett, Marcus H., assignor.)

Bankers Savings & Credit System Company, The. (See Moffett, Marcus H., assignor.)

Bankers Company, The. (See Perkins, Frederic G., assignor.)

Bankette Company, The. (See Perkins, Frederic G., assignor.)
Banks, Harry P. (See Davidson, G., Rippey, Cone, Laucks, and Banks.)
Banks, Henry W. 3d. (See Loomis, C. C., and Banks.)
Banks, Henry W. 3d. (See Loomis, C. C., and Banks.)
Leits, 221; Jan. 26.
Banks, Henry W. 3d. (See Loomis, C. C., and Banks.)
Banks, Henry W. 3d. (See Loomis, C. C., and Banks.)
Leits, 221; Jan. 26.
Banks, Henry W. 3d. (See Loomis, C. C., and Banks.)
Leits, 241; Jan. 26.
Banks, Henry W. 3d. (See Loomis, Pa. Conveyer.
Licas, 1684,666; Aug. 9.
Bankson, W. A. Denry, Pa. Conveyer.
Bankson, W. A. Denry, Pa. Conveyer.
Bankson, W. H. 1998, Pa. Conveyer.
Bankson, W. 1998, Pa. Conveyer.
Bankson, W. 1998, Pa. Conveyer.
Banner, William, assignor to one-half to F. Hickstein, Milwaukee, Wis. Oil engine. 1,642,137; Sept. 13.
Banner, Otto A., assignor to The Falk Corporation, Milwaukee, Wis. Oil engine. 1,642,137; Sept. 13.
Banner, Otto A., assignor to The Falk Corporation, Milwaukee, Wis. Oil engine. 1,644,557; Oct. 4.
Banner, Otto A., assignor to The Falk Corporation, Milwaukee, Wis. Oil engine. 1,644,557; Oct. 4.
Banner, Otto A., assignor to The Falk Corporation, Milwaukee, Wis. Tuel-injection system for oil engines. 1,644,769; Oct. 11.
Belgior.)
Banning, Thomas A., Jr., Wilmette, III. Fuel feeding and

Banning, signor.) Banning, Thomas A., jr., Wilmette, Ill. Fuel feeding and metering systems and apparatus. 1,631,356; June 7.

Banning, Thomas A., jr., Wilmette, Ill. Locomotive power-reverse gear. 1,642,193; Sept. 13.
Banning, Thomas A., jr., Chicago, Ill. System and apparatus for freeding and metering fuel and the like.
Banning, Thomas A., jr., Wilmette, Ill. Fuel feeding and metering system. 1,652,516; Dec. 13.
Banninga, Herman P., Muskegon, Mich. Dustless ash system. 1,637,982; Aug. 2.
Bannister, Alfred E. Duluth, Minn. Mechanical shovel.
Bannister, Grant A., Bridgeport, Conn. Dispensing apparatus. 1,650,179; Nov. 22.
Bannon, Thomas C., et al. (See Dixon, Abner F., assignor.)

paratus. Floworty, et al. (See Dixon, Abbut F., es signor.)
Bannon, Thomas F., assignor of one-half to S. T. Willis, Cleveland, Ohio. Fortable sheet metal shears.
1,651.776; Nov. 29.
Banschback, Edward A., Chicago, Ill. Buffer. 1,647.766;
Banschback, Edward A., Chicago, Ill. Buffer. 2, assignor.)

Banschbach, Edward A., Chicago, Ill. Buffer. 1,647,7667;

Nov. Y. William M. (See Booty, Philip C. P., assignor.)

Banta Clare W., San Francisco, Caiff, Deposit safe.
1,635,736; July 12.

Banting Manufacturing Company, The. (See Lundquist, Herman A., assignor.)

Bany, Herman, Scolia, N. Y., assignor to General Electric Company. Automatic switching system. 1,615,669;

Bary Herman A., assignor.)

Bany, Herman S. Sotia, N. Y., assignor to General Electric Company. Automatic switching system. 1,615,669;

Jan. 25.

Bany, Herman, Scotia, N. Y., assignor to General Electric Company. System of electric distribution. 1,615,670;

Banzet, Faul J., assignor to Bruyere Banzet & Co., Societe Dauphinoise de Materiel Textile, Bourgoin, France. Dobby for looms. 1,627,950; May 10.

Banzet, Faul J., assignor to Bruyere Banzet & Co., Societe Dauphinoise de Materiel Textile, Bourgoin, France. Dobby for looms. 1,627,950; May 10.

Baquey, Pierre (calied) Gaston, Coiombes, France. Grease Barada, Claudio. (See Lico, A. and Baradat.)

Baradat, Edmund R., Brooklyn, N. Y. Vanity case.

Barant, Edmund R., Brooklyn, N. Y. Vanity case.

Barant, Edmund R., Brooklyn, N. Y. Connecter for electrical conductors. 1,634,065; June 28.

Barat, David, Roxbury, Mass. Method of and apparatus for bridge attachment. 1,638,220; Aug. 16.

Barbar, Frank Y., Astoria, N. Y. Attachment for typographical machines. 1,622,361; Mar. 15.

Barbarou, Marius J. B., Paris, France. Ingiltion in internal-combustion engines. 1,622,361; Mar. 19.

Barbarou, Marius J. B., Paris, France. Lubricating arrangement for internal-combustion on like engines. 1,623,571; June 28.

Barbee, Henry D., Greensboro, N. C. Fire door. 1,633,577; June 28.

Barbee, Henry D., Greensboro, N. C. Fire door. 1,633,577; June 28.

Barbee, Henry D., Greensboro, N. C. Fire door. 1,633,577; June 28.

Barbee, Henry D., Greensboro, N. C. Fire door. 1,633,577; June 28.

Barbee, Henry D., Greensboro, N. C. Fire door. 1,633,577; June 28.

Barbee, Henry D., Greensboro, N. C. Fire door. 1,633,577; June 28.

Barbee, Henry D., Greensboro, N. C. Fire door. 1,633,577; June 28.

Asphalt Company, The. (See Browne, Frank A., Asphalt Company, The. (See Forrest, Charles N., assignor.) arber Asphalt Company, The. (See Freegard, Wil-liam, assignor.) arber Asphalt Company, The. (See Miller, John S., jr., Barher assignor.)
Barber Asphalt Company, The. (See Moriarty, John H., assignor.) Asphalt Company, The. (See Ritter, George, as-Signor).

Barber, Basil T., Iola, Kans. Windshield cleaner.
1,643,235; Sept. 20.

Barber, Clinton, Athol, Idaho. Fish creel. 1,652,387;
Dec. 13.

Barber-Colman Company. (See Colman, Howard D., as-Signor.)
Barber-Colman Company. (See Colman, H. D., and Peterson, assignors.)
Barber-Colman Company. (See Dewey, Ritchie P., as-

signor.)
Rarber-Colman Company. (See Edgar, John, assignor.)
Barber-Colman Company. (See Peterson, Burt A., as-

signor.)
Barber-Colman Company. (See Ransome, Stafford M.,

Barber-Colman Company. (See Sinderson, John B., as-Signor.)
Barber, Ernest B., South Bend, Ind., assignor to Bendix
Brake Company, Chicago, Ill. Fastening-inserting machine. 1,649.503; Nov. 15.
Barber, Franklin L., assignor to Standard Car Truck
Company, Chicago, Ill. Shim for car trucks. 1,640,391;
Aug. 30.

Barber-Greene Company. (See Barber, Harry H., assignor.)
Barber, Harry E., Boston, Mass. Attachment clamp for beams. 1,652,695; Dec. 13.

Barber, Harry H., assignor to Barber-Greene Company, Aurora II. Digsing member for ditching machines. April 1918 and the company of the compa

Company, Westerly, R. 1. Tympan cramp. 1,025,005, May 24.
Barber, Howard M., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Driving mechanism for printing presses. 1,637,848; Aug. 2.
Barber, Howard M., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Plate-clamping mechanism for printing presses. 1,646,721; Oct. 25.
Barber, Howard M., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y. Holding, State of the Sons Company, Westerly, R. S. Synatte-delivery mechanism for printing presses. 1,645,176; Oct. 11.
Barber, Howard M., Stonington, Conn., assignor to C. B.

sheets in register on tape carriers. 1, 645,145; Oct. 11.
Barber, Howard M., Stonington, Conn., assignor to C. B.
Gelivery mechanism for printing presses. 1, 645,176;
Oct. 11.
Barber, Howard M., Stonington, Conn., assignor to C. B.
Cottral & Sons Company, New York, N. Y. Mechanism
Greathing sheets from wobs. 1,650,927; Nov. 29.
General Sons Company, New York, N. Y. Driving
mechanism for web feeding and cutting machines.
1,650,928; Nov. 29.
Barber, Howard M., Stonington, Conn., assignor to C. B.
Cottrell & Sons Company, New York, N. Y. Driving
mechanism for web feeding and cutting machines.
1,650,928; Nov. 29.
Barber, Howard M., Stonington, Conn., assignor to C. B.
Teeding mechanism. 1,654,158; Dec. 27.
Barber, Mabel C., Chicago, Ill. Mattress retainer.
1,630,462; May 31.
Barber, Martin A. (See Kothe, Charles A., assignor),
Barber, Martin A., (See Kothe, Charles A., assignor),
Barber, William, Brooklyn, N. Y. Shock absorber and
buffer. 1616,631; Oct. 25.
Bander, William, Brooklyn, N. Y. Shock absorber and
buffer. 1616,631; Oct. 25.
Bander, Martin A., Cleveland, Ohio, Automatic-trainpipe connecter. 1,644,975; Oct. 11.
Barber, Millam, Brooklyn, N. Y. Shock absorber and
buffer. 1616,631; Oct. 25.
Bander, Alexandre, Lyon, France. Shuttle-box motion of
booms. 1,617,143; Peb. 8
Barbier, Alexandre, Lyon, France. Shuttle-box motion of
booms. 1,617,143; Peb. 8
Barbier, Angelo, Milan, Italy. Electric musical recorder. 1,637,044; Aug. 2
Barbieri, Angelo, Milan, Italy.
Barbieri, Cesare, New York, N. Y., assignor to The Vortex
Mfg. Co. Paper-cup-forming machine. 1,623,329;
Apr. 5.
Barbieri, Cesare, New York, N. Y., assignor to The Vortex
Mfg. Co., Chicago, Ill. Cup-machine carton-loading atBarbieri, Cesare, New York, N. Y., assignor to The
Vortex Mfg. Co., Chicago, Ill. Paper cup and blank
for making photographic prints. 1,616,153, Jan. 18.
Barbieri, Cesare, N

Barchoff, Abraham, New York, N. Y. Serving platter.
 Dea, 71,860; Jan. 18.
 Barchoff, Abraham, New York, N. Y. Serving tray.
 Des. 71,80; July 26.
 Barclay, G. Ivar, assignor to Detroit Steel Products Company,
 Detroit, Mich. Latch for windows. 1,615,864;

Barenon. Abranam. New 1078, N. 1. Setving 119. Lean13,119; July 20.

Barclay, G. 1var, assignor to Detroit Steel Products Com15,120; Letroit, Mich. Latch for windows. 1,615,863; Feb. 1.

Barclay, Gustaf I., assignor to Detroit Steel Products
Co., Detroit, Mich. Window. 1,615,823; Feb. 1.

Barclay, Gustaf I., assignor to Detroit Steel Products
Co., Detroit, Mich. Window. 1,644,223; Oct. 4.

Barclay, Gustaf I., assignor to Detroit Steel Products
Company, Detroit Mich. Window. 1,644,223; Oct. 4.

Barclay, William R., and W. T. Minett, Leicester, England, assignors to United Shoe Machinery Corporation, Interson, N. J. Machine for preparing and securing strips
to shoe parts. 1,018,162; Feb. 22;
Barclay, William R., and W. T. Minett, Leicester, England, assignors to United Shoe Machinery Corporation,
Bardach, Loyd H., Gultago, Ill. (1983); Mar. 20.

Bardax, Byron, New York, N. Y. Milk-Bottle holder.
1,612,42; Oct. 11.

Barden, Becaling applicator. 1,621,489; Mar. 22.

Bardax, Byron, New York, N. Y. Milk-Bottle holder.
1,612,47; Oct. 11.

Barden, Department of the Proceedings of the Precedence of

Bardwell, Ralph S., assignor to Solar Lighting Fixture Co., Los Angeles, Calif. Lantern root. Des. 73,155; Bur. Ralph S., assignor to Solar Lighting Fixture Co., Los Angeles, Calif. Lighting-fixture bracket. Des. 73,136; Aug. 2.

Bardwell, Ralph S., assignor to Solar Lighting Fixture Co., Los Angeles, Calif. Lantern bracket. Des. 73,817; Nov. 15.

Barelman, Edward, Guelph, Ontario, Canada. Furnace. Barett, Louis A., and C. Hunt, Lynn, Mass.; said Hunt assignor to said Barett. Automatic windshield cleaner. 1,623,028; Mar. 29.

Barfield, William, Clearwater, Fla., assignor to The Hills Brothers Company. Instrument for removing ment from citrous fruits and the like. 1,614,451; Jan. 18.

1,225,516; Apr. 19.

Barger, George, Chicago, Ill. Toy building blocks. 1,624,557; Nov. 1.

Barger, Lewis J., Maplewood, N. J. Level. 1,618,262; Feb. 22.

Barger, William R., and L. A. Hawkins, Washington, Des. 1,614,557; Nov. 1.

Barghausen, John F., Takoma Park, D. C. Refrigerated display counter. Rel.,595; Apr. 19.

Barile, Phillip P., Takoma Park, D. C. Refrigerated display counter. Rel.,595; Apr. 19.

Barlet, Phillip P., Litsburgh, Pa. Mechanical toy. 1,638,367; Aug. 9.

Barken-Fauland Company, The. (See Remde, Edward H., assignor.)

Barkber-Rauland Company, The. (See Remde, Edward H., assignor).
Barke, John G., Stockport, and F. Hardman, Bramball, England. Driving mechanism for spinning, doubling, England. Driving mechanism for spinning, doubling, Barkelew Electric Monnfacturing Company, The. (See McLaughlin, William E., assignor, mpany, The. (See McLaughlin, William E., assignor, to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,623.042; Apr. 6.
Barker, Englamin F., El Paso, Tex., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,623.042; Apr. 6.
Barker, Englamia B., assignor, by meane assignments, to Parker, Conley T., Gate City, Va. Hending and loading kafir corn, maize, and the like. 1,635.106; July 5.
Barker, Edmund G., delbourne, Victoria, Australia. Dror. Edmund G., delbourne, Victoria, Australia. Barker, Edwin H., Moylan, assignor to A. H. Wirz, Inc., Chester, Pa. Renforcement for sprinkler tops. 1,625,016; Apr. 19.
Barker, Edwin H., Moylan, assignor to A. H. Wirz, Inc., Chester, Pa. Dispensing bottle stopper. 1,631,734; June 7.

June 7. Barker Factory, Inc., The. (See Barker, Merrill G., as-

Signor.) Francis A., Santa Monica, Calif. Radiator. 1,616,776; Feb. 8.

Barker, Frank E., Birmingham, England. Teapot and like vessel for making beverages by Infusion. 1,642,222; Sept. 13.

Barker, Hubert C., Houston, Tex. 1,624,855; Apr. 12.

Barker, John S., Rochester, N. Y., assignor to Berhiehem Barker, Gompany. Detonating fuse. 1,648,603; Nov. 8.

Barker, Germany. Detonating fuse. 1,648,603; Nov. 8.

Barker, Hubert G., Sangara, S., Mechanical toy baseball. 1,626,773; May 3.

Barker, Milton T., Jr., Winston-Salem, N. C. Smoker's appliance. 1,650,974; Nov. 28.

Barker, Percy E., assignor to The Van Dorn Iron Works Company, Cleveland, Ohio. Low-water alarm. Barker, Percy E., assignor to The Van Dorn Iron Works Company, Cleveland, Ohio. Dump truck. 1,618,629; Feb. 22.

Barker, Percy E., Cleveland, assignor, by meane assignments, of one-half to A. B. Betz, Shaker Heights VII. lage, Ohio. Dishwashing machine. 1,624,380; Apr. 12. Barker, Percy E., Cleveland, Ohio, assignor of one-half to A. B. Betz. Dishwashing machine. 1,624,381; Apr. 12.

Apr. 12.

Barker, Percy E., Cleveland, assignor by mesne assignments of one-half to A. B. Betz, Shaker Heights VII-lago, Ohio. Dishwashing machine, 1,624,661; Apr. 12.

Barker, Percy E., assignor of one-half to A. B. Betz, Cleveland, Ohio. Wringer, 1,638,312; Aug. B. Betz, Cleveland, Ohio. Wringer, 1,638,312; Aug. B. Betz, Cleveland, Ohio. Wringer, 1,638,313; Aug. 9.

Barker, Percy E., assignor to The Van Dorn Iron Works Percy E. Sassignor of the Van Dorn Iron Works Theorem Control of the Van Dorn Iron Works Theorem Control of the Van Dorn Iron Works Monter & Rawson. (See O'Brien, J. R., and Revell, assignor).

arker & Rawson.

signor.)
Barker, Reuben F., Portland, Oreg. Holding-down mechanism for rotary valves. 1,616,022; Feb. 1.
Barker, Reuben F., Portland, Oreg. Fluid-cooled rotary valves for internal-combustion engines. 1,626,111; Apper 1.
Barker, Robert H., Chambersburg, Pa. Grain-scouring apparatus. 1,639,364; Aug. 16.
Barker, Robert W., Providence, R. I. Manipulating strands or yarns. 1,612,798; Jan. 4.
Barker, Robert W., Providence, R. I., assignor to E. A.
Taft, trustee, Brookline, Mass. Instrument for manipulating strands or yarns. 1,612,798; Jan. 4.
Barker, Seth S., Ottumwa, Iowa. Coop. Rei6,537; Barker, Virgil D. Wilkinsburg, P., ossignor, to West.

Jan. 18.

Barker, Virgil D., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Banding mæchhet. 1,621,662; Mar. 18.

Autographic Register Company, Chicaco, Ill. Autographic-register cash drawer. 1,631,395; Jun. 2.

Barker, Walter R., and L. Jensen, assignors to United
Autographic Register Co., Chicago, Ill. Autographic-register Co., Chicago, Ill. Autographic
register. 1,648,483; Nov. 8.

Berker, William M., Canton, Ohio. Centrifugal fan
Barker, William M., Canton, Ohio. Ball mill. 1,636,585;
July 19.

Barker, W July 19.

separator. 1,616,566; Feb. 8.

Barker, William M., Canton, Ohio. Ball mill. 1,636,585;
July 19.

Barker, William T., jr., assignor to Hartford-Empire Company, Hartford, Conn. Method and apparatus for Barker, December 1, 1985.

1,649,054; Nov. 15.

Barkley, Alberto. (See Barkley, Fred W., assignor.)

Barkley, Alberto. (See Barkley, Fred W., assignor.)

Barkley, Fred W., Winthrop, Mass., assignor to A. Barkley, Harted Post, N. Y. Carrying over mechanism for Educating machines. 1,622,564; Mar. 29.

Barkley, Entied Post, N. Y. Overrotating check for calculating machines. 1,622,564; Mar. 29.

Barkley, Bobert H. D., Purley, England. Electric fuse. 1,624,626; Oct. 4.

Barkschaft, Henry, Sisignor to Marbelite Corporation of America, Los Angeles, Calif. Lamp post or similar article. Des. 72,666; Apr. 19.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lamp post or similar article. Des. 72,666; Apr. 19.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lamppost or similar article. Des. 72,583; May 10.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lighting-standard capital. Des. 72,585; May 10.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lighting-standard capital. Des. 72,585; May 10.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lighting-standard capital. Des. 72,585; May 10.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lighting-standard capital. Des. 72,585; May 10.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lighting-standard capital. Des. 72,587; May 10.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lighting-standard capital. Des. 72,587; May 10.

Barkschaft, Henry, assignor to Marbelite Corporation of America, Los Angeles, Calif. Lighting-standard capital. Des. 72,587; May 10.

Barkschat, Henry, assignor to Marbeilte Corporation of America, Los Angeles, Calif. Lamp-post or similar article. Des. 72,589; May 10.

Barkschat, Henry, assigno. Marbeilte Corporation of Barkschat, Henry, assigno. Marbeilte Corporation of Lighting standard. Des. 72,500; May 10.

Barkschat, Henry, assignor to Marbeilte Corporation of America, Los Angeles, Calif. Post. Des. 72,924; June 28.

Barkschat, Henry, assignor to Marbeilte Corporation of America, Los Angeles, Calif. Post. Des. 72,924; June 28.

Barkschat, Evring S. Greenville, S. C. Preparation of Calif. Post. Des. 72,924; June 28.

Barkett, John, San Francisco, Calif. Internal-combustion engine. 1,622,266; Dec. 18.

Barletta, John, San Francisco, Calif. Internal-combustion engine. 1,652,266; Dec. 18.

Barlow, Childrod, Waverley, New South Wales, Australia. Advertising machine. 1,612,856; Jan. 4.

Barlow, Harry T., Brooklyn, assignor to Wonder Window Washer Corp., New York, N. Y. Window-cleaning term. 1,632,556; June 14.

Barlow, Lester F., Stamford, Conn. Vapor-cooling system. 1,632,556; June 14.

Barlow, Lester F., Stamford, Conn. Vapor-cooling system. 1,632,556; June 14.

Barlow, Lester F., Stamford, Conn. Vapor-cooling system. 1,632,556; June 14.

Barlow, Lester F., Stamford, Conn. Vapor-cooling system. 1,632,556; June 14.

Barlow, Lester F., Stamford, Conn. Vapor-cooling system. 1,632,556; June 14.

Barlow, Lester F., Stamford, Conn. Vapor-cooling system. 1,632,556; June 14.

Barlow, Lester P., Stamford, Conn. Vapo tem for internal-combustion engines. June 14. Vapor-cooling sys-ngines. 1,632,586;

Barlow, Lester P., Stamford, Conn. Vapor-cooling system for internal-combustion engines. 1,632,586; June 14.
Barlow, Lester P., Detroit, Mich. Engine-cooling system. 1,632,582; June 14.
Barlow, Lester P., Detroit, Mich. Engine-cooling system. 1,632,583; June 14.
Barlow, Lester P., Detroit, Mich. Engine-cooling system. 1,632,583; June 14.
Barlow, Lester P., Detroit, Mich. Engine-cooling system. 1,632,584; June 14.
Barlow, William E., Trevose, Pa., assignor to Dairy Equipment and Continuer Company, Dover, Del. Tuberoining machine. 1,644,643; Jan. 18.
Garning machine. 1,644,643; Jan. 18.
Barnard, Oskar, assignor to the Firm Ernst Leitz, Optische Werke, Wetzlar, Germany. Focal plane shutter. 1,652,553; Dec. 13.
Barnard, Arthur E., and R. C. Caswell. Newton, assignors barnard, Arthur E., and R. C. Caswell. Newton, assignors on the Firm Ernst Leitz, Optische Werke, Wetzlar, Germany. Focal plane shutter. 1,652,553; Dec. 13.
Barnard, Dudley J., Barking, England. Grab. 1,633,305; June 21.
Barnard, George A., near Princeton, Nebr. Game trap. 1,620,182; Mar. 8.
Barnard, Dudley J., Barking, England. Grab. 1,633,005; June 21.
Barnard, Wilbur D., Neenah, Wis. Weed killer. 1,024,033; Apr. 12.
Barnard, Wilbur D., Neenah, Wis. Weed killer. 1,024,033; Apr. 12.
Barnard, Helen B., Frovidence, R. I. Paper-binding electrical impulses. 1,523,714; Apr. 5.
Barnbrook, Helen B., Frovidence, R. I. Paper-binding Colorising carbons from vegetable materials. 1,614,913; Jan. 18.
Barnebey, Oscar J., Edwindsus, and M. B. Cheney, decessed; J. B. Cheney, Briggadale, Ohio, administratix, Making adsorbent carbon. 1,614,707; Jan. 18.
Barnebey, Oscar J., Edwindsus, and M. B. Cheney, Germans. 1,625,768; Apr. 19.
Barnes, Challes H., Illin, N. Y. Triger mechanisms for firearms. 1,625,768; Apr. 19.
Barnes Drill Company. (See Johnson, Albert M., assignor.)
Barnes, Edwin M. (See Effey, Michael P., assignor.)

Barnes Drill Company. (See Johnson, Albert M., assignor.)
Barnes, E. H. (See Effley, Michael P., assignor.)
Barnes, Elvis L., Oklahoma City, Okla. Piling cotton
bales. 1.611,743; Feb. 15.
Barnes, Elvis L., Oklahoma City, Okla. Piling cotton
bales. 1.621,743; Feb. 15.
Barnes, Engene L., Watertown, N. J. Refrigerating apparatus. 1,625,878; Apr. 26.
Barnes, Frederick, J. Stourbridge, England. Constructors, Frederick, J. Stourbridge, England. Constructors, Proderick, J. Stourbridge, England. Constructors, Construct

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Barnes, Stanley H., Mount Vernou, assignor to Gleason-Tlebout Glass Company, Brooklyn, N. Y. Glass light-ing globe. Des. 74,085; Dec. 20. Barnes-Thomas, Albert, Dresden, Germany, assignor to Marvle Products Limited, London, England. Producing articles from compositions of matter. 1,638,108;

Aug. 3 homes, Albert, Dresden, Germany, assignor to Barnes, Debrass, and the standard to the standard to marble, tiles, slabs, and similar material especially for use for decorative purposes in buildings and other places. 1,638,109; Aug. 9.

Barnes, Thomas J., Azusa, Calif. Pulverizer. 1,637,098; July 26.

Barnes, Walter C., Taft, Calif. Core drill. 1,634,865; July 45.

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Barnes. Walter C., Taft, Calif. Core drill. 1,634,865;
311y 5.

Barnes. Walter D., Lancaster, Pa. Attachment for printing presses. 1,626,444; Apr. 26.

Barnes, Walter D., Lancaster, Pa. Attachment for printing presses. 1,626,444; Apr. 26.

Barnes, William G., Kansas City. Mo. Body adjuster for deceased presons. 1,632,160; June 14.

Barnes, William H., Gecasaed, Seattle, Wash; C. Barnes, oxecutin. Motor vehicle. 1,646,13; V. Metallic wall construction. 1,635,197; Dec. 20.

Barnes, William J., Detroit, Mich. Joint attachment and support for double-wall pipe. 1,614,179; Jan. 11.

Barnet, William D., assignor to The Xylos Rubber Company, Akron. Ohio. Rubber working and analogous machinery. 1,649,774; Nov. 15.

Barnett, Arthur J. Mey York. Y. assignor to The Xulting swit. 1,632,723; June 14.

Barnett, Rubert, et al. (See Skinner, Clarence L., assignor.)

Barter Matting Co., Worcester, Mass. Buttouless bathing suit. 1632/23; June 14.

Barnett, Hubert, et al. (See Skinner, Clarence L., assignor.)

Barnett, John B., assignor of one-half to W. G. McCann and one-half to A. E. Spellissy, Philadelphia, Pa. Display device.

Both General Colling Collin

Barniart, Job R., assignor to W. M. Scott, Lakewood. Ohio. Variable condenser. 1,630,885; May Charleste, C., assignor, C., & Company. (See Averlil, Charles C., assignor.)

Barnickel, Wm. S., & Company. (See De Groote, M., and Adams, assignors.)

Barnickel, Wm. S., & Company. (See Roberts, Claudius H. M., assignor.)

Barnickel, See B., assignor to Aluminum Company of Barnitt, Jesse B., assignor to Aluminum Company of Locks. 1,646,674; Feb. S. Producing sodium aluminate. 1,616,674; Feb. S. Baron, George J., Willesden, England. Locksmith's instrument to open all standard makes of cylinder locks. 1,639,919; Aug. 23.

Baron, John, Long Laurend, C. Young, New York, N. Y. Closure lock. 1,639,308; June 21.

Baron, Leon, Brooklyn, N. Y. Bowel evacuant. 1,621,186; Mar. 15.

Barond, Paul J., Dormont Borough. Pa. Method of and Barnwell, Dwight H., Taft, assignor to Axelson Machine Company, Los Angeles, Calif. Pump. 1,641,613; Sept. 6.

Barnwell, Reginald H. (See Barnwell, Stephen and R. H.)

Barnwell, Stephen, Manchester, and R. H. Barnwell,
Potter Heigham, England, Loom, 1,640,813; Aug. 30.
Barr, George R., Hackney, London, England, Automatic
coin-operated machine, 1,621,230; Mar. 15.
Barr, James C., Peoria, Ill. Handsaw, 1,613,432;
Jan. 4.
Barr, James C., Peoria, Ill. Handsaw, 1,613,432;
Jan. 4.
Barr, John N., New York, N. Y. Calculating machine Corporation, New York, N. Y. Calculating machine, 1,644,504; Oct. 4.
Barr, John H., Ithaca, N. Y., assignor to Barr-Morse Corporation. Line lock and margin release, 1,650,180;
Nov. 22.
Barr, Marshall E., Franklin Park, Ill. Variable-pressure
Barr-Morse Corporation. (See Barr, John H., assignor,
Barr, Samuel J., et al. (See Butterbaugh, Raipu B.,
assignor.)

Barr, Samuel J., et al. (See Lucestages). Barr, Samuel J., et al. (See Lucestages). Barr, Sidney U., Brooklyn, N. Y. Double-hung window. 1.644.814; Oct. 11. Barr and Stroud, Limited. (See Strang, John M., as-Barr and Stroud, Limited.

1.644.814; Oct. 11.

Barr and Stroud, Limited. (See Strang, John M., assignor.)

Barr, Wilam J., assignor to The H. T. Cushman Mfg. Co., 100 orth Bennington, Vt. Smoker's stand. Des. 1.00 orth Benvier Froducts Company, Inc. Tile. 1,645.214; Carlet Benvier, Products Company, Inc. Tile. 1,645.214; Carlet Benvier, Products Company, Inc. Tile. 1,645.214; Carlet Barrel, Paul, Paris, France. Vulcanizing molding apparatus for rubber tires. 1.643, 899; Sept. 27. Barrel, Charles S., Boston, Mass. Tire-chain link. 1.644,641; Sept. 6.

Barrett, Aifred G., and H. H. Burton. Leicester, England. Ontour vehicles and the like. 1,644,311; Sept. 6.

Barrett, Arthur M., Winnetka, Ill. Lifting truck. 1,633,390; June 21.

Barrett, Charles D., Altoona, Pa. Smoke box for locomotives, 1,653,637; Dec. 20.

Barrett, Charles G., Quintery Corporation, New York. N. Y. Reversing and control mechanism for internal combustion engines. 1,650,929; Nov. 29.

Barrett Company, The. (See Crever, Augustus E., assignor.)

Barrett Company, The. (See Crever, Augustus E., assignor.)

Barrett Company, The. (See Perry, Ray P., assignor.)
Barrett Company, The. (See Reve, Charles S., assignor.)
Barrett Company, The. (See Rave, Charles S., assignor.)

signor.)

Barrett, Dwight O., Springfield, Ohio. Lubricating-oli pump. 1,653,538; Dec. 20.

Barrett, Edward R., assignor to Wood Hydraulic Hoist and Body Company, Detroit, Mich. Gravity dumping construction. 1,641,369; Sept. 6.

Barrett, Edward R., assignor to Wood Hydraulic Hoist and Body Company, Detroit, Mich. Elevating-dumping apparatus. 1,646,679; Oct. 25.

Barrett, Edward R., assignor to Wood Hydraulic Hoist and Body apparatus. 1,650,815; Nov. 29.

Barrett, George E., assignor to Lenher Engineering Company, New York, N. Y. Driving mechanism for the windlasses and capstans of vessels. 1,634,766; July 5.

Barrett, Jesse L., McMillan, Mich. Boot. 1,642,715; Sept. 20. Barrett, J Sept. 20

Sept. 20.

Barrett, John A., McMillan, Mich. Traction attachment for vehicle power wheels. 1,642.713; Sept. 20.

Barrett, John A., McMillan, Mich. Auto-wheel sleigh runner. 1,642.714; Sept. 20.

Barrett, John H., New York, N. Y. Stationary-washtub cover-holding device. 1,627.476; May 3.

Barrett, Joseph M., Bostoria, Ohio. Feed-water regulator. Barrett, Joseph M., assignor to The "S-C" Regulator Manufacturing Company, Fostoria, Ohio. Automatic alarm and shut-off for steam boilers. 1,634.392; July 5.

Barrett, Joseph M., assignor to The S-C Regulator Manufacturing Company, Fostoria, Ohio. Turbine-pump governor. 1,643.483; Sept. 27.

Barrett, Lewis B., Bangor, Me. Wire holder. 1,631,510; June 7.

June 7

June 17

June 18

June

Barrows, Alford C., assignor to Economy Baler Company, Ann Arbor, Mich. Bale-dividing device. 1.637.633; Aug. 2. Los Angeles, Calif. Car door. Barrows, Allan S., Los Angeles, Calif. Car door. Barrows, Allan S., Los Angeles, Calif. Car door. 1.636.891; July 26.
Barrows, Donald C. (See Kadel, B. W., and Barrows.) Barrows, Donald S., Rochester, N. Y. Side frame. 1.637,72; Aug. 2.
Barrows, Donald S., Rochester, N. Y. Inboard car truck. 1.637,72; Aug. 2.
Barrows, Donald S., Rochester, N. Y. Inboard car truck. 1.652.808; Dec. 13.
Barrows, Donald S., Rochester, N. Y., assignor, by mesne assignments, to The Symington Company. Carry fron. 1.610,603 Col. 1.610,

tories, Oakland, Calif. Brake dressing. 1,645,682; Oct. 18.
Barry, Carl A., Sutherland, Iowa. Hitch. 1,646,342; Oct. 18.
Barry, Clinton R., Fort Smith, Ark., assignor of one-half to the control of the

Barry, James J., assignor to General Seafcods Corporation, Gloucester, Mass. Trimming tool. 1,648,931;
Nov. 15.
Barry, Laurence A. (See Barry, Laurence A. and L. A.)
Barry, Laurence A. Bogota, and L. A. Barry, Irvington,
Barry, Louis J., Newport, R. J. Torpedo. 1,630,159;
May 24.
Barry, Nicholas, Muscatine, Iowa. Sheet-metal pulley.
1,618,433; Jan. 4.
Barry, Nicholas, Muscatine, Iowa. Button-blank-facing
Barry, Richard P., Carle Place, assignor of one-third to
B. J. Kubat, New York, and one-third to A. Parrott,
Jammica, N. Y. Adjustable bracket. 1,618,857; Peb. 22.
Barry-Webmiller Machinery Company. (See Dawson, J.
W., and Herold, assignors.)
Barry-Webmiller Machinery Company. (See Dawson, J.
W., and Herold, assignors.)
Barry-Webmiller Machinery Company.

Barry, Webmiller Machinery Co. (See Herold, James L., assignor; Barry, William A., assignor to Barry Drum Mfg. Co., Philadelphia, Pa. Drum. 1,648.212; Nov. 8.
Barrymore Concrete Mixer Corporation. (See Barrymore, O. C., and Daddisson, assignors to Harrymore Concrete Mixer Corporation, San Francisco, Calif. Concrete mixer. 1,625.762; Apr. 19.
Barrymore Seamless Wiltons, Inc., The. (See Finlay, Alexander, assignor).
Barsky, George, assignor to American Cyanamid Company, New York, N. Y. Treating calcium cyanamid. Barsky, George, assignor to American Cyanamid Company, New York, N. W. Making dicyandiamid. 1,618.504; Feb. 22.
Barsky, George, assignor to American Cyanamid, Company, New York, N. Y. Making dicyandiamid. 1,618.504; Feb. 22.
Barsky, George, assignor to American Cyanamid, Company, New York, N. Y.

Peb. 22.
Barsky, George, assignor to American Cyanamid Company, New York, N. Y. Refrigerant. 1,631,573; June 7.
Barsky, George, assignor to American Cyanamid Company, New York, N. Y. Fertilizer product and producing the same. 1,651,363. Dec. 6.
Barsky, George, assignor to American Cyanamid Company, New York, N. Y. Freilizer product and producing the same of the sa

Bartak, James J., Cleveland, Ohio. Safety window de vice. 1,620,749; Mar. 15. Bartel, Erwaid A. (See Breitenstein, A. F., and Barteit.) Bartel, Rudoiph F., New York, N. Y. Garter. 1,653,883; Dec. 20.

J. Amendus, and O. Miech, Harburg-on-the-Elbe, ny. Manufacture of shaped articles of casein.

Bertels, Amendus, and O. Miech, Harburg-on-the-Eibe, Germany, Manufacture of shaped articles of casein. 1,623,085; Apr. 5. Bartels, Carl, Gee Goldsmith, G. M., and Bartels.) Bartels, Carl, assignor to The Mosler Safe Company, Hamilton, Ohio. Fireproof safe door. 1,616,249;

Hamilton, Prob. Free, 1 Grebel, assignors to The Mosler Safe Company, Hamilton, Ohio. Safety device for Safe Company, Hamilton, Ohio. Safety device for the Company of the like, 1614,944; Jan. 18. Bartols, Corl, and C. J. Goebel, assignors to The Mosler Safe Company, Hamilton, Ohio. Safety device for vaults, safes, and the like. 1,614,945; Jan. 18. Bartels, Edward E., assignor to Standard Oil Company, Whiting, Ind. Producing residual oil products.

Values, Control of the Control of the Control of Company.

Whiting: Ind. Producing residual on Whiting: Ind. Illinois of Standard Oil Company.

Burtls, Edward E. assignor to Standard Oil Company.

Whiting: Ind. Illinoid and mechanical seal. 1,632,213;

Ind. Ill. Twn, Mass. Incorporating a consider Mar. I.

Whiting, Ind. Laquiu and assessing the property of the propert

Mar. 1.
Bartenfeld, Wilford G., Lorain, Ohio. Channel and plate construction for vessels. 1626,716: May 3.
Barter, Andrew. (See Buckthorpe, F. T., and Barter.)
Barth. Adolf, Munich, Germany. Syringe. 1,644,225;

Barth, Edwin J., and F. Hovell, San Antonio Tex. Fluid fuel and producing the same. 1,638,314; Aug. 9. Barth, Erich, New York, N. Y. Plumb bob. 1,626,130; Apr. 26. Barth, Friedrich F., Radeberg, Gassewing maghing.

Finid fuel and producing the same. 1,638,314; Aur. 9.
Barth, Erich, New York, N. Y. Plumb bob. 1,628,130;
Apr. 26.
Barth, Friedrich F., Radeberg, Germany. Spool for sewing machines. 1,624,834; Apr. 12.
Barth, Friedrich F., Radeberg, Germany. Spool for sewing machines. 1,624,834; Apr. 12.
Bartheren Wessenth G. 1,624,834; Apr. 12.
Bartheren Wessenth G. 1,624,844; Apr. 12.
Barthelemy, Henri, assignor to The Societe Industrielle des Maiteres Plastiques, Paris, France. Manufacture of the condensation products of urea and of formal-des Maiteres Plastiques, Paris, France. Manufacture of the condensation products of urea and of formal-des Maiteres Plastiques, Paris, France. Manufacture of the condensation products of urea and of formal-static products. In the second products of urea and of formal-des Maiteres, Emil. Dusseldorf-Oberkassel, Germany.

Partematically-fed crushing and sifting device. 1,635,527; July 12.
Barthology, Max, assignor befield Krupp Aktiengesell-schaft, Essen-on-the-Ruhr, Germany. Implement for testing cones. 1,643,570; Sept. 27.
Bartholome, William, Brooklyn, N. Y. Musical instrument. 1,618,908; pec. 27.
Bartholome, William, Brooklyn, N. Y. Sounding toy. 1,654,398; Dec. 27.
Bartholomew, Marry B. W. Montreal, Quebec, Canada, Writing instrument. 1,636,207; July 12.
Bartholomew, Cedelia, San Francisco, Calif. Surgical appliance. 1,635,919; July 12.
Bartholomew, Harry G., and M. L. D. McFarlane, London, England. Telautography. 1,653,425; Dec. 20.
Bartholomew, Harry G., and M. L. D. McFarlane, London, England. Telautography. 1,653,425; Dec. 20.
Bartholomew, John R. Montclair, N. J., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Vehicle vacuum brake. 1,644,568; Cet. 4.
Bartholomew, Robert J., Lanadale, assignor to Fletcher Works. Incorporated, Philadelphia, Pa. Tranabac apparatus. 1,654,917, 1907, 1907.

Burtkowink, Joseph M., Chicago, III. Lighting fixture. 1,014,591; Jan. 18.

Bartiam, Clinton T., Los Angeles, Calif. Web handling and display system. 1,615,298; Jan. 25.

Bartlam, Thomas C. (See Peters, T. K., and Bartlam.) Bartlebaugh, David W., Springfield, Ohio. Weeder and the like. 1,634,606; July 5.

Bartlett, Albert C., Watford, and R. Le Rossignol, Harrow, assignors to The General Electric Company Limited, London, England. Thermionic valve. 1,632,870; assignors to The C London, England, June 21.

Bartlett, C. O., & Snow Company, The. (See First, Mahlon E., assignor.)
Bartlett, Edward E., Sapulpa, Okla. Making blown glass articles. 1,618,747; Feb. 22.

Bartlett, Frederick A., and R. J. Davis, assignors of one-third to R. M. McCracken, Boise, Idaho. Bridge scorer. 1,613,975; Jan. 11. Bartlett, Frederick P. (See Bilgart, E. E., and Bartlett.) Bartlett, George W., Tacoma, Wash., assignor to Bartlett. Oil Burner & Power Company. Burner. 1,945,222;

Bartiett, George w., ta. Oll Burner & Power Company.
Oll Burner & Power Company.
Oct. 11.
Bartiett, Harold W., Alvarado, Calif. Apparatus for harvesting fruit. 1,626,088; Apr. 26.
Bartiett Hayward Company, The. (See Fast, Gustave,
Bartiett Hayward Company, The. (See Kennedy, James Bartlett Hayward Company, The. (See Kennedy, James S., assignor.)

assignor.)

Bartlett Hayward Company, The. (See Kennedy, James S., assignor.)

Bartlett Hayward Company. (See Kuehn, Paul M., as-Bartlett Hayward Company. (See Kuehn, Paul M., as-Bartlett Hayward Company, The. (See Wagner, Frederick H., assignor.)

Bartlett, Hassignor.)

Bartlett, John N., Winnipeg, Manitoba, Canada. Valvetiming system. 1,614,681; Jan. 18.

Bartlett, John N., Winnipeg, Manitoba, Canada. Amusement device. 1,633,204; June 21.

Bergs, Kenneth A. (See Kilardy, F. W., Bartlett, and Bartlett, Kent W., Hammond, Ind. Apparatus for separating liquids and gases. 1,620,750; Mar. 15.

Bartlett, Kent W., Hammond, Ind. Tray. 1,620,751; Mar. 15.

Bartlett, Kent W., Hammond, Ind. Water-softening upparatus. 1,624,382; Apr. 12.

Bartlett, Newell R., Springfield, Mass. Lock butt for asphalt shingles. 1,634,972; July 5.

Bartlett Oil Burner & Power Company. (See Bartlett, George W., assignor.)

Bartlett, Will J. (See Wright, J. G. E., and Bartlett, George W., assignor to Sewall Paint & Varnish Company, Kanasa City, Mo. Rubbing machine. 1,614,708; Jan. 18.

Systems, Inc., Chicago, Ill., assignor to Sewall Paint & Varnish Company, Kanasa City, Mo. Rubbing machine. 1,633,306; July 18.

Bartling, Howard G., Chicago, Ill., assignor to Sewall Paint & Varnish Company, Kanasa City, Mo. Rubbing machine. 1,633,306; July 18.

Systems, Inc., Chicago, Ill., Spraying cabinet and apparatus. 1,633,306; June 21.

Bartol, George E., Ir., Ardmore, Pa., assignor to C. Howard Hunt Fen Company, Camden, N. J. Pencil sharponer. 1,637,549; Aug. 2.

Bartolomucci, Anthony, Peoria Heights, Ill. Display sign. Barton, Francis M., Chicago, Ill. Concrete wall construction. 1,641,147; Sept. 6.

Bartolomucci, Anthony, Peoria Heights, Ill. Display sign. Bartlon, Francis M., Chicago, Ill. Concrete wall construction. 1,641,147; Sept. 6.

Bartolomucci, Anthony, Peoria Heights, Ill. Display sign. Bartlon, Francis M., Chicago, Ill. Concrete wall construction. 1,641,147; Sept. 6.

Bartolomucci, Anthony, Peoria Heights, Ill. Display sign. Bartlon, Francis

eral Electric Company. Amplifying system. 1,640,436; Aug. 30.
Barton, John, Matador, Tex. Propeller. 1,634,393; July 5.
Barton, Raymond L., Los Angeles, Calif. Combination signal casing. Des. 73,120; July 26.
Barton, Roy L., Milton, Iowa. Harrow-weight-distributing device. 1,620,794; Mar. 15.
Barton, Theophilus F., Schenettady, N. Y., assignor to General Electric Company. System of distribution. 1,640,541; June E., Toronto, Ontario, Canada, Sand distribution. 1,640,636; Aug. 30.
Barton, William H., Montclair, N. J. Packing for gate valves. 1,625,698; Apr. 19.
Bartosik, Joseph, Monessen, Pa. Flush tank. 1,613,640; Jan. 11.

Bartosik, Joseph, Monessen, Pa. Flush tank. 1,613,640; Jan. 11. Bartram, George C., Freeport, N. Y. Pipe Joint. 1,613,434; Jan. 4. Bartsch, Herbert E., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Brake mechanism. 1,623,227; Apr. 5. Bartschmid, William A. (See Holcombe, H. H., and

Bartschmid.)
Bartter, Stephene H., Kingston-on-Thames, England,
Mann or the County of the retention of bedelothes,
Baruch, Samuel, New York, N. Y. Antirattling device.
1,619,913; Mar. 8.
Baruch, Samuel, New York, N. Y. Antirattling device.
1,634,549; July 5.

Stephene Manuel, New York, N. Antirattling device.
1,634,549; July 5.

Barutio, Constantine B. toet and Barutio, and Barutio, Barwood, V. H., Manufacturing Co. (See De Witt, Charles Barwood, V. H., Manufacturing Co. (See De Witt, Charles

Barwool, Y. H., and the change of the beauty of the barwool, Y. H., assignor, beauty of the barwool, and the

Bar-Zilin Toy Manufacturing Co. (See Zimmerman, Harry, assignor.)
Basch, David, Schenectady, N. Y., assignor to General Electric Company. Composite electric conductor. 1,637,033; July 26.
Bascom, Henry M., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Transmission Telephone and Eds. 2817; June 21.
Bascom, Henry M., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Telephone-exchange system. 1,645,573; Oct. 18.
Bascom, Henry M., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company and Sid Fowler, Telephone and Telegraph Company and said Fowler assignor to Bell Telephone Laboratorles, Incorporated, New York, N. Y., Straightforward trunking system. 1,650,683; Nov. 29.

Bascou, Emile B. G. assignor to Societe Anonyme des Petroles Houllies et Derives, Faris, France. Production Bascl, Eli A., Kaussa City, Mo. Valve-operating means. 1,650.590; Nov. 29.
Baseman, Ernest, assignor to Massey-Harris Harvester Company, Inc., Batavia, N. Y. Hitching mechanism for connecting mowers and tractors. 1,646,519; Basenau, Frederik, Amsterdam, Netherlands. Steam trap. 1,639,208; Aug. 16.
Basch, Harold R., San Francisco, Calif. Folding stand. 1,614,818; Jan. 18.
Bash, Harold R., San Francisco, Calif. Folding stand. 1,614,818; Jan. 18.
Bash, Charles E. (See Faira, New Zealand. 1 Print and rain excluder attachment for doors. 1,630,821; May 31.
Bashoo, Bela K., Wew York, N. Y. Peanut and potato Bash, Bash, K., Wew York, N. Y. Peanut and potato Paralosiscans. 1,652,838; Dec. 13.
Bashoo, Eela K., Wew York, N. Y. Peanut and potato Bashor. Emery E., and E. N. Wray, Berthoud, Colo. Tractor hitch. 1,620,937; Mar. 15.
Basknerville, Benjamin J., Joliet, Ill. Grain sprouter. 1,643,536; Sept. 27.
Baskerville, Benjamin J., Joliet, Ill. Oat sprouter. 1,643,537; Sept. 27.
Baskerville, Benjamin J., Joliet, Ill. Oat sprouter. 1,643,537; Sept. 27.
Baskerville, Benjamin J., Joliet, Ill. Oat sprouter. 1,643,537; Sept. 27.
Baskerville, Benjamin J., Joliet, Ill. Oat sprouter. 1,643,537; Sept. 27.
Baskerville, Benjamin J., Joliet, Ill. Oat sprouter. 1,643,537; Sept. 27.
Baskerville, Benjamin J., Joliet, Ill. Oat sprouter. 1,643,537; Sept. 27.
Baskerville, Edward A. Omaha, Nebr. assignor to Unestion ash tray and lamp cap. Des. 7,2468; Apr. 19.
Baskin, Maurice, et al. (See Waterled, Escapor, Basore, George W. Bertyville, Ark. Carpenter's wrecking Benjamin A., Montecal, assignor to Elevator Supplies Company, Inc., Hoboken, N. J. Elevator-position indictor. 1,448,686; Oct. 1,659,623; June 21.
Bassett, George A., Bertyville, Ark. Carpenter's wrecking Benjamin Montecal, Brooklyn, N. Y. Packing rugs, etc. Bassett, Churles W., Alameda, Calif. Combination vent and closure for cars. 1,618,694; Feb. 22.
Bassett, Groppa, J. Fliet,

Bassett, Harry P., Cynthiana, Ky. Altering viscosity of cellulose-containing materials. 1,620,938; Mar. 15.
Bassett, Harry P., Cynthiana, Ky. Motor fuel. 1,641,520;

Sept. 6.

Bassett, Harry P., Cynthiana, Ky., and T. F. Banigan, Clifton Heights, Pa., assignor, by mesne assignments, to said Bassett. Spinning threads. 1,642,290; Sept. 13.

Bassett, Harry P., Cynthiana, Ky., and T. F. Banigan, Clifton Heights, Pa., assignors, by mesne assignments, to said Bassett. Spinning artificial silk. 1,642,201; Sept. 13.

Bassett, L. Columbus, Ind. Shovel handle. Bassett. The Company, Brooklyn, N. Y. Arc lamp. 1,632,161; June 14.

June 14.

Bassett, Robert S., Buffalo, N. Y. Liquid meter.
1,620,151; Mar. 8.
Bassett, Walter B. (See Lottman, Edward J., assignor.)
Bassett, William H., fr., Ansonia, assignor to The American Brass Company, Waterbury, Conn. Wrought-metal article. 1,630,999; May 31.
Bassford, Abraham, Millwood, N. Y. Adjustable tennisnastic Abraham, Millwood, N. Y. Adjustable tennisnastic Alemite Corporation. (See Zerk, Oscar U., as-Bassick Company, The. (See Herold, Walter F., assignor.)

signor.)
assick Company, The. (See Moore, Raymond G., as-

Bassick Manufacturing Company, The. (See Anore, Raymond G., asBassick Manufacturing Company, The. (See Anderson,
Andrew G., assignor.)

Bassick Manufacturing Company, The. (See Carr.
Moses F., assignor.)

Bassick Manufacturing Company, The. (See Davis,
Ernest W., assignor.)

Bassick Manufacturing Company, The. (See Davis,
Ensite Manufacturing Company, The. (See Fesler,
Douglas F., assignor.)

Bassick Manufacturing Company, The. (See Gullborg,

Bassick Manufacturing Company, The. (See Gullborg, Arthur V., assignor.)

Bart H., assignor.)

Bassick Manufacturing Company, The. (See Houghton, Herbert H., assignor.)

Bassick Manufacturing Company, The. (See Johnson, Gustav, assignor.)

Bassick Manufacturing Company, The. (See Manzel, Bassick Manufacturing Company, The. (See Manzel, Howard J., assignor.)

Bassick Manufacturing Company, The. (See Pierce, Earl F., assignor.)

Bassick Manufacturing Company, The. (See Pierce, Earl F., assignor.)

Bassick Manufacturing Company, The. (See Upham, Preston, assignor.)

Bassick Manufacturing Company, The. (See Wallace, Charles F., assignor.)

Bassick Manufacturing Company, The. (See Wallace, Charles F., assignor.)

F., assignor.)

Bassick Manufacturing Company, The. (See Zerk, Oscar, assignor.)

Bassick, William R. (See Pitman, Andrew C., assignor.)

Bassler, Carlos J., assignor to American Liquid Meter Company, Fortland, Osc. 637, 3501 August Ve-operating

Bassler, Edwin M., Milwauke, Wis. Spraying apparatus. 1,639,949; July 26.

Bassler, Edwin M., Milwauke, Wis. Spraying apparatus. 1,639,949; July 26.

Bassler, Edwin M., Milwauke, Wis. Radiator. 1,641,148; Sept. 6.

Bast, Frank J., New York, assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y. Controlling apparatus.

Baster, Frank J., assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y. Valve for automatic controllers and the like. 1,653,613; Dec. 27.

Baster, Forest S., Detroit, Mich. Valve gearing for internal-combustion engines. 1,614,706; Jan. 18.

1,635,304; July 12.

Bastian Blessing Company, The. (See Bastian, C. L., and Apsit, assignors.)

Bastian-Blessing Company, The. (See Bastian, C. L., and Apsit, assignors.)

Bastian-Blessing Company, The. (See Bastian, Charles L., assignor, bastian, C

assignor.)

assignor, Charles L., assignor to The Bastian-Blessing Company, Chicago, Ill. Safety valve. 1,649,210; Bastian, Charles L., assignor to The Bastian-Blessing Company, Chicago, Ill. Carbonator. 1,651,573; Dec. 6. Bastian, Charles L., and J. Apsit, assignors to The Bastian Blessing Company, Chicago, Ill. Torch. 1,639,450; Aug. 16.

Aug. 10.

Bastian, Charles L., and P. Koch, assignors to The Bastian-Blessing Company, Chicago, Ill. Dispensing pump. 1,649,200; Nov. 15.

Bastian-Morley Company. (See Birtch, Fred W., aspump. 1,649 Bastian-Morley

Bastian, William B., Los Angeles, Calif. Quick-throw thermostat valve. 1,621,866; Mar. 22.
Bastian, William B., Los Angeles, Calif. Gas burner. 1,622,820; Mar. 29.
Bastien, Paul, Cleyeland, Ohio. Brake. 1,620,752; Mar. 15.

Mar. 15.

Bastien, Paul. Cleveland, Ohio. Brake-operating mechanism, 1,639,971; Aug. 16.
Bastien, Paul. Cleveland, Ohio, assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,635,571; July 12.
Bastien, Paul, Indianapolis, Ind., assignor to Rendix Brake Company, Chicago, Ill. Brake. 1,635,572; July 12.

Brake Company, Chicago, III. Brake. 1,635.572; July 12.
Bastien, Paul, and C. S. Crawford, assignors to F. E. Moskovies. Indianapolis, Ind. Automobile radiator. Des. 72.545; May 3.
Bataille, Archiméde. Toulouse, France. Cutting machine. 1,653.979; Dec. 27.
Bat-A-Peny Corporation. (See Steinmetz, Herman, as-

Batchelder, Asa F., Scotia, N. Y., assignor to General Electric Company. Locomotive or car truck. Batchelder, Asa F., Scotia, N. Y., assignor to General Electric Company. Locomotive or car. 1,624,709; Apr. 12.

Batchelder, Charles H., North Attleboro, Mass. Link bracelet. 1.641.797; Sept. 6. Batcheller, Hugh W., assignor to Bojac Manufacturing Co., Inc., Winooski, Vt. Circuit closer. 1,613,805; Jan. 4.

Bate, John W., Racine, Wis. Double-lift jack. 1,629,140; May 17.

Bate, John W., Racine, Wis. Double-lift jack. 1,629,140; May 17.
Bateholts, Charles F., Schenectady, N. Y., assignor to General Electric Company. Talking-motion-picture apparatus. 1,652,924; Drc. 13.
Batcholts, Chinton, Hoosis, Ralls, N. Y. Portable cability of the company of

Bates, Adelmer M., assignor to Bates Valve Bag Company, Chicago, Ill. Treating tubing and apparatus therefor, 1,634,066 June 28.
Bates, Adelmer M., assignor to Bates Valve Bag Company, Chicago, Ill. Process and apparatus for forming tubes. 1,634,067; June 28.
Bates, Adelmer M., assignor to Bates Valve Bag ComBates, Adelmer M., assignor to Bates Valve Bag ComBates, Adelmer M., deceased; C. H. Bates, administratrix, assignor to Bates Valve Bag Company, Chicago, Ill. Method of and apparatus for packaging material. 1,637,691; Aug. 2.

trix, assignor to Bates Valve Bag Company, Chicago, Ill. Method of and apparatus for packaging material. 1,637,591; Aug. 2. Bates, Adelmer M., and J. E. Dancker, assignors to Bates Valve Bag Company, Chicago, Ill. Bag-sewing ma-Bates, Adelmer M., and J. E. Dancker, assignors to Bates Valve Bag Company, Chicago, Ill. Stencil and making the same. 1,638,546; July 19. Bates, Adelmer M., and A. Krass, assignors to Bates Valve Bag Company, Chicago, Ill. Sewing, severing, Valve Bag Company, Chicago, Ill. Sewing, severing, Valve Bag Company, Chicago, Ill. Method of and apparatus for severing and valving bag tubes. 1,623,283; App. 20. Bates, Adelmer M., G. P. Dorr, and J. E. Dancker, assignors to Bates Valve Bag Company, Chicago, Ill. Method of and apparatus for severing and valving bag tubes. 1,623,283; App. 30. Bates, Albert H., Shaker Heights, assignor to The American Multigraph Company, Cleveland, Ohio. Latch for embossing machines. 1,627,684; May 10 Ricks) Bates, Benjamin E., assignor to Wilson-Western Sporting Goods Company, Chicago, Ill. Helmet or headguard. 1,646,272; Oct. 18. Bates, Charles J., Ir., Englewood, N. J., assignor to The Mosler Safe Company, Lamilton, Ohio. Lock. 1,614,272; Bates, Chara H., administratrix. (See Bates, Adelmer M.) H., H., Englewood, N. J., assignor to The Mosler Safe Company, Lamilton, Ohio. Lock. 1,614,272; Bates, Chara H., administratrix. (See Bates, Adelmer M.)

Bates, Clara H., administratrix. (See Bates, Adelmer M.)

Bates, Clifford V., assignor to The Cinch Manufacturing Corporation, Chicago, Ill. Radiocondenser. 1,612,902;

Untropration, Carones, Jan. 4. Bates, Edwin G. and R. C.; said R. C. Bates assignor to said Edwin G. Bates, Minneapolis, Minn. Making and holding dies for cutting paper figures. 1,615,048;

nothing dies for cutting paper figures. 1,618,048; Feb. Elwin G, and R. C.; said R. C. Bates assignor to Bess G. Bates, Minneapolis, Minn. Assembly plate and die-holding clamp. 1,683,186; Aug. 9.
Bates, Franklin S., Mount Vernon, N. Y. Straw hat. 1,633,368; June 21.
Bates, George T., assignor to Illinois Watch Case Company. Eligin, Ill. Watch case and making same. 1,627,705; May 10.
Bates, Henry L., Greenfield, Mass. Artificial marble. 1,029,854; May 24.
Bates, Lindon W. (See Plauson, H., and Schröder, assignors.)
Bates, Lindon W. (See Plauson, H., and Schröder, assignors.)

assignors.)

Bates, Minot H., Brockton, Mass. Shoe or analogous article. Des. 73,396; Sept. 6.

Bates, Minot H., Brocketon, Mass. Shoe or analogous article. Des. 73,397; Sept. 6.

Bates, Raymond C. (See Bates, Edwin G. and R. C.)

Bates, Richard A., Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y. Journal Car and Foundry Company, New York, N. Y. Journal Bates, Edwin G. and Me.; F. E. Haines, executor. Oil burner. 1,624519; July 5.

Bates Valve Bag Company. (See Bates, Adelmer M., assignor.)

assignor.)

ates Valve Bag Company. (See Bates, A. M., and Dancker, assignors.) ates Valve Bag Company. (See Bates, A. M., and Krasa,

Bates Valve Bag Company.

assignors.)

Bates Valve Bag Company. (See Bates, A. M., Dorr,
Bates Valve Bag Company. Bates Valve Bag Company. (See Bushman, E. L., Curtis. and Dancker, assignors.)
Bates Valve Bag Company. (See Bushman, E. L., Curtis. and Ward, assignors.)
Bates Valve Bag Company. (See Fegely, Nathan M.,

assignor.)

Bates Valve Bag Company. (See- Krasa, Albert, assignor.) ates Valve Bag Company. (See Kronmiller, Carl G.,

Bates Valve Bag Company. (See Kronmiller, C. G., and Bates Valve Bag Company.

Cornell, assignors.)

Bateson, Donald M., Marshalltown, Iowa. Snubber hook and quick-fastener link. 1,633,512; June 21.

Batter & Company. (See Machin, John S., assignor.)

Bath, John, Worcester, Mass. Grinding threaded work. 1,614,225; Jan. 11.

Bath, John, Worcester, Mass. Thread gauge and holder. 1,654,235; Dec. 27.

Bath, John, and E. A. Walker, Worcester, Mass., assignors, by messae assignments, to said John Bath. Relieving mechanism for grinding machines. 1,651,432; Dec. 6.

Bechanism for grinding machines. 1,651,671; Jan. 25.

Batie, Joseph E., assignor to Kelsey Wheel Company, Inc., Detroit, Mich. Conveyer apparatus. 1,647,599; Nov. 1. Batles-Life Co., The. (See Smith, Rensselaer J., as-

Balles-Life Co., The. (See Smith, Rensselaer J., assignor.)
Battaini, Joseph, Toledo, Ohio. Paring and slicing knife.
1,638,468; Aug. 9.
Battelle, Eugene E., New York, N. Y. Putifying liquids
Battele, Elegene E., New York, N. Y. Putifying liquids
Batter, Richard W., Scammon, Kans. Peneli holder for
shirt waists, etc. 1,615,322; Jan. 25.
Batterman, John J., Brookline, assignor of one-half to J.
J. Daly, Newton, Mass. Manufacture of rubber heels.
1,615,165; Jan. 18.
1,612,077; Mar. 22.
Batterman, John J., Dedham, Mass., assignor of one-half to J.
J. Daly, Newton, Mass. Manufacture of rubber
heels. 1,622,077; Mar. 22.
Batterman, John J., Dedham, Mass., assignor to Vacuum
Refrigerating Company. Refrigerating apparatus.
Battey, Sumter B. and B. M., New York, N. Y. Repeating mechanism for talking machines. 1,629,986;
May 24.
Battey, Mulliam A. (See Borton, G. W., and Battey,
May 11.
Bitefano, New York, N. Y. Shoe tree.
1,631,768; June 7.
Battle, James C., Los Angeles, Calif. Shock absorber.
1,654,769; Dec. 27.
Battle, William T., assignor to G. F. Berkander, Providence, R. I. Barrette. 1,625,687; Apr. 19.
Bigiour.)

dence, R. I. Barrette, 1,625,587; Apr. 19.
Battle-Fyre Company. (See Burke, George W., fr., assignor.)
Battle, Fyre Company. (See Burke, George W., fr., assignor.)
Batts, Carl T., Grand Rapids, Mich. Garment carrier.
1,639,021; Aug. 16.
Batts, Carl T., Grand Rapids, Mich. Garment carrier.
1,639,021; Aug. 16.
Local Carlotte, 1,612,365; Feb. 16.
Batts, Walter H., Grand Rapids, Mich. Shipping box for clothing. 1,623,365; Feb. 15.
Batts, Walter H., Grand Rapids, Mich. Shipping box for clothing. 1,623,881; Apr. 20.
Batts, Walter H., Grand Rapids, Mich. Shipping box for clothing. 1,626,381; Apr. 20.
Batts, Walter H., Grand Rapids, Mich. Shipping box for clothing. 1,624,631; Apr. 12.
Bauer, Bruno, Vienna, Austria. Casing or mold box for concrete beams or ties. 1,628,385; May 10.
Bauer, Frank, Williamsville, N. Y. Rigid aircraft.
1,632,641; June 14.
Bauer, Frank, Williamsville, N. Y. Rigid aircraft.
1,632,641; June 14.
Bauer, George. (See Haines, August W., assignor.)
Bauer, George. (See Bauer, Gustaw F. C., Tonawanda, assignor to Rock Asphalt & Construction Co. Inc., Buffalo, N. Y., Retarding device. 1,613,782; Jan. 11.
Bauer, George. (See Bauer, Gustaw, R. W.)
Bauer, Jacob, assignor of one-third to C. L. Johnson and one-third to L. W. Johnson, Youngstown, N. Y. Inverting packages. 1,622,958; Apr. 12.
Bauer, Gustaw F. W. Washington, D. C. Sanitary pad. Apr. 10.
Bauer, William J., Syracuse, N. Y. Anchor. 1,632,529; June 14.

signor.]

Bauer, William J., Syracuse, N. 1.

June 14.

Bauer, William J., assignor to Foltite Chair Corporation,
New York, N. Y. Collapsible chair. 1,643,107; Sept. 20.

Bauerle, Churles E., assignor to The Motobile Products
Company, Cleveland, Ohio. Motor vehicle lock.

Company, Cleveland, Ohio. Firm of Carl Zeiss,
Jena, Germany. Device for projecting stars. 1,616,736;
Feb. 8.

When assignor to the Firm of Carl Zeiss,
Feb. 8.

Jenna, Germany. Device for projecting stars. 1,616,736;
Jenna, Germany. Machine for making circle divisions.
Jena, Germany. Machine for making circle divisions.
1,653,426; Dec. 20.
Baugh, Charles J. (See Kinkade, W. D., and Bauch.)
Bugh, Linaa C., assignor of one-half to R. E. Baugh,
Develope of the control of the contr

Baum, Ewald G., assignor to Secl-Kap Company, Natick, Mass. Bottle cap. 1,619,283; Mar. I. Baum, Frank G., San Francisco, Calift, assignor to Westinghouse Electric and Manufacturing Company. Transmission system. 1,617,007; Feb. 8. Baum. Henry, Cleveland, Obio. Compound tool. 1,617,653; Feb. 12. Baum. Isaac A., Memphis, Tenn. Plaster terminal. 1,618,695; Feb. 22.

1.617.503; Feb. 15.

Baum, Isaac A., Memphis, Tenn. Plaster terminal.

1.618,695; Feb. 22.

Raum, Janx, New York, N. Y., assignor to Radice Electric Co., Inc. Wall-bracket lighting fixture. Des.

T3.819; Nov. 15.

Baum, Max, New York, N. Y., assignor to Radice Electric Co., Inc. Wall-bracket lighting fixture. Des. 73,820; Nov. 15.

Baum, Max, New York, N. Y., assignor to Radice Electric Co., Inc. Electric light socket adapted. 73,821;

Co., Inc. Electric light
Nov. 15.
Baum, Max, New York, N. Y., assignor to Radice Electric
Co., Inc. Strap for lighting fixtures. Des. 73,822;

Nov. 15.

Bauman, Arthur E., Akron, Ohio, Resilient tire,
1,024,856; Apr. 12.

Bauman, Harry A., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Hot-water bottle.
Des. 72,925; June 28.

Bauman, Harry A., and R. M. Pierson, Akron, Ohio, assignors to The B. F. Goodrich Company, New York,
N. Y. Bathing cap. Des. 72,926; June 28.

Baumann, Christy J., assignor to Macbeth-Evans Glass
Company, Pittsburgh, Pa. Bottle. Des. 71,899;
Jan. 25.

Co. Jan Company, Jan. 25.

Company, Pittsbürgh, Pa. Bottle. Des. 11,898; Jan. 25.
Baumann, Herman J. and J. F. West New York, N. J. Awning-operating device. 1,643,281; Sept. 20.
Baumann, Herman J. and J. F. West New York, N. J. Baumann, Herman J. and J. F. West New York, N. J. Baumann, John F. West New York, N. J. Baumann, John F. West New York, N. J. Baumann, Karl, Uruston, England, assignor, by mesne assignments, to Westinghouse Gear and Dynamometer Company. Double-reduction gear. 1,630,599; May 31.
Baumann, Karl, Uruston, England, assignor to Westinghouse Gear and Dynamometer Company. Prevalled Saumann, Karl, Uruston, England, assignor to Westinghouse Gear and Dynamometer Coupling for shafts, 1639,489; July 21.
Baumann, Karl, Uruston, England, assignor to Westinghouse Electric and Manufacturing Company. Flexible coupling, 1,639,481; Auz. 16.
Baumann, Karl, Uruston, England, assignor to Westinghouse Electric and Manufacturing Company. Flexible coupling for shafts, 1,639,481; Auz. 16.
Baumann, Karl, Uruston, England, assignor to Westinghouse Electric and Manufacturing Company. Flexible coupling for shafts, 1,639,481; Auz. 18.
Baumhorger, William J. Rose Yerk, H. H., and Baumberger, William J. Davennert, Iowa, assignor, by

Baumberger, berger.) assignor, by

Baumgärtner, Der Katz & Co., G. m. b. H. (See Lerk., 1633,661; June 2.1 L. (22.4 & Co., G. m. b. H. (See Lerk.) L. (See Lerk.)

June 21.
Baur, Hugo J., assignor, by mesne assignments, to S. S.
Gorham, trustee, Chicago, Ill. Fare box. 1,634,441; July 5. Baur, Mathieu J., Woodlyn, Pa. Ladder jack. 1,651,863; Dec. 6.

Baurelle, Albert C. (See Carroll, John R., assignor, b Baus, Richard E., assignor to The Studebaker Corpora-tion, Detroit, Mich. Shipping device. 1,638,612; Aug. 9.

Aug. 9. ausch and Lomb Optical Company. (See Bernheim, Daniel P., assignor.) ausch & Lomb Optical Company. (See Day, George

Bausch H., assignor.)
Bausch & Lomb Optical Company. (See Drescher, Theodore B., assignor.)

Bausch & Lomb Optical Company. (See Drescher, Theodore B., assignor.)
Bausch and Lomb Optical Company. (See Flodin, Oscar H. & See Company.)
Bausch and Lomb Optical Company. (See Hart, E., and Gallasch, assignors.)
Bausch & Lomb Optical Company. (See Kellner, Gustav A. H., assignor.)
Bausch and Lomb Optical Company. (See McKinstry, Arthur L., assignor.)
Bausch & Lomb Optical Company. (See Newell, H. J., and Fermoll, assignors.)
BWILLIAM COMPANY. (See Patterson, William L., assignor.)
Bausch & Lomb Optical Company. (See Sabel, John C., assignor.)

assignor.)
Bausch and Lomb Optical Company. (See Stevens, Frederick A., assignor.)
Bausch & Lomb Optical Company. (See Stevens, F. A., and Welsh, assignors.)

Bausch & Lomb Optical Company. (See Stevenson, Clarence M., assignor.)
Bausch and Lomb Optical Company. (See Welsh, James

W., assignor.)
Bauschard, John H., Erie, Pa. Wall-form tie. 1,651,313;

Bauschard. John H., Erie, Pa. Wall-form tie. 1,651,313; Nov. 29; Alongo L. assignor to National Equipment 1,627,138; May 3. Bausman. Alongo L. assignor to National Equipment 1,627,138; May 3. Bauspies. Raymond C., Maywood, Ill. Smoker's tray. Des. 73,864; Aug. 30. Baverey, François, assignor to Societe Du Carburateur Zenith, Lyon, France. Carburetor. 1,631,716; June 7. Bayington, Walter W., Okmulgee, Okla. Compressor. Baxter, Benjamin R., Goulburn, New South Wales, Augustralia. Agitating, washing, liming, or tanning solutions. 1,620,317; Mar. 8. Baxter, Bert, assignor to Baxter & Company, Welch, W. Va. Radiator casing or cover. 1,625,931; Apr. 26. Baxter & Company. (See Baxter & Company. (See Baxter & Company. Sugmental Section 1,633,971; June 28. Baxter, Harold G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,643,791; June 28. Baxter, Harold G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,643,791; June 28. Baxter, Marold G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,643,791; June 28. Baxter, Manufacturing Company. Switch mechanism. 1,643,791; June 28. Baxter, Manufacturing Company. Switch mechanism. 1,643,791; June 28. Baxter, William C., assignor to E. M. Trimble Mg. Co., Baxter, William C., assignor to E. M. Trimble Mg. Co., Baxter, Mulliam C., assignor to E. M. Trimble Mg. Co.,

Mar. 8.

Baxter, William C., assignor to E. M. Trimble Mfg. Co., Inc., Rochester, N. Y. Canopy or tent. 1,687,725;

Baxter, William C., assignor to E. M. Trimble, Rochester, N. Y. Canopy or tent. 1,637,725; Aug. 2.
Baxter, William C., assignor to E. M. Trimble, Rochester, N. Y. Folding crib. 1,640,024; Aug. 2.
Baxter, William C., assignor to Man Trimble Mfg. Combined on the like. 1,640,025; Aug. 23.
Baxter, William E., Louisville, Ky. Automatic handle. 1,627,880; May 10.
Baxter, William M., assignor to Ideal Removable Body Company, Chicago, Ill. Removable track-body-locking mechanism. 1,615,552; Jan. 25.
Bastum Kodak Company, Rochester, N. Y. Bleaching cellulose acctate. 1,623,519; Apr. 5.
Baybutt, Richard, and E. S. Farrow, fr., assignors to Eastman Kodak Company, Rochester, N. Y. Cellulose acctate and making the same. 1,635,026; July 5.
Bayer, Gaudenz, Augsburg, Germany. Absorption refigerating apparatus. 1,646,520; Oct. 25.
Bayer, Gaudenz, Augsburg, Germany. Absorption refigerating apparatus. 1,646,520; Oct. 25.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,520; Oct. 25.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,520; Oct. 25.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,520; Oct. 26.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,520; Oct. 26.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,520; Oct. 26.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,520; Oct. 26.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,620; Oct. 26.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,620; Oct. 26.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,620; Oct. 26.
Bayar, Gaudenz, Augsburg, Germany, Absorption refigerating apparatus. 1,646,620; Oct. 26.
Bayar, Gaudenz, Augsburg, Germany, Absorption P. Augsburg, Germany, Absorption refigeration, and H. J. Eggleng, St. Louis, Mo. 200; December 1, Company, Moches 1, 1000; December 1, 1000; December 2, 1000; December 2, 1000; December

May 3.
Bayer, J. C., Furnace Company. (See Bryer, Edward R.,

May 3.
Bayer, J. C., Furnace Company. (See Bryer, Edward R., assignor:
Bayer, J. C., Furnace Company. (See Bryer, Edward R., assignor:
Bayer, Matthew F., assignor to Simmons Company, Kenosha, Wis. Wall bed. 1,628,763; May 17.
Bayer, Matthew F., assignor to Simmons Company, Kenosha, Wis. Caster mounting. 1,630,514; May 31.
Bayerische Spiegelglasfabriken Bechmann-Kupfer. (See Offenbacher, Luitpold, assignor).
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Loughest, Livid, 1,631, 1,631,651; Nov. 15.
Bayles, Lewis C., Easton, Pa., and H. W. Morrow, Phillipsburg, assignors to Ingersoll-Rand Company, Jersey City, N. J. Dies for forging calking and yarning irons. 1,631,632; Nov. 28.
Bayer, Marcus L., Spokane, Wash. Restaurant equipment. 1,630,160; May 24.
Bayles, Benjamin W., Louisville, Ky. Refrigerator. 1,630,160; May 24.
Bayley, Marcus L., Spokane, Wash. Restaurant equipment. 1,648,551; Nov. 8.
Baylin, Jacch, Montreal, Quebec, Canada, Windshleid

ment 1,025,000. Springueld, Onto.
July 26, Bayley, William D., Springueld, Onto.
July 26, Springueld, Onto.
July 27, Springueld, Onto.
July 26, Springueld,

Baynes, James B., Buffalo, N. 1.

Apr. 19.

Bayner, Foundry Company. (See Relland, Ernest S., and P. M., assignors.)

Bay State Optical Company. (See Clulee, Stephen J., 1998)

[See Nerney, Edwin D., 1998]

Bay State Optical Company. (See Nerney, Edwin D., assignor.) Bay State Optical Company. (See Nerney, George E.,

Bay State Optical Company. (See Siddall, Wilbur H., assignor.)

assignor.)
Bayuk Cigars Incorporated. (See Kitchel, R. R., Lip-pard, and Mullan, assignors.)
Bayuk Cigars Incorporated. (See Wurman, Harry P., assignor.) Bay View Furniture Company. (See Lindemann, Marvin

C., assignor, and Bazeley, Arthur J. (See Blackmore, W., Bazeley, and Robinson.)
Buzeley, Arthur J., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Car coupler, 1,647,669, Nov. 1.

Bazewick, Walter F., Binghamton, N. Y. Mop wringer.

1,626,445; Apr. 26

H. Racine, Wis., assignor to Wisconsin Electric Company, Drink mixer. 1,650,256; Nov. 22.

Beach, Clarence E., Binghamton, N. Y., assignor to The Gamewell Company, Newton, Mass. Signaling system. 1,627,685; May 10.

Beach, David K., Worcester, Mass., assignor to Riley Stoker Corporation. Driving mechanism for clinker signors to Riley Stoker Company. Driving mechanism for clinker grinders. 1,664,234; Dec. 27.

Beach, David K., and I. A. Taylor, Worcester, Mass., assignors to Riley Stoker Company. Driving mechanism for clinker grinders. 1,664,234; Dec. 27.

Beach, Bavard F., assignor to H. H. Robertson Company, Pittsburgh, Pa. Ventilator. 1,632,871; June 21.

Beach, Harold K. (See Staples, H. A., and Beach, Henold K. (See Staples, H. A., and Beach, Henold K. (See Staples, H. A., and Beach, Harold K. (See Staples, H. A., and Beach

Benich, Howard L., assignor to Chris Car Company, Andburgh, Pa. Latch-release mechanism. 1.643.974;
Oct. 4

Oct. 4

Oct. 4

Bench, John M., Grand Rapids, Mich. Radiocabinet. Des.
17.1900; Jan. 25.

Bench, John M., Grand Rapids, Mich., assignor to The
Stromberg-Carlson Telephone Manufacturing Company,
Rochester, N. Y. Radiocabinet or the like. Des.
14.045; Dec. 13.

4.045; Dec. 13.

5.047; Apr. 12.

5.046; Dec. 13.

5.047; Dec. 13.

6.045; Dec

Beach, Ralph H., Beileville, N. J. CARUNTEUR, A., ASSIGNOT, Jan. 11.
Beach, Riley F. (See Johnson, Kirk A., assignor.)
Beachler, George F., Cleveland, Ohlo, Sphygmomanometer. 1,640,920; Aug. 30.
Beacon Oil Company, (See Bolton, Harold L., assignor.)
Beacon Steel Furniture Co. (See Rosenthal, A. E., and Clarin, assignors.)
Bead Chain Manufacturing Company, The. (See Gagnon, Bernard E., assignor.)
Bead Chain Manufacturing Company, The. (See Gagnon, William J., assignor.)

Bernard E. assignor.)

Bead Chain Manufacturing Company, The. (See Gagnon, William J., assignor.)

Bead Chain Manufacturing Co., The. (See Godridge, Gilbert W., assignor.)

Bead Chain Manufacturing Co., The. (See Goodridge, Gilbert W., See Goodridge, Gilbert W., See Goodridge, Gilbert W., See Goodridge, Godridge, Goodridge, Godridge, Goodridge, Godridge, Godridge,

Beam, Aron M., Denver, Colo., deceased; L. J. Beam, administrator. Continuously-operating ore or ore-shale converting retort furnace. 1,627,538; May 3. Converting retort furnace. 1,627,538; May 3. Converting retort furnace. 1,627,538; May 3. Continuously. Combination brace and drill. 1,625,517; Apr. 19. Beam, Charles W., Tonopah, Nev. Combination brace and drill. 1,625,517; Apr. 19. Bean, Lances C., Bracos, Tex. and Combination brace and drill. 1,615,865; Feb. 1. Bean, James O., Brazos, Tex. Gear. 1,648,715; Nov. 8. machine. 1,619,798; Nov. 22. Bean, Leon H., New York, N. Y., assignor to Hollander-Mar. 1, Machine for making buttons. 1,619,233; Mar. 1.

Mar. 1.

Bean, Leon L., Freeport, Me. Inside protecting stay for leather-top rubbers. 1,620,712; Mar. 15.

Bean, Orestes U., New York, N. Y., assignor to Bean Process Syndicate, Incorporated. Producing gas. 1,621,632; Mar. 22.

Bean Process Syndicate, Incorporated. (See Bean Orestes U., assignor).

Bean, Thomas R., Guernsey, Channel Islands, and R. E. Taudevin, Welwyn, Bertford, England. Utilizing wave modion for the Dopulsion of ships and their auxiliary machinery. 1,622,173; Mar. 22.

Bean, Vital A., Keene, N. H. Chain fastener, 1.648.104; Benn, Vital A., Reene, N. H. Chair season and M. Nov. 8.

Bean, William L. West Haven, Conn. Locomotive smokeBean, William L. West Haven, Conn. Locomotive smokebox. 1,639,792; Aug. 23.

Bean, William L. West Haven, Conn. Locomotive smokebox structure. 1,647,385; Nov. 1.

Bean, William L., West Haven, Conn. Locomotive smokebean, William L., West Haven, Conn.

Bean, Filiam L., West Haven, Conn. Locomotive-smokeBean, Bohn T. (See Prichard, Channing, assignor.)

Bear, Belle, (See Bear, Theodore, assignor.)

Bear, Belle, (See Bear, Theodore, assignor.)

Bear, Montague M., Atlanta, Ga. Garter. 1,634,169;

June 28.

Bent, addresses assigner to Belle Bear, Chicago, Ill.
Bending set. 1,641,687; Sept. 6.
Bear, Theophius L., Camden, N. J. Spoon. Des. 73,475;
Sept. 20. Sept. 20. ear Tractor Corporation of America. (See Leake,

Sept. 20.

Bear Tractor Corporation of America. (See Lerke, Thomas C., assignor.)

Beard Arthur L., Minneapolis, Minn. Lock. 1,642,480;

Sept. 13.

Beard, E., Kansas City, Mo. Automobile brake. 1,612,448;

Beard, Lawrence O., Lancaster, Pa. Valve-refacing tool. 1,621,845; Feb. 22.

Beard, Lawrence O., Lancaster, Pa. Valve-seat-refacing tool. 1,638,835; Aug. 23.

Beard, Leonard O., and S. J. Bendtsen, Concrete, Wash. Oll brake. 1,617,366; Feb. 15.

Beard, Leonard O., and S. J. Bendtsen, Concrete, Wash. Oll brake. 1,617,366; Feb. 15.

Beard Leonard O., and W. E. Hostetter, Buckner, Mo. Quick-service oil bottle. 1,652,696; Dec. 13.

Beard William E., and W. E. Hostetter, Buckner, Mo. Quick-service oil bottle. 1,652,696; Dec. 13.

Beardmore, William. (See Choriton, Alan E. L., assignor.)

signor.)

Beardslee Chandelier Manufacturing Company. (See Dvorak, Anton, assignor.)

Beardsley, Charles B., Waterbury, assignor to The Risdon Manufacturing Company, Naugatuck, Conn. Smokers' stand. Des. 73,596; 0ct. 11.

Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, assignors to The Beardsley & Piper Company, Chicago, and W. F. Piper, Oak Park, assignors to The Beardsley & Piper Company, Chicago, and Piper, assignors, may, The. (See Beardsley, E., O., and Piper, assignors, They are the Park of the Park of

Beardsley, Robert, Chicago, III. Lamp shade. Des. 73.889; Nov. 22.
Beardsley, Robert, Chicago, III. Papler-maché product and making the same. 1,018,269; Feb. 22.
Beardsley, Robert, Chicago, III. Shade. 1,651,364; Dec. 6.

Dec. 6. Sole Co. Inc. (See Calvin, Edwin, assignor.)
Bearings Company of America, The. (See Chambers,
David Fr., assignor.)
Bearly, Fred D., Oklahoma City, Okla. Derrick. 1,645,980;
Oct. 18.

Bearly, Fred D., Oklahoma City, Okla. Derrick. 1,643,980; Oct. 18.

Bearse. Ephraim L. Centerville, Mass. Candle support. 1,647,688 Nov. 10 Durham. N. C. Cotton chopper and weeder. 1,634,610; June 28.

Beasley, John W., Jr., Los Angoles, Calif. Electrical switch. 1,651,314; Nov. 29.

Beasley, John W., Jr., Los Angoles, Calif. Electrical switch. 1,651,314; Nov. 29.

Beasley Estarley F., Kansas City, Kans. Truck-bolster reenforcement saddle. 1,647,767; Nov. 1.

Becker, John, et al. (See Aichele, Ernest, assignor.)

Beasley, Walter J., Kew, Victoria, Australia. Collapsible casing. 1,648,869; Nov. 15.

Beaston, Greek P., assignor to Jackerschen, Coin, Iowa.

Beaton, Greek P., assignor to Universal Optical Corporation, Providence, R. I. Making ophthalmic mountings. 1,635,699. July 12a.

Beattle, George W., Highland, Calif. Irrigating and Beattle, George W., Highland, Calif. Irrigating and Beattle, Manufacturing Co., The. (See Beattie, Walter J., assignor).

Beattle Manufacturing Co., The.

J., assignor.)

Beattle, Matter J., assignor to The Beattle Manufacturing
Co., Cohoes, N. Y. Marking machine. 1,653,334

Dec. 20.

Dec. 20.

Birmingham, Ala, assignor to Sand

Beatty, Douglas T., Birmingham, Ala., assignor to Sand Spun Patents Corporation, Wilmington, Del. Casting. Beatty, Douglas T., Birmingham, Ala, assignor to Sand Spun Patents Corporation, Wilmington, Del. Cen-trifugally cast pipe. 1,614,863; Jan. 18. Beatty, Earl W., Falls City, Nebr. Cotter pin. 1,621,346; Mar. 18.

MRE. 19.
Beatty, George W., Decatur, III. Fire-control apparatus. 1,612,861; Jan. 4.
1,612,861; Jan. 4.
1,640,392; Aug. 30.
Beatty, William G., Fergus, Ontarlo, Canada, assignor to Haag Brothers Company, a copartnership composed of George A. Haag and Albert R. Haag, East Peorla, III. Wilner. Rel6,627; May 17.

Beatty, William H., Birmingham, Ala., assignor to James B. Clow & Sons. Centrifugal molding machine. I,620,427; Mar. 8.

Beatty, William T., Flossmoor, F. S. Davis, Homewood, and F. D., Wilson, Harvey, assignors to Austin Manufacturing Co., Chicago, III. Telescoping-axic leaning-wheel road grader. 1,651,513; Nov. 29.

Beatty, Grader, A., Sanguor to The Universal Milking Machine Machine, Machine Machine, Wis. Dairy-Equipment cleaner. 1627,844; May 2018.

Wheel Foad grader. Loss Joseph Horrican Milking Machaty, Beaty, Bruce F., assignor to The Universal Milking Machaty Co. Walkesha, Wis. Dairy-Equipment cleaner. Beaty, Edward E., Seattle, Wash. Cutter head. 1,636,403; July 19. Beaty, Floyd, et al. (See Patterson, Roy G., assignor.) Beauchamp, Clifford J. R., London, England. Stopper for vacuum Hasks and other containers. 1,652,16; Dec. 6. Local Legisland, Stopper for Forest Hills, N. Y. Vehicle signal. 1,626,131; Apr. 26. Beauchamp, Dora F., Forest Hills, N. Y. Adjustable reflector. 1,628,218; May 10. Beauchamp, Dora F., Forest Hills, N. Y. Adjustable reflector. 1,628,218; May 10. Beauchamp, Dora F. X., Blaine, Wash. Gold washer. Beauchamp, Local Legisland, 363,263; June 14. Beaulieu, Joseph, Lynbrook, N. Y. Automatic damper. 1,641,875; Sept. 6. Beaumont Manufacturing Company. (See Burnett, Wilsiand, J. Assignor.)

Signot.) R. H., Co. (See Birch, Herbert E., assignot.) Beaumont, R. H., Co. (See Hale, William E., assignor.) Beaumont, R. H., Company. (See Warner, Arthur, assignor.)

Beaumont, R. H., Company. (See Whiter, Articut, assignort, Robert H., Radnor, assignor to R. H. Beaumont Co, Philadelphia, Pa. Flow-facilitating means
for gravity hoppers. 1,622,665, Mar. 29.
Beaumont, Robert H., Radnor, assignor to R. H. Beaumont Co, Philadelphia, Pa. Material storage and
handing system. 1,622,566; Mar. 29.
mont Co, Philadelphia, Pa. Material storage and
mont Co, Philadelphia, Pa. Cable-winding mechanism.
1,649,279; Nov. 15.
Beaumont, William M., Summit, N. J., and F. A. Bonomi,
Brookkyn William M., Summit, N. J., and F. A. Bonomi,
Brookkyn Christophia, Pa. Western Electric Comtem., 1,629,016; May 17.
Beauprie, Arthur W. (See Taylor, Mark, assignor),
Beauregard, Victor, Boston, Mass. Hair clipper,
1,624,532; Sept. 18.

fem. 1,023010; may 11.
Beaupric, Arthur W. (See Taylor, Mark, assignor,)
Beauregard, Victor, Boston, Mass. Hair clipper,
1,042,032; Sept. 13.
(See Nall, T. O., and Beauvais,)
Beauvei, Broon i., Ulysses, Nebr. Wrench. 1,023,379; Beaver, 5 Apr. 5. Beaverland Corporation, The. (See Artz, Anthony C.,

Beaver Machine and Tool Company. (See Chadwick, Francis C., assignor.)
Beaver Machine & Tool Co. (See Slade, Harold E., as-

signor.)
Beaver Machine & Tool Co. Inc. (See Slade, Harold E.,

assignor.)
Beaver Products Company, The. (See Barratt, Edgar G.,

Bassel Products Company, The. (See Barratt, Edgar G., assignor).

Beazell, William S., Lakewood, Ohio. Card holder. 1,618,163; Feb. 22.

Bebel, Abraham, Brooklyn, N. Y., assignor to The De Long Hook and Eye Company, Philadelphia, Pa. Hook and eye tape. 1,622,408; Mar. 22.

Bebel, Abraham, Brooklyn, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y. Tuftedmattress button. 1,627,723; May 10.

Becerra: Pedro H. (See Campos, A. and Becerra.) Bechard, Emile J., Levallois-Perret, France. Fire-extinguishing and like apparatus. 1,630,251; May 31.

Becher, Edward, New York, N. Y. Massaging heating Pecher, Edward, New York, N. Y. Massaging heating Pecher, Edward, New York, N. Y. Massaging heating Pecher, Bubert L. (See Harvey, H. C., and Becher.) Beehgaard, Poul, Dalby, Sweden. Jaw or breaker plate for stone crushers and the like. 1,643,048; Sept. 20.

Beehle, Edward, Kiel, Wis. Bow-facing oar. 1,634,282; July 5. Bechle, E

Beching. Henry F., assignor to Duplex Printing Press
Bechman, Henry F., assignor to Duplex Printing Press
Bechman, William O., and F. G. Knudsen, Chicago, Ill.
Hoisting presses. 1,643,799; Sept. 27.
Bechman, William O., and F. G. Knudsen, Chicago, Ill.
Hoisting derrick. 1,646,133; Oct. 18.
Bechstein, Carl A., See Kornis, Ewald E., assignor.)
Bechstein, Carl A., et al. (See Jones, Ira M., assignor.)
Bechstein, Carl A., et al. (See Jones, Ira M., assignor.)
Bechstein, Carl A., et al. (See Jones, Ira M., assignor.)
Bechstein, Carl A., et al. (See Jones, Ira M., assignor.)
Bechstein, Carl A., et al. (See Jones, Ira M., assignor.)
Becht, Robert F., Silverton, assignor to The Kenton BakIng Powder Company, Cincinnati, Ohio. Marking device. 1,642,983 Sept. 20.
Bechtel, George M., Montclair, N. J. Contents-level indicator for containers. 1,625,976; Apr. 26.
Bechtold, William S., Newark, N. J.
Mirror or similar
dictator for containers. 1,625,976; Apr. 26.
Beck, Albert, assignor to McGill Metal Products Company, Chicago, Ill. Hand punch. 1,641,521; Sept. 6.

Beck, Alwin H., and E. S. Mix, assignors to Hickok Manufacturing Company, Inc., Rochester, N. Y. Detachable link, 1.642.322; Sept. 13. Beck, Charles F., Park Ridge, Ill. Combination letter-box and house-number sign. Des. 13,416; Sept. 20. Beck, Charles W., Toledo, Ohio, assignor to Beck-Frost Corporation, Detroit, Mich. Oil-can holder. 1,618,099;

Beck, Charles W., Toledo, Ohio, assignor to Beck-Frost Corporation, Detroit, Mich. Oil-can holder. 1,619,099; Mar. 1.

Beck, Charles W., Toledo, Ohio, assignor to The Beck-Frost Corporation, Detroit, Mich. Automobile can Beck Lupikudar Company. The. (See Fecher, F. F., Danheiser, and Baldauf, assignors.)

Beck, Edward, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arcrury arc rectifier. 1,624,383; Apr. 12.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Spoon or similar article. Des. 72,786; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Side panel for metal dishes or similar articles. Des. 72,881; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Side panel for metal dishes or similar articles. Des. 72,882; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Base for metal dishes or similar articles. Des. 72,883; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Base for metal dishes or similar articles. Des. 72,885; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Base for a fountain pen holder. Des. 72,885; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Base for a fountain pen holder. Des. 72,885; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Base for a fountain pen holder. Des. 72,885; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Base for a fountain pen holder. Des. 72,885; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Base for a fountain pen holder. Des. 72,885; June 21.

Beck, Ernest T., assignor to International Silver Co., Meriden, Conn. Base for a fountain pen holder. Des. 72,885; June 21.

Meriden, Com.

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Beck, Ernest T. 2nasignor to Inten.

Beck, Firmest T. 2nasignor to Inten.

T2.886; June 21.

T2.886; June 21.

Beck, Fisthugh L., Barksdale, Tex. Pneumatically-operated railway gate. 1,638,315; Aug. 9.

Beck, Foster A., Allentown, Fa. Combined suction tube and tongue depressor. 1,613,373; Jan. 4.

Beck-Fost Corporation, The. (See Eeck, Charles W., Beck-Fost Corporation, The. (See Lober, George H.,

assignor.)
Beck, George C., Spokane, Wash. Piston-groove cleaner and deepener. L644,005; Oct. 4.
Beck, John, Bross, M. Y. Combination article of furniBeck, Joseph M. (See Combs, W. F., and Beck, Joseph, and A. B. Gallin, Taft, Calif. Motor-driven saw. 1,648,532; Nov. 8.
Beck, Kasri, (See Wagner, H., Langbein, Beck, and

Beck, Karl. (See Fugger, 1997).

Beck, Kenneth H. and E. H. Blackburn, Pittsburgh, Pa. Door catch. 1,627,825; May 10.

Beck, Michael, Minneapolis, Minn. Vaporizer and preheater for internal-combustion engines. 1,619,496;

heat Mar.

Beck, Riley, Dows, Iowa. Water circulator and air mois-tener for water-cooled internal-combustion engines. 1,623,229; Apr. 5 Beck, Sigmund, Nuremberg, Germany. Paintbrush. 1,646,182; Oct. 18. Beck, William E., Herrick, Ill. Article clip. 1,652,972;

1,646,182; te., Herrick, H., Beck, William E., Herrick, H., Dec, 13. Becker, Albert H. (See Nichol, Orr T., assignor.) Becker, Albert W., Windsor, Conn. Heating attachment. 1,642,292; Sept. 16. Becker, Albert W., Windsor, Conn. Heating attachment. Becker, Albert W., Windsor, Conn. Heating attachment. Becker, Albert W., Williams, Company, Cleveland, Ohio. Wagon. 1,639,124; Aug. 16. Unner Montclair, N. J. Automatic

Bowman Company, Cleveland, Unio. Wagon. 1,039,124; Aug. 16.
Becker, Allen J., Upper Montchir, N. J. Automatic stevedore-truck brake. 1,640,308; Aug. 23.
Betweed the Company. Labericant and making the same. 1,628,646; May 17.
Becker, Arman E., Elizabeth, N. J., assignor to Standard Development Company. Lubricant and making the same. 1,628,647; May 17.
Becker, August M., New York, N. Y. Machline for coating webs with adhesive. 1,618,631; Feb. 22.
Becker, Bernard C., York, Pa. Clasp for pencils. Becker, Ebrand C., York, Pa. Clasp for pencils. Inc. New York, N. Y. Method and apparatus for molding confections. 1,617,564; Feb. 15.
Becker, Charles M., Brooklyn, assignor to Smilling Charlle, Inc. New York, N. Y. Method and apparatus for molding confections. 1,617,564; Feb. 15.
Becker, Dean B., Fort Atkinson, Wis. Jacketed cashing. 1,628,524; May 10.
Becker, Edmund H. (See Martus, M. L., and Becker, and Ross.)

Becker, Edmund H. (See Martus, M. L., and Becker, and Ross.)
Becker, Edmund H. (See Martus, M. L., Becker, and Ross.)
Becker, Eulabee D., New York, N. Y. Embroidery and process. 1.646.383: Oct. 25.
Becker, Frank, ir., Mount Carroll, Ill. Incubator egg tray. 1.642.323; Sept. 13.
Becker, Fred, Buffalo, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1.626.779; May S. East Rutherford, N. Y. Welding and cutting apparatus. 1.633.359; June 21.
Becker, George J. Annandale, N. Y. Piano key. 1.623,331; Apr. 5.

Becker, George W., Brooklyn, N. Y. Automobile door. 1.643,939; Uct. 4. Becker, Harry S., River Forest, assignor to American Flyer Manufacturing Company, Chicago, Ill. Wire-terminal clip for toy tracks. 1,620,428; Mar. 8.

Beeker, Hazen K., and E. G. Jurgens, assignors to Peters Machinery Company, Chicago, Ill. Carton-blank separator. 1,638,518; Aug. 9.
Becker, Heinrich, Kiel-Hassee, assignor to Pried. Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Cylinder for internal-combustion engines. 1,627,639; May 10.

Becker, Heinrich, Kiel-Hassee, assignor to Fried, Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Ger-many. Valve gear for power engines. 1,645,574; Oct. 18. Becker, Heinrich, Riel-Hassee, assignor to Fried. Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Ger-many. Cylinder for two-stroke internal-combustion en-gines with scavenging ports. 1,645,575; Oct. 18.

many. Cylinder for two-stroke internal-combustion engines with scavenging ports. 1,645,675 (bct. 18.)

Becker, Helnrich, Klel-Hassee, assignor to Fried. Krupp Germaniawertl Aktiengeselischaft, Klel-Gaarden, Germany. Internal-combustion engine. 1,649,440; Nov. 15.

Becker, John, Warren, Idaho. Bottle-washing device. 1,622,900; Mr. 29.

Becker, John J., New Sork, N. Y. Mechanical toy. 1,643,916; Sept. 27.

Becker, John J., New York, N. Y. Figure wheeled toy. 1,643,916; Sept. 27.

Becker, John J., New York, N. Y. Toy steamboat. 1,643,917; Sept. 27.

Becker, John J., New York, N. Y. Mechanical toy. 1,643,918; Sept. 27.

Becker, John J., New York, N. Y. Sounding toy. 1,651,245; Nov. 29.

Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Combination oven. 1,623,460; Apr. 5.

Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Combination oven. 1,623,460; Apr. 5.

Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Combinal-saturator apparatus. 1,654,159; Dec. 27.

burgh, Pa. Ammonia-saturator apparatus. 1,654,159; Dec. 27.

Becker, Joseph E., San Francisco, Calif. Trailer-steering device. 1,645,892; Oct. 18.

Becker, Lucien E. (See Small, William J., assignor.) Becker, Rudolph, North Plainfield, assignor to The Singer Landston of Company, Elizabeth. 22, 277; Spreader Landston of Company, New York, N. Y. Watchcase. Des. 73,957; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, Wilhelm, New York, N. Y. Watchcase. Des. 73,962; Nov. 29.

Becker, William P., Pelham, assignor to The New York and Paratic Meditarian Electron Meditarian Electro

Last Company, New York, N. Y. Last. 1,625,588; Apr. 19.

Becket, Frederick M., New York, N. Y., assignor to Electro Metallurgical Company. Making molybdenum steel. 1,613,571; Jan. 4.

Becket, Frederick M., New York, N. Y., assignor to Electromagnet of the state of

Mar. 22.
Beckman, Arthur C., Mound City, S. Dak. Corn harvesting and husking machine. 1,646,604; Oct. 18.
Beckman, Gustaf S., Craston, R. 1., assignor to Universal Winding Company, Boston, Mass. Thread guide
for winding machines. 1,648,439; Nov. 8.

Beckman, John W., Oakland, assignor of sixty per cent fo G. C. Roeding, Piedmont, Callf. Pickling fruit, etc. 1,621,138; Mar. 15. Beckmann, 188; Mar. 15. Beckmann, Jacob H., New York, N. Y. Watchcase. Des. 74,134; Dec. 27.
Beckmann, Jacob H., New York, N. Y. Watchcase. Des. 74,135; Dec. 27.
Beckmann, Jacob H., New York, N. Y. Watchcase. Des. 74,135; Dec. 27.
Beckmann, Johannes, Altona-Ottensen, Germany. Explosionary of fitting for electric glowlamps. 1,629,089; Beckmann, Johannes, Charlottenburg, Germany, assignor to General Electric Company. Electric furnace system. 1,631,667; June 7.
Beckord, Frederick, White House, N. J. Scraper. 1,641,522; Sept. 6.
Beckstein, George C., Buffalo, N. Y. Ring. Des. 73,554; Oct. 4.

Oct. 4. Beckstrom, August W. (See Ellison, E. H., and Beck-

Beckord, Frederick, White House, N. J. Scraper. 1,641,522 Sept. 6.
Beckstein, George C., Buffalo, N. Y. Ring. Des. 73,554; Beckstein, George C., Buffalo, N. Y. Ring. Des. 73,554; Beckstein, Magust W. (See Ellison, E. H., and Beckstein, Magust W. (See Ellison, E. H., and Beckstein, Chârles J., Brooklyn, assignor, by mesne assignments, to Johns-Manville, Incorporated, New Seekswith, Clutton H. George Construction, 1642,524; Sept. 13.
Beckwith, Clutton H. (See Swett, Charles E., assignor.) Beckwith, Harry H. (See Swett, Charles E., assignor.) Beckwith, James, Eugene, Oreg. Carbonized article and making same, 1,624,710. Apr. 12.
Becomier, Paul M., Paris, France. Shock absorber. 1,645,576; Oct. 18.
Becsl., Peter, Durand, Mich. Biotter device for pens. Becsl., Peter, Durand, Mich. Biotter, Durand, Bedford, Clayton W., Akron, Ohio, assignor to The B. F. Goodrich Company, Akron, Ohio, Vulcanization of caoutchoue. 1,613,574; Jan. 4.
Bedford, Clayton W., Akron, Ohio, Assignor to The B. Bedford, Clayton W., Akron, Ohio, Assignor to The B. Bedford, Clayton W., Bern., Mi

eech, Alexander C., Chicago, assignor to Kroehler Mfg. Co., Naperville, Ill. Adjustable armchair. 1,628,764; May 17.

May 17.

Beecher, Elmer C., Wakeman, Ohio, assignor of one-third to H. C. Beecher, San Francisco, Calif., and one-third to R. L. Beecher, Petroit, Mich. Auto traffic signal. 1.646,895; Oct. 25.

Beecher, Herbert C., et al. (See Beecher, Elmer C., assignor.)

Beecher, Milton F. (See Jeppson, G. N., and Beecher.)

Beecher, Raymond L., et al. (See Beecher, Elmer C., assignor.)

assignor.)
Beecher, Milton F. (See Jeppson, G. N., and Beecher.)
Beecher, Kaymond L., et al. (See Beecher, Eimer C.,
assignor.)
Beecher, Raymond L., et al. (See Beecher, Eimer C.,
assignor.) hn T., Worcester, Mass. Optical projection.
Beechlyn, John T., Worcester, Mass., assignor to General
Electric Company. Lens. 1,615,674; Jan. 25.
Beechlyn, John T., Boston, Mass., assignor to General
Electric Company. Light projector using Fresnel lens.
1,650,591; Nov 29.
Beechtel, David W., assignor of forty-nine per cent to
1,624,914; Apr. 10.
Beedle, Edwin W., San Francisco, Calif. Automatic type
lock. 1,622,175; Mar. 22.
Beedle, Edwin W., San Francisco, Calif. Automatic type
lock. 1,622,175; Mar. 22.
Beedle, Edwin W., San Francisco, Calif. Salley type
clamp. 1,633,396; June 25.
Beegle, Raymond E., East St. Louis, Mo. Clamping device. 1,631,396; June 7.
Beckman. Ross C., Kansas City, Kans. Washing machine.
1,632,567; June 14.
Beenken, Daniel D., Santal Barbara, Calif. Multiple-record
Beer, James C., Long Beach, Calif. Drafting instrument.
1,632,267; June 14.
Beenken, Daniel D., Santal Barbara, Calif. Multiple-record
Beers, Burton B. (See Labadie, H. H., and Beers.)
Beers, Burton B. (See Labadie, H. H., and Beers.)
Beers, Royce L., Detroit, Mich., assignor, by meane assignments, to Riley Stoker Corporation, Worcester,
Mass. Side tuyère structure. 1,620,067; Mar. 8.
Beers, Royce L., Detroit, Mich., assignor, by mesne assignments, to Riley Stoker Corporation, Worcester,
Mass. Side tuyère structure. 1,620,067; Mar. 8.
Beers, Royce L., Detroit, Mich., assignor, by mesne assignments, to Riley Stoker Corporation, Worcester,
Mass. Side tuyère structure. 1,620,067; Mar. 8.
Beers, Royce L., Detroit, Mich., assignor, by mesne assignments, to Riley Stoker Corporation, Worcester,
Mass. Side tuyère structure. 1,620,067; Mar. 8.
Beers, Royce L., Detroit, Mich., Busgignor, by mesne assignments, to Riley Royer Corporation, Worcester,
Mass. Side tuyère structure. 1,620,067; Mar. 8.
Beers, Royce L., Detroit, Mich., Busgignor, by

Mass. Fuel-distributing means for underfeed stokers. 1,620,509; Mar. 8.

Beers, Royce L., assignor to Detroit Stoker Company, Detroit, Mich. Underfeed stoker. 1,625,976; Apr. 26.

Beers, Royce L., Detroit, Mich., assignor, by mesne assignments, to Riley Stoker Corporation, Worcester, 1438.

Reat-end structure for rear-dump stokers. 1438.

Beers, William C. (See Hunt, Clarence T., assignor.)

Beery, Joseph C., Kansas City, Mo. Combined muffler and cut-out. 1,615,564; Jan. 25.

Beery Shocker, Incorporated. (See Dickinson, Harry S., assignor.)

assignor.) eesch, Hazel O., et al., administrators. (See Owens,

Beesch, Hazel O., et al., administrators. (Nee Owens, assignor.)

Beesch, Hazel O., et al., administrators. (Nee Owens, assignor.)

Beetley, Cora G., Chicago, Ill. Marcel weaver. 1,622,821;

Mar. '9, Beeson, Frank, Alliance, Nebr. Windmill attachment. 1,615,820; Feb. 1.

Beetham, Maurice F., and R. H. Moore, assignors to Whiting Corporation, Harvey, Ill. Door closure for rotatable receptacles. 1,630,600; May 31.

Beetz, Hans B., San Francisco, Calif. Tack and nail extractor. 1,612,733; Jan. 4.

Beezley, Regnald R., Memphis, Tenn. Storage-battery terminal. 1,623,332; Apr. 5.

Beegs Eugene W., Glen Righe, N. J., assignor to West-minal 1,623,332; Apr. 5.

Beigs Eugene W., Glen Righe, N. J., assignor to West-minal to Lamp Company. Lamp mount. 1,653,385; Dec. 20.

B. Hartford, Conn. Flush valve.

ingnoise Lamp Company. Lamp mount of the Dec. 20, Dec. 20, Beggs, Thomas R., Hartford, Conn. Flush valve. 1,624,130; Apr. 12. Beghetti, Peter, San Francisco, Calif. Actuating mechanism for air-blown musical instruments. 1,016,737;

nism for air-blown musical instruments. 1,616,737; Feb. 8.
Behan, Thomas W., assignor to The Nineteen Hundred Washer Company, Inc., Binghamton, N. Y. Combined casing and frame for a washing machine. Des. 73,995; Dec. 8.

Behimer, Otto. (See Holmes, R. C., Manley, and Behi-

Behimer, Utto.

mer. Jeronder, Kiel, Germany. Ascertaining the flying behing to flying machines. 1,630,689; May 31.

Behm. Alexander, Kiel, Germany. Sounding or measuring distance in water. 1,649,378; Nov. 15.

Behm. John J., Grand Haven, Mich. Child's coaster. 1,620,939; Mar. 15.

Behining, Robert V., assignor of one-half to M. Kroeger, Los Angeles, Calif. Ford wheel and throttle lock. 1,623,029; May. 29.

Behning, Robert V., assignor of one-half to M. Kroeger, Los Angeles, Calif. Ford wheel and throttle lock. 1.623,029; Mar. 29. Brooklyn, assignor to National Lead Behr, Gustave E., Jr., Brooklyn, assignor to National Lead 1.464,037; Oct. 118. N. Y. Abrasive sheet material. Behr, Hans C., Scarsdale, N. Y. Centrifugal apparatus and process for continuously separating liquids from soilds. 1,642,662; Sept. 13. Percess and apparatus for separating liquids from soilds. 1,650,685; Nov. 29.

Behr, Herman & Co. (See Crupi, Frank J., assignor.)
Behr, Peter B. (See Mann, Robert C., assignor.)
Behrends, Tony A., Havana, Ill. Adjustable plowshare.
1,684,532; Nov. 8.
Behrens, Walter A. (See La Shelle, C. P., and Behrens.)
Behringer, Matthäus. (See Niedermann, Robert, assignor.)

signor.)
Behrle, Edward H., et al. (See Giancola, Nicholas, as-

Behrman, Abraham S. (See Green, W. H., and Behr-

man,)
ehrman, Abraham S., assignor by mesne assignments
to General Zeolite Company, Chicago, Ill. Water softening reagent and process of preparing same.
1,624,711; Apr. 12.
ehrman, Marcus B., New York, assignor to The Lox Seal
Corporation, Brooklyn, N. Y. Seal for packages.
1,614,592; Jan. 18.
ehrman, Marcus B., assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile-wire cutter. 1,616,344;

Feb. 1. Behrman, Marcus B., assignor to The Lox Seal Corpora-tion, Brooklyn, N. Y. Pile-wire cutter. 1.616,345;

Behrman, Marcus B., New York, assignor to The Lox Feb. 1.

Behrman, Marcus B., New York, assignor to The Lox Seal Copporation, Brooklyn, N. Y. Pile-wire cutter.

Behrman, Marcus B., New York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile-wire cutter. 1,616,347; Feb. 1.

Behrman, Marcus B., New York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile-wire cutter. 1,616,348; Feb. 2.

Jan 18,548; Feb. 2.

Jan 18,548; Feb. 2.

Behrman, Marcus B., New York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile-wire cutter. 1,616,348; Feb. I. Brooklyn, N. Y. Pile-wire cutter. 1,616,348; Feb. I. Behrman, Marcus B., assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pastening means therefor. 1,616,3946; Feb. Signor to The Lox Seal Corporation, Brooklyn, N. Y. Pastening means. Seal Corporation, Brooklyn, N. Y. Pile-wire cutter and making it. 1,625,072; Apr. 10. Behrman, Marcus B., assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile-wire cutter and making it. 1,625,072; Apr. 10. Behrman, Marcus B., New York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile-wire cutter. 1,647,600; Nov. 1. Behrman, Marcus B., Sew York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile-wire cutter. 1,648,473; Nov. 8. Behrman, Marcus B., New York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Pile-wire. 1,648,474; Dec. 20. Beldelstein, Frank Milwaukee, Wis. Game-wheel spider. Jes. 1,248, Mar. S. Belidersen, Frank Milwaukee, Wis. Game-wheel spider. Jesiger, John W., assignor to The Carrom Company, Beiger, John W., assignor to The Carrom Company,

Beidelstein, Frank, Milwaukee, Wis. Game board. Des. 73,477; Sept. 20.
Beidler, Elliott W., trustee. (See Zimmermann, Hans J., assignor) W., assignor to The Carrom Company, and Carrom Company, and Carrom Company, and Georg Braun Gesellschaft mit beschränkter Haftung, Hersfeld, Germany. Extracting fats from the Carrom Company, Allymaukee, Wis. Gasoline locomotive. 1,630,361, July 10.
Electric Company, Milwaukee, Wis. Gasoline locomotive. 1,614,452; Jan. 18.
Beinhauer. Louis, Brooklyn, N. Y. Orthopedic device. 1,617,790; Feb. 15.
Beintema, Tjebbe D., Leighton, Iowa. End-gate scoop board. 1,614,452; Jan. 18.
Beinhauer. Louis, Brooklyn, N. Y. Orthopedic device. 1,617,790; Feb. 15.
Beintema, Tjebbe D., Leighton, Iowa. End-gate scoop board. 1,614,452; Jan. 18.
Beise, Richard J. (See Beise, Leonard L., and R. J.).
Beisel, Rex E., assignor to Curtiss Aeroplane and Motor Co., Inc., Garden City, Long Island, N. Y. Olitemperature regulator. 1,617,435; Feb. 15.
Beiser, Richard J. (See Beise, Reventure regulator. 1,617,435; Feb. 15.
Beiser, Harry, Detroit, Mich. Key machine. 1,634,133; Wheel Corporation. (See Belsel, William Japens Wheel Corporation. (See Belsel, William L., Shippensburg, Pe. Expansible tissue-paper ornament. 1,616,568; Feb. 8.
Beitman, Albert B., Cleveland Heights, Ohlo, Windshield. 1,636,455; July 12.
Belanger, Jean B., Montreal, Quebec, Canada. Lomp stand. Des. 73,996; Dec. 6.
Beither Trunk & Bag Company, The. (See Caldwell, Charles C., assignor: beeling Hornia & Bag Company, The. (See Caldwell, Charles C., assignor: beeling Trunk & Bag Company. (See Langmuir, Frank Beicher, Daniel, assignor to Benis Bro. Bag Co., Minnenoldis, Minn. Feeding attachment for printing

Beloer Trunk & Bag Compuny. (See Langmur, Frank H., assignor.) Belcher, Daniel, assignor to Bemis Bro. Bag Co., Min-neapolis, Minn. Feeding attachment for printing presses. 1,620,863; Mar. 15.

Belcher, Daniel, assignor to Bemis Bro. Bag Co., Minneapolis, Minn. Offset printing attachment. 1,653,198;

ncapons, attan.

Dec. 20.

Belcher, Daniel, assignor to Bemis Bro. Bag Co., Minneapolis, Minn. Feeding attachment for printing
presses. 1,653,199; Dec. 20.

Belcher, Daniel, assignor to Bemis Bro. Bag Co., Minneapolis, Minn. Bag-filling apparatus. 1,653,200;

metpotas, anim. Bag-ming apparatus. 1,655,200; Belcher, J. E. (See Brown, James F., assignor; Delcher, Leslie, Fark Ridge, N. J., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Making confections. 1,614,057; Jan. 11.

Jan. 11. Jelcher, Miles H., Greasy Creek, Ky. Combination tool. 1.644,705; Oct. 11. Jelcher, Warren J., assignor to The Whitney Mfg. Co., Hartford, Conn. Transmission chain. 1,638,139;

Aug. 9.
Belcher, Warren J., assignor to The Whitney Mfg. Company, Hartford, Conn. Power-transmission chain. 1.638,388; Aug. 9.

Beller, Warren J., assignor to The Whitney Mfg. Company, Hartford, 2007,

Company, Toledo, Ohlo. Flexible spring connection. 1,616,842; Feb. 8.
Belden, Edward H., assignor, by mesne assignments, to The Willys-Overland Company, Toledo, Ohlo. Lubrication system for internal-combustion engines. 1,623,461; Pelden, Edward H., assignor to The Willys-Overland Company, Toledo, Ohlo. Internal-combustion engine. 1,623,462; Apr. 5.
Belden, Edward H., assignor to The Willys-Overland Company, Toledo, Ohlo. Lubricating system. Company, Toledo, Ohlo. Lubricating system. Belden Manufacturing Company. (See Parsons, Newell B., assignor).

B., assignor.)
elden Manufacturing Company. (See Wermine, Hugo

Delidea significations (Company, (See Wermine, Higo Belfine, See Bickell, William G., assignor.) Belfined, Stafford C., Liverpool, England. Dash lamp. 1.617,892, Feb. 15. Belford, Mrs. J. D. (See Carnes, A. H., and Marr, as-signors.)

Signor 3. D. (See Carlies, A. H., and Marr, asSignor 3. D. (See Carlies, A. H., and Marr, asSignor 3. D. (See Carlies, A. H., and Marr, aslype machines. 1,682,168; June 14.

Belin. Edouard, Paris, France. Transmitting pictures.
1 635,021; July 5.

Belin. Edouard, Paris, France. System of facsimile telegraphy by wireless signals. 1,642,637; Sept. 13.

Belke. William E., Chicago, Ill. Filtering apparatus.
1,632,428; Dec. 13.

Washington, D. C. Fuel-testing
apparatus. 1,648,617; Sept. 27.

Belknap, George J., Bridgeport, Conn. Valve. 1,651,942;
Dec. 6.

Belknap, Orin H., Chinook, Wash. Seine landing.
1,648,671; Nov. 8.

Belknap, Orin H., Chinook, Wash, Seine la 1.648.671; Nov. 8. Belknap, Samuel L., assignor to In-A-Wall Safe pany, Inc., Los Angeles, Calif. Wall safe. 1,64

Belknap, Samuel L. assignor to In-A-Wall Safe Company, Inc., Los Angeles, Calif. Wall safe. 1,644,410; Oct. 4.

Oct. 4.

Oct. 4.

Oct. 4.

Oct. 4.

Oct. 4.

Oct. 5.

Oct. 6.

Oct. 6.

Oct. 7.

Sept. 6.

Sept. 6.

New Westminster. British Columbia, Bl. Ang. Paper cutter. 1,681,434; Dec. 6.

Bell. Anthony W., sr., and H. L. Jennings, Uniontown, Pa. Timber hoist. 1,650,316; Nov. 22.

Bell. Charles B., Charleroi, assignor of one-half to T. H. Robinson, Donora, Pa. Mine-car check lock. 1,628,525;

ell, Chaires—Robinson, Donora, Pa. Mine-car cueva ser. Auburn, asell, Clinton L., Decatur, and M. S. Kessler, Auburn, assignors, by mesne assignments, to Decatur Rotary Display Company, Decatur, Ill. Sanitary display and
vending device. 1,629,673; Mmy 24. Kessler, Auburn,
ell, Clinton L., Decatur, and M. S. Kessler, Auburn,
ell, Clinton L., Company, Decatur, Ill. Display rack,
1,635,201; July 12.
ell, Cyrus, et al. (See Keniston, G. I., and Priestley, assignors.) Bell.

signors. Bell, paniel, assignor to Invincible Laundry Equipment Co., Chicago, Ill. Door latch. 1,645,849; Oct. 18.
Bell, Edwin A., Philadelphia, Pa. Grease trap. 1,651,246;
Nov. 29.

Bell, Elmer, et al. (See Elackmore, William, assignor.)
Bell, Eugens E., Dayton, Ohio, assignor to American Optical and arrowing bridges of ophthalmic mountings. 1,638,078; Aug. 9.
Bell, Frank M., assignor to R. G. Thompson and E. B. Siammonds, Muncie, Ind. Truck. 1,622,298; Apr. 5.
Bell, Brack C., Alameda, Calif. Rotary compressor.
Bell, Brack C., Alameda, Calif. Combination condenser and oil separator. 1,620,713; Mar. 15.
Bell, Brack C., Alameda, Calif. Rombination condenser and oil separator. 1,620,713; Mar. 15.
Bell, Groge, Granite City, III. Roll grinding and polishing device. 1,614,097; Jan. 11.
Bell, Groge, Granite City, III. Roll grinding and polishing device. 1,620,638; Mar. 8.
Bell, George F., Tulsa, Okla. Flange for bull wheels. 1,620,322; Apr. 26.
Bell, Groge F., Treston, and J. Boardman Ashton, Preston, Bell, George, Freston, machine 1,651,316; Nov. 29.
Bell, Gilbert C., Augusta, Ga. Refrigerator and dispenser. 1,638,181; Aug. 9.
Bell, Gordon R., Englewood, Colo. Water-closet. 1,620,429; Mar. 8.
Bell & Gossett Company. (See Ercanbrack, John E., as-Bell, & Gossett Company. (See Ercanbrack, John E., as-Bell, Harmon. (See Loftus, Thomas J., assignor.)

signor.) Bell, Harmon. Bell, Harmon.

signor.)
Bell, Harmon. (See Loftus, Thomas J., assignor.)
Bell, Harmon., Fort Worth, Tex. Toy rubber shooter.
1.616.453; Feb. 8.
Bell, Harrey W., Adsley-on-Hudson, N. Y., assignor to
The Beloyt Corporation, Dover, Del. Flexible coupling.
1.619.457; Mar. 1.
Bell & Howell Company, The. (See Howell, Albert S., Bell &

Howell Company, The. (See Miehle, Robert F.,

Bell & Howell Company, The. (See Michle, Robert F., ir., assignor.)
Bell, Ivan C., assignor to The Guiberson Corporation, Dullas, Tex. Mechanically-packed packer. Re16,670; July 12.
Bell, Ivan C., assignor to The Guiberson Corporation, Dallas, Tex. Tubing stripper. 1,639,209; Aug. 16.
Bell, James, & Co. Froprietary Limited. (See Innes, Bell, James, & Co. Froprietary Limited. (See Innes, Bell, James, & Co. Froprietary Limited.)

signors.)
Bell, Jesse J., Terre Haute, Ind. Automobile seat.
1,643,236; Sept. 20.
Bell, Jessie M., Tacoma, Wash. Doll. Des. 72,787; June 7. Bell, John Bell, John

Bell, John E. (See Isom, E. W., and Bell,)
Bell, John E. (See Isom, E. W., and Bell,
Bell, John E., deceased, Erooklyn; L. R. Bell, executrix,
assignor to Sinclair Refining Company, New York,
N. Y. Oll still. 1,613,306; Jan. 4.
Bell, John B., Brooklyn, N. Y., assignor to Combustion
B. (10,675; Feb.
Bell, John E., Brooklyn, N. Y., assignor to Sinclair Refining Company, Chicago, Ill. Pressure-still heating furnace. 1,617,297; Feb. 8.
Bell, John E., Brooklyn, N. Y., assignor to Sinclair Refining Company, Chicago, Ill. Evaporative condenser,
fining Company, Chicago, Ill. Evaporative condenser,
for fractional distillation and condensation. 1,619,396;
Mar. 1.

Mar. 1.
ell, John E., Brooklyn, N. Y., assignor to Sinclair Refining Company, Chicago, Ill. Oil still. 1,623,773;

fining Company, Chicago, Ill. Oil still. 1,623,773; Apr. 5.
Bell, John E., Brooklyn, N. Y., assignor to Combustion Engineering Corporation. Grinding and drying apparation. Brighteering Corporation. Furnace apparatus. 1,632,619; July 19.
Bell, John E., Brooklyn, N. Y., assignor to Combustion Engineering Corporation. Furnace apparatus. 1,636,119; July 19.
Bell, John E., Brooklyn, assignor to Combustion Engineering Corporation. Grinding and drying apparatus. 1,641,409; Sept. 6.
Bell, John E., Grooklyn, assignor to Combustion Engineering Corporation. To Combustion Engineering Corporation. Grinding and drying apparatus. 1,641,470; Sept. 6.
Bell, John E., deceased, by L. R. Bell, executrix, Brooklyn, and E. W. Isom, Locust Valley, assignors to Sinclair Refining Company, New York, N. Y. Apparatus for cracking hydrocarbons. 1,641,491; Sept. 8.
Bell, John E., Marietta, Ohio, Suspension seat. 1,640,013; Nov. 15.
Bell, Look R., executrix. (See Bell, John E.)
Bell, Look R., executrix. (See Bell, J. E., and Isom.)
Bell, Look R., executrix. (See Bell, J. E., and Isom.)
Bell, Lond R., executrix. (See Bell, J. E., and Isom.)
Bell, Lond R., executrix. (See Bell, J. E., and Isom.)
Bell, Lond R., executrix. (See Bell, J. E., and Isom.)
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Bell, Lond R., executrix. (See Bell, J. E., and Isom.)
Bell, Lond R., executrix. (See Bell, J. E., and Isom.)
Bell, Lond R., executrix. (See Bell, J. E., and Rell.)
Bell, Paul, Mexico City, Mexico, Holding device for wild

Bell Lumber Company. (See Bubar, George A., assignor.)
Bell, Paul, Mexico City, Mexico. Holding device for will
animals: 1.623.774; Apr. B. Bonomy Barrel Corporation,
Bell, Roy H., and F. R. Searles, Great Falls, Mont.
Support for writing tablets and the like. 1,636,275;
July 19.
Bell, Samuel J., West Springfield, Mass. Cooking utensil.
1.632,236; June 14.
Bell Telephone Laboratories. (See Haddock, Arthur, assignor.)

Bell Telephone Laboratories, Incorporated. (See Bascom, H. M., and Fowler, assignors.) Bell Telephone Laboratories, Incorporated. (See Black, ell Telephone Laboratories, Incorporated. (See Black, Haroid S., assignor.)
ell Telephone Laboratories, Inc. (See Clokey, Allison A., assignor.)
ell Telephone Laboratories, Inc. (See Clokey, Allison A., assignor.)
ell Telephone Laboratories, Incorporated. (See Davis, R. C., and Conway, assignors).
El Telephone Laboratories, Incorporated. (See Davis, R. C., and Conway, assignors). deraid, assignor.)
ell Telephone Laboratories, Incorporated.
Frank E., assignor.)
ell Telephone Laboratories, Incorporated. (See Field. (See Fisher. Bell Telephone Laboratories, Incorporated. (See Fisher, Harold J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Goodrum, Charles L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Griffith, Thomas R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Harrison, Henry C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Horland, Henry, assignor, page 18 Marchage Laboratories, Incorporated. (See Horland, Henry, assignor, page 18 Marchage Laboratories, Incorporated. (See Johnson Company (See Johnson Laboratories, Incorporated.) Beauty State Control of the Control Bell Telephone Laboratories, Incorporated. (See Johnson, Daniel D., assignor.)

Bell Telephone Laboratories, Incorporated. (See Mueller, Emil C., ir., assignor.)

Bell Telephone Laboratories, Incorporated. (See Norton, Edward L., assignor.)

Bell Telephone Laboratories, Incorporated. (See O'Neill, Henry W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Rettensons, George A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Shann, O. D. C., and C. C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Shel., John B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Shiel, John B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Stokely, Ray L., assignor.) Ray L., assignor.)

Ray L., assignor.)

Bell Telephone Laboratories, Incorporated. (See Ulrich, Horace W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Whiting, Donald F., assignor.)

Bell Telephone Laboratories, Incorporated. (See Whiting, Donald F., assignor.)

Bell Telephone Laboratories, Incorporated. (See Whiting, Donald F., assignor.)

Bell Telephone Laboratories, Incorporated. (See Wilbell Telephone Laboratories, Incorporated. (See Wilbell Telephone Laboratories, Incorporated.)

Bell Telephone Laboratories, Incorporated. (See Wilbell Telephone Laboratories, Incorporated.)

Bell Thomas J., Gee Bell, John W. and T. J.)

Bell, Thomas V., Montreal, Quebec, Canada. Loose-leaf binder. 1,648,105; Nov. 8.

Bell, Waltur. (See Van Alstyne, H. M., and Bell.)

Bell, William D., Columbus, Ohio. Oil burner, 1,618,565; Feb. 22. Feb. 22.

Bell, William E. H., Glenside, Pac, assignor, by mesne assignments, to H. W. Butterworth & Sons Company.

Bastening mechanism. I, 648,365; Sept. 27.

Bastening mechanism. I, 648,365; Sept. 27.

Bastening mechanism. I, 648,365; Sept. 27.

Bell, William M., Portsmouth, Ohlo, assignor to Wheeling Steel Corporation, Wheeling, W. Va. Fastening for the covers of metallic drums. I, 642,481; Sept. 18.

Bellamore. David H., New York, N. Y., assignor to The Mosler Safe Company, Hamilton, Ohlo. Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. I, 623,155; Apr. 5.

Butter J. Company, Hamilton, Ohlo, Metallic structure. J. Company, Hamilton, J. Company, J. Compan Bemis Industries Inc. (See Bemis, A. F., and Brown, assignors.)

Remis Industries Inc. (See Folger, Henry C., assignor.)

Bemis, John E., Des Moines, Iowa. Comparative visible record book. 1,685,337; July 12.

Benaglia, Agide, Bologna, Italy. Device for the production of any patterns with grooves and projecting portions on the surface of rubber trees during the tire representation. 1,635,835; Dec. 27.

Benard, Georges L. O., Blois, France. Method of and applications of the production of the pr

Bellamy, John I., Brookfield, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Telephone system. J. 1,262,330; Apr. 5.
Telephone system. J. 1,262,330; Apr. 6.
Signments, to Automatic Electric Inc., Chicago, Ill. Zone-metering telephone system. 1,630,410; Nov. 22.
Bellamy, John I., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,630,430; Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,625,235; Apr. 19.
Bellamy, William D., assignor to S. Stathakis, El Dorado, Belle City Manufacturing Company. (See Johnson, Alfred C., assignor.)

C., assignor.)
Bellevue Manufacturing Company, (See Sounson, Airtee
C., assignor.)
Bellevue Manufacturing Company, The. (See Martin,
Jacob F., assignor.)
Bellgarde, Harry R., Palo Alto, Calif. Game and apparatus for playing the same. 1,616,524; Feb. 8.
Bellinger, Earl W., et al. (See Kouse, George M., assignor.)

Bellingham, Jethro, et al. (See Wemlinger, William F., assignor.)

assignor.)
Bellingrath August, East Orange, N. J., assignor to
August Goertz & Co. Bag frame. 1639,977; Aug. 23.
Belliveau, John E., Hallfax, Nova Scotia, Canada. Hinge.
1,640,525; Aug. 30.
Bellman, Edward T., assignor of one-third to J. J. Raney,
Rockford, Ill. Circuit-closing device. 1,623,571;
Apr. 5.

Beliman, John A., assignor to M. M. Payne and W. G. Flournoy, Henryetta, Okla. Spudding shoe. 1,645,472;

Control of the Assagnor to Societe Chimique des Ushies du Rhone, Paris France, Reduction of halogenited hydrocarons, 1627,831; May 10.

Bellone, Alfred F. S., Lyons, assignor to Societe Chimique des Ushies du Rhone, Paris France, Reduction of halogenited hydrocarons, 1627,881; May 10.

Bellows, Menny, W. (See Bodwell, P. D., and Bellows, Henry W. (See Bodwell, P. D., and Bellows, 1630,483; Nov. 22.

Bellows, Walter C., assignor to Walden-Worcester, Incorporated, Worcester, Mass. Wrench, 1,613,976; Jan. 11.

Belluche, Elimer W., Racine, Wis., assignor to George R. Swart & Company, Inc., New York, N. V. Sheet feeder, 1,646,642; Peb. 22.

Bellows, Marchanical movement, 1,646,441; Oct. 25.

Belliuzzo Giuseppe, Milan, Italy Blade of Internal-com-bustion turbines. 1,631,503; Dec. 6 Belluzzo, Giuseppe, assignor to Società Italiana Ernesto Bredo, Milan, Italy. Steam-turbine locomotive. 1,638,079; Aug. 9.

liam, assignor.)
Belmonte, William C., New York, N. Y. Combined medicinal pencil and inhaler. 1,640,687; Aug. 30.
Beloit Iron Works. (See Aidrich, Alonzo, assignor.)
Beloit Iron Works. (See Berry, Earl E., assignor.)
Beloit Fon Proporation, The. (See Bell, Harvey W., as-

Bemis Industries, Inc. (See Bemis, Albert F., assignor.) Bemis Industries Inc. (See Bemis, A. F., and Brown, as-

Benbow, James D., assignor to Western Wheeled Scraper Company, Aurora, Ill. Dump car. 1,640,637; Aug. 30.

Benca, Ferdinand, Chicago, Ill. Window guard. 135,601; 1ulv 12.
Benckenstein, Charles H., Vinton, La. Core barrel. 1,619,328; Mar. 1
Benda, Jaroslav, Prague, Czechoslavokia, Last. 1,636,677; July 26.
Benda, Louis, Mainkur, near Frankfort-on-the-Main, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Stable and sterilizable solutions containing or 1,635,169; July 12.
Benda, Ludwig, Mainkur, near Frankfort-on-the-Main, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Acylamino-bydroxybenzene arsine oxides. 1,622,271; Mar. 29.
Benda, Ludwig, Mainkur, near Frankfort-on-the-Main, sellschaft. Production of stable, seellschaft. Production of stable, seellschaft. Production of stable, seellschaft. Production of stable, seellschaft. Benzoxazolone arsonic compounds. 1,648,213; Nov. 8.
Benda, Ludwig, Mainkur, near Frankfort-on-the-Main, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft. Benzoxazolone arsonic compounds. 1,648,214; Nov. 8.

Nov. 8.

Benda, Ludwig, Mainkur, and O. Sievers, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to 1.

G. Farbenindustrie Aktiengelischaft. Benzoxazolon arsine oxides. 1,635,167; July 12.

Benda, Ludwig, Mainkur, and O. Sievers, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to 1.

arsonic acids. 1,635,168; July 12.

Bendelari, Mary E., New York, N. Y. Closure for shoe uppers. 1,643,108; Sept. 20.

Bender, Alexander S. H., Chicago, Ill. Vehicle towing mechanism. 1,651,365; Dec. 6.

Bender, Carl J., Minneapolis, Minn. Battery box Bender, Tederick C., Mineola, N. Y. Toy. 1,612,794; Jan. 4.

Bender, Frederick C., Mineola, N. Y. Musical instrument. Bende. Jan.

Bender, Frederick C., Mineola, N. Y. Musical instrument. 1,623,381; Apr. 5. Bender, Frederick C., Mineola, N. Y. Toy. 1,639,550; Aug. 16.

Aug. 16.

Bender, Frederick C., Brooklyn, N. Y. Musical instrument. 1.651.799; Dec. 6.

Bender, George, assignor V. A. Franture-coll winding and shaping device. 1.616.947; Feb. 8.

Bender, George A., Pittsburgh, Pa. Collapsible case. 1.644.909; Oct. 11.

Bender, Howard L., Bloomfield, N. J., assignor to Bake-Hiet Corporation, New York, N. Y. Synthetic resin com-Hiet Corporation, New York, N. Y. Synthetic resin com-Bender, Walter, Ernder, Germany, Windsheel

He Corporation, New York, N. Y. Synthetic resin composition. 1.650,109; Nov. 22.

Bender, Walter, Emden, Germany. Windwheel. 1.615,675; Jan. 25.

Bender, William, ir., South Bend, Ind. Radiocabinet. Des. 71,773; Jan. 4.

Bendick, Sidney S., New York, N. Y. Printing stencil and making same. 1,626,323; Apr. 26.

Bendix Brake Company. (See Andres, William J., assignor).

Bendix Brake Company. (See Barber, Ernest B., as-

Bendix Brake Company, Sendix Brake Company, (See Bastien, Paul, assignor.) Bendix Brake Company, (See Bendix, Vincent, assignor.) Bendix Brake Company, (See Bendix, V., and La Brie,

assignors.)

Bendix Brake Company.

Bendix Brake Company.

Bendix Brake Company.

Bendix Brake Company.

Donald, assignors.)

Bendix Brake Company. (See Clark, John R., assignor.) (See Clark, Otto B., assignor.) (See Dodge, Adiel Y., assignor.) (See Dodge, A. Y., and Mc (See Krieg, Walter L., as-

Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Bendix Brake Company. (See Laddon, I. M., Ring, and

Bendix Brake Company. (See Lyman, Kenneth E., as-Signor.)

Bendix Brake Company. (See McConkey, Montgomery W., assignor.)

assignor.)

Bendix Brake Company.

Signor.)

Bendix Brake Company.

(See Michael, Gus F., assignor.)

Bendix Brake Company.

(See Michael, Gus F., assignor.)

Bendix Brake Company.

The. (See Parsons, Ben G., Cee Parson assignor.)
Bendix Brake Company.
signor.) (See Peterson, John W., as-

Bendix Brake Company. Bendix Brake Company. (See Price, Jacob L., assignor.) (See Renaux, Eugéne P., as-

Bendix Brake Company. (See Reynolds, Frank D., assignor.) Bendix Brake Company. (See Sanford, Roy S., assignor.) Bendix Brake Company. (See Thomas, George J., as-

Bendix Brake Company. (See White, William W., as-

signor.) Bendix Brake Company, (See Whitworth, Stanley, as-Bendix Corporation. (See Perrot, Henri, assignor.)

Bendix Corporation. (See Waseige, Charles, assignor.)
Bendix, Vincent. (See Jacker, Edward G., assignor.)
Bendix, Vincent. (See Price, Jacob L., assignor.)
Bendix, Vincent, assignor to Bendix Brake Company,
Chicago, III. Brake mechanism. 1,619,806; Mar. 8.
Bendix, Vincent, assignor to Bendix Brake Company,
Chicago, III. Reafforced brake shoe. 1,629,471; Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Brake mechanism, 1,619,806; Mar. 8. Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Rendrored brake shoe. 1,629,471; Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Brake, 1,650,257; Nov. 22. Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Brake, 1,650,257; Nov. 25. Brake-applying means. 1,650,816; Nov. 25. Brake-applying means. 1,6

Benedict, Alexandro Company, Chicago, Ill. Manual Company, Chicago, Ill. Manual Company, Chicago, Ill. Chicago, Company, Chicago, Chicago,

Beneuiet, South Orange, N. J. Venters South Orange, N. J. Venters and E. M. Moller, Bart of H. Herschel A., East Orange, and E. M. Moller, South Orange, N. J. Passenger vehicle. 1, 20,904;

South Orange, N. J. Veneze
Benedict, Herschel A., East Orange, and E. M. Moller,
Benedict, Herschel A., East Orange, and E. M. Moller,
May 24.
Benedict, T. N., Mfg. Co. (See Saunders, Albert F., assignor.)
Benel, Francois I., assignor to Compagnie Industrielle de
Mecanique Horlogère, Paris, France. Time train.
1,616.569; Feb. 8.
Benenati, Micholas, New York, N. Y. Mounted gas
Benenati, Nicholas, New York, N. Y. Steam pressing
apparatus. 1,641.875 (1901.4.
Benenati, Nicholas, New York, N. Y. Steam pressing
apparatus. 1,641.876; Sept. 6.
Benes, James W. (See Engstrom, E. F., and Benes.)
Benesh Matthew E., Chicago, Ill. Means and method for
ascertaining, increasing, and maintaining the efficiency
of water gas-generating machines. 1,620.864; Mat. 15.
Eenetti. Carlos, Barcelona, Spain. Bottle closure.
1,626,349; Apr. 26.
Benefoatt, Salvatore, et al. (See Pagano, Gaetano, assignor.)
Benfont, Salvatore, et al. (See Pagano, Gaetano, assignor.)
Frank A., Schenectady, N. Y., assignor to
Georal Electric Company. Light projector. 1,629,332;
May 17.
Bengel, Edward C., St. Louls, Mo., assignor to The
Lamson Company, Syracuse, N. Y. Pneumatic dispatch carrier. 1,643,455; Oct. 1, Y. Pneumatic dispatch carrier. 1,643,455; Oct. 1, 162,933;
May 17.
Bengel, Edward C., St. Louls, Mo., assignor to The
Lamson Company, Syracuse, N. Y. Pneumatic dispatch carrier. 1,643,455; Oct. 1, 162,933;
May 17.
Bengel, Edward C., St. Louls, Mo., assignor to The
Lamson Company, Syracuse, N. Y. Pneumatic dispatch carrier. 1,643,455; Oct. 1, 162,933;
May 17.
Bengel, Edward C., St., Louls, Mo., assignor to The
Lamson Company, Syracuse, N. Y. Pneumatic dispatch carrier. 1,643,455; Oct. 1,654,448; Dec. 27.
Benham. Edgar M., Norwood, Ohio, assignor to The Mosserty May 24.

Bene Lock Company, Covington, Ky. Lock. 1,630,238;
May 10.

Safety device for vaults, sates, and the like. 1,014,916; Jan. 18.

Benham, Edgar M., Norwood, Ohio, assignor to The Mostar Lock Company, Covington, Ky. Lock. 1,630,238; Marcham, Edgar M., Norwood, Ohio, assignor to The Mosler Lock Company, Covington, Ky. Lock. 1,646,987; Oct. 25.

Benham, Roy E., and H. B. Ross, Richmond, Ind. Miniature electric advertising sign. 1,633,283; June 28.

Benham, William T., Norwood, and J. E. Dwyer, assignors to The Hall's Safe Company, Cincinnati, Ohio. Safe-locking mechanism. 1,632,428; June 14.

Benham, William T., Norwood, and J. E. Dwyer, assignors to The Hall's Safe Company, Cincinnati, Ohio. Time-lock mechanism. 1,632,429; June 14.

Benham, William T., Norwood, and J. E. Dwyer, assignors to The Hall's Safe Company, Cincinnati, Ohio. Time-lock mechanism. 1,632,428; July 5.

Beni, Frank, and D. Iarussi, Cleveland, Ohio. Safety attachment for aeroplanes. 1,634,442; July 5.

Benice Theodore S, Los Angeles, Calif. Exerciser. 1,625,447; Apr. 19.
Béni, Henri assignor to La Soelete dite l'Eclairage des Vehicules sur Rail, Paris, France. Regulating the voltage of dynamos of variable speed and load. 1,622,452; Mar. 15.
Bénit, Henri, assignor to l'Eclairage des Vehicules Sur Rail, France. System of electrical supply. Benjamin, Bert R., Oak Park, and C. R. Rance, Riverside, assignors to International Harvester Company, Chicago, Ill. Tractor drawbar. 1,636,276; July 19.
Benjamin, Bert R., Oak Park, and W. Webber, La Grange, assignors to International Harvester Company, Chicago, Ill., and Senjamin, Bert R., Oak Park, and W. Webber, La Grange, assignors to International Harvester Company, Tractor harvester. 1,643,149; Sept. 20.
Benjamin, Dana H. (See Dreher, A. J., and Benjamin, Benjamin, E. V., Company, The. (See Orndoff, Herbert W., 285, 2007).

Benjamin, E. V., Company, The. (See Orndon, Herbert W., assignor.)
Benjamin Electric Manufacturing Company. (See Benjamin Electric Manufacturing Company. (See Hopkins, Chries L., assignor.)

kins, Charles L., assignor.) Benjamin Electric Mfg. Co. (See Niemann, George F., as-

Benjamin Electric Manufacturing Company. (See Hopkins, Charles L., assignor.)
Benjamin Electric Manufacturing Company. (See Warner, Charles E., assignor.)
Benjamin Electric Manufacturing Company. (See Warner, Charles E., assignor.)
Benjamin Jerome. Los Angeles, Calif. Wall furnace. 1632,263; Dec. 12.
Benjamin Jerome. Los Angeles, Calif. Wall furnace. 1632,263; Dec. 12.
Benjamin, Jerome. Los Angeles, Calif. Wall furnace. 1632,635; Dec. 12.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Electrical-fax. Urre-supporting device. 1,613,013; Jan. 4.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Pull-switch Socket. 1,617,097; Feb. 8.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Electrical-fax. 11.
Benjamin, Reuben B., assignor to Benjamin Electric Ling unit. 1,622,272; Mar. 29.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Highway-light-ling unit. 1,622,272; Mar. 29.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Electrical-faxture support and connecter. 1,631,997; June 14.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Electrical faxture support. Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Panel board. 1,632,563; May 24.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Panel board. 1,636,277; July 19.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Panel board. 1,636,277; July 19.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Selectrical connecter and faxture support. 1,637,452; July 2.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Show-case lighting fixture. 1,639,127; Aug. 16.
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, III. Show-case ligh

Benner, Raymond C., Bayside, N. X., assignor, by mesne assignments, to Prest-O-Lite Storage Battery Corporation, 1,651,689, Drc. 6.
Benner, Raymond C., Bayside, N. X., assignor, by mesne assignments, to Prest-O-Lite Storage Battery Corporation. Storage-battery separator. 1,653,614; Dec. 27.
Benner, Raymond C., Bayside, and H. F., French, Flushing, N. X., assignors to The Frest-O-Lite Company, Inc. Storage cell and electrode therefor. 1,659,250; Abg. 16.

Benner, Raymond C., Bayside, and L. C. Werking, New York, N. Y., assignors, by messne assignments, to Prestrude for storage batteries. 1,649,280; Nov. 15. Benner, Winthrop W., Cuyahoga Falis, and E. A. Hoener, assignors to The Firestone Tire and Rubber Company, Akron. Ohio. Compensating mechanism. 1,637,892; Aug. 2.

Akron. Ohio. Compensating mechanism. 1,637,832; Aug. 2.
Bennett, Alonzo W., New Haven, Conn. Steam turbine. 1,652,085; Dec. 6.
Bennett, Arthur, L. (1998) Arthur 1,652,085; June 7.
Bennett, Arthur J., Cambridge, Ohio. Covered dish. Des. 71,821; Jan. 11.
Bennett, Arthur J., Cambridge, Ohio. Platter or similar article. Des. 74,092; Dec. 20.
Bennett, Arthur J., Cambridge, Ohio. Flower holder. 1,652,740; June 1,652,740; June 1,652,754; June 1,652,

signors.

Bennett, Cadwell E., De Soto, Kans. Automatic feeder. 1,629,348; May 17.
Bennett, Charles, Richmond Hill, N. Y. Drawing instrument. 1,651,504; Dec. 6.
Bennett, Charles E., Decatur, Ga. Fuse. 1,631,851; June 7.

June 7.

Bennett, Claude C., Seattle, Wash. Axle-aligning gauge. Bennett, Donald W. Winton, Calif. Miking pail. 1.635,249; Dec. 20.

Bennett, Donald W. Winton, Calif. Miking pail. 1.635,921; July 12.

Bennett, Edward O., Chicago, Ill., assignor to W. C. Hayes Key lock. 1.644,365; Oct. 4.

Bennett, Elmar W. (See Davis L., and Bennett.)

Bennett, Frank S., Scheuectady. N. Y., assignor to General Electric Company. Heart-exchange apparatus. 1.618,797; Feb. 22.

Bennett, Frederick F., Ypsilanti, Mich. Oil burner.

Bennett, George E., assignor to American Automatic Lock and Lift Company, San Francisco, Calif. Foot-frame lock for foldable beds. 1.631,081; May 31.

Bennett, George L., Cleveland Heights. Ohio. Building wall construction. 1,631,787; June 7.

Bennett, George L., Cleveland Heights. Ohio. Building wall construction. 1,631,787; June 7.

Bennett, Guy I., assignor of one-half to W. C. Frieze, Columbus, Ohio. Reenforced shirt cuff. 1,620,319; Mar. 8.

Columbus, Onto. Reentoreed smire cult. 1,620,319; Mar. 8.

Bennett, Harold S., Baltimore, Md. Self-soaping mop. 1,645,702; Sept. 1,645,702; Se

Bennett, Norman B., et al. (See Savage, Basil H., assignor.)

Bennett, Norman B., et al. (See Suvage, Basii H., assignor.)

Bennett, Raymond A., Roxbury, and A. M. Boothby, Moston, Mass. Eaper can. 1.633.884 June. 28

Bennett, Raymond A., Roxbury, and A. M. Boothby, Watertown, assignor to Boothby Fibre Can Company, Boston, Mass. Paper container. 1.644.506; Oct. 4.

Bennett, Roymond A., Roxbury, and A. M. Boothby, Watertown, assignor to Boothby Fibre Can Company, Boston, Mass. Paper container. 1.644.506; Oct. 4.

Bennett, Roy C., Hendersonville, N. C. Telephone cabinate Dec. 25; A. Aug. 23.

1.618.910; Peb. 22.

Bennett, Samuel P., San Francisco, Calif. Shock absorber, 1.613.97; Jan. 11.

Bennett, Thomas F., Flushing, N. Y. Electric-lighting fixture. 1.643.940; Oct. 4.

Bennett, Wilbur, Scranton, Pa., assignor to The Graff Furnace Company, New York, N. Y. Kitchen range, Des. 72.202; Mar. 15.

Bennett, William H., Calvin, Okla. Vehicle body. 1.644.877; Sept. 6.

Bennewitz, Johannes, assignor of one-half to F. Lunow, Leipzig, Germany. Railway signaling device. 1,649,441;

Bennie, Harold C., Almena, Kans. Tricycle. 1,624,915;

Bennie Hurold C., Almena, Kans. Tricycle. 1,624,915; Apr. 19.

Benninger, John, assignor to A. Schroeder, Philadelphia, Pa. Exercising apparatus. 1,660,447; Nov. 22.

Benninger, Mario, Rheineck, St. Gall, Switzerland. Peeling machine. 1,645,516; Oct. 18.

Bennington, Albert P., Philadelphia, Pa. Cleaning head for blackboard renovators. 1,625,200; Apr. 5.

Bennington, Albert P., Finhelphia, Pa. Telesting head Bennington, Earl T., Cleveland Heights, assignor to The Cleveland Crane and Engineering Company, Wickliffe, Ohio. Suspended carrier. 1,624,205; Apr. 12.

Bennington, Earl T., Cleveland Heights, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Jib-crane transfer device for overhead carrier. 1404,344; Aug. 30.

Bennington, Earl T., Cleveland Heights, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Jib-crane transfer device for overhead carrier 1404,344; Aug. 30.

Bennington, Earl T., Cleveland Heights, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Jib-crane transfer device for overhead carrier 1404,344; Aug. 30.

Bennington, Earl T., Cleveland Heights, assignor to The Cleveland Crane & Engineering Company and Compline Company.

Benoît, Eiphege F., Seattle, Wash. Brake-band coupling. 1,644,628; Oct. 4. Bens, Samuel J., New York, N. Y. Baby carriage. 1,616,676; Feb. 8. Bens, Samuel J., New York, N. Y. Fuel tank. 1,633,062;

Bens, Samuel J., New York, N. Y. Bearing for link chains and belts. 1,634.641; July 5. Bens, Samuel J., New York, N. Y. Lubricant retainer or dust cover. 1,634.642; July 5. Bens, Samuel J., New York, N. Y. Interlocking link. Bens, Samuel J., New York, N. Y. Interlocking link.

Bens. Samuel J., New York, N. Y. Lubricant retainer hense, Samuel J., New York, N. Y. Lubricant retainer Bens. Samuel J., New York, N. Y. Lubricant retainer Bens. Samuel J., New York, N. Y. Interlocking link. 1,634,643; July 5.

Bens. Samuel J., New York, N. Y. Link for chains or beits. 1,634,644; July 5.

Bens. Samuel J., Henstmer, N. Y., assignor to Chain Saw Light J., Hense, N. Y., assignor to Chain Saw Corporation, Wilmington, Del. Chain-saw link and bushing therefor. 1,617,566; Feb. 15.

Bens. Samuel J., New York, N. Y., assignor to Chain Saw Corporation, Wilmington, Del. Chain-Saw link and bushing therefor. 1,617,656; Feb. 15.

Bens. Samuel J., New York, N. Y., assignor to Chain Saw Corporation, Wilmington, Del. Wheel or sprocket Saw Corporation, Saw Corporation, Wilmington, Del. Wheel or sprocket Chain Saw Corporation, Saw Corporation, Wilmington, Del. Wheel or Sprocket Chain Saw Corp

Bens, Samuel J., New York, N. Y., assignor to Chain Saw Corporation. Chain saw 1.652,295; Dec. 13. Bensa, Felice. (See Zinke, Alois, assignor). Bensa, Felice. (See Zinke, A., and Kilnger, assignors.) Bensing, Le Rue P., et al. (See Keeler, Lewis J., as-

ensing, signor.)

signor.)

Bensing, Le Rue P., assignor of one-half to G. P.
Koelliker, Cleveland Heights, Ohio. Electrolytic rectifier. 1.645,085; Oct. 11.

Benson, Bernhart A., assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Dashboard attachment for
cigar lighters. 1,616,173; Feb. 1.

Benson, Bernhart A., assignor to Chicago Electric Manufacturing Co., Edicago, Ill. Push and pull switch.
Benson, Davissor A., assignor to Standard Arch Company.
Frostburg, Md. Furnace-roof structure. 1,623,860;
Add. 5.

Apr. 5.

Benson, Blsie C., Seattle, Wash. Portable bath cabinet. 1.646.521; Oct. 25.

Benson, Fred J., assignor to The Fisk Rubber Company. Chicopee Falls, Mass. Making tire-casing repair patches. 1.651.801; Dec. 6.

Benson, George F., Syracuse, N. Y. Preventing leaking of oil from axie housings. 1.645.578; Oct. 18.

Benson, Harold M., Oakland, Calif. Shock absorber. 1.641.021; Aug. 30.

Benson, Harry F., delinery Corporation, New York, N. Y. Hydraulle pump. 1.629,141; May 17.

Benson, Harry F., Holyoke, Mass., assignor to Worthing-ton Pump and Machinery Corporation, New York, N. Y. Impeller bulancing and sealing device. 1,634.317; July 5.

Holling and Sching device. 1,634.31; Housen Henry R. Scattle, assignor to Standard Safety Ampliance Company, Everett, Wash. Towline. 1,649.654; Nov. 15.

Benson, Henry R., Scattle, assignor to Standard Safety Ampliance Company, Everett. Wash. Cargo hook. 1,649.655 Nov. 15.

Housen, Standard Safety Ampliance Company, Everett. Wash. Cargo hook. 1,643.737; Sept. 27.

Benson, Otto C. (See Luedtke, Charles E., assignor.)

Benson, Samuel C., assignor of one-fourth to J. J. Roby, Cleveland, one-fourth to R. W. Moore, and one-fourth to L. Standard Samuel C., assignor of one-fourth one-fourth to R. W. Moore, and one-fourth to L. Standard Samuel C., assignor of one-fourth to R. W. Moore, and one-fourth to L. Standard Samuel C., assignor to Moscific March 15.

Benson, Walter F., Fort Madison, Iowa. Fountain pen. 1,620,620; Mar. 15.

Benson, William A., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic Inc., Electric Inc., Chicago, Ill. Automatic Inc., Ill.

Bent, George H. Battle Creek, Mich. Delivery mechanism for carton-sealing machines. 1.618.911; Feb. 22.
Bent. George H. Bent. George H. Weigning machine. 1.631.117; June 7.
Bent, Walter G. Harrow, England, assignor to Eastman Kodak Company, Rochester, N. Y. Coated paper. 1.623.522; Apr. 5.
Bentley, Anson J., Niles, Ohio. Truck. 1.638.469;

Bentley,

signor.)

simor.)

Sentzen, Aanon, New York, N. Y. Ship's rigging. 1.642.716; Sept. 20.

Benussi, Andrew, Brooklyn, N. Y. Bath mitt. 1,619,180; Mar. 1.

Benway, David A. (See Brady, H. T., Benway, and Van Ness, David A. (See Brady, H. T., Benway, and Van Chine. 1,643,864; Sept. 27.

Benz, Charles A., and E. E. Van Cleave, Chicago, Ill. Reversible fulcrum. 1,613.014; Jan. 4.

Benzel, Emile L., Sherman, Tex. Grain mixer. 1,621,307; Mar. 16.

Mar. 15.
Benzing, Frank, Los Angeles, Calif. Trowel. 1,654,449;
Dec. 27.
Benzinger, Roland F. (See Cope, F. T., and Benzinger.)
Benzinger, Roland F. (See Cope, F. T., and Benzinger.)
Benzinger, Warden, Roland F. (See Ostwald, Walter, assignor.)
Beoddy, John A., Ronnoke, Va. Testing jack. 1,621,867;
Mar. 22.

Berbaum, Henry F., Chicago, Ill. Stirrup pad. 1,639,073;

Aug. 16.
Berchem, Alphonse H. E., et al. (See Ames, Charles F., assignor.) Berchem, Alphonse H. E., et al. (See Frederick, Rheuel

Assignor.)

Berchem, Alphonse H. E., et al. (See Frederick, Rheuef H., assignor.)

Berchem, Alphonse H. E., et al. (See Frederick, Rheuef H., assignor.)

Berdon, Albort E. East Orange, N. J. Pressure fuelfeed system. I,647,768: Nov. 1. N. J., assignor to Self-Berdon, Albort E. (See Trederick)

Pressure fuel-feed system for hydrocarbon engines. 1,639,645; Jun. 21.

Berean, Debort A. (See The Grand W. W., and Berean.)

Berean, Debort A. (See The Grand W. W., and Berean.)

Berean, Debort A. (See The Grand W. W., and Berean.)

Berean, Debort C. (See The Grand W. W., and Berean.)

Berean, Debort C. (See The Grand W. W., and Berean.)

Berean, Debort C. (See The Grand W. W., and Berean.)

Berean, Debort C. (See The Grand W. W., Trevor. Lockport. N. Y. Machine for operating on barrels or other containers. I.647,980: Nov. 8.

Berek, Max. assignor to the Firm Ernst Leitz. Optische-Werke, Wetzlar. Germany. Illuminator for micro-difference of the Grand W. W. (See The Grand W. W.)

Berek, Max. assignor to the Firm Ernst Leitz. Optische-Werke, Vetzlar. Germany. Illuminator for micro-difference of the Grand W. W. (See The Grand W. W.)

Berek, Max. assignor of the Firm Ernst Leitz. Optische-Werke, Vetzlar. Germany. Illuminator for micro-difference of the Grand W. W. (See The Grand W.)

Berek, Max. assignor of the Firm Ernst Leitz. Optische-Werke, Wetzlar. Grand Spill. (See The Grand Republished M.)

Berg, Alpert C., Chevenne Wells, Colo. Wheeled supporting device. J. (613,155; Jan. 4.

Berg, August O., Los Angeles, Calif. Rocking-horse toy.

Berg, Charles, assignor of one-half to V. Hobart, Minne-appolis, Minn. Tire rim. 1,618,405; Feb. 22.

Berg, Charles, C., Detroit, Mich. Lubricating apparatuse for internal-combustion engines. 1,637,600; Aug. 2.

Berg, Charles, C., Detroit, Mich. Lubricating apparatuse for internal-combustion engines. 1,637,600; Aug. 2.

Berg, Charles, C., Detroit, Mich., Attachment for windows. 1,666,522; Oct. 25.

Berg, Charles, C., Detroit, Mich., Attachment for windows. 1,666,522; Oct. 25.

Berg, Charle

Berg, Hans, Grand Rapids, Mich., assignor to The Bruns-stein Ballic-Colleder Company, Chicago, III. Game table. Des, 73:398; Sept., 6 Berg, Harold F., Clinton, Iowa. Milk-can steaming and water-heating system. 1,623,156; Apr. 5. Berg, Henry. (See Atwood, C. R., Berg, and Junkins.) Berg, John, assignor to Metal Specialties Manufacturing Company, Chicago, III. Electric connecter. 1,627,306;

Berg, John, assignor to Metal Specialties Manufacturing Company, Chicago, III. Visor. 1.645.216; Oct. 11. Berg, John, assignor to Metal Specialties Manufacturing Company, Chicago, III. Visor. 1.654.206; Dec. 27. Berg, Joseph, Long Island City, N. Y. Trunk. 1,617,699; Voh. 15.

Berg, Joseph, Long Island City, N. Y. Amplifying tone chamber for horns. 1,650,976; Nov. 29. Berg, M. M. (See Johnson, Alfred E., assignor.) Berg Manufacturing Company. (See Berg, Nanstad, as-

Signor.)

Berg. Nanstad, assignor to Berg Manufacturing Company,
Cleveland, Ohio. Pulley. 1,628,220; May 10.

Berg. Olav, Paterson, and M. Imhoft. Clifton, N. J.

Weighting fibers. 1,634,012; June 28.

Berg, Peter A., Janesville, Wis. Shaping mechanism.
1.051.505; Dec. 6
Berg, Ralph. (See Thomson, Roy W., assignor.)
Berg, Ralph. (See Thomson, Roy W., assignor.)
Berg, William H., South Orange, N. J., R. C. Whitman, Chatham, N. J., and E. F. Ash, Astoria, N. Y., assignors to Health Products Corporation, Newark, N. J. Chewing gum. 1,629.461; May 17.
Bergdoll, John G., assignor to York Manufacturing Com1.012.963; Jan. Furge device for refrigerating systems.
1.012.963; Jan. Furge device for refrigerating systems.

pany, York, Pa. Purge device for refrigerating systems. 1,012,903; Jan. 4.

Berge, Godskalk, assignor of one-third to H. Spurrier, Chicago, Ill. Decomposing insoluble minerals. 1,642,667; Sept. 20.

Berge, Joseph, Montclair, N. J. Crown for screw heads and the like. 1,613,921; Jan. 11.

Bergedorier Eisenwerk Aktiengesellschaft. (See Fischer, Bergelm, Frank H., Woodbury, N. J., assignor to E. I. du Font de Nemours & Company, Wilmington, Del. Tri-azo-nitrate explosives and producing the same. 1,620,714; Mar. 15.

Bergeim, Frank H., Woodbury, N. J., assignor to E. I. du Font de Nemours & Company, Wilmington, Del. Experim, Frank H., Woodbury, N. J., assignor to E. I. du Font de Nemours & Company, Wilmington, Del. Experim, Frank H., Woodbury, N. J., assignor to E. I. du Font de Nemours & Company, Wilmington, Del. Experim, Frank H., Woodbury, N. J., assignor to E. I. du Font de Nemours & Company, Wilmington, Del. Experim, Frank H., Woodbury, N. J., assignor to E. I. du Font de Nemours & Company, Wilmington, Del. Experim, H. H., Woodbury, N. J., assignor to E. I. du Font de Nemours & Company, Wilmington, Del. Experim, H. H., Woodbury, N. J., assignor to E. I. du Font de Nemours & Company, Wilmington, Del. Experim, H. H., Woodbury, N. J., assignor to reference and the first of th

assigner.)
Berger, Eugene F. (See Jenkins, J. D., and Berger.)
Berger, George P. (See Melum, H. A., and Berger.)
Berger, John D., Cincinnati, Ohio. Ground vase,
1.010,647; Feb. 8.
Berger, John G., Breckenridge, Tex. Winding and setting
mechanism for watches, 1.615,898; Feb. 1.
Berger, St. (S. T. 1144; Feb. 8.
Berger, Knute, Seattle, Wash. Controller. 1,630,516;
May 31.

Berger, F May 31 Berger, Knute, Seattle, Wash. Snatch block. 1,630,517; May 31.

Brake mechanism

Berger, Knute, Seattle, Wash. Br. 1,633,919; June 28.
Berger, Knute, Seattle, Wash. F. 1,641,614; Sept. 6.
Berger Manufacturing Company, The. Reversing gear. (See Schlafly,

Julius H., assignor.)

Berger, Matthew R., Philadelphia, Pa. Manner of making sickle hooks. 1,632,327; June 14.
Berger, Nathan I., New York, N. Y. Plate for lighting fixtures. Des. 73,823; Nov. 15.
Berger, Olile J., assignor to Chicago Forging & Manufacturing Company, Chicago, Ill. Hinge. 1,623,572; Apr. 5.

Apr. 5.

Berger, Samuel I., Newark, N. J. Statuette. Dcs. 71,774; Jan. 4.

Berger, Samuel I., Newark, N. J. Target toy. Des. 72,664; May 17.
Berger, Samuel I., Newark, N. J. Automobile toy. Des. 72,694; May 24.
Berger, Samuel I., Newark, N. J. Statuette. Des. 73,223; Aug. 9.

Berger, Samuel I. Newark, N. J. Statuette. Des. 73,277; Aug. 23.
103,277; Aug. 23.
104,277; Aug. 23.
104,000; Newark, N. J. Mechanical toy. 1,619,694; Mar. 1.
104,900; Mar. 104.
104,000; Mer. 104,00

Berggren Engineering Corporation. (See Hall, Frederick,

Bergh, Sven V., Stockholm, Sweden. Furnace and apparatus for utilizing shale or other bituminous materials. 1.618,566; Feb. 22.
Berghorn, Fred H., Latimer, Iowa. Tractor hitch. 1,613,763; Jan. 11.

Bereitsche Elektrizitits-Gesellschaft Gebr. Nelzen. (See Nolzen, Artur, assignor.) Bereitoff, Julieve E., assignor to Wolfe Improved Rotary Rota Weeller, Chenry, Wash. Underground gearing. 1.628.622; May 10.

Berglund, Herman, Brooklyn, N. Y., assignor to General Electric Company. Paper-break detector switch. 1,641,658; Sept. 6.

Bergiund, Sven O. F. A.: son, assignor to Aktiebolaget Filmfortofon, Stockholm, Sweden. System for produc-tion of the stockholm, Sweden. System for produc-lation of the stockholm, Sweden. System for pro-lation of the stockholm, Sweden for the Bergiund, Victor. (See Shirey, Ulyssis A., assignor.) Bergman, Carl, Bergenfield, N. J. Transformer. 1,631,935; June 14. Bergman, Knute W., et al. (See Rudberg, Emil, as-

Lödl. 1955; June 14.

Bergman, Knute W., et al. (See Rudberg, Emil, assignor.)

Bergman, Lars H., assignor, by mesne assignments, to Raymond Bros. Engineering Co., Chicago, Ill. Pulverized fuel furnace. Rel6,828; Loc. 27.

Bergman, Lars H., assignor, by mesne assignments, to Raymond Bros. Engineering Co., Chicago, Ill. Pulverized fuel Co., Chicago, and Co., Chicago, and Co., Chicago, Ill. Method of and apparatus for preparing, feeding, and burning pulverized fuel. 1,627,766; May 10.

Bergman, Sven R., Nahant, Mass., assignor to General Electric Company, Alternating-current motor. 1,622,607 Mar 29.

Bergmann, Carl G., Chicago, Ill. Arch support. Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Fittsburgh, Pa. Receptacle-Rilling apparatus. 1,635,160; July 5.

Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa. Receptacle-Rilling apparatus. 1,635,160; July 5.

Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa. Receptacle-Rilling apparatus. 1,635,160; July 5.

Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa. Receptacle-Rilling apparatus. 1,635,160; July 5.

Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa. Receptacle-Allered Company, Callergmann, Jann, Wa

Jan. 25.

Bergmann Packaging Machine Company. (See Bergmann, Christian N., assignor.)

Bergmann Packaging Machine Company. (See Bergmann, C. N., and Taylor, assignors.)

Bergmann Sun Eindhoven. Netherlands, assignor, by mesne assignments, to General Electric Company. Colled filament incandescent lamps. 1,337,034; July 26

Bergner, John C., Landsdowne, assignor to The Barber Asphalt Company, Philadelphia, Pa. Device for fasten-dashed Company, Philadelphia, Pa. Device for fasten-dashed Company, Philadelphia, Pa. Device for fasten-dashed Company, Philadelphia, Pa. Device, Company, Joseph E., Newton, assignor of one-balf to W. D. Dunn, Belmont, Mass. Window lock. 1,654,207: Dec. 27.

Bergquist, Arthur, Lindstrom, Minn. Apparatus for experience of the company of the

D. Dinn, Belmont, Mass. Villouw local Dec. 27.

Bergquist, Arthur, Lindstrom, Minn. Apparatus for extracting honey from the comb. 1,615,158; Jnn. 18.

Bergquist, Arthur E., Lindstrom, Minn. Saap hook. 1613,641,161.

Lindstrom, Minn. Potato-mashing machine. 1,631,910; June T.

Bergquist, Arthur E., Lindstrom, Minn. Potato-mashing machine. 1,631,910; June T.

Bergquist, Arthur E., Lindstrom, Minn. Protective apparatus for banks. 1,646,344; Oct. 18.

Bergg, Francis X., Milwaukee. Wis. Safe. 1,649,504; Nov. 15.

Rapszfajn. Samuel. (See McDuffle, Benjamin H., as-

Bergstein, signor.) Bergstein. Samuel. (See McDuffie, Benjamin H., as-

Bergstein, Samuel. (See McDuffie, Benjamin H., assignor.)
Bersstein. Samuel. assignor to The Interstate Folding Box Company, Middletown, Ohio. Paper box and the Box Company, Middletown, Ohio. Paper box and the like. 1,616,678; Feb. 8.
Bergstein, Samuel, assignor to The Interstate Folding Box Company, Middletown, Ohio. Dovice for moistening adhesive tape. 1,628,221; May 10.
Berestein, Samuel, assignor to The Interstate Folding Box Company, Middletown, Ohio. Dovice for moistening adhesive tape. 1,628,221; May 10.
Berestein, Samuel, assignor to The Interstate Folding Box Company, Middletown, Ohio. Box-sealing machine and the like. 1,639,282; Aug. 10.
Bergstein, Samuel, assignor to The Interstate Folding Box Company, Middletown, Ohio. Box-sealing machine and the like. 1,639,282; Aug. 16.
Bergstein, Samuel, assignor to The Interstate Folding Box Company, Samuel, assignor to The Interstate Folding Rox Company, Middletown, Ohio. Paper box and the like. 1,639,283; Aug. 16.
Bergstein, Samuel, assignor to The Interstate Folding Box Company, Middletown, Ohio. Paper box and the like. 1,644,411; Oct. 4.
Bergstein, Samuel, assignor to The Interstate Folding Box Company, Middletown, Ohio. Adhesive-applying mechanism for paper-box making machines. 1,647,672; Bergstein, Samuel, assignor to The Interstate Folding Box English Machines.

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Bergstein, Samuel, and A. C. E. Lindner, assignors to The Interstate Folding Box Company, Middletown, Ohio. Machine and making paper boxes. 1,624,885; Bept. 12.

Bergstein, Samuel, and A. C. E. Lindner, assignors to The Interstate Folding Box Company, Middletown, Ohio. Making paper boxes and the like. 1,640,638; Aug. 30.

Bergsten, Frank R., Elik River, Minn. Cultivator blade. 1,634,531; July 5.

Bergsten, John, Redondo, Calif., assignor, by mesne assignments, to Standard Machine Company. Elevator. Bergsten, John, Bedondo, Calif., assignor, by mesne assignments, to Standard Machine Company. Hook. 1,636,209; July 19.

Bergsten, John, Bedondo, Calif., assignor, by mesne assignments, to Standard Machine Company. Hook. 1,636,209; July 19.

Bergstrom, Nathan H., Neenah, Wis. Cylinder for paper-pulp machines. 1,619,052; Mar. 1.

Bergstrom, Tanger E., West Hartford, assignor to The Bergstrom, Tanger E., West Hartford, Conn. Producing radiators. 1,643,84; Oct. 2,658.

Bergyte, Elnar. Gee Freng, J., and Bergye.)

Beringer, Roscoe, assignor to General Motors Corporation, 1,616,648; Feb. 8.

Beringer, Roscoe, assignor to General Motors Corporation, Detroit, Mich. Binding strip for running-board treads. 1,617,617; Feb. 18.

Berk, Hichard, Sommerda, assignor to the Firm Rabelinsche Aug. 1,617,617; Sept. 6.

Berkander, George F. (See Battle, William T., assignor.)

Berkdoll, Charles E., assignor, by mesne assignments. to Probation of internal-combustion engines. 1,641,615; Sept. 6.

Berkander, George F. (See Battle, William T., assignor.)

Berkdoll, Charles E., assignor, by mesne assignments. to Probation of internal-combustion engines. 1,641,615; Sept. 6.

Berkander, George F. (See Battle, William T., assignor.)

Berkdoll, Charles E., assignor by mesne assignments. to Probation of internal-combustion engines. 1,641,615; Sept. 6.

Berkander, George F., See Battle, William T., assignor.)

Berkdoll, Charles E., assignor, by mesne assignments to Probation of the Firm Rebellicke and the Probation of the Firm Rebellicke and the P

Berkowitz, Anton, Awardis, N. J. Attachment for parasol Berkowitz, Aaron, Newardis, N. J. Attachment for parasol berkowitz, Sugaen E., assignor to Baltimore Paper Company, Kansas City, Mo. Feeding device. 1,646,230: Oct. 18.

Berks Engineering Co. Inc. (See Rahm, Robert C., assignor

signor.)

Berlin, David W., Rasunda, Sweden. Self-locking nut. 1,639,681,1 Aug. 23.

1,639,681 Aug. 23.

Aktiebolagate Ferrolegeringar, Stockholm. Sweden. Producing rustless iron and steel. 1,631,512; June 7.

Berlin. Samuel, et al. (See Friedland, Moshe, assignor) berliner, Emile, Washington, D. C. Wall. 1,628,531; May 10.

May 10.

Berliner, Robert. B. Stein. and W. Trautner. Elberfeld,
Germany, assignors to Grasselli Dyestuff Corporation.

New York, N. Y. Glyoxal-dianthraquinone compound.
1.646.782; Oct. 25.

Berlowitz, Max E. (See Ayers, J. G., Chapman, and
Berlowitz.)

Berlowitz.)

Berman, Harry L., Baltimore, Md. Artificial tree.
1,636,981; July 26.

Berman, Joseph. (See Hilton, Roland C., assignor.)

Berman, Joseph. (See Hilton, Roland C., assignor.)

Berman, Louis C. (See Santino, Salvatore, assignor.)

Bernard, Harry, Alentown, Pa., assignor to International

for windshields and the Marry Alentown of the Company of the Compa

Bernard, William A., assignor to The William Schollhorn Company, New Haven, Conn. Hand tool. 1,627,307; May 3. William A., assignor to The William Schollhorn Company, New Haven, Conn., Hand tool. 1,636,088;

July 19. Bernardin Bottle Cap Company. (See Spahn, August C.,

assignor.)

assignor.)

1.629.855; May 24.

Bernarducci, Louis, Bronx, N. Y. Hair-cutting machine.
1.633.063; June 21.

Bernard, Raoul, Bordeaux, France. Injector for refrigerating machines. 1,051.112; Nov. 29.

Berndt, Walter, Brooklyn, N. Y. Doll. Des. 72,749;
May 31.

Bernert, George, Milwaukee, Wis. Pneumatic material conveyer. 1,641,149; Sept. 6. Bernet, Martin S., New York, N. Y. Doll. Des. 73,737;

Nov. 1.

Bernhard, Frederick S., Brooklyn, assignor to Western
Electric Company, Incorporated, New York, N. Y. Regu-lator. 1,645,856; Oct. 18.

Bernhard, Harry I. (See Schrader, Gustave C. C., as-signor.)

Benaud, Johan, New York, N. Y. Mechanical window Processing and Processing and Processing and Processing and Bernhard, John B., Warren, assignor to Ironton Bernhard Bolier Company, Ironton, Ohio. Sectional heat-ing boiler. 1,619,235; Mar. 1, Bernhard, Louis, Boston, Mass. Fire box. 1,614,181;

Jan. 11. Bernhard, Morris, New York, N. Y. Hanger. 1,615,866;

Jan. 11.

Bernhard, Morris, New York, N. Y. Hanger. 1,615,866;
Bernhard, Richard, assignor to Traylor Engineering &
Mannfacturing Company, Allentown, Pa. Supporting
frame for hearings. 1,632,482; Sept. 13.
Bernhard, Richard, assignor to Traylor Engineering &
Mannfacturing Company, Allentown, Pa. Oiling device. 1,615,864; Dec. 6.
Bernhard, Max E. (See Adresse David W., assignor.)
Bernheim, Daniel P., Southbridge, Mass., assignor.)
Bernheim, Daniel P., Southbridge, Mass., assignor.)
Bernheim, Lynn B., assignor of one-half to S. Bernheim, Lynn B., assignor of many, Rochester, N. Y. Ophthalmic mounting and
method. 1,636,336; July 19.
Bernheim, Lynn B., assignor of one-half to S. Bernheim, Lynn B., assignor.)
Bernheim, Lynn B., assignor of one-half to S. Bernheim, Lynn B., assignor.)
Bernheim, Samuel. (See Bernheim, Lynn B., assignor.)
Bernheim, Samuel. (See Bernheim, Lynn B., assignor.)
Bernheim, Samuel. (See Bernheim, Lynn B., assignor.)
Bernheim, Joseph, Lac Frontiere, Quebec, Canada. Rut
filler for logging roads. 1,615,867; Feb. 1.
Butable chair. 1,651,506; Dec. 6.
Bernini, John, Allentown, Pa. Warp let-off mechanism
for looms. 1,622,757; Mar. 29.
Bernitz Furnace Appliance Company. (See Snow, Benjamin H. Basignor.)
Bernot, Walker, Leicester, England. Peranbulator.
1,644,706; Oct. 11.
Bernotow, Dominik M., assignor to Bunte Brothers,
Chicago, Ill. Multicellar mold. 1,619,44, May 8.
Bernstein, Alexander, assignor to W. S. Gluck, New York,
N. Y. Display apparatus. 1,622,409; Mar. 29.
Bernstein, Jesse S., and L. Hulbert; said Hulbert as-

Bernstein, Jesse S., and L. Hulbert; said Hulbert as-signor to Automaticket Limited, London, England. Ma-chine for issuing paper and printed matter in booklet, card, ticket, or other form. 1.635.171; July 12. Bernton, Harry S. (See Csonka, F. A., Bernton, and Jones.)

Bernst M. Brooklyn, N. Y. Rotary engine. 1,656,799; July 28. Berolzheimer, Clarence P., Chicago Heights, Ill. Bobbin for braiding machines. 1,634,607; July 5. Berrenberg, Reinhold A. (See McCann, C. F., and Ber-renberg.)

Berridge, Harold, South Kensington, London, England. Contractible and expansible supporting means suitable for use in the construction of pipens tunnels, bridges, and other bodies or structures. 1,624,712; Apr. 12.

bridges, and other bodies or structures. 1,624,712; Apr. 12.
Berrisford, William H., Stoke-on-Trent, England. Apparatus for separating coal from dirt and like foreign substances. 1,648,716; Nov. 8.
Berry, Althea T., Wolfeboro, N. H. Union undergarment. 1,633,372; June 28.
Berry, Charles A., Berta, Canada, assignor to Berry, Charles A., McMinnville. Oreg. Drill attachment for plows. 1,652,925; Dec. 13.
Berry, Charles A., McMinnville. Oreg. Drill attachment for plows. 1,652,925; Dec. 13.
Berry, Charles F., Boston, Mass. Combined door and table. 1,632,268; June 14.
Berry, Christopher H., Newark, N. J. Automatic grease cup. 1,632,267; June 21.
Berry, Clarence C., Valley Park, Mo. Electrical connection. 1,631,575; June 7.
Berry, Earl E., Beloit, Wis, assignor to Beloit Iron Works. Apparatus and method for applying wires to removable Berry, Earl E., assignor to Beloit Iron Works. Beloit, Wis, Paper-making machine. 1,623,187; App. 5.
Berry, Earl E., Beloit, Wis, assignor to Beloit Iron Works. Beloit, Wis, Paper-making machine. 1,623,187; App. 5.
Berry, Earl E., Beloit, Wis, assignor to Beloit Iron Works. Suction box. 1,644,87; Oct. 18.
Berry, Earl E., Beloit, Wis, assignor to Beloit Iron Works. Suction box. 1,644,87; Oct. 18.

Berry, Eu Edward R., Malden, Mass., assignor to General Company.

Berry, Edwart B., Quartz working. 1,020,011; Electric Company, Quartz working. 1,020,011; Electric Company, Method and apparatus for working quartz. 1,045,086; Oct. 11. Berry, Fred F., Los Angeles, Calif. Fox kennel. 1,618.404; Feb. 22. Berry, Fred F., Concord, N. H. Extension leg attachment for ladders. 1,631,513; June 7. H. Tire-rim tool. 1,647,122; Nov. 1, Wolfeboro, N. H. Tire-rim tool. 1,647,122; Nov. 1, Wolfeboro, N. H. Tire-rim tool. 1,647,122; Nov. 1, Wolfeboro, N. H. Tire-rim tool. 1,647,122; Nov. 1, Greenville, Miss. Cotton picker. 1,647,122; Nov. 1, Greenville, Miss. Cotton picker. 1,647,124; Nov. 1, Greenville, Miss. Cotton picker. 1,647,124; Nov. 1, Greenville, Miss. Cotton picker. 1,647,124; Nov. 1, Greenville, Miss. Cotton picker. 1,636,620; July 19. Greenville, Miss. Vehicle leveling device. 1,636,620; July 19. Greenville, Miss. Wehicle leveling device. 1,636,620; July 19. Greenville, Miss. Wehicle leveling device. 1,636,620; July 19. Greenville, Miss. Melian L., assignor.

Berry, J. H. (See Davis, Miriam L., assignor.)
Berry, James. (See Pickup, W., and Berry.)
Berry, John L., and W. Holden, Andover, Mass. Apparatus
for removing and inserting electric bulbs. 1,619,559;

for removing and the state of the following from th

proofing on the proof of the pr

Berry Shocker Incorporated. (See Dickinson, H. S., assignor.)

Berry Shocker Incorporated. (See Esping, Conrad and Shocker Incorporated. (See Yancey, S. H., and

Berty Shocker Incorporated. (See Stanley, Dickinson, assignors) to The Hooven & Allison Company, Kenia, Ohio. Nipper, 1,630,518; May 31.

Berscheid, John J., Champaign, III., and G. Garst, Urbana, III. Corner-bead erector, 1,630,601; May 31.

Berst-Forster-Dixfield Company. (See Stanley, George P.,

Bersted, Alfred and M., Chicago, Ill. Griddle or similar article. Des. 73,773; Nov. 8. Bersted Alfred and M., assignors to Bersted Manufacturing Company, Chicago, Ill. Electric heating device. 1,622,485; Mar. 29.

Manufacturing Company. (See Bersted, Alfred

Bersted Manufacturing Company. (See Bersted, Alfred and M. Assignors.)
Bersted, Martin. (See Bersted, Alfred and M.)
Bersted, Martin. C., San Diego, Calif. Flatiron.
I.620,188; Mart. 8.
Bersted, Martin C., San Diego, Calif. Automatic electric connection plug for electric heating apparatus.
I.620,188; Mar. 8.
Bersted, Martin C., San Diego, Calif. Automatic electric connection plug for electric heating apparatus.
I.620,188; Mar. 8.
Bersted, Martin C., San Diego, Calif. Automatic electric connection plug. I,620,185; Mar. 8.
Bersted, Martin C., Chicago, Ill. Grease gun. 1,621,308; Mar. 15.

Mar. 15.

Bertels, Arnold S., Tenafly, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Testing device. 1,682,058; June 14.

Berth, Arthur, Sheboygan, Wis. Automatic switch for electric lights. 1,682,22; May 10.

Berthelsen, Carl F., Frederiksberg, near Copenbagen, Denmark. Light projector. 1,625,763; Apr. 19.

Berton, Carl F., Frederiksberg, near Copenbagen, Denmark. Light projector. 1,625,763; Apr. 19.

Berthold, Gustave W., Chicago, Ill. Metering panel board. 1,616,174; Feb. 1.

Berthond, Marcel G., Pratt City, Ala. Milling ig. 1,646,988; Oct. 25.

Berthon, Paul, assignor to Société de Stearinerle et

1.646.988; Oct. 25.

Berthon, Paul, assignor to Société de Stearinerle et Savonnerie de Lyon, Lyon, France. Freparation from starch, of exters of the higher fatty acids, soluble in brythecarbons of the aromatic series. 1.651.366; Dec. 6.

Berthon, Paul, assignor to Société de Stearinerie de Cillulose exters. 1.651.960; Dec. 6.

Berthon, Paul, assignor to Société de Stearinerie de Savonnerie de Lyon, Lyon, France. Making soluble mixed low and high fatty-acid exters of cellulose. Berthon, Dec. 6.

Berthon, Paul, assignor to Société de Stearinerie de Savonnerie de Lyon, Lyon, France. Making soluble mixed low and high fatty-acid exters of cellulose. Berthon, Comparation of the same, chiefly to a navigation course recorder. 1,021.394; Mar. 15.

Retro. Mechanist integration on navigation controlled to a navigation contr

Bertram, Frank, Roslindale, assignor to The S. M. Howes 1675, 168 ton. Mass. Metal screen for fireplaces. Bertram, Louis H. (See Grover, A. D., and Bertram.) Bertrand, Claude F. B. G. (See Cogery, H. E. D., and Bertrand, Claude F. B. G. (See Cogery, H. E. D., and

Bertrand, Frederic E., Lynn, Mass., assignor to United Since Machinery Corporation, Paterson, N. J. Machine for operating on lasts. 1,624,916; Apr. 19.
Bertrand, Jean J. M., and L. J. H. Solanet, Paris, France. Internal-combustion engine with cylinders arranged in two opposite lines. 1,634,866; Jul 5.
Bertrand, Paul, La Croix, France. Ladder. 1,661,914; 6.

Dec. 6, Bertschy, Adolph J. P., Plattsmouth, assignor to D. O. Barnell, Omaha, Nebr. Auxiliary charge-forming means for internal-combustion engines. 1,627,139; May 3. Bertuccioli, Tomaso B., London, England. Drawing and suspending curtains. 1,62,256; Dec. 13. Berwick, Frederick W. (See Quick, W., Thomas, and Barwick)

House B., London, Entimum, and Company and Company.

House B. London, London,

Beskow, Berbhard M., Clearwater, Fla. Hair waver or crimper, 1,637,893; Aug. 2.
Besler, Charles, Company. (See Schwanhausser, Walter E., assignor.)
Bealey, Charles H., and Company. (See Miller, John, jr., Besse, Carl H., Tulsa, Okla. Swing lever for sand reels. 1,621,053; Mar. 15.
Bessee, Frank E. (See McDonald, W. H., and Bessee.)
Besseemer Gas Engine Company. (See Murray, Donald G., assignor.)
Besser, Statistic Company. (See Murray, Donald G., assignor.)
Besser, William, Wauwatosa, Wls. Manifold electric heater. 1,625,448; Apr. 19.
Bessert, Elecar H., Leominster, Mass. Vehicle signallamp casing. 72,348; Apr. 5.
Besser, Marie. (See Carley, William Jr., assignor.)
Bessler, Marie. (See Carley, William Jr., assignor.)
Bessler, August, assignor to Fried Krupp Aklengesell-schaft, Essen-on-the-Rhur, Germany. Locking device for the drive of machines with printing or feeling mechastic from the Company of the Compan

1,636,281, 340, Bessolo, William L., Clearwater, Callf. Pipe wrench. 1.651,575; Dec. 6. Bessolo, William L., Clearwater, Callf. Wrench. 1.651,576; Dec. 6. L. Clearwater, Callf. Tool. 1,651,577; Bessolo, William L., Clearwater, Callf. Tool. 1,651,577; Bessolo, William L., Clearwater, Callf. Tool. 1,651,577; Bessolo, William L., Clearwater, Callf. Tool. 1,651,677; Bessolo, William L., Clearwa

Dcc. 6.
Bessonett, Leland S., assignor, by mesne assignments, to
Standard Oil Company of California, San Francisco,
Calif. Fitting for draining lubricants from vehicle
motor cases. 1,613,738; Jan. 11.
Bessonett, Leland S., assignor, by mesne assignments, to
Standard Oil Company of California, San Francisco,
Calif. Drainage fitting for oil reservoirs. 1,613,739;
Jan. 11.
Best, Charlotte S., executrix. (See Best, Harry S., as-

Best, Charlotte S., executiva signorial properties of the control of the control

Signors.)
Best, Frank E., Scattle, Wash. Multiple-station automatic machine. 1.628.103: May 10.
Best, Frank E., Seattle, Wash. Governor mechanism. 1.644.167; Oct. 4.
Best, Frank E., Inc. (See Loebr, L. K., and Kind, as-

1,644.16f; Oct. 4:
Best, Frank E., Inc. (See Loehr, L. K., and Kind, assignors.)
Best, Frank E., Inc. (See Loehr, L. K., and Kind, assignors.)
Best, Brank E., Inc. (See Loehr, L. K., and Kind, assignors.)
Best, Harry S., assignor to John H. Best & Sons, Galva, Ill. Display rack. 1,626.501; Apr. 26.
Best, Harry S., assignor to John H. Best & Sons, Galva, Ill. Arry S., assignor to John H. Best & Sons, Galva, Ill. Arry S., assignor to John H. Best & Sons, Galva, Ill. Arry S., assignor to John H. Best & Sons, Galva, Ill. Display rack. 1,638.236; Aug. 9.
Best, Howard G. (See O'Brien, Frank, assignor.)
Best, Wilbur E., Smith Falls, Ontario, Canada. The Beswick, David, Brooklyn, N. Y. Portable sewing machine. 1,622,901; Mar. 29.
Best, Low John M., Woburn, Mass. Monkey wrench. 1,643,002; Sept. 20.
Beth, Elvron C., Los Angeles, Calif. Telephone lock. 1,620,622; Mar. 10.

Bethea, Peter H., Washington, D. C. Battery switch. 1,615,106; Jan. 18.
Bethel, Claude, Wilkinsburg, Pa., assignor to Westing-Health and the second of the s

Bethlehem Steel Company. (See Coffey, John J., as-Signor.)
Bethlehem Steel Company. (See Faunce, B. F., and
Dorris, assignors.)
Bethlehem Steel Company. (See Greenwell, Nevil, as-

signor.) Bethlehem Steel Company. (See Howells, F. E., and Leach, assignors.)

Bethichem Steel Company. (See Kinney, James A., as-

Bethlehem Steel Company. (See McCarty, Richard J., Jr., assignor.)
Bethlehem Steel Company. (See Morgan, Rees C., as-

Bethlehem Steel Company. (See Schenck, Charles, as-

signor.) Bethlehem Steel Company. (See Seavey, Elmer S., assignor.) Bethlehem Steel Company. (See Shimer, William R.,

assignor.) John, and J. G. Van Roo, deceased; E. F. Van Roo, executrix. Rochester, assignors to Twin High Transmission Company, Syracuse, N. Y. Variable; per grant for motor vehicles. 1,634.091; June 28.
Betke, Herman, Denver, Colo. Steam board. 1,620,753;

Bettcher, Carl W., assignor to The Eastern Machine Screw Corporation, New Haven, Conn. Die head. 1,615,676; Jan. 25.

Bettcher Stamping & Manufacturing Company, The. (See Bump, Spencer M., assignor.)

Betteley, Edward S. C., Surbiton, England. Electricallyoperated indicating device. 1.644,102; Oct. 4.

Bettendorf Company, The. (See Reck, Peter W., as-

Mar. 8.

Betts, Louis J. (See Betts, Clyde G., assignor.)

Betts, Orville R., San Fedro, Calif. Combined towel

rack and clothesilne. 1,620,590; Mar. 8.

Betts, Walter L. (See Kuhn, J. J., and Betts.)

Bettum, Oscar A., Washbarton, D. C. Watchmaker's

hand vise, 1,563,3335; Dec. 2, Dec. 2, Sasignor.)

Bettz, Charles, St. Louis, Mo. Material-fastening device.

1,639,072; Aug. 1, Barker, G., Company, Hammond, Ind. Mandolin attachment for planos.

Betz, Harry D., Kansas City, Mo. Adding machine.

1,644,559; Oct. 4.

Betz, Hallim G., assignor to Straube Plano Company,

Hammond, Ind. Mandolin attachment for planos.

Betzinger, August, Chicago, Ill. Skid chains. 1,613,922;

Jan. 11.

Betzler, Charles E., St. Louis, Mo. Advertising device.

Jan. 11.

Betzler, Charles E., St. Louis, Mo. Advertising device
1.639,482; Aug. 16.

Waupun, Wis., assignor to Paraneural Theoritic Machinery Co., Chicago, Ill. Knitting
hosiery, 1.622,857; Mar. 29.

Beucus, Abraham J., Waupun, Wis., assignor to Paramount Textile Machinery Co., Chicago, Ill. Hosiery,
1,623,024; Mar. 29.

Signor.)

Sevier, Hutchinson L., Duluth, Minn. Muscle beater.

1,625,977; Apr. 26.

Sevier, Philip H., Brooklyn, N. Y., assignor to National
Fire Proofing Company, Pittsburgh, Pa. Composite
floor structure. 1,646,183; Oct. 18.

Bevilacqua, Guillo, Clifton, N. J. Safety gas-stove lock.

1,632,111; June 14.

Bewsick, William W., Shelby, assignor to The Cleveland
Trust Company, Cleveland, Ohio. Round fabric belt
and method and apparatus for forming the same.

Bey W. William A. tona-or-the-Elbe, Germany. Steam gencrator. 1,642,098; Sept. 13.

Beyer, Albert, Berlin, Germany. Driving wheel.

1,630,886; May 31.

Beyer, Alfred H., Cleveland, Ohio. Box. 1,639,793;

Aug. 23.

Beyer, Otto S., assignor, by mesne assignments, to E. W.

Beyer, Otto S., assignor, by mesne assignments, to E. W. Bliss Company, Brooklyn, N. Y. Composite radiator and radiation-increasing device. 1,635,665; July 12. Beyer, Otto S., assignor, by mesne assignments, to E. W. Bliss Company, Brooklyn, N. Y. Radiator. 1,640,874;

Aug. 30.

Beyer, Robert, Meran, Italy. Transmission mechanism. 1,642,763; Sept. 20.

Beygrau, Paul T., Berkeley, Calif. Wall board. 1,635,922; July 12.

July 12.
 Beyland, Adolph S., Dayton, Ohio. Miter box. 1,653,886;
 Dec. 20.
 Beyland, Sidney A., and E. P. Reynolds, assignors to The Stromberg Carlson Telephone Manufacturing Company, Rochester, N. Y. Method and apparatus for braiding Beyler, Albert, assignor to Rheinische Gnumi- und Cellucide Fabrik, Mannheim-Neckarau, Germany. Manufacture of dolls and parts thereof from cellulose derivatives. 1,945,275; Oct. 11.
 Beynon, Daniel J., Chicago, Ill. Toothbrush. 1,616,484; Feb. 8.

Feb. 8.

Beytes, Leon H., North Plymouth, Mass. Head motion for looms. 1,615,736; Jan. 25.

Bezank, Joseph, assignor to Marshall Field & Company, Chicago, Ill. Playground slide. Des. 73,478; Sept. 20.

Edicago, Ill. Playground slide. Des. 73,478; Sept. 20.

Edizant, Sviney, Bristol, and R. Bezzant, London. England. Adjustable and attachable box cover. 1,622,128; Mar. 22.

Bezzenberger, Fred K., Cleveland Heights, and W. R. Zimmerman, assignors to The Bishop and Babcock Comtems. 1,615,825; Feb. 1.

Blanca, Joseph C., jr., Scranton, Pa. Mortising machine. 1,637,464; Aug. 2.

Blasizzo, Vergilio. (See Müller, Jakob. assignor.)

1,637,464; Aug. 2.
Blasizzo, Vergilio. (See Müller, Jakob. assignor.)
Bibard, René A., Bellevue, France. Flying apparatus.
1,629,198; May 17.
Bibb. Carlisle H. (See Zimmerll, W. F., and Bibb.)
Biber, Eagebert, Frovidence, R. I. Tobacco burner for
Blorgerial, Matthews, 1991, 13.
Blorgerial, Matthews, 1991, 13.
Blorgerial, Matthews, 1991, 13.
Blorgerial, Matthews, 1991, 13.
Blorgerial, Matthews, 1991,

signor.)

signor.)

Bicheroux, Max, Herzogonrath, near Aix-La-Chapelle, Germany. Transport table for rolled sheet glass. 1,621,054; Mar. 15.

Bickel. Ackert, Kansas City, Mo. Concrete mixer. 1,635,532; Nov. 29.

Bickel. Brederick L., Philadelphia, Pa. Washing machine 1,647,261; Nov. 1.

Bickel, Henry F., Plainfield, N. J., assignor to The New York AIr Brake Company. Light and load freight brake. 1,635,737; July 12.

Bickel, Henry F., Plainfield, N. J., assignor to The New York Air Brake Company. Angle cock. 1,642,215; Nov. 8.

Bickel, Henry F., Plainfield, N. J., assignor to The New York Air Brake Company. Push-rod latch for air brakes, 1.649.801; Nov. 22.
Bickell, William G., assignor of one-half to G. A. Bedding, Pittsburgh, Pa. Roofing clip. 1.622.6780; May 3.
Bickford, Harold D., Waterville, Me. Molder's flask. 1,622.623; Mar. 29.
Biddle, Arthur, Trenton, N. J., assignor to United Products Corporation of America. Composition of gum chicle dispersed in an aqueous colloid. 1,624.688; Apr. 12.
Biddle, Arthur, Trenton, N. J., assignor to United Products corporation of America. Insect lime and making the same. 1,624,689; Apr. 12.
Biddle, Arthur, Trenton, N. J., assignor to United Products corporation of America. Insect lime and making the same. 1,624,689; Apr. 12.
Biddle, Arthur, Trenton, N. J., assignor to United Products Corporation of America. Galvanoplasty. 1,622,575; Apr. 12.

ucts Corporation of America. Insect lime and making the same . 1,624,089; Apr. 12.
Biddle, Arthur, Trenton, N. J., assignor to United Products of America. Galvanoplasty. 162, 476; 1970.
Bido, Frank, Jersey City Heights, N. J. Screw driver. 1,616,300; Feb. 1.
Bidwell, Robert W. (See Jarnagin, Harry S., assignor.) Biebel, Herman M., Oakmont, Fa., assignor to Westinghouse Electric & Manufacturing Company. Indicating Biebel, Herman M., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric resistance furnace. 1,638,822; Aug. 16.
Bieber, Rudolf J., Hamburg, Germany. Manufacturing receptacles. 1,642,717; Sept. 20.
Biedermann, Carl Lucerne, Switzerland. Envelope. Bieble, Bernard, Sr. (See Sommer, J. L., and Biehl.) Bielefeldt, Herman, Berlin, Germany. Device for producing offset prints. 1,642,571; Sept. 27.
Biemer, Heinrich, Berlin, Germany. Padlock. 1,621,347; Mar. 15.

Biemer, He Mar. 15.

Mar. 15.
Bienenstein, Andreas, assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio. Mounting crasers within holder members. 1,648,256; Nov. 8.
Bienert, Hermann, Beuthen, Germany. Electric safety lock. 1,614,058; Jan. 11.
Blenz, Charles, St. Jean, Switzerland. Cylinder for internal-combustion englines. 1,617,008; Feb. 8.
Biero, Fred N., Cincinnati, Ohio. Burner. 1,617,744; Febr. 5.
Biero, Fred N., Cincinnati, Ohio. Guard for guarantee.

Beb. 15.
Bierce, Fred N., Cincinnati, Ohio, Guard for guys and the like, 1.627,423; May 3.
Bierce, Fred N., Cincinnati, Ohio, Guy anchor, 1.644,103; Oct. 4.
Bierman, Edwin W., assignor to Standard Four Tire Co., Keokuk, Iowa. Tubular molding apparatus. 1,637,465; Aug. 2.

Aug. 2.

Blerman, Edwin W., assignor to Standard Four Tire Co.,
Keekuk, Iowa. Tube-splicing method. 1,637,466;
Aug. 2.

Bermann, Edwin W., assignor to Standard Four Tire Co., Keokuk, Iowa.

Bierman, Edwin W., assignor to Standard Four Tire Co., Keokuk, Iowa.

Cuffing device for inner tubes.

1,637,467; Aug. 2.

Bierman, Harry C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Molded gent.

1,637,331 Aug. 2.

Gleindale N. Y., assignors to American Cyanamid Company. New York. N. Y. Ammonia cylinder cap.

1,627,371; May 3.

Biermanns, Josef, Karlshorst, Germany, assignor to General Electric Company. Protection of electric systems.

1,655,639; Nov. 29.

Biermann, Lozz, 449; May 10.

Biffex Products Company. (See Pancoast, William G., assignor.)

assignor.) iflex Products Company. (See Thompson, George W., Biflex Pro

Bigelow Arch Company. (See Bigelow, Frank B., assignor.)
Bigelow, Charles A. (See Shapleigh, J. H., and Bige-

Bigelow, Carries and Jow. Bigelow, Edmind S., Kansas City, Mo. Window-shade support. 1,635,700; July 12.
Bigelow, Frank B., assignor to Bigelow Arch Company. Detroit, Mich. Cooled furnace wall. 1,636,894; July 26. Bigelow Hartford Carpet Company. (See Sniffen, George W., assignor.)

Bizelow Hartford Carpet Company. (See Sniffen, George W., assignor.)
Bigelow Hartford Carpet Company. (See Vetter, Ignatius J., assignor.)
Bizelow, Milton B., Warren, Arlz. Motive-fluid generator.
Bizelow, Milton B., Warren, Arlz. Motive-fluid generator.
Bizgers, D. C., et al. (See Pest, Robert W., assignor.)
Bizgers, D. C., et al. (See Presa, Gilberto N., assignor.)
Bizgers, D. C., et al. (See Presa, Gilberto N., assignor.)
Bizgers, Drennec C., fr., Crafton, and L. Johnson, Ingram.
Pa. Method and apparatus for rolling sheetlike material. 1.64,235; Dec. 27.
Bizzlo, John, Little Falls, N. J. Roller skate. 1.617,984;
Bizzlo, John, Little Falls, N. J., Roller skate. 1.617,984;

Feb. 15.

Biggs, Charles H., London, England. Making horns for sound-reproducing apparatus. 1,654,208: Dec. 27.

Biggs, Gorge A., assignor to The James Leffel and Company, Springfield, Ohlo. Runners for turbines. 1,613,816: Jan. 11.

Bigler, Edward A., Auburn, Ill. Automatic latch mechanism for gates. 1,642,534; Sept. 13.

Bignell, Edward, Lincoln, assignor to Concrete Piling Co., Seward, Nebr. Pile. 1,619,053; Mar. 1. Bignell, Edward, Lincoln, assignor in Concrete Piling Co., Seward, Nebr. Pile. 1,621,232; Mar. 13. Great Co., Seward, Nebr. Method and apparatus for river control. 1,622,568; Mar. 29 Bignell, Edward, Lincoln, Nebr. Apparatus for river control. 1,643,691; Sept. 27. Bignell, Edward, Lincoln, Nebr. Apparatus for removing Bignell, Edward, Lincoln, Nebr. Apparatus for removing Control Contr

Billes, S. O., & Company. (See Bigney, Sidney O., Bigney, S. Company, Cassignor, Company, Cassignor, Cassignor

Signoria, Henry S., Elk City, Okla. Snap hook. Bilderback, Henry S., Elk City, Okla. Snap hook. Bilderback, Henry S., Elk City, Okla., and C. A. Franke, Little Rock, Ark. Method of and machine for molding rolls. 1,630 106; May 24.
Bildstein, Paul, and E. Seidel, Elberfeld, Germany. Device for stopping railway trains independently of the driver. a1c27.724; May 10.
Bless, Andrew W., Glasgow Cotland. Tipping appa-Bless, Andrew W., Glasgow Cotland. Tipping appa-Bless, Reginald W., Ealcombe, and J. Plquet. Welwyn Heath, near Welwyn, assignors to A. Reyrolle & Company, Limited, Hebburn-on-Tyne, England. Protective arrangement for duplicate-feeder electric systems. 1,652,080; Dec. 6.
Bless, William A., Chicago, Ill. Shade-supporting structury connecter. 1,641,837; Sept. 6.
Bill. Earl M., Schenectndy, N. Y., assignor to General Electric Company. System of electrical distribution. 1,633,804; June 28.
Bille, Léon, Nogent-sur-Marne, France. Pipes, tubes, and

1,633,804; June 28.
Billif, Léon, Nogent-sur-Marne, France. Pipes, tubes, and the like and method of and apparatus for making the same. Re16,523; Jan. 4. elphiladelphia, Pa. Stnir-controlled electric light switch 1503,075; Jan. 4. Stnir-controlled electric light switch 1503,075; Jan. 4. Stnir-controlled in the construction. 1,651,323; Nov. 29.
Billict, Barney, and S. Hellweil. New York. N. X.; said Hellweil assignor to said Billet. Skull-shaping means 1,651,439; Dec. 6.
Löst-439; Dec. 6. (See Winkler, John, assignor.) Billictioux, Chester A. (See Rundgren, J., and Billetdoux, Chester A. (See Rundgren, J., and Billetdoux.)

doux.)

Billhimer, Frank M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Relay system. I, 616.677; Jan. 25.

Billings, Clarence E., New Haven, Conn. Closure member for receptacles or the like. 1.642.138; Sept. 13.

Billings, Frank. (See Greenlenf, Robert P., assignor.)

Billings, Frank. (See Greenlenf, Robert P., assignor.)

Billings, Frederic C., assignor to The Billings & Spencer Company, Hartford, Conn. Drop hammer. 1.643.380; Nov. 13.

Nov. 10.
Billings, Frederick C., Minmi, Fla. Drying pad for pianos. 1,650,004; Nov. 22.
Billings, Richard B., and J. E. O'Toole, Utica, N. Y. Cable puller. 1,653,698; Dec. 27.
Billings & Spencer Company, The. (See Billings, Frederic C., assignor.)
Billings & Spencer Company, The. (See Talcott, Morton C., assignor.)

Billingsley, Ora. (See Raines, R. D., and Billingsley.)
Billingsley, Ora, New York, N. Y. Lock. 1,645,579;
Billingsley, William H., Florence, Ala. Ornament for automobile radiator caps. Des. 71,775; Jan. 4.
Billingsley, William H., Florence, Ala. Radiator cap. 16,26,177; Apr. 26.
Billion, François, Parls, France. Purification of vaccines. 1,649,531; Nov. 15.
Billion, François, assignor to Les Etablissements Poulence Frères, Faris, France. Salts composed of alkaloids and the same. 1,643,692; Sept. 27.
Billion, Frederic, and J. Bohli, assignors to Scintilla Aktiengesellschaft, Solothurn, Switzerland. Ignition machine. 1,620,060; Mar. 8.
Billwiller, John, Seehausen, Germany. Loosening vegetable fibers. 1,649,281; Nov. 15.
Biltgen, George. (See Jensen, A. C., Moloney, and Biltgen,

gen.)

Bilz, Anton, Berlin, Germany. Pile arrangement in sheetfeeding apparatus. 1.614.059; Jan. 11.

Bindemann, George H., Wauseon, Ohio. Poultry fountain.
1,627,140; May 3.

Binder, Adolph B., Spokane, Wash. Grate bar and support. 1,645,735; Oct. 18.

Binder, Adolph B., Spokane, Wash. Curtain and shade
roller mounting. 1,053,145; Dec. 20.

Brider, Mainer, 1,627,424; May 3.

Binder, Karl, Stuttgart, Germany. Developer for photographic plates, films, papers, and the like. 1,617,432;

Figh. 15.

Bindon, James, Newport, R. I. Vase. 1,615,611: Jan. 25.

graphic plates, films, papers, and the like. 1,617,434; Feb. 15.

Bindon, James, Newport, R. I. Vase. 1,615,611; Jan. 25.

Bindon, James, Newport, R. I. Automobile accessory. 1,651,943; Dec. 6.

Bindon, James, R., Pallas, Tex. Window-shade guide. Bindon, James R., Pallas, Tex. Window-shade guide. Bing, Julius, assignor to the Firm Magnet-Werk G. m. b. H. Eisenach, Thuringia, Germany. Electromagnetic friction clutch. 1,622,939; Man. 29.

Bing, Julius, assignor to Magnet-Werk G. m. b. H. Eisenach, Thuringia, Germany. Friction body for multiple-disk clutches and the like. 1,625,933; Apr. 26.

Bing, Julius, assignor to the Firm Magnet-Werk G. m. b. H. Eisenach, Germany. Electromagnet-Apparate, Eisenach, Germany. Electromagnet-Apparate, Eisenach, Germany. Electromagnet-Apparate, Eisenach. Spezialfabrik für Elektromagnet-Apparate, Eisenach. Spezialfabrik für Elektromagnet-Apparate, Eisenach. Spezialfabrik für Elektromagnet-Apparate, Eisenach. Spezialfabrik für Elektromagnet-Apparate, Eisenach, Thuringia, Germany. Electromagnet-Apparate, Eisenach, Thuringia, Germany. Electromagnet-Apparate, Eisenach, Spezialfabrik für Elektromagnet-Apparate, Eisenach, Spezialfabrik für Elektromagnet-Apparate, Eisenach, Spezialfabrik für Elektromagnet-Apparate, Eisenach, Thuringia, Germany. Variable-spec gen. 1,650,594; Nov. 29.

Bing Worke, (See Reischl Ludwig assignar)

Bing Werke. (See Reischl, Ludwig, assignor.) Bing-Werke, vorm. Gebr. Bing A-G. (See Reischl, Ludwig,

Bing Werke. (See Reischl, Ludwig, assignor.)
Bing-Werke, vorm. Gebr. Bing A-G. (See Reischl, Ludwig, assignor.)
assignor.)
assignor.)
vorm. Gebr. Bing A-G. (See Reischl, Ludwig, assignor.)
Bingaman, John R., West Reading, Pa. Lock valve for gasoline motor-supply tanks. 1,621,486; Mer. 22.
Bingaman, John R., West Reading, Pa. Fluid brake mechanism for motor shafts. 1,621,635; Mar. 22.
Bingaman, John R., and W. R. Nagle, Reading, Pa. Liegging, 1,618,784; Juniub, Pa., assignor to Pittsburgh Transformer Company. Transformer cooler. 1,641,247; Sept. 6.
Bingaw, Robert V., Pittsburgh, Pa., assignor to Pittsburgh Transformer Company. Transformer tank. 1,641,248; Sept. 6.
Bingham, Hurold E., assignor to himself and C. D. Thophura, Montreal, Quebec, Canada. Relief valve. Thophura, Montreal, Quebec, Canada. Relief valve. Tool Company, Toledo, Ohlo. Wheel-hub construction. 1,632,214; June 14.
Bingham, Jeremiah, assignor to The Bincham Stamping & Tool Company, Toledo, Ohlo. Wheel-hub construction. 1,632,214; June 14.
Bingham Lorimer Manufacturing Company. (See Lorimer, G. W., and McVicker, assignors.)
Bingham Stamping & Tool Company, The. (See Bingham, Jeremiah, assignor). The Coling Manufacturing Company. The Collect of Col. 4.
Binkley, Roy S. L. E. Stutsman, and T. E. Grove.

Binkley, Roy S., L. E. Stutsman, and T. E. Grove, Dayton, Ohio. Antrum burr. 1.630,239; May 24, Binks, Harry D. (See Sausen, B. R. and Binks, as-

nks, Harry D., Oak Park, assignor to Binks Spray Equipment Co., Chicago, Ill. Spray gun. 1,650,686; Nov. 29. Binks Spray Equipment Co. (See Binks, Harry D., as-

Binks Spray Equipment Co. (See Sausen, B. R., and

Binks Spray Equipment Co. (See Sausen, B. R., and Rinks, assignors.) Philips of the Company of the Control of t

Biondi, Saverio, Los Angeles, Calif. Fowder puff.
1629,772; May 24.
Biondo, Philip M., Brooklyn, N. Y. Graphic instrument.
1,614,341; Jan. 11.
Bir, Herman M., Lima, Ohio. Diffusing and coloring rays of light. 1,625,407; Apr. 19.
Birch, Graphic instruments and the like. 1,634,821; July 5.
Birch, Charles H., Joliet, III. Apparatus for comminuting materials. 1,646,184; Oct. 18.
Birch, Gustaf B. [See Cameron, B. H., Beaumont Co., Philadelphia, Pa. Fristening, hoisting rope to skip buckets and counterweights. 1,632,755; June 14.
Birch, Robert W., Livingston, Mont. Collapsible basket. 1,639,921; Aug. 23.
Birch, William T., Chicago, III. Foot pad. 1,625,187; Birchard, Ford G., Lewisburg, Pa. Airship and making the same buoyant. 1,624,917; Apr. 19.
Birch-Field, Charles A., Larchmont, N. Y. Inductance unit. 1,635,511; Oct. 18.
Bird, Edward S., and F. B. Cockburn, assignor: Bird, Edward S., and F. B. Cockburn, assignor; Chichard, Chicago, Shipley Machine Tool Company, Cincinnati, Ohio. Lathe. 1,625,598; May 100,000; May 100,00

Bird, Frank P., Childs, Md. Combination box. 1,616,436; Feb. 8.
Bird, George W. (See Berry, R. W., and Bird.)
Bird, Len O., Oceanpark, Calif. Hitch for earth scrapers, 1,616,212; Feb. 1.
Bird Machine Company. (See Clarke, Ralph S., assignor.)
Bird & Son, Inc. (See Hale, William E., assignor.)
Bird & Son, Incorporated. (See Wyman, George R., asBird & Son, Incorporated. (See Wyman, George R., as-

signor.) Bird, Walter J., Flushing, N. Y. Menu holder. 1,632,783; June 21.
Bird, William, Belmont, Calif. Check valve. 1,613,076;

Bird, William, Belmont, Calif. Check valve. 1,613,076; Jan. 4.

Birdsall, Charles G., Elmhurst, assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y. Dry cell., 1,641,524; Sept. 6.

Birdsey, Charles R., Hinsdale, assignor to United States Gypsum Company, Chicago, Ill. Apparatus for making plastic building members. 1,615,815; Jun. 25.

Birdsey, Charles R., Hinsdale, assignor to United States Gypsum Company, Chicago, Ill. Apparatus for making plastic building members. 1,615,815; Jun. 25.

Birdsey, Charles R., Hinsdale, assignor to General Seafoods Corporation, Charles R., Hinsdale, assignor to General Seafoods Corporation, Gloucester, Mass. Method in preparing foods and the product obtained thereby. Rel6,740; Sept. 20.

Birdsey, Clarence, assignor to General Seafoods Corporation, Gloucester, Mass. Method in preparing foods and the product obtained thereby. Rel6,740; Sept. 20.

Birdsey, Charles R., Hunwer, Fa. Windshield cleaner. 1,630,921; May 31.

Birlcenmeier, August G., et al. (See Aichele, Ernest, assignor).

Birkinneier, August G., et al. (See Alchele, Ernest, assignor.)
Birker, Hermann, Dusseldorf, Germany. Perspective chart. I. (18,164; Feb. 22.
Birkhead, Claude V. (See Covey, Charles A., assignor.)
Birkholz, Edward P., Colonia, N. J. Circuit closer.
Birkholz, Edward P., Colonia, N. J. Circuit closer.
Birkholz, Joseph A., Orange, N. J. Building unit. 1.634.283; July 5.
Birkingt, Marc, Bois Colombes, France. Valve-gear-operating device. 1.639.583; Aug. 16.
Birkingt, Marc, Bois Colombes, France. Gear-wheel trans-Birkin, Charles W. and E. T. Sands, assignors to Birkin and Company, Broadway, Nottingham, England. Lace mat. Des. 73.059; July 19.
Birkin, Charles W., and E. T. Sands, assignors to Birkin and Company, Broadway, Nottingham, England. Lace mat. Des. 73.060; July 19.
Birkin, Charles W., and E. T. Sands, assignors to Birkin and Company, Sortingham, England. Lace mat. Des. 73.060; July 19.
Birkin, Charles W., Lamcote, Birkin and Company, Nottingham, England. Machinemade lace and manufacturing same. I. 618.793; Peb. 22.
Birkin, Charles W., Lamcote, Radeliffe-on-Trent, H. L.
Birkin and A. Coxon, assignors to Birkin and Company, Nottingham, England. Manufacture of lace, 1,622.021; Birkin, Charles W., Lamcote, Radeliffe-on-Trent, H. L.
Birkin and Company, (See Birkin, C. W., and Sands, assignost Birkin and Company. (See Birkin, C. W., and Sands, as-

rkin and company. (See Birkin, U. W. and II. L., and and Coxon, assignors.) and Coxon, assignors.) birkin, Harry L. (See Birkin, C. W. and II. L., and thin, Harry L. (See Birkin, C. W. and II. L., and the low of the country of the flow of the country of the

Coxon.)
Birmann, Rudolph, assignor to The De Laval Steam Turbine Company, Trenton, N. J. Controlling the flow of elastic fluid in turbines. 1,613,868; Jan. 11.
Biruingham Small Arms Company Limited, The. Steam Normin, George, assignor).
Birmingham, Thomas H., Jamiaca, assignor, by mesne assignments to Curtiss Aeroplane and Motor Company, Inc., Garden City, N. Y. Aerofoll. 1,613,602; Jan. 1, 116.

Carl, Marblehead, Ohio. Meat cutter. 1,643,829;

Birc, Carl, Marbhead, Ohio. Rest C. Sept 27.

Bron, Wilfred. (See Gervais, M., and Biron.)

Bircil, William, Chehalis, Wash. Self-righting toy.

1,614,227; Jan. 11.

Birtch, Fred W., L. Ports. Ind., assignor to EastianBirtch, Fred W., L. Ports. Ind., assignor to EastianBirtch, Fred W., L. Heating Haudida. 1822,569; Man. 29.

Birtch Laboratories inc. (See Birtch, Fred W., assignor.)

Bisbee, Walter G., and B. P. Hoffman, Bristow, Okla.

Agitator for oil wells. 1,616,623; Feb. 1.

Bisbee, Walter G., and B. P. Hoffman, Bristow, Okla.

Bisbee, Walter G., and B. P. Hoffman, Bristow, Okla.

Bischof, Bernhard, Geneva, Switzerland, Engine with
rotating cylinders arranged radially. 1,646,185;

Oct. 18.

Bischof, Bernhard, Geneva, Switzerland, Engine with rotating cylinders arranged radially. 1,646,185; Bischof, Ulrich, Horgen, Switzerland, assignor, by mesne assignments, to Smyth Manufacturing Company, Hart-ford, Conn. Apparatus for sheet-fastening machines for applying adhesive to the sheets. 1,646,788; Oct.

25.
Bischoff, Hans, Corono, N. Y. Illuminating pencil. 1,439,636; Nov. 15.
Bishop and Babecck Company, The. (See Bezzenberger, F. K., and Zimmerman, assignors.)
Bishop & Babecck Company, The. (See Müller, F. W., and Weatherhead, assignory, The. (See Patton, Hal T., assignory).

Bishop & Babcock Company, The. (See Müller, F. W., and Weatherhead, assignors.)
Bishop & Babcock Company, The. (See Patton, Hal T., assignor).
Bishop & Babcock Manufacturing Company, The. (See Bishop, Benjamin S. T., Shrewsbury, and P. E. Dow, Leicester, Assignors to Lelland-Gifford Company, Worcester, Assignors to Lelland-Gifford Company, Worcester, Assignors to Lelland-Gifford Company, Worcester, Mass. Electric reversing device for tapping machines. 1,640,177, Aug. 23.
Bishop, Benjamin S. T., Shrewsbury, assignor to Leland-Gifford Company, Worcester, Mass. Belt shipper, 1,653,250, pec. 20.
Bishop, Charley J., Cedar Falls, Iowa. Glass-cutting holder, 1,649,282; Nov. 15.
Bishop, Charley J., Cedar Falls, Iowa. Wind motor. 1,633,842; June 28.
Bishop, Garrie R., Runnells, Iowa. Wind motor. 1,632,000; Mar. 8.
Bishop, George E., Cleveland, Ohio. Automobile inclosure. 1,420,003; Mar. 8.
Bishop, Joseph W., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del. Bishop, Joseph W., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del. Combined phonograph and radio receiving apparatus. Bishop, Joseph W., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del. Combined phonograph and radio receiving apparatus. Bishop, Joseph W., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del. Combined phonograph and radio receiving apparatus. Bishop, Joseph W., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del. Combined phonograph and radio receiving apparatus. Bishop, Joseph W., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del. Combined phonograph and radio receiving apparatus. Chicago, Ill. Lugagae carrier. 1,636,033; Dec. 27.
Bishop, Joseph W., Maskegon, Mich., assignor to Chioroder ivatives of N-dihydro-1,21,12-anthraquinone-azine and making same. 1,637,851; Aug. 2.
Bishop, Joseph W., Maskegon, Mich., assignor to E. E. Child Company, Spartanbu

Öct. 18.

Bishop, Stanley H., and N. F. McNaught, Chicago, assignor to Cross Manufacturing Company, Woodstock, Ill. Spring for shock absorbers. 1,642,058; togt. 13.

Bishop, Wayne R. (See Clift, James A., assignor.)

Bishop, William T., Henderson, Tenn. Portable stove. 1,622,176; Mar. 22.

Bisell, Carl M. 22.

Bissell, Carl M. 32.

Bissell, Carl M. 34.

Bissell, Carl M. 35.

Bissell Curpet Sweeper Company. (See Owen, Ira J., assignor.)

Bissell Carpet Sweeper Company. (See Owen, I. J., and Bouwmeester, assignors.) Bissell Carpet Sweeper Company. (See Solliday, Foster

Bissell Carnet Sweeper Composition.

K. assignor.)
Bissell, Richard E., Cleveland Heights, assignor to Thompson Products Inc., Cleveland, Ohio. Poppet valve.
1.615.211; Jan. 25.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion Mich. Collapsible rack. 1.612,063

Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,636,163; July 19.

Elterman, Clifford, (See Cloud, H. D., and Ritterman, Bittlek, Halton A., Taylor, Tex. Manually-carried trans-porting device for electrical conductors. 1,623 823; Apr. 5. Bittinger, Charles, Duxbury, Mass. Production and utili-zation of dichrole laks 1,620,265 (May 17.

Bittner, Andrew F., New York, N. Y. Pipe. 1,628,649; May 17.

Bittner, Andrew F., New York, N. Y. Pipe. 1,622,639; May 17.

Bittner, Whistian, Elwood, assignor of forty-nine one-tial for automobiles. 1,643,633; Nov. 8.

Bittner, William, New York, N. Y. Sheet-Metal-Bending Machine. 1,613,307; Jan. 4.

Bittner, William H. (See Winkler, C., and Bittner.)

Bitzel, Andrew, assignor to The Thermo Instrument Compensation of the Thermo Ins

Biva, Lucien, Brooklyn, assignor to Titus Blatter & Com-pany, New York, N. Y. Textile fabric. Des. 72,752; Biva, Lucien, Brooklyn, assignor to Titus Blatter & Com-pany, New York, N. Y. Textile fabric. 72,753; May 31.

Bixly, Alvan H., Hyde Park, Mass., assignor to Peabody Logis deering Corporation. New York, N. Y. Air regis—likely, Milo P., assignor of one-third to M. Engmark, Chicago, Ill. Loading machine. 1,613,923; Jan. 11. Bixly, Milo P., assignor of one-third to M. Engmark, Chicago, Ill. Loading machine. 1,613,923; Jan. 11. Bixly, Walter. (See Hathaway, E. F., and Bixly). Bixly, Walter, Assignor to Shawmut Engineering Company, Boston, Mass. Tube frame. 1,621,458; Mar. 15. Bixler, L. B. Henry, and W. L. Bixler, Fresno, Calif. Garment conveyer. 1,645,315; Oct. 11. Bixler, William L. (See Bixler, L. B. Henry, and W. L. Bixler, William L. (See Bixler, L. B. Henry, and W. L. Bixler, William L. (See Bixler, L. B. Henry, Motorwick, Long, and M. Y. Mitchell, Lynbrock, Long, and N. Y. Motorwick Iong, Phytocathon from gas. 1,624,206; Apr. 12. Bjork, Carl, Wilmington, Calif. Rowlock. 1,650,418; Nov. 22.

Bjork, Carl, Nov. 22.

Nov. 22.

Sjork Victor T., St. Paul, Minn. Shaker bar for locomotive grates. 1,629,674; May 24.

Bjorkholm, John E., Milwaukee, Wis., and G. Blyberg, Minnaepolls, Minn. Blower nozzle. 1,653,889; Dec. 27.

Bjorkholtz. Gustuv A., Chicago, Ill. Liquid-dispensing. Chicago, Ill. Liquid-dispensing. Bjorkholtz. Gustuv A., Chicago, Ill. Liquid-dispensing. Bjorkhund, Felix, Fairport Harbor, Ohio. Power operated handsaw. 1,628,503; Apr. 26.

Bjorkhund. Olaf, St. Paul, Minn. Hot-water heater. 1,644,222; Oct. 4.

Björkman, George E., Parls, France. Apparatus for permanent undulation. 1,642,867; Sept. 20.

Bjorkhund. Jp. Dh. G., Chicago, Ill. Billard table. Blabon. Geo. W., Co., The. (See Cartwright, Frank, assignor.)

Blabon, George W., Company, The. (See Tamberlin, John, assignor.)
Blacher, Joseph, et al. (See Burgess, Pearl M., assignor.)

Blacher, Joseph, et al. (See Burgess, Pearl M., assignor.)

Black, Archibald. Garden City, N. Y. Freight-alrplane body. 1,625,700; Apr. 19.

Black, Archibald, Garden City, N. Y. Airplane and other aircraft body. 1,625,701; Apr. 19.

Black, Archibald, Garden City, N. Y. Airplane and other aircraft body. 1,625,701; Apr. 19.

Black & Decker Manufacturing Company, The. (See Decker, Alonzo G., assignor.)

Black & Decker Manufacturing Company, The. (See Stumpf, Walter, assignor.)

Black Edgar T., Winston-Salem, N. C. Mechanical movement. 1,648,633; Sent. 27.

Black, Edgar T., Winston-Salem, N. C. Mechanical movement. 1,648,633; Sent. 27.

Black, Edgar T., Winston-Salem, N. C. Mechanical movement. 1,648,633; Sent. 27.

Black, Eugene, New York, N. Y. Clara and cigarette dispensing device. 1,650,181; Nov. 22.

Black, Eugene, New York, N. Y. Clara and cigarette dispensing device. 1,650,181; Nov. 22.

Black, Eugene, New York, N. Y. Clara and cigarette dispensing device. 1,650,181; Nov. 22.

Black, Eugene, New York, N. Y. Lassignor to Western Electric Company, Incorporated, New York, N. Y. Carrier wave signaling system. 1,620,629; Mar. 15.

Black, Harold S., Rewark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Frequency translating circuits. 1,653,837; Dec. 27.

Black, Harold S., Bast Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Frequency translating circuits. 1,653,837; Dec. 27.

Black, Day C. Decker, P. La. Process, and apparatules.

Black, John C., Destrehan, La. Process and apparatus for fractionating hydrocarbon oils. 1,652,886; Dec. 13.

Black, John C., Destreban, La., and W. D. Rial and R. T. Howes, Los Angeles County, assignors to Pan American Petroleum Company, Los Angeles, Calif. Treatment of petroleum products. Re16,679; July 12.
Black, John E., Mendotta, Ill. Machine for edge-uniting veneers. 1,643,194; Sept. 20.
Black, Lee J., Beaumont, Tex. Pump jack. 1,620,795;

Black, Lee J., Beaumont, Tex. Pump jack. 1,620,765; Black, Lee J., Beaumont, Tex, Gate valve. 1,624,465; Apr. 12. Black, Lee J., and E. E. Swope, Beaumont, Tex. Screw pump. 1,624,466; Apr. 12. Black, Lester C., Los Angeles, Calif. Rotary drill bit. 1,621,921; Mar. 22. Black, Lester C., Los Angeles, Calif. Multistage pump plunger. 1,645,6134; Oct. 18. Black, Lester C., Los Angeles, Calif. Casing cutter. 1,643,672; Sept. 27. Black, Percy S. (See Negly, L. A. and Black.) Ellack, Percy S. (See Negly, L. A. and Black.) Ellack, Raymond P., Rockton, Ill. Lubricant retainer.

1843.572; Sept. 27. 1843.572; Sept. 27. 1854.572; Sept. 27. 1854.572; Sept. 27. 1854.572; L. A. and Black.) 1854.572; L. Lubricat retainer. 1854.63; Feb. 1. 1855.602; Robert L., Roanoke, Va. Lubricator. 1,635,602;

Black, Robert L., Roanoke, Va. Lubricator. 1,635,602; July 12.
Black, Robert L., Roanoke, Va. Lubricator. 1,635,603; July 12.
Black Rock Manufacturing Company, The. (See Nicholas, William, assignor.)
Black, Sivalis & Bryson Mfg. Co. (See Black, Edward Fr. assignor.)
Black, Sivalis & Bryson Mfg. Co. (See Raymond, Gwynne, assignor.)

assignor. Black. Thomas C., Portland, Oreg. Detachable link. 1,646,185; Oct. 18.
Black. Walfer G., Whittier, assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Crown-block bearing for oil wells. 1,651,663; Dec. 6.
Black. William F., Danube, Minn. Hairpin. 1,651,802;

Inckurn, Joseph T. (See van Ausdal, J. H., and Blackburn, Boseph T. (See van Ausdal, J. H., and Blackburn, Robert, Chorley, assignor to Parent Cater-pillar Company, Limited, London, England, Round-about and like amusement apparatus. 1,632,692; June 14.

June 14.

Blackden, Perry D., assignor of one-half to Ora A, Morse, Sacramento, Calif. Grain cleaning and grading machinery. 1,620,865; Mar. 15.

Blackser, Bari, Ewrett, Wash. Bag-delivering machine.

Blackford. Gilbert V., assignor of one-half to W. R.
Hobbs, Independence, Kans. Awning for automobile doors. 1,625,765; Apr. 26.

Blackbam, Ninian A., Long Branch, and G. N. Robillard, Toronto, Ontario, Canada; said Blackham assignor to said Robillard. Blevator. 1,619,066; Mar. 8.

Bold Robillard Dievator. 1,619,066; Mar. 8.

M., assignor) Maching Co. (See Pfauser, Edward M., assignor)

Blackhawk Ma M., assignor Blackley ckley, William R., Hamlet, N. C., and R. M. Meredith, avannah, Ga. Driving-box mounting. 1,628,223;

Blackley, William R., Hamlet, N. C., and R. M. Meredith, Savannah, Ga. Driving-box mounting. 1,628,223; May 10.
Blacklock, Thomas. (See Guy, H. L., and Blacklock.) Blackman, Albert E., Mount Vernon, N. Y. Radiator cover. 1,636,689; John 19.
Gover. 1,636,689; John 19.
Governation of the Parker Pen Company, Janesville, Wis. Holder for fountain pens. 1,622,786; Apr. 26.
Blackmon, Ben C., Dallas, Tex. Matrix-making machine. 1,622,786; Apr. 26.
Blackmon, Ben C., Dallas, Tex. Support for collapsible Blackmon, John F., Laurens, S. C. Loom dobby. 1,641,111; Aug. 30.
Blackmone, Charles C., Dayton, Ohlo, Shock absorber. 1,643,050; Sept. 20.
Blackmore, Charles C., Dayton, Ohlo, Shock absorber. 1,643,050; Sept. 20.
Blackmore, George W. Edgewood, assignor to Automatic company of the Company, Pitrsburgh, Fa. Gas steam radiator. 1,630,107; May 24.
Blackmore, Lloyd, Highland Park, assignor to General Motors Corporation, Detroit, Mich. Vehicle having brakes. 1,638,318; Aug. 9.
Blackmore, Lloyd, Highland Park, assignor to General Motors Corporation, Detroit, Mich. Urive-axie construction. 1,644,708; Oct. 11.

Blackmore, Lloyd, Highland Park, assignor to General Motors Corporation, Detroit, Mich. Tractor. 1,651,367; Dec. 6.

Blackmore, William, Sharon, Pa., and A. J. Bazeley, and D. Robinson, assignors to National Mallenble and Steel Castings Company, Cleveland, Ohio. Car Coupler. 1,647,497; Nov. 1.
Blackmore, William, Sharon, Pa., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Shock-absorbing mechanism. 1,653,988; Dec. 27.
Blackmore, William, assignor of one-third to E. Bell, Sharon, Pa., and one-third to W. C. Blackmore, Cleveland, Ohio. Shock-absorbing mechind to W. C. Blackmore, Cleveland, Ohio. Shock-absorbing mechanism. 1,643,051; Sept. 20.
Blackmore, William, Sharon, Pa., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Shock-absorbing mechanism. 1,643,051; Sept. 20.
Blackmore, William C., et al. (See Blackmore, William, assignor).

Assignor.)

Blackshore, Lewis D., Charleston, W. Va., and J. L. Drake, Toledo, Ohio, assignors to The Libbey-Owens Shete Glass Company, Toledo, Ohio, Sheet-glass-bending apparatus. 1.614.098; Jan. 11.

Blackston, Edward A., assignor to L. R. Gilbert, Raleigh, N. C. Filling replenishing mechanism for looms of more than one shuttle. 1,623.961; Apr. 5.

Blackston, Edward A., assignor to Lovic R. Gilbert, Raleigh, N. C. Weft-replenishing mechanism for looms of more than one shuttle. 1,627.310; May 3.

1,625.702: Apr. 19.

Blackwell, Otto B., Plandome, and J. Herman, New York, N. Y., assignors to American Telephone and Telegraph Company, Method and apparatus for television. 1,624.918; Apr. 19.

Blackwell, Waldo R. (See Van Derbeck, S. G., and Blotckwell, Wenonab, Scattle, Wash. Toy doll. 1,613,157; Blackwell, William T. (See Robinson, G. P., and Blackwell, Wenonab, Scattle, Wash. Toy doll.)

Blackwell, William T. (See Robinson, G. P., and Blackwell,)

Weil, Markey, Markey,

Aug. 30.

Bladh. Johan A., assignor to Aktiebolaget Knappfabriken,
Askersund, Sweden. Machine for the manufacturing
of buttons. 1,632,642; June 14.
Blaike, Kenneth G. (See Matheson. H. W., and Blaikle.)
Blaine, James G., Compton, and C. B. Patton. Los Angeles.
Blaine, James G., Compton, and C. B. Patton. Los Angeles.
Compton of the Compton of the Compton of Michile Printing
Press & Manufacturing Company, Chicago, III. Printing press. 1,630,252; May 31.
Blaine, Joseph R., Oak Park, assignor to Miehle Printing
Press & Manufacturing Company, Chicago, III. Sheetcontrol mechanism. 1,636,464; July 19.
Blair, Augusta, Cincinnati, Ohio. Lid support. 1,614,644;
Blair, Bert R. (See Van de Water, J. W., and Blair.)
Blair, Frank N., Boise, Idaho. Folding table. 1,620,061;
Mar. 8. Aug. 30,

Mar. 8.

Mar. 8.

Blair, George W., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Shoe. Des. 73.597; Oct. 11.

Blair, George W., assignor to Mishawaka Rubber & Woolen Manufacturing Company, Mishawaka, Ind. Shoe. 1,648.982; Nov. 15.

Blair, George W., assignor to Mishawaka Rubber & Woolen Manufacturing Company, Mishawaka, Ind. Shoe-sole construction. 1,650.817; Nov. 20.

Blair, Harry R., Cranston, R. I., assignor to Universal Winding Company Boston, Mass. Cop holder or support. 1,652.6617 Dec. 13.

Blair, Henry, London, Englad. Vest or the like undershair, James C., Sez. Nov. 11.

Michael J.) C., et al., administrators. (See Owens, Michael J.)

Michael J.]
Blair, James C., assignor to The Libbey-Owens Sheet
Glass Company, Toledo, Ohio. Forming sheet glass,
1,626,382; Apr. 26.
Blair, James C., assignor to The Libbey-Owens Sheet Glass
Company, Toledo. Ohio. Method and apparatus for
forming sheet glass. 1,621,343; Sept.
Blair, John H. (See Hollingsworth, 61.

forming sheet piess. Houtings of the Hollingsworth, William F., as-signor, 1975.

Bair, John H. (See Hollingsworth, William F., as-signor, 1975.

Bair, Robert F., and C. O. Grove, Electra, Tex. Swivel sockets. 1817.684; Feb. 15.

Blair, Robert F., and G. Hind. Detroit, Mich. Driver's compartment for vehicles. 1.631.357; June 7.

Bair, Robert S., et al. (See Dieterich, Ludwig M., as-signor, 1975.

Blair, Robert S. (See Nickell, T. P., and Rodefeld, as-

Blalr, Kopert S. (See Nickell, 1, Fr. Rud Noterior, signors.)
Signors.)
See Wells, Burling D., assignor.)
Blair, Robert S., Sound Beach, Conn. Humidor.
1,627,833; May 10.
Blair, Robert S., Sound Beach, Conn. Heat-conducting apparatus. L632,745; June 21.
Blair, Robert S., Sound Beach, Conn. Pocket article and the like. 1,632,765; June 21.

Blair, Robert S., Sound Beach, and B. D. Wells, Danbury, Conn.; said Wells assignor to said Blair. Apparatus for truing car wheels. 1,627,074; May 3. Blair, Robert S., Sound Beach, and B. D. Wells, Danbury, Conn.; said Wells assignor to said Blair. Warning Blair. Warning Government of the Conn.; said Wells assignor to said Blair. Shipping container for sound-reproducing records. 1,628,105; May 10.

container for sound-reproducing receius. 1,020,000-, May 10.

Blair, Thomas P., San Diego, Calif. Floor heater. 1,619,593; Mar. I.

Blais, Cyprien E., Pawtucket, R. I. Direction indicator. 1,600,595; Francisco. Company, The. (See Blaisdell, Hiram W., assignor.)

Blaisdel, Hiram W., Los Angeles, Calif., assignor to The Blaisdell Filtration Company. Filtration. 1,614,947; Lan. 12.

Associated Filtration Company, Filtration, 1,614,921; Selected Hiram W., New York, N. Y., assignor to The Blaisdell, Hiram W., New York, N. Y., assignor to The Blaisdell Filtration Company, Filtration system, 1,630,371; May 31, Blaisdell Pencil Company, (See Weis, George G., assignor.)

Elnsstell, Stdney B., assignor to Rhode Island Braiding Machine Company, Providence, R. I. Braiding-machine carrier. 1,614,099; Jan. 11. Blake, C. C., Incorporated. (See Blake, Charles C., as-signor.)
Blake, C. C., Incorporated. (See Fernald, Mark E., as-liake, C. C., Incorporated.

signor.)
Blake, Charles C., Brookline, Mass. Metallic fastening
inseam. 1,628,599; May 10.
Blake, Charles C., Brookline, assignor to C. C. Blake,
Incorporated, Boston, Mass. Seam. 1,619,497;

Mar. 1.
Blake, Charles C., Brookline, assignor to C.
Incorporated, Boston, Mass. Making shoes.
June 21. to C. C. Blake, thoes, 1,632,944;

Theory of the control of the control

Bally William W. (See Lannbog William H., assignor.) Blakely, William W., betroit, Mch. Securing device for vehicles. 1,617,368; Feb. 15. Blakely, William W., Detroit. Mich. Holddown device for vehicles. 1,643,802; Sept. 27.

vehicles, 1,617,868; Feb. 15.
Blakely, William W., Detroit, Mich. Holddown device
for vehicles, 1,643,802; Sept. 27.
Blakely, William W., Dexter, Mich. Wheel block.
1,617,369; Feb. 15.
Blakely, William W., Detvoit, and C. A. Goodspeed, Highland Park, Mich.; said Goodspeed assignor to said
Blakely, William W., Detroit, and C. A. Goodspeed, Highland Park, Mich.; said Goodspeed assignor to said
Blakely, Engle-rod head, 1,630,519; May 31.
Blakeney, Edward, Kitchawan, N. X., assignor to Radio
Corporation of America. Siphon recorder, 1,630,324;
May 31.

Blakeslee, G. S., & Co. (See Anstiss, George P., as-

signor.)
Blakeslee, George R., executor. (See Blakeslee, George S.)
Blakeslee, George S., deceased, Oak Park, Ill.; G. R.
Blakeslee, executor. Dishwashing machine. 1,619,236;
Mar. 1.

Blakeslee, Henry B., Rochester, Minn. Humidifier. 1,449,035; Nov. 15.
Blakeslee, Jerome, assignor to American Steel Foundries, Chicago. Ill. Reversible brake-beam fulcrum 1,647,661; Nov. 1.
Blakeslee, Raymond I. (See Brown, Jasper C., assignor.) Blakeslee, Raymond I. (See Lyndon, L., and Blakeslee, Blakesley, George R., Janesville, Wis. Electric heating system. 1,626,221; Apr. 28.

Blakesley Novelty Company, The. (See Crouch, Walter L. assignor.) Blakey, Louis P., Philadelphia, Pa. Protector or auto-mobile wash apron. 1.646.524; Oct. 25. Blanc, Adolph I., assignor to P. P. Stone and A. I. Blanc, doing business as S. & B. Specialties Manufactural Company, Detroit, Mich. Radioanteana. 1,654,108;

Dec. 27

Blanc, Adolph I., et al. (See Blanc, Adolph I., assignor.)
Blanchi, Sven M., assignor to Fleming Machine Company,
Worcester, Mass. Wire brush. L.648,533; Nov. 8.

Worker, Mass. Wire brush. L.648,533; Nov. 8.

Ing Machine Company, Worcester, Mass. Metal-cutting
tool. 1,645,736; Oct. 18.
Blanch, Sven M., and F. J. Quist, Worcester, Mass. Carpet Cleancer. L.641,063; Aug. 30.
Blanchard, Charles M., Mattoon, Ill. Oil engine.
1,647,667; Feb. 15.

1,617,567; Feb. 15.
Blanchard, Ernest H., Schenectady, and D. Mott, Glenville, N. Y. Convertible vacuum sweeper and floor polisher. 1,644,169; Oct. 4.
Blanchard, Frederick C. Kee Lea. Charles, assignor.) wice. 1,623,775; Apr. beroft, Mieb. Lubricating device. 1,623,775; Apr. beroft, Mieb. Lubricating device. 1,623,775; Apr. beroft, Mieb. Lubricating device. Knowles Loom Works, Worcester, Mass. Intermittent feeler in transferrer. 1,627,826; May 10.
Blanchard, Harold L., Millbury, assignor to Crompton & Blanchard, Harold L., Millbury, assignor to Crompton & Innafer Chanism for Wester, Proceedings of the Compton & March Change (Chang) and Wester, Proceedings (Change) and Wester, Proceedings (Change) and Change (Change)

Nov. 29

Nov. 29.

Blanchard, Harold L., Millbury, and W. H. Wakefield, assignors to Crompton & Knowles Loom Works. Worcester, Mass. Weft-detector-withdrawing means for looms. Bd62,602; Dec. 13.

Blanchard, Joseph L., Montreal, Quebec, Canada. Speedometer and road indicator. 1,618,049; Feb. 15.

Blanchard Machine Company, The. (See Spencer, Henry

Blanchard, Robert L., New York, N. Y. Air Indicating and regulating apparatus for furnaces. 1,640,921; Aug. 30.

Aug. 30.

Blanchard, Walter J., Cleveland, Obio. Centrifugal-separator basket. 1,643,441; Sept. 27.

Blanchard, Walter P., Winthrop, Mass., assignor to General Electric Company. Telemetric apparatus. 1,628,450; May 10.

Blanchard, William, Houston, Tex. Submerged bridge. 1,620,716; Mar. 15.

Blanco, Florino F., San Jose, Costa Rica. Reamer. 1,630,662; May 31.

Bland, John, Chicago, Ill. Screen. 1,622,2005; Mar. 29.

Bland, John, Chicago, Ill. Screen. 1,622,2005; Mar. 20.

Bland, John, Chicago, Ill. Screen. 1,622,2005; June 14.

Bland Magnetic Valves Limited. (See Bland, Leonard N., assignor.)

N., assignor.) Blandford, Thomas, et al. (See Potts, Harold E., assignor.)

Bundarord, Thomas, et al. (See Potts, Haroid E., assignor.)

Blanding, Joseph E., New Lendon, assignor of one-half of the McNamers, Garton, Comp. Internal-combustion contine. 1,631,615; June T.

Blaney, William F., Newark, N. J., assignor to The Turner Tanning Machinery Company, Peobady, Mass. Leather-working machine. 1,621,577; Mar. 22.

Blank, George W., Philadeiphia, P. a. Button. 1,649,765; Nov. 15.

Blank, Herman C., Chicago, Ill. Bullding construction.

Blank, Merton H., Indianapolis, Ind. Internal-combustion engine. 1,647,986; Peb. 15.

Blank, Merton H., Indianapolis, Ind. Internal-combustion engine. 1,625,189; Apr. 19.

Blankenhorn, George W., San Francisco, Calif.; P. E. Witherby, Guardian, Machine for correcting irregulance of the property of the caus. 1,620,706; Mar. 15.

Blankenship, Stanley L. (See McLarty, E., Sr., and Blankenship), William G., et al. (See Ginger, Frank M.,

Blankinship, William G., et al. (See Ginger, Frank M.,

assignor.)

Blasdel, Leo C., Los Angeles, Calif. Brake mechanism.

1.652.232: Dec. 13.

Blaskewitz, William. (See Groehn, O. J., and Blaskewitz.)

Blaskit, Aloyzlous R., Chicago, Ill. Operating mechanism for the closure means of ventilating or skylight constructions. 1.647.262; Nov. 1.

Blaski, Aloyzius R., Chicago, Ill. Actuating mechanism Blaski, Aloyzius R., Chicago, Ill. 4. Actuating mechanism Blaski, Aloyzius R., Chicago, Ill. 4. Safety pin for brake levers and rods. 1.651.318; Nov. 29.

Blass, John P., New Orleans, La. Safety pin for brake levers and rods. 1.651.318; Nov. 29.

Blass, Ludwig, Saaz, Czechoslovakia. Preventing the formation of crystals and the deposition of incrustations on metal surfaces. 1.613.480; Jan. 4.

On metal surfaces. 1.613.480; Jan. 4.

Blathterwise II. (See Wilmos G. W., and Blade).

Blathterwise, Black, Raciogn, Ill. Oil can. 1,628.904; Apr. 5.

Blatt, Mack, assignor to E. P. Bowman, Detrolt, Mich. Vacuum-cleaner nozzle. Des. 73,479; Sept. 20. Blatter, Titus & Company. (See Biva, Lucien, assignor.)

Blattner, David G., Bogota, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Ap-paratus for the visual interpretation of speech and music. 1,654,068; Dec. 27. Blatz, Clarence P. (See Barger, W. R., Hawkins, and

paratus to paratus to

Ang. 300** Conducted and the face. 1,000,000; Ang. 2,000,000; Blaustein, Joseph, Brooklyn, N. Y. Cup. 1,622,858; Mar. 29.
Blauvelt, Fred K., assignor to C. E. Reed, Wichita, Kans. Retaining means for spindles of deep-well rotary cutters. 1,636,669; July 19.
Blauvelt, William G., New York, N. Y., assignor to American Telephone and Telegraph Company. Telephone exchange system. 1634,734; July 5.
Blew, Legione B., and S. S. Berger, S. B. Blaw, G. B. Blaw, Jacob B., deceased, Atlantic City, N. J; S. H. Blaw, Jacob B., deceased, Atlantic City, N. J; S. H. Blaw, Arox D., Blaw, Flag holder. 1,675,083; Dec. 20.
Blaw-Knox Company. (See Brynoldt, Christian, assignor.)

Blaw-Knox Company, (See Davidson, Harry O., as-

signor.)
Blaw-Knox Company. (See Gstalder, Paul A., assignor.)
Blaw-Knox Company. (See Venable, William M., as-

Blaw-Knox Company, (See Venable, William M., assignor.)
Blaw, Sadie H., executrix. (See Blaw, Jacob B.)
Blaylock, Offford E., Baltimore, Md. Blow-out patch.
Blazek, Adolph J., Baltimore, Md. Locking device for printing forms. 1,637,099; July 26.
Blazer, Philip L., Chicago. III. Powder box or similar article. Des. 73,686; Oct. 25.
Bleam, Albert, Clarksville, Mich. Seed-cleaning machine. 1,624,048; Apr. 12.
Blechspielwarentabrik Johann Distler. (See Keppner, Lorge, 1988, 1997).

Blechsplelwarenfabrik Johann Distler. (See Keppner, Ernst, assignor.)
Blecker, Herbert E., New York, N. Y. Fish-catching apparatus. 1,619-560; Mar. I.
Blecker, William M., assignor to E. A. Langenbach, Canchon Ohio. Sheet-shearing apparatus. 1,646,989; Bleckley, Frederick W., Orange, N. J. Kitchen tool holder. 1,014,342; Jan. 11.
Blecksmith, Arthur F. (See Sperti, George, assignor.)
Bledsoe, Carl F., Chicago, Ill., assignor to Ogle Construction Company. Safety means for holsts and the like. 1,641,967; Sept. 13.
Bledsoe, Carl F., Chicago, Ill., assignor to Ogle Construction Company. Safety means for holsts and the like. 1,641,967; Sept. 13.
Bledsoe, Carl F., Chicago, Ill., assignor to Ogle Construction Company. Safety means for holsts and the like. 1,641,967; Sept. 13.
Bledsoe, Carl F., Chicago, Ill., assignor to Ogle Construction. Nature of the Company of the Comp

Blendermann.)

Blendow, Alfred W., Maplewood, and L. H. Blendermann, South Orange, assignors to National Gum Company, South Orange, Orange, Chil. Lock. 1642,252; Sept. 13. Bleco, John B., Chicago, Ill. Lock. 1642,252; Sept. 13. Bleco, John B., Chicago, Ill. Lock. 1642,252; Sept. 13. Blessing, John G., assignor, by mesue assignments, to Automatic Electric Inc., Chicago, Ill. Impulse-transmitting device. 1,641,616; Sept. 6. Blessing, John G., assignor, by mesue assignments, to Automatic Electric Inc., Chicago, Ill. Impulse-transmitting device. 1,641,617; Sept. 6. Plessing, John G., assignor to Pressed Steel Car 1,619,054; Mar. 1,519,054; Mar. 1,519,054; Mar. 1,619,054; Mar. 1,619,055; Mar. 1,19,19,19, Pa. Poke-hole cover. 1,619,055; Mar. 1. Blets, Raiph B., and E. H. Ruckrell. Lor. Appears

Bletcher, Ralph B., and E. H. Bucknell, Los Angeles, Callf. Silencer or flow regulator for valves, faucets, and the like. 1,825,589; Apr. 19.
Blevin, Frederick L., Jersey City, N. J., and A. D. Ferguson, Brooklyn, N. Y. Cardboard-box knife. 1,623,158; Apr. 5.
Blevins, James L., Borderland, W. Va. Electric-cable Blevins, James L., Borderland, W. Va. Electric-cable Supplied, 1,622,940; Mar. 29.
Berjamin B., Waco, Tex. Tally. 1,637,211;

coupling.
Bley, Benjamin B., Waco, 1ck.
July 26.
July 26.
July 26.
July 27.
July 28.
July 28.
July 28.
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July 28.
July 28.
July 29.

Blickman, S., Inc. (See Leppert, Dorrence W., assignor.) Blidsoe, Hugo, New York, N. Y. Tool holder. 1.633,239; June 21.

Blidsoe, Hugo, New York, N. Y. Pipe and cigar holder for the purpose of eliminating the nicotine. 1,633,240; June 21.

Blieberger, Charles, assignor of forty-five per cent to A. A. Thomas, New York, N. Y. Sound amplifier. 1,643,284; Sept. 20.

Blikstad, Martin, Eidsvold, and T. Martin, Heggeli, near Oslo, Norway. Recording taximeter. 1,616,213; Feb. 1. Blincow, Joseph E., Wolverhampton, England. Cooking apparatus. 1,622,081; Mar. 22.
Bliss, Anna M. H., Long Beach, Calif. Apron. 1,632,873;

June 21.

Bliss, Carl E., and F. A. Wegener, assignor to Welsbach Company, Gloucester, N. J. Gas mantle and making the same. 1,639,682; Aug. 23.

Bliss, Charles A., Bradford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Finishing machine. 1,648,042; Nov. 8.

Bliss, Clyde H., Fortland, Oreg. Tamper. 1,644,320; Oct. 4.

Bliss Containers, Inc. (See Bliss, Herbert R., assignor). Bliss, Donald M., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y. Electromagnetic switch. 1,630,630; May 31. Bliss, E. W., Company. (See Beyer, Otto S., assignor). Bliss, E. W., Company. (See Gabriel, Charles R., as-

Copposition of the control of the co

Niagara Faiis, N. I. Snipping case. 1,033,140; Nov. 15.

Bliss, Isabelle, Ocean Beach, Califf, Appliance for removing facial defects. 1,641,471; Sept. 6.

Blisslit, William R., Columbus, Ga. Mattress and bed protector. 1,621,49; Mar. 16.

1,634,929; July 5.

Blitz, Adolf, and A. S. Kux, Chicago, Ill. Swinging table. 1,648,717; Nov. 8.

Blizard, Charles E., West Haven, assignor to Winchester Repeating Arms Co., New Haven, Conn. Sight for firearms. 1,618,749; Feb. 22.

Bliztoits, George E., Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company. Wave conhouse Conhouse

Nov. 8.
och, Leon, assignor to The Republic Brass Company,
Cleveland, Ohio. Bathroom fixture. 1,647,984;

Nov. c. Block, abraham, Sau Block, abraham, Sau assignments, to The Nationan pany, Dayton, Ohlo. Credit-slip-authorization pany, Dayton, Ohlo. Credit-slip-authorization pany, Dayton, Ohlo. Credit-slip-authorization panels, 1,626,910; lippover and process of manufacture, 1,626,910; lippover and 1,626,910; lippover and

May 3.

Block, Gregory K., New York, N. Y. Typewriting machine. 1,620,004; Mar, 8.

Block, Joseph. (See Dam, Henry M. R., assignor.)

Block, Maurice, assignor to Block Porteller Company, Checago, III. Lighting fixture. Des. 73,555; Oct. 4.

Block, Maurice, assignor to Block Porteller Company, Chicago, III. Lighting fixture. Des. 73,5636; Oct. 18.

Block, Maurice, assignor to Block Porteller Company, Chicago, III. Floor lamp. Des. 73,636; Oct. 18.

Block, Maurice, assignor to Block Porteller Company, Chicago, III. Floor lamp. Des. 73,636; Oct. 18.

Block Porteller Company, Gee Block, Maurice, assignor.)

Block Porteller Company, Gee Block, Maurice, assignor.)

Block Porteller Company, Gee Block, Maurice, assignor.)

tures. Des. 72,079; Mar. 1.

Block, William, Chicago, III. Lamp bracket. Des. 72,080; Mar. 1.

Block, William, Chicago, III. Lamp base. Des. 72,081; Mar. 1.

Block, William, Chicago, Ill. Lamp base. Des. 72,081;
Mar. 1.
Block, William, Chicago, Ill. Lamp base. Des. 72,082;
Mar. 1.
Blocker, Henry A. and M. L. Mullin, Shreveport, La.
Product for use in uniting rubber sheets and in repairing rubber articles. 1652,926; Dec. 13.
1.627,827; May 10.
Blodgett, George W., Portland, Org. Clamp for feathering arrows. 1,648,376; Nov. 8.
Blobm, George A. (See Corlew, C. M., and Blohm.)
Blom, Hjalmar T., Chicago, Ill., assignor to Sullivam Machinery Company. Compressor valve. 1,634,247;
June 28.

Blom, Hjalmar T., Chicago, Ill., assignor to Sullivan Machinery Company. Unloading mechanism. 1,644,007;

Machinery Company. Unloading mechanism. 1,644,007; Oct. 4.
Blomberg, Otto, Chicago, Ill. Valve-spring lifter. 1,641,618; Scpt. 6.
Blomfeldt, Allea Asewport, Ky. Unit heater for air Blomfeldt, Allea As. Asy. 9.
Blomfeldt, Allea As. Asy. 9.
Blombeldt, Alfred L., Klügman, Ariz. Ore-treating system. 1,621,474; Mar. 15.
Blomfeldt, Alfred L., Colorado Springs, and E. R. Ramsey, Denver, Colo., assignors to The Dorr Company, New York. N. Y. Treatment of pulps. 1,618,937; Mar. 8.
Blomgren, Henry E., assignor to Rubber Shackle Company, New York. N. Y. Treatment of pulps. 1,618,937; Mar. 8.
Blomgren, Henry E., assignor to Rubber Shackle Company, New York. N. Y. Treatment of pulps. 1,618,637; Mar. 8.
Blomgren, Henry E., assignor to Rubber Shackle Company, New York, N. Y. Antirattler spring shackle. 1,635,636; Aug. 16.
Blomguist, August E. R., Cleveland Heights, Ohio. Vibrating machine. 1,613,377; Jan. 4.
Blomquist, Hjallmer F., and G. C. Miller, Cedar Rapids, Iowa. Combined pressure-reducing and gas-flow-regulating valve. 1,651,507; Dec. 6.
Blomgtom, Charles, Minneapolis, Minn. Mechanic's Soap. 1,618,323; Feb. 22.
Blondin, Joseph A. Los Angeles, Calif. Propeller. 1,642,803; Sept. 20.
Brood, George H. (See Lewis, George W., assignor). Blood, George H. (See Lewis, George W., assignor). Blood, George H. (See Greenleaf, G. E., Blood, and Blood, Howard E., assignor to Detroit Gear and Machine

Rausch.)

Rauschoward E., assignor to Detroit Gear and Machine Company, Detroit, Mich. Transmission. 1,636,800; July 26.

Blood, Laurence E., assignor to S. A. Woods Machine Company, Boston, Mass. Woodworking machine, 1,638,652; Aug. 9.

Bloom, Edgar J., Tiffin, Ohlo, assignor, by mesne assignments, to Auto Research Corporation. Terminal construction for central lubricating installations. 1,632,724; June 14.

Bloom, Edgar J., Tiffin, Ohlo, assignor, by mesne assignments, to Auto Research Corporation. Chassis lubrication. 1,632,767; June 14.

Bloom, Edgar J., Tiffin, Ohlo, assignor, by mesne assignments, to Auto Research Corporation. Chassis lubrication. 1,632,767; June 14.

Bloom, Edgar J., Tiffin, Almei 14.

Bloom, Edgar J., Tiffin, Almei 14.

Bloom, Edgar J., Tiffin, Almei 14.

Bloomental, Irvin. Harrisburg, Pa. Pylama trousers.

Oct. 25.
Bloomental, Irvin, Harrisburg, Pa. Pyjama trousers.
Bloomental, Synt. 3.
Bloomer, Matthew, East Brisbane, Queensland, Australia.
Apparatus for manufacturing roller and semiroller chains. 1,644,561; Oct. 4.
Bloomield, Grover. (See Woodruff, J. C., and Bloomental).

field.)
Bloomfield-Holmes Corporation. (See Holmes, Frank E.,

field.)

Bloomfield-Holmes Corporation. (See Holmes, Frank E., assignor.)

Assignor.

Morris, assignor to Tonell-Robitschek Co., Inc., New York, N. Y. Cap. 1,650,258; Nov. 22.

Bloomingdale, Hiram C., assignor to Card Display, Inc., New York, N. Y. Sign. 1,653,033; Dec. 20.

Blose, Clyde E., Springfield, Ohio. Auxiliary bleed-valve actuator for air-brake equipment. 1,638,681; Aug. 8.

1,637,675; Aug. 2.

Bloss, Eugene, et al. (See Pecker, Joseph S., assignor; Dloss, Nelson W., East Orange, N. J., assignor to American Car and Foundry Company, New York, N. Y.

Car roof. 1,617,641; Feb. Brown, New York, N. Y.

Car roof. 1,617,641; Feb. The International Derrick & Equipment Company, Columbus, Ohio. Pitman structure. 1,646,948; Oct. 25.

Bloss, Richard R., assignor to The International Derrick & Equipment Company, Columbus, Ohio. Pitman structure. 1,646,948; Oct. 25.

Bloss, Richard R., assignor to The International Derrick & Equipment Company, Columbus, Ohio. Band-wheel counterbalance. 1,651,944; Dec. 6.

Bloss, Richard R., H. T. Strout, and H. R. Ansel, assignors to The International Derrick & Equipment Company, Columbus, Ohio. Band-wheel counterbalance. 1,651,944; Dec. 6.

Bloss, Richard R., H. T. Strout, and H. R. Ansel, assignors to The International Derrick & Equipment Company, Columbus, Ohio. Band-wheel Counterbalance. 1,619,445; Dec. 6.

Bloss William G., Los Angeles, Calif. Wave motor.
1,617,568; Feb. 15.
Blount, Harry, Oak Park, III., assignor to Western Electric Company, Incorporated, New York, N. Y. Lubricating bearing surfaces. 1,632,874; June 21.
Blount, Harry, Oak Park, III., assignor to Western Electric Company, Incorporated, New York, N. Y. Carrier.
1,647,263; Nov. 1.
Blount, Harry, Oak Park, and J. W. Hernlund, Glen Ellyn, III., assignors to Western Electric Company, Incorporated, New York, N. Y. Carrier.
1,647,263; Nov. 1.
Blount, Harry, Oak Park, and J. W. Hernlund, Glen Ellyn, III., assignors to Western Electric Company, Incorporated, New York, N. Y. Carrier.
1,647,263; Nov. 1.
Blown, Arthur, Montreal, Quebec, Canada. Roof-flashing holder. 1,653,337; Dec. 20.
Bludworth, William D., Sacramento, Calif. Single horse and cart toy. Des. 72,140; Mar. 8.
Bludworth, William D., Sacramento, Calif. Goat and darkie toy. Des. 72,4470; Apr. 19.
Blue Diamond Materials Co. (See Tuttle, Albert E., assignor.)

Blue Island Specialty Co. (See Montag, Christopher F.,

Blue India (orange) assignor of one-fourth to W. Blue, Louis V., Pittsburgh, assignor of one-fourth to W. A. Falson, Chester, Ph. Automatic closer for windows and the like. 1,632,532; June 14.

Blue Point Tool Company. (See Seidemann, William A.,

assignor.)
Blue Tip Plie Wire & Knife Company. (See Pfeiffer,
Immanuel, assignor.)
Blue Valley Creamery Company. (See Cook, Joseph, as-

signor.)
Bluhm, Leo, New York, N. Y. Woven fabric or similar article. Des. 73.022; July 12.
Bluhm, Leo, New York, N. Y. Woven fabric or similar article. Des. 73.038; Oct. 18.
Briticle. Des. 73.038; Oct. 18.
Briticle. Des. 73.038; Oct. 18.
Blum, Eugen, Valley Streum, assignor, by mesne assignments, to American Schaeffer & Budenberg Corporation, Brooklyn, N. Y. Tachometer, 1,639.078; Aug. 23.
Blum, George, Akron, Iowa. Valve lifter, 1,613.015; Jan. 4.
Hrold P., Cleveland, Ohio. Rail anchor.

Jan. 4. Hrold P., Cleveland, Ohio. Rall anchor. Blum. 13, 869; Jan. 11. Cleveland, Ohio. Rall anchor. Elum. Harold P., assignor to The Cleveland Railway Supply Company, Cleveland, Ohio. Troughless skeleton fiange-way goard. 1,630,325; May 31. Blum, Henri, Mulhouse, assignor to Société Alsacienns de Produits Chimiques, Parts, France. Manufacture of borneol esters. 1,640,639; Aug. 30. Blum. Hyman, Pittsburgh, Pa. Cellar-door hinge. 1,635,107; July 165. Lickstone, 1,655,107; Aug. 165. Lickstone, 1,655,107; Aug. 165. Lickstone, 1,655,107; Aug. 165. Lickstone, 1,655,107; Aug. 165,107; Aug

Blumberg, Hamilton G. (See Price, W. H., and Blumberg, Burnberg, Supravat E., and C. Anderson, Ciarcmont, Minn. Blume, Henry, and G. B. Streitz, Jordan, Minn. Valve and cage puller. 1,627,477; May 3. Blume, Louis F., Pittsfield, Mass., assignor to General Electric Company. Indicating instrument. 1,618,800; Feb. 22. Hanry, M. Money, Moy. Ministraciable.

Blumenberg, Henry, jr., assignor to Stockholders Syndicate, Josa Angeles, Calif. Sulpur burnets; Henry, jr., assignor to Stockholders Syndicate, Juny 19.

June 28.

Blumenberg, Henry, Jr., assignor to Stockholders Syndicate. Los Angeles, Calif. Treating phosphate rock. 1,638,677; Aug. 9.

Blumenberg, Henry, Jr., Moapa, Nev., assignor to Stockholders Syndicate, Los Angeles, Calif. Making sodium sulphites and boric acid. 1,642,635; Sept. 13.

Blumenberg, Henry, Jr., Moapa, Nev., assignor to Stockholders Syndicate, Los Angeles, Calif. Acid metal phosphate and making same. 1,654,404; Dec. 27.

Blumenfeld, Joseph, London, England. Filtration of solu-Blumenfeld, Joseph, London, England, assignor to Blumann Rare Earths Chemical Company. Preparation of pigments and paints. 1,639,423; Aug. 16.

Blumenfeld, Louis. (See Post, L. B., Lyon, and Blumenfeld,

Blümenfeld, Louis. (See Post, L. B., Lyon, and Blümenfeld,)
Blumental, Benjamin. Youngstown, Ohlo. Drawer construction for chairs or similar articles of furniture.

1.641.249; Sept. 6.
Blumental, Maurice Brooklyn, N. Y. Sinking concrete piles. 1,629,947 May 47.

Vork, N. Y. Smoker's set. 1,638,339; Aug. 9.
Blumenthal, Sidney, & Co. Inc. (See Gowans, James, assignor.)
Blumenthal, Sidney E. New Orleans, La. Textile fabric. Des. 74,046; Dec. 13.
Blumer, Heinrich, Zurich, Switzerland. Drive of three-Blumie, Frank W., assignor to Automatic Display Company, Seattle, Wash. Advertising display device. 1,622,410; Mar. 29.
Blumstead, Rainb W., Lowell, Mass., and R. S. Robertson, Covington, Tenn., assignors of one-third to H. J. Monty, Lowell, Mass. Vibrator for card doffers. 1,645,74; Oct. 16,7 and Mound, Iowa. Funnel screen. 1,655,317; Nov. 22.
Blunse, Fritz, Hesperinghausen, near Niedermarsberg, Germany. Grain separator. 1,642,331; Sept. 13.
Blunt, James G., Schenectady, N. Y. Cruinder cock. 1,628,024; May 10.
Blunt, James G., Schenectady, N. Y. Truck for locomotive engines. 1,652,657; Dec. 13.

Blunt, Toran, Chicago, Ill. Hot-water bag. 1,625,018;

Apr. 19.
Bust, Christian, St. Albans, W. Va. Automatic safety
cut-of for gas valves. 1,627,312; May 3.
Blust, Christian, St. Albans, W. Va. Steam valve or
gauge cock. 1,664,451; Dec. 27.
Buthardt, Gustav A., Dorchester, Mass. Merry-go-round.
1,635,108; July 5.
Bly, Edwin F. assignor to Standard Oil Company of
Christian 18,7309; Nov.
Blyberg, Godfrey. (See Bjorkholm, J. E., and Blyberg, Blydenburgh, Harold L. (See Jandus, H. S., and Blydenburgh)

Blyberg, Godfrey. (See Bjorkholm, J. E., and Blyberg.)
Blydenburgh, Harold L. (See Jandus, H. S., and Blydenburgh.)
Blydenburgh, Harold L. (See Jandus, H. S., and Blydenburgh.)
Blyth, Charles E., Dunchurch, assignor to Alfred Herbert
Litt. (Loren E., Bunchurch, assignor to Alfred Herbert
Limited, Hardy, 17, 180.)
Blyth, Charles E., Stockton, near Rugby, assignor to Alfred Herbert Limited, Butts, Coventry, England. Coalpulverizing machine. 1,649,148; Nov. 15.
Blyth, John, Chicago, Ili, assignor to Eastman Kodak
Gruphs. 1,651,748; Dec. 6.
Blyth, John F., Newark, and C. Ellis, Montclair, N. J.
Arsenical product and making same. 1,649,562; Nov. 15.
Bodl, Harry J. (See Jonasson, C. V., and Bodl.)
Bodl, Harry J. (See Jonasson, C. V., and Bodl.)
Bodl, Harry J. (See Jonasson, C. V., and Bodl.)
Bodl, Harry J. (See Jonasson, C. V., and Bodl.)
Bodl, Harry J. (See Jonasson, C. V., and Bodl.)
Bodl, Fell, See, See, G.
Bodl, Fell, See, G.
Bodl, Harry J. (See Jonasson, C. V., and Bodl.)
Bodl, Harry J. (See Jonasson, C. V., and Bodl.)
Bodl, Fell, Bry J. (See Jonasson, C. V., and Bodl.)
Bodl, Harry J. (See Jonasson, C. V., and Bodl.)
Bodl, Bry J. (See Jonasson, C. V., and Bodl.)
Bodl, Fell, Bry J. (See Jonasson, C. V., and Bodl.)
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Bodl, Bry J. (See Jonasson, C. V., and Bodl.)
Bodl, Bry J. (See Jonasson, C. V., and Bodl.)
Bodl, Bry J. (See

trup.)
Bobo, Edward H., Ranger, Tex. Rheostat. 1,625,703;
Apr. 19.
Bobo, Edward H., Ranger, Tex. Connecter. 1,648,605;

Nov. 8. bst. Henri,

Bobst, Henrl, assignor to J. Bobst & Fils, Societe Anonyme, Lausanne, Switzerland. Apparatus for working paper, carton, and like materials. 1,619,848; Mar. 8.
Bobst, J., & Fils, Societe Anonyme. (See Bobst, Henri, assignor.)

oby, Robert, Limited. (See Allingham, Sidney, assignor.)

Signor.) Ernest, Newark, N. J. Safety device for fire localino, 1.441.798; Sept. 6.

Bocchino, Brnest, Newark, N. J. Musical toy telephone. 1.651.508; Dec. 6.

Bocchino, Ernest, assignor of one-third to S. Tollon, Newark, N. J. (Lown and animal toy. Des. 72,083; Newark, N. J. (Lown and animal toy. Des. 72,083;

Bochonok, Stefan, Pittsburgh, Pa. Cuff link. 1,651,437;

Bochomok, Stefan, Pittsburgh, Pa. Cuff link. 1,601,487. Dec. 6.

Bock, Charles S., Chicago, Ill., assignor of four one-hundredths to W. J. O'Brien, thirty-two one-hundredths to E. Colombo. Hinge. 1.647.047; Oct. 25.

Bock, Edward S., Croydon, Pa. Apparatus for making Bock, Richard W., River Forest, Ill.

Bock, Bidnard W., River Forest, Ill.

Bock, Milliam E., Eagle Point Colony, assignor to The Brie Glass Company, Toledo, Ohio. Method and apparatus for manufacturing glassware. 1,645.644; Oct. 18.

Bockhoff, William F. (See Galloway, R. M., Bockhoff, and McJoy.)

Bockhoff, William F. (See Galloway, R. M., Bockhoff, and Meloy.)
Bockholt, Hermann, Cologne-Deutz, Germany, Plunger pump, 1,616.883; Feb. 8.
Bockius, Walter A., Park Ridge, Ill. Electrical condenser. 1,633,566; June 28.
Bodde, Theodore, Niagara Falls, N. Y. Method of and apparatus for electrically producing sound. 1,640,140;

Bodde, Theodore, Nugara rate of the property of the producing sound. 1,640,140; Aug. 23.

Bodde, Theodore, Niagara Falls, N. Y. Method of and apparatus for electrically producing sound. 1,640,141; Aug. 23.

Bodde. Theodore, Shanghal, China, assignor to The Regan Safety Devices Company. Inc., New York, N. Y. Traincontrol system. 1,650,596; Nov. 29.

Boddeer, Albert, Chicago, III. Oil burner. 1,627,267; May 3.

Bodden, Blucher B., Philadelphia, Pa. Stand for supporting shoes. 1,618,264; Feb. 22.

Boddie, Clarence A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,624,387; Apr. 12.
Boddiger, John F., Piolo, Ili. Checkrow planter attachElectric & Manufacturing Company. ReguBoddier, Clarence S., Los Angeles, Calif. Circulating
plunger pump. 16,14,865; Jan. 18.
Boden, George, assignor to Scovill Manufacturing Company, Waterbury, Conn. Double-pointed pin fastener.
1,649,760; Nov. 18.
Boden, Gleber, Birmingham, assignor to Vickers Limited,
1,642,837; Sept. 20.
Bodensiels, Jennie M., New York, N. Y. Hose-supporter
clasp. 1,640,689; Aug. 30.
Bodensiels, Jennie M., New York, N. Y. Abdominal support. 1,632,160; Dec. 18.
Br., Stantsburg, N. Y. Roadresurfacing machine. 1,651,247; Nov. 29.
Bodensiels, John G., Jr., (See Bodenstein, Fred and
J. G., jr.)
Bodholdt, Aksel K., et al. (See Speer, Alexander S., assignor.)
Bodin, Joel O., et al. (See Ankarlo, Victor E., assignor, Chicago, Ill. Mining machine, 1,632,290;
June 21.
Bodin, Joel O., et al. (See Ankarlo, Victor E., assignor.)
Bodine Electric Company. (See Williams, Ralph T., assignor.)
Bodine Electric Company. (See Williams, Ralph T., assignor.)

e Electric Company. (See Williams, Ralph T., as-

Bodine Electric Company. (See Holder Signor.)
Bodle, Virgil H., and W. E. Jaquith, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Apparatus for assembling sheet material. 1,649,802; Nov. 22.
Bodmer, Christian, and H. J. Cook, assignors to The State of Christian, and H. J. Cook, assignors to The 1,642,898 W.S. New Britain, Conn. Hand drill. 1,642,898 W.S. New Britain, Conn. Hand drill. Godwell, Paul D., and H. W. Bellows, assignors to Decaplise Phonograph Company, Waynesboro, Pa. Record holder for talking machines. 1,653,541; Dec. 20.
Boe, Charles J., Pittsburgh, Pa. Ash receiver. 1,635,395; July 12.

Boe, Charles J., Pittsburgh, Pa. Ash.

July 12.
Boe, Hans M., Minneapolis, Minn. Oil-dispensing bottle.
Des. 73.824; Nov. 15.
Boe, Hans M., Minneapolis, Minn. Pump construction.
1.637,727; Aug. 2.
Boe, Hans M., Minneapolis, Minn. Bottle. 1,654,507;
Boe, Hans M., Minneapolis, Minn. Bottle. 1,654,507;

Boe, Hans M., Minneapolls, Minn. Bottle. 1,654,507; Dec. 27.

Boe, Helmer J., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Serving mechanism. 1,614,594; Jan. 18.

Boe, Helmer J., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Reel-supporting apparatus. 1,614,965; Jan. 18.

Boek, Harry, Berlin, Germany. Sun blind. 1,649,943; Nov. 22.

Nov. 22.

Boeckh, John C., Toronto, Ontarlo, Canada. Golf-ball cleaner. 1,614,914; Jan. 18.

Boedecker, Friedrich, Berlin-Dahlem, Germany. Sedative and hyporte ureides. 1,633,392; June 21.

Boedecker, Friedrich, Berlin-Dahlem, assignor to the Firm acid and making same. 1,622,129; Mar. 22.

Boedecker, Henry J., Waverly, Iowa. Animal trap. 1,648,160; Nov. 8.

Boedigheimer, Leo F. (See Fontaine, Philiza H., assignor).

Boedigheimer, Leo F. (See Fontaine, Philiza H., assignor.)
Boedker, Harry, Plymouth, N. C., assignor of twenty-seven and one-half one-hundredths to W. H. Lowe, Kilmarnock, and twenty-seven and one-half one-hundredths to R. W. Lowe, Chestern, Va. Thread tier. 1,621,863;
Boedicher, Franz A., Bergenfield, N. J. Operating mechanism for shaft doors. 1,620,463; Mar. 8.
Boedicher, Franz A., Bergenfield, N. J. Illuminated signal for elevator installations. 1,622,838; Apr. 26.
Boedicher, Franz A., Bergenfield, N. J. Electric switch. 1,638,439; July 26.
Boedicher, Franz A., Bergenfield, N. J. Electric switch. 1,638,439; July 26.
Boedicher, Franz A., Bergenfield, N. J. Klectric switch. 1,638,439; July 26.
Boedicher, Franz A., Bergenfield, N. J. Wey York, N. Y. Chengle, M. A. A. Belz, New York, N. Y. Chengle, M. C. (See Williams, H. M., and Boegehold, Alfred L., (See Williams, H. M., and Boegehold, Alfred L., assignor to General Motors Research

hold.)

Boegehold, Aifred L., assignor to General Motors Research
Corporation, Dayton, Ohio. Internal-combustion-engine
cylinder and making same. 1,640,876; Aug. 30.

Boegen Gauge Company. (See Boegen, John E., as-

cylinder and making same solvens of the state of the stat

Boehmer. Norris. Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Chlorinated Chemical Company, New York, N. Y. Chlorinated Chemical Company, New York, N. Y. Chlorinated Chemical Company, Altora, 11. Stampling machine, 1,830,824; May 31.
Boehringer, C. F., & Soehne G. m. b. H. (See Rothmann, A., and Stein, assignors.)
Boehringer, C. H., & Sohn, Chemische Fabrik. (See Häuss-Gerhalferd, assignor.)
Boehringer, C. H., Sohn Chemische Fabrik. (See Wieland, Heinrich, assignor.)
Boehringer, C. H., Sohn Chemische Fabrik. (See Wieland, Heinrich, assignor.)
Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Arm for a chandeller Co., Inc., New York, N. Y. Spreader for a lighting fixture. Des. 72,755; May 31.
Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Bridge-lamp arm or similar article. Des. 72,757; May 31.
Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Bridge-lamp arm or similar article. Des. 72,757; May 31.
Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Chanopy for electric-lighting fixtures. Des. 72,757; May 31.
Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Chanopy for electric-lighting fixtures. Des. 72,781; June 14.
Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Clamp plate for lighting fixtures. Des. 72,813; June 14.
Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Loop for lighting fixtures. Des. 72,815; June 14.
Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Loop for lighting fixtures. Des. 72,815; June 14.
Boehringer, John A., Springfield, N. Y., assignor to Star Chandeller Co., Inc., New York, N. Y. Electric socker Chandeller Co., Inc., New York, N. Y. Electric candle Generic, John A., Springfield, N. Y., assignor to Star Chandeller Co., Inc., New York, N. Y. E lighting July 5.

Bochringer, John A., Springfield, assignor to Star Chan-delier Co., Inc., New York, N. Y. Body frame for lighting fixtures or similar articles. Des. 72,979; July 5.

July 5.
Boehringer, John A., Springfield, assignor to Star Chandelier Co., Inc., New York, N. Y. Strap for lighting fixtures or similar articles. Des. 72,980; July 5.
Boehringer, John A., Springfield, assignor to Star Chandelier Co., Inc., New York, N. Y. Bridge lamp arm or a similar article. Des. 73,121; July 26.
Boehringer, John A., Springfield, assignor to Star Chandelier Co. Inc., New York, N. Y. Shilde for Chandelier Co. Inc., New York, N. Y. Shilde for Ilgating fixtures or similar articles. Des. 73,158;

lighting fixtures or similar articles. Des. 73,158; Aug. 2c. John A., Springfield, assignor to Star Changington or similar articles. Des. 73,159; Aug. 2. Boehringer, John A., Springfield, assignor to Star Chandeller Co. Inc., New York, N. Y. Shield for lighting fixtures or similar articles. Des. 73,160; Aug. 2. Boehringer, John A., Springfield, assignor to Star Chandeller, John A., Springfield, assignor to Star Chanding fixtures or similar articles. Des. 73,460; Sept. 20. Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Chandeller, Des. 73,481; Sept. 20. Boehringer, John A., Springfield, assignor to Star Chandeller, Des. 73,997; Dec. 6. Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Lamp base or similar article. Des. 73,997; Dec. 6. Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Lamp base or similar article. Des. 73,997; Dec. 6. Boehringer, John A., Springfield, assignor to Star Chandeller Co., Inc., New York, N. Y. Lamp base or similar article. Des. 73,999; Dec. 6. Boekenoogen, Isaac E., and D. R. A. Ames, Aitkin, Minn. Towing device. 16,575; Mar. 22.

Boelcke, Eugen R. C., Charlottenburg, Germany, Manu-facturing electric insulators. 1,636,282; July 19. Boelkow, Frederic E., Wauwatosa, and F. W. O. Listing, North Milwaukee, assignors to Durable Floor Corpora-tion, Milwaukee, Wis. Elastic compesition floor.

North Milwaukee, assignors to burable Floor corpora-tion, Milwaukee, Wis. Elastic composition floor. 1,635,982; July 19.
Boelter, Hugo. (See Koegle, John G., assignor.)
Boerger, Otto, Wittenberg, Wis. Heading device. 1,615,066; Jan. 18.
Boerman, Jacob, Grand Rapids, Mich. Inspection light. 1,615,067; Jan. 18.
Boerner, Anton, Thompson, Nebr. Snare trap. 1,643,602; Sept. 27.
Boerner, Otto, Hamburg, Germany, Automatic tralp-brake mechanism. 1,653,615; Dec. 27.
Boerneth, Henry J., et al. (See Haipin, Michael K., as-signor.)

Stept., Henry J., et al. (see Haipin, Michael K., assignor, ossay S., Danbury, Conn. Hat-sizing machine. 1645,531; Oct. 18.
Boesch, Hacob J., assignor to The Meyer Furnace Company, Peoria, Ill. Furnace. 1,645,223; Oct. 11.
Brossc, Albert T. and P. H., Hutchinson, Kans. Gauge. 1,619,695; Mar. 1.
Boese, Peter H. (See Boese, Albert T. and P. H.)
Boese, George A., assignor to The W. W. Sly Manufacturing Company, Cleveland, Ohlo. Dust arrester. 1,621,824; Mar. 22.
Boeseneck Ernst, Gesellschaft mit beschränkter Haftung. Hossow, Walter, Berlin-Lankwitz, Germany. Hockey game. 1,641,525; Sept. 6.
Boettcher, Jacob H. L., assignor to Devices Corporation of New Jersey, Orange, N. J. Machine for stacking blscuits and the like. 1,649,563; Nov. 15.
Boettcher, Jacob H. L., assignor to Devices Corporation of New Jersey, Orange, N. J. Mixing machine. 1,649,564; Nov. 15.

New Jersey, Orange, N. J. Mixing machine. 1,649,564; Nov. 15.

Boettger, William F., Redlands, Calif. Labeling machine. 1,652,697; Dec. 13.

Boettger, William F., Redlands, Calif. Stacking device. 1,652,698; Dec. 13.

Boettler, Ervin L., Sapulpa, Okla. Fishing tool. 1,652,698; Dec. 13.

Boettler, Ervin L., Sapulpa, Okla. Fishing tool. 1,651,898; Dec. D. Detroit. Mich. Control device for Bogan, Baggar P., Detroit. Mich. Electrical lighter for gas stoves. 1,644,230; Oct. 4.

Bogan, Hans, Springfield, Ill. Egg preserver. 1,627,141; May 3.

Bogan, Hans, Springfield, Ill. Egg preserver. 1,627,141; May 3.

Bogan, Hans, Springfield, Ill. Egg preserver. 1,627,141; May 3.

Bogan, Hans, Springfield, Ill. Egg preserver. 1,627,141; May 3.

Bogan, Hans, Springfield, Ill. License-plate fastener. 1,640,106; Aug. 23.

Bogandus, Arthur G., Chiego, Ill., assignor to The Griscom-Russell Company, New York, N. Y. Device for protecting condensers. 1,643,803; Sept. 27.

Bogardus, Charles C., Los Angeles, Calif. Upper-cylinder oller. 1,634,134; June 2,800,142; Gorger H., assignor of one-half to R. K. M. Mfg. Co., Newark, and one half to Alberts Mfg. Co., Inc., Hackensack, N. J. Tape reversing and feeding attachment for sewing machines. 1,638,833; Aug. 16.

Boggild & Buodeson. (See Jensen, Jens J., assignor.)

Apr. 26.

Boggild & Jacobsen. (See Jensen, Jens J., assignor.)

Boggild, Glusto, Royalton, Ill. Figure toy. 1,638,910;

Aug. 16.

Boggs, Charles R., Waban, assignor to Simplex Wire and
Cable Company. Boston, Mass. Flexible cable.

1,664,508; Dec. 27.

Brown, B. K., and Bogin.)

Bogin, Charles, assignor to Commercial Solvents Corporation, Terre Haute, Ind. Mitrocellulose lacquer composition. 1,651,578; Dec. 6.

Bogle, Charles C. (See Hamilton, Elmer W., assignor.)

Bogle, John C., Oak Park, assigor to Cook Electric Company. Chicago, Ill. Hinged construction. 1,634,602;

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pany, Lineago, Ill. Hinged construction. 1,634,602; Nov. 1.

Bognar, Bela, New York, N. Y. Permanent-hair-waving device. 1,644,521; Oct. 4.

Bornal States of the Control o

Böhling, Rudolf H., Hamburg-Steinwarder, assignor to Rohrbogenwerk Gesellschaft mit beschränkter Haftung, Hamburg, Germany. Machine for producing tubular bends and coils and for expanding tubes. 1,648,161;

bends and cells and for expanding tubes. I,648,161; Nov. 8.
Bohlman, Ernest A., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Rheestat. 1,618,201; Dobb. 22.
Bohlman, Ernest A., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Lighting and ignition switch. I,618,802; Feb. 22.
Bohlman, Ernest A., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Terminal. 1,639,161; Aug. 16.

Supply Company, Chicago, III. Terminal. 1,003-101; Aug. 16.

Rhischer and Lorenz. (See Ladewig, Emil. assignor.)

Bohnsack, Harry C., assignor of one-half to H. W. Passer,

Fort Atkinson, Wis. Oil filter. 1,624,526; Apr. 12.

Bohn Aluminum and Brass Corporation. (See Eggen-weiler, C. W., and Flegel, assignors.)

Bohn Aluminum and Brass Company. (See Flegel, William I., assignor, is assignors.)

Bohn Aluminum and Brass Company. (See Flegel, W., and Enderich, assignors.)

Bohn, Gebrard C., St. Paul, Minn. Refrigerator. 1,644,910; Oct. 11.

1,644,910; Oct. 11.

New York, N. Y. Molding phenol plastic or like compounds. 1,625,449; Apr. 19.

Bohn & Herber Maschinenfabrik und Eisengiesserel. (See Flore Herber Maschinenfabrik und Eisengiesserel. (See Flahaus, Ostar, assignor). Alvey Manufacturing Company, St. Louis, Mo. Loading device. 1,619,015; Mar. 1.

Bolarsky, Jennie, Charleston, W. Va. Pastry cutter.

Mat. 1. Jennie, Charleston, W. Va. Pastry cutter. Bolarako, S. Nov. 22. Bolte, Harry. (See Haon, H. J., and Bolce.) Boles, Harry. B., Harvey, Ill. Combination tire pump and gauge. 1,645,788; Oct. 18. Bolg, James H. C., San Francisco, Calif. Blade holder. 1,645,685; Oct. 18. Bolleau, Joseph. (See Johnson, A. J., Bolleau, and

Findell,) Boillot, Henry F., Marshall, Mo. Advertising sign. 1,641,914; Sept. 6. Boissonnault, Frank L., Berkeley, Calif., assignor to Westinghouse Electric & Manufacturing Company. Elevator. 1,649,014; Nov. 15. Bokan, Frank, St. Louis, Mo. Knockdown bench and table structure. 1,618,503; Feb. 22. Boker, H., & Co. Inc. (See Redman, Charles H., assignor.)

Table structure: Advances of the Boker, H., & Co. Inc. (See Redman, Cuartes of Signor.)

Boker, Vitus A., Minneapolis, Minn. Heating element and making the same. 1,642,223; Sept. 13.

Boker, Vitus A., assignor to R. E. Holland, Minneapolis, Minn. Low-metal alarm. 1,650,005; Nov. 22.

Boland, Edward J., assignor of one-third to M. L. Conley, Freeport, Ill. Rall anticreeping and the-plate device. 1,635,738; July 12.

Boland, John L., Wilmore, Pa. Hydraulic ram. 1,641,878; Sept. 6.

Boland, William P. (See Dougherty, John J., assignor.)

Sept. 6. Sep

olens, signor.

signor.)
Bolens, Harry W., et al. (See Travers, Charles J., assignor.)
Bolens, Harry W., Port Washington, Wis. Power lawn
mower. 1.651.579: Dec. 6.
Bolensh, Harry W. (See Murakami, Rin N., assignor.)
Bolgiano, John, New York, N. Y., assignor to WorldWide Patent Enterprises, Inc. Aircraft. 1,652.564;
Dec. 13.

Dec. 13.

Bolick, Jerome, Conover, N. C. Wheel. 1,630,651;
May 31.

Bolin, Charles D., St. Louis, Mo. Incubator thermometer.
1,618,050; Feb. 15.

Bolin, Sven G., Kansas City, Mo. Furniture brace.
Bolin, Sven G., Kansas City, Mo. Furniture brace.
Bolin, Sven G., Kansas City, Mo. Furniture brace.
Bolin, Sven G., Lander, Control Control

Bolin, Sven G., Kansas City, Mo. Furniture brace.
Bolin, Sven G., Mek. Verkstadts Aktiebolag. (See
Ruddvist, Carl A. assignor.)

Bolinger. George N., Shelbyville, Ill. Golf tee.
1,630,288; May 31.

Boller, Albert, Wetzikon, Switzerland. Yarn. 1,621,348;
Mar. 15.

Boller, Albert, Wetzikon, Switzerland. Yarn. 1,621,348;
Mar. 15.

Bolles, Robert E., West Islip, N. Y. Glove. 1,654,279;
Dec. 27.

Bolles, Robert E., West Islip, N. Y. Antinguic actuator
Dec. 27.

Belles, William B., Milwaukee, Wis. Antipanic actuator for door fasteners. 1,646,990; Oct. 25. Bollheimer, Rhinehard, and E. T. Wilkens, Fort Laramie, Ohio. Tractor attachment. 1,634,446; July 5. Bolling, John E., assignor to Drying Systems, Inc., Chicago, Ill. Air-filter drive. 1,638,141; Aug. 9. Bolling, John E., assignor to Drying Systems, Inc., Chicago, Ill. Atmospherically-controlled switch. 1,642,718; Sept. 20.

Bolling, John E., assignor to Drying Systems, Inc., Chicago, Ill. Liquid-feeding apparatus. 1,651,945;

Doc. 6.

Bollinger, Charles, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Furnace, 1.626,450; Apr. 19.

Bollinger, Charles, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Furnace, 1.626,450; Apr. 19.

Bollman, George O., Nokomis, and O. J. Zimmermann, Ohlman, Ill., Vehicle light, 1.642,617; Sept. 20.

Bollman, John E., Rockford, Ill., Advertising sign. 1.634,568; Ill., Month and J. J. J. Sept. 20.

Bollman, John E., Rockford, Ill., Advertising sign. 1.634,568; Ill., Month and J. J. J. J. Sept. 20.

Bollman, John E., Rockford, Ill., Advertising sign. 1.634,568; Ill., Month and J. J. J. Sept. 20.

Bollman, John E., Rockford, Ill., Advertising sign. 1.634,568; Ill., Month and J. J. J. Sept. 20.

Bollman, John E., Bockford, Ill., Advertising sign. 1.634,638; Ill., Month and J. J. J. Sept. 20.

Bolonski, Fester, Pincher, Will., Ill., Ribber-machine at Bolonski, Felix, Pincheryville, Ill., Ribber-machine at Bolonski, Pan. 19.

Bolton, Archer L., North Andover, Mass. Spiral bar. Bolton, Archer L., North Andover, assignor to John W. Bolton, and Sons, Inc., Lawrence, Mass. Removable lining shell for Jordan Engines. 1,642,327; Sept. 13.

Bolton, Edith, M., Gerrards, Pross, England, Case for College and Pan. 19.

Bolton, Edith, M., Gerrards, Pross, England, Case for College and Pan. 19.

Sept. 27.

Bolton, Earl, and F. D. Bolton, Tulsa, Okla. Stone-cutting machine. 1,627,142; May 3.

Bolton, Edith M., Gerrards Cross, England. Case for stamps in roll form. 1,617,791; Peb. 15.

Bolton, Edith M., Gerrards Cross, England. Frying pan and saucepan and such like vessel. 1,628,641; May 17.

Bolton, England. Gee Bolton, Earl and F. D.)

Bolton, Edward D., Gee Bolton, Earl and F. D.)

Bolton, James A.S. Guide for excavating devices. 1,628,555; Dec. Bolton, James A., Sayville, N. Y. Doll. 1,630,240; May 24.

Bolton, James A., Sayville, N. Y. Doll. 1,630,240;

John W., and Sons, (See Bolton, Archer L., as-Bolton, John W., and Sons, Inc. (See Bolton, Archer L.,

Bolton, John W., and Sons, Inc. (See Bolton, Archer L., assignor.)
Bolton, Ray C., Birmingham, Ala. Dimmer switch. 1,612,582; Jan. 4.
Bolton, Sidney B. (See Bridgeford, A. G., and Bolton, Boltshauser, Heinrich, Zurich, Switzerland. Stuffing box for shafts. 1,613,924; Jan. 11.
Boltz, Fred S. (See Perry, E. J., and Boltz.)
Boltz, Fred S., (See Perry, E. J., and Boltz.)
Boltz, Fred S., Mansfield, Mass. Clothes container. 1,613,635; Feb. 22.
Boltz, Julius A., Everett, Mass. Trunk. 1,619,561;
Boltz, Bulland B., Boltz, Pred S., Combined letter box.

Boitz, Fred S., Mansfield, Mass. Clothes container. 1,618,635, Feb. 22.
Bolz, Julius A., Everett, Mass. Trunk. 1,619,561; Mar. I. Declo, Pittsburgh, Pa. Combined letter box Box Mar. I. Declo, Pittsburgh, Pa. Combined letter box Box Mar. I. Declo, Pittsburgh, Pa. Combined letter box Box Mar. I. Declo, Pittsburgh, Pa. Combined letter box Box Mar. I. Declo, Pittsburgh, Pa. Combined letter box Box Mar. I. Declo, Pittsburgh, Pa. Combined letter box Box Mar. I. Declo, Pittsburgh, Pa. Decl. 20, 100 pt. Pittsburgh, Pa.

Rond, John S., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Cruster and constructing the same. 1,641,726; Sept. 6. Bond, Joseph, ct al. (See Bond, Fred, assignor.) Bond, Milton E. (See Munsell, A. E. O., and Bond.) Bond, Oscar, Sapulpa, Okla. Torpedo hook. 1,638,678;

Aug. 9. and, William G., Wilmington, Del. Extruder. 1,650,687;

Bond, William G., Wilmington, Del. Extruder. 1,650,087; Nov. 29.
Bondiersky, Paul M., assignor of one-half to J. Herda, 1,654,495; Dec. 27.
Bondeson, John A., and A. F. Hunt, San Francisco, Calif. Combined punch and file. 1,623,824; Apr. 5.
Bonds, Frances L., Iva, S. C. Bedpan. 1,651,324; Nov. 29.

Bonds, Frances L., Iva, S. C. Bedpan. 1,651,324; Nov. 29.
Bondziulis, Charles A., Waterbury, Conn. Automatic stop for double-pile-fabric looms. 1,635,396; July 12: 000.
Bone, William A., St. Albans, England. Production of 1,639,584; Aug. 16.
Bonell, Lawrence, Chicago, Ill. Dice box. 1,629,142; May 17.
Boner, Hulbert E., Los Angeles, Calif. Contacting means. 1,637,488; Aug. 2.
Bonesteel, Willes C., Troy, N. Y. Milk-bottle-crate at-Bonetto, Domenico. St. Louis, Mo. Fluid motor. 1,646,723; Oct. 25.
Bongers, Arnold H., London, England, assignor to E. Pausser, Fhiladelphia, Pa., and R. Zabel, Detroit, Mich. Appliance for permanent hair waving. Bonhöte, Géraid. (See de Montmollin, G., and Bonhöte,) Bonhöte, Géraid. (See de Montmollin, G., and Bonhöte,) Bonhöte, Géraid. (See de Montmollin, G., and Bonhöte,) Boniforti, Carlo, Milan, Italy. Cut-film magazine. 1,613,379; bonilla. Penjamin M., New Orleans, La. Life-saving ponilla.

Boniforti, Carlo, Milan, Italy. Cut-lilm pack. 1,010,015, Boniforti, Carlo, Milan, Italy. Cut-lilm pack. 1,020,015, Bonifila, Benjamin M., New Orleans, La. Life-saving means for sunken ships. 1,625,704, Apr. 19. Bonine, Charles E., Melrose Park, Chelteaham Township, Pa. Variable-resistance device. 1,614,774; Jan. 18. Bonn, Carl R. H., Hillhead, Glasgow, Scotland. Flow meter. 1,037,927; Aug. 2. Bonnar, Henry O., New York, assignor, by messe assignments, to Gilman Fanfold Company, Limited, Niegara Falls, N. Y. Printed form. 1,639,683; Aug. 23. Bonnard, Alfred H. (See Bonnard, Leonard H., assignor of one-half to A. H. Bonnard, London, England. Manufacture of vegetable carbon. 1,619,649; Mar. 1. Bonnemaison, Paul, Paris, France. Ship's hull. 1,637,677; Aug. 2.

Bonnemstson, Paul, Paris, France. Ship's hull. 1.637.677; Aug. 2. Bonner-Charter Corporation. (See Bonner, Clarence E.,

assignor.) Bonner-Charter Motor Company. (See Bonner, Clarence

Bonner-Charter Motor Company.

E., assignor.)

Bonner, Clarence E., New York, N. Y., assignor to Bonner-Charter Corporation.

Engine lubrication. 1,634,768;

Bonner, Clarence E., New York, N. Y., assignor, by mesne assignments, to Bonner-Charter Motor Corporation, Dover, Del. Lubricating device. 1,648,440;

Name S.

mesne assignment of the property of the proper

Bonnette, Howard E. (See Born, S., Bonnette, Walker).
Bonnettl, Harry M. (See Sarr, Elmer E., assignor.)
Bonney Floyd Company, The. (See Edmunds, Glenn E., assignor.)
Company, Los Angeles, Calif. Core drill. 1,036,896;
July 26:
Bonnie Blaze Company. (See Relyea, Jesse F., assignor.)
Bonnot Company, The. (See Hartman, William H., assignor.)

Bonnot Company, The (see Signor.)
Bono, Andrew, Brooklyn, N. Y. Shoe heel. 1,619,458;
Mar, I.
Bonomin, Felix A. (See Beaumont, W. M., and Bonomin, Bonomini, Domenico, Alameda, Calif. Mucliaginous composition and making the same. 1,614,645; Jan. 18.
Bonrath, Wilhelm. (See Lieske, R., and Bonrath.)
Bonrath, Wilhelm. (See Lieske, R., Schulemann, and

Bonrath, Wilhelm. (See Lieske, R., Thauss, and Bonrath.) Bonsall, Charles D., New Kensington, Pa. Carline reen-forcement and load-lifting attachment. 1,638,145; 1,638,145;

Bonsall, Charles D., New Kensington, Pa. Carling enforcement and load-lifting arrangement. 1,64: Oct. 11.

efforcement and ionic-inting strangement.

Oct. 11.

Bonsall, Charles D., assignor to P. II. Murphy Company,
New Kensington, Pa. Car roof. 1.624,207; Apr. 12.,
Bonsall, Charles L., assignor to P. II. Murphy Company,
New Kensington, Pa. Car roof. 1,627,372; May 3.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,628,427; May 24.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,635,305; July 12.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,635,306; July 12.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,635,307; July 12.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,635,307; July 12.

Bonsall, Charles D., New Kensington, Pa., assignor to Company, New Kensington, Pa., assignor to Union Metal Products Company, Chicago, III. Device for operating car couplers. 1,636,163; July 19.

Bonsall, Charles D., New Kensington, Pa., assignor to Union Metal Products Company, Chicago, III. End wall Bonsall, Charles D., New Kensington, Pa., assignor to Union Metal Products Company, Chicago, III. End wall Bonsall, Charles D., assignor to Union Metal Products Company, Chicago, III. End wall Bonsall, Charles D., assignor to Union Metal Products Company, Chicago, III. Panel Products Company, Chicago, III. Car wall structure. 1,638,144; Aug. 9.

Bonsall, Charles D., assignor to Union Metal Products Company, New Kensington, Pa., assignor to Union Metal Products Company, New Kensington, Pa., assignor to D. H. Murphy Company, New Kensington, Pa., assignor to D. H. Murphy Company, New Kensington, Pa., assignor to The General Industries Company, Elyia, Ohio, Retning device for rods and Products Company to The General Industries Company, Elyia, Ohio, Retning device for rods and Products Company to The General Industries Company, Elyia, Ohio, Cheming device for rods and Products Company to The Gener

Oct. 4.

Sonsieur, Le, assignor to The General Industries Company, Elyria, Ohio, Retaining device for rods and shafts. 1,622,990; Mar. 29.

Bonsieur, Le, assignor to The General Phonograph Mannafacturing Co., Elyria, Ohio. Commutator and making same. 1,631,461; June 7.

Bonswor, Florence, Detroit, Mich. Curtain stretcher. 1,621,765; Mar. 22.

Bontenni, Augustus Coytesville, N. J. Sculpturing. Bontenni, Mario, New York, N. Y. Coffeepot. 1,619,967; Mar. 8.

Mar. 8. nus Candy Corporation. (See Lanzi, Elmo G., as-

Bolgo, James E., assignor to E. I. du Pont de Nemours Booge, James E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Producing light-resistant lithophone. 1,617,311; Feb. 8. Book Saver Company. (See Sharrard, George M., as-

Book Saver Company, (See Sharrard, George M., assignor.)
Booker, Richard A., Richmond, Ind., assignor to Richmond Piston Ring Co., Richmond, Ind. Making piston rings.
Booken, Richmond, Ind. Making piston rings.
Bookman, Sidney M., New York, N. Y. Repeating device for phonographic recards. 1643.369; Sept. 27.
Bookout, Charles H., Denver, Colo. Coin-controlled vending apparatus. 1,616.251; Feb. 1.
Booksh, George W., Grosse Tete, La. Expansion piston.
Boomer, George A., assignor to The Plume & Atwood Mig. Co., Waterbury, Conn. Electric-lighting fixture. 1,633.309; June 21.
Boomer, George A., assignor to The Plume & Atwood Mig. Co., Waterbury, Conn. Electric-lighting fixture. 1,633.309; June 21.
Boone, Doctor C., and J. T. Burkett, assignors of one-fourth to W. C. Mitchell and J. C. Turlor, and one-fourth to W. C. Mitchell and J. C. Turlor, and one-fourth to W. C. Mitchell and J. C. Turlor, and Sept. W. A. Railway switch. 1,638,911; Aug. 16.
Boone, James P. (See Cophill Henry H., assignors, Boone, James P. (See Cophill Henry H., assignors to British & Colonial Inventions Limited, England. Pump or compressor. 1,615.267; Jan. 25.
Boornem, John F. (See Sutphen, Robert M., assignor.)
Boornem, John F. (See Sutphen, Robert M., assignor.)

signor.)
Boosey, Edward W. N., Detroit, Mich. Water-closet bend.
1,624,653; Apr. 12.
Bootes, John T., Cebu, P. I. Cylinder head for all types
of water-cooled internal combustion engines. 1,649,659;

of water-cooled internal combustion engines. 1,649,659; Nov. 15.

Booth, Alba C., assignor of one-fourth to F. M. Coon, Burlingston, Vt. Bottle cap. 1,622,220; Mar. 22.

Booth, Anna V., and G. W., Bultimore, Md. Closure for bottle or fars. 1,645,316; Oct. 1,646, 120; Cor. 1,646, 136; Cor. 1,646, 136; Cor. 1,646, 136; Cor. 1,846, 136; Cor. 1,846

Both, Herbert L., Beverly Hills, Calif. Wave motor. 1625,518; Apr. 19.

1625,518; Apr. 19.

1625,518; Apr. 19.

160th, Sp. 19.

160th, Sp. 19.

160th, James S., Detroit, Mich. Motor vehicle. Rel(5,79; Mar. 29.

160th, James S., Detroit, Mich. Hood for automobile body fronts. Des. 73,890; Nov. 22.

160th, James W., Barnsdale, Okla. Still cleaner. 1,000; Jam. 11.

160th, Joseph L., Virginia, Minn. Garbage container. 1,613,690; Jam. 11.

160th, William G., West Somerville, assignor to Forbes Lithograph Manufacturing Company, Beston, Mass. 11,025,866; Mar. 15.

160th, William H., Kincardine, Ontario, Canada. Game. 1,622,866; Mar. 15.

160th, William N., Detroit, Mich. Vehicle wheel. 1,622,573; Apr. 26.

160th, William N., Detroit, Mich. Nut. 1,632,571:

June 21.

Booth, William N., Detroit, Mich. Machine for assembling spoted wheels. 1.647.603; Nov. 1.

Both, William N., Detroit, Mich. Demountable rim. 1.649.944; Nov. 2.

Booth, William N., Detroit, Mich. Driving device for demountable rims. 1.649.945; Nov. 22.

Booth, William N., Detroit, Mich. Demountable-rim tool. 1.652.161; Dec. 13.

Booth, Z. A., et al. (See Hodges, B. D., and Owen, assignors.)

assignors.)

Boothby, Albion M. (See Bennett, R. A., and Boothby,)

Boothby Fibre Can Company. (See Bennett, R. A., and

Boothby, Assignors.)

Boots, William C., assignor to Guyot Brothers, Attleboro,

Mass. Expansible-link bracelet. 1.631,946; June T.

Boots, William C., assignor to Guyot Brothers, Attleboro,

ments, to L. W. Fricke, Oak Park, III. Polishing implement. 1.615,436; Jan. 25.

Booty, Philip C. P., assignor to W. M. Bansley, Chicago,

III. Regulating device for controlling the operation of valves of the IRe. 1.623,616; Apr. 5 willing the Chicago, III. Box for face powder and the like. 1,628,106; May 10.

Booty, Philip C. P., assignor of one-half to M. T. Daley,

Glosty, Philip C. P., assignor of one-half to M. T. Daley.

1,628,106; May 10.

Booty, Philip C. P., assignor of one-half to M. T. Daley, Chicago, Ill. Container. 1,642,868; Sept. 20.

Booze, MacDonald C., assignor to Norton Company, Worcester, Mass. Article of silimanite-bonded granular works of the control of the cont

Apr. 20.

Bradford, Cleveland, Ohio. Pipe-threading machine. 1.616.649; Feb. 8.

Borden, Bradford, Cleveland, Ohio. Thread-cutting tool. 1.616.630; Feb. 8.

Borden, Bradford, Cleveland, Ohio. Pipe-threading machine. 1.622.411; Mar. 28.

Bradford, Cleveland, Ohio. Pipe-threading machine. 1.622.411; Mar. 28.

Signorian, The. (See Bresett, George A., assignor).

Borden Company, The. (See McClatchie, John M., as-

or.) or Company, The. (See Nonneman, Ira W., as-

signor.)

Borden Company, The. (See Taylor, Burt E., assignor.)

Borden Damund G., Queens, assignor to Doherty Research Company, New York, N. Y. Calorimeter.

1,623,299; Apr. 5.

Borden, John F., Berkeley, assignor to Oliver Continuous Filter Company, San Francisco, Calif. Treating canejuice settlings. 1,633,491; Dec. 20.

Borden, Moro M. (See Ledoux, J. W., and Borden.)

Borden, Perry A., Tronto Ontario, Canada. Remote Borer, Josef, Breitenbach, near Basel, Switzerland. Apparatus for transferring mica onto a fibrous web. 1,633,622; June 28.

Borer, Josef, Breitenbach, near Basel, Switzerland. Apparatus for the manufacture of mica plates. 1,644,631; Oct. 4.

Borer, William J., Genoa, Nebr. Fountain comb.

Oct. 4.

Borer, William J., Genoa, Nebr. Fountain comb.
1,645,038; Oct. 11.

Brosseau, Inc., New York, N. Y.
Ladies' hand-bags.
1,622,306; Mar. 29.

Borg & Beck Company, The. (See Gamble, David E., assignor.)

Borg & Beck Company, The. (See Reed, Harold V., as-

Born Carl W. Aberdeen, Wash. Animal trap. 16,29,69; May 24.
Borgadt, John B., Cleveland, Ohlo, Electromagnetic current control for welding machines. 1,631,438; Dec. 6.
Borgers, William H., Marion, S. Dak. Corn-planter wire. 1,614,463; Jan. 18.

Börgesen, John G., Lyngby, Denmark. Bottle closure. 1,630,466; May 31.
Borgium, Miller, Bakersfield, Calif. Vehicle signal. 1,623,905; Apr. 5.
Borglum, Torvaid M., Portland, Oreg. Milk-can-top lock. 1,618,145; Feb. 15.
Borgmann, Henry, Washington, D. C. Foot rest. 1,642,525; Sept. 13.
Borgwardt, Erich. (See Feldt, A., Schoeller, and

1.442.328; Sept. 18.
Borgwardt,
Bork, Otto J., Sun Prairie, Wis., assignor to Universal
Borgwardt,
Bork, Otto J., Sun Prairie, Wis., assignor to Universal
Milking Machine Company, Milking-machine washing
device, Religa38; Dec. 21.
Borston, Religa38; Dec. 21.
Borston, Religa38; Dec. 21.
Borston, Religa38; Dec. 21.
Borston, Wis., Company, New
York, N. X. Hoist, 1,644.770; Oct. 11.
Borkhuls, Louis J., Jr., Vayland, S. Dak, Guard finger
and ledger plate, 1,650,861; Nov. 29.
Borland, Deloss, assignor of seven-eighths to A. and M.
Isenberg, Charleston, Miss. Churn. 1,636,039; July 19.
Borntt, Romualdo, Milan, Italy. Fump. 1,634,867;
July 5.

Isenock, Commaido, Milan, Italy, Fump.
July 5.
Born, Alfred, Magdeburg, assignor to the Firm Fried.
Krupp Grunsonwerk Aktiengesellschaft, Magdeburg,
Buckau, Germany, Extrusions press. 1,564,109;
The 27.

Krupp Grunsonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany, Extrusions press. 1,654,109; Dec. 27.

Born, Ernest R., Hensel, N. Dak. Potato cutter. 1,617,194; Feb. 8.

Born, Ernest R., Hensel, N. Dak. Shocking tongs. 16,42,639; Str. 13.

Born, Otto C., and A. B. Dauses, Baltimore, Md. Track clearer; 1,652,603; Dec. 13.

Born, Otto C., and A. B. Dauses, Baltimore, Md. Track clearer; 1,652,603; Dec. 13.

Born, Sidney, and H. E. Bonnette, Bartlesville, Okla., and J. C. Walker, Eldorado, Kans., assignors to Empire Gasoline Company, Dover, Del. Dehydrating oils. Bornarth, Charles A., Chicago, Ill. Electric-battery-jar closure. 1,649,213; Nov. 15.

Borne, Serymser Company. (See Smith, R. B., and Lovern, assignors.)

Borneman, Herman A. F., Columbus, Ohio, assignor of Order of the Charles and Charles a

Bornkessel, Max, New York, N. Y. Heating-unit adapter. 1,646,525; Oct. 25. Bornmann, Carl, assignor to Ansco Photoproducts, Inc., Binghamton, N. Y. Photographic shutter. 1,630,049; Mos. 24.

Bornmann, Carl, assignor to Ansco Photoproducts, Inc., Binghamton, N. Y. Photographic shutter. I.630.049; May 24.

Carl, assignor to Ansco Photoproducts, Inc., Binghamton, N. Y. Focusing indicator for cameras. 1,637,213; July 26.
Bornmann, Carl, assignor to Ansco Photoproducts, Inc., Binghamton, N. Y. Safety catch for shutters. 1,637,513; Aug. 2.

Bornmann, Carl, Assignor to Ansco Photoproducts, Inc., Binghamton, N. Y. Safety catch for shutters. 1,637,513; Aug. 2.

Bornmann, Carl, A. See Lessler, L. W. and Bornmann, Carl A. Borchester, Boston, Mass. Windshield wiper. 1,643,619; Sept. 27.

Borotsky, Samuel H. (See Krafft, Bert H., assignor.) Borough, Willard L. (See McLaine, W. L., and Borough, Dorovoy, Samuel, and W. L. Perry, Lowell, assignors to Saco-Lowell Shops, Boston, Mass. Trap motion for textile machines. 1,638,237; Aug. 11 fo E. R. Hills, Chicago, Ill. Watch barrel, 1,643,693; Sept. 27.

Borrosen, Heige A., assignor to The C. H. Hanson Company, Chicago, Ill. Plate mounting. 1,643,652; Sept. 27.

Borroughs, Joseph N., Oakland, Calif. Laundering

Sept. 21.

Berroughs, Joseph N., Oakland, Calif. Laundering towels. 1.635,342; [bc. 2].

Berrow, Will H., Seattle, Wash. Ship-ventilator closing and opening mechanism. 1.615,437; Jan. 25.

Berrowmite Company of America, The. (See Ault, Forest F., assignor.)

Boraschel, Alfred F. (See Mulholland, J. B., and Borschel.)

Borsig, A., G. m. b. H. (See Marscheider, Karl, assignor.)

signor.)

Borski, John L., Anderson, Tex. Locomotive driving mechanism 1,633,818; July 12.

Borsky, Harry, (See Freedman, H., and Borsky.)

Borsody, Frank, East Chicago, Ind. Compound lock. 1,644,823; Oct. 4.

Bortollin, Joseph. (See Van Derbeck, S. G., and Bortolin, Borton, George W., Philadelphia, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y. Screen bar for crushing machinery. 1,624,886; Apr. 12.

Borton, George W., New Lisbon, and W. A. Battey. The Company, New 1,649,565; Nov. 10.

Company, New 1,648, N. Y. Hämmer crusher. 1,649,565; Nov. 10.

Borzych, Frank A., Minnatare, Nebr. Spiral plate condenser. 1,650,862; Nov. 29.

Boscarelli, Giovanni, Placenza, Italy. Rolling-mill appliance. 1,618,954; Feb. 22.
Boscarelli, Giovanni, London. England. Rolling thin or middle sheets from sheet bars. 1,622,177; Mar. 22.
Bosch. Carl. Ludwigshafen-on-the-ubine. assignor. by mesne assignments, to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of fertilizers. 1,639,585; Aug. 18.
Bosch, Carl F., Pforzheim, Germany. Clock. 1,651,804; Dec. 6.
Bosch, Carl F., Pforzheim, Germany. Clock. 1,651,804;

Dec. 6.

Bosch, José, Barcelona, Spain, assignor to Scott and Williams, Inc., New York, N. Y. Striping attachment for knitting machines. 1,615,807; Jan. 25.

Bosch, Robert, Aktiengesellschaft. (See Friedrich, Ernst,

Bosch, Robert, Aktiengeseiischaft. (See Friedrich, Ernst, assignor).
Bosch, Robert, Aktiengeseilschaft. (See Schäfer, M., Hähnle, and Walther, assignors.)
Boschelli. Angelo A., Chicago, Ill. Bath mat. 1,618,165; Feb. 22.

Feb. 22.
Boskey, Meyer, et al. (See Pfister, John R., assignor.)
Boske, Jacob P., Mount Oliver, and A. Telfer, Pittsburgh,
Pa., assignors to National Tube Company, Gauge.
1.630,690; May 31.
Bosley, Marlon E., and L. J. Kane, Oklahoma City, Okla.
Game device. 1,616,884; Peb. 2.
Bosley, Maurice E., Chicago, Ill. Weather stripping.

Bosley, Marion E., and R. 2.
Game device. 1,616,884; Feb. 2.
Bosley, Maurice E., Chicago, Ill. Weather stripping.
1,625,764; Apr. 19.
Boss, Frank N., Cranston, R. I. Electric candle.
1,528,716; Apr. 5.
Boss, O'thindo. J., Los Angeles, Calif. Bomb-dropping
Rossard, Gisbert L., Loudonville, N. Y. Flasher.
1,621,621; Mar. 22.
Bossard, Theodore, Salt Lake City, Utah, assignor to
National Products Incorporated. Vacuum tank for
motor vehicles. 1,639,254; Aug. 16.
Bossart, Faul N., assignor to The Union Switch & Signal
Company, Swisswile, Pa. Railway-traffic-controlling ap
paratus. 1,643,331; Septin.
Details, 1,643,331; Septin.
Details, 1,644,331; Septin.
Details, 1,644,405, 9.
Bosserdet, Alfred E., assignor of one-half to E. Hunter,
Detroit, Mich. Plumb bob. 1,626,717; May.
Bossert, William F., assignor to Signal Accessories Corporation, Utica, N. Y. Pipe carrier, 1,631,009;
May 31.

Bossert, William F., and J. C. Edwards, assignors to Signal Accessories Corporation, Utica, N. Y. Directional track contactor, 1,615,168; Jan. 18.
Bossert, William F., and J. C. Edwards, assignors to Signal Accessories Corporation, Utica, N. Y. Bond-wire connecter and bootleg terminal, 1,615,187; Jan. 18.
Bosshart, Edwin, Berlin-Tempelbof, Germany, Openherath Iurnace, 1,627,425; May 3.
Bosshart, Fredrich, Osabrock, N. Dak. 1,620,062;

Mar. 8.

Bossi, Enea, New York, N. Y. Diaphragm for liquid pumps. 1,615,299; Jan. 25.

Liquid-fuel-supply mechalossi, Baca, New York, N. Y. Liquid-fuel-supply mechalossi, Baca, New York, N. Y. Liquid-fuel-supply mechalossier, Claude G., Paris, and H. Zanicoli, Lardy, France.

Separating the components of alloys. 1,642,574;

Sept. 13.

Bossier, Albert, Munich, Germany. Box of bricks for building rooms inclosed by walls. 1,629,199; May 17, May 22,474;

May 22,474;

Bost, Arthur E., Waelder, Tex. Switch. 1,631,001;
May 31.
Bost, William D., assignor to Orange Crush Company,
Chicago, Ill. Food-coloring composition and preparing
sume. 1,616,738; Feb. 8.
Bostic, Ralph R., Los Angeles, Calif. Snap-on sucker-rod
Boston Auto Gage Company, The. (See Gregory, George
P., assignor.)
Boston Dyb House. Inc. (See Chel. Abraham B.

Boston Dye House, Inc. (See Cibel, Abraham B., as-

Boston Electric Heating Corporation. (See Heath, Donald B., assignor.)
Boston Insulated Wire & Cable Company. (See Burley.

Boston Haware wire & cane Company. (See Burky, Harry E. assignor.)
Boston, John, Newark, N. J., assignor, by meane assignments, to T. Harden Carter. Automatic stop mechanism for sewing machines. 1,629,090; May 17.
Boston Machine Works Company. (See Osgood, Walter

. assignor.) ton Match Company. (See Clark, George F., as-

signor.)
oston Wire Stitcher Company. (See Maynard, Arthur

signor.)
Boston Wire Stitcher Company. (See Maynard, Arthur H., assignor.)
Boston Woven Hose & Rubber Co. (See Fellows, John W., assignor.)
Bostwick, Henry C. (See Hudson, C. B., and Bostwick.)
Boswell, John S., assignor to Jersey-Creme Company,
Fort Worth, Tex. Jug., Des. 72.141; Mar. S.
Boswell, John S., assignor to Jersey-Creme Company,
Fort Worth, Tex. Jug., Des. 72.141; Mar. S.
Boswell, John S., assignor to Jersey-Creme for Jersey-Creme for Jersey-Creme Jersey, Jersey,

Bosworth, George P., assignor to Hemphill Company, Central Falls, R. I. Knitted glove and making the same. 1641.570; Sept. 6. Bosworth, Harry J., Company. (See Bosworth, Harry J.,

same. 1641.570; Sept. 6.

Sosworth, Harry J., Company. (See Bosworth, Harry J., Bosworth ComBosworth, Chicago. III. Light support. 1.644.231; Oct. 4.

Both, Tonjes A., Stratford, assignor to The Connecticut Electric Manufacturing Company, Bridgeport, Conn. Externally-operated safety switch. 1,023.573; Apr. 5.

Both, Tonjes A., Stratford, assignor to The Connecticut Electric Manufacturing Company, Bridgeport, Conn. Snap switch. 1,644.822; July 5.

Both, Tonjes A., Stratford, assignor to The Connecticut Electric Manufacturing Company, Bridgeport, Conn. Snap switch. 1,644.822; July 5.

Bridgeport, Conn. Snap switch. 1,644.822; July 5.

Bothe, Clarant Company, Bridgeport, Conn. Insuitating switch shell. 1,648.66; Nov. 8.

Bothe, Charence W. (See Cleveland, W. H., and Bothe.) Bothe, Clarance W. (See Cleveland, W. H., and Bothe.) Bothe, Clarance W. (See Cleveland, W. H., and Bothe.) Bothe, Clarance W. (See Cleveland, W. H., and Bothe.) Bots, Richard H., Syracuse, N. Y. Manufacturing vanillin. 1,643.804; Sept. 27.

Botson, Render H., Syracuse, N. Y. Manufacturing vanillin. 1,643.805; Sept. 27.

Botson, Rende, Anderghem-Brussels, Belgium. Treatment of hides and skins preliminary to tanning. 1,647,533;

Nov. 1.

Nov. 1.

Bott, George R., assignor to Norma-Hoffmann Bearings Corporation, Stamford Conn. Mounting for antifriction bearings. 1,639,634; Aug. 20.

Bott, Wister P., assignor of one-half to D. W. Knighton and one-fourth to F. C. McClanahan, Homer, La. Store furniture. 1,615,438; Jan. 25.

Botterbusch, William D., Bluffs, III. Chicken feeder. 1,631,462; June 7.

Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Trorotto, Ontario, Canada. Manifolding sules book. 1,636,548; July 19.

Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Manifolding sales book. 1,636,801; July 26.

Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Mnifolding sales books. 1,636,801; July 26.

Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Holder for manifolding books. 1,645,177; Oct. 11.

Canada. Holder for manifolding books. 1,645,177;
Oct. 11.
Bottome. Edgar M., assignor to Fostoria Glass Co,
Moundsville, W. Va. Plate. Des. 72,816; June 14.
Bottome. Edgar M., assignor to Fostoria Glass Co,
Moundsville, W. Va. Goblet. Des. 72,817; June 14.
Pottomley, William T., Newcastle-upon-Tyne, and E.,
Weeks, Northumberland, assignors to the Firm Merz
Weeks, Northumberland, assignors to the Firm Merz
production from the production of t

Boucek, Charles F., assignor to Ruda Manufacturing Com-pany, Chicago, Ill. Latch mechanism. 1,634,013; Boucek, James, and J. Halick, assignors of one-third to Boucek, James, and J. Halick, assignors of one-third to J. Trefney, Cleveland, Ohio. Furnace. 1,630,162;

J. Treiney, Lieventur, J. J. May 24.

Bouch, Elmer, and T. R. Shriver, Worthington, Pa. Adjustable steering knuckle. 1,642,640; Sept. 13.

Bouchard, Arsene J., Providence, R. I. Banjo. 1,625,387; Apr. 19.

Lancaster, and E. J. Blake, Buffalo.

Bouchard, Arsene J., Providence, R. I. Banjó. 1,625,887; Apr. 19.

Bouché, William F., Lancaster, and E. J. Blake, Buffalo, assignors, by mesne assignments, to Gould Car Lighting. Corporation, Rochester, N. Y. Exhaust muffler, 1,632,328; June 14.

Boucher, Edward H., Winchendon, Mass. Door hinge. Government of the Boucher, Edward H., Stillwater, N. Y. Fountain spray brush. 1,639,586; Aug. 16.

Boucher, Edward H., Stillwater, N. Y. Fountain spray brush. 1,639,586; Aug. 16.

Boucher, Hornee E., New York, N. Y. Miniature yacht. 1,610,548; Frb. 8.

Boucher, Hornee E., New York, N. Y. Miniature yacht. 1,610,548; Frb. 8.

Boucher, Hornee E., New York, N. Y. Miniature yacht. 1,610,548; Frb. 8.

Boucher, Light, M. J., Parls, France. High-frequency elemings. 1,624,288; Apr. 12.

Bouchery, August, Brooklyn, N. Y. Douche means. 1,652,383; Dec. 13.

Bouck. John, Akely, Minn. Automobile attachment. 1,635,541; July 12.

Boudette, Clayton M., Revere, Mass. Sound-reproducing Boudette, Clayton M., Revere, Mass. Sound-reproducing Conditions of the Control of

May 10.

Bouffart, Maurice, Herstal, near Liege, Belgium, Apparatus for measuring and distributing liquids bouffart, Bouffare, Box, Ottawa Ontario, Canada. Box construction. 1,630-318; Nov. 22.

Boughton, Solon J., assignor to Industrial Research Corporation, Toledo. Ohio. Washing and drying machine. 1,629,856; May 24.

Souin, Charles, Bocton, Mass. Claematographic picture with stereoscopic qualities. 1,642,918; Sept. 20. Bouin., Charles, Boston, Mass. Rival photograph. 1,651,248; Nov. 29. Boulogne, Baltus, Pasoerocean, Java. Automatic weighing apparatus with tare weighing. 1,635,623; June 28. Boulogne, Baltus, Pasturuan, Java. Automatic weighing apparatus with weighing arrier. Houlton, George, Rochester, N. Y. Attachment for seving machines. 1,627,228; May 3. Bouma, Benjamin T., Lynnville, Iowa. Poultry roost, 1,627,268; May 3. Seuna, Benjamin T., Lynnville, Iowa. Poultry roost, 1,627,268; May 3. George, Rochester, N. Y. Attachment for seving machines. 1,621,228; May 3. George, Rochester, N. Candon, Carl, assignor.) Bound Brook Oil-Less Bearing Company. (See Claus, Carl, assignor.) Bourcier, Charles D., Grafton, Mass. Ignition-testing device for internal-combustion engines. 1,632,166;

Bourcier, Charles D., Gratton, Mass. harton coangeries of internal-combustion engines. I, 632,166; June 14.

Bourdeau, Leon N., Rock Island, Ill. Curtain stretcher. 1,638,324; Aug. 16.

Kee Deligianes, T. N., and Bourdea.) Bourdon, Victor, Seattle, Wash. Adjustable mirror bracket. 1,622,486; Mar. 29.

Bourdon, Victor, Seattle, Wash. Adjustable mirror bracket. 1,630,777; May 31.

Bourgeois, Constant, Ronen, France. Shuttle provided with a hand or automatic threading device. 1,621,101; Mar. 15.

Mar. 15.

Mar. 15.

Horroscoph H. (See Hoffer, J. G., Sullivan, and Bourgon).

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Body bardware. 1,613,077; Jan. 4.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Vehicle closure. 1,615,826; Feb. 1.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Vehicle closure. 1,615,826; Feb. 1.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Latch. 1,616,106; Feb. 1.

Saker Corporation, South Bend, Ind. Latch. 1,616,106; Feb. 1.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Window regulator. 1,617,195; Feb. 8.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation. Ventilator. 1,620,512; Mar. 8.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation. South Bend, Ind. Vehicle closure. 1,623,934; Apr. 5.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Vehicle Closure. 1,623,934; Apr. 5.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Top construction. 1,635,358; July 12.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Top construction. 1,640,592; Aug. 30.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Top construction. 1,640,592; Aug. 30.

Bourgon, Joseph H., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Body construction. 1,645,582; Oct. 18.

Bourgord, Edward, and A. Leitl, Park Falls, Wis. Operating apparatus for safety guards on roll winders of paper machines. 1,628,488; May 10.

Bourke, Edmund, Footscruy, near Melbourne, Victoria, Augustaila, Ridde, 1,637,128; Aug. 2.

Bourn, Stephen W., Providence, R. I. Tubular-armoring-cable machine. 1,615,502; Jan. 2.

Apr. 5.

Bourn, Stephen W., Providence, R. I. Tubular-armoringcable machine. 1,615,502; Jan. 25.

Bourne, Cedric A. (See Bourne, Frank and C. A.)

Bourne, Frank and C. A., London, England. Connecting
device. 1,638,978; Jug. 16.

Bourne, Phillips P., Winchester, Mass., assignor to Worthington Pump & Machinery Corporation, New York.

N. Y. Oll-engine-driven centrifugal and similar pump.
1,622,699; Mar. 29.

Bourne, Phillips P., Winchester, and O. Nonnenbruch,
Boston, Mass., assignors to Worthington Pump & Mation engine. 1,642,293; Sept. 13.

Bourne, Stephen. (See Rypinski, M. C., Staunton, and
Bourne,)

Bournen, Stephen.

Bournonville, Eugene M., Jersey City, N. J. Internal-combustion-engine rotary valve member. 1,624,388; Apr. 12.

Apr. 12.

Bournonville, Eugene M., Jersey City, N. J. Rotary valve.
1.646,949; Oct. 25.

Bournonville Rotary Valve Motor Company. (See Smith,
Carlisle F., assignor.)

Bourque, David, Amesbury, assignor to G. W. J. Murphy
Company, Amesbury, Mass. Separable Instener and
construction equipped therewith. 1,650,486; Nov. 22.

Bourque, David, assignor to G. W. J. Murphy Company,
Amesbury, Mass. Buffer, 1,622,759; Mar. 29.

Bourrieu, Albert, Chicago, Ill. Spark plug. 1,622,760;
Mar. 29.

Bousfield, Alfred, assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Weighing machine. 1,652,810; Dec. 13.

Bouslough, Joseph A., and G. M. Eaton, Wilkinsburg, P.A., assignors of Westinghones Elseit, & Manufettining Company. Trimmer mechanism. 1,649,063; Nov. 15. Boustead, John R. (See Christian, C. L., and Boustead,) Boutin, Stanley, assignor to W. E. Gilbert, G. H. Empsall, and H. Duckworth, trustees, Springfield, Mass., doing business as Duckworth Chain & Manufacturing 1,662,390; Dec. 18.

atll, and H. Duckworth, trustees, Springfield, Mass, doing business as Duckworth Chain & Manufacturing Company, Machine for detecting and sorting articles. 1,652,390; Dec. 13.

Bouton, Edgar M., East Pittsburgh, Pa., assignor to West-north Control 1,619,393; Mart Contro

Sept. 6. Bouwmeester, Bernard J. (See Owen, I. J., and Bouw-

meester.), Behand 3. (see Owen, 1. 3., and bother Bouza, Vicente, Highland Park, Mich. Synchronizing mechanism for talking and motion-picture machines. 1,629,522; May 17. Bouzo, Manuel, Habana, Cuba. Plow. 1,616,107; Feb. 1.

Feb. 1.

Bovaird & Seyfang Manufacturing Company. (See Austin. Raymond L., assignor.)

Bovaird and Seyfang Manufacturing Company. (See Leonard, Peter. G., assignor.)

Bovard, Fritz, Bern, assignor to the Firm: Sport S. A. Fritz, Bern, assignor to the Firm: Sport S. A. Fritz, Bern, assignor to The Oblo Brass Company, Mansfeld, Ohlo. Apparatus used in bonding rails and its application. 1,623,634; Apr. 5.

Bove, Anthony C., Brooklyn, N. Y. Radiodesk. 1,647,264; Nov. 1.

Bove, Joseph E. Kenne, N. Y.

Nov. 1.

Bove, Joseph E., Kearny, N. J. Double-tread pneumatic tire. 1.643.195; Sept. 20.

Bovey, Sidney J. V. (See Bovey, Thomas and S. J. V.)

Bovey, Thomas, Chicago, Ill. Control device for automobile heaters. 1.615.068; Jan. 218:ng for automobile beaters. 2.615.068; Jan. 2.618:ng for automobile bovey. Thomas Chicago, Ill. Casing for automobile bovey. Thomas and S. J. V., Chicago, Ill., said S. J. V. Bovey assignor to said Thomas Bovey. Control for automobile heaters. 1.617.099; Feb. 8.

Bovey, Thomas and S. J. V., Chicago, Ill., said Sidney J. V. Bovey assignor to said Thomas Bovey. Clamping device. 1.621,490; Mar. 22.

Boving, Henrick, assignor to Western Electric Company, Incaparated, John St. V. Mctalle composition. Boving, Jens O., London. England. Hydraulic air-composition.

Boving, Henrick, assignor to Western auteur.
Incorporated New York, N. Y. Metallic composition.
1,636,763; July 26.
Boving, Jens O., London, England. Hydraulic air-compression plant. 1,628,025; May 10.
Boving, Jens O., Westminster, London, England. Hydraulic air-inspiring plant. 1,628,026; May 10.
Boving, Jens O., Westminster, London, England. Refrigerating apparatus. 1,646,007; Oct. 25.
Boving, Jens O., Westminster, London, England. Infector apparatus for compressing gases. 1,631,749;
Bovditch, James H., Brookline, Mass. Hat. 1,635,456;
July 12.
Bowe, Denis E., Wasca, Minn. Clamp. 1,634,532;
July 5.

Bowe, Fred A., Southbridge, Mass. House slipper and making it. 1.618,637; Feb. 22. Bowe, Marion R., assignor of one-half to W. D. Harris, Philadelphia, Pa. Boller-cleaning device. 1,626,385; Apr. 26.

Apr. 26.

Bowel, Gorge B., Hertfortshire, assignor of one-fourth to R. G. Dinwiddy, Blockheath, London, and five-eighth of R. G. Dinwiddy, Blockheath, London, and five-eighth and the continuation of the con

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Bowen, Ernest W., Chiswick, London, England. Mechanism for converting rotary motion into combined reciprocating and oscillating motion and vice versa.

Bowen, Frederick D., Monett, Mo. Handle attachment. 1,638,399; Aug. 9.

Bowen, George W., assignor to Illinois Watch Case Company, Elgin, Ill. Watchcase. 1,634,447; July 5.

Bowen, Leslie G., assignor to Bowen & Phelps Co., Bed-18. 13.

Bover, Serdinand A., Fine, assignor to Celeral adors; Dec. Chord, Marchael C., 1651,368; Dec. Chord, S., Aledo, Ill. End-gate-locking device. 1.642.051; Sept. 13.
Bower, John S., Aledo, Ill. End-gate-locking device. 1.642.051; Sept. 13.
Bower, Rolland. (See Sapp. James E., assignor.)
Bower, Rolland. (See Sapp. James E., assignor.)
Signors to Linotype and Machinery Limited, London, England. Method and mold for casting type bars. 1.622,573; May 10.
Bowers, Charlis M., Bicomington, Ind. Automobile Bowers, Charlis M., Bicomington, Ind. Automobile To Palester-board walls. 1.615.972; Feb. 1.
Bowers, Claude E., Los Angeles, Calif. Combined switchbox support and lath holder. 1,620.063; Mar. 8.
Bowers, Claude E., Los Angeles, Calif. Stucco nal. Dowers, Claude E., Los Angeles, Calif. Stucco nal. June 7.

necting the abutting ends of concrete slabs. 1,631,576; June 7.

Bowers, Claude E., Los Angeles, Calif. Wire package-holding device. 1,651,664; Dec. 6.

Bowers, Edward C., et al., receivers. (See Arnold, Les-Bowers, Ernak, assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,624,576; Apr. 12.

Bowers, Frank, assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich. Bowers, Frank, assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich. Soot blower, 1,637,546; Aug. 2.

Bowers, Frank assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich. Soot blower, 1,637,546; Aug. 2.

Bowers, Frank E., Indianapolis, Ind. Power washing machine, 1,639,255; Aug. 4.

Bowers, Frederick M., Chester, Pa. Helmet and mask. Re16,515; Jan. 4.

Bowers, Frederick M., Chester, Pa. Hand shield for electric welding. 1,652,973; Dec. 13.

Bowers, George H., Buffalo, N. Y. Apparatus for dispensing viscous materials. 1,651,865; Dec. 6.

Bowers, Lewis, San Francisco, Calif. Fireplace screen. 1,647,895; Nov. 1.

Bowers, Lewis, San Francisco, Calif. Fireplace screen. 1,647,895; Nov. 1.

Bowers, Nov. 12, 169,382; Apr. 5.

Sovers, Walter G. and C. A. Smith, Akron, Ohio. Brake lock, 1,623,882; Apr. 5. Bowes, Thomas D., Cynwd, assigner of one-third to H. C. Verhey and one-third to L. C. Cope, Philadelphia Fa. Cylinder for double-acting engines. 1,625,843;

Apr. 26.
Bowie, Augustus J., San Francisco, Calif. Electric fuse and fine holder. L614,846; Jan. 18.
Machinery Corporation, Paterson, N. J. Heel-seat-fitting machine. 1,617,475; Feb. 15.
Bowles. Englamin A., Washington, D. C. Window guard, 1,638,724; Aug. 9.
Bowles. Englamin A. Washington, D. C. Window guard, 1,638,724; Aug. 9.

Bowles, V

signor.) William II., assignor of one-third to W. H. Bowles, and sons, Mendow Creek, W. V. A. Rail Joint. Isosiles and sons, Mendow Creek, W. V. A. Rail Joint. Isosile, J. Bowling, Clarence B., and H. Bulman, Detroit, Mich. Floss holder, 1,623,231; Apr. 5.
Bownan, Albert B., Grand Rapids, Mich. Transmission. 1,620,044; Mar. 8.

Bowman, Chatham E., assignor to Samstag & Hilder Bros., Inc., New York, N. Y. Child's apron. Des. 72,665; May 17.
Bowman, Clifford, Spencer, Iowa. Map construction. 1643,831; Sept. 27.
Bowman, Edgar P. (See Blatt, Mack, assignor.)
Bowman, Pred., Anaconda, and J. S. May 11.
Bowman, Fred., and E. Ellis, Cushing, Okla. Furniture. 1,631,002; May 31.
Bowman, George H., Company, The. (See Becker, Alfred. A., assignor.)

1.631.002: May 31.

Bowman, George H., Company, The. (See Becker, Alfred A., assignor.)

Bowman, George J., Glenburn, Calif. Hay loader.

Bowman, George J., Glenburn, Calif. Tightener and holder for tire chains. 1.626,179; Apr. 26.

Bowman, Henry V. (See Woolsey, C. A., and Bowman.)

Bowman, Henry V. (See Woolsey, C. A., and Bowman.)

Bowman, Henry V. (See Woolsey, C. A., and Bowman.)

Bowman, John G., assignor of one-half to W. C. Haseltine,

Kansas City, Mo. Lining for brake bands and shoes.

Bowman, John G., assignor of one-eighth to H. H. Harrison and one-eighth to A. R. White, Chicago, Ill.

Liquid fuel. 1.625.236; Apr. 19.

Bowman, Lewis N., assignor of one-eighth to H. H. Harrison and one-eighth to A. R. White, Chicago, Ill.

Liquid fuel. 1.625.236; Apr. 19.

Bowman, Newton K., Bowdil, Ohlo. Mining-machine chain link and bit. 1.615.738; Jan. 25.

Bowman, Oliver S., Colorado Springs, Colo. Vertical fire-tube boiler. 1.624,908; Apr. 19.

Bowman, Oliver S., Colorado Springs, Colo. Ash-hnndling equipment. 1.624,908; Apr. 19.

Bowman, Oliver S., Colorado Springs, Colo. Ash-hnndling equipment. 1.624,908; Apr. 19.

Bowman, William J., Smith Center, Kans. Inner tube.

Bowman, Oscar F., et al. (See Savage, Basil H., assignor.)
Bowman, William J., Smith Center, Kans. Inner tube.
1,628,642; May 17.
Bowman, William W., assignor, by mesne assignments, to
The National Cash Register Company, Dayton, Ohio.
Cash register. 1,652,087; Dec. 6.
Coxh Replay. Carringe, N. J., assignor to American
1,637,404; aug. 2, gegraph Company. Signaling system.
1,637,404; aug. 2, gegraph Company. Signaling system.
2, swignor, J. Carringe, M. J. Combined clearerte and
Bowyer, John A., Chicago, Ill. Combined clearerte and

Bowyer, John A., Chicago, Ill. Combined cigarette and ash holder. 1,651.177; Nov. 29. Boxboard Products Company. (See Kondolf, Mathias R.,

Boxboard Products Company. (See Kondolf, Mathlas R., assignor.)

Boxrud, Alf M., Minneapolis, Minn. Ensilage harvester. 1.630,603: May 31.

Boyce, Harrison H., Jericho, N. Y., Motor heat indicator. Des. 72,981; July 5.

Boyce, Harrison H., Jericho, N. Y., Motor heat indicator. Des. 72,982; July 5.

Boyce, Harrison H., Jericho, N. Y., Motor heat indicator. Des. 73,983; July 5.

Boyce, Harrison H., Jericho, N. Y., Heat indicator. Des. 73,923; July 12.

Boyce, Harrison H., Jericho, N. Y., Heat indicator. Des. 73,923; July 12.

Boyce, Harrison H., Jericho, N. Y., Heat indicator. Des. 73,923; July 12.

Boyce, Harrison H., Forest Hills, N. Y., Temperature-Indicating instrument for motor vehicles. 1,647,171; Nov. 1.

Boyce And Veeder Co. Inc. (See Louder, Earl A., assignor.)

Boyce, James. (See Anderson, Harry F., assignor.)

Boyce, Reginald D., Hendon, London, England. Mercantile unit of patching material for pneumatic tires. 1,650.420; Nov. 22 trust for Plant Research, Inc. (See Boyce & Veeder Company. (See Iserman, S., Vernet, and Moses, assignors.)

Boyce and Veeder Co. Inc. (See Louder, Earl A., assignor.)

Boyden, Thomas L., Victoria, British Columbia, assigner of one-half to J. Hart, Vancouver, and H. C. Hall, Victoria, Canada. Reflecting signal device. 1,652,138;

signot.)
Boyer, Albert L., Marion, Ind. Loose-leaf binder.
1,623,524; Apr. 5.
Boyer, Clifford F., Webster Groves, Mo. Refrigerator.
1,631,577; June 7.
Boyer, Edwin W., Thornton, Ind. Feeder. 1,617,988; Feb. 15.
Boyer, Fernand, Paris, France. Thread-feeding device

Feb. 15.

Boyer, Fernand, Paris, France. Thread-feeding device for tufted-fabric looms. 1,628,387; May 10.

Boyer Fire Apparatus Company. (See Allen, J. E., and Schweeppe, assignors.)

Boyer, Henry, Jersey City, N. J., and M. Klevins, Brooklyn, N. Y. Fountain pen. 1,633,433; June 21.

Boyer, Joseph, Detroit, Mich, assignor to Burroughs Adding Machine Company. Carrying mechanism for accounting machines. 1,634,068; June 28.

Boyer, Willet. (See Updegrave, C. A., and Shollenberger, assignors.)

Boyer, William J., Wilmington, Del. Antiskid cross-chain, 1,651,439; Dec. 6. Boyett, Jesse B., Tampa, Fla. Plant-spraying apparatus, 1,638,758; Aug. 9.

Boykin, Burwell, jr., Beaumont, Tex. Air-cooled hoisting drum. 1.618.925; Jan. 11.

Boykin, Burwell, jr., Beaumont, Tex. Air-cooled hoisting reel. 1.636.040; July 19.

Boykow, Johann, Schoneberg, near Berlin, assignor to the Firm of Ippoc Gesellschaft mit beschränkter Hausten auch 1998. The Handley of the Firm of Ippoc Gesellschaft mit beschränkter Hausten auch 1998. The Handley of the Handley of the Firm of Ippoc Gesellschaft mit beschränkter Hausten auch 1998. The Handley of German Aerika utweing by photograph 1.650.073; Nov. 29.

Boylan, Jerome C., Cleveland, Ohio. Door-operating device for stoves and the like. 1.635.777; July 12.

Boylan, Thomas F., sr., assignor to Eversharp Manufacturing Co., New Brunswick, N. J. Manufacturing Boyle, Edward, Lyndhurst, N. J., assignor to MacCammond-Alexander Corporation, New York, N. Y. Casting moid. 1,640,107; Aug. 23.

Boyle, Edward, Lyndhurst, N. J., assignor to MacCammond-Alexander Corporation, New York, N. Y. Casting moid. 1,640,107; Aug. 23.

Boyle, Edward, Lyndhurst, N. J., assignor to MacCammond-Alexander See Dwyer, M. and Boyle.)

Boyle, Edward, Lyndhurst, N. J., assignor to MacCammond-Alexander, See Dwyer, M. and Boyle.)

Boyle, Thomas W., Chicago, Ill. Shaving brush. 1,617,569; Feb. 15.

Boynton, Alexander, San Antonio, Tex. Polished-rod rotor, 1,633,044; June 21. tonio, Tex. Device for ce-Boynton, Alexander, San Antonio, Tex. Device for ce-Boynton, Arthur J., Wilmette, assignor, by mesne assignments, to Victor Chemical Works, Chicago, Ill. Combustion system. 1,634,570; July 5.

Boynton, Dorothy, Chicago, Ill. Ire-cream cone. 1,616,570; Feb. 8.

Boynton, Oliver R., St. Louis, Mo. Tollet-paper-roll holder, 1,625,190; Apr. 19.

Mar. 22.

Boynton, Oliver R., St. Louis, Mo. Tollet-paper-roll bolder, 1.625,190; Apr. 19.

Boynton, Oliver R., Kanasa City, Mo. Egg beater, 1.627,314; May 3.

Boynton, Oliver R., Kanasa City, Mo. Beater or mixer, 1.627,315; May 3.

Boynton, Oliver R., St. Louis, Mo. Tollet-paper holder, 1.651,867; Dec. 6.

Oak Park, III., assignor to C. E. Cherch, Labert of G., 1.645,219; Oct 11.

Boys, Charles V., London, Eugland. Means for measuring and delivering gas at a known rate. 1,617,196; Feb. 8.

Boyter, Berry H. (See Bahan, W. H., and Boyter.)

Feb. 8.

Royter, Berry H. (See Bahan, W. H., and Boyter, Doyter, Doyter, John C., Cleveland, Ohio. Temporary fastening means for outlet hoxes. 1,652-251; Dec. 20.

Belgino, By German, Chicago, H. Tractor hitch for drills. 1,636,802: July 26.

Bozarth, William H., Vineland, N. J. Bathtub seat. 1,653,310; June 21.

Bozain, Millian, Cleveland, Ohio. Turret tool post.

assignor.

prach, Frances, administratrix. (See Brach, Henry E., assignor.)
Brach, Henry E., deceased, Valparaiso, Ind.; F. Brach, administratrix. Soldering iron. 1,626,911. May 8. Park, Ind. 1,626,911. May 10. Park, Ind. 1,627,551; May 10. Park, I. S. Brach, Marg, Co., Newark, N. J. Electric lamp, 1,627,551; May 10. Park, Ind. 1,627,559; Nov. 1. Park, Ind. 1,647,559; Nov. 1,647,647; Nov. 1,647

Bracke. Robert F., Chicago, assignor to C. B. Camp. trustee, Glencoe, Ill. Fuel feed system for motor vehicles. 1,619,809; Mar. 8.

Brackelsberg, Casper D., Madelia, Minn. Tilting apparatus for harrows. 1,646,273; Oct. 18.

Brackett, Edward M. and F. M., Topeka, Kans. Wiper for stip-applying machines. 1,629,473; May 24.

Brackett, Edward M., et al. (See Mulroney, John E., assignor.) assignor.) assignor. Fred, et al. (See Mulroney, John E., as-

signor.)

Signor.

Si

Braden, Richard W. (See Feeley, M. R., Stern, and Braden). Braden, Richard W. (See Stern, C., and Braden.). Braden Steel & Winch Company. (See Schuetz, Thomas J., assignor.)

Bradford Corporation, The. (See Rodman, Thomas E.,

Bradien Steel & Winch Company. (See Schuetz, Thomas J., assignor.)
Bradford Corporation, The. (See Rodman, Thomas E., assignor.)
Bradford Corporation, The. (See Rodman, Thomas E., assignor.)
Bradford, James R., San Francisco, Calif. Motion-picture machine. 1.641,727; Sept. 6.
Bradford, James R., San Francisco, Calif. Motion-picture machine. 1.641,727; Sept. 6.
Bradford Machine Company. (See Johnson, Carl O., assignor.)
Bradford, Richard H., J. S. La Barr, and P. H. Thompson, Paulsboro, N. J. Carboy. 1.630,163; May 24.
Bradford, Richard H., J. S. La Barr, and P. H. Thompson, Paulsboro, N. J. Carboy. 1.630,163; May 24.
Bradford, Zerbe C., assignor to The Dayton Engineering Laboratories Company, Dayton, Ohio. Engineering Laboratories Compandient of Engineering Laboratories Compandient of Engineering Laboratories Compandient of Engineering Laboratories Company, Dayton, Ohio. Engineering Laboratories Company, Dayton, Ohio. Engineering Laboratories Company, Stonington, Com

Company, 1, 1652,658; Dec. 13.
Bradley, Harry J., Johnstown, Pa. Overalls. I,003,202, Dec. 27.
Bradley, Harry L., Millwaukee, Wis. Variable condenser, 1641,314; Sept. 6.
Bradley, Harry T., and F. Jacobi, Newark, N. J. Collapsible hamper. 1,632,259; June 14.
Bradley, Harry T., and F. Jacobi, Newark, N. J. Adjustable bottom for hampers. 1,632,270; June 14.
Bradley, John J., West Springfield, Mass. Sash fastener. 1,635,238; Apr. 19.
Bradley, Lillian M. (See Bradley, Catherine and L. M.)
Bradley, Lillian M. (See Bradley, Catherine and L. M.)
Bradley, Linn. Montclair, N. J., and E. P. McKeefe, New York, N. Y. Production of caustic alkali, etc. Bradley, Linn. Montclair, N. J., and E. P. McKeefe, New York, N. Y. assignors to Bradley-McKeefe Corporation. Treatment of residual liquors. 1,637,515; Aug. 2.

New York, N. Y., assignors to bradley-McKeete Corporation. Treatment of residual liquors. 1,637,515; Aug. 2.

Bradley, Linn. Montclair, N. J., and E. P. McKeefe, 1,637,516; Corporation. (Sée Bradley, L., and McKeefe, assignors.)

Bradley-McKeefe Corporation. (Sée Bradley, L., and McKeefe, assignors.)

Bradley Motor Products Company, The. (See Munger, Howard, assignor.)

Bradley, Oyle E. (See McCarty, E. E., Dicus, and Lang-Bradley, Oyle E.).

Bradley Divie J., Elmo, Mo. Veterinary medicine. 1,918,951; Feb. 15.

Bradley Dulverizer Company. (See Burke, James G., assignor.)

Bradley, William Thrift, Tex. Traveling valve for oil-Bradley, William Thrift, Tex. Traveling valve for oil-Bradley, William Thrift, Tex. Traveling valve for oil-Bradley, Donald B., and N. E. Oglesby, Edgewood, Md. Producing smoke clouds from moving alreraft. 1,619,183; Mar. 1.

Bradner, Donald B., assignor to E. I. du Pont de Nemours & Company, Willington, Del. Impregnated wood and effecting the impregnation. 1,652,811; Dec. 13.

Bradshaw, Dennis F., Indianapolis, Ind. Spotlight for mail cars. 1.631.003; May 31. Bradshaw, Frank H., Reno, Nev. Wrench. 1,646.608; Oct. 25.

mail cars. 1,631.003; May 31.

Bradshaw, Frank H., Reno, Nev. Wrench. 1,646.608;

Bradshaw, Grauville, London, England. Bowling-game apparatus. 1,629.065; May 17.

Bradshaw, Harry, Kansas City, Mo. Paper feeding. 1,628,224; May 10.

Bradshaw, Harry, Topeka, Kans. Paper feeding. 1,628,225; May 10.

Bradshaw, Richard Montreal, Quebec, Canada, assignor for the control of the contro

Best Company of the C

Brady, Jac. Apr. 5.

Apr. 5.

Brady, Francis E., jr., Muncie, Ind., assignor of one-third to R. A. Oppenheim, and one-third to D. Oppenheim, Detroit, Mich. Pump. 1,625,659; Dec. 13.

Brady, Gertude, New York, N. Y. Clothespin. 1,645,220; Oct. 11.

Dertock Meine Himm and Scholler, Dec. 13, Optimizer Brady, Gertrude, New York, N. Y. Clothespin. 1,645,220; Oct. 11.

Prady, Gurdon G., Arkansas City, Kans. Pipe saddle. 1,644,879; Sept. 6.

Brady, Henry, Inc. (See Brady, Ellen, assignor.)

Brady Henry, Inc. (See Brady, Ellen, assignor.)

Brady Hury, Lind D. A. Benvay, Eag City, and W. R. Van Ness, Detroit, Mich. Camera. 1,616,301; Feb. 1, Erady, John D., assignor to Brady Process Company, Ell Dorado, Ark. Apparatus for the treatment of impure petroleum olls. 1,628,574; May 10.

Brady, John D., Bartleeville, Okla., assignor to Brady Process Company, Ell Dorado, Ark. Hind-feed apparatus, 1,645,686; Oct. 18.

Brady, John F., and R. B. Ott, Ritzville, Wash. Balloon-tire patch. 1,629,335; May 17.

Prady, John F., and R. B. Ott, Ritzville, Wash. Balloon-tire patch. 1,629,335; May 17.

Prady, John F., Charleeville, Okla. Pump. 1,626,072; Apr. 26.

Prady, Sanford C., Bartleeville, Okla. Pressure-control device. 1,626,073; Apr. 26.

Prady, Thomas, East Orange, N. J., assignor, by mesne assignments, to Otts Elevator Company, New York, N. Y. Door closure. 1,624,911; Apr. 19.

Brady, Thomas, East Orange, N. J., assignor, by mesne assignments, to Otts Elevator Company, New York, N. Y. Door closure. 1,624,911; Apr. 19.

Brady, Thomas, East Orange, N. J., assignor, by mesne assignments, to Otts Elevator Company, New York, N. Y. Door closure. 1,624,911; Apr. 19.

Brady, Thomas, East Orange, N. J., assignor, by mesne assignments, to Otts Elevator Company, New York, N. Y. Door closure. 1,624,911; Apr. 19.

Brady, Thomas, East Orange, N. J., assignor or varians composition. 1,639,396; Aug. 16.

Brangman, Hartin, Hawthorne, N. J. Vehicle transmission. 1,612,799; Jan. 4.

Brangman, Hartin, Hawthorne, N. J., Vehicle transmission. 1,612,799; Jan. 4.

Brangman, Hartin, Hawthorne, N. J., Vehicle transmission. 1,620,612; Mar. 8.

Bragg, Caleb S., Palm Beach, Fla., and V. W. Kilesrath, Port Washington, N. Y., assignors to Brang-Kilesrath Corporation, Long Island City, N. Y. Valve-contro

Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, N. Y., assignors to Bragg-Kliesrath mechanism for power actuators. 1,630,327; May 31.

Bragg, Caleb S., Falm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island, N. Y. Throttle-control apparatus of brake-applying mechanism. 1,033,360;

poration, Long Island, N. Y. Throttle-control apparatus for brake-applying mechanism. J.633,360; June 21.

Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation of the Company of the Com

Bragg, Thomas A., assignor to The Owens Bottle Company, Toledo, Ohio. Cooling molds. 1,632,992; June 21.
Braggiotti, Isidore. (See Serchi, Enrico, assignor.)
Bramm, Albert, Dusseldorf-Rath, Germany. Connecting nipple for cast-iron heating-boller elements. 1,631,911; June 7.
Brail Gorge, Paterson, N. J. Shuttle tension. Brail 1,305; June 7.
Bra

Braidwood, Charles E., Chicago, Ill. Pulverizer. 1,642,139;
Sept. 13.

Brainard, Ernest D., Davenport, Iowa. Superstructure for vehicles. 1,614,598; Jan. 18.

Brainard, Ernest D., Davenport, Iowa. Superstructure for vehicles. 1,614,598; Jan. 18.

Brainard, Ernest D., Brochon, M. S., Brainard, Ernest J., Brochon, M. Y.

Brainard, Forest J., Brochon, N. Y.

Brainard, George C., assignor to The General Fireproofing Company, Youngstown, Ohio. Metal desk confing Company, Youngstown, Ohio. Metal desk confing Company, Toungstown, Ohio. Metal desk confing Company, Toungstown, Ohio. Metal desk confing Company, Inc. Alloy. 1,624,857; Apr. 12.

Brainin, Clement S., Gien Ridge, N. J., assignor to Baker & Company, Inc. Alloy. 1,624,857; Apr. 12.

Bray, Norman B., Faso Robles, Calif. Scrubber. 1,620,591; Mar. 8.

Bray, Norman B., Faso Robles, Calif. Scrubber. 1,622,1591; Mar. 8.

Bramhall, Edwin E., Balboa Heights, Ganal Zone, Fanama of Month of molding. 1,626,447; Apr. 26.

Brammar, Louis C. (See Allen, John F., assignor to Accessories Manufacturing Company, Connector member. 1,632,11; June 14.

Bramming, Carl, Chleago, Ill., assignor to Accessories Manufacturing Company. Electric lamp for radios. 1,636,421; July 19.

Bramwell, Balfour, Belfast, Ireland. Filtering apparatus. 1,630,431; Mar. 8.

Bramwell, Francis H., Hartford, England, assignor to Atmospheric Nitrogen Corporation, Solvay, N. Y. Catanos, M. S. (1997). Description of the Paramoling Company. Machine for printing ampulla. 1,638,912; May 3.

Brand, Hermann, Berlin, Germany, Machine for printing ampulla. 1,638,912; May 3.

Brand, Hermann, Berlin, Germany, Water heater. 1,634,659; Sept. 6.

Brand, Hermann, Berlin, Germany, Water heater. 1,635,797; Dec. 27.

Brand, Hermann, Berlin, Germany. Water heater. 1,634,704; July 5. Brand, James C. (See Chase, L. W., and Brand.)

Brand, Jesse D., Hartsville, S. C. Baby walker. 1:613,436; Jan. 4: Repair of the period of the perio

operating according to the development method. 1,636,120; July 19. Brandenburg, Joseph F., et al. (See Otterson, George W.,

assignor.) assignor, Wilson C., Weston, W. Va., assignor to General Electric Company. Recording instrument. 1.637.852: Agg. 2.

General Electric Company. Recording Institution 1,637,852; Aug. 2.
Brandes Laboratories, Inc. (See Brigham, Cyril A., Brandes Laboratories, Inc. (See Brigham, C. A., and Gerns, assignors.) Brandes Laboratories, Inc. (See Dietrich, F., and Gerns,

Berndes Laboratories, Inc. (See Gerns, William H., Brandes Laboratories Inc. (See Moss, David H., assignor.) Brandes Laboratories, Inc. (See Respess, William R.,

assignor.)
randes Laboratories, Inc. (See Rowe, C. R., and Gerns,

assignors.)
Brandes Laboratories, Inc. (See Rypinski, Maurice C.,

Brändes Laboratories, Inc. (See Rypinski, M. C., Staun-ton, and Bourne, assignors.)
Brandes Laboratories Inc. (See Stacy, Ray H., as-signor.)
Brandes Laboratories, Inc. (See Staunton, Le Roy W.,

Brandes Laboratories, Inc. (See Stevenson, Harry, assignor.)
Brandes Laboratories, Inc. (See White, Charles D., as-

signor.)

Brandes, Paul H., and J. W. Adams, assignors to The Springfield Mfg. Co., Bridgeport, Conn. Sectional grinding wheel. 1641.79; Sept. 6.

Brandish, Michael. (See Kaplan, M. L. and Brandish.)

1.635.245; July 12.

Brandoine, Paul, Port Richmond, N. Y. Combined mail box and bottle holders. 1,625.412; Mar. 29.

Brandon, Adele U. G., New York, N. Y. Vapor lamp. Des. 71,985; Feb. 15.

Brandon, David C., et al. (See Fénelon, Juan, assignor.)

Brandon, David C., et al. (See Fénelon, Juan, assignor.)

assignor).

Brandt, David G., Westfield, N. J., assignor to Doherty Research Company, New York, N. Y. Process and ap-paratus for the condensation of vapors. 1,613,016; Jan. 4.

Jan. 4.

Brandt, Edgar W., Paris, France. Projectile for smooth-bore guns. 1,628,527; May 10.

Brandt, Edward J., assignor to Brandt Automatic Cashier Co., Watertown, Wis. Casing for a coin-delivery machine. Des. 78,559; Oct. 4.

Brandt, Edward J., assignor to Brandt Automatic Cashier Cashier

Grine. 1988, 16,300°, Oct.

Brandt, Edward J., assignor to Brandt Automatic Cashier Color of the Color of the

Brandwein, Henry G., Chicago, Ill. Mattress-filling mech-arilla (18,56); F.b. 22. Brailland (18,56); F.b. 22. Brandweid, Seebh, Waban, Mass. Collapsible holder for yarn packages. 1,546,472; Oct. 25. Branham, Luther G., Tulsa, Okla. Bottle. Des. 74,000; Dec. 6.

Dec. 6.
Branham, Walter R., Fort Valley, Ga. Pusher. 1,630,604;
May 31.

May 31.

Branick. John, Simpson, Pa. Tool-locking device, 1.652,233: Dec. 13.

Brannen, Thomas L., assignor to Brown Company, Berlin, N.H., Pluc cock. 1643,371 Sept. 27 cm. 18.

In N.H., Pluc cock. 1643,371 Sept. 27 cm. 27 cm. 18.

Inghouse Electric & Manufacturing Company, Removable furnace heating unit. 1.638,826; Aug. 16.

Brannon, Nem W., Greer, S. C., assignor to Draper Corporation, Hopedale, Mass. Intermittent thread-cutting temple. 1,615,188; Jan. 18.

Brannon, Hopedale, Mass. Loom-picker check. 1,629,446; May IT portale, Mas

Branson, David E., Bloomfield, N. J., assignor to American Telephone and Telegraph Company. Apparatus and method for measuring transmitted light, 1,653,694; Dec. 27.

Bec. 27.

Bernard, Brooklyn, N. Y. Beverage urn or similar article. Des. 72,696; May 24.

Branston, Bernard, Brooklyn, N. Y. Beverage urn or similar article. Des. 72,697; May 24.

Brant, Arthur P., and C. M. Derby, Little Valley, N. Y. Speed-indicating device. 1,647,500; Nov. 1.

Brant, Jessie H. Youngstown, Ohio. Track-scale trig Brant, Joseph S., Somerset, assignor to W. L. Morrison, Somerset, Pa. Motor-vehicle heater. 1,642,296; Sept. 13.

13.
Frantford Oven & Rack Co. Limited, The. (See Aird, Clarence W., assignor.)
Frantford Oven & Rack Co. Limited, The. (See Riches. C. H., and Aird, assignors)
Brand, Lorenz K., assignor the Firm Friedrich Deckel Brand, Lorenz K., assignor Maschinenbau, Munich, Eavard, Germany, Eagraving machine, 1,647,312;
Feb. 3.

Feb. 8.

Braren, Lorenz K., assignor to the firm Friedrich Deckel, Fabrik für Frizisionsmechanik und Maschinenbau, Munich, Germany, Lubrication for screw making and turning lathes. 1,629,461; May 17.

Braren, Lorenz K., Munich, Germany, assignor to the Firm: Friedrich Deckel, Präcisionsmechanik und Maschinenbau, Munich, Bavaria, Germany, Internal-company, 1,635,541, June 21.

Braten, Lorenz K., assignor to the Firm Friedrich Deckel Fabrik für Präzisionsmechanik und Maschinenbau, Munich, Germany, 1,636,406; July 19.

Braten, Lorenz K., assignor to the Firm Friedrich Deckel Fabrik für Präzisionsmechanik und Maschinenbau, Munich, Germany. Serve making and turning machine.

nich, Germany. Screw making and turning machine. 1.643,635; Sept. 27.

1 643,635; Sept. 27.
Brass, Italio, Milan, Italy. Typewriter. 1,620,942;
Brass, Italio, Milan, Oak Park, Iu. Car retarder.
1,620,943; Mar. 15.
Brassiton, Chester H., assignor to The Tillotson Manufacturing Co., Toledo, Ohio. Carburetor. 1,625,787;

Brasslton, Chester H., assignor to The Tillotson Manufacturing Co., Toledo, Ohio. Carburetor. 1,625,787; Apr. 26.
Braselton, Chester H., New York, N. Y., and C. P. Brockway, Toledo, Ohio, said Brockway assignor to said Braselton. Pumping mechanism, 1,620,665; Mar. 8.
Mailba, N. Y., said MacLaren, assignor to said Braselton. Vibration-operated pump. 1,625,768; Apr. 26.
Braselton, Chester H., New York, and F. B. MacLaren, Mailba, N. Y., said MacLaren, assignor to said Braselton. Vibration-operated pump. 1,625,768; Apr. 26.
Braselton, Chester H., New York, and F. B. MacLaren, assignor to said Braselton. Liquid-pumping apparatus. 1,625,789; Apr. 26.
Braselton, N. Y., said MacLaren assignor to said Braselton. Liquid-pumping apparatus. 1,625,789; Apr. 26.
Braselton, N. Y., said MacLaren assignor to said Braselton. Pumping mechanism. 1,629,837; May 24.
Brass, Edward E., Petersburg, III, assignor to Indiana Canning Machinery Company, Indianapolis, Ind. Pump-Rin-Willing machine. 1,647,338; Nov. 1,220.
Brasell, Pred E., and S. T. Ray, Gadsden, Ariz, Trench-cleaning device 1,633,311; June 21.
Bratton, John N., and W. N. Bryant, Chase City, Va. Shooksorting machine. 1,624,389; Apr. 12.
Bratvold, Oscar N., Wayasta, Minn. Hydraulic drive. 1,616,252; Feb. 1.
Brauchler, Chastel A. Canton, Ohio. Forging gear blanks. Brauer Ebward J., University City, assignor to Brauer.

Brauchler, Charles A., Canton, Ohio. Forging gear blanks. 1,632,533; June 14.
Brauer Bros. Mfg. Co. (See Brauer, Edward J., assignor; Bruer, Edward J., University City, assignor to Brauer, Bros. Mfg. Co., St. Louis, Mo. Golf bag. 1,648,162; Brauer, Herman, and L. H. Cron. Graver, Okla. Rock bit breaker. 1,643,442; Sept. 27.
Brauer, Walter, Seminole, Okla. Swivel circulating head. 1,629,650; May 24.
Braughler, Floyd, Butler, Pa. Chair. Des. 73,249; Braun, Aquila R., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Garment-pressing machine. 1,640,142; Aug. 23.
Braun, Aquila R., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Electric Braun-Bruning & Co. (See Schröder, Edmund, assignor.) Braun, Carl. Canastota, N. Y. Receptacle sterilizer. 1,632,588; June 14.
Braun, Carl. F., Pasadena, Calif. Condenser, cooler, and absorber. Braun-Carl F., Pasadena, Calif. Absorption plant. 1,640,747; Aug. 30.
Braun, Carl F., Pasadena, Calif. Heat exchanger. 1,640,748; Aug. 30.
Braun, Carl F., San Francisco, Calif. Heat exchanger. 1,640,748; Aug. 30.
Braun, Carl F., San Francisco, Calif. Heat exchanger. 1,640,748; Aug. 30.
Braun, Carl F., San Francisco, Calif. Heat exchanger. 1,640,748; Aug. 30.
Braun, Carl F., San Francisco, Calif. Heat exchanger. 1,640,746; Aug. 30.
Braun, Carl F., San Francisco, Calif. Heat exchanger. 1,640,746; Aug. 30.
Braun, Carl F., San Francisco, Calif. Heat exchanger. 1,640,746; Aug. 30.

Braun. Georg. Gesellschaft mit beschrünkter Haftung et al. (See Beil, A., and Meyer, assignors.) 1,649,015; Braun. Hans, Zurich, Switzerland. Clamp. 1,649,015; Braun. Hans, Zurich, Switzerland. Clamp. 1,649,015; Braun. Philip N., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Pressing-machine control. 1,637,729; Jug. 2.
Braun. Philip N., assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine (silding head). Inc., Syracuse, N. Y. Pressing machine (silding head). Braunige, Karl A., assignor to The Prosperity Company, Stamford, Conn. Rim lock. 1,613,555 Jun. 4.
Brauning, Karl A., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Rim lock. 1,613,615 Jun. 4.
Braunisdorf. Otto. (See Nawiasky, P., Braunsdorf, and Holzapiel.) Braunsdorf, Julius, Bernx. N. Y., assignor to Premier Laurich Prosperity, Property of the Prop

Alleghen Nov. 29.

Nov. 29.

Frautigam, John M., and M. C. Bright, Indianapolis, Ind. Sectional folding minnow trap. 1,638,238; Aug. 9.

Frawman Piston Ring Manufacturing Company. (See Brawner, George H., assignor).

Frawner, George H., assignor to Brawman Piston Ring Manufacturing Company, Dallas, Tex. Piston. 1,618,805; Feb. 22, projects. Calif. Reversible ice-cream Bray, Albert, Los. 1,634,569; July 5.

Bray, Frad C., Moncton, New Bruoswick, Canada. Composition for cleaning brushes and the like. 1,635,202; July 12.

July 12.

July 12.
Bray, Glessie, guardian. (See Bray, Mark.)
Bray-Hurd Process Company. (See Hurd, Earl, assignor.)
Bray, Mark; G. Bray, guardian of said Mark Bray, a
mental incompetent, assignor of one-half to J. C.
Howard, Nevada, Mo. Steering gear. 1,638,3818.

Aug. 9.
Bray, Norman C., Portland, Oreg. Coupling sleeve for dredging pipe. 1,628,302; May 10.
Bray, Norris E., Kimball, S. Dak, Grain door for freight cars. 1,634,015; June 28.
Bray, Norris E., Argyle, Wis. Anchoring stake. 1,635,923; July 12.
Bray, Fartick H. (See Green, Henry M., assignor.) Brayell, Fred W. and O. Wis. Kansas City, Mo. Weather Brazell, Ottis W. (See Brazell, Fred W. and O. W.)
Brazzola, Victorio, Buenos Aires, Argentina, Locomotive using crude fuel oil. 1,633,798; Dec. 27.
Breecinski, Karl, Mauston, Wis. Clevis. 1,632,877; June 21. June 21

June 21.

Breaker, Harry O., Winthrop, Mass. Electric furnace. 1,636,041; July 19.

Breaux, Aline O., New Iberia, La. Bedpan. 1,632,021; June 14.

Breck Ednil, and R. Fugmann, Guben, Germany. Blowning of the manufacture of felts. 1,649,335; Nov. 15.

Nov. 15.

Brecht, Gus V., Butchers' Supply Company. (See Deacon, Edward F., assignot.)

Brechtbill, Guy H., assignot to Central Foundry Company, Marshalltown, Iowa. Stock fountain. 1,650,489; Nov. 22.

Breck Engineering Company. (See Childs, Gustav G.,

Breck Engineering Company. (See Childs, Gustav G., assignor.)
Breckneil, Munro & Rogers Limited. (See Dolman, Henry J., assignor.)
Breckneil, Munro & Rogers Limited. (See Dolman, Henry J., assignor.)
Breckneil, Munro & Rogers Limited Limi

Bredemeler, Henry E., Kenmore, assignor to Schreiber Products Corporation, Buffalo, N. Y. Labeling con-tainers, 1,649.442; Nov. 15. Bredig, Georg, and E. Elöd, Karlsruhe, assignors to the Firm of Rudolph Koepp & Co., Oestrich-on-the-Rhine, Germany, Production of hydrocyanic acid. 1,627,144; May 3.

May 3.

Bredig, Georg, and Egon Elöd, Karlsruhe, F.
many. Production of hydrocyanic acid. Badenia

Bredow, Robert A., Los Angeles, Calif. Hat block. 1.644.976; Oct. 11. Revent. Charles of Market Charle

Bree, Helier O., Auckland, New Zealand. Switching and starter apparatus of electric motors. 1,632,534; June 14.

Bree, Helier O., Auckland, New Zealand. Starting in-duction motors and apparatus therefor. 1,637,292;

duction motors and apparatus theretor. 1,051,252, Proci. Scient, Los Angeles, Calif. Floating compass. 1,614,228; Jan. 11, Breed, Ralph S., Lynn, Mass. Golf-tee holder. 1,627,145; May 3. Breeden, Alfred J., Grinnell, Iowa. Lawn sweeper.

Breed, Ralph S., Lynn, Mass. Golf-tee holder. 1,627,145;

Breeden. Alfred J., Grinnell, Iowa. Lawn sweeper. 1,815,928; Feb. 1.

Breeden, Carl L. (See Ireland, Harold W. F., assignor.)

Breeden, Paul L. (See Breeden, Sam G. and P. L.)

Breeden, Paul L. (See Breeden, Sam G. and P. L.)

Breeden, Paul L. (See Breeden, Sam G. and P. L.)

Breeden, Sam G. and P. L., Memphis, Tenn. Battery and connecter. 1,025,355; June 1.

Breen. Harry H., Tulsa, Okla.

Breen. James L., Jr., Chicago, Ill. Oil pilot light. 1,641,250; Sept. 6.

Breese, James L., Jr., assignor to Oil Devices Corporation, Chicago, Ill. Removing soot. 1,628,643; May 10.

Breese, James L., Jr., assignor to Oil Devices Corporation, Chicago, Ill. Removing soot. 1,628,643; May 17.

Breese, James L., Jr., assignor to Oil Devices Corporation, Chicago, Ill. Automatic draft regulator. 1,628,644; May 17.

Breese, James L., Jr., assignor to Oil Devices Corporation, Chicago, Ill. Automatic draft regulator. 1,628,644; May 17.

Breese, James L., Jr., assignor to Oil Devices Corporation, Chicago, Ill. Automatic draft regulator. 1,628,644; May 17.

tion, Chicago, III. Automatic drait regulator. 1,025,044; May 17.

Breese, James L., Jr., assignor to Oil Devices Corporation, Chicago, III. Controlling the combustion of bydrocarbones 1,629,235; May 17.

Breese, James L., jr., assignor to Oil Devices Corporation, Chicago, III. Heating device. 1,633,065; June 21.

Breese, James L., jr., assignor to Oil Devices Corporation. Chicago, III. Oil-burning furnace and thermostatic control therefor. 1,633,065; June 21.

Breese, James L., jr., assignor to Oil Devices Corporation, Chicago, III. Oil-burning furnace and ignition means therefor. 1,633,567; June 28.

Breese, James L., jr., assignor to Oil Devices Corporation, Chicago, III. Signor to Oil Devices Corporation, Chicago, III. Signor to Oil Devices Corporation, Chicago, III. Combustion. 1,634,533; July 5.

Breese, James L., jr., assignor to Oil Devices Corporation, Chicago, III. Combustion. 1,634,533; July 5.

Breese, James L., jr., assignor to Oil Devices Corporation. Chicago, III. Combustion. 1,634,533; July 5.

Breese, James L., jr., assignor to Oil Devices Corporation. Chicago, III. Combustion. 1,634,533; July 5.

Breese, James L., jr., assignor to Oil Devices Corporation. Chicago, III. Combustion. 1,634,533; July 5.

Breese, James L., jr., assignor to Oil Devices Corporation. Chicago, III. Combustion. 1,634,533; July 5.

Brégeat Corporation of America, The. (See Runge, Wal-

assignor.)

Brégeat Corporation of America, The. (See Runge, Walter, assignor.)

Brégeat, Jean & America, Wilmington Del. Recovery of camphor and naphthalene contained in gaseous mixtures. 1,613,218; Jan. 4.

Brégeat, Jean H., Paris, France, assignor to Brégeat Corporation of America, Wilmington, Del. Recovery of camphor and naphthalene contained in gaseous mixtures. 1,613,218; Jan. 4.

Brégeat, Jean H., Paris, France, assignor to Brégeat Corporation of America, Wilmington, Del. Recovery of volatile organic solids. 1,613,218; Jan. 4.

Bréguet, Louis G. and P. A., Geneva, Switzerland. Wiredrawing bench. 1,646,596; Oct. 1,619,184; Mar. I.

Bréguet, Louis G. and P. A., Geneva, Switzerland. Wiredrawing bench. 1,646,596; Oct. 2015; G. and P. A., See Bréguet, Louis G. and D. A., See Bréguet, Louis G. and D. A., See Bréguet, Louis G. and D. A., See Bréguet, B. See L. See L. See Bréguet, B. See L. See L.

Betteneien, Albert F., assignor to The Geometric Tool Company, New Haven, Conn. Self-opening die head. 1,632,719; Aug. 23.

Breitenstein, Albert F., and E. A. Barteit, assignors to The Geometric Tool Co., New Haven, Conn. Nonrotary self-opening die head. 1,643,832; Sept. 27.

Breitenstein, Albert F., and E. A. Barteit, assignors to The Geometric Tool Co., New Haven, Conn. Nonrotary self-opening die head. 1,643,832; Sept. 27.

Breind, Essen-on-fhe-flut, Fried Krupp Aktiengesellschaft, Essen-on-fhe-flut, Germany. Cash register. 1,649,443; Nov. 15.

Breind, Eugene F. J., Paris, France. Controlling device for marine engines. 1,625,978; Apr. 26.

Bremer, Engil M., Glenville, Minn. Attachment for gasengine-colling systems. 1,626,448; Apr. 26.

Bremer, Francis D. H., assignor to The English Electric Company Limited, London, Esgland. Blow-ont are Company Limited, London, Esgland. Blow-ont are Forging Company. Pittsburgh, Pa. Automobile bumper. 1,646,473; Oct. 25.

Brener, Harry A. Chicago, Ill. Vibration absorber for radio tubes. 1.616.176 Feb. 1.

Renorman Company. 1.

Brenner, Maurice D. K., Chicago, Ill. Protective envelope for garments. 1.652.268; Dec. 13.

Bren, George T., New Rochelle, assignor to Herring-Hall-Marvin Safe Company, New York, N. Y. Chute. 1.

Breno Corporation. 1.

Breno Corporation. 1.

Breno Corporation. 1.

Breno Corporation. 1.

Brenenan, Chas. W., Company, The. (See Stratman, Joseph W., assignor.)

Brenker, Fred G. (See Ollinger, T., and Brendel.)

Brenker, Toseph W., and K., Highland Park, Mich. Burner or carbon holder. 1.613.078; Jan. 4.

Brenkert, Karl. (See Brenkert, Joseph W. and K.)

Brennan, Charles M., New Haven, Conn. Bottle decaper. 1.650.597; Nov. 29.

Brennan, Joseph L., New York, N. Y. Snow removing and loading plow. 1.646.639; Oct. 25.

Brenne, Arild M., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1.620.630; Mr. 15.

Brenne, Arild M., Saignor to Brenneis Manufacturing Company, Oxnard, Calif. Disk harrow. 1,620.666; Mar. 8.

Brenneis, Louis, assignor to Brenneis Manufacturing Company, Oxnard, Calif., Disk harrow. 1,620.636; Mar. 8.

Brenneis, Louis, assignor to Brenneis Manufacturing Company, Oxnard, Calif., Disk harrow. 1,621.622; Mar. 22.

Brenneis, Manufacturing Company. (See Brenneis, Louis, assignor to Brenneis Manufacturing Company, Oxnard, Calif., assignor to Brenneis Manufacturing Company.

Nov. 15.
Brenneis Manufacturing Company. (See Brenneis, Louis,

Brenneis Manufacturing Company assignor.)
Brennen, Charles H., Landsdowne, Pa. Adjustable window-frame stile. 1,622,022: Mar. 22.
Brenner, Ernest, et al. (See Pfister, John R., assignor.)
Brenner, Frank A., assignor to The Studebater Corporation, South Bend, Ind. Vehicle closure. 1,617,298;

Brennen, Charles H., Landsdowne, P.A. Adjustable window-from stite. 1.622.022 Mar.
dow-frome stite. 1.622.022 Mar.
Diversity of the Studebaker Corporation, South Bend, Ind. Vehicle closure. 1.617.208;
Feb. 8.
Brenner, Frank A., assignor to The Studebaker Corporation, South Bend, Ind. Vehicle closure. 1.617.208;
Feb. 8.
Brenner, Ralph F., assignor to H. C. Fry Glass Company, Rochester, Pa. Heat-resisting glass. 1,623.301;
Des. 72.818; June 14.
Brenzinger, Julius, Fairfield, assignor to The Max Ams Machine Company, Bridgeport, Conn. Seaming machine. 1,639.552; Aug. 16.
Brenzinger, Julius, Fairfield, and P. H. Lange, assignors to Glassing machine and body-conveying means. 1,625,639; Apr. 19.
Brest, George A., Middletown, assignor to The Borden Company, New York. N. Y. Web feeding and cutting mechanism. 1,618.161; Feb. 22.
Breslauer, George A., Middletown, assignor to The Borden Company, Bridgeport, Conn. George A., Middletown, assignor to The Borden Company, New York. N. Y. Web feeding and cutting mechanism. 1,618.161; Feb. 22.
Breslauer, Joseph assignor to Compagnie de l'Azote et des Fertilisants S. A., Geneva. Switzerland. Manufacture of alkali-intropen fertilizers having urea as their base. 1,618.266; Feb. 22.
Breslauer, Joseph, and C. Goudet, assignors to Société d'Btudes Chimiques pour l'Industrie. Geneva, Switzerland. Manufacture of urea from cyanamide and decolorizing the dast from calcium cyanamide and decolorizing Freslauer, Joseph, and C. Goudet, assignors to Société d'Btudes Chimiques pour l'Industrie. Geneva, Switzerland. Manufacture from cyanamide and decolorizing Freslauer, Joseph, and C. Goudet, assignors to Société d'Btudes Chimiques pour l'Industrie. Geneva, Switzerland. Manufacture from cyanamide and manures containing soluble organic nitrogen. 1,652.753; Dec. 13.
Bressile, Robert E., assignor to Western Wheeled Scraper Company, Aurora III. H. Grader car. 1,622.761; Mar. 29.
Bressler, Robert E., assignor to Western Wheeled Scraper Company, Aurora III. H. Grader car. 1,622.762; Mar. 29.
Bressler,

Horse (Vormais J. C. & H. Dietrich) Asthines, 1,652,845; Land Germany. Embroidery machine. 1,652,845; Brett. William P., Decatur, Ill. Pumping mechanism. 1,624,527; Apr. 12. Brett, William P., Decatur, Ill. Deep-well pumping mechanism. 1,624,577; Apr. 12.

Bretz, Robert B. (See Schrecker, Arthur C., assignor.) Breuer, Vladimir, and P. Lesennik, New York, N. Y. Breuis, Staney A., Sutton West, Ontario, Canada. Stor-age battery. 1,689,922; Aug. 23. Breusch, Adolf, Pforsheim, Germany. Hand-operated roller stamp. 1,648,534; Nov. 8. Brewer, Alca, Wentworth, Mo. Spring tire. 1,618,168;

Feb. 22.

Brewer, Alden R., Spokane, Wash. Machine tool. 16.34.534; July 5.

Brewer, Charles A., Noroton Heights, Conn. Sprinkler. 1,612.964; Jan. 4.

Brewer, Charles A., Noroton Heights, Conn., Soil-vibrating Brewer, Charles A., Noroton Heights, Conn., assignor to Cannon Engineering Co., Brooklyn, N. Y. Generating and impregnating steam with a chemical constituent. 1,633.568; June 28.

Brewer, Charles A., Noroton Heights, Conn., assignor to Cannon Engineering Co., Brooklyn, N. Y. Mangle. 1,643.937; Nov. 15.

Brewer, Charles A., Noroton Heights, Conn., assignor to Cannon Engineering Co., Brooklyn, N. Y. Electric fron. 1,649.506; Nov. 15.

Brewer, Charles A., Noroton Heights, Conn., assignor to Cannon Engineering Co., Brooklyn, N. Y. Electric fron. 1,649.506; Nov. 15.

Brewer, Charles A., Noroton Heights, Conn., assignor to Cannon Engineering Co., Brooklyn, N. Y. Sadiron. 1,649.507; Nov. 15.

Brewer, Charles B., College Park, Md. Protecting finantering Charles B., College Park, Md. Protecting finantering Charles B., College Park, Md. Protecting finantering Charles B., College Park, Md.

signor.)

Brewer, Charles B., College Park, Md. Protecting financial securities. 1,615,566; Jan. 25.

Brewer, Clarence T. (See Trane, R., and Brewer.)

Brewer, Francis A., Eastwood, N. Y. Mixing device for Internal-combustion engine. 1,622,701; Mar. 29.

and the like. 1,613,158; Jan. 48.

Brewer, Bipp M., Sylvia, Kans. Clamping gear puller. 1,648,106; Nov. 8.

Brewer, Harold D., Oklahoma City, Okla. Golf game. 1,621,057; Mar. 15.

Brewer, Joseph, New York, N. Y. Key holder. 1,616,302; Feb. 1.

Brewer, Joseph, New York, N. Y. Key holder. 1,616,802; Feb. 1.

Brewer, Kenneth E., assignor to Chas. A. Brewer & Sons, Chicago, Ill. Game counter. 1,613,575; Jan. 4.

Brewer, Robert W. A., Philadelphia, Pa. Fuel manifold. 1641,527; Sept. 6.

Brever, R. G. Franchyn, Pa. Construction and mounting of a valve-sealing mechanism for internal-combustion engines. 1,637,799; Aug. 2.

Brewer-Titchener Corporation, The. (See Miller, Harold G., assignor.)

Brewin, Thomas. Fife. Scotland. Sound-reproducing instrument. 1,633,760; June 28.

Brewer-Titchener Corporation, The. (See Miller, Harold G., assignor.)

Brewin, Thomas. Fife. Scotland. Sound-reproducing instrument. 1,633,760; June 28.

Brewin, Thomas. Fife. Scotland. Sound-reproducing instrument. 1,633,760; June 28.

Brewiner, Dymonth. Mass. Marking device for rope. 1,635,739; July 12.

Brewster, Frank G., White River Junction, Vt. Electromagnetic indicator. 1,638,614; Aug. 9.

Brewster, Morris B., Chicago, Ill. Quickly-detachable sealing coupling. 1,641,028; Sept. 6.

Brewster, Oswald C., Casper, W.W., assignor to The Sharples Specialty Company. Refining lubricating oils. 1,649,096; Nov. 15.

Brewster, Oswald C., Casper, Wyo., assignor to The Sharples Specialty Company. Refining lubricating oils. 1,640,096; Nov. 16.

Brewster, Desmit C., Easper, Wyo., assignor to Wyko Projector Corporation. Film projector. 1,624,156; Apr. 12.

Apr. 12.

Apr. 14.

Brewster Ruby T., New York, N. Y. Flacon, Des. 72,698; May 24.

Brewster, Ruby T., New York, N. Y. Box or similar research from the pressure of the

Brewster, Ruby T., New York, N. Y. Bottle or similar container. Des. 72,889; June 21.

Brewster, Ruby T., New York, N. Y. Vanity case. Des. 73,024; July 12.

Brewster, Ruby T., New York, N. Y. Vanity case. Brewster, Ruby T., New York, N. Y. Flacon. Des. 73,025; July 12.

73.250; Aug. 16.

Browster, Ruby T., New York, N. Y. Bottle or similar perfume container. Des. 73,278; Aug. 23.

Browster, William, New York, N. Y. Retainer for automobile cushions. 1.619.916; Mar. 8.

Brewster, William, New York, N. Y. Glass partition for closed automobile bodies. 1,628,074; Apr. 26.

Browster, William D., Syrneuse, assignor to National Brake Compan. 1.614.418. Nr. 1.

Browster, William D., Syrneuse, assignor to National Brake Compan. 1.614.418. Nr. 1.

Broy, Charles J., Park Falls, Wis. Apparatus for felling trees and the like. 1.642.668; Sept. 20.

Broy, Clarence F., Philadelphia, Pa. Piano construction. 1,642,356; Sept. 13.

Breyer, Frank G., Palmerton, and C. W. Farber, Bowmanstown, Pa., assignors to The New Jersey Zinc Company, New York, N. Y. Compounded rubber, 1,649,782; Nov. 15.

Breyer, Robert W., Stephen S. (2,143; Mar. R. Breyer, Theodore V., New Philadelphia, Ohio. Telephone note rack and pencil holder, 1,631,717; June 7.

Breyley, Rupert, Painesville, Ohio. Car bumper, 1,621,708; Mar. 22.

Breyley, Rupert, Painesville, Ohio. Stop for rolling stock, 1,648,012; Nov. 8.

British Stephen Stephen

Brides, Thomas J. (See Raiche, P. A., Dowling, and Brides.)
Brides, Adam E. (See Shartle, C. W., and Bridge.)

Brides, dam E. (See Shartle, C. W., and Bridge.) Bridge, Herbert H., Detroit, Mich. Priming device. 1,636,897; July 26. Bridge, Matter G., Newton, assignor to C. E. Parkburst, Somerville, Mass. Articulator. 1,644,106; Oct. 4, Bridge, Walter G., Newton, and W. A. Pervier, Water-Mass. Muffle furnne. 1,644,107; Oct. 4. Somerville, Bridgeport Brass Company. (See Brown, G. A., and Dennison, assignors.) Bridgeport Brass Company. (See Clark, Francis M., assignor.) Bridgeport Brass Company.

Bridgeport Brass Company. (See Clark, Francis M., assignor.)
Bridgeport Brass Company. (See Robinson, Thomas T.,
Bridgeport Brass Company. (See Robinson, Thomas T.,
Bridgeport Brass Company. (See Robinson, Thomas T.,
Bridgeport Hardware Manufacturing Corporation, The.
(See Hobbs, Willis F., assignor.)
Bridgeport Hardware Manufacturing Corporation, The.
(See Hobbs, W. F., and Anderson, assignors.)
Bridgewarer Machine Company, The. (See Mason, Freeman D., assignor.)
Bridges, Frank, Harrow, H. Firman, Harrow Weald H.
Weals (L., assignor), Bridges, Frank, Harrow, H. Firman, Harrow Weald H.
Weals (L., assignor), Bridges, Bridges, Hasel M., assignor to Silex Company, Malden,
Mass. Drainer, 1,634.705; July 5.
Bridges, Walter J., Two Rivers, Wis. Air-cleansing
humidifier, 1,640,641; Aug. 30.
Bridgford, Archie G., and S. B. Bolton, Aledo, Ill.; said
S. B. Bolton assignor to said A. G. Bridgford. Manifold heater for internal-combustion engines. 1,641.728; 1,641.728;

fold heater for internal-combustion engines. Sept. 6. 1.641.728:

S. B. Bolton assignor to said A. G. Bridgford, Manlfold heater for internal-combustion engines. 1,641,728; Sept. 6.
Bridgman, Harry, New York, N. Y., assignor to Stokes & Shith Company, Philadelphi, Pa. Box-fly-applying Bridgman, Harry, New York, N. Y., assignor to Stokes & Shith Company, Philadelphi, Pa. Box-fly-applying Bridgman & Rubin, Inc. (See Smith, Harry B., assignor, Dridgman & Rubin, Inc. (See Smith, Harry B., assignor, Dridgman, Enders, P. Bridgwater, Ernest R., Wilmington, Del., and D. H. Powers, Penns Grove, N. J., assignors to B. I. du Pont de Nemours & Company, Wilmington, Del. Age-1981, Inc. 1992, Physical Property of the Property

Briggs, Arthur J., Syracuse, N. Y., assignor to National Carbon Company, Inc. Seal for galvanic cells. 1,650,319; Nov. 22.
Briggs, Arthur M., Andrade, Calif. Toy horse or novelly. 1,627,426; May 3.
Briggs, C. A., et al. See McCulloch, Stewart B., assignor.)
Briggs, C. A., et al. See McCulloch, Stewart B., assignor.)
Briggs, C. A., et al. See McCulloch, Property of the State of th

signor.)
Briggs, George W., Nanuet, N. 1.
Mar. 1.
Mar. 1.
Briggs, Guy O., Cleveland, Ohio. Sash fastener.
1.634,350; July 5.
Briggs, Luther K., Hersman, Ill. Eyeglasses. 1,647,124;
Nay, 1.
Dompany. (See Lehman, Wal-

Nov. I.
Briggs Manufacturing Company. (See Lehman, Walter J., assignor.)
Briggs Manufacturing Company. (See Lundberg, Everett

E., assignor.)
Briggs Manufacturing Company. (See Maise, Herman C., assignor.)
Briggs Manufacturing Company. (See Marshall, William,

assignor.)
Briggs Manufacturing Company. (See Marshall, William,
Kiehler, assignors.) Kiehler, assignors.)

Briggs Manufacturing Company. (See Westrope, Fred J.,

assignor.)
Briggs Manufacturing Company. (See Williams, Clif-ford J., assignor.)

Briggs, Orum T., Indiana, Pa. Package card. 1,629,435;
May 17.

Briggs, Southwick W., Glenmont, Md. Tractor scoop. 1,622,033; Mar. 22. Briggs, Southwick W., Glenmont, Md. Dump-wagon-gate closer. 1,622,084; Mar. 22. Briggs, Southwick W., Glenmont, Md. Hydraulic scoop. 1,622,085; Mar. 22. Glenmont, Md. Oil-diluent sepa-flegs. Southwick W., Glenmont, Md. Oil-diluent sepa-flegs. Southwick W., Glenmont, Md. Diluent separator. 1,646,724; Oct. 25. Briggs, Stephen F., and E. N. Jacobi, assignors, by meane assignments, to Briggs & Stratton Corporation, Milwankee, Wis. Oil gauge. 1,623,533; Apr. 5. Briggs & Stratton Corporation; See Briggs, S. F., and Briggs & Stratton Corporation. (See Briggs, S. F., and Briggs & Stratton Corporation, General Resistance, Massignor.)

Briggs & Stratton Corporation. (See Mack, Perry E., assignor.)
Briggs & Stratton Corporation. (See Mack, Perry E.,

Resignor, Briggs & Stratton Corporation. (See Zygmunt, Conrad, Briggs & Stratton Corporation. (See Zygmunt, Conrad, Briggs, William N., Pittsfield, Mass., assignor to General Electric Company. Making moded articles. 1,531,668; Electric Company. Making moded articles. 1,531,668; Electric Company.

Electric Company. Making moides articles. 1,05,000-7, June 7.

Bright Company. Making moides articles. N. J., assignor to Bright Company. 1,000 and 1,000 an

Bright, C. Laco, et al. (See Jones. Leslie W., assignor.) Bright, George B., Co. (See Bright, G. B., and Cole, as-

Bright, George B., Co. (See Bright, G. B., and Cole, assignors, and cole, assignor, and bright, and Bright,
Bright, Martin C., Indianapolis, Ind., assignor to
Bright, Martin C., Indianapolis, Ind., assignor to B. B.
cole, and cole, assignors, and cole, assignor to B. B.
Carlin, Chicago, Ill. Vacuum-controlled fuel-supply
system, 1,636,496; July 19.
Bright Star Battery Company, (See Keller, Frederick A.,
assignor.)
Bright Star Battery Company, (See Sokolow, Samuel, as-

Bright Star Battery Company. (See Sokolow, Samuel, as-

signor.)
Brightman, William A., Sullivan, Ky. Extractor for automobiles. 1.644.509; Oct. 4.
Brigman, William H., Orangeburg, S. C. Weight-changling device for top-roll-saddle mechanism. 1.613,557; Jan. 4.

Brikner, Edward J. (See Gross, E., and Brikner.)
Brill, J. G., Company, The. (See Adams, Walter S., assignor.)
Brill, J. G., Company, The. (See Brooks, James A.,
assignor.)

Brill, J. G., Company, The. (See Leonhauser, Henry A., assignor.) Brill, J. G., Company, The. (See Senter, Ralph T., as-Glass Products, Inc. (See Frolking, Stanley

A., assignor.)
Brilliant, Morris R., Roxbury, Mass. Muffler. 1,637,516;
Aug. 2.

Brillion Iron Works. (See Ohlsen, Mark P., assignor.) Brillo Manufacturing Company. (See Field, Crosby, as-

Brillouin, Léon N., and E. M. F. Fromy, Paris, Transmission by electric oscillations. 1, May 10. 1,627,767:

Transmission by electric oscillations. 1,627,767; May 10.

Brims, 1 ames A., Taringa, near Brisbane, Queensland, paratus. 1,621,509; Dec. 6.

Brinckerhoff, Francis M., Suffern, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Safety device for articulated cars. 1,635,247; July 12.

Brinckerhoff, Francis M., Suffern, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Safety device for articulated cars. 1,635,247; July 12.

Pressed Steel Car Company, Pittsburgh, Pa. Safety device for articulated cars. 1,635,247; July 12.

Brinckerhoff, Francis M., Suffern, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Articulated car. 1,642,869; Sept. 20.

Brinckerhoff, Francis M., Suffern, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, P. Safety device for articulated cars. 1,645,983; Oct. 18.

Brinckerhoff, Francis M., Suffern, N. Y., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Side bearing for articulated cars. 1,651,560; Dec. 16.

Bettingman, John M., Butte, Mont. Spark blug. 1,616,779; Bringman, John M., Butte, Mont. Spark blug. 1,616,779; Bringman, John M., Butte, Mont. Spark blug. 1,616,779; Bringman, John M., Butte, Mont. Spark blug. 1,616,779; Eringman, John M., Butte, Mont. Spark blug. 1,616,779; Eringman, John M., Butte, Mont. Spark blug. 1,616,779;

Bringman, John M., Butte, Mont. Spark plug. 1,616,779;

Feb. 8.
Brink, Carl A. (See Parks, E. F., Brink, and Taylor.)
Brink, Dick, Platte, S. Dak. Cultivator. 1,613,079;
Jan. 4.

Brink, Dick, Platte, S. Dak, Cultivator. 1,613,079; Jan. 4.

Brink, William, Henryetta, Okla. Method and apparatus for cracking oils. 1,652,344; Dec. 13.

Brinker, Jesse E., assignor to Standard Oil Company, Whiting, Ind. Ornamented candle, and making same. 1,613,349; Espt. 6.

1,614,729; Espt. 6.

1,614,729; Espt. 6.

1,615,740; Jan. 4.

Brinkerhoff, Frederic H., Riverdale, N. J. Coin magazine. 1,625,979; Apr. 26.

Brinkman, Fritz A., Humboldt, Kans. Clutch-release coupling. 1,652,345; Dec. 13.

Brinkman, Louis G., Dayton, Ohio. Game apparatus. 1,653,428; Dec. 20.

Brinkman, John. 50.

Brinkman, Otto, Astoria, N. Y. Floating advertising device. 1,648,934; Nov. 15.

Brinkmelder, Henry, Los Angeles, Calif., Hair curler and waver. 1,636,457; July 19.

Brinser, Elizabeth E., Blizabethtown, Pa. Automatic pathiese, Elizabeth E., Blizabethtown, Pa. Automatic pathiese, Licabeth E., Blizabethtown, Pa. Automatic pathiese, Licabeth E., Blizabethtown, Pa.

Brintnall, Manufacturing Company, The. (See Brintnall, Thomas M., Oakland, Calif., assignor to The Brintnall, Manufacturing Company, Los Angeles, Calif. Grease Printon, William C., Tr., Larkspur, assignor to The Greasometer Corporation, San Francisco, Calif. Grease Prisbols, Oddion, Chicago, Ill. Engine starter. 1,633,338;

Mar. 15 Brisbois, Odilon, Chicago, Ill. Engine starter. 1,653,338; Dec. 20.

Dec. 20. Brisbois, Odilon, Chicago, Ill. Engine starter. 1,653,616; Dec. 27.

Dec. 27.

Brisbois, Odilon, Chicago, III. Magnetic starter. 1,653,616; Brisbois, Odilon, Chicago, III. Magnetic starter. 1,653,617; Dec. 27.

Brisbois Odilon, Chicago, III. Magnetic engine starter. Briscoe, Benjamin, et al., trustees. (See Ramage, Alexander S., assignors.)

Briscoe, G. C. (See Byrns, Emett L., assignor.)

Briscoe, Waiter F., Trenton, N. J. Flexible coupling. 1,620,592; Mar. S. B. May 31.

Bristin, John, Brooklyn, N. Y. Fishing reel. 1,630,779; Bristin, John, Brooklyn, N. Y.

May 31. Brislin, John, Brooklyn, N. Y. Fishing reel. 1,631.790; June 7. Bristol Aeroplane Company Limited, The. (See Fedden, A. H. R., and Butler, assignors.) Bristol Company, The. (See Thompson, L., and Marshall,

Bristol, Cyrus J., sssignor to Globe Machinery & Supply Company, Des Moines, Iowa. Water-heating attach-ment for hot-air furneses. 1,649,660; Nov. 18. Bristol, Edgar H., assignor to The Foxboro Company, Foxboro, Mass. Measuring and controlling instrument.

ment for hoten.

(istol. Edgar H., assignor
Foxboro, Mass. Measuring and controlling
1,624,887; Apr. 12.

1,624,887; Apr. 12.

1,624,887; Apr. 12.

Tistol. Edgar H., assignor to The Foxboro Company, ristol. Edgar H., assignor to Instrument. 1,641,944;

Timited. (See Boonzaler, Sept. 6.

British & Colonial Inventions Limited. (See Boonzaler, British & Colonial Inventions.)

British Dyestuffs Corporation Limited. (See Baddlley, J., Chorley, and Butler, assignors.)

British Dyestuffs Corporation Limited, J., Shepherdson, Swann, Hill, and Lawn British Dyestuffs Corporation Limited, Hugh M., assignor.) (See Baddiley, (See Bunbury,

British Dyestuffs Corporation Limited. (See Bundury, Hugh M., assignor.)

6. J. T., and Naunton, assignors.)

British Dyestuffs Corporation Limited. (See Fairbrother, T. H., and Renshaw, assignors.)

British Dyestuffs Corporation Limited. (See Fairbrother, T. H., and Renshaw, assignors.)

British Dyestuffs Corporation Limited. (See Perkin, W. H., Fyfe, and Mendoza, assignors.)

British Dyestuffs Corporation Limited. (See Smith, British Dyestuffs Corporation Limited. (See Smith, British Dyestuffs Corporation Limited.)

Leo, assignor.)
British Glues and Chemicals Limited. (See Ellenberger,

British Glues and Chemicans Educated Justus, assignor.)
Bristol, Howard S., Newport, R. I. Top roll and covering same 1,616,108; Feb. 1.
Bristol, John S., Danbury, Conn. Driving bit. 1,632,589; Bristol, Joi June 14.

June 14. Wilsond W. (See Weigele Edmund, assistance, Bristol, William H., Highland, assistance to California Fruit Geowers Exchange, Los Angeles, Calif. Molding fruit-juice extractors. 1,627,884; May 10. Bristow, Bruce A., Toronto, Ontario, Canada. Hydraulic power apparatus. 1,635,457; July 12. Bristow, Bruce A., assignor of one-third to W. A. Chamberlain and one-third to D. Z. Bristow, Toronto, Ontario Canada. Game. Opporatus. 1,637,517; Aug. 2. Bristow, Dudley A., et al. (See Bristow, Bruce A., assignor.)
Bristow, Dudley A., et al. (See Bristow, Bruce A., assignor.)
Bristow, Francis G. (See Wright, H. C., and Bristow).

Bristow, Francis G. (See Wright, H. C., and Bristow, Bristow, Francis G. (See Wright, H. C., and Bristow, Bristow, John J. R., Tampa Shores, assignor to J. W. Beach, Tampa, Fla. Paint. 1,035,110; July 5. Britt, Max, assignor to Switt & Company, Chicago, Ill. Britt, Max, assignor to Switt & Company, Chicago, Ill. Brittain, George E., Lynn, Mass., assignor to L. H. Harriman, trustee. Shoe counter, 1,636,982; July 26. Brittain, Richard J., Jr., Newark, N. J., assignor to General Motors Corporation, Detroit, Mich. Gauge, L. 1,624,654; April 22. L. 1,624,654; April 22. L. 1,624,654; April 22. L. 1,628,482; Mar. 8. Britton, Claude G., et al. (See Hale, William H., assignor).

Britton, George W., assignor to J. P. Steedman, Hamil-Britton, George W., assignor to J. P. Steedman, Hamil-Incept Art. May 24, Brixey, Austin D., New York, N. Y., assignor to The Replitura Corporation. Framing device. 1.634,769:

Brizendine, Olie, Attica, Kans. Lamp.

Brigeriane, Olfe, Actues, Oct. 25.
Broad, William, Benver Falls, assignor of three-fourths to Broad, William, Benver Falls, assignor of three-fourths to Leipton 95: Mer. 1.
Broadfield, Ward H., assignor to The H. H. Miller Industries Company, Canton, Ohlo. Engine. 1,525,580; Apr. 26.

Apr. 40.

Abor 1. Abert, assignor to The W. O. Hickok Manufacturing Company, Harrisburg, Pa. Sheet-feeding apparatus. 1.617,833; Feb. 15.

Broadmeyer, Albert, assignor to The W. O. Hickok Mfr. Company. Harrisburg, Pa. Paper-feeding apparatus. Broadmeyer, Albert, assignor to The W. O. Hickok Manu facturing Company, Harrisburg, Pa. Feeding mechanism for ruling machines and the like. 1,625,239; Apr. 19. nism fo

Apr. 19.

Broadmeyer, Albert, assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa. Counting and indicating mechanism. 1.631,616; June 7.

Broadmeyer, Albert, assignor to The W. O. Hickok Mfg. Co., Harrisburg, Pa. Sheet-retarding means for sheet-feeding apparatus. 1,631,617; June 7.

Broadmeyer, Albert, assignor to W. O. Hickok Mfg. Company, Harrisburg, Pa. Underlift. 331,618; June 7.

Broadmeyer, Albert, assignor to The W. O. Hickok Mfg. 1,632,945; June 21.

Roadmeyer, Albert, assignor to The W. O. Hickok Mfg. 1,763,945; June 21.

Co., Harrisburg, 1,682,945; June 21.
Broadmeyer, Albert, assignor to The W. O. Hickok Mfg. Co., Harrisburg, Pa. Sheet-feed-control apparatus, 1,635,604; July 12.

Co. Harrisours, 1, 1,625,604; July 12. Broadmeyer, Albert, assignor to The W. O. Hickok Manufacturing Company, Harrisburg, Pa. Sheet-stop mechanism for ruling machines and the like. 1,636,983; anism for July 26. Broadmeyer,

July 26.

Broadmeyer, Albert, assignor to The W. O. Hickok Manufacturing Company, Harrisburg, Pa. Sheet-feeding apparatus. 1,637,019; July 26.

Broadmeyer, Albert, assignor, to The W. O. Hickok Mfg. Co., Harrisburg, Pa. Changing the direction of movement of sheets. 1,640,108; Aug. 23.

Broadwood, Hida, Mobile, Ala. Hearth broom. Des. 72,933; June 28.

Region of the Company of th

Logg Stockholm, Sweden. Pitot tube. 1,644.815: Oct. 11.
Broberg, Ester, et al., administrators. (See Broberg, I., Erlisson, and Sjölin.)
Broberg, Isidor. (See Ljungström, F., and Broberg), Broberg, Isidor. (See Ljungström, F., Eriksson, and Broberg).

Broberg, Isidor, Lidington, assignor to Aktiebolaget Ljungströms Angtunbin, Lidingo Brevik, Sweden. Lo-Broberg, Isidor, decrased, Lidingo-Brevik, Sweden. Lo-Broberg, Isidor, decrased, Lidingo-Brevik, and B. Sjölin, Troll-hattan, assignors to Aktiebolaret Ljungstroms Angturbin. Lidingo-Brevik, and B. Sjölin, Troll-hattan, assignors to Aktiebolaret Ljungstroms Angturbin. Lidingo-Brevik, Sweden. Condenser for locomotives. 1650,259; Nov. 22.
Brock, 1650,259; Nov. 22.
Broch, Breder, Broch, Broch, Breder, Liell, Reflector. 1,617,894; Feb. 15.
Broch, Lieller, L. New York, N. Y. Gas heater. 1,618,169; Feb. 22.
Broch, Brederick, G., Newark, N. J. Lifting device for vehicles. 1,650,182; Nov. 22.
Brock, John J., Brockton, Mass. Securing device for vehicles. 1,650,182; Nov. 22.
Brock, Nicholas Y. D., Santa Ana, Calif. Drawer pull. Des. 71,901; Jan. 2.
Brock, Norman H., assignor to Brock & Weymouth, Incorporated, Philadelphia, Pa. Conversion of conical projections to orthographic projections. 1,612,800; Jan. 4.

Jan. 4. Jersey City. N. J., assignor to The Engraversuch Corporation. Engraving machine, 1,617,570; Feb. 15.
Brock & Weymouth, Incorporated. (See Brock, Norman

H., assignor.)

Brock & Weymouth, Incorporated. (See Holst, Lodewyk

Brock & Weymoutn, moop-J. R., assignor.)

Brock. William R., Shelton, assignor to M & P Corset Company, Derby, Conn. Corset. 1,641,195; Sept. 13. Brock, William S. (See Reedy, J. H., and Brock.) Brocket, Thomas W., and P. F. Ebiling, Milwaykee, Wis. Child's shoe. 1,632,430; June 14. Brockway, Carl P. (See Braselton, C. H., and Brock-way.)

Child's shore. 1.632.430; June 14.

Brockway, Carl P. (See Braselton, C. H., and Brock Brockway, Carl P., Toledo, Ohio. Air-cooled engine. 1.641.960; Sept. 13.

Brockway, Carl P., Toledo, Ohio. Air-cooled engine. 1.641.960; Sept. 13.

Brockway, Carl P., assignor to Industrial Research Corporation, Toledo, Ohio. Two-cycle rotary plant. 1.641.960; Sept. 13.

Brockway, Carl P., assignor to Industrial Research Corporation, Toledo, Ohio. Air-rison, N. J. Variable condenser. 1.634.930; July 5.

Brockway, Carl P., Toledo, Ohio, and E., Huntley, Milwulkee, Wis., assignors to Industrial Research Corporation, Toledo, Ohio. Liquid-fuel feeding and carbureting Brickway, Murilio M., Furbank, Cailf. Four-wheel rearrich drive chassis. 1.650.006; Nov. 22.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.482; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.484; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.485; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.485; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.485; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.485; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.485; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.485; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.489; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.491; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.491; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.491; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.491; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.491; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.491; Sept. 20.

Brod. Albert, New York, N. Y. Brooch or similar article. Des. 73.491; Sept. 20.

Broderick, John K., Kirkwood, Mo. Reversible cuff. 1,651,370; Dec. 6. Broderick, Joseph F., Springdale, Conn. Support for radiators and the like. 1,620,632; Mar. 16. Broderickson-Raymond Co. (See Raymond, Lambert L.,

assignor.)

assignor.)
Broden, Arthur J. (See Kinsler, George B., assignor.)
Brode, George A., Goldendale, Wash. Cow-milking apparatus, 1644,413. Oct. 4.
Brodie, Ralph N., Oakland, and A. J. Granberg, Berkeley, Calif. Liquid meter, 1,644,863. Oct. 11.
Brodin, Arvid, Los Angeles, Calif. Hat-crown shaper, 1,649,338; Nov. 15.
Brodkey, Benn D., Sloux City, Iowa. Safety device for clutches. 1,015,005; Jan. 18.
Brodrick, Leo H., New York, N. Y. Container, 1,052,754; Dec. 13.

Brodrick, Leo H., New York, N. Y. Container. 1,652,755;

Brodrick, Leo H., New York, N. Y. Container. 1,652,755; Dec. 13.

Brody, Maurice D., Chicago, Ill. Felling machine. 1,622,414; Mar. 29.

Broe, Edgar P. (See Bailey, R. S., and Broe.)

Brogan, John H., (See Cain, L. H., and Brogan.)

Brogan, John H., (See Cain, L. H., and Brogan.)

Brogan, Machinery Corporation, Paterson, N. J. Shoe. 1,613,991; Jan. 11.

Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for separating lasts and shoes. 1,634,487; July 5.

Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for separating lasts and shoes. 1,634,487; July 5.

Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine Shoe Machinery Corporation, Paterson, N. J. Making shoes. 1,639,721; Auy. 23.

Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making shoes. 1,639,721; Auy. 23.

Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making shoes. 1,639,721; Auy. 23.

Brogalen, Gentley, M., Whiter Haven, Pla. Composition for treating fruit and the like. 1,628,945; May 17.

Brogden, Ernest M., assignor to Brogdex Company, Winter Haven, Fla. Method and apparatus for treating fresh fruit. 1,641,112; Aug. 30.

Brogden, Joah, Melrose Park, Pa. Vise. 1,632,538; June 14.

June 14.

Srogden, Joah, McIrose Park, assignor to David Lunton's Sons Company, Philadelphia, Fa. Metallic window, 1,631,949; June 7.

Brogden, Joah, McIrose Park, assignor to David Lupton's Sons Company, Philadelphia, Pa. Metallic window, 1,640,000; Oct. 18.

Lodd,000; Oct. 18.

Lodd,

Broido, Benjamin, assignor to The Superheater Company, New York, N. Y. Apparatus for superheating steam. 1,648,634; Nov. 8. Broido, Benjamin, assignor to The Superheater Company, New York, N. Y. Boiler with superheaters. 1,650,184;

Nov. 22. Broido, Benjamin N., assignor to The Superheater Com-pany, New York, N. Y. Boller construction. 1,640,178; pany, Ne Aug. 23.

Aug. 23.

Frokaw, Andrew I. (See Noelting, W. H., and Brokaw.)

Broking, Ada L., West New York, N. Y. Clothespin.

1.638,797; Aug. 16.

Broman, Charles E., Grand Rapids, Mich., assignor, by
mesne assignments, to Add-Index Corporation. Calculating machine. 1,639,522; Aug. 25.

grand and the composition of the composition. Calculating machine. 1,639,522; Aug. 25.

Fromberg, Samuel, assignor of twenty-live per cent to M.

M. Kahn, Brooklyn, N. Y. Cut-out and fuse box.

1,613,437; Jan. 4.

Bromley, Josiah H., Leicester, England. Apparatus for
use in attaching soles to the lasted uppers of boots
and aloes. 1,654,408; Dec. 27.

grease guns. 1,634,407; July 19.

Bronander, Wilhelm B., Montclair, N. J. Two-strokecycle opposed-piston internal-combustion engine.

1,614,867; Jan. 18.

Bronander, Wilhelm B., Montclair, N. J. Internal-com-

15(14,867; Jan. 13)

Bronander, Wilhelm B., Montclair, N. J. Internal-combination engine 1,649,806; Nov. 22

Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Paper-feeding roll. 1,626,386; Apr. 26.

Bronander, Wilhelm B., Montclair, N. J., assignor to International Cigar Machinery Company. Device for feeding scrap tobacco. 1837,800; Aug. 2.

Bronander, Wilhelm B., Montclair, N. J., assignor to Standard Tobacco Stemmer Company. Tobacco-stemming mechanisms of the Machine & Foundry Company. Cigarette-machine cut-off. 1,637,803; Aug. 2.

Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Feeding device for cigarette-packaging machines. 1,647,265; Nov. 1.

Bronander. Wilhelm B., Montclair, and J. W. Leary, Bloomfield, N. J., assignors to American Machine & Foundry Company, Package and making the same, 1,637,802; Aug. 2.

Total Company. Fackage and making the same.

Brosso Natice Fl. 200 monay, The. (See Homan, Walter A., assignor.)

Brosson, Adelbert E., assignor to The Dill Manufacturing Company, Cleveland, Ohio. Dust-cap construction.

1,627,874; May 3.

Bronson, Adelbert E., assignor to The Dill Manufacturing Company. Cleveland, Ohio. Quick detachable cap. 1,637,332; Aug. E. assignor to The Dill Manufacturing Company, Cleveland, Ohio. Nut. 1,652,235; Dec. 13. Bronson, Adelbert E., and E. F. Tobold, assignors to The Dill Manufacturing Company, Cleveland, Ohio. Armored Steering wheel. 1,652,234; Dec. 13. Bronson, Eleny, Brooklyn, N. Y. Beverage set stand. Bronstien, Edward L., St. Paul, Minn. Attachment for bed springs. 1,619,187; Mar. 1. Brook, Harold, assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Automobile bumper, Company, Detroit, Mich. Automobile bumper, Company, Detroit, Mich. Automobile bumper, Gypsum Company, Chicago, Ill. Plastic cementitious material. 1,627,952; May 10. Brookly, Harry E. Evanston, assignor to United States Gypsum Company, Chicago, Ill. Light-weight gypsum Brookly, Harry E., Evanston, assignor to United States Gypsum Company, Chicago, Ill. Light-weight gypsum Frookly, Harry E., Evanston, assignor to United States Gypsum Company, Chicago, Ill. Molded structural unit and producing the same. 1,652,162; Dec. 13. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Donge, Iwan, assignor to United States Gypsum Company, Chicago, Ill., and G. D. King, Fort Donge, Iwan, assignor to United States Gypsum Company, Chicago, Ill., and G. D. King, Fort Donge, Iwan, assignor to United States Gypsum Company, Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago, Ill., and G. D. King, Fort Mar. S. Brookly, Harry E., Chicago,

pany, Chica Mar. 8. Brooke, Frank

Mar. S. Brooke, Frank W., assignor to William Swindell and Brothers, Eittsburgh, Pa. Furnace and operating the same. 1,626,263; Apr. 26. Brooke, Holman L. Bradford, England, Infinitely-variance and property of the same of

Heb. S. Company, De. Company, D

oks, I pr. 5

Brooks, George W., Topeka, Kans. Locker door. 1,648,807; Nover W., Locker door Life, 400; L

Oct. 4.5., Thataepinia, Fa. Lat sear. 1,047,052, Oct. 4.5., John A., Detroit, Mich. Automatic sprinkling system. 1,638,519; Aug. 9. Brooks. John A., Detroit, Mich. Spraying device. 1,633,162; Aug. 16. Brooks. Leon. D., Upper Lake, Calif. Golf club. Brooks. Lucile. A. Seattle, Wash. Cording device. 1,637,804; Aug. 2. Brooks, Robert, Ashton-on-Mersey, England, assignor to Westinghouse Electric & Manufacturing Company. Relay. 1,626,665; May 3. Brooks, Rosco A., Chicago, H., assignor to E. G. Mum-Brooks, Rosco A., Chicago, H., assignor to E. G. Mum-Brooks, Rosco A., Chicago, H., assignor to E. G. Mum-Brooks Rosco A., Chicago, H., assignor to E. G. Mum-Brooks, Rosc

Brooks Rupture Appliance Company. (See Welch, George W., assignor.)
Brooks, Stanley G., assignor to The D. L. Auld Company, Columbus, Ohio. Name plate. 1.616.438; Feb. 8.
Brooks, Stephen H., assignor to The Oil Conservation Engineering Company, Cleveland, Ohio. Swing-pipe mechanism. 1,626,782; May 3.
Brooks, Stephen H., assignor to Brooks Engineering Corporation, Los Angeles, Calif. Gas-tight cable support for tanks. 1,630,826; May 34.
Brooks, Thomas J., Nashville, Tenn. Illuminated writing implement. 1,615,740; Fun. Sco., Calif. Display and storage cablett. 1,643,738; Sept. 27.

Brooks, Winfred M., West Orange, N. J. Sealing means. 1.631.464; June 7. Brookshire, Charles T., et al. (See Ward, Andrew W.,

assignor.)

Brookstire Cheese Company. (See Wheeler, J. H., and Brookstire Cheese L., Tarrytown, N. Y., Scaling device for hydraulic gates. 1,648,536; Nov. 8.

Scott, assignors.)

Broome, Lewis H., Jersey City, N. J. Tee. 1,614,343;

Scott, desis H., Jersey City, N. J.
Jan. 1.
Jan. 2.
Ja

atting mechanism. 1,6230,240; Apr. 19.
Brophy, John J., and W. E. Broughton, assignors to T.e.
Turner Tanning Machinery Company, Feabody, Mass.
1,622,981; Apr. 26.
Brophy, John J., Salem, and G. E. McLaughlin, Brookline,
Mass., assignors to The Turner Tanning Machinery
Company, Portland, Me. Machine for measuring sheet
material. 1,638,913; Aug. 16.
Brophy, John P. Cleveland, Ohio. Traffic signal.
1,616,640 are Philadelphia, Pa. Pyrometer thermocouple. 1,651,750; Dec. 6.
Brophy, Rosanna M., Jersey City, N. J. Cleaner for
nursing-bottle nipples. 1,622,178; Mar. 22.
Bropson, James, Cleveland, Ohio. Closet connection.
1,613,926; Jan. 11.
Bropson, James, Cleveland, Ohio. Closet connection.
1,614,928; Jan. 11.
Brossin, Federick T., San Francisco, Calif., assignor to
A.W. Higgins, trustee. Baby-shoe keepsake. 1,638,431;
Brossi. Henry W. E., Oakland, Calif. Utensil handle.
1,649,387; Nov. 15.
Brossin, Engar E., Pittsburgh, Pa. Materlal-handling
apparatus. 1,622,902; Mar. 29.
Brossis, Engar E., Pittsburgh, Pa. Materlal-handling
apparatus. 1,622,902; Mar. 29.
Brossis, Andrew, New Derry, Pa. Flower box.

Aug. 2.
Brosnick, Andrew, New Derry, Pa. Flower box.
1.635,203; July 12.
Brostedt, Carl W. Springfield, Mass., assignor to The
George P. Clark Company, Windsor Locks, Conn.
Swivel caster. 1,649,946; Nov. 22.
Brothers, Edwin S., Brooklyn, N. Y. Dental apparatus.
1,620,999; Mar. 15.
Brotherton, Minerva A. (See Agnew, Francis E., assignor.)

signor.)

Brotz, Anton F., assignor to Kohler Company, Kohler, Wis. Air-cooled engine. 1,639,022; Aug. 16.

Protz, Anton F., assignor to The Kohler Company, Kohler, Wis. Voltage regulator. 1,641,269; Nov. 1.

Brotz, Anton F., assignor to The Kohler Company, Kohler, Wis. Voltage regulator. 1,641,269; Nov. 1.

Brough John, Philadelphia, Pa. Double-hung window sash. 1,643,920; Sept. 27.

Brougham, Herbert B., White Plains, assignor of one-half to W. Clark, New York, N. Y. Sonp-flaking device. 1,613,558; Jun. 4.

Broughton, Arthur E., Minneapolis, Minn. Apparatus for your properties of the program of th

removing air from steam condensing systems. 72,890; June 21.
Broughton, Winn E. (See Bronby, I. J., and Broughton, Winn E., assignor to The Turner Tanning Machinery Company, Peabody, Mass. Leather-working mschine. 1,624,921; Apr. 19.
Broughton, Winn E., assignor to The Turner Tanning Machinery Company, Peabody, Mass. Clutch mechanism. 1,649,283; Nov. 15.
Bronssouse, Fernand L., assignor to P. J. Leboncher, Bronssouse, Fernand L., assignor to P. J. Leboncher, Bronwer, Enjamin W. Auburn, assignor to Crompton & Knowles Loom Works. Worcester, Mass. Yielding bobbin support for multicolor loom magazines. 1,652,604; Dec. 13.
Brower, Elbert O., Huntington, N. Y. Machine element. 1,643,441 him M., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Multiple variable condenser. 1,633,516; June 21.
Brown, A. G., Boveri & Cie. (See Frey, Karl, assignor.)

rown, A. assignor.)

assignor.)
Brown, Albert. (See Peck, R. G., and Brown.)
Brown, Albert. and R. G. Peck, assignors to The Aridor
Company, Chicago, Ill. Display receptacle. 1,628,108;
May 10.

Brown, Albert C., Chicago, Ill. Faucet. 1,640,527;

Aug. 30.

Brown, Albert J., Sandusky, Ohio. Tappet-adjusting tool. 1.654-319; Dec. 27.

Brown, Alfred B., Clinicanon III., assignor to Western Communication of the Communication

Brown, Archibald M., Akron, Ohio. Nursing-bottle nipple. 1.634,170; June 28.
Brown, Archie E., El Paso, Tex. Cotton picker. 1.624,308; Apr. 12.
Brown, Archie E., El Paso, Tex. Dental articulator. 1.654,453; Dec. 27.
Brown, Archie E., El Paso, Tex. Dental articulator. 1.654,453; Dec. 27.
Brown, Arthur E. (See Gaisman, L., and Brown.)
Brown, Arthur E. (See Gaisman, L., and Brown.)
Brown, Arthur L. (See Gaisman, L., and Brown.)
Brown, Arthur L., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Phenolic condensation product. 1.632,113; June 14.
Brown, Arthur L., Wilkinsburg, Pa., assignor the Westinghouse Electric & Manufacturing Company. Flexible Application of the Company of the Company. Physical Research 1,633,976; June 24.

Brown, Arthur L., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condensation-product varnish. 1,640,562; Aug. 30.
Brown & Bailey Company. (See Keppler, Albert E., as-

signor.) Brown & Bailey Company. (See Shrum, William R., as-

signor.)
Brown & Bigelow. (See Harris, Blaine H., assignor.)
Brown & Bigelow. (See Swift, George L., assignor.)
Brown and Brown, Inc. (See Brown, Chalmers S., assignor.)

Brown & Caine, Inc. (See Ringwald, Clarence, assignor.) Brown & Pengilly, Inc. (See Pengilly, Joseph H., as-

Brown & Pengilly, Inc. (See Pengilly, Joseph H., assignor.)
Brown and Sharpe Manufacturing Company. (See Graves. Benjamin P., assignor.)
Brown, Bruce K., Terre Haute, Ind., assignor to C. F.
Burgess Laboratories, Inc., Dover, Del. Eiectrochemical production of solid oxides of carbon. 1,639,980;
Aug. 23.

ical production of solid oxides of carbon. 1,639,980; Aug. 23.

Brown, Bruce K., Terre Haute, Ind., assignor, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover, Del. Galvanic cell. 1,639,983; Aug. 23.

Brown, Bruce K., Terre Haute, Ind., assignor, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover, Del. Dry cell. 1,639,584; Aug. 23. ssignor, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover, Del. Dry cell. 1,639,584; Aug. 23. ssignor to C. F. Burgess Laboratories, Inc., Lower of the Comparison of Comparis

Sept. 20.

Brown, Charles S., Dayton, Ohio. Fitting cooperating bodies. 1.631,359; June 7.

Brown, Charles S., Syracuse, N. Y. Mowing machine. 1.644,563; Oct. 4.

Brown, Charles S., Syracuse, N. Y. Tractor and implement construction. 1.645,224; Oct. 11.

Brown, Charles W., Mount Vernon, Wash. Electrical strong, Charles W., July Jan. 18.

Brown, Charles W., 162; Jan. 18.

Brown, Charles W., 162; Jan. 18.

Brown, Charles W., 162; Jan. 18.

Brown, Claude D., assignor of one-half to J. W. Badle, Fort Smith, Ark. Auto tray holder. 1,618,567; Feb. 22.

Brown, Colin. assignor to The E. C. Brown Company.

Brown, Colin, assignor to The E. C. Brown Company, Rochester, N. Y. Punp handle for fire extinguishers or similar articles. Des. 72,546; May 3. L., assignor.) Brown Company. (See Brannen, Thomas L., assignor.) Brown Company. (See Brown, O. B., and Parker, as-

(See Ek, Arvid, assignor.)
(See Moore, Hugh K., assignor.)
(See Parker, Howard, assignor.)
(See Richter, George A., assignor.)
(See Richter, G. A., and Schur, as-Brown Company. Brown Company. Brown Company.

Brown Company. Brown Company.

signors.)

Brown Company. (See Schur. Milton O., assignor.)
Brown, Cremer F., Cleveland, Ohio, assignor to The C. G.,
Spring & Bumper Company, Detroit, Mich. Clamplug
device for bumper bars and the like. 1,649.149;

. 15. Daniel B., Dover, N. H. Rake. Rown, Daniel B., Dover, N. H. Rake. 4,641,541, Oct. 25.
Rrown, David. (See Tannenbaum, H. J., and Brown, David. & Sons (Huddersfield) Limited. (See Welsby, Silas, assignor.)

Brown, David W., Akron, N. Y. Building construction. 1,614,775; Jan. 18.
Brown, Donald, Newcastle-upon-Tyne, England. Spring suspension for vehicles. 1,641,472; Sept. 6.
Brown, Donald T., and E., Kasyuer, T. Chion, England. Spring suspension of vehicles. 1,614,742; Sept. 6.
Signal Company, Swissvale, Pa. Controlling apparatus for collieries. 1,613,786; Jan. 11.
Brown Door Check Co., Inc., The. (See Brown, Max, assignor.)

Brown, Dudley, and A. H. Irving, Chewelah, Wash. Saw-mill carriage. 1,613,159; Jan. 4.
Brown, E., Washington, D. C. Piston ring. 1,640,109;

E. C., Company, The. (See Brown, Colin, as-

Brown, E. C., Company, The. (See Brown, Colin, assignor.)
Brown, Earl J., (See D'Evlyn, Blizabeth, assignor.)
Brown, Earl J., Chicago, Ill. Bye-testing device.
1,633,658; June 28.
Brown, Edgar D., Pottsville, Pa. Brake mechanism for automobiles. 1,645,124; Oct. 11.
Brown, Edgar D., Pottsville, Pa. Brake mechanism for vehicles. 1,645,125; Oct. 11.
Brown, Edgar F., Salisbury, Md. Speed-governing device. 1,625,655; Apr. 5.
1053,655; Apr. 5.
1053,655; Apr. 5.
Brown, Edwin O., West Croydon, England. Apparatus for playing a table game of hockey. 1,634,016; June 28.

Brown, Elmer B., assignor to The Fleischmann Company, New York, N. Y. Improvement of flavor of yeast, 1,642,537; Sept. 13. Brown, Elmer E. Kansas City, Mo., and M. C. Dixon, Kansas City, Kans. Septic tank. 1,641,800; Sept. 6. Brown, Emma, et al. (See Brown, George W., assignor.) And Septimization of the Company of the C

Brown Engineering Corporation, (See Brown, James W., assignor.)
Brown, Ernest A., Springfield, Ohio. Tire construction, Ernest Dec. (See Towle, Owen C., assignor.)
Brown, Eugene M. (See Towle, Owen C., assignor.)
Brown, Eugene M., Oak Station, Pa. Fireplace log. Des. 71,999; Feb. 15.
Brown, Everett, Hardy, Ky. Grease-gun filler. 1,616,780; Feb. 8.

Feb. 8.

Frown, Everett, Hardy, Ky. Valve-operating mechanism 1,623,043; Apr. 5.

Frown, Florence B., administratrix. (See Brown, Thomas E.)

Frown, Foskett, Nashville, Tenn. Automatic flushing device. 1,648,108; Nov. 8.

Frown, Frank A., Chicago, Ill. Cap for receptacles. 1,615,533; Jan. 25.

Brown, Frank A., Los Angeles, Calif. Signal. 1,626,913; May 3.

May 3.

Brown, Fred A., Los Angeles, Calif. Device for handling wire connecters. 1,648,635; Nov. 8.

Brown, Fred B. (See Johnson, William M., assignor.)

Brown, Fred B. (See Johnson, William M., assignor.)

Brown, Frederick K., assignor to Draper Corporation,

Hopedale, Mass. Loom for weaving openwork fabrics.

1,651,338; Nov. 29.

Brown, Frederick M., West Palm Beach, Fla. Safety

1,642,323; Sept. 13.

Brown, Frederick M., Los Angeles, Calif. Automatic

catch for zarage doors. 1,614,868; Jan. 18.

Brown, Frederick W., York, England. Wheel for ve
hicles. 1,623,656; Apr. 5.

Brown, George. (See Wilson, Jansee O., assignor.)

1,624,209; Apr. 10.

Brown, George. (See Wilson, Jansee O., assignor.)

1,624,209; Apr. 10.

Brown, George E., Los Angeles, Calif. Game board.

1,624,469; Apr. 12.

Brown, George R., Bridgeport, Conn., assignor to General

1,622,469; Apr. 12.

Brown, George R., Bridgeport, Conn., assignor to General Electric Company. Electric fuse. 1,621,349; Mar. 15.

Brown, George K., Bridgeport, Conn., assignor to General Electric Company. Electric fuse. 1,631,669; June 7.

Brown, George W., Selma, Ala. Fireplace stove. 1,615,741; Jan. 25.

Brown, George W., Marietta, Ohio. Cuff button. Brown, George Electric Comp George

Brown, George W., Marietta, Ohio. Cuff button. 1,631,912; June 7.
Brown, George W., Cape Elizabeth, assignor of one-half to S. J. Dodge, Damariscotta, and one-half to E. Brown, Cape Elizabeth, Me. Pencil sharpener. 1,647,078; Oct. 25.

Oct. 25.

Rrown, Georges H., Parls, France. Time indicating device. 1,628,946; May 17.

Rrown, Harold, Kansas City, Kans. Safety device for automobiles. 1,619,697; Mar. 1.

Brown, Harold, Kansas City, and G. R. Uhl, Tongonoxie, Kans. Afr valve. 1,628,519; May 17.

Brown, Harold, Kansas City, Kans. Packless ball valve. 1,645,790; Oct. 18.

Brown, Harold, Kunsas City, Kans. Ball valve. 1,645,790; Oct. 18.

Brown, Harold, Kunsas City, Kans. Ball valve. 1,645,790; Oct. 18.

Brown, Harold, W., Schenectady, N. Y., assignor to General Electric Company. Controllist; device and system employing the same. 1,634,973; July 5.

Brown, Hauchton, Minneapolis, Minn. Insulating material. 1,637,547; Aug. 2.

Brown, Haydn, London, England. Measuring respired air in testing the lungs. 1,638,393; June 21.

Brown, Henry M., North Plainfield, N. J., assignor to Standard Oil Levelopment Company. Apparatus for piston assembly. 1,644,110; Dec. 27.

Brown Hoisting Machinery Company, The. (See Hunter, Pierre R., assignor; Drown Hoisting Machinery Company, The. (See Lipps, Louis F., assignor; Drown Hoisting Machinery Company, The. (See Lipps, Louis F., assignor; Drown Hoisting Machinery Company Lind Apparatus for printing the Company, Limited, Toronto, Ontario, Canada. Continuous interfold packet. 1,641,622; Sept. 6.

Brown, Horace P., Oakland, Calif., assignor to Pacific Burt Company, Limited, Toronto, Ontario, Canada. Continuous interfold packet. 1,641,622; Sept. 6.

Brown, Horatio W., See Bemis, A. E., and Brown, Indicator. 1,646,474; Oct. 20.

Brown, Hugh A., assignor to board of trustees of the University of Illinois, Urbana, Ill. Electron tube. 1,653,544; Dec. 20.

Brown Instrument Company, The. (See Brown, Richard F., assignor).

Brown Instrument Company, The. (See Cornman, G. W. W., and Brown, assignors.)
Brown Instrument Company, The. (See Fairchild, C. O.,

Brown Instrument Company, The. (See Grisdale, George

W., assignor.) Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)

Brown Instrument Company, The. (See Poole, Foster M., assignor.)

Brown Instrument Company, M., assignor.)
Brown, Isaac, New York, N. Y. Hood apron. 1,636,122;
July 19.
Brown, J. Alvin, et al. (See Hobson, John H., assignor.)
Brown, Jackson W., assignor of forty-five per cent to K.
E. Farris, De Quincy, La. Railway crossing. 1,632,725;

E. Farris, De Quincy, La. Railway crossing. 1,632,725; June 14.
Brown, James A., Bristol, Tenn. Spraying device. 1,614,520; Jan. 18.
Brown, James C., Newark, N. J., assignor to E. Frederics, Development of the Land Tall probability. The position. 1,637,469; Jan. 2.
Brown, James F., assignor of one-half to J. E. Belcher, Lookout, Ky. Railway tie and rail fastener. 1,626,076; Apr. 26.
Brown, James M., Philadelphia, Pa. Treating pasteboard. 1,614,869; Jan. 18.
Brown, James M., Philadelphia, Pa. Treating pasteboard. 1,614,869; Jan. 18.
Brown, James S., Miami, Okia. Concrete tie. 1,635,816; July 12.
Brown, James W. (See Turner, W. M., and Brown.) Brown, James W., Tulisa, Okia. Derrick or tower. 1,622,080; Mar. 22.
Brown, James W., See Turner, W. M., and Brown. James W., Tulisa, Okia. Derrick or tower. 1,624,132; Apr. 12.
Brown, James M., See Gurner, W. Rosentrol appliance. 1,624,132; Apr. 12.
Brown, Japer C., assignor of one-half to R. I. Blakeslee, Los Angeles, Calif. Picking up objects and articles. 1,644,366; Oct. 4.
Brown, Jefferson F., assignor to U. S. Bedding Company, Memphis, Tenn. Spring bottom. 1,642,226; Sept. 13.
Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg. Loco-Brown, John B., and J. P. Kane, Portland, Oreg

1.644.368; Oct. 4.

Brown, Jefferson F., assignor to U. S. Bedding Company, Memphis, Tenn. Spring bottom. 1.642.225; Sept. 18.

Brown, John B., and J. P. Kane, Portland, Oreg. Locomotive-type boiler. 1.644.633; Oct. 4.

Brown, John B., Portland, Oreg. Engine valve gear. 1.635.172; July 12.

Brown, John E., Elyria, Ohlo. Trolling lure. 1.617,318; Brown, John F., West Warwick, R. I. Hat buckle. Des. 73.774; Nov. 8.

Brown, John H., Jersey City, N. J. Warehouse-truck brake. 1.632.247; June 14.

Brown, John H., Jersey City, N. J. Warehouse-truck brake. 1.632.247; June 14.

Brown, John H., Jersey City, N. J. Warehouse-truck brake. 1.632.247; June 14.

Brown, John L., Vernon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Cap for bearings. 1.621.709; Mar. 22.

Brown, John L., Wernon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Cap for bearings. 1.621.709; Mar. 22.

Brown, John M., Hamilton, Ontario, Canada. Machine for folding stovenjee blanks. 1.636.803; July 26.

Brown, John M., Hamilton, Ontario, Canada. Machine for folding stovenjee blanks. 1.636.803; July 26.

Brown, John D. (See Trompeter, H. F., and Brown, John P. (See Trompany, The. (See Tromps, John W., Company, The. (See Tromps, John W., Manufacturing Company, The. (See Tromps, John W., Manufacturing Company, The. (See Tromps, William C., assignor.)

Brown, John W., Manufacturing Company, The. (See Tromas, William C., assignor.)

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Brown, John W., Manufacturing Company, The. (See Tromas, William C., assignor.)

Brown, John W., Manufacturing Company, The. (See Tromas, Company, Chicago, III.) Burner. 1.648.573; Nov. 8.

Brown, Ladura A., Uniontown, Pa., Automatic safety breaker. 1,627,528; May 10.

Brown, Ladura A., Uniontown, Pa. Multiple-break electric switch, 1,636,984; July 26, Brown, Ladura A., Uniontown, Pa. Attachment plug. 1,650,421; Nov. 22. Brown, Ladura A., Uniontown, Pa. Automatic cut-over and safety switch, 1,652,194; Dic. 13. Brown, Latkin H., Los Angeles, Calif., and G. E. Repass, Kanoxville, Tenn, assignors to Draper Corporation, 170,044, Mass. Filling wound bobbins, 1,614,420; Tengeldon, Mass. Filling wound bobbins, 1,614,420;

Brown, Laurence E., Rio de Janeiro, Brazil. Separator. 1,648,607; Nov. 8. Brown, Lawrence L., Chicago, Ill. Display stand.

1.648,607; Nov. 8.

Brown. Lawrence L., Chicago, Ill. Display stand.
1,615 323; Jan. 25.

Brown. Leeland F., assignor of one-half to K. W. Dennis,
Knoxville, Tenn. Gear lock. 1,647.033; Oct. 25.

Brown. Lesile A., assignor to International Silver Co.,
Meriden. Conn. Hollow handle for metal vessels.
1,637.653; Aug. 2.

Brown. Linwood M., Pittsburgh, Pa. Stee alloy
1,643.054; Sept. 20.

Brown-Lipe Gear Company. (See Carhart, George C., assignor).

signor.)
Brown-Lipe Gear Company. (See Spase, Charles B., assignor.)

Brown-Lipe Gear Company. (See Sponable, George W.,

Brown. Luter E. Assignor. Text. Apparatus for eliminating dents in tuber of proper form. Marvin A., Artesia, N. Mex. Crate. 1,636,804; Jan. 4.

Brown, Lutier E., assignor of one-half to S. Caprito, Breckenridge, Tex. Apparatus for eliminating dents in tubes or pipes. 1,628,657; Apr. 5.

Brown, Marvin A., Artesia, N. Mex. Crate. 1,636,804; July 26.

July 26.

Brown, Maurice E., Marinette, Wis, Method and apparatus for preserving posts. 1,627,829; May 10.

Brown, Maurice H., North Baltimore, Ohio. Cap for horse collars. 1,646,651; Oct. 18.

Brown, Max, Chicago, Ill. Reverse control for motors. 1,629,989; May 24.

Lichting Fixture Co., Inc. Lighting-fixture strap. Des. 72,471; Apr. 19.

Brown, Max, New York, N. Y., assignor to The Brown Door Check Co. Inc. Doorcheck. 1,636,549; July 19.

Brown, Millard D., assignor to Continental Mills, Inc., Philadelphia, Pa. Knitted fabric. Des. 73,366; Aug. 30.

Aug. 30.

Brown, Norman F., and C. M. Reppert. Pittsburgh, Pa. Concrete railway tie. 1,613,508; Feb. 22.

Brown, Orton B., and II. Parker, assignors to Brown Company, Berlin, N. H. Machine for making fiber tubes. 1,633,458; July 12.

Brown, Oscar, assignor of one-half to Morton Machine Works, Columbus, Ga. Automatic knock-off for cotton pickers. 1,645,412; Oct. 11.

Brown, Oscar H. Salem, assignor to The Turner Tanning Machinery Company, Peabody, Mass. Work support for Erown, Paul. (See Pecker, Joseph S., assignor).

Brown, Paul. (See Pecker, Joseph S., assignor).

Brown, Perry O., assignor of one-half to G. V. Backstrom, St. Vincent, Minn. Railway switch. 1,625,241; Apr. 19.

Brown, Perry O., assignor of one-half to G. V. Backstrom. Strown, Perry O., assignor of one-half to G. V. Backstrom.

St. Vincent, Minn. Railway switch. 1,625,241; Apr. 19.

Brown, Perry O.. assignor of one-half to G. V. Backstrom, St. Vincent, Minn. Automatic circuit regulator. 1,650,320; Nov. 22.

Brator. 1,650,320; Nov. 22.

Brator. 1,650,320; Nov. 22.

Brown, Phelps. Springfield, Mass. Ignition apparatus. 1,634,335; June 28.

Brown, Phelps. Springfield, Mass. Ignition apparatus. 1,634,636; Sept. 27.

Brown, Phelps. Springfield, Mass. Magneto-actuating mechanism. 1,642,636; Sept. 27.

Brown, Brain M. 1,643,636; Sept. 27.

Brown, Richard L. G. 20, S88; May and Grot tying vegetables in the bundles. 1,630,888; May and Grot tying vegetables. Brown, Raph. L., Pittsburgh, Pa. Recovering styrene. 1,640,975; Aug. 30.

Brown, Ray W., assignor to The Mechanical Appliances Co. Los Angeles, Calif. Precision contra-angle piece. Brown, Richard P., assignor to Brown Instrument Compite Spring May 1,642,988; Sept. 20.

Brown, Richard P., assignor to Brown Instrument Company, Philadelphia, Pa. Recording instrument. 1,631,578; June 7.

Brown, Richard P., assignor to The Brown Instrument Company, Philadelphia, Pa. Recording instrument. 1,631,578; June 7.

Brown, Richard P., assignor to The Brown Instrument for temperature - measuring instruments. 1,630,365; Aug. 13.

Aug. 16

Brown, Richard P., assignor to The Brown Instrument Company, Philadelphia, Pa. Ventilated thermocouple, 1,640,816; Aur. 30. Brown, Robert M., Chicago, Ill., assignor of forty-five one-hundredths to A. Pow, Glencoc, Ill. Wall panel, 1,652,431; June 14.

Brown, Robert S., assignor to The New Britain Machine Company, New Britain, Conn. Chack mechanism. Brown, Robert S., and W. J. Victory, assignors to The New Britain Machine Company, New Britain, Conn. Wrench-sct-carrying device. 1,612,905; Jan. 4. Brown, Roy W., assignor to The Firestone Tire and Rubler Company, Akron, Ohio. Vulcanizer. 1,643,180;

ber Company, Akron, Ohio, Vulcanizer, 1,048,190; Sept. 20.
Brown, Roy W., assignor to The Firestone Tire and Ruber Company, Akron, Ohio. Heat or vulcanizing device. 1,647,339; Nov. 1.
Brown, Kyneer E., assignor of one-half to A. S. Balley, Holdenville, Okla. Valve-spring lifter. 1,636,950; Lale 20.

July 26.

Brown, Samuel R., New Glasgow, Nova Scotia, Canada.

Paper fastener. 1,653,543; Dec. 20.

Brown & Sharpe Mfg. Co. (See Parker, John W., as-

signor.)
Brown, Sidney G., North Acton, England. Production or reproduction of sound or like vibrations. 1,624,823;

signor.)

Frown, Sidney G., North Acton, England. Production or reproduction of sound or like vibrations. 1,624,823; Apr. 12 Sidney G., North Acton, England. Telephone receiving apparatus. 1,635,309; July 12.

Frown, Sidney G., North Acton, London, England. Apparatus for transmitting or reproducing sound. 1,639,528; Aug. 16.

Brown, Sidney G., North Acton, London, England. Apparatus for transmitting or reproducing sound. 1,639,924; Aug. 23.

Brown, Stewart, et al. (See Wood, Joseph E., assignor.) Brown, Stewart, assignor of one-half to li. K. Delnhanty, Chicago. Ili. Toy pistol. 1,631,006; May 31.

Brown, Theodore I., assignor, by messa assignments, to standard player mechanism for musical instruments. 1,634,171; June 28.

Brown, Theophilus. (See Strandlund, C. G., and Brown.) Brown, Theophilus. Sasignor to Deere & Company, Moline, Theophilus. Sasignor to Deere & Company, Moline, Theophilus. Sasignor to Deere & Company, Moline, Theophilus, assignor to De

Brown, Induns W. (see Calanta) and Brown, Brown, Walter E., assignor to United Iron Works, Inc., Kansas City, Mo. Distilling apparatus. 1,620,593;

Kansas City, Mo. Distining approximation, Mar. 8.
Brown, Walter E., assignor to United Iron Works, Inc.,
Kansas City, Mo. Storage tank for volatile liquids.
Kansas City, Mo. Storage tank for volatile liquids.
Brown, Walter F., assignor of one-half to A. A. Laurent,
Minneapplis, Minn. Siphon device, 1,636,123, July 19.
Brown, Walter S., Urbana, Ill. Diving board. 1,635,204;

Brown, Walter F., assignor of ohe-mail to A. A. Lauten-Minneappolis, Minn. Siphon device. 1,636,123; July 19. Brown, Walter S., Urbana, III. Diving board. 1,635,204; July 12. Brown, Wilhur F., assignor to The Libbey-Owens Sheet Olass Gengray, Toledo, Ohio. Laminated glass. Company, Toledo, Ohio. Laminated glass. Brown, William C., Incinnati, Ohio. Fuel vaporizer. 1,614,543; Jan. 18. Brown, William A., Philadelphia, Pa. Emergency heater. 1,620,432; Mar. 8. Brown, William E., Coalinga, Calif. Pull-rod guide. Brown, William E., Coalinga, Calif. Pull-rod guide. Brown, William E., Sacramento, Calif. Cuspidor cover. 1,624,824; Apr. 12. Brown, William E., Los Angeles, Calif. Folding cot. 1,632,114; June 14. Brown, William F., Tottenville, N. Y. Vehicle fender. 1,637,632; Aug. 2. Brown, William F., Tottenville, N. Y. Uchicle fender. 1,637,632; Aug. 2. Brown, William H., Cleveland, Ohio, assignor to Dryden Rubber Company. Machine for placing washers on upstanding plns. 1,626,014; May 3. Brown, William H., Cleveland, Ohio, assignor to Dryden Rubber Company. Machine for placing washers on upstanding plns. 1,626,014; May 3. Brown, William J., Dunleyy, Pa. Lamp clip for miners' Process. William J., Dunleyy, Pa. Lamp clip for miners' Process.

Brown. William J., et al. (See Hobson, John H., assignor). Illiam J., Dunley, Pa. Lamp clip for miners' Brown. William, Jero, and S. Morano, Morgantown, assignor of one-sixth to J. Maone, one-sixth to J. Werrise, one-sixth to J. Nuoto, Morgantown. W. Va. Combined clothes and dish washing machine. 1.622.221; Mar. 22.

1,050,000; Nov. 29.
Browne, Walter A., assignor to Warthen Train Control Corporation, Washington, D. C. Automatic train-stopping and speed controlling apparatus. 1,643,976; 1,643,976; San Diego, Calif. Spark plug cleaning apparatus. 1,643,761; Sept. 6.
Browning, George, and P. J. Bohan, San Diego, Calif. Sprewing, George, and P. J. Bohan, San Diego, Calif. Browning, George, and P. J. Bohan, San Diego, Calif. Wench. 1,641,730; Sept. 6. III. assignor to Chicago Flexible Shart company of the Chicago Flexible Shart company Chicago. III. Combination plug and switch for electrical appliances. Des. 73,738; Nov. 1.
Browning, John, administrator. (See Browning, John M.) Browning, John electrical appliances. Des. 73,738; Nov. 1.
Browning, John, executor. (See Browning, John M.) Browning, John E. Control of the Chicago Flexible Shart Company of the Chicago Flexible Shart Company. John M., deceased, Ogden, Utah, J. Browning, Joseph W., assignor to The Wood Shovel and Tool Company, Figua, Ohio. Method and apparatus for testing shovels. 1,629,868; May 24.
Browning, Joseph W., assignor to The Wood Shovel and Tool Company, Figua, Ohio. Method and apparatus for testing shovels. 1,629,868; May 24.
Browning, Ray J., Buffalo, N. Y. Safety clasp. 1,644,562; Oct. 4.
Browning, Samuel H., Atlanta, Ga. Coil-spreading machine. 1,631,084; May 31.
Browning, Samuel H., Atlanta, Ga. Coil-spreading machine. 1,631,084; May 31.
Browning, Samuel H., Atlanta, Ga. Coil-spreading machine. 1,631,084; May 31.
Browning, Samuel H., Atlanta, Ga. Coil-spreading machine. 1,631,084; May 31.
Browning, Samuel H., At

Brownlee, Roy H., Pittsburgh, Pa. Dentifrice. 1,645,791;

Brownies, Roy H., Pittsburgh, Pa. Dentifrice. 1,645,792;
Oct. 18.
Brownies, Roy H., Pittsburgh, Pa. Dentifrice. 1,645,792;
Oct. 18.
Brownies, Roy H., Pittsburgh, Pa. Dentifrice. 1,645,782;
Oct. 18.
Brownies, Roy H., Pittsburgh, Pa. Dentifrice. 1,645,852;
Brownstein, Benjamin, Ellwood City, Pa. Pipe-thread protector. 1,642,363; Sept. 18.
Broyles, John E., assignor of one-half to H. E. Robertson and T. F. Lugwiller, Russelville, Mo. Superplane.
Broyles, Late C., Sacramento, Calif. Christmastree ornament. Des. 72,000; Feb. 15.
Broyles, Leo T., Entiat, Wash. Wrench. 1,624,922;
Adr. 19.

with one wheel support. L. 626,594; May 3. Bruback, Theodore M. (See Linaker, F. W., and Bruback). W. L., & Bros. Company. (See Roderick, Marcy B., assignor). Brubaker, W. L., & Bros. Company. (See Roderick, Marcy B., assignor). Brubaker, William A., Akron, Ohio. Cushion tire. 1.616,843: Feb. 8. Brubaker, William A., Akron, Ohio. Cushion tire. 1.616,161; Sept. 6. Brubaker, William A., Akron, Ohio. Cushion tire. 1.621,161; Sept. 6. Bruce, Alfred W., New York, N. Y. Locomotive boiler. 1.624,655; Apr. 12. Bruce, Alfred W., New York, N. Y. Locomotive frame. 1.641,151; Sept. 6. Bruce, Alfred W., New York, N. Y. Locomotive frame. 1.644,687; Oct. 18. Bruce, Alfred W., New York, N. Y. Locomotive-boiler Bruce, E. L., Company. (See Bruce, Frank E., assignor.) Bruce, E. L., Company. (See Bruce, Frank E., assignor.) Bruce, E. L., Company. (See Bruce, Frank E., assignor.) Bruce, E. L., Company. (See Bruce, Frank E., assignor.) Bruce, William E., Mirando City, Clin. Switch throwing and locking device. 1.614,183; Jan. 11. Spruce, William E., Mirando City, Tex. Fertilizer distributor and loader. 1.614,870; Jan. 18. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,210; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,210; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,210; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,610; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,610; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,610; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,610; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,610; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.624,610; Apr. 12. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.625,974; Dec. 18. Bruce, William E., Mirando City, Tex. Fertilizer distributor. 1.625,974; Dec. 18. Bruce, William E., Mirando

Printing Press Company. Frinting press. Auto. 18. Aug. 30.

B. 16.28, 325; Apr. 26.

Brugmann, Herman H., Spencer, Iowa. Storm-sash fasteurgmann, Herman H., Spencer, Iowa. Storm-sash fasteurgmann, William F., Evanston, Ill. Printing-plate holder and clamp. 1619,650; Mar. I.

Brühl. Paul, Dusseldorf, Germany. Grinding machine. 1.638,032; Aug. 9.

Bruhn. Bruno, Bethlehem, Pa., assignor to G. Polysius, Dessan, Germany. Regulating discharge from containers, 10. 1616,288 Aug. 10.

Bruhn. John H., assignor of one-half to J. G. Chalmers, Dubuque, Iowa. Fire and burglar alarm system. 1.614,275; Jan. 11.

Bruhn. John H., and J. F. Becker, Dubuque, Iowa. Door and the like holder. 1.618,357; Jan. 25.

Brutjnes, Johannes. (See Holst, G., Oosterhuis, and Brutjnes).

Bruijnes, Johannes, (See Hues) G.
Bruijnes, J.
Brumbach, Alvin L., Reading, assignor to Textile Machine
Works. Wyomissing, Pa. Slotting-machine attachment.
1,630,328; May 31.
Brumbaugh, Andrew K., assignor to The Autocar Company, Ardmore, Pa. Electric vehicle. 1,048,536;

Brumberg, Zelton D., Ironton, Ohio. Display device.

Des. 73.399; Sept. 6.
Brumberg, Zelton D., Ironton, Ohio. Display device.
1,620,944; Mar. 15.
Brumder, William C., Milwaukee, Wis. Golf goggles.
1,637.406; Aug. 2.
Brumell, Henry P., Assignor to Ajax Electric Hammer or revere.
1,621,103; Mar. 15.
Brun, Vally P., San Francisco, Calif. Game apparatus.
1,652,270; Dec. 13.
Bruna, Charles, New York, N. Y. Automatic train control.
1,641,954; Nov.
1,847.096; Nov.
1,847.096; Nov.
1,847.106
Brundage, James W., assignor to The Miller Rubber Company, Akron, Ohio. Bias-cutting machine. 1,621,152; Mrudege, James W., assignor to The Miller Rubber Company, Akron, Ohio. Bias cutting machine. 1,635,531; July 12.

July 12.

Brundage, Mary L., administratrix. (See Cooey, Edward W.)

Brunder, William C., Milwaukee, Wis. Putting apparatus. 1,637,407; Aug. 2.

Brundidge, Robert M., Cleburne, Tex. Vulcanizer for pneumatic tubes. 1,618,406; Feb. 22.

Brundidge, Robert M., Cleburne, Tex. Vulcanizer for pneumatic tubes. 1,648,406; Feb. 22.

Brundidge, Robert M., Cleburne, Tex. Unclaiming and dumpling container. 1,644,4077; Oct. 10.

Brune, Edward H., St. Louis. Mo. Magnetic separator. 1,624,528; Apr. 12.

Brune, Herbert M., et al., trustees. (See Charles, Carl L., assignor.)

Bruneau, Hudger, Woonsocket, R. I. Can opener. Brundidge, Busene A. (See Burtnett, E. R., and Brunell.)

Brunelle, Eugene A. (See Burtnett, E. R., and Brunell.)

Brunelle, Eugene A. (See Deschenes, Adelard G., assignor.)

Bruner, Hassignor

assument Martin R. Buckland, Ohio, Tractor plow. 1,633,205; June 2J. Bruner, Simon. (See Lehr, Louis, assignor.) Brunhoff Manufacturing Company, The. (See Karst, Clarence E., assignor.) Brunhübner, Georg. (See Wenz, J., Alvera, and Brun-Brunhübner, Georg. (See Wenz, J., Alvera, and Brun-

Brunbibner, Georg. (See Wenz, J., Alvera, and Brunbibner.)
Brünig, Victor, Berlin-Grunewald, Germany. Production of canals. 1,632,946; June 21.
Bruning, Ernst, Badingen, Germany. Agricultural machine. 1,615,679; Jan. 25.
Bruninga, John H., trustee. (See Deemar, Henry V., assignor, V., and D. D. Harrison, Kansas City, Mo. Erock. 1,637,518; Aug. 2.
Brunner, Harold E., Mamaroneck, N. Y., assignor to The Hess-Bright Manufacturing Company, Philadelphia, Pa. Antifriction-bearing lubrication. 1,638,521;

Pa. Antifriction-bearing Aug. 9. lubrication. 1,638,521;

Aug. 9.
Brunner, John P. (See Luley, J., and Brunner.)
Brunner, Theodore P., Los Angeles, Calif. Escape trick
device. 1,625,452; Apr. 19.
Bruno, C., & Son, Inc. (See Stark, Theodore H., assignor.)

signor.)
Bruns, William G., Sloux Falls, S. Dak. Brooder.
1,629,066 May H. M., and J. A. Nordin, assignors to
Bruns, William G., Sloux Falls, S. Dak. Brooder.
1,629,066 May H. M., and J. A. Nordin, assignors to
British and the like.
1,619,056; Mar. 1.
Brunswick Balke-Collender Company. (See Barker,
Charles P., assignor.)
Brunswick Balke-Collender Company. (See Berg, Hans,
18518007.)

Brunswick-Balke-Collender Company, The. (See Bishop, Joseph W., assignor.)
Brunswick-Balke-Collender Company, The. (See Griffith,

Brunswick-Baike-Colleader Company, The. (See Hedenstoog, Ernest, assignor.)
Frunswick-Baike-Colleader Company, The. (See Miller,
John O., assignor.)
Brunswick-Baike-Colleader, Company, The. (See Nystrom.
Martin, assignor.)
Martin, assignor.)
Georgia Colleader, Company, The. (See Thompmany Lead Brunswick-Baike Colleader, Company, The. (See Thomp-

son, Aksel R., assignor.) Brunswick-Balke Collender Company, The. (See Whelan.

Brunswick-Balke Collender Company, The. (See Whelan, Michael J., assignor.)
Brunswick, Raymond, assignor to M. Rice Co., Philadelphia, Pa. Flower holder. Des. 73,775: Nov. 8.
Brunt, Percy, Meval, Pholigheb, India. Drilling tool.
1,641,113; Aug. 30.
Brunt. Samuel, assignor to The Sebring Manufacturing
Corporation, Sebring, Ohlo. Casserole. Des. 73,001;

Brunt, Samuel, assignor to The Sebring Manufacturing Corporation, Sebring, Ohio. Sugar bowl. Des. 73,062;

Corporation, Septing, Univ. Sugar.

July 19.

Brush, Abbott P. (See Brush, Dorothy S. and A. P.)

Brush, Abbott P., Greenwich, Conn. Direction and distance measuring instrument. 1,638,914; Aug. 16.

Brush, Ahnson P., Detroit, Mich. Steering-wheel brake.

Rei6,538; Jan. 18.

Brush, Ahnson P., Detroit, Mich. Vehicle spring.

1,632,903; June 21.

Brush, Alanson P., Detroit, Mich. Manifold for multicylinder Internal-combustion engines. 1,634,823; July 5.
Brush, Alanson P., Detroit, Mich. Brake mechanism.
1,652,757; Dec. 13.
Brush, Dorothy S. and A. P., Greenwich, Conn. Cigarette lighter. 1,631,514; June 7.
Brush, George S., Zanesville, Ohio. Casing for radio sets.
Des. 71,223; Jan. 11.
Brush, George S., Zanesville, Ohio. Clock casing. Des.
Brush, George S., Zanesville, Ohio. Pitcher. Des. 74,136;
Brush, Gittle T., Dublin, N. H., Alrcraft. 1,619,100;
Mar. 1.
Brushidtle T., Dublin, N. H., Alrcraft. 1,619,100;
Bruspin, Mittle T., Dublin, N. H., Alrcraft. 1,619,100;
Bruspin, Mar. 1.
Bruspickl, Thaddens J. (Sec. Park.)

Brutnell, Brightie E., et al. (See Keating, Robert M., assignor.)
Brutofski, Stephen J., and J. Armstrong, Scranton, Pa. Baesball-game apparatus. 1,640,878; Aug. 30.
Bruun, Otto, Frederiksberg near Copenhagen, Denmark. Milking up. 1,641,316; Sept. 6.
Bruyere Banzet & Co., Societe Dauphinoise de Materiel Textile. (See Banzet, Paul J., assignor.)
Bruynes, Johannes, Eindhoven, Netherlands, assignor to 1,650,601; Nov. 29.
Bryan, Benjamin B., Jr., New York, N. Y. Utilizing the surplus energy exerted in operating revolving doors, turnstiles, and the like. 1,624,656; Apr. 12.
Bryan, George A., Peru, Ind., assignor to Bryan Harvester Company, Inc. Steam generator. 1,634,351; July 5.

July 5.
Bryan, George A., Peru, Ind., assignor to Bryan Harvester
Company. Fire box for steam generators. 1,640,346;
Aug. Marvester Company. (See Bryan, George A., as-

Bryan Harvester Company. (See Bryan, George A., assignor.)
Bryan Screw Machine Products Company, The. (See Fisher, Frank C., assignor.)
Bryan, William J., Jersey City, N. J. Chain link. 1,633,434; June 21.
Bryans, William A., Denver, Colo. Fountain syringe. 1,647,210; Nov. 15.
Bryant, Charles L., Cleveland, Obio. Heating. 1,649,097; Nov. 15.
Bryant, Charles L., Cleveland, Ohio. Valve. 1,649,566; Nov. 15.

Bryant Electric Company, The. (See Anderson, Carl E.,

assignor.

Bryant Electric Company, The. (See Catlin, H., and Thomas, assignors.)

Bryant Electric Company, The. (See Engstrom, Henry O., assignor.)

Bryant Electric Company, The. (See Engstrom, Henry O., assignor.)

Bryant Electric Company, The. (See Kinney, Aldon M.,

assignor.)
Bryant Electric Company, The. (See Peterson, M., and Danielson, assignors.)
Bryant Electric Company, The. (See Thomas, George B., assignor.)
Bryant Electric Company, The. (See Stacey, William A.,

assignor.)

Bryant, Ellsworth S., Detroit, Mich. Condenser.

1.641.660; Sept. 6.

Bryant, Ellmer, Lexington, Ky. Mechanical movement.

1.630,164; May 24.

Bryant, Eugene, Bardstown, Ky. Haystacker.

1,647.955; Nov. 1.

Fryant, Frank L., Jollet, Ill. Granulating dry materials.

1.621.869; Mar. 22.

Bryant, George F., assignor to Electrograph Advertising Service, Inc., Chicago, Ill. Printing press. 1,628,109; May 10.

Service, Inc., Chicago, In. Frinding press. 1,055,049; May 10.

Bruint, Chireye L., Roselle, N. J., assignor to American Leafy 284; Nov. 15.

Bryant Heater Manufacturing Company, The. (See Fox. Otto, assignor.)

Bryant Heater and Manufacturing Company, The. (See Fox. Otto, assignor.)

Bryant Heater and Manufacturing Company, The. (See Fox. Otto, assignor.)

Bryant Heater and Manufacturing Company, The. (See Fox. Otto, and Stark, assignors of Tubular Woven Fox. Otto, and Stark, assignor to Tubular Woven Leaven, Company, Parwincket, R. I. Spool or reel. 1,620,264; Apr. 26.

Bryant, Henry E., Providence, assignor to Tubular Woven Fabric Company, Parwincket, R. I. Linear-measuring machine. 1,626,265; Apr. 28.

Bryant, Hies, Battle Creek, Mich. Cord-actuated burglar alarm. 1,633,361; June 21.

Bryant, Roland G., Carterville, Mo., Combination table and luggage carrier. 1,621,922; Mar. 22.

Bryant, Walter N. (See Bratton, J. N., and Bryant.)

Bryant, William L., Springfield, Vt. Micrometer gauge. 1,623,574; Apr. 5.
Bryant, William L., Springfield, Vt. Multispindle internal-grinding machine. 1,624,211; Apr. 12.
Bryant, William O., Los Angeles, Calif., assignor to Underwood Typewriter Company, New York, N. Y. Type-Bryce, James W., Binghamton, N. Y., assignor, by meane assignments, to Dayton Scale Company, Dayton, Ohlo. Scale. 1,614,710; Jan. 18.
Bryce, James W., Binghamton, N. Y., assignor to The International Time Recording Company of New York.
Multiplying machine. 1,622,279; Mar. 29.
Househild Company, Endiectt, N. Y. Tabulating card-printer device. 1,620,068; Mar. 8.
Bryce, James W., Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohlo. Scale. 1,628,110; May 10.

Rating Machine Company, Enducott, N. Y. Tabulating card-printer levice. 1020/068; Mar. 8.

Break Company, Dayton, Ohio. Scale. 1,628,110; May 10.

Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Enducott, N. Y. Record-card-controlled machine for sorting and the like. Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Sorting machine. 1,651,160; Nov. 29.

Brydes, Samuel M., London, England, Portable cig-Brydes, Samuel M., London, England, Portable cig-Brydes, Samuel M., London, England, Portable cig-Brydes, Patton R., Jamaica, N. Y. Shingle. 1,614,871; Jan. 18.

Brye, Walter C., Knoxville, Tenn. Cot for automobiles, 1,620,433; Mar. 8.

Brye, Walter C., Knoxville, Tenn. Cot for automobiles, 1,620,433; Mar. 8.

Bryenold, Company, Inc., Domestic sawdust burner, 1,613,265; Jan. 4.

Brynoldt, Christian, Pittsburgh, Pa., assignor to J. C. Brydes, Edward & Company, Method of and apparatus for building concrete structures in water, 1,615,069; Jan. 18.

Brysilka, Limited. (See Schubert, Friedrich W., assignor, Marchine Works, Safety guard for centrifugal machines, 1,628,063; May 10.

Bryson, Tandy A., Troy, N. Y., assignor to Tolhurst Machine Works. Safety guard for centrifugal machines, 1,628,363; May 10.

Bryson, Tandy A., Troy, N. Y., assignor to Tolhurst Machine Works. Safety guard for centrifugal machines, 1,628,363; May 10.

Bryson, Tandy A., Troy, N. Y., assignor to Tolhurst Machine Works. Safety guard for centrifugal machines, 1,628,263; May 10.

Bryson, Tandy A., Troy, N. Y., assignor to Tolhurst Machine Works. Safety guard for centrifugal machines, 1,628,263; May 10.

Bryson, Tandy A., and F. I. Williams, Troy, N. Y., assignors to Tolhurst Machine Works. Sofety guard for centrifugal machines, 1,628,262; May 10.

Bryson, Tandy A., and F. I. Williams, Troy, N. Y., assignors to Tolhurst Machine Works. Centrifugal extraction, 1,638,274; May 20.

Bubar, George A., assignor to Bell Lumber Company, Minneapolis, Minn. Animal trap. 1,652,202; D

Development Company, Maring earter, proceedings, per G. Bucci, Mauro, Philadelphia, Pa, Facial composition. 1,634,974; July 5.

1,634,974; July 5.

1,634,974; July 6.

1,634,974; Jan. 18.

1,634,974; July 6.

1,628,650; May 17.

1,634,974; July 6.

1,632,650; May 17.

1,634,974; July 6.

1,634,974;

Calif. Electric-light bracket. Des. 72,085; Mar. 1.
Buchanan, Jerome R., and R. H. Abbott, Los Angeles,
Calif. Bobeche for electric-light fixtures. Des. 72,086;
Mar. 1.
Buchanan, John. North Braddock Pa. Crystal detector
Buchanan, Luther H., Los Angeles, Calif. Detachable
stencil for ball lights. 1,638,679; Aug. 9.
Buchanan, Stephen N. (See Davis, A. P., and Buchanan.)
Buchenberg, Alvin E., assignor to Industrial Research
Corporation, Toledo, Ohio. Engine and generator cooling system. 1,638,146; Aug. 9.
Bucher Reinbard, Lake Waies, Fla. Packing container.
1,647,604 NM. Amriswil, Switzerland. Frame or body
of jointed doils and other articulated or jointed toys.
1,620,659; Mar. 8.
Buchholt, Henry F., Milwaukee, Wis. Shade-roller support. 1,620,515; Mar. 8.
Buchholt, Ferdinand, Jim Falls, Wis. Adjustable
chimney cleaner. 1,620,999; May 24.
Buchholt, Fredinand, Jim Falls, Wis. Adjustable
chimney cleaner. 1,620,999; May 24.
Buchholt, Max. Cassel, Germany. Protective system for
electric apparatus. 1,640,509; Aug. 23.

Buchholz, Max, Cassel, Germany, apparatus, 1,640,310; Aug. 23.

Buchholz, Max, Cassel, Germany, Protecting liquid-insulated electric apparatus. 1,642,397; Sept. 13.

Buchholz, Max, Cassel, Germany, Controlling electric
apparatus. 1,642,398; Sept. 13.

Buchholz, Max, Cassel, Germany, Controlling liquidinsulated electric apparatus. 1,642,399; Sept. 13.

Buchholz, Max, Cassel, Germany, Control of liquidsulated electric apparatus. 1,642,401; Sept. 13.

Buchholz, Max, Cassel, Germany, Protection of elecBuchholz, Max, Cassel, Germany, Protection of liquidinsulated electric apparatus. 1,642,403; Sept. 13.

Buchholz, Max, Cassel, Germany, Protection of liquidinsulated electric apparatus. 1,642,403; Sept. 13.

Buchholz, Max, Cassel, Germany, Protection of liquidinsulated electric apparatus. 1,642,403; Sept. 13.

Buchholz, Max, Cassel, Germany, Electric protective system. 1,642,405; Sept. 13.
Buchholz, Max, Cassel, Germany. System of protection of electric apparatus. 1,642,406; Sept. 13.
Buchholz, Max, Cassel, Germany. System of protection of liquid-insulated electric apparatus. 1,642,407; Sept. 13.

Sept. 13.

Buchholz, Max, Cassel, Germany, Protecting liquidinsulated electric apparatus. 1,642,408; Sept. 13.

Buchholz, Theodor, Berlin-Zehlendorf-West, Germany,
Rail fastening. 1,640,750; Aug. 30.

Büchi, Albert, Klosters, Switzerland. Hand printing apparatus. 1,647,967; Nov. 1.

Buchl, Javander J., New York, N. Y. Electric hair
curier. 1,631,183; June 7.

Buchli, Jacob, Winterthur, Switzerland. Valve gear for
power cognes. 1,634,736; July 5.

Buchli, Jacob, Winterthur, Switzerland. High-pressure
steam boiler. 1,636,985; July 26.

Buchner, Winfield S., et al. (See Thurston, Charles B.,
assignor.)

Buchner, Wassignor.)

assignor. Herbert. (See Buchebaum, Samuel and H.)
Buchbaum, Samuel, Chicago, Ill., Antifriction device
for those heats. 1,640,503°, Aug. 30
Buchsbaum, Samuel and H., Chicago, Ill., Vanity box.
1,623,994°, Apr. 12.
Buck, Caphas C., Sandpoint, Idaho. Fox feed trough.
1,639,554°; Aug. 16.
Buck, Cephas C., Sandpoint, Idaho. Fox feed trough.
1,639,554°; Aug. 16.
Buck, Charles P., Topeka, Kans., assignor to GustinBacon Manufacturing Company, Kansas City, Mo. Antomatic vapor-take-off valve for oil tanks. 1,620,718°;
Buck, Charles P., Topeka, Kans., assignor to GustinBacon Manufacturing Company, Kansas City, Mo. Relief valve for excessive-pressure vapor tanks and lines.
1,620,719°; Mar. 15.
Buck, Charles P., Topeka, Kans., assignor to GustinBacon Manufacturing Company, Kansas City, Mo. ComBination vacuum and pressure relief valve. 1,620,720°;
Mar. 15.

Mar. 15.

Mar. 15.

Buck, Frank E., Baltimore, Md. Device for stopping choe squaking, 1,642,099; Sept. 13.

Buck, Howard T., Cedar Knolls, N. J. Attaching means for multigraph signature plates. 1,629,376; May 17.

Buck, John W., Birmingham, Ala. Combined shade and curtain holder. 1,615,598; Feb. 1.

Buck, Nelson E., D. W. Roper, and A. P. Thoms, Chicago, Ill. Cable Soint. 1,613,720; San. 11.

Buck, Relson E., D. W. Roper, and A. P. Thoms, Chicago, Ill. Cable Soint. 1,613,720; San. 11.

Buck Gerporthon, Mass. Tackaging articles of furniture and the like and pack or shell incasement therefor. 1,637,137; July 26.

Buck, Sterling P., Baltimore, Md. Articulate car joint. 1,653,942; Dec. 27.

Buckberg, Frank E., Chicago, Ill. Figure toy. 1,636,042; July 19.

Buckeye Aluminum Company, The. (See Fabens, Andrew

L., assignor.)

Buckeye Blower Company, The. (See Harnett, Lewis D., assignor.)

Buckeye Blower Company, The. (See Linbart, Lena E.,

assignor.)

Buckeye Iron and Brass Works. (See Rike, Frederick F., assignor.)

Buckeye Steel Castings Company. (See Akitt, Norman

B., assignor.)

Buckeye Steel Castings Company, The. (See Bush, Buckeye Steel Castings Company, The. (See Bush, Samuel P., assignor). Buckeye Steel Castings Company, The. (See Johnson, G. T., and Stertzbach, assignors.) Buckeye Steel Castings Company, The. (See Stertzbach, H. W., and Hansen, assignors.) Buckeye Steel Castings Company, The. (See Stertzbach, H. W., and Hansen, assignors.) Buckeye Steel Castings Company, The. (See Whitridge, John C., assignor.) Buckanm, George T. (See Dawson, A. T., and Buckham, Edward J., Camberwell, London, England. Sparking plus. 1,644,635; Oct. 4.

tion for automatic hotwater heaters. 1,627,830; May 10.

Buckley, Oliver E., Maplewood, N. J., assignot to Western Electric Company, Incorporated, New York, N. Y. Translating device. 1,618,927; Jan. 11.

Suckley, Oliver E., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling conductor system and method of operation. 1,624,470; App. E. Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Lönded-submarine-cable telegraph system. 1,647,267; Nov. 1.

Buckley, Oliver E., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Control apparatus for electric discharge devices. 1,649,016; Nev. 15. Buckley, Roy B., Wichita, Kans. Shingle. 1,653,085; Dec. 20.

1.649.016; Nov. 15.
Buckley, Roy B., Wichita, Kaus. Shingle. 1,653,085;
Duckley. Thomas A., Brooklyn, N. Y. Gum massaging Buckley. Thomas A., Brooklyn, N. Y. Gum massaging Buckley. Thomas A., Brooklyn, N. Y. Gum massaging the state of the

May 17.

Buckwalter, Jacob S., assignor to The Enterprise Manus 17.

Buckwalter, Jacob S., assignor to The Enterprise Manus 18.

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing and assembling the same. 1,617,319; Feb. 15.

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Railwaye.or truck. 19.

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Railwaye.or truck. 1,640,156; Aug. 23.

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Mounting roller-Bearing Company, Canton, Ohio. Mounting roller-Bearing Company, Canton, Ohio. Mounting roller-Bearing Company, Canton, Ohio. Bearing Company, Canton, Ohio. Bearing Company, Canton, Ohio. Bearing, 1,649,285; Nov. 15.

Bucyrus Company, (See Bager, S. R. W. M., Kacser, and Lehman, assignors.)

Bucyrus Company.

Lehman, assignor: Bucyrus Company, signors.)

Bucyrus Company. (See Wilkinson, F., and Lehman, as-

signors.)
Bud Wheel Company. (See Fine, Lewis, assignor.)

Buda Company, The. (See Gormley, Frank L., as-

Buda Company, The. (See Gormley, Frank L., assignor.)
Budd, Cinton S., Clarion, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Glass-blowing ma-Budd, Edward G., and J. H. Hunt, assignors to Budd Wheel Company, Philadelphia, Pa. Roll for making tapered wheel disks. 1,647,853; Nov. 1.
Budd, Edward G., Manufacturing Company. (See Kelley, George L., assignor).
Budd, Edward G., Manufacturing Company. (See Kelley, G. L., and Winlock, assignors.)
Budd, Edward G., Manufacturing Company. (See Kelley, G. L., and Winlock, assignors.)
Budd, Edward G., Manufacturing Company. (See Kelley, G. L., and Wanufacturing Company. (See Kelley, G. L., and Wanufacturing Company. (See Harbox, Joseph assignor.)
Budd, Edward G., Manufacturing Company. (See Trout, Walter M., assignor.)
Budd, Edward G., Manufacturing Company. (See Trout, Walter M., assignor.)
Budd, Edward G., Manufacturing Company. (See Trout, Walter M., assignor.)
Budd, Thomas D., and W. R. Sinks, Chicago, Ill. Binfloor dust-collecting system for grain-elevators and the like. 1,629,991; May 24.
Budd, Thomas D., and W. R. Sinks, Chicago, Ill. Dust-collecting system for grain-elevator garners. 1,630,780; Budd Wheel Company. (See Budd E. G., and Hunt ass

collecting system for grain.
May 31.
May 31.
Old Wheel Company. (See Budd, E. G., and Hunt, asand Wheel M., as-

signors.) Budd Wheel Company. (See Clement, Samuel M., as-

signor.)
Budd Wheel Company. (See Hunt, J. Harold, assignor.)
Budd Wheel Company. (See Ingham, Edward S., as-

signor.)
Budd Wheel Company. (See Ludwick, Herbert V., assignor.)
Budd Wheel Company. (See Nelson, Emil A., asslgnor.)
Budd Wheel Company. (See Ragsdale, Earl J. W., as-(See Ludwick, Herbert V., as-

Budd Wheel Company. (See Schoenwerk, Otto C., as-

signor.)
Budd Wheel Company.
Budd Wheel Company.
Budd Wheel Company. (See Smith, John W., assignor.) (See Tarbox, John P., assignor.) (See Trout, W. M., and Des

Budd Wheel Company. (See Tarbox, John F., assignor.)
Budd Wheel Company. (See Trout, W. M., and Des
Jardins, assignors.)
Budde, Charles H. St. Louis, Mo. Aquatic toy.
Buddenberg, Gerhard, Beverungen, Germany. Veneer-jointing machine. 1,615,107; Jan. 18.
Buddendorf, Frederick, Philadelphia, Pa. Electric-cord
recl. 1,636,587; July 19.
Bucchele, Edward E., West View, and S. A. Martin, Bradfortwoods, Pa. Barth anchor for structural towers.
Bucchier, Emil. Chicago, Ill. Weigh-scale platform.
1,619,504; Mar. 1.
Buedingen, William L., Milwaukee, Wis. Game.
1,655,545; Dec. 20.
Buehler, Leon, Jr., and N. M. Small, assignors to Frick
Buchler, Leon, Jr., and N. M. Small, assignors to Frick
and dumping apparatus. 1,628,047; May 17.
Buehler, Randolph J., South Bend, Ind. Valve-controlling
mechanism. 1,621,870; Mar. 22.
Buehrer, Emill, assignor to The Geo. Kress Co., Green
Ray, Wis. Hunnidiher for heating units. 1,648,587;
Nov. 8.

Buehler, Randolph J., South Bend, Ind. Vaive-controlling mechanism. 1,621,870; Mar. 22.

Burer, Emil, assignor to The Ceo. Kress Co., Green Es., Humidiler for heating units. 1,648,587; Nov. 8.

Buehrer, Emil, assignor to The Geo. Kress Co., Green Bay, Wis. Humidifier. 1,654,209; Dec. 27.

Buel, Hambden, Fairview, J., assignor to International Patents Development Company, Wilmington, Del. Extended to the Company, Company, Committee of the Company, Pittsburgh, Pa. Apparatus for condensing oils. 1,622,365; Mar. 29.

Buerger, Charles B., assignor to Gulf Refining Company, Pittsburgh, Pa. Apparatus for condensing oils. 1,622,665; Mar. 29.

Buerger, Charles B., assignor to Gulf Refining Company, Pittsburgh, Pa. Apparatus for condensing oils. 1,622,665; Mar. 29.

Buerger, Charles B., assignor to Gulf Refining Company, Pittsburgh, Pa. Apparatus for condensing oils. 1,622,665; Mar. 29.

Buerger, Charles B., assignor to Gulf Refining Company, Pittsburgh, Pa. Safety valve for oil burners and the like, 1,623,160; Ma

Buerger, Charles B., assignor to Gulf Oil Burner Company, Pittsburgh, Pa. Safety valve for oil burners and the Re. 1,622,161; Apr. 6.
1,624,310; Apr. 12, A., Elkhart, Ind. Slide trombone. 1,624,310; Apr. 12, A., Elkhart, Ind. 1,647,079; Oct. 25.
Buetcher, Christ, et al. (See Jones, James M., as-Buttner, Christ, et al. (See Jones, James M., as-

Buettner, T., & Co. (See Drummond, Katherine L., assignor.)
Buf, Frank L., Wichita, Kaps. Safety.

signor.) Buff, Frank L., Wichita, Kans. Safety control valve. 1.644,170; Oct. 4. Buff, Louis F. (See Sebell, Harry, assignor.) Buffalo Bolt Company. (See Mollnow, Edward A., as-

signor.)
Buffalo Bolt Company. (See Topping, Charles P., assignor.)

Buffalo Brake Beam Company. (See Campo, James A.,

assignot operative Stove Co. (See Kener, Edward, Buffalo ssignor)
Buffalo ssignor)
Buffalo Forge Company. (See Dyer, Orville K., assignor.)
Buffalo Forge Company. (See Yates, Arthur T., as-

Buffalo Forge Computer, Signor.)
Buffalo Steel Company, et al. (See Klinger, A. E., and
Burkhardt, assignors.)
Buffalo Wire Warks Co. (See Scheeler, Charles A., as-

Signor.)
Buffardi, Pasquale, Irvington, assignor to E. W. Zen,
Newark, N. J. Adjustable eccentric. 1,631,466;
June 7.

June 7.

Buffington, Edwin C., assignor to U. S. Bobbin & Shuttle Company, Manchester, N. H. Bobbin ferrule and making the same, 1,614,638; Jan. 18.

Buffington, Edwin C., 1614,638; Jan. 18.

Buffington, Edwin C., 18.

Buffington, Edwin C., 18.

Buffington, George L., and E. H. Hopson, assignors to Excell-O Tool & Manufacturing Co., Detroit, Mich. Rotary motor, 1,624,529; Apr. 12.

Buffington, Harry C. (See Weaver, G. E., and Buffing-

Buffington, Harry C., assignor to Weaver Manufacturing Company, Springfield, Ill. Truck jack. 1,647,268; Nov. 1.

NOV. 1.
Buffington, Harry C., and G. E. Weaver, Springfield, Ill., assignors to Weaver Manufacturing Company. Press bolister adjustment. 1.850.818; Nov. 29.
Buffington, Joseph, Pittsburgh, assignor of one-half to Charles J. Kirk, New Castle, Pa. Catch. 1,623,302;

Charles J. Kirk, New Castle, Fr. Cacca.

Apr. 5.

Buffington, Leonard C., Golden City, Mo. Combined end gate and ramp. 1,639,879; Aug. 23.

Bugatti, Ettors. Molshelm, France. Elastic axle for motor Bugatti, Ettors. 1,620,232; Aug. 23.

Bugatti, Ettors. 1,636,838; July 26.

Bughet, Lucian W., ir. (See Bugbee, Lucian W. and L. W., ir.)

Bugbee, Lucian W., ir., (See Bugbee, Lucian W. and L. W., ir.)

Bugbee, Lucian W., ir., Indianapolis, Ind., assignor, by mesue assignments, to Continental Optical Corporation. New York, N. Y. Machine for grinding lenses. 1,630,253; May 31.

Bugbee, Lucian W., ir., Indianapolis, Ind., assignor, by Bugbee, Lucian W., ir., Indianapolis, Ind., assignor, by

May 31. ugbee, Lucian W., jr., Indianapolis, Ind., assignor, by meane assignments, to Continental Optical Corporation, 1-637-405, Ind., 2. Curvature-measuring device. Lucian W., Indianapolis, Ind., assignor, by meane assignments, to Continental Optical Corporation, New York, N. Y. Marking a toric-lens, 1.642,075; Sept. 13.

Sept. 13.

Bugbee, Lucian W., jr., Indianapolis, Ind., assignor, by mesne assignments, to Continental Optical Corporation. New York, N. Y. Lens block. 1643-978: Oct. 4.

Bugbee, Lucian W. and L. W., jr., Indianapolis, Ind., assignors, by mesne assignments, to Continental Optical Corporation, New York, N. Y. Tool for treating ophthalmic lenses and making the same. 1,051,181;

Buggic, Horace H. assignor to the Dum Company, 1-clo. Ohio. Sliding window for vehicle bodies. 1.633,449; July 5. See Stern. C. L. and Bugler, Arthur V. (See Stern. C. L., and Bugler.) Bull, Lawrence L. De Privott Mich. Metaille container Bull. Stamping Company. (See Comp. Charles A., assignor, Alfred E. River Forest, Ill. Golf club.

Bubrke, Affred E., River Forest, Ill. Golf club Bubrke, Fil. Cot. 4. Bubrke, R. II. Co. (See Schauk, John E., assignor.) Bubse, Maximilian E., Minneapolis, Minn, assignor to Maryland Baking Co., Baltimore, Md. Ice-cream cone. 1,615,680; Jan. 25.

Bubse Maxmilian E. and W. W., Minneapolis, Minn., assignors to Maryland Baking Co., Baitimore, Md. Icecream cone. 1,615,681; Jan. 25.
Bubse, Waiter W. (See Bubse, Maximilian E. and W. W.)
Bubtz, Erost, Berlin, Germany. Method of and apparatus for carrying out chemical reactions or physical processes. 1,629,200; May 17.
Builders Iron Company, The. (See Lyons, George W., assignor.)

assignor.) Builders' Needs, Incorporated. (See Weissinger, Emil C.,

ssignor.) t, Ralph, assignor to The Alaska Refrigerator Com any, Muskegon, Mich. Brine-tank hanger. 1,646,186

Sult. Ralph, assignor to The Alaska Refrigerator Company, Muskegon, Mich. Brine-tank hanger. 1,646,186; Oct. 18.
Bukott. Roman B., Stevens Point, Wis. Scooter. 1,014,822; Jan. 18.
Bukott. Roman B., Stevens Point, Wis. Roller bearing. 1,014,014,013; Jan. 18.
Bukott. Roman B., Stevens Point, Wis. Hand-propelled childs vehicle. 1,614,824; Jan. 18.
Bulgin, William J., Worcester, assignor to Heenan & Froude Limited, Manchester and Worcester, England. Top-feed door for refuse destructors and other furbillation of the Alaska Marchies. S. San. Francisco, Calif. Nursing-bottle holder. 1,036,347; July 26.
Bull, Arthur A., assignor to Handy Governor Corporation, Detroit, Mich. Manifold accessory or supercharger. 1,644,870; Oct. 11.
Bulkichton H. M., assignor to Reed Roller Bit Company, Houston, Tex. Roller-cutter mounting. 1,634,318; July 5.
Bull, Clinton H. M., assignor to Reed Roller Bit Company, Houston, Tex. Roller bit. 1,647,269; Nov. 1.
Bull, Clinton H. M., assignor to Reed Roller Bit Company, Houston, Tex. Roller bit. 1,652,267; Dec. 13.
Blotter. 1,622,367; Mar. 29.
Bull, Frank W., Oshawa, Ontario, Canada. Shock absorber. 1,620,945; Janr. 15.
Bull, George L., Oakland, Calif. Combustion engine. 1,622,367; Mar. 29.
Bull, William R., Springfield, Mass. Method of and appa-

Bull. William R., Springheid, Mass. Method of and appared by the Reb. 22.
Bull, William R., Springheid, Mass. Method of and apparatus for cooling gun barrels. 1,631,190; June 7.
Bullard, Edward P., jr., Stratford, assignor to The Bullard Machine Tool Company, Bridgeport, Conn. Tool-slide mechanism. 1,631,579; June 7.
Bullard, Edward P., jr., Stratford, assignor to The Bullard Machine Tool Company, Bridgeport, Conn. Cutting compound distribution system. 1,635,702; July 12.

mrd Machine 1001 company, Brugepere, compound distribution system. 1,635,702; this compound distribution system. 1,635,702; this compound distribution system. 1,635,703; July 12. Bullard, Herbert A., assignor to Multi Vane Construction Cugine. 1,618,806; Feb. 22. Y. Internal-combustion Reliable of Company, The. (See Bullard Machine Tool Company, The. (See Bullard Machine Tool Company, The. (See Petersen, Carl M., assignor.) Bullard Machine Tool Company, The. (See Petersen, Carl M., assignor.) Rutherford, N. J., assignor to P. S. Thorsen & Company, Inc., Brooklyn N. Y. Heat insulator. 1,646,388; Oct. 25. Bulley, George W., assignor to The Miller Rubber Company, Akron, Ohio. Sound-ampilying horn. 1,617,513; Feb. 15. Bulley, George W., assignor to The Miller Rubber Company, Akron, Ohio. System of making treads. 1,624,826; Apr. 12. Assignor to Bullington Motors, 1,624,526; Apr. 12. Rushass City, Mo. Sealing means for rotary engines. 1,648,619; Catl. Stereoscopic Dibtography, 1,620,998; Mar. 15. Bullit, James E., near San Jose, Cailf. Stereoscopic Dibtography, 1,648,511; Sept. 20. Bullock, Calvin, Denver, Colo. Trunk. 1,624,714; Apr. 12. Bullock, Charles A. H., London, England. Typesetting

Bullock, Apr. 12 Bullock,

Apr. 12.
Bullock, Charles A. H., London, England. Typesetting apparatus. 1,623,515; June 7.
Bullock, Charles F., Schenectady, N. Y., assignor to General Electric Company. Integrating and registering mechanism for flow meters and the like. 1,018,807;

Feb. 22. Bullock, David Feb. 22.
Bullock. David M. Champaign, Ill. Football pants.
1.641,733; Sept. 6.
Bullock. Edward W., assignor to Gleason Works.
Rochester, N. Y. Machine for producing gears.
1.647,430; Nov. 1.
Bullock. Jay, Marquette, Mich., assignor to A. S. Reed,
Portiand, Oreg. Check. 1.621,437; Mar. 15.
Bullocks. (See Ebell. Helen, assignor.)
Bullocks. (See Ebell. Helen, Burner. 1.613,928;
Jan 11, 1471.

Bullum, Steve, Los Angeles, Calif. Burner. 1,636,353; Jan. 11. Bullum, Steve, Los Angeles, Calif. Burner. 1,636,353;

Bullum, Steve, Fellows, Calif. Drilling tool. 1,640,644; Aug. 30.

Aug. 30.

Bulman, Hubert. (See Bowling, C. B., and Bulman, Dulman, William V., Philadelphia, Pa. Combined floor drain and back pressure water trap. 1,620,457;

Bulmer, James R., Fort Collins, Colo. Air cooler and humidifier. 1,621,766; Mar. 22.

Bulova, Adolph, New York, N. Y. Strap-watch display device. 1,615,524; Jan. 25.

Bulova, Hough, New York, N. Y. Watch. 1,614,276;

Jan. 11,20ph, New York, N. Y. Watch. 1,614,276;

Bunding der. 1,621,765; Mart. 2,000. Ale Cooler and Municipal Sulvoya. Adolph. New York, N. Y. Strap-watch display device. 1,615,624; Jan. 25. Bullova, Joseph. New York, N. Y. Watch. 1,614,276; Jan. 11. Bundarger. Clarence R., assignor to George W. Johnson Joseph. New York, N. Y. Watch. 1,614,276; Jan. 11. Bundarger. Clarence R., assignor to George W. Johnson device. 1,648,673; Nov. 3 Brump, Spencer M., assignor to The Bettcher Stamping & Manufacturing Company, Cleveland, Ohio. Chair hub. 1,648,694; Sept. 27. Bundury, Hugh M., assignor to The Bettcher Stamping & Manufacturing Company, Cleveland, Ohio. Chair hub. 1,648,694; Sept. 27. Bundury, Hugh M., assignor to Fittish Dyestuffs Corporamine dumbrimides. 1,5616,109; Feb. 1. Bunce, Bobert M., Portland Oreg., assignor to Hanceck Bross. San Francisco, Calif. Baggage-check holder. 1,645,796; Oct. 18. Bundrick David D., assignor to Moore Dry Klin Company, Bundard Charles, C. 1,645,796; Oct. 18. Bundrick David D., assignor to Moore Dry Klin Company, Philadelphia Flectrical & Manufacturing Company, Philadelphia Flectrical & Manufacturing Company, Philadelphia Flectrical & Manufacturing Company, Philadelphia Pa. Lamphanger, 1,620,516; Mar. 8. Bundy, Clifton L., assignor to Philadelphia Flectrical & Manufacturing Company, Philadelphia, Pa. Lamphanger, 1,620,516; Mar. 8. Bundy, Harry W., Detroit. Mich. Composite tubing. 1,630,527; Fank, S. S. Bundy, Clifton L., assignor to Manufacturing Company, Philadelphia, Pa. Lamphanger, Frank, South Bend, Ind. Convertible automobile body. 1,637,101; July 26. Bunevac, Frank, South Bend, Ind. Convertible automobile body. 1,637,101; July 26. Bunevac, Prank, South Bend, Ind. Convertible automobile body. 1,637,101; July 26. Bunevac, Prank, South Bend, Ind. Convertible automobile body. 1,637,101; July 26. Bunevac, Prank, South Bend, Ind. Convertible automobile body. 1,637,101; July 26. Bunevac, Prank, South Bend, Ind. Convertible automobile body. 1,637,101; July 26. Bunevac, Prank, South Bend, Ind. Convertible automobile body. 1,637,101;

Aug. 16.

Eunker, H. M., & Co. (See Gardner, Percy, assignor.)

Eunker, Herbert H., Jersey City, N. J. Stair-tread carrier. 1,613,004; Jan. 11.

Bunker, John W. (See Horton, George W., assignor.)

Eunker, John W., New York, N. Y. Illuminating device.

1,615,070; Jan. 18.

Bunker, John W. M., Belmont, assignor to American

Protein Corporation, Boston, Mass. Producing an
edible protein product. 1,624,036; Apr. 12.

Bunker, William H., Lisie, Ontario, Canada. Compressor
for gas engines. 1,636,124; July 19.

Bunna, Rodney T., Danville, Va. Galley-slug adjuster.

Bunnel, Earl C., Strafford, and L. H. Messinger, jr.,

Bridgeport, assignors to The C. O. Jelliff Manufacturing
Corporation, Southport, Conn. Loom with edge trimmers. 1,636,551; July 19.

Bunnell, J. H., & Company. (See Hesselbach, Henry,
assignor.)

Bunnenelper, Helene, Hannover, Germany. Gaiter.

Buhnen, assignor.)

Bunnenberg, Helene, Hannover, Germany.

Bunte Brothers, See Barnotov, Dominik M., assignor.)

Bunte Brothers, See Barnotov, Dominik M., assignor.)

Bunte Brothers, See Barnotov, Dominik M., assignor.

Bunting, James H., Clifton, N. J., assignor to Susquehanna Silk Mills. Textile fabric.

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Bunting, James H., Clifton, N. J., assignor to Susquehanna Silk Mills.

Bunting, James H.

signor.)

Buquet, Edouard W., Montrouge, France, Constructing metal wheels, 1,627,953; May 10, Bura, Benjamin H., Kremlin, Okla, Attachment for grain binders, 1,629,610; May 24.

Burbach, John, Bangor, Wis. Draft coupling. 1,637,854; Aug. 2. Burbank, Louis S., Worcester, Mass. Dispensing top. 1,637,548; Aug. 2. B. C. Yost, Medford, Oreg. Fruitpicking-pail cover, 1,636,679; July 26. Windmill, 1,636,679; July 26. Wash. Windmill, 1,644,912; Oct. 11. Burch, Seattle, Wash. Windmill, 1,644,912; Oct. 11. Burch, Lawrence A., Jamestown, N. X. Wrench. 1,647,404; Nov. 1. Burch, Louis A. (See Burch, Frederick R., assignor.) Burch, Orson G., Detroit, Mich. Sash-regulating device. 1,621,164; Mar. 15. Burch, Comp. Works Co., The. (See Kime, Charles G., assignor.) Works Co., The. (See Kime, Charles G., assignor.) Burcham, John, San Diego, Calif. Drill. 1,617,231; Feb. 8.

Burchard, Albert F. (See Howard, Alonzo, assignor.) Burchard, O. A., et al. (See McCulloch, Stewart B.,

Burchard, O. A., et al. (See McCulloch, Stewart B., assignot.)
Burchartz, Heinrich, Gelsenkirchen, Germany. Apparatus for the centrifugal casting of hollow bodies, 1,648,442; Nov. 8.
Burchann, John, Albuquerque, N. Mex. Automatic flush tank and deodorizer. 1,643,286; Sept. 20.
Burchalter, James A., Barnwell, S. C. Pliers. 1,613,929; Burchalter, James A., Barnwell, S. C. Pliers.

Jan. 11.

Burckhauser, John J. (See Richter, H. J. F., and Burckhauser.)
Burd, Grace A., Colfax, Calif. Bedpan. 1,652,467; Dec. 13.
Burd High Compression Ring Company. (See Dalin, Arvid G., assignor.)
Burd High Compression Ring Company. (See Higgins, Burd High Compression Ring Company. (See Higgins, Burdelf, Arthur, Atlanta, Ga., assignor, by mesne assignments, to A. S. Gilman, Cleveland, Ohio. Duplicating device. 1,622,415; Mar. 29.
Burden, Everett, East Liverpool, Ohio. Glove, 1,620,434; Mar. 8.

Burdete, Everett, East Liverpool, Onto. Giove. 1,620,434; Mar. 8.

Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Intermittently-operable take-up mechanism of the state of the sta

July 12.

Burdick, Charles L., London, England, Coin-wrapping machine, 1,628,576; May 10.

Burdick, Charles L., London, England. Spraying apparatus, 1,629,144; May 17.

Burdick, Charles L., Wood Green, London, England. Machine for counting sheets, 1,640,563; Aux. 30.

Burdick, Charles L., Wood Green, London, England. Air conditioner, 1,640,564; Aux. 30.

Burdick, Charles L., London, and J. D. Whiteman, Wallington, England. Liquid-forcing apparatus. 1,624,827; Apr. 12.

Apr. 12.

Burdick Corporation, The. (See Anderson, Fritz A., assignor.)

Burdick Corporation, The. (See Chesney, Jacques W. D.,

Burdick Colporation, The. (See Maxson, Rolland H., assignor, Burdick Corporation, The. (See Maxson, Rolland H., assignor, Island, C., assignor, Island, C., assignor, Island, C., assignor, Island, C., assignor to E. & Burdick, Hiram M., Frankfort, N. Y., assignor to E. & Burdick, Clothes driver, 1,648,636; Nov. 8.
Burdine, Pearl G., Chester, Miss. Automobile seat construction, 1,648,610; Oct. 25.
Burdon, Charles S. (See Bower, W. M., Burdon and

Stern.)

Burdaul, Raymond W., Gloucester Heights, N. J. Signal apparatus. 1,624,923; Apr. 19.

Burdwise, Anton, assignor to Musical Manufacturers' Corporation, Baltimore, Md. Fastening connecter for strings of musical instruments. 1,619,563; Mar. 1.

Bureau, Arthur A. (See Sehlenpy, S. L., and Bureau, Buritt. Frank F. S. Portland, Oreg. Sike fature. Buritten, Sessen-on-the-Ruhr, Germany. Apparatus for buring powdered fuel. 1,618,868; Feb. 22.

Burgamy, John R., administrator. (See Parker, Joseph F., assignor.)

Burgan Corporation, The. (See Burke, William H., assignor.)

Burgdorf, Herman, assignor to The Frank A. Rolling Company, Inc., Philadelphia, Pa. Paper-bag machine. 1.646,572; Oct. 25.

1.646,572; Oct. 26.

1.640,572; Oct. 27.

1.650,572; Oct. 28.

1.650,572; Oct. 28.

1.650,572; Oct. 29.

1.650,572;

Burgess Battery Company. (See Hodge, Howard D., assignor.) Burgess Battery Company. (See Ring, Hans A., as-Burgess Battery Company. (See Schulte, Walter B., Burgess Battery Company. (See Schulte, Walter B.,

Jan. 4. orgess, Pearl M., et al. (See Burgess, Pearl M., as-

signot.)

Burgess, Pearl M., Reading, assignor to P. M. Burgess and J. Blacher, doing business under the firm name of Burgess and Blacher, Boston, Mass. Hospital operating room. 1.645.520; Oct. 48.

Burgess, Robert, Newton Center, assignor of one-half to J. H. Jones, Winthrop, Mass. Cap spinning frame. 1.625.529; Apr. 19.

Burgess, Roy H., Glen Ellyn, Ill. Vertical-file folding machine. 1.650,424; Nov. 22.

Burgess, Roy H., Glen Ellyn, Ill. Die-cutting wheel. Eurgess, Warren E., Boston, Mass. Compensator for radiocompasses. 1.646.443; Oct. 25.

Burgest, Lynn S., assignor to The Rall Welding & Ronding Company, Cleveland, Ohio. Cable splicing. 1.642.644; Sept. 13.

Dargett, Lynn S., assignor to The Rail Welding & Bond-ing Company, Cleveland, Obio. Cable splicing, 1.642.644; Sept. 13. Burgett, Ort, Scobey, Mont. Grain-mixing and chemical-treating machine. 1.625.521; Apr. 19. Burgett, Faul F., Mexico, Mo. Truck. 1,640,263; Aug. 23.

Aug. 20.

Burgewitz, John W., Detroit, Mich. Fountain hair comb. 1.638.523; Aug. 9.

Burghard, E. G. (See Fourness, Wilfred, assignor.)

Burghard. Edward G. (See Worth, Clemens S., assignor to A. B. Burgin, Robert F. Buena Vista, Ga., assignor to A. B. Farquhar Co. Ltd., York, Pa. Llning for boilers and furnaces. 1.015.785; Jan. 25.

Burgmann, Firm Footor. (See Huth, Carl, assignor.)

Burgoyne, Bruest G. B. (See Ricks, F., and Burgoyne.)

Burguiéres, Denis P. J., assignor of one-fourth to G. Crist. Louisa, La. Elastic suspension wheel. Crist. Louisa, La. Elastic suspension wheel. Burhans, William G., Kingston, N. Y. Oil filter. 1,632,461; June 14. Burian, Jaroslava, Leonia, N. J., assignor to The Sebring Pottery Company, Sebring, Ohio. Sugar bowl. Des. 74,137; Dec. 27. Burian, Jaroslava, Leonia, N. J., assignor to the Sebring Durian, Jaroslava, Sebring, Ohio. Casserole. Des. 74,138; Dec. 27. Burkart, William, Denver, Colo. Stake for trucks, wagons, and other vehicles. 1,631,118; June 7. Burket, Hifed W., Pelham Manor, N. Y. Washing machine. 1,613,737; Jan. 11. Burke, Arthur S., Sloux Falls, S. Dak. Toy vehicle. 1,621,350; Max. 15. Burke, Arthur S., Sloux Falls, S. Dak. Toy vehicle. 1,623,616; May 3. Burke, Charles E., assignor, by mesne assignments, to Du Pont Viscoloid Company, Wilmington, Del. Fireproofed product and the production thereof. 1,633,067; Burke, Charles E., assignor, by mesne assignments, to Du Pont Viscoloid Company, Wilmington, Del. Fireproofed product and the production thereof. 1,633,067; Burke, Charles W. (See Balzer, V. W., and Ballou, as-

Burke, Charles W. (See Balzer, V. W., and Ballou, as-

signors, Charlet Signors, Signor to The Midwest Cabinet Company, Kitchen cabinet, 1,621,491; Mar. Burke Electric Company. (See Stoeltzlen, Charles L.,

assignor.) urke, George W., jr. (See Polk, G. W., and Burke,

Burke, George W., jr., Dayton, Ohlo. Fire extinguisher. 1,634.975; July 5.
Burke, George W., jr., Dayton, Ohlo. Fire-extinguishing apparatus for aircraft. 1,634.977; July 5.
Burke, George W., jr., Dayton, Ohlo, assignor, by mesne assignments, to Battle-Fyre Company. Fire extinguishering the state of the

Burke, John C., Middlesboro, Ky. Clock. 1,623,907; Apr. 5. Burke, John W., Del Rio, Tex. Barber's comb. 1,628,577; May 10.

Apr. 5.

Burke, John W., Del Rio, Tex. Barber's comb. 1,628,577;
May 10.

Burke, Lawrence J., assignor to Curtis Leger Co., Chicago, III. Display plateau. Des. 73,326; Nov. 12.

1,629,859; May 24.

Burke, Michael A., Lima, Ohio. Organized mechanism for flanging plates. 1,647,431; Nov. 1.

Burke, Michael A., Lima, Ohio. Organized mechanism for flanging plates. 1,647,431; Nov. 1.

Burke, Richard T., New Orleans, La. Device for automatically printing data on racing programs. Burke, Robert F. (See Himman, J. H., and Burke.)

Burke, Welter S., Cambridge, Mass. Promoting health, growth, and development of plants in greenhouses. 1,648,527; Nov. 8.

Burke, Wilbur W. and E. Q. Weller. East Cleveland, strength of the control o

assignor.)

Burkhardt, Frederick C. (See Klinger, A. E., and Burkhardt.)

Burkhart, Paul H., New Haven, Conn., and W. L. Bayne, Henry, Ill. Automobile lighting system and switch mechanism therefor, 1620,187; Mar. 8.

Automobile ventlator. 1,623,383; Apr. 5.
Burkholder, John C., West End, N. C., assignor to West-ern Electric Company, Incorporated, New York, N. Y. Signaling system. 1,624,579; Apr. 12.
Burkholder, John H., assignor to Elic Manufacturing System, 1624,579; Chief Manufacturing July 12; Ashland, Ohio. Vehicle jack. 1,635,307; July 12;

Burkman, John A., Port Arthur, Ontario, Canada. Hot-water furnace. 1,642,600; Sept. 13. Burks, Arthur W., Decatur, 11. Pump. 1,619,285; Mar. 1.

Burks, Arthur W., Decatur, Ill. Pump. 1,619,286;

Mar. 1.

Burks, Edwin H., Trent, Tex. Cultivator knife.
1.645,039; Oct. 11.

Burlectas Limited. (See Enock, Arthur G., assignor.)

Burletis, Limited. See Enock, Arthur G., assignor.)

Burletis, Limited. See Enock, Arthur G., assignor.)

Burletigh, James K., assignor to B. & H. Utility Products, Inc. New York, N. Y. Attachment for typeling jar caps. 1,641,152; Sept. 6.

Burleson, Joseph F., Scottsdale, Ariz. Poppet valve.
1,623,262; Apr. 5.

Burlew, Gilderoy O., New York, N. Y. Artificial tooth.

Burley, Harry H., Bookline, Mass., assignor to Boston

manufacture of electric wires. 1,630,322; May 31.

Burley, Thomas, Seattle, Wash. Fireplace. 1,638,286;

Aug. 9.

Burley, Thomas, Seattle, Wash. Fireplace. 1,638,286; Aug. 9.
Burlin, Adolph L., assignor of one-third to Sheldon Leicester and one-third to L. B. Holman, London, England.
Manufacture of dentures and the like. 1,615,212; Jan. 25.
Burlin, Leslie H., Chicago, assignor to Chicago Hardware.
1,620,006; Mar. 8.
Burlingame, Fred E., Pawtucket, R. I., assignor to Attleboro Braiding Co., South Attleboro, Mass. Lacing-tip-ping machine 1,625,522; Apr. 19.
Burlingham, James H., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Distilling apparatus. 1,626,223; Apr. 26.
Burnah Oli Company Limited, The.
and More.
Bussignors.
Adurce, Ossagnors.
Heating furnace. 1,651,668; Dec. 6.
Burnap, James M., Chicago, Ill. Foot-washing slipper.
1,945,688; Oct. 18.
Burnap, Robert S., East Orange, N. J., assignor to General Electric Company. Electric lamp. 1,650,602; Nov. 29.
Burnett, Lewis W., Vancouver, British Columbia, Canada.

Nov. 29.

Burnett, Lewis W., Vancouver, British Columbia, Canada. Electric governor. 1,650,786; Nov. 29.

Burnett, William J. Glenside, assignor to Beaumont gravity discharge hoppers. 1,649,286; Nov. 15.

Burniel, James H., South Akron, Ohio. Dirigible head-light. 1,649,661; Nov. 15.

Burnham, Edward C., assignor to Draper Corporation. Hopedale, Mass. Bobbin support for filling replenishing looms. 1,644,644; Oct. 4.

Burnham, George A., Saugus, assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston Marchael States and Condition of the Condition o

Burns, Ratherine E., assignor to Tranklin Simon & Co., Inc., New York, N. Y. Dress. Des. 73,827; Nov. 15.

Burns, Katherine E., assignor to H. H., Franklin Manufacturing Company, Syracuse, N. Y. Counterbalancing device for shafts. 1,646,897; Oct. 25.

Burns, Katherine E., assignor to Franklin Simon & Co. Inc., New York, N. Y. Dress. Des. 73,827; Nov. 15.

Burns, Katherine E., assignor to Franklin Simon & Co., Inc., New York, N. Y. Dress. Des. 74,904; Dec. 20.

Burns, Katherine E., assignor to Franklin Simon & Co., Inc., New York, N. Y. Dress. Des. 74,004; Dec. 20.

Burns, Raymond W., Poughkeepsie, N. Y. Clamp carrier. 1,655,035; Dec. 20.

Burns, Robert H. (See Higgins, J. J., and Burns.)

Burnel, D. Brancisco, Calif. Key-opening-can structure. 1,655,061; Nov. 22.

Burrell, D. H., & Co. (See Feldmeier, H., and Wray, assignors.)

signors; sig

Burrow Manufacturing Company. (See Burrow, James

nrows, Virgil A., Kansas City, Mo. Automatic shut-off. 1,658,983; Dec. 27. urson Knitting Company. (See Hinchliff, Ralph, as-

off. 1.658,0007.
Burson Knitting Company. (See Carle, Harold, assignor.)
Burt, F. N., Company. (See Carle, Harold, assignor.)
Burt, F. N., Company. (See Barrin, Marc, assignor.)
Burt, F. N., Company. (See Royal, Joseph N., assignor.)

Signor.)
urt, Harold F., assignor to Rhodes-Hochriem Manufac-turing Co., Chicago, Ill. Adjusting attachment for coin-control levers. 1,649,017; Nov. 15. coin-control levers. 1,t Burt Machine Company.

signor.)
Burtchaell, Samuel W., Oakland, Calif. Apuse in cementing soles or heels to shoes.
Dec. 20. Apparatus

Dec. 20.

Eurthert, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,645,795; Oct. 18.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,645,796; Oct. 18.

Burton Edward, Sasignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,645,797; Oct. 18.

Burton, Edward, Grand Rapids, Mich., assignor to Keeler Brass Co., Grand Rapids, Mich., assignor to Keeler Brass Co., Grand Rapids, Mich., assignor to Keeler Brass Co., Grand Rapids, Mich., Brawer pull. Des. 73,640; Oct. 18.

Burton, Edward, assignor to Keeler Brass Company, Company, Company, Company, Company, Company, Company, Company, New York, Nov. 1.

Burton, Everett T., Jackson Heights, assignor to Western Electric Company, Incorporated, New York, N. Y. System for indicating frequency changes. 1,647,270; Nov. 1.

System for indicating frequency changes. 1,644,270;
Nov. I. Arrest G., Topeka, Kans. Sealing composition for punctures in pneumatic tires and the like. 1,645,585; Oct. 18.
Burton, Isaac F., deceased, M. E. Burton, executrix, assignor to Visualatione Company of America, Philadelphia, Pa. Governor and governor stop. 1,648,109;
Nov. 8.

assignor to Visualatone Company of America, Philadelphia, Pa. Governor and governor stop. 1,648,109; Nov. 8.

Burton, Jesse B., assignor to The Waterbury, Farrel Foundry and Machine Company, Waterbury, Conn. Gauging machine. 1,652,288; Dec. Burton, Isaac F.)

Burton, Warren D. (See Page, C. B., and Burton.)

Burton, Warren D. (See Page, C. B., and Burton.)

Burton, Warren D. (Dayton, Ohio. Tension meter. 1,650,003; Nov. 29.

Busch, Ben, Detroit, Mich., assignor, by mesne assignments, to B. D. Clark, Morenci, Mich. Airometer. Busch, Herman F., Millyale, assignor to Armstrong Cork. Busch, Herman F., Millyale, assignor to Armstrong Cork. Same. 1,646,187; Oct. 18.

Busch-Sulzer Bros. Diesel Engine Co. (See Schaer. Ernst, assignor.)

Busch-Sulzer Bros. Diesel Engine Co. (See Schaer. Ernst, assignor.)

Busch-Sulzer Bros. Diesel Engine Co. (See Schaeren. Ernst, assignor.)

Busch-Sulzer Bros. Diesel Engine Co. (See Schaeren. Ernst, assignor.)

Busch-Mulzer Bros. Diesel Engine Co. (See Schaeren. Ernst, assignor.)

Busch-Luther M. Royersford, Pa. Joint fastener. Busch-Sulzer Bros. Diesel Engine Co. (See Schaeren. 1,645,867; Oct. 11.

Bush, Luther M., Royersford, Pa. Joint fastener. Busch-Wildington C., Port Byron, N. Y. Animal trap. 1,632,606; Dec. 13.

Bushek, John, Eimhurst, N. Y. Machine for straightening disk wheels. 1,647,211; Nov. 1,

Bushnell, Charles S., assignor to General Railway Signal Control of the Schaler of Company, Plainfield, N. J. Apparatus for elevating and distributing material. 1,645,942; Oct. 18. W. N. 15.

Buss, Wendell R. (See Buss, Hadley N. and W. R.)

Buss, Wendell R. (See Buss, Hadley N. and W. R.)

Buss, Wendell R. (See Buss, Hadley N. and W. R.)

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Buss, Wendell R. (See Buss, Hadley R. and W. R.)

B

Suswell, Annie M., et al., executrices. (See Rhoades, Alonzo E.)

Buswell, Walter, Bridgeport, Conn., assignor to Standard Compositor Aktiengesellschaft, Berlin, Germany, Linecasting machine. 1,651,993; Dec. 6.

Butchart, William A. (See De Mier, Fred, assignor.)

Butcher, Alfred, Roselle Park, N. J. Oli burner. 1,647,956; Nov. 1.

Butcher, Charles A., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, Re-Burlingham, William, Tenatly, and R. L. Lovell, Crarford, assignors to Adams, Lovell, Burlingham, Inc., Jersey City, N. J. Compressor for refrigerating systems. 1,622,023; Mar. 22.

Burman, George A., assignor to E. J. Woodison Company, Detroit, Mich. Multiway vaive. 1,630,781; May 31. Burman, Peter M., Seattle, Wash. Folding stand. 1,613,930; Jan. 1i. Burmeister, Charles C., Davenport, Iowa. Stagging hook. 1,620,438; Mar. 8. Milwaukee, Wis. Elevator leg. 1,640,529; Aug. 30. Burmister, Donald M., New York, N. Y. Separable fastener, 1,638,321; Aug. 9. Burner, Thomas E. Carthage, Ill. Cornstalk shredder. 1,630,321; Aug. 2. Castle, assignors to Koppel Industrial Car and Equipment Company, Pittsburgh, Pa. Dump car, 1,621,871; Mar. 22. Burner, William L., Koppel, Pa., and O. E. Kantenwein.

Mar. 22.
Burner, William L., Koppel, Pa., and O. E. Kantenwein, Oak Park, Ill., assignors to Koppel Industrial Car and Equipment Company, Pittsburgh, Pa. Supporting mecianism for dump ears. 1,631,241; June 7.
Burnert, Charles A., Elkhart, Ind. Cleaning out pipe lines. 1,628,539; May 10.
Burnert, John P., assignor to Automatic Motion Picture Display Co. Chicago, Ill. Continuous moving-picture machine. 1,624,689; Apr. 12.
Burnert, John W., Cambridge, Mass. Faucet. 1,639,326; Aug. 16.

Burnett, John W., Cancago, Ill. Railway car. 1,623,303; Apr. 5.

Burnett, Richard W., Chicago, Ill. Railway car. 1,623,303; Apr. 5.

Burney, Charles D., casignor to Airship Guarantee Company Limited, Westminster, London, England. Lighter than-air aircraft. 1,632,169; June 14.

Burney, Charles D., Westminster, London, assignor to Airship Guarantee Company, Limited, London, England. Mooring mast and mooring gear for lighter-than-air aircraft. 1,636,354; July 19.

alicraft. 1,636,354; July 19.

Burnham, Charles, Washington, D. C. Box-making machine. 1,635,532; July 12.

Burnham, Charles, Washington, D. C. Box-making machine. 1,635,532; July 12.

Burnham Chemical Company. (See Gauger, A. W., and Storch, assignors. 5.

Burney, Carporation, Hopedale, Mass. Filling-control mechanism for filling replenishing looms. 1,626,505; Apr. 26.

Apr. 26.

Burnham, George A., Saugus, assignor, by mesne assignments, to Conduit Electrical Manufacturing Corporation, Boston, Mass. Electric switch. 1,631,913; June 7.

June 7.

Burnham, George A., Saugus, assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass. Multipole-electric-switch casing. 1,648-444; Sept. 27.

Burnham, John A., Marbiehead, Mass. Representing cascades in landscapes. 1,627,270; May 3.

Burnham, Locke H., Pittsheid, Mass., assignor to General Electric Company. Transformer. 1,620,437; Mar. 8.

Burnham, Locke H., Pittsheid, Mass., assignor to General Electric Company. Transformer. 1,620,437; Mar. 8.

Burnham, 1841,762; June 5, Beach, Calif. Massaging de-Burns, Afred P. (See Turner, A., and Burns.)

Burns, Bernard, Toronto, Ontario, Canada. Keyboard. 1,616,025; Feb. 1.

Burns, Charley E., Haynesville, La. Pump. 1,626,181; Apr. 26.

Burns, Dana B., Asheville, N. C., Valve mechanism for Burns. Dana B., Asheville, N. C., Valve mechanism for

Apr. 26.

Burns, Dana E., Asheville, N. C. Valve mechanism for internal-combination engines. 1,623,525; Apr. 5.

Burns, David E., deceased: Grand Rapids Trust Company, executor, assignor to C. G. Willett, Grand Rapids, Mich. Road-scraper-adjusting mechanism. 1,625,019; Apr. 19.

Burns, Dawson J. (See Kaegt, Emll, assignor.)

Burns, Edward L., assignor. by mesne assignments, to S. (See Van Sielen, Henry W., assignor.)

Burns, Edward L., assignor. Surness assignments, to S. (See Van Sielen, Henry W., assignor.)

Burns, Eugene O., Reno, Nev. Device for punching and plugging cans. 1,641,571; Sept. 6.

Burns, Francis B., North River, N. Y. Gravity separator for garnet ores. 1,635,111; July 5.

Burns, George J., Youngstown, Ohio. Thermal gasifying motor construction. 1,626,783; May 3.

Burns, Jabez, & Sons, Inc. (See Kopf, Joseph L., assignor.)

Signor.)

Burns, John H., Brisbane, Queensland, Australia, Resilient tire. 1,616,026; Feb. 1.

Burns, Julius G., and H. S. Davis, New York, N. Y., assignors to Purceold Products of America, Inc. Freezing press, 162,0993; Mar. 15.

Burns, Julius G., and H. S. Davis, New York, N. Y., assignor to Purceold Products of America, Inc. Refrigerating household unit. 1,62,2636; Mar. 29.

Burns, Leslie E. (See Esterline, A. M., Burns, and Esterline, Leslie E. (See Esterline, A. M., Burns, and

Bues, Raymond W., Poughkeepsle, N. Y. Clamp ma-chine, 1.628.112; May 10. Burns, Raymond W., Poughkeepsle, N. Y. End-clamping device, 1.628.113; May 10. Burns, Richard J., Lowellylle, Ohlo. Expansion steam frap, 1.624.622; Mar. 22. Burns, Wilchood E. (See Burdet, G. A., and Burns.)

Burns, Wilfred E., Burlingame, assignor to M. J. B. Co., San Francisco, Calif. Can and method of forming. 1,15,930; Feb. 1. Burns, William A., London, assignor, by mesne assign-ments, to C. Gold, Ravens, England. Sign. 1,619,189; Mar. 1.

Mar. 1. Burnwatt, William W., assignor of one-half to W. M. Fearon, Los Angeles, Calif. Folding truck. 1,643,268;

Burnwart, William W., assignor of one-fair to W. Réaron, Los Angeles, Calif. Folding truck. 1,643.265: Burpee Can Sealer Company. (See Burpee, Frank W., assignor). Burpee, Frank W., assignor to Burpee Can Sealer Company, Chicago, Ill. Machine for cutting green corn from the cob. 1,623,088; Apr. 5. Burpee, Frank W., assignor to Burpee Can Sealer Company, Chicago, Ill. Green-vegetable cutter. 1,623,089; Burpee, John H., and D. E. Lain, Bellingham, Wash, Burpee, John H., and D. E. Lain, Bellingham, Wash,

pany, Chicago, Ill. Green-vegetable cutter. 1,623,089; Apr. 5.
Burpee, John H., and D. E. Lain, Bellingham, Wash. Engine piston. 1,623,717; Apr. 5.
Burr, George D., Seattle, Wash. Parkenforced concrete paving. 1,623,090; Apr. 6.
Belingham, J. 1,623,090; Apr. 6.
Belingham, J. 1,623,090; Apr. 6.
Burr, Henry O. (See Young, H. C., and Burr.).
Burrell, D. H. & Co. (See Feldmeier, Harvey, assignor.)
Burrell, D. H. & Co. (See Feldmeier, Harvey, assignor.)
Burrell, D. H. & Co. (See Feldmeier, Harvey, assignor.)
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Burrell, D. H. & Co. (See Feldmeier, Harvey, assignor.)
Burrell, D. H. & Co. (See Feldmeier, Harvey, assignor.)
Chicago, Ill. Book cover. Des. 71,938; Feb. 1.
Burress, Herman N., assignor of one-half to L. T. Compton. Matewan, W. Va. Switch-throwing mechanism. 1,620,947; Mar. 15.
Burress, John R., Arlington, Tex. Yieldable barrier for automatic railway-crossing geffes. 1,628,651; May 17.
Burress, John R., Arlington, Tex. Yieldable barrier for automatic railway-crossing geffes. 1,628,651; May 17.
Burrier, John A., St. Paul, Minn. Greasless-doughnut machine. 1,632,115; June 14.
Burris, Carl, Clayton, Mo. Maintenance record. 1,632,124; June 28.
Burrough, Willard L., et al. (See Tibbetts, Robert M., assignor.)

assignor.)

assignor.)

Burroughs Adding Machine Company. (See Boyer,
Joseph, assignor.)

Burroughs Adding Machine Company. (See Horton,
Allen A., assignor.)

Burroughs, Adding Machine Company. (See Rinsche,
Burroughs, Adding Machine Company. (See Rinsche,
Burroughs, John I.,
1029,017; May 17.

Burrow, Edgar A., Brady Tex. Road leveler or planer.
1,629,678; May 24.

Burrow, Frank V., Glendale, Callf., assignor of one-half to
Chattas. (1921), Callf., Muskogee, Okla. Amusement appaBurrowes, E. T., Company, The. (See King, William J.,
assignor.)

Burrows, Fred A., York, Pa. Steam trap. 1,627,271;
May 3.

May 3.

Burrows Magnetic Equipment Corporation. (See Brown,
Thomas R., assignor.)
Thomas R., assignor.)
Thomas R., assignor.)
Thomas R., assignor.)
Bursley, Edmund S. (See Dayls, L. W., and Bursley.)
Bursley, Edmund S. (See Dayls, L. W., and Bursley.)
Bursley, Edmund S. (See Dayls, L. W., and Bursley.)
Bursley, Edmund S. (See Dayls, L. W., and Bursley.)
Bursley, Edmund S., (See Burson, George E., assignor.)
Bursley, Edward S., and George E., assignor.)

signor.)

Burson, Frank B., et al. (See Burson, George E., assignor.)

Burson, George E., assignor of twelve and one-half per cent to A. L. Burson, twelve and one-half per cent to C. and twelve and one-half per cent to H. H. Burson, and twelve and one-half per cent to H. H. Burson, Glendale, Calif. Internal-combustion engine. 1,628,027; May 10.

Burson, Harold H., et al. (See Burson, George E., assignor.)

Burson, Harvey W., et al. (See Burson, George E., assignor.)

Burson Knitting Company. (See Hinchliff, Ralph, assignor.) Burson Knitting Company. (See Parker, William S.,

assignor.)

assignor.) Burstall, William H., Los Angeles, Calif. Packing construction. 1,618,511; Feb. 22.

1,618,697; Feb. 22.

Burt, Gora W., et al., executors. (See Burt, Harry B.)

Burt, F. N., Company, (See Royal, Joseph N., assignor.)

Burt, Harry B., deceased, Youngstown, Ohlo; C. W. Burt
and The Dollar Savings and Trust Company, executors,

assignors to C. W. Burt. Ice-cream sucker. 1,618,324;

Feb. 22.

1,640,026.

Burt, John O., Memphis, Tenn. Fumigator. 1,640,026;

Burt Machine Company. (See Wild, Charles H., assignor.) Burt. Sidney C., Chicago, Ill. Ventilator. 1,617,939; Feb. 15. Feb. 15. Burtchaell, Peter T., San Rafael, Calif. Garment at-tachment. 1,621,826; Mar. 22. Burtis, Ira E. (See Kings, Thomas W., assignor.)

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine.

Co. Los Angeles, Calif. Internal-combustion engine.

1.614.229; Jan. 11.

Buttnett, Everett R., assignor to The Automotive Valves

Co. Los Angeles, Calif. Internal-combustion engine. 1,623,384; Apr. 5.
Burtnett, Everett R., assignor to The Automotive Valves
Co., Los Angeles, Calif. Internal-combustion engine.
1,623,385; Apr. 5.

1,623,385; Apr. 5. Burtnett, Everett R., assignor to The Automotive Valves Co.. Los Angeles, Calif. Internal-combustion engine.

Co., Los Angeles, 1,623,386; Apr. 5. Burtnett, Everett R., Co., Los Angeles, 1,623,387; Apr. 5. Burtnett, Everett R., assignor to The Automotive Valves Calif. Internal-combustion engine.

, assignor to The Automotive Valves Calif. Inlet manifold for internal-s. 1,623,388; Apr. 5. assignor to The Automotive Valves Calif. Internal-combustion engine. Co., Los Angeles, combustion engines.
Burtnett, Everett R.,
Co., Los Angeles, Co., Los Angeles, 1,623,389; Apr. 5

combustion engines.

Burnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. Burnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,623,390; Apr. 5.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,624,581; Apr. 12.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,624,581; Apr. 12.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,624,581; Apr. 12.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,624,581; Apr. 12.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,626,387; Apr. 26.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,628,387; Apr. 28.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,632,879; June 21.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,632,881; June 21.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,632,881; June 21.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,632,881; June 21.

Burtnett, Everett R., Los Angeles, Calif., assignor to The Automotive Valves Corporation, Reno, Nev. Internal-combustion engine. 1,632,832; July 12.

Burtnett, Everett R., Los Angeles, Calif., assignor to The Automotive Valves Corporation, Reno, Nev. Internal-combustion engine. 1,635,532; July 12.

Burtnett, Everett R., Los Angeles, Calif., assignor to The Automotive Valves Cor

Burtnett, Everett
Automotive Valves Corr
Auto Automotive head for sleeve-valve interactions 1,637,519; Aux. 2. unitnett, Everett R., assignor to The Automotive Valves unitnet, and Angeles, Calif. Internal-combustion engine.

Burnett, Everett R., assignor to The Automotive valves Co., Los Angeles, Calif. Internal-combustion engine, 1,638,287; Aug. 9. Burnett, Everett R., assignor to The Automotive Valves Co., Los Augeles, Calif. Internal-combustion engine.

Co. Los Angeles, Calif. Internal-combustion engine. 1,633,288; Aug. 9.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Gascous-fuel pump for Internal-combustion engine. 1,6362,89; Aug. 9.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,638,291; Aug. 9.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,639,291; Aug. 9.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,639,165; Aug. 16.

Burtnett, Everett R., assignor to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,639,165; Aug. 16.

Burtnett, Everett R., and H. A. Brutell, assignors to The Automotive Valves Co., Los Angeles, Calif. Internal-combustion engine. 1,639,165; Aug. 16.

Burton-Boston Brush Co., (See Steidle, Anton, assignor). Burton, Charles S., Oak Park, Ill. Container for music rolls and the like. 1,616,951; Feb. 8.

Burton, Charles S., Oak Park, Ill. Container for music rear-shifting device, 1,632,947; June 21.

Burton, Edward L., Sandwich, Ill. Pneumatic hammer, 1,633,967; Aug. 16.

Burton, Frank F. Mont Carmel, assignor to Winchester and C

Burton, Harry H., New Bedford, assignor to Draper Corporation, Hopodale, Mass. Spooler bobbin holder. 1.621,655; Mar. 15.
Burton, Harry H., New Bedford, assignor to Draper Corlooms. 1,626,566 d. Apr. 26. Warp stop mechanism for looms. 1,626,566 d. Apr. 26. Warp stop mechanism for Burton, Harry R., Worcester, Mass. Windshield clearer. 1,622,46; Mar. 29.
Burton, Hubert H. (See Barrett, A. G., and Burton.) Burton, Joseph H. (See Roberts, W. S., and Burton.) Burton, Joseph H. (See Roberts, W. S., and Burton.) Burton, Paul C., La Grange, Heimond, Ind. Spring operated clutch shifting mechanism. 1,640,536; Aug. 30.

Burton, Ralph B. (See Twyman, B. W. and Burton, Burton, Robert N. (See Dahl, Conrad, assignor, Burton, Robert N. (See Dahl, Conrad, assignor, Burton, Thomas L., New York, N. Y. Mount for brake Burton, Thomas L., New York, N. Y., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Angle-ock holder, 1,638,805; July 26.
Burton, Troy P., and S. W. Ford, Denver, Colo. Dirigibured Company, Sept. 6.
Burton, Troy P., and S. W. Ford, Denver, Colo. Dirigibured Company, Sept. 6.
Burton, Tay S., Sharton, Pa. Shock absorber. 1,641,572; Sept. 6.
Busch, Charles H., and W. A. Vollmer, assignors to Simmons Company, Kenosha, Wis. Leg construction. 1,633,561; Aug. 9.

Busch, Charles H., and W. A. Vollmer, assignors to Simmons Company, Kenosha, Wis. Leg construction. 1,638,561; Aug. 9.
Busch, Herman F., Millvale, assignor to Armstrong Cork Company, Pittsburgh, Pa. Treatment of cork textile roils. 1,629,145; May 17.
Busch, Herman F., Millvale, assignor to Armstrong Cork Company, Pittsburgh, Pa. Compressed-cork article and Company, Pittsburgh, Pa. Compressed-cork article and Company, Pittsburgh, Pa. Compressed-cork article and Arthur S., assignor. Busch-Sulzer Bros. Diesel Engine Company. (See Schenker, Walter, assignor.)
Busch-Sulzer Bros.-Diesel Engine Com. (See Schenker, Walter, assignor.)
Busch-Sulzer Bros.-Diesel Engine Co. (See Schiatter, Rudolph, assignor.)

er, Walter, assignor.)

Busch-Sulzer Bros.-Diesel Engine Co. (See Schlatter, Rtudolph, assignor.)

Busch-Sulzer Bros.-Diesel Engine Co. (See Schneider, Rtudolph, assignor.)

Busch-Sulzer Bros.-Diesel Engine Co. (See Schneider, Busch-Sulzer Bros.-Diesel Engine Co. (See Schneider, Busch-Sulzer, Bros.-Diesel Engine Co. (See Schneider, Busch-Bros.-Diesel Co. (See Schneider, Busch-Bros.-Diesel Co. (See Schneider, Busch-Bros.-Diesel, Busch-Bros.-Di

Bush & Lane Piano Company. (See Lane, Walter, assignor.)

Bush, I.G Grand C., Philadelphia, P.a, assignor to Interest of Company of New York.

Endicort, N. Y. Interlocking device for doorlocks and the like. 1.614,711; Jan. 18.

Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,621,827; Mar. 22.

Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Spring support. 1,629,476; May. 24.

Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Spring support. 1,629,476; May. 24.

Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,635,740; July 12.

Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,635,740; July 12.

Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,635,740; July 12.

Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,637,928;

Bush, Samuel F., assignor to the Board.
Company, Columbus, Ohio. Car truck. 1,637,928;
Aug. 2.
Bush, Vanevar, Chelsea, assignor by mesne assignments,
Bush, Vanevar, Chelsea, assignor by mesne assignments,
Electrical apparatus. 1,617,178; Feb. 8.
Bush, Charley P., Redord, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus. 1,617,131; Feb. 8.
Busha, Charley P., Redore, assignor of one-fourth to P. R.
Eklund, Hibbing, and one-sixteenth to W. I. Poole,
Duluth Minn. Loping-pony toy. 1,543,371; Sept. 27.
Busha, Leon, assignor to W. E. Nelson, Minneapolis,
Minn. Strip shingle. Rel6,621; May 10.
Busha, Leon, assignor to W. E. Nelson, Minneapolis,
Minn. Strip shingle. 1,629,146; May 17.
Busha, Leon, assignor to W. E. Nelson, Minneapolis,
Minn. Strip shingle. 1,633,474; June 21.
Bushey, Fornklin P., (See Morgan, H. D., and Bushey,)
Bushuan, Edward L., East Orange, N. J., K. L. Curtis,
New York, N. Y., and J. Ward, Ellzabeth, N. J., assignors to Bates Valve Bag Company, Chicago, Ill.
Bag-filling machine. 1,629,860; May 24.

Bushnell, Alvah, Philadelphia, Pa. File. 1,634,450;

July 5
Bushnell, Charles R. Beverly Hills, Calif. Refrigerating apparatus. 1,628,820; May 17.
Bushnell, Charles S. (See Dudley, S. W., and Bushnell.) Bushnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Intermittent inductive train control. 1,619,698; Mar. 1.
Bushnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,620,188; Mar. 8.

Bushnell, Charles S., Rochester, assignor to General Rail-Bushnell, Charles S., Rochester, assignor to General Rail-Bushnell, Charles S., Rochester, assignor to General Rail-Bushnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,628,453; May 10.
Bushnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Brake-applying apparatus. 1,628,454; May 10.
Bushnell, Robert C., Philadelphia, Pa. Tire pump. Bushnell, Robert C., Whittier, Calif. Tubing bleeder. 1,624,411; Apr. 12.
Bushwick National Bank. (See Furedy, Frank, assignor.) Busisek, William A., Belleville, III. Range. 1,616,680; Feb. S.

Businger. Emil F. (See Reis, J. M., and Businger.) Buss, August, Detroit, Mich. Circulating drlp vent.

Businger, Emil F. (See Reis, J. M., and Businger, Businger, Emil F., Mich. Circulating drip vent. Buss, August, Detroit, Mich. Circulating drip vent. Buss Machine Works. (See Buss, W. R., and Dick, assignors.)
Buss, Otto W. L., Minneapolis, Minn. Window structure. 1,628,266; Apr. L. Window, Minn. Window structure. 1,626,266; Apr. Circulation, Minn. Hinge. 1,632,116; Buss. Otto W. L., Minneapolis, Minn. Hirger. 1,632,116; Buss. Otto W. L., Minneapolis, Minn. Firerorof sash

ture. 1,626,236; Apr. 26.
Buss, Otto W. L., Minneapolis, Minn. Hinge. 1,632,116;
June 14.
Buss, Otto W. L., Minneapolis, Minn. Fireproof sash
Buss, Otto W. L., Minneapolis, Minn. Fireproof sash
Buss, Otto W. L., Minneapolis, Minn. Fireproof sash
Buss, Wendell R., Arc. 30.
Buss Wendell R., and M. E. Dick, assignors to Buss Machine Works, Holland, Mich. Sectional feed roller for
woodworking machine. 1,625,881; Apr. 26.
Busse, Edwin G., assignor to Chicago Railway Equipment Company, Chicago III. Two-way brake-beam
Busse, William H., et al. (See Femer, George, assignor, bussel, Freddie S., Indianapolis, Ind. Automatic adjusting end-thrust bearing. 1,636,263; July 19.
Bussey, Hugh, East St. Louis, Ill. Spreader. 1,637,601;
Aug. 2.
Bussel, Brattha E., New Orleans, La. Drying apparatus.
1,630,052; May 31.
Bussmann, Henry T., St. Louis, Mo. Electric fuse.
1,632,948; May 24.
Bussmann, Henry T., St. Louis, Mo. Electric fuse.
1,633,033; Aug. 2.
Buswell, Cecil. 1,62,094; Mar. 15.
Buswell, Cecil. 2, Wallingford, England, Harrow.
1,637,633; Aug. 2.
Buswell, Walter, Bridgeport, Conn., assignor to Standard
Compositor Aktiengesellschaft, Berlin, Germany. Device for distributing the matrices, patrices, and the
Butchart, Cubbert S., Rye N. Y., Golf club. 1,638,916;
Aug. 16.

Butchart, Cuthbert S., Rye N. Y. Golf club. 1,638,916; Aug. 15.

Butcher, Charles A., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic station. 1,619,439; Mar. 1.

Hunt, Los Angeles, Cnilf., assignors to Westinghouse Electric & Manufacturing Company. Time-limit relay. 1,642,061; Sept. 13.

Butcher, Galeima, Norfolk, Va. Window adjustment. 1,643,871; Sept. 27.

Butcher, Galeima, Norfolk, Va. Casement-window-adjustment. 1,643,871; Sept. 27.

Butcher, John E., and H. B. Harris, Garber, Okla. Wirecable cutter. 1,623,044; Apr. 5,
Butcher, John E., and H. B. Harris, Garber, Okla. Wirecable cutter. 1,623,044; Apr. 5,
Butcher, John F., Canton, Ohio. Collapsible crate. 1,643,533; Sept. 27.

1,638,182; Aug. 9, Durungo, Colo. Shift lever. 1,638,182; Aug. 8, Durungo, Colo. Shift lever. 1,643,055; Sept. 20.

Buten, Arthur, Watford, assignor to Ronald Trist & Company, Limited, London, England. Alarm device for indicating high and low liquid level. 1,617,101; Butler, 2,671,601.

Butler, Carlton. (See Baddiley, J., Chorley, and Butler.)

Butler, Charles A., Okmulgee, Okla. Machine for dress-ing bits. 1,614,649; Jan. 18. Butler, Charles A., Okmulgee, Okla. Deep-well-drilling apparatus. 1,560,426; Nov. 22. Butler, Charles R. (See Rasmussen, Chester A., asapparatus. 1. Butler, Charles signor.)

Butter. Edward A., Buffalo, assignor to Colloidal Equipment Corporation, New York, N. Y. Apparatus for deflocculating and emulsifying, 1,624,037; Apr. 12. Butter, Edward J., Malden, assignor, by mesne assignments, to Gamewell Company, Newton, Mass. Repeater-locking device. 1,613,018; Jan. 4.

Butler, Elizabeth M., et al. (See Munyon, Alice G., as-

signor.)
Butler, Elmore R., and W. T. Singer, Toronto, Ontarlo,
Canada. Shaying-stick holder. 1,640.027; Aug. 23,
Canada. Shaying-stick holder. 1,640.027; Aug. 23,
Trestle. 1,647.432; Nov. 1.
Butler, George H. C. (See Reeves, Alfred, assignor.)
Butler, George P., assignor, by mean assignments, to
Postindex Company, Inc., Boston, Mass. Index,
memorahum, and reference equipment. 1,645,008;
memorahum, and reference equipment. 1,645,008;

Oct. 18.
Butler, Henry E., (See Diggs, Dudley M., assignor.)
Butler, Henry E., Scotia, N. Y. License holder. 1,620,798;
Mar. 15.

Mar. 15.

Mar. 15.

Builer, Henry E., Scotia, N. Y., assignor to General Electric Company. Film cut-out. 1,620,518; Mar. 8.

Butler, Henry E., Scotia, N. Y., assignor to General Electric Company. Film cut-out. 1,635,029; July 5.

Butler, Henry R., assignor of one-half to T. C. 2.

Butler, James A., Needham, assignor to Paeumatic Scale Corporation, Ltd., Norfolk Downs, Mass. Automatic package-feed mechanism. 1,638,391; Aug. 9.

Butler, Jay H., Newark, Ohlo. Transmission control. 1,628,718 May 3.

Li629,718 May 3.

Butler, Jay H., Sewark, Ohlo. Transmission control. 1,638,861; Aug. 23.

Butler, Leonard F. G. (See Fedden, A. H. R., and Butler).

1.626,718; May 3.
Butler, Joseph B., Whitehall, London, England. Toothburler, Joseph B., Whitehall, London, England. Toothburler, Joseph B., Whitehall, London, England. Toothburler, Morgan R., Wankesha, Wis. Material handling equipment. 1,626,389; Apr. 26.
Butler, Morgan R., Wankesha, Wis. Material-handling equipment. 1,626,389; Apr. 26.
Butler, Ruby A., St. Louis, Mo. Toy animal. 1,630,465; May 24.
Butler, Ruby A., St. Louis, Mo. Toy animal. 1,630,465; May 24.
Butler, Thomas J. Harrison, N. J. Speed-accelerating mechanism. 1,638,064; Aug. 89.
Butler, Thomas J. Harrison, N. J. Speed-accelerating mechanism. 1,638,064; Aug. 89.
Butler, William, Philadelphia, Pa. Mop wringer. 1,616,786; Jan. 25.
Butler, William, Philadelphia, Pa. Mop wringer. 1,617,520; Feb. 15.
Butler, William F. Newburryport, Mass. Combined thortic and trip valve. 1,617,895; Feb. 15.
Butler, William F., Hillside, N. J., assignor to American Can Company, New York, N. Y. Lead-keg-closing device. 1,634,488; July 46, N. J., assignor to American Can Company, New York, N. Y. Lead-keg-closing device. 1,634,488; July 46, N. J., assignor to American Can Company, New York, N. Y. Can tester. 1,649,287; Nov. 15.
Butler, William F., Hillside, N. J., assignor to American Can Company, New York, N. Y. Can tester. 1,649,287; Nov. 15.
Butler, William J., Cranston, assignor to Henry Lederer & Bro. Inc., Providence, R. I. Clgar lighter. 1,637,855; Apr. 5.
Butl, Herbert G., Winthrop, Mass. Pipe visc. 1,623,045; Apr. 5.

G., Winthrop, Mass. Pipe wrench.

Butt, Herbert G., Winthrop, Mass. Pipe vise. 1,623,045; Apr. 5.

Butt. Herbert G., Winthrop, Mass. Pipe wrench. 1,641,153; Sept. 6.

1,641,153; Sept. 6.

1,642,870; Sept. 20.

1,642,870; Sept. 20.

Butterbaugh, Raiph B., assignor of one-half to E. Tobias, Prescott, Wis., and one-half to J. F. Main and S. J. Barr, Minneapolis, Minn. Power-transmission mecha-prescott, Wis., and one-half to J. F. Main and S. J. Barr, Minneapolis, Minn. Power-transmission mecha-prince of Control of the Control of the

June 14.

Büttner, Artur, assignor to Schnellpressenfabrik Aktlengesellschaft Heidelberg, Heidelberg, Germany. Platen printing press 1, 673, 383; Dec. 27.

Büttner, Artur, assignor to Schnellpressenfabrik Aktlengesellschaft Heidelberg, Heidelberg, Germany. Sheetfeeding mechanism for printing machines and the like. 1,653,839; Dec. 27.

Buttolph, Leroy J. Compeny, Hookeen, N. J. Electric Lamp. 1,630,051; Map. 24.

Buttolph, Leroy J., East Orange, assignor to Cooper Lamp. 1,630,052; May 24.

Buttolph, Leroy J., East Orange, N. J., assignor to Cooper Hewitt Electric Company. Water-cooled lamp. 1,630,052; May 24.

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Buttolph, Leroy J., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Vapor lamp. 1,630,053; May 24.
Buttolph, Leroy J., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Water-cooled Lamp. 1,630,055; May 24.
Buttolph, Leroy J., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Water-cooled lamp. 1,630,055; May 24.
Buttolph, Leroy J., East Orange, assignor to Cooper Lamp. 1,630,056; May 24.
Buttolph, Leroy J., East Orange, N. J., assignor to Cooper Hewitt Electric Company. Light for microscopes and the like. 1,630,233; May 24.
Buttolph, Leroy J., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Therapeutic lamp. 1,630,057; May 24.
Button Attaching Co., The. (See Ross, Frederick N., assignor).

Button Attaching Co., The. (See Ross, Frederick N., assignor.)
Button, William S., Riverside, Calif. Orchard heater.
1.648-911. Nov.
2.
Button, William S., Riverside, Calif. Orchard heater.
1.648-911. Nov.
2.
Butts, Benjamin B., et al. (See Hudson, A. D., and Smith, assignors.)
Butts, Durain C., Dover, N. J., assignor to Hercules
Powder Company, Wilmington, Del. Removing diphenylamine from smokeless powder. 1,650,689; Nov. 29.
Butts, Divard G. (See Shelor, O. W., and Butts.)
Butts, England, Sasignor to Gregory Butte Company,
Web. Doublebelt sanding machine. 1,650,683;
Nov. 29.

comia, Wash. Double-belt sanding machine. 1,550,563; Nov. 29.
Butts, Brnest W., et al. (See Campbell, Harry, assignor.)
Butts, Rerbert A. (See Lumley, D. A., and Butts.)
Butts, Royer A. (See Lumley, D. A., and Butts.)
Butts, Roger T., et al. (See Campbell, Harry, assignor.)
Butts, Roger T., et al. (See Campbell, Harry, assignor.)
Butts, Arthur, Halbau, Silesia, Germany. Safety plate against burning during cooking. 1,021,867; Mar. 22.
Buts, Walter D., Norristowa, Pa. Stocking. 1,025,523;
Apr. 20.

Apr. 19.
Buvinger, George A., and C. Warner, assignors to Delco Light Company, Dayton, Ohio. Pumping apparatus. 1,631,619; June 7.
Buxton, Marner R., Longmeadow, Mass. Flexible pocket receptacle. 1,633,054; May 31.
Buxton, Warner R., Longmeadow, assignor to Buxton, Incorporated, Springfield, Mass. Key case. 1,623,959; Buxton, Warner R., Longmeadow, assignor to Buxton, Incorporated, Springfield, Mass. Key case. 1,623,653; May 31.

May 31.
Buxton, Warner R., Longmeadow, assignor to Buxton, Incorporated, Springfield, Mass. Key case. 1,650,322;

Electric Company. Electric regulator. 1,630,604; Nov. 29.
Byles, Frank A., Schenectady, N. Y., assignor to General Electric Company. Electric regulator. 1,632,928; Disc. 11.
Byles, Frans I. L., South Portland, Me. Gyratory pump or compressor. 1,638,183; Aug. 9.
Byllesby Engineering and Management Corporation. (See Fisher, II. H., and Rittenhouse, assignors.)
Byllesby Engineering and Management Corporation. (See Kahn. Samuel, assignor.)
Byne. Edward, Gabyon Station, Wurarga, Western Australia, Tent. 1,650,111; Nov. 22.
Byrde, Bulwin A., Naspura, 1977, June 29.
Byrne, Harry, et al. (See Comerford, John J., assignor.)
Byrne, Harry, et al. (See Comerford, John J., assignor.)
Byrne Manufacturing Company, The. (See Dillhoefer, Henry M., assignor.)
Byrne, Thomas J., Tulsa. Okla. Measuring device for ice-making cans. 1,646,598; Oct. 25.

Byrnes, Irving F., Schenectady, N. Y., assignor to General Electric Company. High-frequency signaling system. 1,631,670; June 7. Byrnes & Klefer Company. (See Schwab, Henry M., as-

Byrnes & Kiefer Company. (See Schwab, Henry M., assignor.)
Byrnes, Mary I., Des Moines, Iowa. Packaged unbaked dough layer. 1.642.804; Sept. 20.
Byrnes, Patrick W., Belmar, N. J. Firing mechanism for multiple-barrel guns. 1.649.88; Nov. 22.
Byrns, Emett L., assignor to G. C. Briscoe, Mineral Wells, Tex. Combination truck and weigher. 1.553.761; June 28.
Ly553.761; June 28.
Ly59.348501, Pump Company. (See Hollander, Aladar,

Byton Jerome P., and H. A. Evans, assignors, by mesue assignments, to Parco Specialty Co., Lynn, Mass. Boot and shoe manufacture. 1.618,809; Feb. 22. Bystricky, Joseph, assignor to The Allyne-Zerk Company, Cleveland, Ohio. Lubricant compressor. 1,632,240; Sept. 20.

& C Developing Company. (See Zworykin, Vladimir K.,

assignor.)
G. Spring & Bumper Company, The. (See Broock, Harold, assignor.)
G. Spring & Bumper Company, The. (See Brown, Cremer F., assignor.) remer F., assignor.)
G. Spring & Bumper Company, The. (See Dunston,

Cremer F., assignor.)
C. G. Spring & Bumper Company, The. (See Dunaton, Wayne E., assignor.)
C. G. Spring & Bumper Company, The. (See Flum, Robert C. G. Spring & Bumper Company, The. (See Girl, Christian, assignor.)
C. G. Spring & Bumper Company, The. (See Jandus, Herbert S., assignor.)
C. G. Spring & Bumper Company, The. (See Jandus, H. S., and Flum, assignors.)
C. G. Spring & Bumper Company, The. (See Jandus, H. S., and Flum, assignors.)
C. G. Spring & Bumper Company, The. (See Jandus, H. S., and Flum, assignors.)
C. G. Spring & Bumper Company, The. (See Jandus, H. S., and Keelor, assignors.)
C. G. Spring & Bumper Company, The. (See Jandus, H. S., and Rasmussen, assignors.)
C. G. Spring & Bumper Company, The. (See Jandus, H. S., and Rasmussen, assignors.)
C. G. Spring & Bumper Company, The. (See Jandus, H. S., and Rasmussen, assignors.)
C. G. Spring & Bumper Company, The. (See Jandus, H. S., and Van Husen, assignors.)
C. Howard Hunt Pen Company. (See Brits, Emil.)

C. Howard Hunt Pen Company. (See Bartol, George E., Jr., assignor.)
C. P. Root Beer Company. (See Ernst. Emil.)
C. S. Engineering Company. (See Schellens, E. L., and Coffin, assignors.)
Cabangis. Pedro. 3.
Li556,132.; July 25.
decased, by M. J. Cabezola, administratrix, Bayonne, N. J.; C. C. Hicks, F. J. Wagner, née Cabezola, add M. C. Mettler, née Cabezola, executrices. Rheostat. 1,623,026; Mar. 29.
Cabezola, Margaret J., administratrix. (See Cabezola, Eusebic F.)
Cable Company, The. (See Collignon, William C., assignor.)

Cable Company, The. (See Collignon, William C., asCable Company, The. (See Hagey, James C., assignor, Cable, Frank T., New London, assignor to Electric Boat
Company, Groton, Conn. Reversible internal-combustion engine. 1,627,316; May 3.
Cabot, Samuel, Inc. (See Abbott, Charles M., assignor,)
Cabot, Sawali, Brookline, Mass. Musical sound resonator.
1,620,863; Mar. 15.
Cabral, Florimundo. Fall River, Mass. Clothes press.
Caccla, Plo, New York, N. Y. Fermentation tube
1,614,184; Jan. 11.
Caccia, Plo, New York, N. Y. Diuretic product and
making the same. 1,617,701; Feb. 15.
Caccia, Plo, New York, N. Y. Preparing concentrated
vitamine B. 1,617,702; Feb. 15.
Caccia, Plo, New York, N. Y. Preparing concentrated
vitamine B. 1,617,702; Feb. 15.
Cadden, Charles C., F. Slusher, and B. A. Evans, Akron,
Ohio, assignors to The B. F. Goodrich Company, New
York, N. Y. Method and apparatus for making tubular
articles. 1,649,808; Nov. 22.
Cadman, George L. Beloit, Wis. Differential gearing.
1,635,880; Aug. 16.
Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Rubber deterloration retarder and process of making. 1,626,784; May 3.
Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treating
latex and product of acctaldehyde and aniline.
Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treating
latex and products obtained thereby. 1,641,573;
Sept. 6.

Sept. 6.

Sept. 6.

Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn.

Cadwell, Sidney M., Leonia, N. J., and O. H. Smith, New York, N. X., assignors to Morgan & Wright, Detroit, Mich. Treating fabrics 1.631,751; Dec. Cadwell, Thomas H. Newcastle, Wash. Valve rocker arm attachment. 1,623,863; App. 6.

Cadwell, W. H., J. Ott, New Britain, and C. D. Crocker, West Hartford, assignors to The Beaton & Cadwell Manufacturing Company, New Britain, Conn. Flush valve. 1,653,492; Dec. 20.

Cady, Sarran W. Hand Ontario, Canada, assignor, Cady, Sarran W. Hand to International Harvester Company, Chicago, Ill. Disk harrow. 1,639,481; Aug. 16.

Cady, Walter H. (See Kirschbrau, L., and Cady). Cady, Walter H. Boston, Mass. Producing reenforced waterproof compositions. 1,644,050; Oct. 4.

Cady Walter H. Boston, Mass. Producing reenforced waterproof compositions. 1,644,050; Oct. 4.

Cadfeel, Ralph D., Chicago, Ill. Power take-off for easified tanks. 1629,394; May 24.

Caffee, Caywood W. South Omaha, Nebr. Hog conveyer for scaliding tanks. 1617,146; Feb. 8.

Caffeany William E., assignor to Nashum Amacturing machine, 1,626,505; May 3.

Cage Engine Syndicate, Inc. (See Cage, John M., assignor).

machine. Inc. (See Cage, considered and a signor to Cage Engine Syndicate, Inc., Orlario, Canada, assignor to Cage, John M. Port City, Orlario, Canada, assignor to Cage, John M. Port City, Orlario, Canada, assignor to Cage Engine Syndicate, Inc., New York, N. Y. Internal-thereto, 1619,460 Mar. 1.

Cage, John O., Silverton, Oreg. Sanding device, 1648,372; Sept. 27.

Cagle, Dora, Ringling, Okla. Baby holder. 1,616,349; Feb. 1.

Cabill, Edward F. (See Hoover, W. C., Fritz, and

Feb. 1.
Cahill, Edward F. (See Hoover, W. C., Fritz, and Cahill.)
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Cain, Loyd H., J. H. Brogan, and C. J. Brogan, Tyler, Tex.
Tank-hose coupling. [,641,839; Sept. 6.
Cain. Marcus J., Chadron, Nebr. Fuel vaporizer.
1.633,738; Dec. 27.
Caine, William P., Easley, Ala. Method and apparatus
for the generation and utilization of steam in an inclosed cycle. 1.616,526; Feb. 8.
Caire, Philippe. (See Bolachowsky, D., aud Caire.)
Caird, Marthew N. (See Grimble, F., Caird, and

Coombs.)

Coimcross, Robert L., Chicago, Ill. Rail-Joint spring.
1.619,505: Mar. 1.

Cairns, John, London, England. Driving and revolving mens for fans and the like. 1.615.667; Jan. 25.

Callaco, London, London, England. Driving and revolving mens for fans and the like. 1.615.667; Jan. 25.

Calacco, London, London, Co. Carlotte, Carlo

Calco Chemical Company, The. (See Crossley, M. L., and Dolf, assignors.)

Calco Chemical Company, The. (See Crossley, M. L., and Dolt, assistnores.)
Calcott, William S. (See Daudt, H. W., Parmelee, and Calcott.)
Calcott, William S., Penns Grove, N. J., A. R. Hitch, Wilmington, Del., and H. W. Mahr, Penns Grove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del.
Manking 2,8-hydroxynaphtholo; william S., Penns Grove, and F. L. English, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Manufacturing tetra-cityl lead. 1,652,812; Dec. 13.
Calcata, Salvatore C., New York, N. Y. Valve.
Calcut, C. L. Salvatore, Salvatore C., Servander, Salvatore C., Servander,

Mar. 22.
Caldwell, Charles C., Woodbury, N. J., assignor to The
Belber, Trunk & Bag Company, Philadelphia, Pa.
Wardrobe trunk, 1,658,470; Ang. Philadelphia, Pa.
Caldwell, E. F., & Co. (See Klehr, William, assignor, Caldwell, Edwin, New York, N. Y. Smoker's article, 1,628,114; May 10.
Caldwell, Edwin, New York, N. Y. Smoker's article, 1,631,467; June 7.
Caldwell, Ewin, Brimgham, Ala,, assignor to Perry-Caldwell Manufacturing Company (Inc.) Blow-off device for steam bollers, 1,626,767; Apr. 19.

Caldwell, Frank B., Oak Park, assignor to Link-Belt Com-pany, Chicago, Ill. Tripper for duplex belt conveyers. 1,636,986; July 26. Caldwell, Frank W., Dayton, Ohlo. Impeller. 1,622,222; Mar. 22.

Mar. 22.
Caldwell, Frank W., Dayton, Ohio, assignor to Standard
Steel Propeller Company. Propeller hub. 1,653,943;

Stel Propeller Company. Dec 27.
Caldwell, Hendrix K., San Diego, Calif. Remote gascontrol-valve apparatus. 1,644,171; Oct. 4.
Caldwell, Jonathan E., Santa Monica, Calif. Aeroplane.
1,640,645; Aux. 30.
Caldwell Lawn Mower Company. (See Haselton, Page S.,

Caldwell Lawn adover compositions assignor.

Caldwell, Lyle. (See Endres, H. A., and Caldwell.)

Caldwell, Fan A. Tell, Tex. Attachment for cultivators.

Caldwell, Samuel B., Oakland, Calif. Wave motor.

1.637.571; Feb. 15.

Caldwell, Thomas F., et al. (See Rylander, William P., assignor.)

assignor.)

Caldwell, Truman S., assignor to Racine Horseshoe Tire
Company, Racine, Wis. Tire. Des. 72,472; Apr. 19.

Caldwell, Truman S., assignor to Racine Horseshoe Tire
Company, Racine, Wis. Tire. Des. 72,473; Apr. 19.

Caldwell, Truman S., assignor to Racine Horseshoe Tire
Company, Racine, Wis. Tire. Des. 72,819; June 14.

Caley, Edward C. and L., Burton Pidsea, England. Apparatus for plastering cellings, walls, and the like.

Caley, Leonard. (See Caley, Edward C. and L.)

Calhoun, Ben S. (See Calhoun, Charles S., assignor.)

Calhoun, Charles S., Vidalia, assignor of one-half to B. S.

Calhoun, Glenwood, Ga. Spark arrester. 1,641,022;

Aug. 30.

Aug. 30.

Aug. 30.

Calhoun, George E. (See Wilkes, C. H., and Calhoun.)

Calhoun, Tracy J., assignor to The Oil Conservation

Engineering Company, Cleveland, Ohio. Collar and

cover for tank gauge holes. 1,628,028; May 10.

California Almond Growers Exchange. (See Bailey,

David R., assignor.)

California Barrel Company. (See Andresen, J. C., and

Marten, assignors)

Calliornia Canning Machinery Co. (See Wilcox, George,

California Canning Machinery Co. (See Wilcox, George, assignor).

Guest, William J., assignor).

California Card Mannifacturing Company. (See Helm-California Card Mannifacturing Company. (See Young, Julius, assignor).

California Corrugated Culvert Company. (See Thorsby, Karl J., assignor).

California Cyanide Company. (See Neuls, Joseph D., assignor.) California Cyanide Company. (See Poindexter, Robert

California Cyanida Company. (See Poindexter, Robert W., jr., assignor.)
California Cyanida Company. (See Poindexter, R. W., and Dolley, assignors.)
California Cyanida Company. (See Poindexter, R. W., jr., and Morgan, assignors.)
California Cyanida Company. (See Poindexter, R. W., jr., and Olberg, assignors.)
California Fruit Growers Exchange. (See Bristol, William M., assignor.)

M., assignor.)
California Packing Corporation, (See Olivarius, Holger de F.)

California Packing Corporation. (See Robinson, R. D., and Ash, assignors.)
California Packing Corporation. (See Sullivan, Albert V., assignor.)

California Stucco Products Company. (See Kennedy, Earl J., assignor.)
California Walnut Growers Association. (See Hayes,

California Walnut Growers Association. (See Hayes, Frank, assignor.)
Calingaert, George, Cambridge, Mass., assignor to General Motors Corporation, Detroit, Mich. Producing alkyl Calis, Gust N. (See Needles, George E. assignor.)
Calkins, Addison N., assignor to Electric Wheel Company, Quincy, Ill. Tractor. 1,631,243; June 7.
Calkins, Claude C., Spokane, Wash. Machine for treating grain. 1,616,783; Feb. S. Org., Machine for treating Calkins, Edgar G., Morland, Kans. Egg tray. 1,616,782; Feb. S. Calkins, Edgar G., Morland, Kans. Egg tray. 1,616,782; Feb. S. Calkins, Edgar G., Morland, Kans.

Feb. 8.
Calkins, Edgar G., Morland, Kans. Tractor attachment.
1,636,733; July 26.
Calkins, Frederick A., Waterbury, Conn. Chain-link
opening and closing device. 1,622,627; Mar. 29.
Calkins, James M., Detroit, Mich. Toothbrush. 1,651,251;
Nov. 29.

Nov. 29.
Call, Benjamin G., Tacoma, Wash., assignor to American Smelting and Refining Company, New York, N. Y. Metallic shingle. 1,643.445; Sept., Company, New York, N. Y. Callaghan, 1,628,115; May 10.
Callaghan, Thomas F., Bellefonte, Pa., assignor to E. C. Uihlein. Milwaukee, Wis. Method and apparatus for heat treating metal articles. 1,633,419; July 5.
Callaghan, William, V. Cummings, and J. Dunterman, Joliet, III. Reflector. 1,617,009; Feb. S.

Callahan Distributor Company, Incorporated. (See Callahan, J. W., and Dusinberre,)
Callahan, E. J., et al. (See Nesmith, Samuel D., assignor.)

Callahan Harold. (See Tschappat, Sheridan P., as-

Callahan, John J., Peabody, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me. Machine for splitting sheet material. 1,647,433; Ohio, as York,

Arabe 1 for splitting sheet material. 1,647,438;
Nov. 1.
Callaban, John J., and F. C. Rogers, Akron. Ohio, assignors to The B. F. Goodrich Company, New York, N. Y.
Making hollow annular articles. 1,628,821;
Alloy T. John W., Wellsbore, Pa., and G. B. Dusinberre,
Callaban, John J., and S. C. Rogers, Akron. Ohio, assignors to Callaban Distributor Company, Incorporated. Device for handling hay and the
like. 1,636,498; July 19.
Callaban, Joseph J., Cornwells Heights, Pa. Propeller.
1,644,872; Jan. 18.
Callaban, Joseph J., Cornwells Heights, Pa. Propeller.
1,644,872; Jan. 18.
Callaban, John G., Cambridge, assignor to Eastern Manufacturing company, Boston, Mass. Forming and applying paper-making patterns to pattern-carrying members. 1,653,148; Dec. 20.
Callaban, John G., Cambridge, assignor to Eastern Manufacturing Company, Boston, Mass. Forming and applying paper-making patterns to pattern-carrying members. 1,653,148; Dec. 20.
Callaban, John G., Cambridge, Allaban, S. Company, New York, N. Y. Apparatus for unloading compressors. 1,645,798; Cot. 18.
Callery, Christopher C., West Coatesville, Pa. Pipe clamp. 1,641,085; Aug. 30.
Calleson, Amos, Brooklyn, N. Y. Bottle-height-compensating mechanism. 1,661,165; Nov. 22.
Chilis, Alwa W., and F. E. Smoots, Zineville, Okla. Fowder charger. 1,636,734; July 26.
Callis, Alwa W., and F. E. Smoots, Zineville, Okla. Fowder charger. 1,636,734; July 26.
Callison, Claud, Loyal, Okla. Milk down. 1,623,871; Apr. 5.

Apr. 5. Callison, Claud, Loyal, Okla. Speed wrench. 1,626,719; May 3. Callison, William E., Tulsa, Okla. Amusement device. 1,645,370; Oct. 11. Ranoke, Va. Operating mech-culloway, William A. Ranoke, Va. Operating mech-

1645.370; Oct. 11.
Calloway, William A., Roanoke, Va. Operating mechanism for bleed cocks. 1,616,110; Feb. 1.
Callowhill, Percy J., Providence, R. I. Bracelet link.
Des. 73,122; July 26.
Callowhill, as or similar article. Des. 73,224; Aug. 9.
Calmanson, Saul. (See Melniker, A., and Calmanson.)
Calmels, Pierre L. M. V., Tours, France. Apparatus for the cut of the mustache. 1,633,978; June 28.
Calorae Electric Corporation, The. (See Sunderland, Caloroll Burner Corporation, The. (See Sunderland, Caloroll Burner Corporation, (See Grant, Albert E., assignor.)

signor.)

Calpin, Raymond, Everett, assignor to A. S. Campbell Company, East Boston, Mass. Curtain window. 1,643,942; Oct. 4. Company. Asset Boston, Mass. Curtain window. Chiefa. Maymond, Everett, assignor to A. S. Campbell Company. East Boston, Mass. Curtain window. 1,643,979; Oct. 4. Calumet Steel Company. (See Hook, Arthur S., assignor). Caluori, George, Jersey City, assignor to Pennsylvania Des. (1,603,1 July 19. Caluori, George, Jersey City, assignor to Pennsylvania Textile Mills. Inc., Clifton, N. J. Textile fabric. Des. (7,064; July 19. Caluori, George, Jersey City, assignor to Pennsylvania Textile Mills. Inc., Clifton, N. J. Textile fabric. Caluori, George, Jersey City, assignor to Pennsylvania Textile Mills. Inc., Clifton, N. J. Textile fabric. Clifton (Poorge, Jersey City, assignor to Pennsylvania Textile Mills. Inc., Clifton, N. J. Textile fabric. Des. 73,066; July 19. Calvert, George W., Rushville, Mo. Helicopter, 1,652,090; Dec. 6.

Calvert, C

Dec. 6.

Calvert, James F., England, Ark. Game carrier.
1.650.491; Nov. 22.
Calvert, Sebastian L., Bristow, Okla. Stuffing box.
1.649.662; Nov. 15.
Calvete, Isladoro B., London, England. Clip for hairways archets.
1.631.793; June 7.
waving suchets.
1.631.793; June 7.
waving suchets.
1.631.793; June 7.
Waving suchets.
1.631.793; Dec. 10.
1.62.16851, Mass. Shoe sole. Des. 72.474; Apr. 19.
Calvo, Francisco C., Brooklyn, N. Y. Electric broller.
1.651.868; Dec. 6.
Cambressétics, Jean B. F., Paris, France. Tipping wagon and the like. 1.638.009; Aug.
Cambre, Manuel. (See Menzemer, Harry E., assignor.)
Cambridge Glass Company, The. (See Kimble, Raymond T., assignor.)

Cambridge Glass Company. (See McCartney, Will C., assignor.)
Cambridge Glass Company, The. (See Orme, Wilber L.,

nssignor.) Cambridge Rubber Company. (See Dunbar, E. W., and Westling, assignors.)

Camden Pottery Company. (See Wright, Charles C.,

assignor.)
Came, Samuel, Huntington, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Filling stop motion for iooms. 1,651,584; Dec. 6.
Camel Company. (See Kibbs, Sam F., assignor.)
Camel Company. (See Madland, G., and Darrow, as-

camel Company. (See Posson, Edward, assignor.)
Camel Company. (See Wasberg, A., and Darrow, as-

Camel Company. (See wasperg, A., and Dairon, assignors.)
Camera, Maurice F., Somerville, Mass. Doorknob or similar article. Des. 73,828; Nov. 15.
Cameron, Alexander G., Winnipeg, Canada. Window fastener. 1,654,361; Dec. 27.
Cameron, Alexander W. (See Grant, K. A., Halliday and Company.)

Cameron, Argy G. (See Boals, Polk, assignor.) Cameron Can Machinery Company. (See Cameron, Wil-

nam, assignor.)
Cameron, Charles E., jr., East Orange, N. J. Piano action. 1,635,817; July 12.
Cameron, Cheever J., et al. (See Williams, Arthur J.,

cameron, Uneever J., et al. (See Williams, Arthur J., Cameron, Edward, New York, N. Y. Oil-gas apparatus. 1,632,432; June 14. Cameron, Forrest F., Cleveland, Ohio, assignor to E. B. Davis, Brockton, Mass. Engine. 1,648,775; Nov. 15.

B. Davis, Broaden, Nov. 15.
Cameron, Hugh M., New York, assignor of one-half to E. A. Judge, Brooklyn, N. Y. Scale. 1,646,009; Cameron, 149.

B. A. Judge, Brooklyn, N. 1.
Oct. 18.
Cameron, James, Henryetta. Okla. Cutting apparatus
Cameron, James, Henryetta. Okla. Cutting apparatus
Cameron, James A., assignor to Cameron Machine Company, Brooklyn, N. Y. Winding mens. 1,1613,381;
pany, Brooklyn, N. Y. Cameron, Machine Com-

Jan. 3. James A., assignor to Cameron Machine Com-Cameron Frootlyn, N. Y. Slitting and winding machine. 1,617,572; Feb. 17. Sangara, assignor to Cameron Machine Com-pany, Brooklyn, N. Y. Winding means. 1,620,007; Mar. 8.

Cameron, James A., Chicago, Ill., assignor to Eastman Kodak Company, Rochester, N. Y. Foldable easel mount. 1,635,030, July 5. Cameron, James A., Chicago, Ill., assignor to Eastman World.

Kount Could and Advisory, N. I. Pollutole task Cameron, Janob A., Chiongo, Ill., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic mount. 1,683,562; Aug. 9. Cameron, James A., and G. B. Birch, assignors to Cam-eron Machine Company, Brooklyn, N. Y. Winding ma-chine. 1,642,669; Sept. 20. Cameron, James D., Tuliare, Calif. Suction device for water-closets. 1,622,993; Mar. 29. Cameron, Jarrett L., Orangefield, Tex., assignor of one-half to Evangeline Iron Works, Idd., Vinton, La. Social Company of the Company of the Company of the Company Dec 220 of elevelic casings or tubing. 1,653,547; Spear for oil-well casings or tubing. 1,653,547; Spear for oil-well casings or tubing. 1,653,547; Cameron, Lyle J., Blundellsands, near Liverpool, England. Harvesting machine, 1,637,739; Aug. 2. Cameron Machine Company. (See Cameron, James A., as-

Cameron Machine Company. (See Cameron, J. A., and

Cameron Machine Company.

Birch, assignors.)

Cameron Machine Company.

Cameron Machine Company.

Cameron Machine Company.

(See Stocker, William M., assignor.)

Cameron, Oscar J., Luling, Tex. Chuck. 1,637,436;

Cameron. Oscar J., Luling, Tex. Chuek. 1,637,436; Aug. 2.
Cameron. Will J., Chicago, Ill. Lamp construction. 1,649,150; Nov. 15.
1,649,150; Nov. 15.
Company, Chicago, Ill. False wiring and seaming mechanism. 1,615,325; Jan. 25.
Cameron, William, assignor to Cameron Can Machinery Company, Chicago, Ill. Double-seaming machine. 102,1580; Wilden, 2,812,000; Company, Chicago, Ill. Can-body-making machine. Company, Chicago, Ill. Can-body-making machine. Cameron, William, assignor to Cameron Can Machinery Company, Chicago, Ill. Can-body-making machine. Cameron, William, assignor to Cameron Can Machinery Company, Chicago, Ill. Can-deron Can Machinery Company, Chicago, Ill. Cap-thread-rolling machine. Cameron, William, assignor to Cameron Can Machinery Company, Chicago, Ill. Machine for operating upon sheet-metal caps. 1,639,464; Aug. 28.
Cameron, William, assignor to Cameron Can Machinery mechanism. 1,640,970; Aug. 30.
Cameron, William, assignor to Cameron Can Machinery Machinery Machinery, Cameron, William, assignors, Cameron, William, assignors, Cameron, William, assignor to Cameron Can Machinery Machinery, Cameron, William, assignor to Cameron Can Machinery Cameron, William, assignor to Cameron Can M

meto, Leon, assignor to Modern Foundry and Pattern Works, Oakland, Calif. Clothes wringer, 1,652,424; Dec. 13.

Camilla, Stefano, and F. Pagllani, Turin, Italy. Apparatus for cleaning, peeling, or shelling corn, grains, and the like. 1,637,678; Aug. 2. Caminita, Santi, St. Louis, Mo. Automobile direction signal switch. 1,624,828; Apr. 12. Camilin Coract Co. Inc. (See Marquis, Marcelle M., as-

signor.)

mmack. William J., Los Angeles, Calif. Siren. 1,633.569; June 28.

Camors, Marcel R., New Orleans, La. Armature securing and centering means. 1,637,173; July 26. Camp, Curtis B., trustee. (See Bracke, Robert F., as-Curtis B., trustee. (See Schoenwolf, Fred, as

gnor.

signof Percy B., Maywood, III., assignor to Universal Inp. Geon Attachment Co. Winding mechanism. 1,618,750; Feb. 22. Camp. Percy B., Maywood, assignor to Universal Draft Gear Attachment Co., Chicago, III. Brake. 1,618,810; Feb. 22.

Gear Attachment Co., Chicago, Ill. Brake. 1,618,810; Feb. 22.

Camp, Percy B., Maywood, Ill., assignor to Universal Draft Gear Attachment Co. Brake mechanism. 1,624,924 apr. 13.

Gear Attachment Company. Brake mechanism for railway cars. 1,636,284; July 19.

Camp, Percy B., Maywood, assignor to The Universal Draft Gear Attachment Company. Chicago. Ill. Brake mechanism for railway cars. 1,652,758; Dec. 13.

Camp, Percy B., Maywood, assignor to The Universal Draft Gear Attachment Company. Chicago. Ill. Brake mechanism for railway cars. 1,652,758; Dec. 13.

Camp, Percy B., Maywood, assignor to The Universal Draft Gear Attachment Co. Brake mechanism for railway cars. 1,623,304; Apr. 5.

Camp, Wofford B. (See Townsead, J. S., and Camp.). Campagne, Steven A. L., Sloux Center, Iowa. Vehicle traffic signal. 1,653,384; Dec. 21a Marina et d'Hometrie Gear Marton, Campano, Daseph D., Berkeley Heights. N. J. Mixture for stopping leaks. 1,641,086; Aug. 30.

Campbell, Alexwence M., Derricit, Mich. Dirigible balloon. 1,648,935; Nov. 15.

Campbell, Andrew C., Waterbury, Conn., assignor, to

signor.)
Campbell, Andrew C., Waterbury, Conn., assignor to American Chain Company, Inc. Punching machine. 1.646 851; Oct. 25.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, III. Dump-car door and lock-Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, III. Load-discharging car. 1.615,793; Jan. 25.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, III. Dump car. 1,615,794; Jan. 25.

Jan. 25.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dump car. 1,615,795; Jan. 25.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago Ill. Door operating mechanism. 1,615,796; Jan. 25.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dor supporting and railsing means. 1,615,797; Jan. 25.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dump car. 1,617,573; Feb. 15.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dump-door-operating means of the company of the Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dump car. 1,617,575; Feb. 15.

Feb. 15.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dump-door shaft-operating means. 1.617.576; Feb. 15.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Load-discharging car. 1.618.811; Feb. 22.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Load-discharging car. Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dump car. 1,635.248; July 12.

July 12.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, III. Railway car. 1,635,249; July 12.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, III. Car side construction. 1,635,250; July 12.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, III. Hopper car and the like. 1,635,251; July 12.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, III. Railway car. 1,635,252;

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, III. Dump car. 1,635,253;
July 12.

July 12.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Car construction.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dumping door for railway cars and the like. 1,635.25; July 12.

Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Car. 1,648,232; Nov. 8.

Campbell, Argyle, and A. E. Zimmer, assignors to Enterprise Railway Equipment Company, Chicago, Ill. Cardoor-locking mechanism. 1.633,782; June 28.
Campbell, Argyle, and A. E. Zimmer, assignors to Enterprise Railway Equipment Company, Chicago, Ill. Cardoor-locking mechanism. 1.635,398; July 12.
Campbell, Argyle, and A. E. Zimmer, assignors to Enterprise Railway Equipment Company, Chicago, Ill. Cardonolocking mechanism. 1.635,398; July 19.
Campbell and the Company, Chicago, Ill. Cardonolocking and Campbell and Campbell (C. C., et al. (See Dougherty, Charles T., assignor.)
Campbell, Charles A. (See Minnier, B. J., and Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Triple valve.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Triple valve. 1.632,757; June 14.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Lubricator. 1,633,763; June 28.

June 28.

Campbell, Charles A., Watertown, N. Y., assignor to
The New York Air Brake Company. Air brake.
1,633,985; Drc. 27. and E. C. Vroman, Watertown, N. Y., assignor to The New York Air Brake Company.
Train control. 1,530,234; May 24.

Campbell, Charles E., Lynn, Mass. X-ray apparatus.
1,629,830; May 24.

Campbell, Charles E., assignor to Campbell Electric
App. 50, Yana, Mass. X-ray apparatus. 1,625,575;
App. 50, Yana, Mass. X-ray apparatus. 1,625,575;
App. 50, Yana, Mass. X-ray apparatus. 1,625,575;

Apr. 5.
Campbell, Charles E., assignor to Campbell Electric Company, Lynn, Mass. Cabinet, 1.631,718; June 7.
Campbell, Charles H. (See Carpenter, William A., as-

signor.)
Campbell, Charles H., Brookline, Mass. Hinge, 1.653.362; Dec. 27.
Campbell, Charles H., Pittsburgh, Pa., assignor to American Gine Company, Boston, Mass. Making reclaimed rubber, 1.640.817, Aug. 30.
Campbell, Charles H., Pittsburgh, Pa., assignor to Campbell, Charles H., Pittsburgh, Pa., assignor to campbell, Charles W. (See Landrum, Reginald F., ascouble filler with rubber, 1.640.818; Aug. 30.
Campbell, Charles W. (See Landrum, Reginald F., ascambell, Charles F.

Campbell, Clarence E. (See Cooney, Robert K., bell.)
Campbell-Cooney Patents Co. (See Cooney, Robert K., Molder's

hell.)

Campbell-Cooney Patents Co. (See Cooney, Robert K., assignor.)

Campbell, Donald J., Muskegon Heights, Mich. Molder's pattern. 1,626,224; Apr. 26.

Campbell, Donald J., Muskegon, Mich. Molding apparatus. 1,626,225; Apr. 26.

Campbell, Edmund D., St. Louis, Mo., assignor to American Sar and Foundry Company, New York, N. Y.

Campbell Edetric Company. (See Campbell, Charles E., assignor.)

Campbell, Fenton H., Ansted, W. Va. Dust-settling ma-chine. 1.616,503; Feb. 1. Campbell, Francis H., Brighton, Mass. Shield attachment for automobile doors. 1.625,791; Apr. 26. Campbell, Frederick H. (See Lloyd, G. F., and Camp-

Cambbell, Frederick H. (See Lloyd, G. F., and Cambbell, Cambbell, Cambbell, George A., Montclair, N. J., assignor to American Telephone and Telegraph Company. Electrical netabolic company. Electrical netabolic company. Electrical netabolic company. Electrical testing apparatus. 1,651,440; Dec. 6.

Cambbell, George E., Chattanooga, Tenn., assignor to The Wheland Company. Chattanooga, Tenn. Shaft bear-Weiland Company. Chattanooga, Tenn. Shaft bear-Weiland Company. Chattanooga. Tenn. Shaft bear-Weiland Company. Chattanooga. Tenn. Shaft bear-Weiland Company. Chattanooga. Tenn. Chain-drive belt feed works for sawmilis. 1,623,098 Apr. 5.

Cambbell, George E., assignor to The Wheland Company. Now York. N. Y. Type-writing machine. 1,628,029; May 10.

Cambbell, George W., Hartford, Conn., assignor to Under-wood Typewriter Company. New York. N. Y. Typewrit-Cambbell, Harry, Mariners Harbor, assignor of twenty-five per cent to R. T. Butts, twenty per cent to E. W. Butts, and twenty per cent to R. S. Allyn, New York, N. Y. Fine valve. 1,639,951; July 26.

Cambbell, Harry, Mariners Harbor, Sasignor to Canducturing Company, Milwaukee, Wis. Starting box for controlling the electric current to machine motors.

Cambbell, Harry E., assignor to Union Electric Manufacturing Company, Milwaukee, Wis. Starting box for controlling the electric current to machine motors.

Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window frame and sash construction. 1,636,806; July 26. Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window. 1,636,807; July 26.

Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window frame and sash construction. 1,637,731; Aug. 2.

Campbell, Grant E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window frame and sash Construction. 1,637,732; Aug. 2.

Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window frame and sash construction. 1,637,732; Aug. 2.

Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window frame and sash construction. 1,637,733; Aug. 2.

Campbell, Harry E., assignor to Union Electric Manufacturing Company, Milwaukee, Wis. Assembling sheetmetal resistance units. 1,649,809; Nov. 22.

Campbell, Harry E., assignor to Union Electric Manufacturing Company, Milwaukee, Wis. Electric controller. 1,652,630; Dec. 13.

Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window-sash construction. 1,652,607; Dec. 13.

Campbell, Howard D., assignor of one-half to C. R. Hudson, McAlester, Okia, Clurch. 1,642,298; Sept. 13.

Campbell, John B., assignor: Campbell, Thomas B., jr., Campbell, John A. (See Campbell, John A. (See Altimari, G., and Campbell).

assignor.) assignor, John A. (See Altimari, G., and Campbell.)
Cambell, John B., assignor to The J. B. Campbell Maunfacturing Company, Salem, N. J. Floor covering.
1,637,762; Aug. 2.
Campbell, John G., assignor to Delco-Light Company,
Dayton, Ohlo. Electrical apparatus. 1,626,182;

Dayton

Campbell, John G., assignor of paratus. 1,626,182; Dayton Ohio. Electrical apparatus. 1,626,182; Campbell, John G., assignor, by mesne assignments, to Delco-ftemy Corporation, Dayton, Ohio. Dynamo. 1,634,770; July 5. Campbell, Julian A., Long Beach, Calif. Dephlegmator. 1,622,703; Mar. 29. Campbell, Julian A., Long Beach, Calif. Absorber. 1,626,980; Nov. 29. Campbell, Katharine, Hastings, Pa. Hypodermic case. 1,650,980; Nov. 29. Campbell, Lawrence A., Kansas City, Mo. Display kerchief. 1,631,398; June 7. Campbell, Lawrence B., Washington, D. C. Radiator Campbell, Lorn, Jr., Minneapolits, Minn., assignor, by mesne assignments, to The Harris Calorific Company. Cleveland, Ohio. Regulator. 1,632,055; June 14. Campbell, Malcolm, Maryfield, Saskatchewan, Canada. Scaffold bracket. 1,650,324: Nov. 22. Campbell Metal Window Corporation. (See Campbell, Acambell, Metal Window Corporation. (See Illch, Amson

Campbell Metal Window Corporation. (See Campbell, Harry E., assignor.) Campbell Metal Window Corporation. (See Illch, Amson

G., assignor.)
Campbell, Neal J., St. Louis, Mo. Railway crossing.
1,653,252; Dec. 20.
Campbell, P. A., et al. (See Dougherty, Charles T., as-

signor.)
Campbell, Percy A., East Cleveland, Ohio, assignor to General Electric Company. Filament for incandescent lamps or similar articles. 1,650,605; Nov. 29.
Campbell, Rolph B., St. Louis, Mo. Tape solder. Campbell, Robert B., Long Island City, assignor, by mesne assignments, to Dry Ice Corporation of America, New York, N. Y. Carbonator. 1,648,575; Nov. 8.
Campbell, Robert H., Upper Edmonton, London, assignor to Sparkets Limited, London, England. Infatting approach of the Compbell, Robert M. (See Wille, H. V., Campbell, and Etherington.)

Etherington.)

Etherington.) C., Springfield, Ill. Awning bracket.
1.645.737; Oct. 18.
Campbell, Samuel J., St. Louis, Mo. Shoe support and
stretcher. 1.646.137; Oct. 18.
Campbell Soup Company. (See McGowan, James, jr., as-

Campbell.

signor.)
Campbell, Sterling H., assignor to Railway Devices Company, St. Louis, Mo. Nut lock. 1,626,596; May 3.
Campbell, Sterling H., assignor to Western Railway Equipment Company, St. Louis, Mo. Retaining-valve bracket. 1,640,819; Aug. 30.
Campbell, Sterling H., assignor to Railway Devices Company, St. Louis, Mo. Angle-cock holder. 1,646,689;

ny, + 18.

Oct. 18.
Campbell, Thomas B., jr., assignor of one-half to J. R.
Campbell, Castle
Locate
Loca

assignor.)
Campbell, William B., Montreal, Quebec, Canada. Freeness tester for pulp. 1627,010; May 3.
Campbell, William E., San Diego, assignor of one-third to A. Hicks, San Diego, Calif. Metal-lath corner strip. 1,619,401; Mat. 1.
Campbell, William L., Spearfish, S. Dak. Composition for stopping leaks. 1,630,828; May 31.

mpbell, Willis C., Yonkers, N. Y. Game projectile. 1,634,451; July 5. mpe Corporation. (See Monheimer, Henry F., as-

Camper, James H., Huntington, W. Va. Household arti-cle. 1,628,507; Apr. 26. Campfire Company, The. (See Hope, Samuel N., as-

Camper, James H., Huntington, W. Va. Household article. 1,62.6.07; Apr. 26.
Campfire Company, The. (See Hope, Samuel N., assignor.)
Campion, Michael F. (See Wayer, F. L., and Campion, Michael F. (See Wayer, F. L., and Campion, France, Campon, A., Woodridge, N. J., assignor to Buffalo Marco, Campon, Ca

Jones.) Indrew H., Forest Hills, Pa., assignor to West-Candee, the Electric & Manufacturing Company. Control apparatus. 1,649,018; Nov. 15. Candee, L., & Company, The. (See Lewis, Harry F., as-signor.) Candee, L., & Company, The. (See Lewis, Harry F., as-

sizor.)

Candee, Zenas P., assignor to The Waterbury Farrel
Foundry and Machine Company, Waterbury, Conn.
Power press. 1,632,462; June 14.

Candler, De Forest W., assignor to E. Holley, Detroit,
Mich. Mold-cooling means. 1,650,260; Nov. 22.

Candler, De Forest W., assignor to E. Holley, Detroit,
Mich. Piston. 1,633,283; Dec. 20.

Candray, José S. San Francisco, Calif. Lighter-thanair cord F. San Francisco, and A. C. Wheelock,
Calland, Calif. Mattress-suspending means. 1,642,140;
Sept. 13.

Oakland. Calif. Mattress-suspending means. 1,642,140; Sept. 13.
Canedy, James M. (See Canedy, Ransford O. and J. M.)
Canedy, Ransford O. and J. M., North Adams, Mass.
Electrical feeler for looms. 1,649,348; Nov. 22.
Canfield, Afred C. (See Johnson, W. R., and Canfield, G. 1652,236; Dec. 13.
Canfield, Albert H., Bridgeport, Conn. Tank valve.
Canfield, Albert H., Bridgeport, Conn. Tank valve.
Canfield, Henry H. (See Isbell, W. A., and Canfield.)
Canfield, Lewis T., assignor to Union Gear Co. Chicago,
Ill. Draft gear. 1,616,411; Feb. Draft Gear Cong.
Canfield, Myron E. (See Lawson, W. L., and Canfield.)
Canfield, Myron E. (See Lawson, W. L., and Canfield.)
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for shaping glassware. 1,625,590; Apr. 19.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for shaping glassware. 1,625,590; Apr. 19.
Canfield, William C., Philadelphia, P.A. Detachable suspension hinge. 1,620,189; Mar. 8.
Caniscan, Chester W., Cincinnati, Ohio. Laundry-marking tag. Re16,717; Aug. 23.
Caniscan, Peter C., Vicksburg, Miss. Portable fire escape. 1,647,684; Nov. 1.

Cann, Arthur S., assignor of eachird to B. Carlson and one-third to B. Carlson, Springheid, Mass. Radiator Cann, Thomas E., Lelcester, England. Sole-pressing apparatus for use in the manufacture and repair of boots and shoes. 1,622,418; Mar. 29.

Cannaday, Charles E., Washinston, D. C. Inside-door protector and gang board. 1,623,476; Apr. 5.

Cannam, Earl W., and G. S. Hugnin, Eureka, Callf. Tire lock. 1,642.576; Sept. 13.

Cannard, William H., assignor to Fort Howard Paper Company, Green Bay, Wis. Spray marker. 1,628,805; Cannell, William, et al. (See Rath, Albert J., assignor.) Cannell, William, et al. (See Rath, Albert J., assignor.) Cannell, William, et al. (See Rath Albert J., assignor.) Canning, John F., Richmond Hill, N. Y. Treatment of internal-combustion-motor cylinders for carbon deposit. 1,640,690; Aug. 30.

Canning Machinery Exchange. (See Randall, H. C., and Cobert, assignor.) (See Gerow, J. A., and Cannon.)

Cannon, Earl, assignor, by mesne assignments, to American Engineering Company, Philadelphia, Pa. Hydraulic mechanism. 1,638,633; Aug. 9.

Cannon, Earl, assignor.) (See Brewer, Charles A., as-Cannon, Espey T., Salt Lake City, Utah, assignor to American Smelting and Refining Company, New York, N. Y. Belt-conveyer arrangement. 1,636,630; July 26.

Cannon, Felix, Hamlet, N. C. Locomotive driving box. 1,617,042; Feb. 8.

Cannon, Harvey W. (See Turner, O. M., and Cannon, Pany, Harvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Harvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, Cannon, Marvey W. (See Turner, O. M., and Cannon, C

pany, Jan. 18.

Jan. 18.

Jan. 18.

Cannon, Harvey W. (See Turner, O. M., and Cannon.)

Cannon Hiram B., Metuchen, N. J. Distilling materials.

1,651,994; Dec. 6.

Cannon, James H., assignor to Cannon Electric Development Company, Los Angeles, Calif. Broller. 1,624,214;

Apr. 12.

Cannon, John W., Birmingham, Ala. Burial garment.

Cannon, Manufacturing Company. (See Flannery, Burt V., assignor.)

Cannon, Michael P., and O. Markel Chicago, Ill. Vibrating chair. 1,615,615; Jan. 25.

Canno, Jorda R., Los Angeles, Calif. Window-sash construction. 1,621,828; Mar. 22.

Canno, Lycoup, Elizabeth, N. J., Apparatus for bestimerating for besti

V. assignor.)
nuon, Michael P. and O. Markel Chicago, Ill. Vibratage clair. 1615/015 Jan 25
ng clair. 1615/015 Jan 25
ng clair. 1615/015 Jan 25
ng clair. 1621,823; Adel 25
no, Vernon, Elizabeth, N. J. Apparatus for beating,
colling, or drying materials. Rel.6,999; Aug. 26
no, Vernon, Elizabeth, N. J. assignor to Bentz Enlineering Corporation. Mulling cabinet. 1,649,151;

Cano. Vernon, Entraueur, E. Andrews, assignors to The Seiden Company, Pittsburgh, Pa. Carrying on eatalytic reactions. Rel6.824: Dec. 20.
Canon, Frank A., and C. E. Andrews, assignors to The Seiden Company, Pittsburgh, Pa. Carrying on eatalytic reactions. Rel6.824: Dec. 20.
Canon, Frank A., and C. E. Andrews, Pittsburgh, Pa., assignors to The Seiden Company, Pittsburgh, Pa., assignors to The Seiden Company, Pittsburgh, Pa., Canott, M. L. (See Smith, Noble E., assignor.)
Canott, M. L. (See Smith, Noble E., assignor.)
Canott, Sarvin Company, Pittsburgh, Pa., Canott, M. L. (See Smith, Noble C., assignor.)
Canter, Vernon C., Charleston, W. Va., assignor to Gasoline Recovery Corporation. Apparatus for cooling and condensation. 1,622,024; Mar. 22.
Cantilever Corporation. (See Morse, Raymond P., assignor.)

assignor.)

Canton Forge & Axle Company. (See Schneider.
Lawrence A., assignor.)

Cantono, Eugenio, Rome, Italy. Shock-preventing device
for vehicles. 1,629,378; May 17.

Cantor, Osias, Sea Gate, New York Harbor, N. Y. Dental
forceps. 1,626,226; Apr. 26.

Cantor, Ruban, assignor to Royal Glass Works, Brooklyn,
N. Y. Unloading device. 1,626,597; May 3.

Cantorl, Joseph, St. Charles, III. Window retainer.
1,625,295; Apr. 19.

Cantorlay Spr. 10.

Cantorlay Spr. 10.

Cantrell, Alonzo, Sait Lake City, Utah. Merchandisevending machine. 1,625,845; Apr. 26.

Cantrell, Joseph T., de Company. (See Cantrell, Joseph T.,
assignor.)

Cantrell, Joseph T., Huntington, N. Y. assignor to J. T.

Cantrell, Scopper T., Huntington, N. Y. assignor to J. T.

Cantrell & Company. Tail-board fastener. 1,615,300;

trell, Joseph T., Huntington, N. Y. assignor to J. T. Cantrell & Company. Tail-board fastener. 1.615.300:

Cantwell, George L., Wichita, Kans. Syringe. 1,645,984; Oct. 18, Cantwell, Margaret W. (See Schauman, Bror M., as-

Cantwell, Margaret W. (See Schauman, Block Signor).
Capaldo, Louis A., New York, N. Y. Parasol. 1,632,832; June 21.
Capaldo, Louis A., New York, N. Y. Umbrella. 1,650,933; Nov. 29.
Cape, Thomas A. (See Reedy, J. H., and Cape.)
Cape, Thomas V. Frocklyn, assignor to Dubiller Condenser Corporation, New York, N. Y. Welding copper and aluminum. 1,636,656; July 19.
Capital Manufacturing Co. (See Forth, Charles, asand auminum. 1,650,000; July 15.

Capital Manufacturing Co. (See Forth, Charles, assignor.)

Capian, Samuel J. (See Willock, H. H., Capian, and Babb.)

Capolupo, Vincenzo, East Boston, Mass. Automatic fire-arm. 1,639,425; Aug. 16.
Cappa, Giulio C., Turin, Italy. Cooling the valves, stems, and seats in internal-combustion engines. 1,621,521; Mar. 22.
Cappa, Giulio C., Turin, Italy. Valve gear for internal-combustion engines. 1,621,522; Mar. 22.

Cappa, Giulio C., Turin, Italy. Internal-combustion engine with inclined cylinders. 1,634,017; June 28. Cappa, Giulio C., Turin, Italy. Valve gear for explosion engines. 1,636,213; July 19. Cappa, Giulio C., Turin, Italy. Head for explosion engines. 1,636,214; July 19. Cappon, Thomas W., Brooklyn, N. Y. Ink eradicator. 1,630,329; May 31. Cappon, Sashington T., Baltimore, Md, and H. G. Mastin, Poughkeepsie, N. Y., assignors to Locomotive Stoker Capps. William P. Shreveport, I.a. Valve cage. 1,613,559; Jan. 4. Shreveport, I.a. Valve cage. 1,613,559; Jan. 4. Shreveport, I.a. Valve cage. 1,613,559; Jan. 4. Shreveport, I.a. Valve cage. 1,613,659; Jan. 4. Shreveport, I.a. Valve cage. 1,613,659; Jan. 4. Shreveport, I.a. Valve cage. 1,621,767; Mar. 22. Capra Filter Press Corporation. Filter press. 1,621,767; Mar. 22. Capra Filter Press Corporation. (See Capra, Angelo M., assignor.)

assignor.)
Capra, Mary, Alameda, Calif. Drain board. 1,653,000;

Dec. 20.

Caprarola, Domenick, assignor of one-half to D. S. Gross, Baitimore, Md. Coat. 1, 1648, 741, Oct. 18.

Capril, Peter M. W. York, N. Y. Swab or dauber. Caprilo, S. (See Brown, Luther B., assignor.)

Caprilo, S. (See Brown, Luther B., assignor.)

Caps, Arthur W., Kanasa City, Mo., assignor to Photostat Corporation, Providence, R. I. Photographic developing apparatus. 1,653,429; Dec. 20. Dec. 20. Caps, Arthur W., Rochester, N. Y., assignor to Photostat Caps, Arthur W., Rochester, N. Y., assignor to Photostat 1,651,441; Dec. 60.

stat Corporation, Providence, R. I. Photographic developing apparatus, 1,653,429; Dec. 20.

Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Roll-holding camera. 1,651,441; Dec. 6.

Capstaff, James A. (See Fletcher, A., Jr., and Capstaff, Capstan Ghass Company. (See Kucera, Peter, assignor.)

Capunto, Michael R., Scranton, Pa. Crossing gate.

Capvell, Vernon L., Clinton, Ind. Razor-stropping device. 1,625,638; Apr. 19.

Car Devices Company. (See Hannaford, Cleon M., assignor.)

signor Fastener Company. (See Pierce, Walter H., as-

Signer.

Signer.

Signer.

Caracristi, Virginius Z., Bronxville, N. Y. Steam-engine operation. 1,627,075; May 3.

Caracristi, Virginius Z., Bronxville, N. Y. Valve cut-oft and speed indicator. 1,627,076; May 3.

Caracristi, Virginius Z., Bronxville, N. Y., Valve cut-oft and speed indicator. 1,627,076; May 3.

Caracristi, Virginius Z., Bronxville, N. Y., assignor' to powdered fuel. 1,614,713; Jan. 18.

Carbeil, Louis R., Savanna, Ill. Wrench. 1,623,945; Apr. 5.

Carbie Limited. (See King, Otis C. F., assignor). Carbide and Carbon Chemicals Corporation. (See Curme, George O. I. assignor).

Carbide & Carbon Chemicals Corporation. (See Curme, George O. I., assignor).

Carbide & Carbon Chemicals Corporation. (See Poundson, Joseph G., assignor).

Carbide & Carbon Chemicals Corporation. (See Young, Charles O., assignor).

Carbide & Carbon Chemicals Corporation. (See Young, Charles O., assignor).

Carbondale Machine Company. (See Hiller, N. H., and McCabe, assignors.)

McCabe, assignors.)
Carbondale Machine Company. (See Hiller, N. H., and Safberg, assignors.)
Carbondale Machine Company. (See Hiller, N. H., and Carbondale Machine Co., The. (See Torrance, Henry, assignors.)

assignor.)
Carbone, Peter, Brooklyn, N. Y. Embroidery frame, 1,636,681; July 26.
Carbone, Tito L., deceased, Berlin, by E. Mommsen, exceptor, Charlottenburg, Germany, Frame are lamp carbor and are. 1,629,254; May 17.
Carbornadum Campany, The. (See Greenwood, Charles H., assignor.)
Carbornadum Company, The. (See Hartmann, Miner L., assignor.)
Carbornadum Company, The. (See Hartmann, M. L., and Easter, assignors.)
Carbornadum Company, The. (See Martin, Harry C.,

assignor.)

Carborundum Company, The. (See Power, Henry R., assignor. Carborundum Company, The. (See Seymour, John P., as-

signor.) Carborundum Company, The. (See Tone, Frank J., as-

signor.) Card Display, Inc. (See Bloomingdale, Hiram C., assignor.

signor.) Card, Roy A., Washington, D. C. Faucet or valve. 1.634,771; July 5. Cardarella, Philip, Kansas City, Mo.. Nursing-bottle holder. 1,630,167; May 24. Cardarelle, Joseph E. (See Turner, Francis M., as-

Cardarelli, Emilio A., Boston, Mass. Combination step-ladder. 1.685,705; July 12. Cardenas, Francisco, Piedras Negras, Mexico. Water pump. 1.682,948; June 21. Carder, Barle H., Hollywood. Callf. Combination hot and cold water faucet. 1,646,575; Oct. 25.

Carder, Frederick, Corning, N. Y. Flower holder. Des. 73,557; Oct. 4.
Cardinet, Albert D., Los Angeles, Calif. Insect trap. 1,634,648; July 5.
Cardullo. Forrest E., assignor to The G. A. Gray Company, Cincinnait, Ohio. Tool holder for planers. 1,615,787;

Cincinnati, Obio. Tool notice for planes.
Jan. 25.
Cardullo, Forrest E., assignor to The G. A. Gray Company,
Cincinnati, Obio. Tool holder for planers and similar
tools. 1,643,873; Sept. 27.
Cardwell, Alien D., Rockville Center, N. Y. Making electrical colls. 1,616,111; Feb. 1.
Cardwell, Alien D., Rockville Center, assignor to The
Allen D., Cardwell Manufacturing Corporation, New
J. J. Y. Variable air condenser. 1,626,301; A. D. 26.
Cardwell. Allen D., Manufacturing Corporation, The.

York, N. Y. Variable air condenser. 1,626,391; Apr. 26.
Cardwell, Allen D., Manufacturing Corporation, The. (See Cardwell, Allen D., assignor.)
Cardwell, James R., assignor to Union Draft Gear Congression (See Cardwell, Allen D., assignor.)
Cardwell, James R., assignor to Union Draft Gear Congression (See Cardwell, Thomas, Sedalia, Mo. Rail for locomotive stalls. 1,023,454; Apr. 19.
Cards, Charles C., Touhy, Nebr. Portable desk for auction Celestes 1,613,440; Jan. 4.
Cards, Harry F., and R. Marsland, Essington, Pa., assignors to Westinghouse Electric & Manufacturing Company Shaft coupling. 1,638,790; Aug. 9.
Carey, Charles E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic station. 1,635,574; July 12.
Carey, Cornelius J., Fall River, Mass. Life-saving de-Carey, Eloto R., assignor to Westington, Carey, Charles E., Wilkinsburg, Pa., assignor to Westing de-Carey, Eloto R., assignor to O. E. Carey, Long Beach, Calif. Front-axle assembly. 1,635,706; July 12.
Carey, George W., Oshkosh, Nebr. Crust breaker. 1,655,760; Dec. 27.
Carey, Octoba E. (See Carey, Elton R., assignor, The. (See Carey, Fliton R., assignor, The. (See Carey, Fliton R., assignor, The. (See

Sept. 6.

Carey, Ovelda E. (See Carey, Elton R., assignor.)

Carey, Phillip, Manufacturing Company, The. (See
Rogers, Homer L., assignor.)

Carey, Robert F., Leigh-on-Sea, England. Hydraulic
power-transmission apparatus. 1,645.371; Oct. 11.

Carichoff, Eugene R., Schenectady, N. Y., assignor to
General Electric Company. Electromagnetic device.

1,648,674; Not. 1. (See Pradas, Henry, assignor.)

Carlon, Mary, Hillside, N. J. Combined ironing board
and ladder. 1,617,234; Feb. 8.

Carhart, George C., assignor to Brown-Lipe Gear Company, Syracuse, N. Y. Friction clutch. 1,637,734;
Aug. 2.

pany, Aug. 2.

Carhart, George C., assignor to Brown-Lipe Gear Company, Syracuse, N. Y. Clutch construction. 1,640,752; Carnart, George Pan, Syracuse, N. Y. Clutch construction. 1,640,752; Aug. 30 George M. Los Angeles, Calif. Combined weed cutter and cultivator. 1,652,853; June 21. Carl, John S., assignor to T. A. Sala, Dallas, Tex. Scraper for golf greens. 1,652,552; Dec. 3. Carl Lindstrom Aktiengesellschaft. (See Jokel, Franz, as-

Carlsen, Harold. (See Dahl, Sigvald, assignor.)
Carlson, Alder G., Moose Lake, Minn. Fly and insect
trap. 1,629,816: May 24.
Carlson, Authony E., Los Angeles, Calif. Apparatus for
elevating and lowering oil-well tubing. 1,620,190;

Anthony E. Los. Angeles, Calif. Rock drill.
Carlson, Anthony E. Los Angeles, Calif. Buttocks
elevator. 1,650,261; Nov. 22.
Carlson, Arthur J.,
1,620,961; Mar. 15.

Carlson, Axel E., Molino, Ill. Electric gas lighter. 1.622,089; Mar. 22. Carlson, Barney, et al. (See Cann, Arthur S., assignor.) Carlson, Benjamin, et al. (See Cann, Arthur S., as-

1622,099; Mar. 22.
Carlson, Barney, et al. (See Cann, Arthur S., assignor).
Carlson, Benjamin, et al. (See Cann, Arthur S., assignor).
Carlson, Carlson, Carlson, Carlson, Carlson, Carl C. R. Duluth, Minn. Coal chute for cellar visions.
Carlson, Carl C., et al. (See Fisher, Charles, assignor).
Carlson, Carl D., et al. (See Fisher, Charles, assignor).
Carlson, Carl D., et al. (See Fisher, Charles, assignor).
Carlson, Charles A., Ridle Park, Pa. Piston constructions.
Carlson, Charles A., Ridle Park, Pa. Piston constructions.
Carlson, Charles A., Ridle Park, Pa. Piston constructions.
Carlson, Charles G., Chicago, Ill. Curtain-stretcher clamp. 1,632,995; June 21.
Carlson, Charles J., Helena, Mont. Universal sawing or cutting machine. 1,615,901; Feb. 1.
Carlson, Charles J., 43,703; Aug. 2, Elton, Holena, Mont.
Carlson, Carles, J., 43,703; Aug. 2, Elton, Holena, Mont.
Carlson, Edwin E., and L. A. Stread, Chester, Pa.
Dycing warps. 1,646,526; Coct. 20.
Carlson, Edwin E., and L. A. Stread, Chester, Pa.
Dycing warps. 1,646,526; Coct. 20.
Carlson, Enock A., Delvalle, Tex. Paper bag and twine holder. 1,630,066; May 31.
Carlson, Enock A., Delvalle, Tex. Paper bag and twine holder. 1,630,066; May 31.
Carlson, Friederick O., Hopewell, Va., assignor to May-hew Steel Products Company, Incorporated, Shelburne July Mass. Cutter, mill, or the like. 1,626,568; Carlson, George H., assignor to Redin, Ekstrom & Company, Bockford, Ill. Oscillating bett sander. 1,628,581; May 31.
Carlson, George H., assignor to Redin, Ekstrom & Company, Bockford, Ill. Oscillating bett sander. 1,628,581; Carlson, George H., assignor to Redin, Ekstrom & Company, Bockford, Ill. Oscillating bett sander. 1,628,581; Carlson, George H., assignor to Redin, Ekstrom & Company, Bockford, Ill. Oscillating bett sander. 1,628,581; Carlson, George H., assignor to Redin, Ekstrom & Company, Bockford, Ill. Oscillating bett sander. 1,628,581; Carlson, George H., assignor to Redin, Ekstrom & Carlson, England & Carlson, England & Carlson, England & Carlson, England & Carlso

Carlson, George H., assignor to Redin, Ekstrom & Com-pany, Rockford, Ill. Oscillating belt sander. 1,628,531; April 10.

Carlson, George H., assignor to Redin, Ekstrom & Co., Rockford, Ill. Routing machine. 1,639,485; Aug. 16. Carlson, Gunnar, et al. (See Peterson, Alfred T., assignor.)

Signor.)

Garlson, Gustave A. (See Peterson, Aircu I., assignor.)

Carlson, Gustave O., Wethersfield, assignor of one-third to H. Hanson, Middletown, and one-third to C. O. Hed-strom, Portland, Conn. Tool. 1,643,835; Sept. 27.

Carlson, Henry F., and H. A. Recen Leadwille. Colo. Cord and thread container. 1,642,805; Sept. 20.

Cord and thread container. 1,642,805; Sept. 20.

Cord and thread container. Combination fack and puller. 1,621,829, Mar. 22.

Carlson, Hjalmar G., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Latchreleasing device for dry pipe valves. 1,621,872; Mar. 22.

Carlson, Joseph C., Tillsa, Okla. Surfacing for automobile parts and the like. 1,625,508; Apr. 26.

Carlson, Grompany, South Boston, Mass. Radial setting gauge. 1,641,114; Aug. 30.

Carlson, Martin O., Chicago, Ill. Push sled. 1,633,362; June 21.

Carlson, Martin O., Chicago, Ill. Push-sled brake. 1,633,363; June 21. Carlson, Marvid C., Fort Dodge, Iowa. Bolter. 1,635,925; July 12.

Carlson, Oscar. Dannebrog, Nebr. Cream-can lifter. 1.618.568; Feb. 22. Carlson, Oscar F., Chicago, Ill. Automatic control sys-tem for burners. 1,635,809; July 12. Carlson, Peet, Manor, Tex. Cotton harvester. 1,624,313; Apr. 12.

Carlson, Philip, Bridgeport, Conn. Cab for motor vehicles. 1.641,115; Aug. 30.
Carlson, Philip, Bridgeport, Conn. Cab for motor vehicles. 1.641,117; Aug. 30.
Carlson, Stewart W., et al. (See Peterson, Alfred T., Carlson, Stewart W., et al. (See

assignor.)

Carlson, Wendell L., Washington, D. C. Amplifier.
1.613.741; Jan. 11.

Carlson, Wendell L., and G. W. Carpenter. Washington, D. C. Radio telegraph system. 1.640.851; Aug. 30.

Carlson, Wendell L., Washington, D. C., assignor to Radio Corporation of America New York, N. Y.

Curlson, Wilbur J., Rochester, and J. J. Lanaban, Buffalo, N. Y. Household still. 1.635.112; July 5.

Carlson, Carl, Stockholm, Sweden. Carburetor for Internal-combustion engines. 1,639.396; Aug. 16.

Carlson, Carl, Stockholm, Sweden. Venturi for carburctors. 1.642.332; Nept. 13.

Carlston, Carl, Stockholm, Sweden, Venturi for Carburctors. 1,642.332; Nept. 13.

Carlston, Carl, Stockholm, Sweden, Venturi for Carburctors. 1,642.3395; June 21.

Carlstedt, Ragnar, Stockholm, Sweden, assignor to Midwest Air Fillers, Incorporated. Humidifier. 1,627.686; May 10.

Carlton, Allan J. (See Wilson, W. J., and Carlton.)

Carlton, Allan J. (See Wilson, W. J., and Carlton.) Carlton, Fred. Bloomington, Ill. Knockdown container. 1,650,292; Nov. 22; Carlton, Jack C., assignor to The Carlton Machine Tool Company, Cincinnall, Ohio. Radial drill: 1,619,190;

Carlton, Jack C., assignor to The Carlton Machine Tool Company, Cincinnati, Ohio. Radial drill. 1,638,654; Aug. 9.

Carlton, Jack C., assignor to The Carlton Machine Tool Company, Cincinnati, Ohio. Radial-drill column-clamp control. 1,638,655; Aug. 9.
Carlton, Jack C., assignor to The Carlton Machine Tool Company, Cincinnati, Ohio. Clutch mechanism. 1,642,642; Sept. 13.
Carlton, James A., St. Louis, Mo., assignor, by mesne assignments, to C. S. Russell, West Medford, Mass. Automatic suction sheet-feeding machine. 1,646,651;

Machine Tool Company. (See Carlton, Jack C.,

Automatic suction sneet-reeding machine. 1,646,681; Carlton Machine Tool Company. (See Carlton, Jack C., assignor.)
Carlton, William F., Massillon, Ohio. Trap for rodents. 1,649,063; Nov. 15.
Carlucel, Rocco A., West New York, N. J. Stringed instrument. 1,631,794; June 7.
Carlucel, Rocco A., West New York, N. J. Stringed instrument. 1,631,794; June 14.
Carman, William H., and V. K. Davison, Sacramento, Calif. Locking device. 1,653,385; Dec. 20.
Carmichael, Andrew J., assignor to The Greist Manubase. 1,638,735; July 26.
Carmichael, Andrew J., and H. F. Thurber, assignors to The Greist Manufacturing Company, New Haven, Conn. Lamp. Des. 74,047; Dec. 13.
Carmichael, John P., Milwaukee, Wis. Root-canal filling Carmichael, John P., Milwaukee, Wis. Root-canal filling Scarmichael, John P., Milwaukee, Wis. Root-canal filling Scarmichael, John P., Milwaukee, Wis. Root-canal filling Scarmichael, Thomas, and J. E. Bowlin, Fort Bragg, Calif. Sawmill setwork. 1,633,206; June 21.
Carmichael, Thomas, and J. E. Bowlin, Fort Bragg, Calif. Sawmill setwork. 1,633,206; June 21.
Carmichael, William M., Atlanta, Ga. Static neutralizer for printing pressess. 1,619,988; Mar. 8.
Carnahan-Byrne Machinery Company. (See Kramer, John G., assignor.) d. R. M. Marr; said Marr assignor of one-fourth to said Carnes and one-fourth to Mrs. J. D. Belford, Okemah, Okla. Working barrel for oil wells. 1,642,601; Sept. 13.
Carnes, Almus T., Kansas City, Mo. Automatic hose mozels. 1,642,601; Sept. 13.
Carnes, Byron J., Charlotte, Mich. Combination lock. 1,622,489; Mar. 29.

assignor.)

Carnes, Byron J., Charlotte, Mich. Combination lock.
1,622,489; Mar. 29.

Carnes, Sam. North Powder, Orec. Vehicle body removing and repinding device. 1,631,918; June 7.

Company, Kansas City, Mo. Phonograph tone arm
and resonator. 1,633,624; June 28.

Carney, Joseph F., New York, assignor to Waldorf Astoria Service Corporation, Long Island City, N. Y.
Plate or similar article. Des, 12,307; Mar. 29.

Carney, Samuel E., Wick, W. Va., assignor of one-half to
Nov. 29. can, Cambridge, Ohio. Spikes. 1,651,339;
Nov. 29.

J. M. Roan, Cambridge, Char. Spring.
Nov. 29.
Carnowsky, Robert R., and J. T. Stratman, assignors, by mesne assignments, to General Motors Corporation, Detroit, Mich. Abrading tool and preparing automobile bodies for finishing. 1.346.852; Oct. 25.
Caro Cloth Corporation. (See Walsh, Patrick H., assignment)

Caro, Raymond J. (See Larison, E. L., Frick, and Caro.) Carolin, Samuel. (See Quigan, F. J., and Carolin.) Carolus Manufacturing Company. (See Carolus, William assignor.) us, Willian

B., assignor.)
Carolus, William B., assignor to Carolus Manufacturing
Company, Sterling, Ill. Nut-splitting tool. 1,653,340;

Company, Sterling, Ill. Nut-splitting tool. 1,608,34v, Dec. 20, Carolyn Laundry. (See Lane, Edwin, assignor.)
Caron, Philbert A., Detroit, Mich. Safety electric door opener. 1,638,240; Aug. 9.
Caroni, Halo, Rome, Haly. Bridge material. 1,640,980; Aug. 30.
Caroni, Halo, Rome, Haly. Bridge material. 1,640,980; Aug. 30.
Carothers, Electric Company. Regulating system. 1,624,715; Apr. 12.
Carpe, Allen, New York, N. Y., and R. W. Deardorff, Kensington, Calif., assignors to American Telephone and Telegraph Company. Protection circuit. 1,646,444; Oct. 25.
Carpenter, Albert J., Portland, Me. Garter. 1,618,147; Feb. 15.

Carpenter, Albert J., Portland, Me. Garter. 1,618,147; Feb. 15.
Carpenter. Arthur H., La Grapge, and P. C. Huntley, Riverside, Ill., assignors to The Vitrolite Company, Parkersburg, W. Va. Pourting device for glass furnaces. Carpenter, Campbell C., assignor to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Treatment of wood separators. 1,614,916; Jan. 18.
Carpenter, Campbell C., assignor to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Battery cell. 1,632,364; June 14.
Carpenter, Carroll E. (See Little, A. D., and Carpenter.) Carpenter, Carloll E. (Catago, Ill. Razor stropper and Carpenter, Charles E., Chicago, Ill. Toasting machine and the like. 1,621,234; Mar. 15.
Carpenter, Charles E., New York, N. Y. Speed regulation. 1,627,832; May 10.
Carpenter, Charles E., Chicago, Ill. Doughnut machine and the like. 1,641,118; Aug. 30.
Carpenter, Charles E., Nicky Ork, N. Y. Method and apparatus for tension control. 1,652,299; Dec. 18.
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Carpenter, Charles L., and W. E. Jaquith, Syracuse, N. Y. Sanitary tollet bowl. 1,645,799; Oct. 18.
Carpenter, Charles U., Dayton, Ohlo, assignor, by mesne assignments, to J. R. Sterrett, H. F. Devens, and J. R. Speer. Trj. Tayleviter. 1644,108; Oct. 1.
1.647,900; Nov. 1.
Carpenter, David E., New York, N. Y., assignor to Dictaphone Corporation, Bridgeport, Conn. Container, 1,637,333; Aug. 2.
Carpenter, Frank D. assignor, by mesne assignments, to The Carpenter, 1647,438; Aug. 2.
Carpenter, Genn W. Cocord, N. H. Transmission of the Carpenter of t

penter.)

penter.) Carpenter, Grant. (See Weston, E. F., and Carpenter.) Carpenter, Howard B., Pueblo, Colo. Coal drier. 1,630,427; Nov. 22. Carpenter, Hubert V., Fullman, Wash. Device used for controlling the speed of water wheels. 1,022,763;

Carpenter, Hubert V., Pullman, Wash. Device used for controlling the speed of water wheels. 1,622,763; Carpenter, Ira C., Cleveland, Ohio. Back for rotary scrubbing brushes. 1,634,036; Dec. 27.
Carpenter, R. F., Löse, B., Carpenter, C., and Carpenter, Carpenter, Paul. (See Barbieri, C., and Carpenter). Carpenter, Paul. (See Barbieri, C., and Carpenter). Carpenter, R. F., Manufacturing Company, The. (See Anderson, Thomas F., assignor.) Carpenter, R. F., and G., Carpenter, Carpenter, Carpenter, Carpenter, Carpenter, Carpenter, Carpenter, Warren W., Queens, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,623,777; Apr. 5.
Carpenter, Warren W., Queens, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,632,056; June 14.
Carpenter, Warren W., Queens, Masignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,632,056; June 14.
Carpenter, Warren W., Queens, Mailage, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,649,099; Nov. 15.
Carpenter, William, et al. (See Ferris, Roy W., assignor). William, et al. (See Ferris, Roy W., assignor).

signor.)
Carpenter, William A. (See Irwin. H. H., and Car-

Carpenter, William A. (See Irwin, H. H., and Carpenter, Politics, P. C., assignor of one-half to G. H. Campbell. Undercleaner for spinning frames. 1,635,205; July 12.
Carpio, Tomas C., San Sebastian, Spain. Photographic enlarging, reducing, reproducing, and printing apparatus. 1,635,741; July 12.
Carpmac, Richard H., Mones. 1,651,669; Dec. 6.
Carpmill, John F., and H. G. Hancock, assignors to North & Judd Manufacturing Company, New Britain, Conn. Snap. 1,646,745; Oct. 25.
Carr, Edward G., Chicago, Ill. Concrete-road machine. 1,629,611; May 24.
Carr, Edward G., Chicago, Ill. Concrete-road machine. Carr, Edward G., Chicago, Ill. Concrete-road machine. Carr, Edward G., Chicago, Ill. Machine for preparing bases for rails and the like. 1,648,637; Nov. 8.
Carr Fastener Company. (See Anderson, Andrew G., assignor.)

Carr Fastener Company. (See Carr, Fred S., assignor.) Carr Fastener Company. (See Carr, Moses F., assignor.) Carr Fastener Company. (See Elwell, George H., assignor.) arr Fastener Company. (See Pierce, Walter H., as-

Carr Fastener Cumpany,
signor.)
Carr, Fred P. (See Arnold, James E., assignor.)
Carr, Fred S., Newton, Mass., assignor, by mesne assignor,
ling apparatus, 1.644.173; Oct. 4.
Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener, 1.646.345; Oct. 18.
Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Nut fastening, 1.646.360;

Cair, Fred S. Newton, assignor to Carr Fastener Company, Cambridge, Mass. Nut fastening. 1,464,366; Oct. 18.
Carr, Fred S. Newton, assignor to Carr Fastener Company, Cambridge, Mass. Nut and screw fastening. 1,648,367; Oct. 18.
Carr, Fred S. Newton, assignor to Carr Fastener Company, Cambridge, Mass. Lock-nut-fastening installation. 1,646,368; Oct. 18.
Carr, Fred S. Newton, assignor to Carr Fastener Company, Cambridge, Mass. Separable fastener. 1,647,777; New 1.1

Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.771; Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.772; Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.773; Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.774; Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.775; Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.776; Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.778; Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.778; Nov. 1.

Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647.778; Nov. 1.

Carr. Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Fastener. 1,647,781; Nov. 1. Carr. Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Separable fastener. 1,647,782; Nov. 1. Carr., Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Separable fastener. 1,647,783; Nov. 1. Carr., Fred S., Newton, assignor to Carr Fastener Company, Carr., Bart. S., Newton, assignor to Carr Fastener Company, Carr., John G. (See Hastings, Mich. Cultivator tooth. 1,650,007; Nov. 22. Carr., James A. (See Matthews, E. M., and Carr.) Carr., John P., et al. (See Munyon, Alice C., assignor.) Carr. Matthew, Berwyn, assignor to Joseph C. Curry, Chicago, Ill. Refrigerator car. 1,623,305; Apr. 5. Curr., Matthew, Berwyn, assignor to Joseph C. Curry, Chicago, Ill. Refrigerator car. 1,623,305; Apr. 5. Curr., Mastener, Company, Cambridge, Mass. Fastener stud. 1,634,230; June 28. Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Cambridge, Mass. Fastener stud. 1,634,230; June 28. Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Cambridge, Mass. Fastener stud. 1,634,230; June 28. Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Cambridge, Mass. Fastener stud. 1,634,230; June 28. Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Cambridge, Mass. Fastener stud. 1,634,230; June 28. Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Cambridge, Mass. Fastener stud. 1,634,230; June 28. Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Carr., Moses F., Lexington, assignor to Carr. Fastener Company, Carr., Moses F., Lexington, assignor

Company, Cambridge, Moss. Fastener, Con-June 28. Lexington, assignor to Carr Fastener Con-Carr, Moses F., Lexington, assignor to Carr Fastener Com-pany, Cambridge, Mass. Fastener, 1,641,917; Sept. 6. Carr, Moses F., Lexington, Mass., assignor to Carr Fastener Carr, Moses F., Lexington, Mass., assignor to Carr Fasten-er Company, Cambridge, Mass. Fastener, 1,643,981;

er Company, Cambridge, ausse Cott. 4. arr, Moses F., Lexington, Mass, assignor, by mesne assignments, to The Bassick Manufacturing Company. Company. Company. Company. Company. Company. Company. Company. Company. Chicago, III. Lubricating nipple and cap therefor. In Company. Chicago, III. Lubricating nipple and cap therefor. 1.644,230; Oct. 4. assignments. Carr Fastener. Company. Cambridge, Mass. Fastener. 1.647,779; Nov. 1.

Nov. 1.
arr, Moses F., Lexington, assignor to Carr Fastener
Company, Cambridge, Mass. Separable fastener.

Cart, Moses F., Lexington, assignor to Carr Fastener.
Company, Cambridge, Mass. Separable fastener.
Carr, Paul, Miami, Fia, Shoe, 1,623,092; Apr. 5.
Carrsine, Eugene, Philadelphia, Fa. Illuminated sign.
1,625,708; Apr. 19.
Carrey, John O., assignor to Carrey-Morse Engineering
Company, St. Louis, Mo. Compressor, 1,614,100;
Jan. 11, pp. 0, assignor to Carrey-Morse Engineering

11. John

Jan. 11.
Carrey, John O., assignor to Carrey-Morse Engineering
Company, St. Louis, Mo. Balanced centrifugal clutch.
1,614,161; Jan. 11.
Carrey, John O., assignor to Carrey-Morse Engineering
Company, St. Louis, Mo. Compressor. 1,620,870;

Carrey, John O., assignor to Carrey-Morse Engineering Company, St. Louis, Mo. Flywheel and balancing same. 1,620,871; Mar. 15. Carrey, John O., assignor to Carrey-Morse Engineering Company, St. Louis, Mo. Thermostat. 1,638,085;

Company, St. Louis, Mo. Thermostat. 1,638,085; Aug. 9. Carrey, John O., assignor to Carrey-Morse Engineering Company St. Louis, Mo. Pressure-reducing device. Carrey, John O., assignor to Carrey-Morse Engineering Company, St. Louis, Mo. Driving mechanism. 1,639,647; Aug. 23. Carrey, John O., assignor to Carrey-Morse Engineering Company, St. Louis, Mo. Compressor housing. 1,633,642; Aug. 23. Carrey, John O., assignor to Carrey-Morse Engineering Company, St. Louis, Mo. Controlling device. 1,642,141; Sept. 13, St. Louis, Mo. Controlling device. 1,642,141; Sept. 13, Sept. 14, Sept. 14

Company, St. Louis, Mo. Controlling Germany, St. Louis, Mo. Compressor for refrigeration systems. 1,651,670; Dec. 6.
Carrey, John O., assignor to Carrey-Morse Engineering Company, St. Louis, Mo. Shaft coupling. 1,651,671;

Dec. 6. Carrey-Morse Engineering Company. (See Carrey, John

Carrey-Morse Engineering Company. (See Carrey, John O, assignor.)
Carrick, Caleb R., Buffalo. N. Y. Combination sink and refrigerator. Des. 73.776; Nov. 8.
Carrick, Franklin K., Rapid City, Manitoba, Canada. Weed eradicator. I. Ga34.172; Junie 28.
Carrick, Robert E., Larchmont, N. Y. Concrete clip. 1,628,228; May 10.
Carricer Engineering Corporation. (See Carrier, Willis IL, assignor.)

Carrier Enginering Corporation. (See Lewis, Leo L., as-

Carrier Enginering Corporation. (See Lewis, Leo L., assignor.)
Carrier, Willis H., Essex Fells, assignor to Carrier Engineering Corporation, Newark, N. J. Refrigerating system. 1,639,023; Aug. 16.
Carrier, Willis H., Essex Fells, assignor to Carrier Engineering Corporation, Newark, N. J. Substance and process of using the same for refrigeration purposes. 1,642,942; Sept. 20.
Carrier, Willis II., Essex Fells, assignor to Carrier Engineering Corporation, Newark, N. J. Substance and process of using the same for refrigerating purposes of using the same for refrigerating purposes of using the same for refrigerating purposes. Carrier, Willis II., Essex Falls, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Refrigerating system. 1,652,163; Dec. 13.

Carrigan, Jesse L., Birmingham, Ala. Screen adjuster. 1.646.390; Oct. 25. Carrigan, Thomas E., Milwaukee, Wis. Knockdown bed frame for automobiles. 1.631,620; June 7. Carrigan, Thomas E., Milwaukee, Wis. Knockdown bed frame. 1.631,621; June 7. Carringer, James R. (See Howard, F. A., Clark, and Carcringer, James R. (See Howard, F. A., Clark, and Car-

ringer.)
Carringer, James R., Elizabeth, N. J., assignor to Standard Development Company. Continuous distillation of hydrocarbon oils. 1,644,324; Oct. 4.
Carrington, George, Chicago, Ill. Steering device for

Carringer, James R., Engabeth, N. J., assignor to Standard Development Company, Continuous distillation of Carrington, George, Chicugo, Ill. Steering device for vehicles. 1,614.2719; Jan. 11.

Carrington, John W., Cincinnati, Ohlo. Automobile cleaning device. 1,623,792; Apr. 26.

Carriol, Louis. (See Muller, A., and Carriol).

Carriol, Louis. (See Muller, A., and Carriol).

Carriol, Louis. (See Muller, A., and Carriol).

Carroll, Dallas C., assignor to The Firestone Steel Products Company, Akron, Ohlo. Machine for manufacturing rims. 1,618,612; Feb. 22.

Carroll, Edgar E., and F. B. Culbertson, Portland, Oreg. Heating furnace. 1,634,706; July 5.

Carroll, Emil J., assignor to The American Laundry Machinery Company, Cincinnati, Ohlo. Extractor control. 1,634,62; July 5.

Carroll, Emil J., assignor to The American Laundry Machinery Company, Cincinnati, Ohlo. Overdriven extractor. 1,634,707; July 5.

Carroll, Emil J., assignor to The American Laundry Machinery Company, Cincinnati, Ohlo. Automatic washing machine. 1,639,024; Aug. 16.

Carroll, Emil J., assignor to The American Laundry Machinery Company, Cincinnati, Ohlo. Control means for electrically-driven machines. 1,643,197; Sept. 20.

Carroll, Emil J., assignor to The American Laundry Machinery Company, Norwood, Ohlo. Control means for electrically-driven machines. 1,643,197; Sept. 20.

Carroll, Emil J., assignor to The American Laundry Machinery Company, Norwood Station, Cincinnati, Ohlo. Electrically-driven wachinery Company, Cincinnati, Ohlo. Electrically-driven wachinery Company, Cincinnati, Ohlo. Control means for electrically-driven machines. 1,648,189; Sept. 20.

Carroll, Emil J., Norwood, assignor to The American Laundry Machinery Company, Cincinnati, Ohlo. Elec

Laundry Machinery Company, Norward States, Cannoll, Ohio. Electrically-driven extractor. 1,649,889; Nov. 22.
Carroll, Emil J., Norwood, assignor to The American Laundry Machinery Company, Cincinnatt, Ohio. Centritugal extractor. 1,652,760. Dec. 13.
Carroll, Emil J., Norwood, assignor to The American Company, Endicott, N. Y. Card-controlled printing machine. 1,623,163; Apr. 5.
Carroll, Fred M., assignor to The Tabulating Machine Company, Endicott, N. Y. Sensing means for perforated record cards. 1,623,164; Apr. 5.
Carroll, James O., Pittshield, Ill., assignor of fifty-one with the company, Endicott, N. Y. Sensing means for perforated record cards. 1,623,164; Apr. 5.
Carroll, John S., Oak Park, Ill.
Thermometer or thermometer-tube support. 1,635,174; July 12.
Carroll, John E., Oak Jame, Mich. Mechanical movement. 1,634,454; July 5.
Carroll, John K., assignor of one-half to A. C. Baurelle, Sou Carroll, John S., Vonkers, assignor, by mesne assignments, to Johns-Manwille Corporation. New York, N. Y. Insulation construction for containers. 1,629,255; May 17.

May 17

Carroll, Joseph, Brooklyn, N. Y. Cleaning machine, 1.645.317; Oct. 11. Carroll, Joseph F., Denver, Colo. Template. 1,653.450; Dec. 20.

Carroll, Joseph F., Denver, Colo. Template. 1,603,400; Del. 20.

Rool. 20.

R

Ohio. Apparatus and method for packaging paper. 1.638.563; Aug. 9.
Carruth, Nat, assignor to Hillside Cotton Mills. Lagrange, Ga. Laundry basket. 1,642,643; Sept. 13.
Carry, Joseph C. (See Carr, Matthew, assignor.)
Carry, Joseph C. (See Carr, Matthew, assignor.)
Carson, Charles B., assignor to Taylor Instrument Companies, Rochester, N. Y. Indicating instrument. 1.630,291; May 31.
Carson, Clark, Los Angeles, Calif., assignor to M. H. Lane, Washington, D. C. Liquid-level Indicator. 1.641,116; Aug. 40

Carson, Ernest R., Denver, Colo. Pneumatic-tire pump. 1,630,923; May 31.
Carson, Frederick T., Washington, D. C. Apparatus for testing hygroscopic substances. 1,642,577; Sept. 13.
Carson, George F., Memphis, Tenn. Automatic safety gate for railroad crossings. 1,620,799; Mar. 15.
Carson, George F., Memphis, Tenn. Automatic safety gate for railroad crossings. 1,620,799; Mar. 15.
Carson, Joseph P., assignor to American Motor Equipment Corporation, Richmond, Va. Automobile head-light. 1,653,493; Dec. 20.
Carson, Moy K., assignor to American Motor Equipment Corporation, Richmond, Va. Automobile head-light. 1,653,493; Dec. 20.
Carson, William E., Riverton, Va. Producing hydrated lime. 1,613,341; Jan. 4.
Carson, William E., Riverton, Va. Producing hydrated lime. 1,613,341; Jan. 4.
Carson, William W., Fr., assignor, by mesue assignments, to The Fulton Sylphon Company, Knoxville, Tenn. Carson, William W., Fr., assignor, by mesue assignment, assignory, assignory, which will be a supplied to the company, Knoxville, Tenn. Carson, William W., Ern. Thermostatically-controlled valve mechanism. 1,644,325; Oct. 4.
Carstarphen, William P., Denver, Colo. Headlight. 1,653,389; Dec. 20.
Carter, Alick L., Kenmore, N. Y., assignor, by mesne assignments, to The Grolan Manufacturing Company, Dayton, Ohio. Liquid gauge. 1,629,992; May 24.
Carter, Alick L., Kenmore, N. Y., assignor, by mesne assignments, to The Grolan Manufacturing Company, Dayton, Ohio. Diaphragm pressure gauge. 1,647,342; Nov. 1.
Carter, Alick L., Kenmore, N. Y., assignor, by mesne assignments, to The Grolan Manufacturing Company, Dayton, Ohio. Diaphragm pressure gauge. 1,647,342; Nov. 1.

Carter, Allek L., Kenmore, N. Y., assignor, by mesne assignments, to The Grolan Manufacturing Company, Dayton, Onio. Liquid level gauge. 1,652,761; Dec. 13. Carter, Alva J., assignor to Carter Radio Company, Chicago, Ili. Jack. 1,620,755; Mar. 15. Carter, Alva J., assignor to Carter Radio Company, Chicago, The Carter, Alva J., assignor to Carter Radio Company, Chicago, Ili. Terminal connecter. 1,635,256; July 12. Carter, Alva J., assignor to Carter Radio Company, Chicago, Ili. Terminal connecter. 1,635,256; July 12. Carter, Alva J., assignor to Carter Radio Company, Chicago, Ili. Rheestat. 1,630,008; Nov. 22. Carter, Alva J., assignor to Carter, Thomas J., assignor.) Carter, Benjamin C., London, England. Centringal septiator. 16. Geoceci. M. G. Carter, exceptrix, Chicago, Ili. Process and apparatus for producing hexamethylenetetramine and ammonium chloride. 1,630,782; May 31.

enetetramine and ammonium chloride. 1,630,782; May 31. Carter, Carnle B., Pittsburgh, Pa., assignor to S. Karpen & Bros., Chicago, Ill. Manufacture of hexamethylene-tetramine. 1,665,707; July 12. Carter, Carnle B., Pittsburgh, Pa., assignor to S. Karpen & Bros. Chicago, Ill. Froduction of phenol-methylene resins and alcohol from methylals. 1,645,229; Oct. 11. Carter, Charles E., Pasadena, Calif. Medicine. 1,631,244; June 7.

Carter, Charles J., Kansas City, Mo. Flooring. 1,637,634;

Aug. 2.

Carter, Clarence W., assignor to Carter-Mayhew Manufacturing Company, Minneapolis, Minn. Scalper.

Lic20,439; Mar. 8.

Carter, Clarence W., assignor to Carter-Mayhew Manufacturing Company, Minneapolis, Minn. Cooling device for drinking fountains. 1,642,228; Sept. 13.

Carter, Clarence W., assignor to Carter-Mayhew Manufacturing Company, Minneapolis, Minn. Dockage tester.

Carter, Emmett F. Schenetady, N. Y., assignor to General Electric Company. Control apparatus. 1,634,979; July 5.

July 5.

July 5.

Carter, Emmett F., Schenectady, N. Y., assignor to General Electric Company, Remote-control cartier-current system. 1,635,779; July 12.

Carter, Franklin, W., Louisville, Ky. Railway-track signal. 1,635,494; Dec. 20.

16,19,402; Mar. 1.

Carter, Glenn O., New Rochelle, N. Y., assignor to The Linde Air Products Company. Welded structure and making same. 1,620,324; Mar. 1.

Carter, Herbert F., Cicero, III., assignor to Western Electric Company, and an arrange of and apparatus for wrapping strand material around a core. 1,625,983; Apr. 26.

Carter, Herbert F., Cicero, III., assignor to Western Electric Company, incorporated, New York, N. Y. Method of and apparatus for wrapping strand material around a core. 1,625,983; Apr. 26.

Carter, Herbert F., Ciero, III., assignor to Western Electric Company, incorporated, New York, N. Y. Serving machine. 1,632,849; June 21.

Peb. 8.

Levine G. Detroit, Mich. Rectal Irrigator.

Carter, Hubert, Toronto, Ontario, Canada. Device for icing cakes. 1.627,630; May 10.

Carter, James H., Oakland, Calif. Bean stringer. 1,621,698; Mar. 22.

Carter, James I. (See Hester, Stephen J., assignor.)

Carter, John J., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Making clamping rings for commutators. 1,622,179; Mar. 22.

Making clamping rings for commutators. 1,622,179; Mar. 22.

Carter, John J., Lansing, Mich., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, Manufacture of commutators. 1,638,922; June 28.

Charles, Marton, N. C. Harvester. 1,628,948; May 17.

Carter-Mayhew Manufacturing Company. (See Carter, Clarence W., assignor).

Carter, Mitchell, Sait Lake City, Utah, assignor to Thermic Generating Company. (Oil burner. 1,626,785; Carter, Mitchell, Sait Lake City, Utah, assignor to Thermic Generating Company. (See Carter, Carnie B. Carter, Myrtice G., executrix. (See Carter, Carnie B. Carter, Ostan A., et al. (See Allensworth, J. N., Keltner, and Collins, assignors, wand O. E.)

Carter, Oscar M., Houston, Tex. Veil drill. 1,617,043; Feb. 8.

Carter, Oscar M., Houston, Tex. Core barrel. 1,640,264;

Feb. 8.

Carter, Oscar M., Houston, Tex. Core barrel. 1,840,264;
Aug. 23.

Carter, Oscar M., Houston, Tex. Combination lifting and
lowering tool for drills. 1,651,322; Nov. 29.

Light of the company of the combination lifting and
lowering tool for drills. 1,651,322; Nov. 29.

Light of the company of the combination lifting and
lowering tool for drills. 1,621,322; Nov. 29.

Carter, Philip S., New Brunswick, N. J., assignor to
Radio Corporation of America. Radio transmission
system. 1,623,396; Apr. 12.

Carter Radio Company. (See Smith, Waldorf A., assignor.)

Carter Radio Company. (See Smith, Waldorf A., assignor.)

Nov. 8.

Cartlidge, Frank, Cincinnati, Ohio, assignor to Sullivan
Machinery Company. Clutch mechanism. 1,648,110;

Nov. 8.
Cartoning Machinery Corporation. (See Evans, H. L., and Hohl, assignors.)
Cartwright, Forest S., Indianapolis, Ind. Automatic gear shift for automobiles. 1,629,654; May 24.
Cartwright, Frank, Trenton, N. J., assignor to The Geo. W. Blabon Co., Philadelphia, Pa. Linoleum or similar hard-surfaced covering. Des. 71,824; Jan. 11.
Cartwright, Frank, Trenton, N. J., assignor to The Geo. W. Blabon Co., Philadelphia, Pa. Linoleum or similar hard-surfaced covering. Des. 71,825; Jan. 11.

Carty, Richard S. (See Robinson, C. B., and Carty.)
Cartzdafner, Roy E., Passaic, N. J., assignor to R. J.
Magor, Montreal, Quebec, Canada, Railway-dump-car
chute lock. 1.642,578; Sept. 13. John M., assignor.)
Caruso, Domelle, et al. (See Cobres, John M., assignor.)
Caruso, Louis, Irvington, N. J., assignor to The Lionel
Corporation, New York, N. Y. Toy electric railway.
1.614,874; Jan. 18.
Caruso, Louis, Irvington, N. J., assignor to The Lionel
Corporation. Toy electric railway. 1.626,267; Apr. 26.
Caruso, Louis, Irvington, N. J., assignor to The Lionel
Caruso, Louis, Irvington, N. J., assignor to The Lionel
Caruso, Louis, Irvington, N. J., assignor to The Lionel
1.631,245; June 7.
Caruso, Louis, Irvington, N. J., assignor to The Lionel
Caruso, Louis, Irvington, N. J., assignor to The Lionel
Caruso, Louis, Irvington, N. J., assignor to The Lionel
Caruso, Louis, Irvington, N. J., assignor to The Lionel

Caruso, Louis, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y. Toy electric railway. 1,631,245; June 7.
Caruso, Louis, Irvington, N. J., assignor to The Lionel Corporation. Toy electric railway. 1,647,172; Nov. 1.
Corporation. Toy electric railway. 1,647,172; Nov. 1.
Caruso, Romeo O., assignor of one-third to D. Mastrolia and one-third to A. F. Ferrainolo, Reading Pa. Screw driver. 1,624,530; Apr. 12.
Carusho, Leslie R. N., assignor to The Closure Service Company, Toledo, Ohio. Receptacle closure. 1,626,917; Carusho, Leslie R. N., assignor to The Closure Service Company.

Carvalho, Leslie R. N., assignor to The Closure Service Company, Toledo, Obio. Receptacle closure. 1,626,918; Carvalho, Leslie R. N., assignor to The Closure Service Company.

Carvalho, Leslie R. N., assig, Company, Toledo, Ohio. July 26. Carvalho, Leslie R. N., assig: Company, Toledo, Ohio. Sept. 13. Carvalho assignor to The Closure thio. Bottle cap. 1, 1,636,849; assignor to The Closure

1.642.010:

Company, Toledo, Ohio. Closure cap. 1,642,010; Sept. 13.
Carvalho, Louis da C., New Orleans, La. Dumping vehicle. 1,633,364; June 21.
cs. Louis da C., New Orleans, La. Dumping vehicle. 1,632,364; June 21.
Carver, George W., Tuskegee, Ala. Producing pdints and stains. 1,632,365; June 14.
Carver, Tohmas A. B., London, England. Fattern-controlled shedding mechanism. 1,633,475; June 21.
Carver, Wilfred A., Orlando, Fla. Window-sash operator and lock. 1,647,901; Nov. Fulls, assignor to The Roster of Hassacher Chemical Company, New York, N. Y. Reacting metals with gases. 1,638,471; Aug. 9.
Cary, Frank W. (See Novotny, E. E., and Cary)
Cary, George W., assignor to Goodell Manufacturing Company, Greenfield, Mass. Drill chuck. 1,620,440; Mar. 8.
Cary Manufacturing Co. (see Cary, Spencer C., assignor).

signor. Cary Manufacturing Co. (See Frech, William F., as-signor.)

Manufacturing Co. (See McChesney, John S., as-

signor.)
Signor.)
Cary Manufacturing Co. (See Ragona, Vincent, assignor.)
Cary Manufacturing Co. (See Weeks, Charles S., as-

Cary, Melbert B., assignor to Vaslamp Manufacturing Corporation, New York, N. Y. Lamp device. Re16,722;

Carporation, New York, N. Y. Lamp device.
Aug. 30.
Cary, Melbert B., assignor to Vaslamp Manufacturing
Corporation, New York, N. Y. Lamp device, 1,614,102;
Jan. 11.
Cary, Spencer C. Brooklyn, assignor to Cary Manufacdels of various kinds. 1,624,531; Apr. 12.
Cary, Spencer C., Brooklyn, assignor to Cary Manufacturing Co., Brooklyn, N. Y. Wire-working machine.
1,624,925; Apr. 19.
Cary, Spencer C., Brooklyn, assignor to Cary Manufacturing Co., Brooklyn, N. Y. Wire-working machine.
1,624,925; Apr. 19.
Cary, Spencer C., Brooklyn, assignor to Cary Manufacturing Co., Brooklyn, N. Y. Shipping package. 1,631,516;
June 7.
Sancer C., deceased, Brooklyn; A. A. Hovell, execNew York.

June 7.

Cary, Spencer C., deceased, Brooklyn; A. A. Hovell, executor, assignor to Cary Manufacturing Co., New York, J. (1998). The property of the property of the property of the property of Cary, Spencer C. New York, assignor to Cary Manufacturing Co., New York, N. Y. Sealing shipping packages, 1,652,813; Dec. 13.

Cary, Spencer C., assignor to Cary Manufacturing Co., Berooklyn, N. X. Package-binding implement. Cary, William E., and W. J. Miller, Sulphur, La.; said Miller assignor to said Cary, Steam cooker, 1,617,235; Feb. 8.

Feb. 8. Casali, Joseph, Seattle, Wash. Folding stand. 1,647,723; Nov. 1. Cascade Manufacturing Company. (See Kehoe, Michael

Lascus and Company. (See Kenoe, Michael Company.) (See Kenoe, Michael Chascade Manufacturing Company. (See Kenoe, Thomas J. and M. J., assignors.) (See Greenwald. S., and Casclo.) (Casc). Salvatore. (See Greenwald. S., and Casclo.) (Casc). Arthur F., assignor to The Wellman-Seaver Morgan Company. Cleveland, Olio. Car dumper. 1, 1927,375;

Company, Cleveland, Ohio. Car dumper. 1,627,375; May 3. Case, Arthur F., assignor to The Wellman-Scaver-Motgan Company, Cleveland, Ohio. Safety stop for traveling Case. Arthur F., assignor to The Wellman-Seaver-Morgan Company, Cleveland, Ohio. Litting car dumper. 1,642,237; Sept. 13. Case, Francis M., Cleveland Heights, assignor to The Enterprise Manufacturing Company, Akron, Ohio. Fishing reel. 1,637,437; Aug. 2.

Case, Francis M., Cleveland, assignor to The Enterprise Manufacturing Company, Akron, Ohio, Cilck mechanism for fishing reds. 1,639,629; Aug. 16.
Thomas, assignor, Machine Company. (See Dugan, Case, J. I., Threshing Machine Company, (See MacGregor, Wallace F., assignor.)
Case, J. I., Threshing Machine Company. (See Smith, Henry S., assignor.)

Jan. 18.

Class Research Laboratory Incorporated. (See Case, Theo-case Research Laboratory Incorporated.)
Case, Theodore W. Abburn, N. Y. Electrical apparatus. 1,631,055; May 31.
Case, Theodore W., Auburn, N. Y. Sound-producing apparatus. 1,647,604; Nov. 1.
Case, Theodore W., assignor to Case Research Laboratory Incorporated, Abburn, N. Y. Electrical apparatus.

Case, Theodore W. assignor to Case Research Laboratory and the comportated, Auburn, N. Y. Electrical apparatus. 1,624,341; Apr. 12.

Case, Theodore W., assignor to Case Research Laboratory Incorporated, Auburn, N. Y. Electrical apparatus. 1,622,409; Apr. 19.

Lices, Theodore W., assignor to Case Research Laboratory Incorporated, Auburn, N. Y. Electrical apparatus. 1,628,409; Apr. 19.

Case, Theodore W., assignor to Case Research Laboratory Incorporated, Auburn, N. Y. Talking-moving-picture machine. 1,638,392; Aug. 9.

Case, Theodore W., assignor to Case Research Laboratory, Inc., Auburn, N. Y. Talking-picture machine. 1,638,393; Aug. 9.

Case, Theodore W., assignor to Case Research Laboratory, Inc., Auburn, N. Y. Talking-picture apparatus. 1,647,502; Nov. 1.

Case, Theodore W., assignor to Case Research Laboratory Inc., Auburn, N. Y. Electrical apparatus. 1,647,502; Nov. 1.

Case, Theodore W., assignor to Case Research Laboratory Inc., Auburn, N. Y. Reproducing amplifier. Case, Theodore W., assignor to Case Research Laboratory Inc., Auburn, N. Y. Reproducing amplifier. Casement Hardware Co. (See Spencer, C. E., and Roberts, assignors.)

Casey, Arthur, Cusick, Wash. Cream separator. 1,613,083; Jan. 4. Casey-Hedges Co., The. (See Stimmel, Frederick C., as-

signor.)

Caey, James C., Cedar Falls, Iowa. Apparatus for treating the hair and scalp. 1,637,035; July 26, Casey, John W., assignor to Minnle E. Casey, Oklahoma City, Okla. Automatic weight opening valve. 1,633,023; June 28.

Casey, Vasco F., Minneapolis, Minn. Air-floated barge. Casey, Vasco F., Minneapolis, Minn. Air-floated barge. Casey, Vasco F., assignor to Minneapolis Dredging Co., Minneapolis, Minn. Dredging machine. 1,610,850; Mar. 8.

Casey, Ver H., Richmond, Victoria, Australia. Resilient wheel 1,630,844; Jan. 4.

wheel 1,630,844; Jan. 4.

wheel 1,630,844; Jan. 4.

wheel 1,630,864; Jan. 4.

wheel 1,630,864; Jan. 4.

casey, William P., Oshkosh, Wis. Electric handsaw. 1,651,995; Dec. 6.

Cash, A. W., Company. (See Cory, R. C., and Terry, assignors.)

signor.) W., Company. (See Terry, Charles M., as-

signor.)
ash, Alfred G., Rochester, N. Y. Surface test Indicator. 1.645.473; Oct. 11.
nsh, Frank P., Winston-Salem, N. C. Bevel and square.
1,636,623; July 19.
sshin, W. D., Co. (See Cashin, W. D., and Miller, assignors.)

signors.)

Cashin, William D., West Roxbury, and M. P. Miller, Waban, assignors to W. D. Cashin Co., Boston, Mass. Water and air relief valve. 1,644,109; Oct. 4.

Cashin, William D., West Roxbury, and M. P. Miller, Waban, assignors to W. D. Cashin Co., Boston, Mass. Packless valve. 1,648,260; Nov. 8.

Cashoty, George, New York, N. Y. Toy vehicle. 1,613,109; Packles Valve. 1,614,100; Packles Valve. 1,614,1

Jan. 4.

Casner, Thaddeus S., Plainfield, N. J., assignor to Radio Electric Clock Corporation, New York, N. Y. Com-pound-pendulum clock. 1.638,917; Aug. 16. Casparis, William A., et al. (See Harding, Joseph G., assignor.)

assignor.)
Casper, Anthony B. (See Shultz, A. B., and Casper.)
Casper. George D., New York, assignor of one-half to
W. W. Schusky, Long Island City, N. Y. Drain trap,
Re16,752; Oct. 4.
Casper, George H., Maywood, and L. F. Dillon, Melrose
Park, Ill., assignors to American Can Company, New
York, N. Y. Cas-soldering machine. 1,649,288;

York, N. Y. Can-soldering machine. 1,649,281 Nov. 15. Casper, William L., Brooklyn, assignor to Western Ele-tric Company, Incorporated, New York, N. Y. R peating coil. 1,617,372; Feb. 15.

Casper, William L., Brooklyn, N. Y., and F. E. Field, Somerville, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Magnetic coil.

Cass, Christopher P., Berkeley, Calif., and J. F. Craig, Edgewood, assignors to The Westinghouse Al Brake Company, Wilmerding, Pa. Automotive brake device. 1,619,229; Mar. 1.

Cassel, Gunnar E., assignor to Aktiebolaget Casselvexel Sangle, Mar. L. Ratchet feed mechanism. J.615,534; 2002.

Jilian S., Lund, Sweden, assignor to Aktic-compact venska Kullagerthriken. Front-wheel brake for automobiles and the like, 1,635,708; July 12 Cassel, John K., Ainsworth, Neb., File jacket, 1,624,776; Apr. 12. Casselman, Elbridge J. (See Jackson, R. P., Kent, and

1.624.776; Apr. 12.
Casselman, Bibridge J. (See Jackson, R. P., Kent, and Casselman, Bibridge J., Pittsburgh, N. Griffith and C. E. Johnson, Bennette, assignors to Window Glass Machine Company, Pittsburgh, Pa. Apparatus for flattening sheet glass. 1,641,918; Sept. 6.
Cassels, Arnold V., assignor of three-eighths to J. M. Stewart, South Brisbane, Queensland, Australia. Glareless lamp. 1,622,764; Mar. 29.
Cassels, Charles W., assignor to The N. Slater Company, 1,617,644; Feb. 8.
Cassels, Charles W., assignor to The N. Slater Company, Limited, Hamilton, Ontario, Canada. Cross-arm. 1,620,949; Mar. 15.

Limited, Hamilton, Ontario, Canada. Cross-arm. 15. Cassidy, George W., New York, N. Y. Attachment for bridge arm lamps. Des. 73,367; Aug. 30. Cassidy, Willis W., assignor to Sweet Candy Company, Saft Lake City, Utah. Candy jumping jack. 1,623,165; Apr. 5.

Cassier, Alphonse T., Long Beach, Calif. Mixing nozzle. 1,648,216; Nov. 8, Cassriel, Henry H., Conlinga, Calif. Drill bit. 1,618,982; Jan. 11. Castagnaro, Dominick. (See Chapin, P. P., and Kupec, Castagnaro, Dominick.)

Castagnaro, Dominick. (See Chapin, P. P., and Aupec, assignors).
Castau. Karl, Pforzheim, Germany. Manifolding device. 1646576; Oct. 25.
Castanien, Alfred, Columbus, Ohio. Combined table and tub. 1,651.448; Dec. 6.
Castelll. Vittorio. (See Soncini, C., and Castelli, Castille, Michel R., Opelousas, La. Display apparatus. 1,614.714; Jan. 18.
Castillo, Miguel, Mexico City, Mexico, assignor of one-half to S. W. Fisher, Chicago, Ill. Portable grinder. 1,633.88; June 28.
Castillo, Miguel, Mexico Comstock-Castie Stove. Company, Quincy, Ill. Heater. Des. 72.144; Mar. 8.
Castlenan, J. W., et al. (See Kliewer, Edward A., assignor.)

Company, Quinev, III. Heater. Des. 72,144; Mar. S. Castleman, J. W., et al. (See Kliewer, Edward A., assignor.)

Castles, Thomas R., Portland, Oreg. Eurglar alarm. 1,632,170; June 14.

Castles, Thomas R., Portland, Oreg. Eurglar alarm. 1,632,170; June 14.

Castles, Thomas R., Portland, Oreg. Eurglar alarm. 1,632,170; June 14.

Castles, C., Canada. Advertisement-mounting device. 1,613,033; Jan. 11.

Castleton, W. E. (See Dawn, Richard W., assignor, Other Fisk Rubbert Company, Chicopee Falls, Mass. Manufacture of Castricum, Martin, Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Delivering moving webs. 1,619,192; Mar. 1.

Castricum, Martin, Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cord-guiding device. 1,624,533; Apr. 12.

Castricum, Martin, Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cord-guiding device. 1,624,533; Apr. 12.

Castricum, Martin, Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cord-guiding device. 1,624,533; Apr. 12.

Castricum, Martin, Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cord-guiding device. 1,624,533; Apr. 12.

Castricum, Martin, Springfield, and E. C. Taylor, Longmandow, assignors to The Fisk Rubber Company, Chicopee Falls, Mass. Manufacture of weftless cord fabric. 1,651,806; Dec. 6.

Caswell, Dominick, Watertown, N. Y. Oil burner. Caswell, Dominick, Watertown, N. Y. Oil burner. Caswell, Robert G., See Barrard, A. E., and Caswell, Caswell, Robert G., See Barrard, A. E., and Caswell, Caswell, Control of C

Cates, James W., Coffeyville, Kans. Cake-icing machine. 1.618.035. Feb. 15. Cathelli, Jack, West Hollywood, Calif. Headlight lens. 1,620.872; Mar. 15. Catheine, Mary. Galesburg, Ill. Invalid support. 1,628.649; May 17.

Catlett, Harry, assignor of one-half to A. N. Sacre, Los Angeles, Calif. Koller arm rest. 1,628,030; May 10. Catlin, De Forest B., Boston, Mass. Diathermic apparatus for treatment of internal organs adjacent to the Catlin, Del. 1614,873 Jan. 18. Mass. Testes-treating apparatus. 1,640,479; Aug. 30. Catlin, Hoyt, Fairfield, and G. B. Thomas, assignors to The Bryant Electric Company, Bridgeport, Conn. Connecter. 1,650,166; May 24. Conn., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Casting curved and flat stereotype plates. 1,622,997; App. 12. Catlin, Joseph P. Plainfield, N. J., assignor to Wood Konney, Machinery Corporation, New York, N. Y. Casting curved and flat stereotype plates. 1,622,997; App. 12. Catlin, Vinder Machinery Corporation, New York, N. Y. Evening. 1,632,468; Dec. 2. Catlin, Windel, McKulle, assignor of one-half to C. A. Weaver, Hillsboro, Ind. Animal trap. 1,630,607; May 31.

Weaver, Hilsboro, Ind. Animal trap. 1,630,637; May 31.

Catoldo, Glovanni R., Boston, Mass. Vegetable and fruit crusher. 1,638,618; Aug. 9.

Caton, Charles H., Leeds, England.

Ing for motor vehicles. 1,618,054; Feb. 15.

Caton, Charles H., Leeds, England.

Caton, Frederick C., assignor of one-half to P. Catron, Memphis, Tenn. Liquid filter. 1,636,285; July 19.

Catron, Nettle P. (See Catron, Frederick O., assignor.)

Catron, John J., assignor to Catron Manufacturing Company, Honhamm, Tex. Fluid dispenser. 1,613,934; John J., assignor to Catron Manufacturing Company.

Jan. 11.
Catron, John J., assignor to Catron Manufacturing Company, Bonbam, Tex. Level indicating and controlling means for liquid dispensers. 1,613,935; Jan. 11.
Catron, John J., assignor to Catron Manufacturing Company, Bonbam, Tex. Liquid measuring and dispensing means. 1,613,936; Jan. 11.
Action of the Catron of the Catron, John J., Catron of Catron of Catron, John J., Catron of Catron o

Catron, John J., assignor to Catron Administration, company, Bonham, Tex. Liquid measuring and dispensing means. 1,613,936; Jan. 11.

Catron Manufacturing Company. (See Catron, John J., Catron Manufacturing Company.) (See Catron, John J., Catron Manufacturing Company.) (See Catron, John J., Cattaneo, Giustino, Milan, Italy. Steering mechanism. 1,617,666; Feb. 15.

Cattley, Ernest M., New York, N. Y. Indicator for leaking air, gases, and the like. 1,621,492; Mar. 22.

Catuccl., Piny., Newark, N. J. Click check for reels. 1,637,434; Aug. 2.

Catucle, Joseph J., Richmond, Va. Direction signal. 1,613 019; Jan. 4.

Caudle, Joseph J., Richmond, Va. Direction signal. 1,613 019; Jan. 4.

Caudle, Thomas W., Dayton, Tenn. Dry-pipe valve. 1,624,315; Apr. 12.

Ranghery Company, Parkenning, Pa. Manufacture of steel Sheets. 1,625,524; Apr. 19.

Caughey, Edward G., Sewickley, assignor to Edgewater Steel Company. Pittsburgh, Pa. Rendering iron and steel nonoxidizable and articles produced thereby. 1,617,616; Feb. 15.

Caulle, L.D., Company, The. (See Poetachke, Paul, as-Caulle, L.D., Company, Chicago, Ill. Operating mechanism. Cautley, John R., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Operating mechanism. Grutley, John R., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,628,838; May 24.

Cautley, John R., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,628,838; May 10.

Cautley, John R., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,628,838; May 24.

Brake Company, Chicago, III. Brake shoe. 1,628,388; May 10.
Cautley, John R. South Bend, Ind., assignor to Bendis, Brake Company, Chicago, III. Brake shoe. 1,639,838; Aug. 23.
Levis F., Waterbury, Conn. Metal rairoad tie. 1,642,30; Dec. 27.
Cavailaro, Abramo, Detroit, Mich. Desk set. Des. 74,096; Dec. 20.
Cavailaro, Abramo, Detroit, Mich. Lamp. Des. 74,097; Dec. 20.
Cavailit, Tito L., Benicia, Calif. Pasteurizer. 1,623,997; Apr. 5.
Lohn F. assignor to Anca. Manufacturing.

Apr. 5. Cavanagh, John

Apr. 5.

Cavanagh, John F., assignor to Apco Manufacturing Company, Providence, R. I. Steering-gear stabilizer. 1,636,685; July 19.

Company, Providence, R. I. Steering stabilizer for automobiles. 1,653,944; Dec. 27.

Cavanaugh, Florence S., New York, N. Y. Bottle. Des. 73,568; Aug. 30.

Cavanaugh, William M., New York, N. Y. Bettler, Cave. Henry, assignor to The Fuller Brush Company.

1.001.300; June 7.
we, Henry, assignor to The Fuller Brush Company,
Hartford, Conn. Brush. 1.635.970; July 12.
we, Henry, assignor to The Fuller Brush Company,
Hartford, Conn. Broom. 1.635.971; July 12.

signor.)

Cave, Henry, Hartford, Conn., assignor, by mesne assignments, to General Railway Signal Company. Dishwashing machine. 1,646,052; Oct. 18.

Cavett, John J., Woodlawn, Pa., assignor to The Koppers Company. Sealed valve. Rei6,604; Apr. 26.
Cavictel, Roland, Quincy, Mass. Surfacing machine. 1,653,160 Nov. 20

Li650,600 Nov. 20

Li650,600 Nov. 20

Lift See Van Sickle, D. L., and Cavin.) Cavins, Bessie, et al. (See Collins, Alf C., assignor; Cavins, Bessie, et al. (See Collins, Alf C., assignor; Cavins, Cora, Ardmore, Okla. Incubator. 1,644,634; Oct. 4. Cavin, Walter H. Gee Van Steats.

Cavins, Bessie, et al. (See Collins, Alf C., assignor.)

Cavine, Cora, Ardmore, Okla. Incubator. 1,644,634;

Cawood, Richard L., East Liverpool, Ohio. Pulverizer.

1,643,874; Sept. 27.

Cawood, Richard L., assignor to The Patterson Foundry

& Machine Company, East Liverpool, Ohio. Discharge

valve. 1,652,929; Dec. 13.

Cawthon, Bender A., Jacksonville, Fla. Stereopticon for

molion-picture projectors. 1,643,541; Sept. 27.

et al. Cawthon, Bender A., Jacksonville, Fla. Stereopticon for

molion-picture projectors. 1,643,541; Sept. 27.

et al. Stereopticon for

molion-picture projectors. 1,643,541; Sept. 27.

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molion-picture projectors. 1,643,541; Sept. 27.

et al. Stereopticon for

molion-picture projectors. 1,643,541; Sept. 27.

et al. Stereopticon for

molion-picture projectors. 1,643,641; Sept. 27.

et al. Stereopticon for

molion-picture projectors. 1,643,641; Sept. 27.

et al. Stereopticon for

molion-picture projectors. 1,643,641; Sept. 27.

et al. Stereopticon for

molion-picture projectors. 1,643,641; Sept. 27.

et al. Stereopticon for

molion-picture projectors. 1,644,641; Al. Stereopticon for

molion-picture projectors. 1,644,641; Al. Stereopticon Cease anne, care assignor. Cech, William, New York, N. Y. Sandwich-display fix-ture. 1,030,469; May 31. Cedar Creek Oil & Gas Co. (See McDonald, Harry W., Cedar Creer OI. e. Oss. Sci. Assignors to Crompassignor. Cederlund, Albert, and R. G. Turner, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Wert detector in loom transferrer. 1,647,72±; Nov. 1. 1,649,850; Nov. 22. 1.094.5.097, Vov. 22.
Celanese Corporation of America. (See Chatham, Robert H., assignor.)
Celanese Corporation of America. (See Dickie, W. A., and Rooney, assignors.)
Celanese Corporation of America. (See Dreyfus, Camille, assignor.)
Celanese Corporation of America. (See Ellis, George H., Celanese Corporation of America. (See Small, F. T., and Dickie, assignors.)
Celentano, Frank. (See Davis, W. H. H., and Celentano.)
Celite Company, The. (See Derleth, Charles P., assignor.)
Celite Company, The. (See Endres; H. A., and Caldwell, Celite Company, The. (See Thatcher, Harry S., assignor.)
Celite Company, The. (See Wig, Rudolph J., assignor.)
Celite Company, The. (See Wig, Rudolph J., assignor.)
Cellino, Attillo, Buenos Aires, Argentina, assignor to
Central Battery Corporation. Preparing positive electrodes of storage batteries. 1,640.922; Aug. 30.
Cellocilk Company. (See Furness, William H., assignor.)
Celluloid Company, The. (See Lindsay, William G., assignor.) signor.) Cement-Gun Company. (See Dewey, Clarence L., assignor.) Cement Gun Contracting Company. (See Crom, John M., assignor.) Cement Gun Contracting Company. (See Leriche, Willis, Cement Gun Contracting Company. (See Leriche, Wills, assignor; Assignor; Cement, Samuel M., Webster Groves, Mo., assignor to Budd Wheel Company, Detroit, Mich. Wire and disk wheel split-ring tool. 1.650.325; Nov. 22.
Centeno V., Melchor, Caracas, Venezuela. Photoelectric cell. 1.637,293; July 28.
Centilivere, John L., Larmie, Wyo. Movable feature figure toy. 1.632,272; June 14.
Une toy. 1.632,272; June 14.
Centra Handels-& Industrie A.-G. (See Michel, Hermann, assignor.)
Central Advertising Specialty Company. (See Sunderlin, Frank R., assignor.) Central Advertising Specialty Company. (See Sunderlin, Frank R., assignor.)
Central Alloy Steel Corporation. (See Auer, E. W., and Central Alloy Steel Corporation. (See Farnsworth, Walter M., assignor.)
Central Alloy Steel Corporation. (See Orr, William S., assignor.)
(See Schlafly, Julius H., Alloy Steel Corporation. (See Smith, Earle C., Central Battery Corporation. (See Cellino, Attillo, assignor.)
Centrul Brass Manufacturing Company, The. (See Eckhouse, Edgar A., assignor.)
Central Brass Manufacturing Company, The. (See Mortimer, John N., assignor.) timer, John N., assignor.) Central Commercial Company. (See Stone, Frederick W., assignor.) Central Door and Lumber Company. (See De Penning, John C., assignor.) Central Electric Tool Company. (See Weyandt, Carl S., assignor.) Central Foundry Company. (See Brechtbill, Guy H., as-

Central Iron & Steel Company, (See Irons, Robert H., Central Machine Company. (See Thomas, William A., assignor.)
Central Scientific Company. (See Klopsteg, Paul E., assignor.) Central Scientific Company. (See Klopsteg, P. E., and Sachse, assignors.) Central Scientific Company. (See Klopsteg, P. E., and Stannard, assignors.) Central Scientific Company. (See Sachse, Herman P., Central Scientific Company, Get al. (See Speer, assignor.)
Central Trust Company of Illinois et al. (See Speer, Alexander S., assignor.)
Central Trust Company of Illinois et al., trustees. (See Speer, Alexander S., assignor.)
Central Tube Company. (See Laughlin, Alexander, jr., contral Tube Company. (See McMillen, Albert K., as-asignor.) asignor.) Centre Lighting Fixture Mfg. Co., The. (See Novin, Joseph, assignor.) Centrinx Corporation. (See Hawley, Charles G., as-Centrifix Corporation. (See Schutz, Joseph M., assignor.) Centrifugal Castings Limited. (See Hurst, J. E., and Centringal Castings Limited. (See Hürst, J. E., and Ball, assignors.)
Cerbo. Ferdinando, Providence, R. I. Urethoscope. 1,624.716; Apr. 12.
Cercghino, Joseph A., assignor to National Labeling Machine Company, Los Angeles, Calif. Method of and apparatus for pasting labels on noncircular cans and containers. 1,633,495; Dec. 20.
Cerny, Frank, Berwyn, Ill. Steel railing. 1,633,659; June 28.
Certain-teed Products Corporation. (See Miller, John E., assignor.) Certain-teed Products Corporation: One Amer.
E., assignor.).
Cervelli, Blanche, San Francisco, Callf. Corset.
1,623,031; Mar. 29.
Corporation, New York, N. Y. Apparatus for absorbing radium emanations. 1,614,825; Jan. 18.
Cervi, Armando, assignor to The Radium Emanation Corporation, New York, N. Y. Process of and apparatus for dissolving radium emanation in fluids. 1,655,113; July 5. for dissolving ranton control of the asse, W. M., van assignor, Mich. 1,637,805; Aug. 2. Chace Valve Company. Bimetallic element. 1,642,485; Chace Valve Company. (See Boehmer, Norris, as-Chace, V Sept. 13. Chadeloid Chemical Company. (See Boehmer, Norris, assigner.) Chadeloid Chemical Company. (See Ellis, Carleton, assignor.)
Chadeloid Chemical Company. (See Enell, Otto E., assignor.)
Chadeloid Chemical Company. (See Swift, Owen P., as-Signor.)
Chadeloid Chemical Company. (See Swift, Owen P., assignor.)
Chadeloid, Charles, Brocklyn, N. Y. Tone-sustaining mechadwin, 1623-282; Apr. 5.
Chadwick, Charles, Brocklyn, N. Y. Tone-sustaining mechadwin, 1623-282; Apr. 5.
Chadwick, Eric H., Jenkintown, assignor to Armstrong Cork Company, Lancaster, Pa. Linoleum or similar hard-surfaced floor covering. Des. 71,902; Jan. 25.
Chadwick, Eric H., Jenkintown, assignor to Armstrong Cork Company, Lancaster, Pa. Bindeum or similar bard-surfaced floor covering. Des. 71,903; Jan. 25.
Chadwick, Eric H., Jenkintown, assignor to Armstrong Cork Company, Lancaster, Pa. Linoleum or similar bard-surfaced floor covering. Des. 71,904; Jan. 25.
Chadwick, Eric H., Jenkintown, assignor to Armstrong Cork Company, Lancaster, Pa. Linoleum or similar bard-surfaced floor covering. Des. 71,904; Jan. 25.
Chadwick, Eric H., Jenkintown, assignor to Armstrong Cork Company, Lancaster, Pa. Linoleum or similar bard-surfaced floor covering. Des. 71,904; Jan. 25.
Chadwick, Farro W., San Francisco, Calif. Vehicle direction indicator. 1,630-608; May 31.
Chadwick, Francis C., assignor to Beaver Machine and Tool Company, Newark, N. J. Socket terminal. 1,634-173; June 28.
Chadwick, Lee S., Shaker Heights Village, assignor to Perfection Stove Company, Civeland, Ohio. On burner. 1,613.020; Jan. 4.
Chadwick, Lee S., Shaker Heights Village, assignor to Perfection Stove Company, Civeland, Ohio. Sheet-Chadwick, Lee S., Shaker Heights Village, assignor to Perfection Stove Company, Civeland, Ohio. Thermostatic control for oil burners. 1,622-569; May 24.
Chadwick, Thomas H., Pittsburgh, Pa.
Shiffing tractor blitch. 1,643-542; Sept. 27.
Chafetz, Benjamin, New York, N. Y. Medailion or similar article. Des. 71,826; Jan. 11. Chaffee, Edward F., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y. Sash holder or latch. 1,614,917; Jan. 18. Chaffee, Emory L. (See Hammond, J. H., jr., and

Chaffee, Emory L., Belmont, Mass. Modulating signaling currents. 1,625,296; Apr. 19, 100. Chaffee, Emory L., Belmont, assignor to J. H. Hammond, Jr. Gloucette, Mass. Detector and controlling the Chaffee, Emory L., Belmont, assignor to J. H. Hammond, Jr., Gloucester, Mass. System of radiocommunication. 1,642,633; Sept. 13. Chaffee, Emory L., Belmont, assignor to J. H. Hammond, Jr., Gloucester, Mass. Vacuum tubs. 1,649,810; Jr. 10,649,810; Jr.

ffin, Howard A., and F. C. Holmes, assignors to Enoz hemical Company, Chicago, Ill. Sprayer. 1,632,218;

Une 14.
Chain Beit Company. (See Shafer, Samuel, jr., assignor.)
Chain Beit Company. (See Viall, George K., assignor.)
Chain Beit Company. (See Welser, George B., jr., as-

Chain Saw Corporation. (See Bens, Samuel J., assignor.)
Chain Saw Corporation. (See Bens, Samuel J., assignor.)
Chaifant, Frank, Fort Wayne, Ind. Post for couches.
Chaifant, Frank, Fort Wayne, Ind. Post for couches.
Chaifant, Albert L., Trenton, N. J., assignor to Mergenthaler Linotype Company, Slug-casting machine.
1,649,811; Nov. 22
Chaiker, Albert R. (See Lower, N. M., and Chaiker.)
Chailenge Company. (See Lund, John A., assignor.)
Chailenge Machinery Company, The. (See Barney, Freeman, assignor.)
Chailenge Machinery Company. (See Ige, Igma, W. and Chaifang, Machinery Company, The.) man, assignor.) Challenge Machinery Company. (See Lee, James W., as-

Challenge Machinery Company. (See Lee, James W., assignor.).
Challis, Philip, Victoria, Londou, England. Spark plug.
1,619,653; Mar. 1.
Chalmers, Albert H., Fairfield, Ala. Coke-quenching can
1,645,587; Oct. 18.
Chalmers, Charles H., Minneapolis, Minn. Pressure-controlled fluid-feeding apparatus. 1,630,609; May 31.
Chalmers, Charles H., Minneapolis, Minn. Liquid-Tuel
heating apparatus. 1,630,609; July 19.
Chalmers, Harry B., New York, N. Y. Box. 1,618,325;
Feb. 22.

Chalmers, John G. (See Bruhn, John H., assignor.)
Chalmers, John G. (See Bruhn, John H., assignor.)
Chalmers, John G. (See Bruhn, John H., assignor.)
Chalmeriain, Arthur E. C., assignor to W. J. Denker,
London, England. Detachable heelpiece for footwear.
1.647,856; Nov. 1.
Chamberlain, Floyd L. Waterloo, Iowa. Wringer-frame
construction. 1,638,241; Aug. 9.
Lowa. Supporting deconstruction. 1,638,242; Aug. 9.
Chamberlain-Haber Chemical Company, The. (See Haber,
Henry J., assignor.)
Chamberlain, John J., assignor to The United States
Stoneware Company, Akron, Ohlo. Molding press.
Stoneware Company, Akron, Ohlo. Molding press.
Chamberlain, Leroy, Wichita Fells, Tex. Weight elevator
for pulling machines. 1,626,114; Apr. 26.
Chamberlain, Paul A., assignor to Mohawk Corporation
of Illinois, Chicago, Ill. Radio condenser. 1,635,459;
July 12.
Chamberlain, Paul A., assignor to Mohawk Corporation
Illinois Chicago, Ill. Radio condenser. 1,635,459;
July 12.
Chamberlain, Paul A., assignor to Mohawk Corporation
Illinois Chicago, Ill. Radio condenser. 1,635,459;
Sept. 6.

Chamberlain, W. Allen, et al. (See Bristow, Bruce A.,

Chamberlain, W. Allen, et al. (See Bristow, Bruce A., assignor, Wilbur L., Merlden, Conn. Incubate 1.613.342; Jan. 4.
Chamberlain, Benjamin D., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-film spool. 1.648,539; Nov. 8.
Chamberlin, Benjamin D., assignor to Eastman Kodak Company, Rochester, N. X. Photographic-printing machine processes and the company of the c

Chambers, Charles I., Seattle, Wash. Pump. 1,635,148;

July 5.
Chambers, David F., assignor to The Bearings Company of America, Lancaster, Pa. Ball retainer for ball bearings, 1,627,232; May 3.
Chambers, Gurth F., London, Ontarlo, Canada, assignor to Canada Biscuit Company, Limited. Biscuit, Des. 73,067; July 19.
Chambers, James, Eavo, Ga. Tongs. 1,631,916; June 7.
Chambers, James, Eavo, Ga. Tongs. 1,631,916; June 7.
Chambers, Laurence B., Eau Claire, Wis. Refrigerator case for window display. 1,643,372; Sept. 27.
Chambers, Eaurence B., Eau Claire, Wis. Refrigerator case for window display. 1,643,372; Sept. 27.
Chambers, Perry O., assignor to The Akron Standard Mold Company, Akron, Ohlo. Tire. Des. 71,906; Jan. 25.

Jan. 25. Chambers, Ralph W. (See Greenway, M. E., and Cham-

Chambers, William L., Ogden, Utah. Shock absorber, 1,651,373; Dec. 6. Chambless, Ersyl F., Chicago, Ill. Hat cover. 1,632,786; June 21.

Champeau, Lawrence X., New York, N. Y., assignor, by mesne assignments, to Kirby Incorporated. Device for artificial illumination. 1,618,035; Feb. 15.
Champeau, Lawrence X., New York, N. Y., assignor, by mesne assignments, to Kirby Incorporated. Lighting apparatus. 1,625,547; Dec. 18.
Spark Plug Company, Filint, Mich. Spark plug. 1,619,969; Mar. 8.
Champion, Albert, assignor to A C Spark Plug Company, Filint, Mich. Terminal connecter for spark plugs. 1,631,191; June 7.
Champion, Albert, assignor to A C Spark Plug Company, Filint, Mich. Terminal connecter for spark plugs. 1,631,191; June 7.
Champion, Albert, assignor to A C Spark Plug Company, Filint, Mich. Terminal connecter for spark plugs. Champion, Albert, assignor, berr J., et al. (See Turver, William H., assignor,)

Champion Auto Equipment Company. (See Larson, Jonas

Champion Auto Equipment Company. (See Larson, Jonas E., assignotal Paper Company, The. (See Reedy, Champion Conted Paper Company, The. (See Reedy, J. H., and Cape, assignors.)
Champion John W., Corsicana, Tex. Go-around tongs for drilling machines. 1,635,031; July 5.
Champion, Manufacturing Company. (See Dunbaugh, Champion Preumatic Machinery Co. J. See Rayfield, Fred J. assignor.)

J. assignor.)
Champion Porcelain Company.
(See Biddle, Frank H.,
Champion Porcelain Company.
(See Riddle, Frank H.,

Champion Porcelain Company. (See Riddle, Flank I., assignor.)
Champion Spark Plug Company. (See Rohde, Otto C., assignor.)
Champin Franklin J., Daiton, Mass., assignor to General Systems of electric distribution.
1,625,431 and 1, Daiton, Mass., assignor to General Electric Company. Systems of electric distribution.
1,651,669 ; Dec. 6.
Champing, Hubert H., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Explosive. Fowder Company, Wilmington, Del. Explosive.
1,651,650,181 Nov. 22.
Chame Brothers and Co. (See Gell, P. V. W., Gould.

Electric Company. System of electric distribution. 1,651,869; Dec. 6.
Champney, Hubert H., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Explosive. 1,650,186; Nov. 22.
Chance Brothers and Co. (See Gell, P. V. W., Gould, Chance Charles E., Annapolis, Md. Boat form. 1,626,509; Apr. 26.
Chance, Thomas M., Philadelphia, Pa. Method and apparatus for separating materials of different specific gravities. Rel6,674; July 12.
Chance, Thomas M., Philadelphia, Pa. Method and apparatus for agitating fluid-separating mediums Chancey, William H., assignor of one-half to W. H. Roberson, Grand Saline, Tex. Plow attachment. 1,635,606; July 12.
Chandler, A. R. (See Osborne, William L., assignor.) Chandler, Charles E., Philadelphia, Pa. Evaporating tank. 1,613,310; Ján. 4.
Chandler Charles E., Philadelphia, Pa. Evaporating tank. 1,613,310; Ján. 4.
Chandler Charles E., Philadelphia, Pa. Evaporating tank. 1,613,310; Ján. 4.
Chandler Charles E., Philadelphia, Pa. Evaporating tank. 1,613,310; Ján. 4.
Chandler, Daniel L., Boston, Mass. Puzzle. 1,637,602; Changler, Daniel L., Boston, Mass., assignor, by mesne assignor.

Chandler, Daniel L., Boston, Mass. Puzzie. 1,051,002;
Ang.
Chandler, Daniel L., Boston, Mass., assignor, by mesne assignments, to Vend Ads Corp. Fraud-preventing device.
1,619,654; Mar. 1.
Chandler, Daniel L., Boston, Mass., assignor to Vend Ads Co., Inc., Worcester, Mass. Fraud-preventing device for Chandler, Daniel L., Worcester, assignor; by mesne assignments, to W. H. Whitcomb, Newton, Mass. Coincontrolled and change-making turnstile apparatus.
1,625,242; Apr. 19.
Chandler, Daniel L., Worcester, assignor, by mesne assignment of the Chandler, Daniel L., Worcester, assignor, by mesne assignment of the Chandler, Daniel L., Worcester, assignor, by mesne assignment of the Chandler, Daniel L., Worcester, assignor, by mesne assignment of the Chandler, Daniel L., Worcester, assignor, by mesne assignment of the Chandler, Daniel L., Worcester, assignor, by mesne assignment of the Chandler, Daniel R., Worcester, assignor, by mesne assignment of the Chandler, Daniel R., Worcester, assignor, by mesne assignment of the Chandler, Daniel R., Worcester, assignor, by mesne assignment of the Chandler, Daniel R., Worcester, assignor, by mesne assignor, by mesne assignment of the Chandler, Newton, Mass. Chandler, Edward F., Brooklyn, N. Y. Fuel for auto-

May 24.

Chandler, Edward E., Brooklyn, N. Y. Fuel for automotors, 1,622,572; Mar. 29.

Chandler, Edward F., Brooklyn, N. Y. Remote-control apparatus, 1,654,238; Dec. 27.

Chandler, Edward M. S., Taunton, Mass. Storing drying oils, 1,631,999; June 14.

Chandler, Edwin M. S., Taunton, Mass. Storing drying oils, 1,643,198; Sept. 20.

Chandler, Elbert E., Los Angeles, Calif. Cotton stapling, 1,643,198; Sept. 20.

Chandler, Elbert E., Los Angeles, Calif. Measuring the strength of fibers, 1,643,338; Sept. 27.

Chandler, Harry A., Sloux City, Iowa. Convertible passenger vehicle and casket coach. 1,627,833; May 10.

Chandler, Harry A., Sloux City, Iowa. Convertible passenger vehicle and casket coach. 1,627,833; May 10.

Chandler, Homer F., assignor to The Ohlo Brass Company, Mansfield, Ohlo. Conductor support. 1,623,658; Apr. 5.

pany, M Apr. 5.

Chandler, Homer P., assignor to The Ohio Brass Company, Mansfield, Ohio. Connecting device. 1,631,719; June 7.
Chandler, Homer P., assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley guard. 1,652,425; Fec. 13.

Chandler, Milton E. (See Mock, F. C., Gustafson, and Chandler).

Chandler, Moron E., assignor to Stromberg Motor Devices Chandler, Maron H. Puel control. 1,023,168, Apr. 5.

Chandler and Price Company, The. (See Frackelton, R. J., and Sixt, assignors.)

Chandler & Price Company, The. (See McGeorge, Herbert, assignor).

Chandler & Price Company, The. (See Root, Charles F., assignor).

Chandler & Frice Company, The. (See Roby, Charles F., Chandler & Price Company, The. (See Tyler, Raiph S., assignor.) Chandler, Thomas H., Long Beach, and W. H. Stigall, Taft, Calif. Gas, oil, and sand separator. 1,649,570; Nov. 15.

Chaney, Newcomb K. (See Heise, G. W., Thompson, and Chaney.) Channing. Alfred W., Inc. (See Alderice, Walter, assignor.

Channing. Alfred W., Inc. (See Alderice, Walter, assignor.)
Chant, John, and E. P. Ryan, Filirstowe, England.
Landard collar-inishing moditie. [4817,896; Feb. 15.
Landard collar-inishing modities. [4817,896; Feb. 15.
Landard collar-inishing modities. [4817,896; Feb. 15.
Landard Carlon, P. C. Auxiliary sin and Chapin. Alfred V. San Antonio, Tex. Auxiliary sin and Chapin. Alfred V. San Antonio, Tex. Auxiliary sin and Chapin. [481, 282, 283].
Chapin. Franklin G., East St. Louis, Ill. Door-locking mechanism. L619,596; Mar. I.
Chapin. Franklin G., et al., executors. (See Chapin. Chapin. Philip P., and W. J. Kupec, assignors of one-third to D. Castagnaro, New York, N. Y. Automatic egg bolier. 1,623,093; Apr. 5.
Chapin. Skelton Corporation. (See Baker, Frank E., assignors).

Chapins Selton Corporation. (See Baker, Frank E., as-Chapins Selton Corporation. (See Baker, F. E., and Taylor, assignors.)
Chaplin, Merle P., White Plains, assignor to Western Electric Company, Incorporated, New York, N. Y. Printing telegraphy, 1,613,937; Jan. 11.
Chaplin, Merle P., White Plains, assignor to Western Stepping mechanism. 1,636,170; July 19.
Chaplin, Merle P., White Plains, assignor to Western Electric Company, Incorporated, New York, N. Y. Steeping mechanism. 1,636,388; Dec. 27.
Chaplin, Waiter L., Syracuse, assignor to The Smith-Lee Company, Ondria, N. Y. Bottle cap, 1,637,470; Aug. 2.
Chaplin, Maiter L., Syracuse, assignor to Gook, Eorgann, Albert E., Willington, and C. R. Cook, Eorgann, Albert E., Willington, and C. R. Cook, Eorgann, Prince P., Chapman, Pyron V., et al. (See Owen, John H., assignor.)

Chapman, Eyron V., et al. (See Owen, John H., as-Chapman, Charles E., assignor of one-half to J. Good-fellow, Fort Edward, N. Y. Apparatus for burning fuel oils, 1,629,774; May 24.
Chapman, Charles E., Fort Edward, assignor, by mesne assignments, of one-half to R. C. Carter and G. S. Jamison, Giens Falls, N. Y. Welding-torch burner. Chapman, Charles E., Fort Edward, assignor, by mesne assignments of one-half to R. C. Carter and G. S. Jamison, Glens Falls, N. Y. Closure for clean-out openings, 1,636,125; July 19.
Chapman, Lories H., Scotia, N. Y., assignor to General Electric Company. Electromagnetic time-element de-Chapman Electric Company of Portland, Maine. (See Chapman, William H., assignor.)
Chapman, Frank C., Modesto, Calif. Briter, 1,645,783; Oct. 18.

Oct. 18.
Chapman, Frank D., Berlin, Wis., assignor of one-half to Electric Household Utilities Corporation, Chicago, Ill. Ironing machine. Rel.6347; June 7.
Chapman Frank D., Berlin, Wis. Continuous cooker. 1.646.577; Oct. 25.
Chapman, Fred H., Pepperell, Mass., assignor to Acme Ball Bearing Spindle Company, Franklin, N. H. Self-oiling ball-bearing spindle. 1,638,394; Aug. 9.
Chapman, Fred H., Pepperell, Mass., assignor to Acme Ball Bearing Spindle Company, Franklin, N. H. Spindle and base. 1,642.466; Sept. 1.
Chapman, George, Arlington, N. J. Coln lock. 1,653,150; Dec. 20.

Dec. 20.
Chapman, George A. (See Andersen, F. C., Madson, and Chapman, John A., et al., trustces. (See Sommer, William H., assignor.)
Chapman, John W., and J. J. Melley, Parsons. Kans.
Bearling for locomotive trucks and the like. 1,636,490;
July 19.

July 19.
Chapman, Joseph R., Rapid City, S., Dak, Composition for Covering stains on plaster walls. 1,651,996; Dec. 6.
Chapman, Lionel J. (See Tucker, C. J., and Chapman, Lyman B., assignor to Scovill Manufacturing Company, Waterbury, Conn. Double-pin stud fastener. 1,649,767; Nov. 15.
Chapman, Nathan E., assignor to Illuminating Products Co., Chicago, Ill. Electric-light fixture. Des. 73,897; Nov. 22.

Chapman, Nathan E., assignor to Illuminating Products Co., Chicago, Ill. Electric-light fixture. Des. 73,898;

Chapman-Stein Furnace Co., The. (See Culbertson, Al-

Nov. 22.

Chapman-Stein Furnace Co., The. (See Culbertson, Albelt L., assignor.)

Chapman-Stein J., Schenectndy, N. Y., assignor to Genderful J., Schenectndy, N. Y., assignor to Genderful Dietric Company. Electric welding. 1,640,437; Aug. 30.

Chapman, Verni J., Schenectndy, N. Y., assignor to General Electric Company. Electric furnace. 1,645,091; Oct. 11.

Chapman, William H., assignor to Chapman Electric Neutralizer Company of Portland, Maine, Portland, Me. 1,655,599; Dec. 20.

Chapman, William H., Montclair, N. J., assignor to General Motors Corporation. Antifriction bearing. 1,651,807; Dec. 6.

Chapman, William H. (See Ayers, J. G., Chapman, and Berlowitz.)

Chapman, William H. (See Griswold, F. C., and Chapman, William H., Vernar J., Leon Mountair, Mich. Safety, belt.

Chapman, William H. (See Griswold, F. C., and Chapman, William H. (See Griswold, F. C., and Chapman, William H. (See Griswold, F. C., and Chapman, Chappel, Vernon P., Iron Mountain, Mich. Safety belt. 1,630,459; July 19.
Chappel, Ebert M., assignor to Hartsville Manufacturing Company, Hartsville, S. C. Plow stock. 1,631,008; Chappell, Fred E. (See Axhelm, C. M., and Chappell, Chappell, Marvin L., R. F., Davis, and M. M. More, El Segundo, assignor, by mesne assignments, to Contact Filtration Company, San Francisco, Calif. Clarifying and decolorizing agent and making the same. 1,642,871; Sept. 20.
Charles C., New York, N. Y. Gas burner. 1,220,071; Mar. 8.
Charaway, Frederick, assignor of one-half to G. W. Hartzell. Plqua, Ohio. Propeller ventilating motor. 1,646,578; Oct. 25.
Charles, Carl L., assignor to Boyden Steel Corporation, Baitimore, Md. Railway-car truck. 1,621,493; Mar. 22.
Charles, Carl L., assignor, by mesne suggestives, Statismore, Md. Railway-car truck. 1,632,147; June 14.
Charles, George M., Washington, P. C. Detachable buckle. 1,648,755; Nov. 8.
Charles, Henry L. (See Jacquemin, Eugene, assignor.)
Charleston, Máce E., Vancouver, British Columbia, Canada. Photograph washer. 1,650,009; Nov. 22.
Interest E. (See Mackay, G. M. J., and Charlton.)

Charlton, Ernest E., Schenectady, N. Y., assignor to General Electric Company. Electric-discharge device. 1,648,293; Nov., 8. Charlwood, Knowles S., Baldwin, Miss. Railway til. 1,618,056; Feb. 15. Charpentier, Paul. assignor to Forges & Ateliers de Con-structions Electriques de Jeumon, Societe Anonyme, Paris, France. Electrical control system. 1,624,155; Charter James A. Chicago. III. Lykanal combustics.

Apr. 12. Charter, James A., Chicago, Ill. Internal-combustion engine. 1,649,509; Nov. 15. Charter, James A., Chicago, Ill. Metal wheel. 1,618,813;

Charter, James A., Chicago, Ill. Constant-compression internal-combustion engine. 1,627,727; May 10. Charter Oak Stove & Range Company. (See Dana, Leslie, assignor.)

assignor.)

Charter, Thomas E., Cedar Rapids, Iowa. Hose-repair claup. 1,619,287; Mar. I.

Chase, Charles J., Philadelphia, Pa. Sanitary milk bottle and cap. 1,620,997; Mar. 15.

Chase. Cyde H. (See Nichols, Horace E., assignor.)

Chase, Companies. (See Kener, Nicholas C., assignor.)

Chase Companies. (See Recker, Adolph C., assignor.)

Chase Companies. Inc. (See Baker, Thomas, assignor.)

Chase Companies. The. (See Wellington, Arthur

Chase Companies Inc., The. (See Wellington, Arthur W., assignor.)
Chase, Earl G., Smethport. Pa. bubs. 1,625,591; Apr. 19. Pa. Mask for electric-light bubs. 1,625,591; Apr. 19. Pa. Mask for electric-light Chase, Earle M., assignor to Chocolate Machinery Company, Inc., Springfield, Mass. Rotary pump. 1,626,5101; Apr. 26.
Chase, Elroy A., Northfield, Vt. Sludging wheel. 1,618,057; Peb. 15.
Chase, Elroy A., Northfield, Vt. Buffing wheel. 1,622,942; Mar. 22 Phys. A. Northfield, Vt. Childing, wheel.

Mar. 29.
Chase. Elroy A., Northfield, Vt. Grinding wheel. 1.635.607; July 12.
Chase. Elroy A., Northfield, Vt. Producing a polished surface on granite block. 1.637.138; July 26.
Chase. Engenranite block. 1.637.138; July 26.
Chase. Sugar and S. 469.100.7 Ta.
Hadring apparatus for Chase. Sherwood M., assignori.
Chase. Hamilton C., assignor of one-half to T. Weber, Los Angeles, Calif. Vehicle brake. 1.631.470; June 7.
Chase. Herbert. Forest Hills, N. Y. Toy building.
Chase. Shervert. Forest Hills, N. Y. Case for tennis rackets. 1,620,072; Mar. 8.

Chase, Herbert C., assignor to Atwood Machine Company, Stonington, Conn. Reel mill. 1,624,585;

Apr. 12.
Chase, March F. (See Skogmark, John, assignor.)
Chase National Bank of the City of New York,
The trustee. (See Hawthorne, Charles W., assignor.)
Chase National Charles W., assignor.)
Chase National Charles Teler J., assignor.
Chase State Connection of The City of New York, The,
(See Leonard, P. J., and Connor, assignors.)
Chase, Philip H. (See Foster, William, assignor.)
Chase, Philip H., Sala, and W. Foster, Philadelphia, Pa.;
and Poster sesignor to said Chase. Rack. 1,023,544;
and Poster sesignor to said Chase.

Apr. 5.

Chase, Leon W., assignor to Chase Plow Company, Lincoln, Nebr. Ridge-splitter attachment. 1,620,441; Mar. 8.

Chase, Leon W., and J. C. Brand, assignors to Chase Leon W., and J. C. Brand, assignors to Chase Leon W., Lincoln, Nebr., assignor to Chase Plow Company. Steering gear. 1,647,034; Oct. 25.

Chase Plow Company. (See Chase, Leon W., assignor.) Chase Plow Company. (See Chase, Leon W., assignor.) Chase Plow Company. (See Chase, Leon W., assignor.) Chase Plow Company. (See Chase, L. W., and Brand, assignor.)

Chase Flow Company. (See Chase, L. W., and Braind, assignors.)

Chase, Reyburn T., assignor of one-half to F. B. Scott, Chase, Revrood M., assignor to The Chase Foundry and Manufacturing Company, Columbus, Ohio. Transfer car. 1,623,828; Apr. 5.

Chase, Sherwood M., assignor to The Chase Foundry and Manufacturing Company, Columbus, Ohio. Coupling device. 1,621,855; May 10.

Corporation, Dayton, Ohio. Vehicle brake. 1,613,692; Jan. 11.

Chase, Theron P., Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich. Vehicle brake. 1,622,834; May 10.

Chase, Theron P., Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich. Vehicle brake. 1,622,834; May 10.

Chase, William G., Sangles, Calif. Golf practice declared the Chase, William G., Oak Park, III. Tire chain. 1,619,783; May 10.

Chase, William G., Oak Park, III. Tire chain. 1,619,783; May 10.

Chase, William G., Oak Park, III. The Chase, William B., Oak Park, III.

Mar. I.

Chase, William P., Livingsten, N. J. Flower delivery

Chase, William P., Livingsten, N. J. Flower delivery

Chase, Daniel H., assignor to The Singer Manufacturing

Company, Elizabeth, N. J. Lifting device for covers.

1,622,307; Mar. 29.

Chasen, Daniel H., assignor to The Singer Manufacturing

Company, Elizabeth, N. J. Motor controller. 1,627,533;

May 10.

Chasen, Daniel H., assignor to The Singer Manufacturing

Chasen, Daniel H., assignor to The Singer Manufacturing

Chasen. Daniel H., assignor to The Singer Manufacturing

Chasen.

May 10.

Chason, Daniel H., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Electric switch.
1.641,134; Aur. 30.

Chason, Daniel H., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Motor controller.

Chastain, Whilm E., Wichita, Kans. Seat-actuating means for sanitary closets. 1,632,819; June 21.

Chattain, Whilm E., Wichita, Kans. Seat-actuating means for sanitary closets. 1,632,819; June 21.

Chattell, Franklin, assignor to The Munsingwear Corporation, Minneapolis, Minn. Bloomers and making the same. 1,629,147; May 17.

Chattain, Robert H., Manchester, England, assignor to Chattain, Robert H., Manchester, Teatment of Tabrics, property of the property of the control of th

Sons, New York, N. Y. Dynamometer, 1,647,272; Nov. 1. Chatillon, John, & Sons, (See Chatillon, George E., assignor.) Chatillon, John, & Sons, (See Rockefeller, John W., jr., John, & Sons. (See Rockefeller, John W., jr., assignor.)

Charlion, John, & Sons. (See Rockefeller, John W., Jr., assignor.)
Chattanogra Bottle & Glass Manufacturing Company. (See Harrison, James F., assignor.)
Chattanogra Implement & Mig. Co. (See Lancaster, Harry V., assignor.)
Chaunecy, Language Charley, Language Char

Cheatham Electric Switching Device Co. (See Robinson, Robert M., assignor.)
Cheek, Tolbert F., assignor to Welte-Mignon Corporation, New York, N. Y. Record-controlled musical instrument. 1,613,441; Jan. 4.
Cheek, Tolbert F., assignor to Welte-Mignon Corporation, New York, N. Y. Record-controlled musical instrument. 1,613,441; Jan. 4.
Cheek, Tolbert F., assignor to Welte-Mignon Corporation, New York, N. Y. Cabinet player. 1,626,327; Apr. 26.
Cheek, Tolbert F., assignor to Welte-Mignon Corporation, New York, N. Y. Cabinet player. 1,626,327; Apr. 26.
Cheek, Tolbert F., assignor to Welte-Mignon Corporation, New York, N. Y. Operate plano-pedal mechanisms under control of a record. 1,526,328; Apr. 26.
Cheek, Tolbert F., assignor to Westinghouse Electric & Manufacturing Company. Volt-amper-bour meter. 1,637,370; Aug. 20.
Chebton, Rouge A., Manchester, England, assignor to Westinghouse Electric & Manufacturing Company. Volt-amper-bour meter. 1,637,370; Aug. 20.
Chellis, Lawrence T., Covrallis, Org. Slewe-pressing form. 1,624,777; Apr. 12.
Chemical Machinery Corporation. (See Field, Crosby, as-Chemical Works, formerly Sandoz. (See Karer. Paul.

signor.) Chemical Works, formerly Sandoz. (See Karrer, Paul,

signor.)
Chemical Works, formerly Sandoz. (See Karrer, Paus, assignor.)
Chemical Works formerly Sandoz. (See Stoll, A., and Chemical Works formerly Sandoz. (See Stoll, A., and Chemical Works. (See Tagliani, Glovanni, assignors.)
Chemical Works. (See Tagliani, Glovanni, assignor.)
Chemische Pabrik auf Actien (vorm E. Schering). (See Feldt, A., Schoeller, and Borgwardt, assignors.)
Chemische Fabrik auf Actien (vorm E. Schering). (See Schoeller, W., and Gehrie, assignors.)
Chemische Fabriken Dr. Kurt Albert G. m. b. H. (See Amann, A., and Fonrobert, assignors.)
Chemische Werke vormals Auergesellschaft m. b. H. Kommanditgesellschaft. (See Mayer, M., Finckh, and Chemnitzer, Erdmann. (See Lehmann, Carl, assignor.)
Chemosan Aktiengesellschaft. (See Sagit, Eugen, assignor.)

signor.)
Cheney, Charles C., Charlestown, Mass. Lawn sprinkler.
1,651,511 Dec. 6.
Cheney, Charles W., Boston, Mass. Massage appliance.
1,624,133; Apr. 12.
Cheney, Charles W., Birmingham, England.
for attache cases, boxes, bags, and such like.
1,624,839; Apr. 12.
Cheney, Charles W., Cheney, Charles C., 1624,636,638.

Cheney, Frank P., Lowell, Mass. Container. 1,636,458; July 19.

July 19.
Cheney, George M., and J. D. Clarke, assignors to Litchfield Shuttle Company, Southbridge, Mass. Shuttle tip, 16,18,569; Feb. 22.
Cheney, Josephine B. administratrix. (See Barnebey, Cheney, Mervitt B. (See Barnebey, O. L., and Cheney, Cheney, Mervitt B. (See Barnebey, O. L., and Cheney, Cheney, Talking Machine Company. (See Doerr, F. H., and Roedding, assignors).
Chenow, William H. (See McKenney, F. Y., and Cheney, Chenoweth, Alexander C., deceased, New York, N. Y.; Dratus for laying protective overlags. 1,619,331; Mar. 1.

paratus for laying protective coverings. 1,619,331; Mar. 1.6

Char. 1.6

Char

ignor.) erry, J. G., Company. (See Bagby, Ralph B., as-

signor.)
Cherry, J. G., Company. (See Bagby, Ralph B., assignor.)
Cherry, Lewis J., Houston, Tex. Combination tool. 1,628,116; May 10.
Cherry, Luther L., Cromwell, Okla. Automatic valve. 1,648,756; Nov. 8.
Cherry, Oscar A., Wauwatosa, assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Novel composition of material. 1,616,741; Feb. 8.
Chesebrough, John L., et al. (See Midgley, Joseph, assignor.)

signor.) Edward, St. Petersburg, Fla. Mitering machine. Cheshire, 66; Jan. 4.
Cheshire, 66; Jan. 4.
Cheshire, Edward, Berlin Township, Waukesha County, Wis. Speed variator. 1.616.027; Feb. 1.
Cheshire, Edward, Berlin Township, Waukesha County, Wis. Composing-room saw. 1,618.170; Feb. 22.

Chesler, Nathan, Brooklyn, N. Y. Switch plate. 1,651,252; Nov. 29.
Chesney, Jacques W. D. assignor, by mesne assignments, and the state of the state

1.025.525; May 47.
Chesterman-Leeland Co. (See Chesterman, Dana L., assignor.)
Chesterman-Leeland Co. (See Chesterman, Dana L., assignor.)
Des. 72.203; Mar. 15.
Chevrette, Augustin J., assignor to The Crompton & Knowles Loom Works, Worcester, Mass. Wett detector for looms. 1,625,824; May 17.
Chevrette, Augustin J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Combined weft detecting and transferring mechanism. 1,654,112; Dec. 27.
Chevrette Augustin J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Combined weft detecting and transferring mechanism. 1,634,161; Dec. 27.
Chew, William L., Rockville Center, N. Y. Sadiron holder, 1,613,160; Jan. 4.
Chewning, James A., Sikeston, Mo. Window screen. 1,624,634; Apr. 12.
Chiarchi, Antonio, New York, N. Y. Propelling, lifting, and steering device for airships, 1,620,638; Mar. 3, anism for air navigators. 1,638,726; Aug. 9.
Chicago Automatic Conveyor Co. (See Shaw, Arthur L., assignor.)

assignor.)
Chicago Bridge & Iron Company. (See Seels, Aubrey W., assignor.)

Chicingo Bridge & Iron Company. (See Seen, Ausery w., assignor.)
Chicago-Cleveland Car Roofing Company. (See Finney, Edicago-Cleveland Car Roofing Company. (See Gloss, S. D., and Wright, assignor.)
Chicago-Cleveland Car Roofing Company. (See Hamilton, Karl M., assignor.)
Chicago-Cleveland Car Roofing Company. (See Jacobs, Francis A., assignor.)
Chicago-Cleveland Car Roofing Company. (See Munro, Roy C., assignor.)
Chicago-Cleveland Car Roofing Company. (See Russell, The Company Company. (See Russell, The Company Company.)
Chicago-Cleveland Car Roofing Company. (See Williams, T. H., and Jacobs, assignors.)
Chicago-Cleveland Car Roofing Company. (See Williams, T. H., and Wright, assignors.)
Chicago-Cleveland Car Roofing Company. (See Wright, Williams, assignor.)
Chicago-Cleveland Car Roofing Company. (See Wright, Williams, Assignor.)
Chicago-Cleveland Car Roofing Company. (See Wright, Williams, Assignor.)

hart A., assignor.)
Chicago Electric Manufacturing Co. (See Gough, James J., assignor.) Chicago Electric Manufacturing Company. (See Kerwin,

Chicago Electric Manufacturing Company. (See Leschman, Thomas J., assignor.)
Chicago Electric Manufacturing Co. (See Leschman, William, assignor.)
Chicago Electric Manufacturing Company. (See Preston, Edward S., assignor.)

Chicago Fire Brick Company. (See Abbott, Lyle S., assignor.)
Chicago Flexible Shaft Company. (See Browning,

George, assignor.)
Chicago Flexible Shaft Company. (See Kocourek, Henry, assignor.)

Chicago Flexible Shaft Company. (See Wright, H. C., and Bristow, assignors.)
Chicago Fording & Manufacturing Company. (See Berger, Olite J., assignor.)
Chicago Forging & Mfg. Co. (See Ratelke, Charles J.,

Chicago Fuse Mfg. Co. (See Cook. Herbert R., assignor.) Chicago Fuse Mfg. Co. (See Kellner, Louis, assignor.) Chicago Fuse Manufacturing Company. (See Wilhelmi.

Chicago Fuse Manufacturing Company. (See Wilhelmi, Julian A., assignor.) Chicago Hardware Poundry Company. (See Burlin, Chicago Hardware Foundry Company. (See Pangborn, L. D., Warwick, and McKay, assignors.) Chicago Lock Company. (See Shinn, Lyle B., assignor.) Chicago Metallic Packing Company. (See Pickett, A. Glenn, assignor.)

Chicago Mill and Lumber Company. (See Murphy, J. T., and Raney, assignors.)
Chicago Miniature Lamp Works. (See St. James, Robert T., assignor.)
T., assignor.)
H., assignor.)
Chicago Pneumatic Tool Company. (See Callan, William H., assignor.)
Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)
Chicago Pneumatic Tool Company. (See Hoffman, Leon F., assignor.)
Chicago Pneumatic Tool Company. (See Penberthy, Chicago Pneumatic Tool Company. (See Price, Jacob L., Chicago Pneumatic Tool Company. (See Price, Jacob L.)

Ernest, assignor.)
Chicago Pueumatic Tool Company. (See Penberthy, Chicago Pueumatic Tool Company. (See Price, Jacob L., assignor.)

Chicago Pneumatic Tool Company. (See Stevens, Edward assignor.)
go Pump Company. (See Durdin, Augustus C., jr.,

W., assignor.)

W., assignor.)

Chicago Fump Company. (See Durdin, Augustus C., jr., assignor.)

Chicago Railway Equipment Company. (See Busse, Edwin G., assignor.)

Chicago Railway Equipment Company. (See De Long, Frederic T., assignor.)

Chicago Railway Equipment Company. (See Elholm, Herbert W., assignor.)

Chicago Railway Equipment Company. (See Hawkins, Chicago Railway Equipment Company. (See Janus, William, assignor.)

Chicago Railway Equipment Company. (See Moore, Ambrose C., assignor.)

Chicago Railway Equipment Company. (See Moore, Ambrose C., assignor.)

Chicago Taliway Equipment Company. (See Johnson, Norman E., assignor.)

Chicago Telephone Supply Company. (See Johnson, Norman E., assignor.)

Chicago Tolephone Supply Company. (See Diener, Riley M., assignor.)

Chicago Tolephone Supply Company. (See Diener, Riley M., assignor.)

assignor.)
ilcago Tubing & Braiding Company. (See Fentress,

James, assignor. Brating Company. (See Fentress, J., and Junkus, assignor.)
Chicago Tubing and Braiding Co. (See Fentress, J., and Junkuo, assignors)
Chicopee Manufacturing Corporation. (See Clark, Robert G., assignor.)

G. assignor.)
Chieffo, Henry P., Weehawken, N. J. Safety window-cleaning device. 1,621,626; Mar. 22.
Chilcaat, Harvey C., Stanton, Nebr. Draft equalizer. 1,613,038; Jan. 4.
L. 1,630,038; Jan. 4.
L.

Children C. Chicago, III. Lifting truck. 1,000,000 C. July 20, Childreth, Henry O. (See Graham, Paul C., assignor.) Childreth, Henry O. (See Graham, Paul C., assignor.) Childs, Fenakin N., Danville, Pa. Compound for filling holes in east iron. 1,649,100; Nov. 15.
Childs, George A., Arlington, Mass., assignor to D. A. Childs, Gustav G., assignor, by mesme assignments, to Breck Engineering Company, St. Louis, Mo. Lubricator. 1,648,163; Nov. 8.
Childs, James. (See Peneson. E. C., and Childs.) Childs, Gustav G., assignor to Ylckers Limited, Westminster, England. Rotnry drilling machine of well-boring apparatus. 1,628,032; May 10.
Childs, Kenneth L., assignor to The Fabric Body Corporation, Detroit, Month of the Children Childr

Houston, Tex. Roller-cutter mounting. 1,652,346; Dec. 13. hiles, George S., St. Louis, Mo., assignor to Dalman, Chiles Company. Railway-car truck. 1,615,616; Jan. 25.

Jan. 29.
Chilingirian. Harry, Bridgeport, Conn. Safety cooking and heating device. 1.641.624; Sept. 6.
Chillingworth, Rudolf, New York, N. Y. Aeroptane. 1.653,342; Dec. 20.
Chilson. Lewis S., assignor to J. M. Fisher Company, Attleboro, Mass. Flexible wrist-watch bracelet. 1.616.215; Feb. 1.

Lidicalo; Feb. 1.

Chilson, Lewis S., assignor to J. M. Fisher Company, Attleboro, Mass. Belt buckle. 1,025,388; Apr. 19.

Chilson, Lewis S., assignor to J. M. Fisher Company, Attleboro, Mass. Extension device for bracelets. Chilson, Summer B. Minneapolis, Minn. Radiator. 1,634,824; July 5.

Chilton, Ralph H., assignor to The Inland Manufacturing Company, Dayton, Ohlo. Steering wheel. 1,616,681; Feb. 8.

Feb. 8.
Chilton, Ralph H., assignor to Industrial Research Corporation, Toledo, Obio. Gas-engine starter. 1,625,793;

Chilton, Roland, Kerport, N. J., assigner to Healey-Aeromarine Bus Company, Inc. Connecting rod for engines, 1,621,494; Mar. 22. Chilton, Roland, Kerport, N. J., assigner to Healey-Aero-marine Bus Company, Inc. Transmission, 1,623,306; Apr. 5.

Chilton, Roland, Keyport, N. J., assignor to Healey-Aeromarine Bus Company, Inc. Lond-limiting clutch. Chilton, Roland, Keyport, N. J., assignor to Healey-Aeromarine Bus Company, Inc. Self-aligning gear mounting, 1,637,806; Aug. 2.
Chilton, Roland, Keyport, N. J., assignor to Healey-Aeromarine Bus Company, Inc. Spring wheel, 1,646,991;

Oct. 25. Chand, Keyport, N. J., assignor to Aeromarine. History and Motor Company, Incorporated. Propeller mounting, 1,653,341; Dec. 20. Chin, Howard T., Atascadero, Calif. Stovepipe holder, 1,647,081; Oct. 25. Chin, Howard T., Atascadero, Calif. Doll. 1,632,171;

1,647,081; Oct.
Chinn, Howard T., Atascadero, Calli.
June 14.
Chinneck, Herbert J. L., Boone, Iowa. Lawn rake.
1,650,428; Nov. 22.
Chinski, C. C., et al. (See Rayon. Joseph D., assignor.)
Chipman, Andrew L., et al. (See Chipman, Harry E., assignor.)

Harry E., Springfield, Mass., assignor to W. A.

signor.)
Chipman, Harry E., Springfield, Mass., assignor to W. A. and A. L. Chipman, New York, N. Y. Talking-picture transfer mechanism. Rel6,58c; Apr. 5.
Chipman, Morton R., Waterbury, Conn. Dust cap for lubricating apparatus. 1,626,26s; Apr. 26.
Chipman, William A., et al. (See Chipman, Harry E., assignor.)

briesting apparatus. 1,626,288; Apr. 26.
Chipman, William A., et al. (See Chipman, Harry E.,
Cassignor)

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Company, Cleveland, Ohio. Embossing dies. 1,612,2047;
Jan. 4.
Chisholm, Clifton, assigner to The American Multigraph
Company, Cleveland, Ohio. Addressing machine.
1,627,687; May 10.
Chisholm, Clifton, assignor to The American Multigraph Co., Cleveland, Ohio. Printing chase. 1,640,347;
Aug. 30.

chisholim Clifton, assignor to The American Multigraph Co., Cleveland, Ohlo. Printing chase. 1,640,347; Aug. 30.
Chisholim, Clifton, assignor to American Multigraph Company. Cleveland, Ohlo. Locking printing strips in place. 1,651,185; No. M. Columbur, Cleveland, Ohlo. Locking printing strips in place. 1,651,185; No. M. Columbur, Cleveland, Ohlo. Cleveland, Ohlo. Locking printing strips in place. 1,651,185; No. M. Columbur, Cleveland, Ohlo. Cle

Dec. 27.
Chonich, Michael. (See Anderson, Carl M., assignor.)
Chorley, Percy. (See Baddley, J., Chorley, and Butler.)
Chorleton, Alan E. L., London, England. Variable-speed
gear and controlling the same. 1,615,701; Mar. 1.
Chorlon, Alan E. L., London, England. Reversing are
for internal-combustion-engine locomotives. 1,619,702;
Mar. 1.
Alan E. L., London, England. Power-transmethorizer. 1,619,702; Mar. 1.

Mar. 1.
Chorlton, Alan E. L., London, England. Power-transmission mechanism. 1.619,703; Mar. 1.
Chorlton, Alan E. L. London, England. Internal-combustion-engine locomotive. 1.619,705; Mar. 1.
Chorlton, Alan E. L., London, England. Internal-combustion engine. 1.647.434; Nov. 1.
Chorlton, Alan E. L., assignor of one-half to W. Beardmore, London, England. Internal-combustion-engine locomotive. 1.619,704; Mar. 1.

Chott, Edward L., assignor of one-half to H. J. Chott, Chicago, Ill. Teeth-cleaning device. 1,644,465; Oct. 4. Chott, Hogo J. (See Chott, Edward L., assignor.) Chovanec, Michael, Hazleton, Pa. Combination lid and Hiting device. 1.624,926; Apr. 1. Dispensing apparatus. Chorgo, Chee S., Chicago, Ill. Dispensing apparatus. Chrisman, Chrence C., Martinsburg, Mo. Pen or pencil clip. 1.634,472; July 5. Chrisman, Frank S., South Bend, Ind. Metal binding for reed matting. 1.652,195; Dec. 13. Christ, Golfrey. (See Burguifers, Denis P. J., assignor.) Christ, Wilhelm. (See Jellinck, K., and Christ.) Christ, Wilhelm. (See Jellinck, K., and Christ.) Christe, Wilhelm. (See Jellinck, K., and Christ.) Christe, William F., Valders, Wis. Grader. 1,631,517; June 7. Christeler, Marie. Utica, N. Y. Window-cleaning device.

June 7.
Christeler, Marie, Utica, N. Y. Window-cleaning device, 1.639,201; May 17.
Christensen, Anders, Wilson, and A. W. Warsen, Hartford, Conn. Weeding machine. 1,620,594; Mar. 8.
Christensen, Carl. Vancouver, British Columbia, Canada, Christensen, Carl. Capacity, Christensen, Carl. Capacity, Christensen, Carl. L., 1.666,251; Jan. 18.
Christensen, Carl L., Dalton, Nebr. Fan. 1,636,286; July 19. July 19.

Christensen, Charles E., Viborg, S. Dak. Fencepost. 1,636,126; July 19. Christensen, Christen, Chicago, Ill. Lawn mower.

Lu30.120', Aug. 2.

Christensen, Christen, Chicago, III.

1.637,603; Aug. 2.

Christensen, Christen, assignor to Electrical Engineers Christensen, C

CHIR.; said Loehnis assignor to said Christensen. Au-tomatic stop device for automobiles. 1,653,945; Dec. 27. Christensen, John, sr., Galveston, Tex. Holst. 1,618,914; Feb. 22.

Christensen Machine Company, The. (See Christensen, Martin, assignor.) Christensen Machine Co. (See Greene, Frederick J., as-

Christensen Machine Co., The. (See Hoffert, Roy G., assignor.)
Christensen, Martin, Elmhurst, Ill., assignor to The Christensen Machine Company, Racine, Wis. Signature-Christensen, Martin, Elmhurst, Ill., assignor to The Christensen, Martin, Elmhurst, Ill., assignor to The Christensen Machine Company, Racine, Wis. Stitcher feed mechanism. 1,614,716; Jan. 18.
Christensen Machine Company, Racine, Wis. Signature-handling apparatus. 1,614,717; Jan. 18.
Christensen, Miels A., Cleveland, Ohio. Brake-control Christensen, Miels A., Cleveland, Ohio. Compressed-air brake system for motor-vehicle trains. 1,614,653; Jan. 18.
Christensen, Niels A., Cleveland, Ohio. Compressed-air brake system for motor-vehicle trains. 1,614,653; Christensen, Niels A. Christensen, Niels A.

Jan. 18.

Christensen, Niels A., Cleveland, Ohlo. Brake-controlvate mechanism. 1,618,671; Feb. 8.

Christensen, Niels A., Cleveland, Ohlo. Direct-drive compressor. 1,633,767; June 28.

Christensen, Niels A., Cleveland, Ohlo. Direct-drive compressor. 1,633,767; June 28.

Christensen, Niels A., Cleveland, Ohlo. Automotive compressor. 1,633,769; June 28.

Christensen, Niels A., Cleveland, Ohlo. Automotive compressor. 1,633,770; June 28.

Christensen, Niels A., Cleveland, Ohlo. Automotive compressor. 1,633,770; June 28.

Christensen, Niels A., Cleveland, Ohlo. Compressor control. 1,640,597; Aug. 30.

Christensen, Niels A., Cleveland, Ohlo. Compressor control. 1,640,697; Aug. 30.

Christensen, Niels A., Cleveland, Ohlo. Control-valve mechanism. 1,650,693; Nov. 22.

Wis. Stralght and automatic air-brake system. 1,614,662; Jan. 18.

Christensen, Niels A., Milwaukee, Wis. Control-valve mechanism. 1,616,606; Feb. 8.

Christensen, Niels A., Milwaukee, Wis. Vehicle brake nechanism. 1,619,970; Apr. 8.

Christensen, Niels A., Milwaukee, Wis. Compressor governor. 1,626,676; Apr. 26.

Christensen, Niels A., Milwaukee, Wis. Compressor governor. 1,628,676; Apr. 26.

Christensen, Niels A., Milwaukee, Wis. Compressor mounting. 1,633,766; June 28.

Christensen, Niels A., Milwaukee, Wis. Compressor mounting. 1,633,766; June 28.

Christensen, Niels A., Milwaukee, Wis. Engine-driven compressor, Niels A., Milwaukee, Wis. Compressor mounting. 1,633,766; June 28.

Christensen, Niels C., Salt Lake City, Utah. Treating sulphide ores of lead and zinc. 1,620,873; Mar. 15. Christensen, Niels C., Salt Lake City, Utah. Treatment Christensen, Niels C., Salt Lake City, Utah. Apparatus for fitration. 1,641,736; Sept. 6. Christensen, Niels C., Salt Lake City, Utah. Apparatus for fitration. 1,641,736; Sept. 6. Christensen, Niels C., Salt Lake City, Utah. Apparatus for fitration. 1,641,736; Sept. 6. Sept. 6. Christensen, Niels C., Salt Lake City, Utah. Precipitating copper from sulphate solution. 1,643,922; Sept. 27. Christensen, Peder J. Elidshol, Denmark. Smiling doil. 161,648; Peder J. Christensen, Robert J. R., Bremerton, Wash. Pastry cutter. 1,615,569; Jan. 25. Christensen, Viggo, Los Angeles, Callf. Auto heel protector. 1,022,859; Mar. 29. Christensen, George, North Plainfield, N. J., assignor to Johns-Manville Incorporated, New York, N. Y. Packing for plungers and the like. 1,616,412; Feb. 1. Christenson, Raiph L., Seattle, Wash. Swinging double-Christin, George and P., Detroit, Mich. Wheel. 1,634,454; July 5. Christia, George and P., Detroit, Mich. Wheel. 1,634,454; July 5. Christia, Peter. (See Christia, George and P., Christian, Atthur T., Gleaview, Ill. Combination dust Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Boustead, Christian, Charles L., San Francisco, and J., R. Bo

B. H.) Christian, Charles L., San Francisco, and J. R. Boustead, Oakland, Calif. Egg separator. 1,646,682; Oct. 25. Christian, Earl. (See Christian, William and B. II., assignors.)

assignors.)
Christian, Joe G. (See Fox, G. B., and Christian.)
Christie, John, assignor to Eastman Kodak Company,
Rochester, N. Y. Spool holder for cameras. 1,645,694;
1.651,471; June 7.
Christian, Raymond A., and E. Gates, assignors, by mesmassignments, to The National Cash Register Company,
Dayton, Ohio. Cash register. 1,652,691; Dec. 6.
Christian, W. W. (See O'Loughin, Charles E. A.,

Assignments, 10 July 1882.

Dayton, Ohio. Cash register. 1,682,091; Dec. 6. Christian, W. W. (See O'Loughlin, Charles E. A., assignor, W. W. (See O'Loughlin, Charles E. A., assignor, William, and B. H. Christian, Milford; solid B. H. Christian assignor of one-half of his right to B. Christian, and E. H. Christian, Edge-port, Conn. Musical stringed instrument, 1,653,496; Dec. 20.

Christian, Anthony W., Red Bank, N. J. The-fettling machine. 1,618,061; Feb. 15.

Christians, Christian B., Jr., San. Antonio, Tex. Road-repairing machine. 1,624,300 Apr. 12.

Christians, Christian, Assignor to New Way Harvester Company, Sioux Falls, S. Dak. Shocker. 1,640,598; Aug. 30.

Christiansen, Christian, assignor to New Way Harvester Company, Sioux Falls, S. Dak. Shocker. 1,640,598; Aug. 30.

Christiansen, Christian G., Fingal, N. Dak. Horse nose guard. 1,654,303; Dec. 21.

Christiansen, Hens A.; and L. E. Merrick, Agar, S. Dak. 1632,367; June 14.

Christiansen, Julius H. A., Ricketts, Iowa. Paperhanger's table. 1,623,167; Apr. 5.

Christianson, Adolph W., Burlington, Vt., and J. F. Christianson, Andrew, Butler, assignor to Standard Steel Christianson, Andrew. Butler, assignor to Standard Steel Christianson, Andrew, Butler, assignor to Standard Steel Car Company, Pittsburgh, Pa. Car construction. 1,648,576; Nov. 8.

Christianson, Andrew Butler, assignor to Standard Steel Car Company, Pittsburgh, Pa. Car construction. 1,648,576; Nov. 8.

Christianson, Andrew Butler, assignor to Standard Steel Car Company, Pittsburgh, Pa. Car construction. 1,648,576; Nov. 8.

Christianson, Andrew Butler, assignor to Standard Steel Car Company, Pittsburgh, Pa. Car construction. 1,648,576; Nov. 8.

Christianson, Andrew Butler, assignor to Standard Steel Car Company, Pittsburgh, Pa. Car construction. 1,648,576; Nov. 8.

Christianson, Andrew Butler, Assignor to Standard Steel Car Company, Pittsburgh, Pa. Car construction. 1,648,576; Nov. 8.

Christianson, Andrew Butler, Assignor to Standard Steel Car Company Pittsburgh, Pa. Car construction. 1,648,57 Car Company, Fitsburgh, Fa. Car construction, 1,648,576; Nov. 8.
Christianson, Arnold and C., Hammond, Ind. Brake-head support, 1,639,256; Aug. 16.
Christianson, Arnold and C., Hammond, Ind. Brake structure, 1,648,287; Sept. 27.
Christianson, Bjorn, Langruth, Manitoba, Canada, Self-christianson, Christianson, Christianson, Christian, Canada, Self-Christianson, Christian, Csec Christianson, Arnold and C.)
Christianson, Christian, Csec Christianson, Arnold and C.)
Christianson, Christian, Csec Christianson, Arnold Christianson, Christian, Csec Christianson, Christian, Csec Christian, Christianson, Christian, Csec Christian, Christianson, Christian, Christianson, Christian, Christianson, Cerrany, Christianson, Christianson, Cerrany, Christianson, Christianson, Christianson, Christianson, Christianson, Christianson, Christianson, Christianson,

Hartord, Conn. Drying apparatus. 1,625,017; Mar. 29. Carl E., assignor to Dexter Folder Company, Carl E., assignor to Dexter Folder Company, Fearl River, N. Y. Pile-elevating mechanism. 1,611,374; Feb. 15. Christophel, Carl E., assignor to Dexter Folder Company, Fearl River, N. Y. Automatic throw-out mechanism for printing presses and the like. 1,620,800; Mar. 15. Christophel, Carl E., Pearl River, assignor to Dexter Folder Company, New York, N. Y. Sheet-feeding machine. 1,661,444; Dec. 6. Christopher, Arthur J., assignor to Western Electric Company, Incorporated New York, N. Y. Inductance I., Christopherson, Alfred C., assignor to Hacker Manufacturing Co., Chicago, Ill. Sheet feeder. 1,629,477; May 24.

Christy, Frank W., Beverly, Mass. Lighting apparatus. 1.643.697; Sept. 27. Chritton, George A., et al., trustees. (See Curtis, Lewis E., assignor.)

E. assignor.
Chritton, George A., trustee. (See Stouman, Henning, assignor.)
Chrobaltic Tool Company. (See Klouman, Henning, Chrobaltic Tool Company. (See Klouman, William B.

hrobaltic Tool Company. (See Sullivan, William B., hrobaltic Tool Company. (See Sullivan, William B.

assignor.)
Chrobatic Tool Company. (See Sullivan, William B.
assignor.)
Chromczak, Antoni, Utica, N. Y. Sectional fishing rod.
1.643,003; Sept. 20.
Chrome Steel Works. (See Currie, William, assignor.)
Chrysler Corporation. (See Enger, Arthur F., assignor.)
Chrysler Corporation. (See Kent, Philip J., assignor.)
Chrysler Corporation. (See Maynard, Howard E., assignor.)
Signor.)

Chrysier Corporation. (See Kent, Philip J., assignor.)
Chrysier Corporation. (See Manyand, Howard E., assignor.)
Chryst, William A., assignor. by messe assignments to Deleo-Remy Corporation. Dayton, Ohio. Engine-starting apparatus. 1,633,925; June 28.
Chryst, William A., assignor, by messe assignments, to Deleo-Remy Corporation. Dayton, Ohio. Engine-starting apparatus. 1,643,738; July 5.
Chryst, William A., assignor, by messe assignments, to Deleo-Remy Corporation. Dayton, Ohio. Engine-starting apparatus. 1,649,733; Aug. 30.
Chryst, William A., assignor, by messe assignments, to Deleo-Remy Corporation. Dayton, Ohio. Engine-starting apparatus. 1,640,733; Aug. 30.
Chryst, William A., assignor, by messe assignments, to Deleo-Remy Corporation, Dayton, Ohio. Engine-starting the Corporation of the Corporat

Church, Frederick P., Lynn, Mass., assignor to Electric Company. Electric-meter circuit. 1, Feb. 15. Church, Frederic P., Lynn, Mass., assignor to Electric Company. Mercury meter. 1,640,43 30. 1,618,058;

assignor to General er. 1,640,438; Aug.

oo. uurch, Frederic P., Lynn, Mass., assignor to General Electric Company. Mercury meter. 1,640.439; Aug. Church, Harold D., et al. (See Marcus, Charles, as-

Church, Harold D., Cleveland, Ohio, assignor to General Motors Corporation, Detroit, Mich. Anchoring device for brakes. 1,688,322; Aug. 9.
Church, Harold D., Cleveland Heights, assignor to The White Harold D., Cleveland Heights, assignor to The White Harold D., Cleveland Heights, assignor to The White Motor Company, Cleveland, Ohio. Headlight Church, Harold D., Cleveland Heights, assignor to The White Motor Company, Cleveland, Ohio. Motor-vehicle transmission. 1,652,599; Dec. 13.
Church, Harold D., Fairfield, Conn., assignor to Packard 1,639,881; Aug. 22.
Church, Harold D., Fairfield Conn., assignor of one-third to C. Marcus, New York, N. Y., and one-thord to R. P. Lansing, Montclair, N. J. Shock absorber for vehicles. 1,644,654; Oct. 4.
Church, Lewis H., assignor to The Thomas & Estas Co., Elizabeth, N. J. Cable connecter. 1,644,308; Oct. 4.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,644,308; Oct. 4.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,644,308; Oct. 4.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,644,308; Oct. 4.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,644,308; Oct. 4.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,644,308; Oct. 4.
Church, Lewis H., assignor to The White Motor Company, Cleveland, Ohio. Electrical system. 1,639,882; Aug. 23.
Churcher, William B., Cleveland Heights, assignor to The White Motor Company, Cleveland, Ohio. Dynamo-electric system. 1,640,613, Aug. 23.
Churcher, William B., Cleveland Heights, assignor to The White Motor Company, Cleveland, Ohio. Dynamo-electric system. 1,640,613, Aug. 28.
Churcher, M. J., Aller H., Saatte, Wash. Collapsible canvas signor.)

Churchill cabinet Company, (See Academic Signor.)
Churchill, Frank H., Scattle, Wash. Collapsible canvas boat. 1,614,280; Jan. 11.
Churchill, William J. (See Churchill, Benn P. and W. J.)
Churchman, John W., assignor to National Anlline & Chemical Company, Inc., New York, N. Y. Germiede.
1,614,281; Jan. 11. Syracuse, N. Y. License-call.
Churchy, 1,645,229; Oct. 11.
Church, 1,645,229; Cot. 12.
Church, 1,645,229; Cot. 13.
Churchill, 1,645,229; Cot.

chutmisch. Nicolona J. Syracuse, N. Y. License-card bolder. 1645,229; Oct. 11.
Chruns, George, Detroit, Mich. Toy boat. 1,613,941; Jan. 11.
Chroika, Joseph. Philadelphia, Pa. Aerial advertiser. 1,613,636 Mer. 1,613,636 Mer. 1,613,636 Mer. 1,613,636 Mer. 1,613,636 Mer. 1,614,636 Mer. 1,636,648; July 19.
Chylinski, Stanisias Z., assignor to Western Electric Company, Incorporated, New York, N. Y. Induction coil. 1,621,473; Sept. 6.
License Language Company, Incorporated, New York, N. Y. Induction coil. 1,621,473; Sept. 6.
Chylinski, Stanisias Z., assignor to Western Electric Company, Incorporated, New York, N. Y. Induction coil. 1,621,473; Sept. 6.
New York, N. Y. Induction coil. 1,641,674; Sept. 6.
Chee, Abraham B. Brookline, assignor to Boston Dye House, Inc., Malden, Mass. Drying apparatus. 1,643,696; Sept. 20.
Chee, Anthana B. Brookline, assignor of the Stanish Charles, Milesand Societé Anonyme." (Sec. Mer. 1),645,676; Sept. 6.
Clicone, Anthony, Chicago, III. Vaive pad for wind instruments. 1,621,395; Mar. 15.
Cld. Found J. Indianapolis, Ind. Electric water heater. 1,645,278; Oct. 11.
Clesiak, Charles, Milwaukee, Wis. Pastry-cream filling device. 1,630,224; May 31.
Clesiak, Charles, Milwaukee, Wis. Pastry-cream filling device. 1,630,224; May 31.
Clich Manufacturing Corporation, The. (See Bates, Clifford V., assignor).
Clinch Manufacturing Corporation. (See Vodicka, John, assignor).
Clinch Manufacturing Corporation. (See Vodicka, John, assignor).
Clincinnati Bickford Tool Company, The. (See Millaria assignor).
Clincinnati Bickford Tool Company, The. (See Mater. Tarish, Robert, assignor).

Cincinnati Butchers Supply Company, The. (See McClincinnati Butchers Supply Company, The. (See McClincinnati Butchers' Supply Company, The. (See McClincinnati Butchers' Supply Company, The. (See Schmidt, Gustay, assignor.)

Cincinnati Butchers Supply Company, The. (See Schmidt, Oscar C., assignor.) Cincinnati Butchers' Supply Company, The. (See Schmidt, O. C., and Klawitter, assignors.) Cincinnati Car Company, The. (See Elliott, Thomas, as

Cincinnati Grinders Incorporated. (See Binns, George

W., assignor.)
Cincinnati Grinders Incorporated.
and Nenninger, assignors.)
Cincinnati Grinders Incorporated. (See Heim, Lewis

Cincinnati Grinders Incorporated. (See Kern, Fred M., assignor.)
Cincinnati Grinders Incorporated. (See Kern, Fred M., assignor.)
Cincinnati Grinders Incorporated. (See Norton, Charles H., assignor.)
Cincinnati Lathe and Tool Company, The, (See Thiel.

Louis, assignor.)
Cincinnati Milling Machine Company, The. (See Intel, Louis, assignor.)
Cincinnati Milling Machine Company, The. (See Nenninger, Lester F., assignor.)
Cincinnati Planer Company, The. (See Linden, C. E., and Langen, assignors.)

Cincinnati Shaper Company, The. (See Hazelton, Robert

T. assignor.)
Clicinant Specialty Manufacturing Company, The. (See Miller, Otto, assignor.)
Clicinant Time Recorder Company, The. (See Streckfuss, Elmer G., assignor.)
Chema Advertising Corporation. (See Stegmann, Louis

A., assignor.)
Cine-Mars. Legendre, San Francisco, Calif. Gas heater.
1,642,540; Sept. 13.
Cippola, Giovanni, Worcester, Mass. Liquid-dispensing apparatus. 1,614,344; Jan. 11.
Circle F. Mfg. Co. (See Cross, C. S., and Smith, as-

apparatus. 1,614,844; Jan. 11.
Circle F. Mfg. Co. (See Cross, C. S., and Smith, assignors.)
Circle F. Mfg. Co. (See Freeman. Edgar II., assignor.)
Circle F. Fangesco, Philadelphia, Pa. Amplifying horn.
Circle F. Fangesco, Philadelphia, Pa. Amplifying horn.
Circle F. Fangesco, Philadelphia, Pa. Amplifying horn.
Circle Francesco, Philadelphia, Pa. Amplifying horn.
Circle Frank J. Philadelphia, Pa. Circle Frank J.
Cisco, George W., Hawthorne, N. J. Temperature indicator, 1,617,897; Feb. 15.
Cisco, George W., Hawthorne, N. J. Wireless-apparatus Cisco, George W., Hawthorne, J. July 5.
Cisco, George W., Hawthorne, N. J. Wireless-apparatus Cisco, George W., Hawthorne, J. July 5.
Cisco, G. George W., Hawthorne, J. July 5.
Cisco, G. George W., July 5.
Cisco, G. George W., Hawthorne, J. July 5.
Cisco, G. George W., July 5.
Cisco, G. George W

Claessons, Frederick C. (See Leonard, Frank P., assignor, Signor.)
Cladin, Charles R. B., East Hartford, assignor, by mesne assignments, to The Siko-Lite Corporation, Meriden, Conn. Headlight. 1,627,688; May 10.
Clafin, Harry C., Bennington, N. H. Beater-roll raiser. 1,614,826; Jan. 18.
Clafin, Harry C., Bennington, N. H. Beater-roll raiser. 1,614,826; Jan. 18.
Clancy, John C., Asbury Park, N. J. Converting oils and apparatus therefor. 1,620,075; Mar. 8.
Clancy, John C., Asbury Park, N. J. Cracking hydrocarbon oils and manufacturing cyanides. 1,651,114; Clancy, John F. (See Dunlop, J., and Clancy, Iohn F. (See Person, Axel, assignor.)
Clapp, Albert L., Danvers, assignor to Beckwith Manufacturing Company, Boston, Mass. Shoe stiffener. 1,617,375; Feb. 15.
Clapp, Albert L., Danvers, assignor to The Flintkote Control of the Company of the Control of the

ths comprising a south of the Apr. 5. Clapp, Lewis J., Claremont, N. H., assignor to Sullivan Machinery Company. Lifting mechanism for railway cars. 1.627.481; May 3. cars. 1.627.481; May 3. Machinery Company. Valve mechanism, 1,633,692; Machinery Company. Valve mechanism, 1,633,692; Machinery Company.

sacchinery company. Valve mechanism. 1,535,692; June 23: June 24: Machinery Company. Valve mechanism. 1,633,772; June 28: Clapp, Roger I., Shanghai, China. Nut lock. 1,628,355; May 10.

Clapp, Roger I., Shanghai, China. Nut lock. 1,628,355; May 10.
Clapper, John S. Minneapolis, Minn. Machine for spreading fertilizer. 1,648,720; Nov. S.
1,636,552; July 19.
Claremont Waste Manufacturing Company. (See Decoteau, William J., assignor: O dakite Products, Inc., New York, N. Y. Dishwashing machine. 1,633,396; Clarin, David X., assignor to Oakite Products, Inc., New York, N. Y. Dishwashing machine. 1,633,396; Clarin, Charles C. C. Carlon, David X., assignor.)
Clarinda Manufacturing Company. (See Criner, Harry J., assignor.)
Clark, Alfred E., Boston, Mass. Speed-change gear. 1,640,382; Aug. 30.
Clark, Alfred A., Baltimore, Md. Stand for washing machines. 1,649,571; Nov. 15.
Clark, Alfred A., Baltimore, Md. Stand for washing machines. 1,649,571; Nov. 15.
Clark, Alfred T., H. A. Leonhauser, and J. R. Jester, Baltimore, Md.
1,617,667; Feb. 15.

Clark, Alva B., Brooklyn, N. Y., assignor to American relephone and Telegraph Company. Telephone repeater system. 1,615,269; Jan. 25.

Clark, Annie. I See Clark, Philippe L., assignor.)

Clark, Annie. I See Clark, Philippe L., assignor.)

Clark Car Company Clark Course, R. C. Chark, A. B.)

Clark Car Company Clark Course, R. C. Chark, C. Company, C. Clark Car Company, Clark Charles N., Bridgeton, N. J. Glass-tank furnace. 1,652,063; Dec. 13.

Clark Charles N., Somerville, Mass. Wagon. 1,652,762;

Dec. 18, 19-18, R. C. and A. B., Retford, England. Ap. Chark Charles N., Somerville, May Charles N., Somerville, May Charles N., Somerville, May 21.

Clark, Chester H., Gallup, N. Mex. Game. 1,631,000;

May 21.

May 31 Clark, C

Maly S1.
Clark, Claude W., West Palm Beach, Fla. Vehicle wheel. 1,628,578; May 10.
Clark Controller Company, The. (See Rippl, Charles H.,

(1888) 103. Joint S., assignor to Clark Engineering Corpo-nation, Norfolk, Va. Internal-combustion engine. 1,618,859; Feb. 22. Clark Cornelius S., assignor to Clark Engineering Corpo-ration, Norfolk, Va. Fuel and lubricant segregating system for internal-combustion engines. 1,618,860;

Space 20 of merina-combuston engines. 1,010,500; 381-82. Clark Cornelius S., assignor to Clark Engineering Corporation, Norfolk, Va. Vacuum mens for conserving lubricating oil of internal-combustion engines. 1,618,861; Feb. 22. Clark-Cutler-McDermott Co. (See McDermott, Thomas S., Clark-Cutler-McDermott Co.)

Clark-Cutter-acceptement Co. (See Annual Control assignor). Clark, Dolph M., Portland, Oreg. Coffee-urn attachment to automatically measure more than one substance simultaneously to deliver a combined uniform volume. Clark, Dolph M., assignor to O. Harbaugh and Mrs. A. P. Clark, Portland, Oreg. Combination sanitary automatic creamer attachment for coffee urns. 1,618,363; Feb. 22.

matic creamer attachment for coffee urns. 1,618,363; Feb. 22.
Clark, Earle A., Tulsa, Okla. Meter top and index box. 1,631,472; June 7.
Clark, Edgar C., Pittsburgh, Pa. Separator for bricks and piling the same. 1,640,691; Aug. 30.
Clark, Edgar H., Richmond Hill, assignor to Western Electric Company, Incorporated, New York, N. Y. Testrophone-exchange system. 1,634,540; Apr. 12.
Clark, Edgar H., Richmond Hill, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,634,717; July 19.
Clark, Edgar M. (See Howard, F. A., Clark, and Carringer.)

Clark, Edgar M. (See Howard, F. A., Clark, and Carringer.)
Clark, Edgar M., New York, N. Y., assignor to Standard Development Company. Distilling hydrocarbon material. 1,625,984; Apr. 26.
Clark, Edgar M., New York, N. Y., and N. E. Loomis and F. A. Howard, Elizabeth, N. J., assignors to Standard Development Company. Manufacturing gas from petro-Clark, Edward D. (See Busch, Ben, assignor.)
Clark, Edward E. Kansas City, Mo., assignor, by mesne tion City, Kans. Antivibrating device. 1,637,604; Aug. 2.
Clark, Edward E. North Attlebrey, Mars. Page 65, 114

Aug. 2.

Clark. Edward F., North Attleboro, Mass. Bar cuff link. 1,631,246; June 7.

Clark. Edward M., Davenport, Iowa. Commercial sign. 1,638,564; Aug. 9.

Clark. Edwin M., Clarkston, Mich. Storage tank. 1,643,924; Sept. 27.

Clark. Ediliott B., Weldon, N. C. Bottle construction. 1,635,070; July 5.

Topeka, Kans. Power-transmitting means. 1,651,987; Dec. 6.

Clark. Emery E., Topeka, Kans. Power-actuating means for tricycles and the like. 1,653,889; Dec. 27.

Clark Engineering Corporation. (See Clark, Cornellus S., assignor.)

assignor.)

clark Engineering Corporation. (See Clark, Cornelius S., assignor).

Clark Equipment Company. (See Mogford, E. C., and Clark, Ernest, Richeller, St. 1,622,636; Apr. 26.

Clark, Ernest, Abington, assignor to Abington Textile Machinery Works, Boston, Mass. Pneumatic stripper attachment for carding engines. 1,614,103; Jan. 11.

Clark, Ernest, Abington, assignor to Abington Textile carding engines. 1,622,246; Mar. 22.

Clark, Ernest, Abington, assignor to Abington Textile Machinery Works, Boston, Mass. Pneumatic stripper attachment for carding engines. 1,633,542; June 21.

Clark, Ernest, Abington, assignor to Abington Textile Machinery Works, Boston, Mass. Pneumatic stripper attachment for carding engines. 1,633,542; June 21.

Clark, Ernest, Montonville, Mass. Accelerating the opening of drypler valves. 1,630,783; May 31.

Dip valves of drypler valves. 1,613,341; Jun. 4.

Clark, Farley G. (See Allan, William G., assignor.)

Clark Fibre Products Corporation. (See Clark, Horace H., assignor.)

lark, Francis M., assignor to Bridgeport Brass Com-pany, Bridgeport, Conn. Trolley wheel. 1,642,766; Sept. 20. Inrk, Frank J., Harmony, Minn. Rural-mail-receiving apparatus, 1,639,722; Aug. 23. Clark, Francis M.,

Clark.

Clark, Frank J., Milwaukee, Wis., assignor to Grand Rapids Bookcase & Chair Company, Hastings, Mich. Rewind and replay mechanism for automatic players. Clark, Fred N., Hammond, Ind. Wire clamp. 1,638,918;

Clark, Fred N., Hammond, Ind. Wire clamp. 1,000,020, Aug. 16.
Clark, George F., Boston, Mass., assignor to Boston Match Company. Match book. 1,634,136; June 28.
Clark, George H. (See Hill, G., and Clark.)
Clark, George H., Washington, D. C., assignor, by mesne assignments, to Radio Corporation of America. Ad-Clark, George H., Brooklyn N.Y., assignor to Radio Corporation of America. Radio signaling system. 1,623,215; Apr. 12.
Clark, George H., Brooklyn N. Y., assignor to Radio Corporation of America. Variable condenser. 1,631,360; June 7.
Clark, George H., Melrose, assignor to Crosby-Steam Gage & Valve Company, Boston, Mass. Pressure gauge. 1,625,985; Apr. 26.
Clark, George P., Company, The. (See Brostedt, Carl W., assignor.)

Clark, George F., Company, Phe. (See Brostedt, Carl W., assignor.)
Clark, George S., et al. (See Feeden, Junn assignor.)
Clark, George S., et al. (See Feeden, Junn assignor.)
Clark, Horge T. (See Guest, Harry, assignor.)
Clark, Harry A., Wichita Falls, Tex. Sheave tensioning and adjusting device. 1,617,668; Feb. 15.
Clark, Harry A., Wichita Falls, Tex. Sheave tensioning and adjusting device. 1,617,668; Feb. 15.
Clark, Harry A., Wichita Falls, Tex. Frame construction for tractor-driven winches. 1,638,243; Aug. 9.
Clark, Harry J., Syracuse, N. Y. Draft mechanism for wagons and wagon trains. 1,652,700; Dec. 13.
Clark, Harry J., Syracuse, N. Y. Draft mechanism for wagons and wagon trains. 1,652,700; Dec. 13.
Clark, Horry A., Old Harry, Magdalen Islands, Quebec, Canada. Shipping crate. 1,639,555; Aug. 16.
Clark, Horry A., Old Harry, Magdalen Islands, quebec, Canada. Shipping crate. 1,639,555; Aug. 16.
Clark, Horry R., Tarrant, Ala. Fertilizer distributor. 1,632,540; June 14.
Clark, Horre H., Framingdale, N. J., assignor to Clark and Machine Company, Pittsburgh, Pa. Shect-glass apparatus. 1,611,572; Feb. 22.
Clark, Horace S., Oakiand, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Vehicle brake device. 1,622,420; Mar., Aeroplane. 1,615,682; Clark, Hugh S., Elizabeth, N. J. Aeroplane. 1,615,682; Clark, Hugh A. (See Kauffman, H. L., and Clark.)

Clark, Huga S., Birkabeta, T., Jan. 25.
Clark, Irwin A. (See Kauffman, H. L., and Clark.)
Clark, J. L., Manufacturing Co. (See Kjellstrom, John H., assignor.)
Clark, J. L., Manufacturing Co. (See Mills, Wallace C., assignor.)
Clark, J. R., Company. (See Kalgren, John E., assignor.)
Clark, Jack, Rosedale, N. Y. Golf tee. 1,643,113;
Sant. 20.

Clark, J. R., Company. (See Kalgren, John E., assignor.) Clark, Jack, Rosedale, N. Y. Golf tee, 1,643,113; Sept. 20. Clark, James, assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Uniting butted edges of metal parts by welding. 1,654,037; Dec. 27. Clark, James E. (See Clark, Thomas E. and J. E.) Clark, James E. and T. E., Detroit, Mich. Humidifier. 1,652,392; Dec. 13. Clark, James, F. N. Smith, and J. Meese, assignors to S. R. Dresser Manufacturing Company, Bradford, Pa. Wrought, metal connection for threaded pipes. Clark, James H., River Rouge, Mich. Attachment forvehicles. 1,630,525; May 31. Clark, James H., River Rouge, Mich. Attachment forvehicles. 1,630,525; May 31. Clark, James R., assignor to Yawman & Erbe Manufacturing Co. Rochester, N. Y. Adjustable partition. The John M., Scholley, J. Clark, John M., assignor to Universal Button Fastening & Button Company, Detroit, Mich. Button fastening. 1,646,053; Oct. 18. Clark, John M., assignor to Universal Button fastening. Lark, John M., assignor to Universal Button fastening. 1,646,053; Oct. 18. Clark, John M., Detroit, Mich. Button fastening. Lark, John T., Provo, Utah. Pneumatic tire. 1,626,511; Apr. 26. Clark, John T., Provo, Utah. Pneumatic tire. 1,626,512; Apr. 26. Clark, John T., Provo, Utah. Pneumatic tire. 1,626,512;

Apr. 26. T., Provo, Utah. Pneumatic tire. 1,626,512; Apr. 26. Clark, John T., Provo, Utah. Vehicle tire. 1,651,375; Dec. 6.

Dec. C.

Dec. C.

Dec. C.

Clavik, Le. Roy B., Waterbury, Conn. Smoke shield.
1.627,482; May 3.

Clark, Le Roy G., Wayne County, Mich. Sign. 1.651.084;
Nov. 29.

Clark, Le Steine H., Evaneville, Ind. System for cleaning garments by gasolines 1.649,572; Nov. 15.

Company, New York, N. Y. Automatic lubricating device. 1,625,074; Apr. 19.

Clark, Leverett M., assignor to Waugh Equipment Company, New York, N. Y. Hand-strap mounting.
1.636,429; Nov. 22.

Cloth, Level M., Assignor, Company. (See Kemp, John R., assignor).

Clark, Louis F., Potrevillos, Chile. Oxidizing metallic solutions. 1,649,152; Nov. 15.

Clark, Mickle, Chicago, III. Electrical condenser.

1.619.597; Mar. J.

3. Glen Head, and A. R. Armstrong, New
York, K. Y. assignors to The American National Red
Cross. Braille matrix. 1,635,032; July 5.

Clark, Nolon I, Beggs, Okla. Pump grip. 1,649,573;
Nov. 15.

Clark, Omar E, (See Skaer, A. H., and Clark.)

Clark, Omar D, Denver, Colo. Holst. 1,633,543;
Clark, Omar M, Denver, Colo.

June 21.

Clark, Orlando A., and G. P. Anderson, Milwaukee, Wis.

Box-making machine. 1,614,522; Jan. 18.

Clark, Otto B., Evanswille, Ind., assignor to Bendix

Brake Company, Chicago, Ill. Brake. 1,628,950;

May 17.

Clark, Otto B., Evanswille, Ind., assignor to Bendix

Brake Company, Chicago, Ill. Brake shoe. 1,628,951;

May 17.

Clark, Otto B., Evanswille, Ind., assignor to Bendix Brake

Company, Chicago, Ill. Brake shoe. 1,652,763;

Dec. 13.

Clark, Otto B., Evansville, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,652,763; Dec. 13.

Clark Paper & Manufacturing Co. (See Clark, Raymond P., assignor.)

Clark, Paul L., Brooklyn, N. Y. Photo-electrical transmission apparatus. 1,648,042; Nov. 8.

Clark, Philippe L., deceased; R. A., Kirkpatrick, executor. Los Angeles, Calif., assignor to A. Clark, Power-transmitting device. 1,439,025; Aug. 23.

Clark, Robert G., Brooklyn, N. Y., assignor to Chicopee Manufacturing Cooperation. Vending apparatus. 18.

Clark, Raymond P., assignor to Clark Paper & Manufacturing Co., Bochester, N. Y. Fruit packer. 1,633,571; June 28.

Clark Reed J., jr., Youngstown, Ohio. Washing machine.

June 28.
Clark, Reed J., ir., Youngstown, Ohio. Washing machine.
1.640.232; Aug. 23.
Clark, Robert C. (See Clark, Charles, R. C. and A. B.)
Clark, Robert G. Brooklyn, assignor to Sam Cohen Machine Corporation, New York, N. Y. Apparatus for applying stays to box corners. 1,617.321; Feb. 15.
Clark, Robert P., assignor to Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Creel. 1,648.757; Nov. 8.

Nov. 8. Clark, Rufus W., assignor to The Goodyear Tire & Rub-ber Company, Akron, Ohio. Tire-display holder. 1,628,306; May 10.

1,628,306; May 10.

Clark, Sidney C., assignor to American Gypsum Company, Port Clinton, Ohio. Manufacturing wall board.
1,639,128; Aug. 16.

Clark, Sidney C., assignor to American Gypsum Company, Port Clinton, Ohio. Plaster board. 1,642,840; Sept. 20.

Clark, Theodore D., Quimby, Iowa. Automobile tire chain.
1,615,570; Jan. 25.

Clark, Theodore B. (See Anderson, M. F., and Clark.)

Clark, Theodore B. (See Clark, James E. and T. E.)

Clorporation, Detroit, Mich. Prain-control apparatus.
1,619,220; Mar. 1.

Clark, Thomas E., Sasignor to Continuous reads of Corporation, Detroit, Mich. Train-control apparatus 1,619.290; Mar. 1.
Clark, Thomas E., assignor to Continuous Train Control Corporation, Detroit, Mich. Conductor for train-control Corporation, Detroit, Mich. Train-control apparatus 1,646.683; Oct. 25.
Clark, Thomas E., assignor of Continuous Train Control Corporation, Detroit, Mich. J.646.683; Oct. 25.
Clark, Thomas E., and C. B. Stone, assignors to Continuous Train Control Corporation, Detroit, Mich. Air Train-Control Corporation, Detroit, Mich. Air Train-Control Corporation, Detroit, Mich. Railwaystem. 1,619.289; Mar. 1.
Clark, Thomas E. and J. E., assignors to Continuous Train Control Corporation, Detroit, Mich. Railwaystem. 1,619.684; Clark, Thomas E. and J. E., Control, Corporation, Detroit, Mich. Continuous Train Control Corporation, Detroit, Mich. Continuous Train Control Corporation, Detroit, Mich. Continuous Train-control system. 1,646,685; Oct. 25.
Clark Thurateror Company. (See Stockfieth, B., and

rk Tructuation Company. (See Stockfleth, B., and

lark Tructractor Company. (See Storkheth, D., and Burger, assignors.) ark, Victor E., Grand Rapids, Mich. Air compressor. 1,634.093; June 28. depth of the Starting device for ark, Virgin R., and the Starting device for ark, Virgin bus E., assignor to Dayton-Wright Company, Dayton, Ohio. Wing or similar member for airplanes.

internal-combustion engines. 1,620,988; Mar. 15.
Clark, Virginius E., assignor to Dayton-Wright Company,
Dayton, Obio. Wing or similar member for airplanes.
1,616,682; Peb. 8, assignor to Dayton-Wright Company,
Clark, Virginius E., assignor to Dayton-Wright Company,
Clark, Wallace. (See Brougham, Herbert B., assignor).
Clark, Walter J., and W. M. Ronine, Wichita, Kans.
Clamp for dental molds. 1,651,376; Dec. 6.
Clark, Warren F. Cleveland, Obio. Heat-controlling
Clark, Warren F. Cleveland, Obio. Heat-controlling
Clark, Warren F. E. Straussky, Warren, Pa. Mounting for heating units. 1,618,364; Feb. 22.
Clark, Wall A. St. Louis, Mo. Liquid-polish applier.
Clark, Will A. St. Louis, Mo. Liquid-polish applier.
Clark, Will M. South Orange, N. J. Telephone directory.
1,650,430; Nov. 22.
Clark, William C., San Francisco, Calif., assignor, by
messne assignments. to Acme Card System Company,
Chicago, Ili. Visible Index. 1,631,473; June 7.

Clark, William D., Washington, D. C. Flying machine, 1,650,113; Nov. 22. Clark, William D., Washington, D. C. Flying machine, 1,650,114; Nov. 22. Clark, William E., Mount Hood, Oreg. Retainer, 1,652,761; June 4. Clark, William E., Wollaston, Mass. Tire carrier.

Clark, William E., Mount Hood, Oreg. Recans...
1.632.761. june 4.
Clark, William F., Wollaston, Mass. Tire carrier.
1.602.473. May 24.
Clarke, Charles M. (See Everts, Walter W., assignor.)
Clarke, Charles M. (See Desmond, Joseph E., assignor.)
Clarke, Charles M. B., New York, N. Y.
Clarke, Charles M. B., New York, N. Y.
Clarke, Charles M. B., New York, N. Y.
Clarke, Edgar W., Hamilton, Ontario, assignor to Mercury
Mills, Limited, Hamilton, Canada. Knotting mechanism for knitting machines. 1,623,233; Apr. 5.
Clarke, George M., Oklahoma City, Okla.
Electric Company. Electrical power transmission.
Clarke, George M., Oklahoma City, Okla. Well bailer.
1,622,627; Mar. 22.
Clarke, Hans T., and C. J. Malm, assignors to Eastman
Kodisk Company, Rochester, N. Y. Prepairing halogen
Nov. 8.

Nov. 8.

Nov. 8.

Nov. 8.

Name M. New Martinsville, W. Ya. Stand for

Nov. 8. Clarke, Ira M., New Martinsville, W. Va. Stand for floor lamps, smokers' stands, and the like. 1,613,382; Jan. 4.

Clarke, James D. (See Chency, G. M., and Clarke, John O., Crawfordsville, Ind. Safety burist vault or casket. 1,637,471; Aug. 2. Clarke, John Og. Crawfordsville, Ind., assignor to W. W. Clarke, Nelson, Calif. Ventilated house. 1,651,341; Nov. 29.

Nov. 29. Clarke, Joseph P., San Francisco, Calif. Dental unit. 1.616,253; Feb. 1. Clarke, Joseph P., San Francisco, Calif. Actuating device for door and window transoms. 1.641,738; S.pt. 6. Clarke, Michael J., Beitlimore, Md. Safety cock for gas appliances. 1645,985; Oct. 18. Clarke Michael J. Beitlimore, Md. Safety cock for gas appliances. Captration. (See Moore, Arlington, as-

signor.)

signor.)
Clarke, Patrick J., assignor of one-half to M. Jaros, Chicago, III. Burglar guard. 1,643,293; Sept. 2Clarke, Ralph A., assignor to Franklin Radio Company, St. Albans, Vt. Spring jack. 1,617,477; Feb. 15.
Clarke, Ralph S., assignor to Bird Machine Company, South Walpole, Mass. Rotary screen for paper pulp. 1,635,285; July 12.
Clarke, René, New York, N. Y., assignor to W. H. & A. E. Margerison & Co., Philadelphia, Pa., a firm composed of the Company, South Walpole, A. E. Margerison. Towel. Clarke, Robert & Dev. 73,349 and Clarke, Robert & Dev. 73,549 and Clarke, Robert & Dev. 73,549 and Clarke, Robert & Dev. 74,540 and Clarke, Robert & Dev. 74,540 and Robert & Clarke, Robert & Persenville, III. Tray. 1,630,889; May 31.

Des. 72,349; Apr. 5.
Clarke, Robert E., Jerseyville, Ill. Tray. 1,630,889; May 31.
Clarke, Thomas, Belfast, Ireland. Apparatus for controlling and regulating gas supply for certain purposes. 1,653,985; Dec. 27.
Clarke, William E., Toronto pump. 1,652,609; Dec. 18.
Clarke, William E., Toronto pump. 1,652,609; Dec. 18.
Clarke, William W., Gee Clarke, John Q., assignor.)
Clarkson, Guy S., assignor to D. R. Finkelstein, Winnipeg, Manitoba, Canada. Rack for dishwashing machines. 1,621,830; Mar. 22.
Clarkson, Thomas, London, England. Steam generator of water heater. 1,637,689; Aug. 2.
Clarkson, Thomas, London, England. Steam generator of the control of the control

laus, Carl, Plainfield, assignor to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J. Method of and apparatus for forming bodies by pressure. 1,624,904;

apparatus for forming bodies by pressure. 1,624,904; Apr. 12.
Claus, Carl, Plainfield, assignor to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J. Self-aligning bearing and making the same. 1,638,797; Aug. 3.
Claus, Carl, Plainfield, assignor to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J. Method of and machine for forming bodies by pressure. 1,648,721;

1,648,449 Nov. Dorchester, these Clauson, William, Doston, Mass. Spraying 1,140,111; Aug. 23.
Clauss, George E., assignor to The Ansonia O & C Company, Ansonia, Conn. Elastic webbing. 1,644,667; Oct. 11.
Clauss, George E., assignor to The Ansonia O & C Company, Ansonia, Conn. Elastic webbing. 1,644,816;

Clauss, George E., assignor to The Ansonia O & C Company, Ansonia, Con. Elastic webbing, 1,644.816; Oct. 11.

Clayier, Pierre, Tarbes, France. Hook for breast collars. 1,616.350; Feb. 1.

Clawson, Monroe S., Upper Montclair, N. J. Electric Clawson, Monroe S., L620.519; Mar. 8.

Clawson, Monroe S., Montclair, N. J. Trousers hanger. 1,635.033; July 5.

Clawson, Monroe S., Upper Montclair, N. J. Casting moid and making same. 1,653.444; Dec. 20.

Clawson, William, San Francisco, Calif. Paring knife. Clay-Adams Co. (See Hilborn, Lloyd T., assignor.)

Clay Equipment Corporation. (See Obele, George, assignor.)

Clay, Frank, assignor of five-sixths to J. Adler and one-sixth to E. C. Rodenmeyer, St. Louis, Mo. Mop wringer, 1.638,518; June 21. Clay, George W., Kingston, Pa. Sash-bar construction, 1,638,764; July 20.

1.636.764; July 26.
Clay, Harvey E., assignor to Wolverine Bumper and Specialty Co., Grand Rapids, Mich, Bumper for vehicles. 1.651.053; Nov. 29.
Clay, Noble S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Tip for propellers. 1.614.186; Jan. 11.
Clay, Noble S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Wood-weaver propeller. 1.618.968; Mar. 1.
Clay. Otis D., Canton, Ohio. Burial vault. 1.650.606; Nov. 29. Clay. C

Claybourn, John G. (See Tucker, Henry R., assignor.) Claybourn, Leslle W., Milwaukee, Wis. Inking mechanism for printing machinery. 1,627,483; May 3. Clayden, Arthur L., Riddey Park, assignor to Sun Oil

for printing maninery. (2.24.88) May 3. (2.24.88) May 3.

Clayton, Andrew B., Union, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Looper-actuating advertising device. 1,653.996; Dec. 27.
Clayton Gin Compress Company. (See Mackenzle, Alexander S., assignor.)
Clayton, John C. L., Galveston, Tex. Box-lid holder and mechanisms for sewing machines. 1,641,136; Aug. 30.
Clayton-Kennedy, Kenneth E., New York, N. Y., assignor to American Hydrocarbon Co. Inc. Apparatus for extracting volatile matter. 1,647,273; Nov. 1.
Clayton & Lambert Manufacturing Company. (See Clayton, William F., Huntsville, assignor of one-third to W. E. James, Cullman, and one-third to N. E. James, Birmingham, Ala. Check for looms. 1,649,446; Nov. 15.

Groen, William F. Hinsterful. assignor of one-third to W. E. James. Ollman. And assignor of the control of the

1.613.442; Jan. 4. Clement, Charles G., assignor to Highway Trailer Company, Edgerton, Wis. Automatic pintle hook. 1.635.659; July 12. Clement, Edward E. (See Hoge, J. B., and Clement, Edward E. (See Lowenstein, H. F., and Clement, H. F., and Clement, Edward E. (See Lowenstein, H. F., and Clement, Edward E. (See Lowenstein, H. F., and Clement, H. F., and Clement, Edward E. (See Lowenstein, H. F., and Clement, H. F., and Clement, H. F., and Clement, H. F., and Clement, Edward E. (See Lowenstein, H. F., and Clement, H. F., and Cleme

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio distributing system. 1,635,151:

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio distributing system. 1,635,151; July 5. Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio broadcast selecting and distributing system. 1,635,162; July 5. Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Subdivided service system of radio broadcast distribution. 1,635,153; July 5. Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio service metering system. 1,635,154; July 5. C

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio service metering system, 1,635,155; July 5.

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio broadcast distributing system, 1,635,156; July 5.

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio broadcast distributing system, 1,635,157; July 5.

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio broadcast distributing system, 1,635,158; July 5.

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio broadcast distributing system, 1,635,158; July 5.

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio broadcast distribution, 1,635,158; July 5.

Clement, George A., Mount Vernon, N. Y. Marking fused bifocal lenses for identification, 1,627,148; May 3.

Clement, Hans, New York, N. Y., assignor to General

May 8.

Clement, Hans, New York, N. Y., assignor to General Optical Co., Inc. Optical diagnostic Instrument. 1.626,601; May 3.

Clement, Hans, New York, and G. S. Dey, Mount Vernon, N. Y., assignor to General Optical Company. Ophthalmological apparatus. 1.625,675; Apr. 10.

Clement, John S., Company. (See Millholland, James H., assignor).

Clement, Lowis M. (See Williams, S. B., and Clement.)

Clement, Lewis M., assignor to Western Electric Company, Incorporated, New York, N. Y. High-frequency signaling system. 1,624,473; Apr. 12.
Clément, Louis, and C. Rivière, Pantin, France, assignors of one-half to Courtaulds Limited, London, England Manufacture and production of threads, filaments, strips, or films from cellulous esters. 1,634,896 July 5.
Clement, Philip E., Monchester, N. H. Combination tal Clement, Charles L. and E. W. Hidebrandt, assignors to The Auto Roller Awning Manufacturing Company, Pueblo, Colo. Awning. 1,630,646; May 31.
Clements, Elmer R., Riverton, Nebr. Hog oiler, 1,638,624; July 19.

Pueblo, Colo. Awning. 1,630,416; May 31.
Clements, Elmer R., Riverton, Nebr. Hog oiler. 1,636,624; July 19.
Clements, Evenett G. (See Rothschild, L., and Clements.)
Clements, Wellington 1, Norfolk, Va. Combined ash and Clements, Wellington 1, Norfolk, Va. Combined glare, wind, rain, and insect shield for automobiles. 1,631,010; May 31.
Clementson, Nils E., Chicago, Ill. Building block and Wall. 1,622,369; Mar 29.
Atlantic, Iowa. Chicken brooder and hover. 1,637,036; July 28.

July 26.

Clemons, John G., Denver, Colo. House number and porch light. 1,642,644; Sept. 13.

Clendon, George W., Piermont, N. Y., assignor to International Combustion Engineering Corporation. Puverized-duel-burning locomotive. 1,650,691: Nov. 29.

Cleret, Albert, Paris, France. Signaling apparatus for road traffic. 1,637,684; Aug. 2.

Clemont Machine Co. (See Surleo, Carmine, assignor.)

Cleweiand-Akron Bag Company, The. (See Appel, Daniel, assignor.)

Clermont Machine Co. (See Surico, Carmine, assignor.) Cleveland-Akron Bag Company, The. (See Appel, Daniel, assignor.) Cleveland-Survey State Company, The. (See Duputy, John W., assignor.) Cleveland Co-Operative Stove Company, The. (See Dupuy, John W., assignor.) Cleveland Crane and Engineering Company, The. (See Bennington, Earl T., assignor.) Cleveland Crane & Engineering Company. (See Wehr, William G., assignor.) Holland, Mich. Furnace-radiator-flue cleaner. 1,635,810; July 12. (See McElligott, Michael C., assignor.) Cleveland Fare Box Company, The. (See McElligott, Michael C., assignor.) Cleveland Folding Machine Company. (See Campbell, Thomas D., assignor.) Cleveland Folding Machine Company, The. (See Olson, Andrew, assignor.) Cleveland Folding Machine Company, The. (See Shipley, John H., assignor.) Cleveland Folding Machine Company, The. (See Tifts, Lesley R., assignor.) Cleveland Folding Machine Company, The. (See Tifts, Lesley R., assignor.) Cleveland God Burner & Appliance Company. (See Kerr, Harry E., assignor.) Cleveland Goorge B., Mobile, Ala. Bookcase. 1,631,622; Gleveland George B., Mobile, Ala. Signboard. 1,639,129: Cleveland George B., Mobile, Ala. Signboard. 1,639,129: C

June 7.
Cleveland, George B., Mobile, Ala. Signboard. 1,639,129;
Aug. 16.

Aug. 16.
Cleveland, George C., Cleveland, Ohio. Track detector.
1,633,572; June 28.
Cleveland Graphite Bronze Company, The. (See Dann,
Ernest G., assignor.)
Cleveland Graphite Bronze Company, The. (See Hopkins,
Benjamin F., assignor.)
Cleveland Harry S., Muneapolis, Minn. Refrigerator.
Cleveland Railway Supply Company, The. (See Blum,
Harold P., assignor.)
Cleveland Rock Drill Company, The. (See Nell, G. M.,
and Kale, assignors.)
Cleveland Stone Company, The. (See Ballash, Joseph L.,
assignor.)

assignor.) eveland Tractor Company, The. (See Heaslet, James assignor.) Cleveland Tractor Company, The. (See Heaslet, James E., assignor.) Cleveland Tractor Company, The. (See Jones, George D.,

assignor.)
Cleveland Trust Company, The. (See Bewsick, William W. assignor.)
Cleveland Trust Company, The. (See De Voe, Albert H.,

assignor.) Cleveland Trust Company, The. (See Dorn, Harry P.,

assignor.

assignor.)
Cleveland Trust Company, trustee. (See Hazelett, Clarence W., assignor.)
Cleveland Trust Company, trustee, The. (See Kachni, Frank J. and W. L., assignor.)
Cleveland Trust Company, The. (See McCaughey, William J., assignor.)
Cleveland Trust Company, trustee, The. (See Pearson, Carl E., assignor.)
Cleveland Trust Company, trustee, The. (See Laughlin, See Caughey, Milliam, et al. (See McCarthy, Joseph P., assignor.)
Cleveland, William, et al. (See McCarthy, Joseph P., assignor.)

Cleveland, William H., and C. W. Bothe, Wellington Kans. Retracting sectional running board. 1,621,479 Mar. 15. 1,621,479;

Cleveland Worm and Gear Company, The. (See Acker, Cleveland Worm and Gear Company, The. (See Acker, George H., assignor.)
Cleveland Worm and Gear Company, The. (See Anderson, Russell G., assignor.)
Cleveland Worm and Gear Company, The. (See Anderson, Clevelland, Company, Clevelland, Clevelland,

Clifford, Walter B., Kimball, W. Va., assignor to The Clifford, Walter B., Kimball, W. Va., assignor to The Clifford Corporation, Boston, Mass. Apparatus for breaking down ore bodies. 1,630,470; May 31.

Clifford, Walter B., Framingham, assignor to The Clifford Corporation, Boston, Mass. Material-handling Clifford, Wiley C., Rochester, N. Y. Tool container. 1,632,172; June 14.

Cliff, James A., assignor of one-half to W. R. Bishop, Springfield, Mo. Angle cock. 1,616,351; Feb. 1.

Cliff, James A., assignor of One-half to W. R. Bishop, Springfield, Mo. Angle cock. 1,616,351; Feb. 1.

Climax Engineering Co. (See Alexander, R. L., and Wishart, assignors.)

Climax Engineering Co., (See Alexander, R. L., Wishart, and Waters, assignors.)

Climax Engineering Company, (See Exten, Rudolph P., Clim

assignor.)
Climax Engineering Co. (See McCallum, James R., as-

signor.) imax Engineering Company. (See Waters, Harry H.,

assignor.) limax Engineering Co. (See Wishart, Harold W. and W., assignors.)
Climax Engineering Company. (See Wishart, William.

Climax Engineering Company. (See Wishart, William. assignor.)
Climic William. Mossend. Lunarkshire, Scotland. Gas Producer 1,650,187; Nov. 22.
Climic, William. Mossend. Lunarkshire, Scotland. Gas producer 1,650,188; Nov. 22.
Cline, Allan J., Chicago, and J. A. Hollander, Forest Park, assignors to Cline Electric Manufacturing Company, Chicago, Ill. Web-tension equipment for printing presses. 1,613,75; Mar. J. A. Hollander, Forest Park, assignors to Cline Electric Manufacturing Company, Chicago, Ill. Fluid-pressure web controller for printing presses. 1,636,987; July 26.
Cline, Allan J., Chicago, and J. A. Hollander, Forest Day, Chicago, Ill. Solenoid wite Manufacturing Company, Chicago, Ill. Solenoid wite Chicago, All. J., and Hollander, assignors, Cline, Sanford E., Greensburg, Ind. Lawn-mower sharpener. 1,621,524; Mar. 22.
Clinton, Harry D., Johnson City, N. Y. Warping yarn. Sept. 13.
Clipper Belt Lacer Company. (See Diamond, James K., assignor.)

Clinton, John, Mempins, TevanSept. 13.
Clipper Belt Lacer Company. (See Diamond, James K.,
Sept. 13.
Clipper Belt Lacer Company. (See Diamond, James K.,
assignor).
Clipperton, John H., Windom, Minn. Grass and weed destroyer. 1,624,474; Apr. 12.
Clipperton, John H., Windom, Minn. Grass and weed destroyer. 1,624,474; Apr. 12.
Clisson, Albert B., assignor, by mesne assignments, to
The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine. 1,629,091; May 17.
Clisson, Albert B., assignor by mesne assignments, to
The Prosperity Company, Inc., Syracuse, N. Y. Springand construction. 1,630,635; May 31.
Clisson, Albert B., assignor by mesne assignments, to The
Prosperity Company, Inc., Syracuse, N. Y. Triple tandem-pressing-machine mechanism. 1,632,463; June 14.
Clisson, Albert B., assignor by mesne assignments, to The
Prosperity Company, Inc., Syracuse, N. Y. Pressingthe Prosperity Company, Inc., Syracuse, N. Y. PressingClizbe, Adelbert R., Plymouth, Ind. Oil burner. 1,621,063;
Mar. 15.
Clodfelter. Mayo, Detroit, Mich. Motor-operated saw.
1,627,652; May 10.
Cloer. Walter J., Young Harris, Ga., assignor of oneInif to W. M. Fain, Murphy, N. C. Plow. 1,622,388;
Olabert Allison A., Rutherford, N. J., assignor to Western
Valey. Allison A., Rutherford, N. J., assignor to Western

1.027.002; May 10.

Cloer. Walter J., Young Harris. Ga., assignor of one-half to W. M. Fain, Murphy, N. C. Plow. 1.632,388; June 14.

Cloer. Walter J., Horberford, N. J., assignor to Western aling system. 1.616.907; Feb. 3.

Cloev. Allison A., Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telegraph system. 1.624,393; Apr. 12.

Cloos, George. (See Plein, A., and Hoffmann, assignor.) Cloes, Lyman W., assignor to The Toledo Pressed Steet Company, Toledo, Ohio. 1.613,319; Jan. 11.

Closure Service Company, The. (See Carvalho, Leslie R. N., assignor.) Clothier, Henry W. (See Anderson, W., and Clothier.)

Cloud, Harry D., and C. Bitterman, Lexington, Ky. Metal awning. 1,015,21; Jan. 25.

Metal awning. 1,045,21; Jan. 25.

Metal awning. 1,645,334; Nov. 8.

Cloud, William S., Berkeley, Calif. Process and apparatus for making confections. Re16,712; Aug. 23.

Clough, Newsome H., London, England, assignor to Radio bloomer of the Clougher, Robert H., Kanasa City, Mo. Controlled head-light. 1,642,919; Sept. 20.

Clouse, R., Robert H., Kanasa City, Mo. Controlled head-light. 1,642,919; Sept. 20.

Clouse, William L., assignor to The National Machinery Company, Hoboken, N. J. Method of and apparatus for applying and treating varnish. Clover, George R., Detroit, Mich., assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Method of and apparatus for applying and treating varnish. Clow, Henry B. and M. L., Lakeport, N. H. Making yarn and the like. 1,637,138; July 26.

Clow, Henry L. (See Clow, Henry B. and H. L.)

Clow, Henry B. and H. L., Lakeport, N. H. Making yarn and the like. 1,637,138; July 26.

Clow, Jan. B., & Sons. (See Beatty, William H., as-Clow, Janse B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, William E., as-Clow, Jense B., & Sons. (See Clow, Jense B., & Son

signor.)

signor.)
Clow, James B., & Sons. (See Wernie, Karl A., assignor.)
Clow, James B., & Sons. (See Wernie, Karl A., assignor.)

Behert. (See Buckles, E. C., Henri, and Clow.) signor.)
Clow, Robert. (See Buckles, E. C., Henri, and Clow.)
Clow, Samuel C. (See Winter, August P., assignor.)
Clow, Samuel C. (See Winter, August P., assignor.)
Clow, Samuel C., See Winter, August P., assignor.
Cloward, Charles E., Fr., Payson, Utah. Poultry-feeding
Cloward, Elmer R., Payson, Utah. Plural-filament electric bulb. 1,636,460; July 19.
Cluett, Peabody & Co. (See Connolly, Charles M., assignor.)

signor.)

signor.)
Cluett, Peabody & Co. (See Cook, Orville E., assignor.)
Cludee, Stephen J., assignor to Bay State Optical Company, Artleboro, Mass. Eyeglass construction.
Cluft, St. Sept. 6.
Clutts, Joshua K., Detroit, Mich. Cupola-charging car.
1.633.693; June 28.
Clyde Iron Works. (See McGiffert, John R., assignor.)
Clyde Iron Works. (See McGiffert, John R., assignor.)
Clyde, Stophen V., South Bourddwook, N. Sunker, ship signal buoy. 1,615.108; Jan. 18.
Clymer Manufacturing Company, The. (See Anderson, Martin B., assignor.)

Clymer Manufacturing Company, The. (See Anderson, Martin E., assignor)

Gyne, Robert G., St. Louis, Mo. Combined pen clip and pocket check protector. 1.644.668; Oct. 11.

Gyne, Robert G., and G. B. Williams, Alton, assignors tridge magazine loader. 1.650.263; Nov. 22.

Cnossen, Andrew J., Newburyport, Mass. Belt-shifting, mechanism. 1.651.254; Nov. 29.

Cond, William H., Nowara, Okla. Antiskid chain for tires. 1.000 of the condition of the cond

Signor.)

Coast, John W., ir., Tulsa, Okla, assignor, by mesne assignments, to Doherty Research Company, New York, N. Y. Apparatus for distilling oil. 1,639,327; Aug. 16.

Coatalen, Louis, Wolverhampton, England. Valve-operating mechanism. 1,622,492; Mar. 29.

Coatalen, Louis, and S. H. Attwood, Wolverhampton, England. Mechanism for varying the angular relationship of two shafts relatively to a third. 1,622,491; Mar. 29.

Coates, Ewim F., St. Paul, Minn. Collar button. 1,619,706; Mar. 1,624,010; Minn. Collar button. 1,626,131; Apr. 26.

Coates, Frederick, Cincinnati, Ohio. Nail. 1,620,193; Mar. 8.

Coates, Mar. 8

Mar. 8.
Coates, John W., Detroit, Mich. Truck. 1,636,172;
July 19.
Coates, Ray G., Pasadena, Calif., assignor, by mesne assignments, of one-half to the estate of H. G. Hamilton, deceased, Youngstown, Ohio. Finishing castings such as ingot molds. 1,635,660; July 12.
Coates, Spencer D., P. H. Davis, and A. B. Jenks, Santa Fe Springs, Calif. Cementing bailer. 1,621,970;
Mar. 22.

Coates, William, Newark, N. J. Water heater. 1,630,890; May 31. Coates, William A., Chorlton-cum-Hardy, and D. R.

May 31.

Contes, William A., Chorlton-cus-Hardy, and D. R.
Davies, Stretford, Engiand, assignors to Westinghouse
switch gener, 1,633-016, July 60.

Coates, William A., Chorlton-cus-Hardy, G. E. Gittins
and D. R. Davies, Stretford, Manchester, England, assignors to Westinghouse Electric and Manufacturing
Company, Electric switch, 1,630-372; May 31.

Coaton, Arthur A., Springs, South Africa. Rock-drill bit. 1,650,492; Nov. 22. Coats, George A. (See Daly, J. F., Coats, and Lutz.) Coats, Henry B. (See Holmes, A. W., Jaques, and Coats.) Coats, J. & F., Limited. (See Sutton, William H., as-

Signot.) In A. Remer, Minn. Auxiliary lens for eye-cotics. B. Leit 827; Jan. 18. Coatsworth, Frank E., Lincoin, Nebr. Incubator tray. 1,626,394; Apr. 26. Cobb. C. L., et al. (See Neil, Joseph B., assignor.) Cobb. Charles, fr., Marshall, Tex. Brake shoe. 1,638,759;

Aug. 9.

Cab. Chee, It., Marsani, 122. Disc. Subt. 1,606,108, Aug. 6.

1.01634,981; July 5.

1.01634,981; July 5.

1.024, 1.025, 1

Dec. 13.

Cobb. Lonie, Hammond, assignor to Graver Corporation, East Chicago, Ind. Filtering tank. 1,615,671; Jan. 18.

McGuire, Bengal, British India. Load-indicating mechanism. 1,620,442; Mar. 8.

Coberly, Clarence J., Los Angeles, Califf., assignor to Purox Company, Denver, Colo. Pressure regulator. 1,613,743; Jan. 11.

Coberly, Clarence J., assignor to Kobe, Inc., Los Angeles,
Calif. Strainer. 1,629,018; May 17.
Coberly, Clarence J., assignor to Kobe, Inc., Los Angeles,
Calif. Turret tip for torches. 1,639,328; Aug. 16.
Coberly, Clarence J., assignor to Kobe, Incorporated, Los
Angeles, Calif. Producing screen pips. 1,654,160;
Dec. 27.

Angeles, Calif. Producing screen pipe. 1,654,460; Dec. 27.
Cobiella y Vasconcelos, Poemia, Habana, Cuba. Drawing instrument. 1,613,221; Jan. 4.
Guilment Company, New York, N. Y. Molding flask. 1,616,177; Feb. 1.
Coble, Ray C., assignor to A. H. Heisey & Company, New York, N. Y. Molding flask. 1,616,177; Feb. 1.
Coble, Ray C., assignor to A. H. Heisey & Company, Newark, Ohio, Flower block, Des. 73,280; Jug. 23.
Coblentz, William W., Washington, D. C. Optical means rents: 1,640,393; Aug. 30.
Coblentz, William W., Washington, D. C., assignor to Secretary of Commerce of the United States as trustee for the Government of the United States as trustee for the Government of the United States and the People of the United States. Eye-protective glass. Coburo, John M., Shinnston, W. Va, assignor of twenty one-hundredths to J. Theis, ten per cent to D. Caruso, and ten per cent to J. Caruso, Baltimore, Md. Railway gate. 1,616,887; Feb. 8.
Coburn, Chand W., Rapid City, S. Dak. Combination Coburn, James M., and B. Knapp, assignors to Plane Speaker Corporation, Kansas City, Mo. Urilizing fabric of sircraft as diaphragm for loud speakers. 1,628,250; May 10.
Cochran, Albert W., Portland, Oreg. Forming cutting

May 10.

Cochran, Albert W., Portland, Oreg. Forming cutting Cochran, Albert W., Portland, Oreg. Forming cutting Cochran, Charles C., Los Angeles, Calif. Mixing valve. 1,614,437; Jan. 11.

Cochran, Clyde E., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,628,389; May 10.

Cochran, Grand, Charles C., Calif. Silver, Calif. Company, Cleveland, Ohio. Elevating platform truck. 1,628,390; May 10.

Cochran, Joseph S., Stockton, Calif. Sales-indicating container. 1,638,313; Aug. 9.

Cochrane Corporation. (See Gibson, George H., assignor.) Cochrane Corporation. (See Gibson, George H., and Yoder, assignors.)

assignors.)
Cochran, Joseph T., et al. (See Ditzler, Guy E., assignor.)

Cochrane, Robert L., Chicago, Ill. Rail anchor. 1.628,231; May 10. Cochrane, Victor H., Tulsa, Okla. Sewer construction.

Cochrane, Victor H., Tulsa, Okla. Sewer construction. 1,638,473; Aug. 9.
Cochrane, William F., Baltimore, Md., assignor, by meane assignments, to U. S. Industrial Alcohol Co. Nickel-copper alloy and making same. 1,634,878; Jan. 18.
Cockburn, Francis B., See Bird, E. S., and Cockburn, Cranics B., assignor to The Lodge & Shipley Machine Tool Company, Cincinanti, Ohio. Talistock with tool slide. 1,613,161; Jan. 4
Cockburn, Francis B., assignor to the Lodge & Shipley Machine Tool Company, Cincinanti, Ohio. Universal follow rest. 1,622,622; Mar. 29.

Cocker, John A., Jolict, Ill., assignor to The American Steel and Wire Company of New Jersey. Fence-making machine. 1,638,528; Aug. 9.
Cockerell, W. G. (See Kendall, George M., assignor.) Cocking, Richard, S. Vallam, Mass. Textile fabric. Des. Cocking, Richard, Waitham, Mass. Textile fabric. Des. 72,986; July 5.
Cocking, Richard, Waitham, Mass. Textile fabric. Des. 72,986; July 5.
Cocking, Richard, Waltham, Mass. Textile fabric Des. 72,987; July 5.
Cocker, Harry J., assignor to Metal Products Company, Des Moines, Iowa. Coll-winding form. 1,640,821; Aug. 30.

Des Moines, Iowa. Coll-winding form. 1,540,821; Aug. 30. Cocazella, Anthony, jr. (See Cocozella, Anthony and Cocozella, Anthony and A., jr., Lynn, Mass. Finishing machine for boots and shoes. 1,620,721; Mar. 15. Coçroft, Susanna, New York, N. Y. Face litter. 1,612,801;

Cocroft, Susanna, New York, N. Y. Face litter. 1,012,001, Cocroft, Susanna, New York, N. Y. Massage appliance. 1,618,059; Feb. 15.
Code. Samuel M. Chicago, Ill. Amphibious vehicle. 1,646,611; Oct. 25.
Code, Samuel M. Chicago, Ill. Amphibious vehicle. 1,646,611; Oct. 25.
Coder, Joseph and L. St.-Marcel-les-Marseille, France. Tractor trailer of the type carried on two wheels. 1,626,183; Apr. 26.
Coder, Joseph and L., St.-Marcel-les-Marseille, France. Tractor trailer of the type carried on two wheels. 1,626,183; Apr. 26.
Codins, Peter, assignor to Illinois Cork Co., Chicago, Ill. Capped swab or dauber. 1,618,977; Mar. 1.
Codling, William R. (See Bridges, F., Firman, Tisdale, and Hoskins, assignors.)
Cody. Martin M., Chicago, Ill., assignor to Crane Packing 1,642,431; Sept. 13.

Coe Harrison S., Palo Alto, Calif. Thickener. 1,650,820; Nov. 29.
Coe, James R., assignor to The American Brass Company, Waterbury, Conn. Rolling mill. 1,614,422; Jan. 11.
Coe, James R., assignor to The American Brass Company, Waterbury, Conn. Rolling mill. 1,614,423;

Coe. James R. ussignor to The American Brass Company, Waterbury, Conn. Rolling mill. 1,614,423;
Jan. 11.
Coe. James R., assignor to The American Brass Company,
Waterbury. Conn. Rolling mill. 1,614,424;
Jan. 11.
Coe. James R., assignor to The American Brass Company,
Waterbury. Conn. Belling mill. 1,614,424;
Jan. 11.
Coe. James R., assignor to The American Brass Company,
Waterbury, Conn. Electric furnace. 1,615,109;
Jan. 13.
Coe. James R., assignor to The American Brass Company,
Waterbury, Conn. Annealing or heating furnace.
1,630,784;
Ray 31.
Coe. James R., assignor to The American Brass Company,
Waterbury, Conn. Annealing or heating furnace.
1,630,784;
Ray 31.
Coe. James R., assignor to The American Coe.)
Coe. Leonard F., Veraddle, Wash. Flying machine.
1,623,477;
Apr. 12.
Coe. Samuel, Jersey City, N. J. Striping machine.
1,623,577;
Apr. 5.
Coene, Gaston E. (See Scheluto, J., and Furnemont, assignors.)

Coene, Gaston E. (See Science, v., signors.) Coerper, Henry J., Indianapolis, Ind. Rail joint. 1.613,870: Jan. 11. Coerper, Henry J., Indianapolis, Ind. Railway rail and tie plate, 1,663,001; Dec. 20. Cofar, Lemel, Milwaukee, Wis. Display stand. 1,632,820;

June 21.

Coffed, Earl J., Depew, N. Y. Trestle or sawhorse.
1.648.638; Nov. 8.

Coffey, Arvin L. Anson, Tex. Trailer hitch for automobiles, 1.650.189; Nov. 22.

Coffey, Barton H. Elizabeth, N. J. and G. S. Dauphinee, Coffey, Barton H. Elizabeth, N. J. and G. S. Dauphinee, Coffey, John J., askganor to Bethlehem Steel Company, Rethlehem Pa. Milling machine, 1.619.057; Mar. 1.

Coffey, Joseph M., Schenectady, assignor to Mea Insulator Company, New York, N. Y. Mica-plate composition.

Coffey, Joseph M., Schenectady, assignor to Mea Insulator Company, New York, N. Y. Mica-plate composition.

Coffey, Nobert J., Oakland, Calif. Sprayer. 1,641.023; Aug. 20.

Codey, Robert J., Oakland, Calli. Sprayer. 1,641,028; Aug. 20. Coffey, Sylvester V., Hixon, Tenn., assignor, by mesne assignments, to Easton Car & Construction Company. Easton. Pa. Operating means for couplers. 1,614,654; Jan. 18.

Coffield, Charles W., Bowle, Tex. Game ball. 1,622,421; Mar. 29. Coffield, James L., Dayton, Ohio. Clutch mechanism for washing machines. 1,648,675; Nov. 8. Coffield Washer Company of Canada Limited. (See Kemp, C. T., and Ryckman, assignors.)

Coffin, Carl L., Kansas City, Mo. Anatomical mounting for articulators. 1,614,828; Jan. 18.
Coffin, Charlie G., and J. A. Wolf, assignors of one-third form of the control of the control

man.)

Comman, Whitain F. (see anglemyer, C. M., and CorCoftin, Austin E., Green Bay, Wis. Method and apparatus for making paper. 1,623,526; Apr. 5.
Coftin, Austin E., Green Bay, Wis. Method of and apapartus for creping paper. 1,941,739; Sept. 6.
Coger, Albert C., Dunbar, Nebr. Postbole auger.
1,642,647; Sept. 13.
Corery, Henri E. D., and C. F. B. G. Bertrand, Paris,
France. Loose-leaf binder. 1,640,646; Aug. 30.
Coggeshall, George W., and A. Reilly, assignors to The
Jefferson Construction and Oil Treating Company,
1,643,698; Sept. 27.
Coggeshall, George W., and A. Reilly, assignors to The
Jefferson Construction and Oil Treating Company,
Washington, D. C. Treating emulsions. 1,643,699;
Sept. 27.

Richmond, Va. Line Dup of story processing the Feb. 8.
Cognitin, B. J., Company Limited. (See Picard, Georges, assignor.)
Cognost of the Company Company of the Cognost of the Cognosting Company. (See Cognosting Company, A, assignor, Cognosting Company, Detroit, Mich. Machine tool. 1,630,528; May 3).

Cogsull, Stuart A. assignor to Cougain Manufacturing Control of the Cougain Manufacturing Course, Developing the Marchine tool. 1,630,526; Cogshall. Wilbur A. Bleemington, Ind. Sextant. 1,631,014; Nov. 29.
Cogswell, Lloyd B., West Springfield, Mass. Radio apparatus. 1,634,896; July 5.
Cohan, Newton, Fortland, Oreg. Adjustable mail chute. 1,640,895 apparatus. 1,645,475; Cot. 11.
Cohen, David, Brooklyn, N. Y. Liquid measuring and dispensing apparatus. 1,645,475; Cot. 11.
Cohen, Edouard, Brussels, Belgium. Making files. 1,645,895; Oct. 18.
Cohen, Florence, Liverpool, England. Playing cards. 1,029,266; May New York, N. Y. Hand lantern. 1,641,890; Sept. 6.
Cohen, H. F. (See Hammond, Frederick, assignor.)
Cohen, Harry, New York, N. Y. Undergarment. 1,616,440; Feb. 8.

Cohen, Herbert J., Chicago, Ill. Signal switch. 1617,376;

Cohen, Herbert J., Chicago, Ill. Signal switch. 1617,376; Feb. 15. Cohen, Irving H., assignar of one-half to I. D. Groak. Chicago, Ill. Lighting device. 1632,173; June 14. Chicago, Ill. See concell, A. J. and Cohen. Cohen, Joseph E. (See Feeney, T. L. and Godoy, assignors). Cohen, Joseph H., Bridgeport, Conn. Cigar lighter. Des. 72,935; June 28. Cohen, Joseph H., Bridgeport, Conn. Electrical device and the manufacture thereof. 1,639,258; Aug. 16. Chicago, St. Louis, Mo. Hat-size reducer. 1,633,004; Cohen. Leon, St. Louis, Mo. Hat-size reducing pad. Cohen. Leon, St. Louis, Mo. Hat-size reducing pad.

Cohn, Iwili, assignor to Irwin & Company, Inc., New York, N. Y. Toy rattle, 1,617,535; Feb. 15.
Cohn, Irwin, assignor to Irwin & Company, Inc., New York, N. Y. Toy trumpet. 1,623,163; Apr. 5.
Cohn, Irwin, assignor to Irwin & Company, Inc., New York, N. Y. Celiulold toy water pistol. 1,629,019;

May 17.
hn, 1rwin E., New York, N. Y. Whistle pinwheel,
1,613,982; Jan. 11.
hn, 1rwin E., New York, N. Y. Air-operated toy.
1,647,902; Nov. L.
hn, Jacob, New York, N. Y., assignor, by mesne assignments, to Nonexplosive Corporation of America
(New Corporation). Safety attachment for tanks.

signments, to Nonexplosive Corporation of America (New Corporation). Safety attachment for tanks. 1.6:26,721; May 3.

Cohn, Louis N., Rock Island, Ill., assignor to Gleam Manufacturing Co., Davenport, Iowa. Cleaning composition Cohn, Samuel, New York, N. Y. Machine for stretching, drying, and winding up tubular fabric. 1,636,683; July 26.

Cohoe, Wallace P., Riverdale-on-the-Hudson, N. Y., assignor to Wallace P., Cohoe & Co. Inc. Novel closure Cohoe, Wallace P., & Co. Inc. (See Cohoe, Wallace P., assignor to Wallace P., & Co. Inc. (See Cohoe, Wallace P., assignor to Wallace P., & Co. Inc. (See Cohoe, Wallace P., assignor).

Conder, Waints.

Signori, Coli, Otto, Fayette County, Ohio. Posthole digger.

1.622.704; Mar. 29.

1.622.704; Mar. 29.

Col. 1.622.704; Mar. 29.

Co

Colader Company, The. (See Newdick, Norton A., assignors, 1)
Colbert, Charles C., and G. E. Preston, assignors to American Coating Mills, Elkhart, Ind. Coated paper board. 1,624,091; Apr. 12.
Colbert, Charles C., and G. E. Preston, assignors to American Coating Mills, Elkhart, Ind. Web-coating apparatus. 1,632,885; June 21.
Colbert, Charles C., and G. E. Preston, assignors to American Coating Mills, Elkhart, Ind. Web-coating apparatus. 1,632,885; June 21.
Colbert, George F. and W. H., C., and Colbert, Colbert, George F. and W. H., Clibert, Ph. Nonglare milror, 1,647,857; Nov. 1.
Colbert, William H. (See Colbert, George F. and W. H.)
Colborne Manufacturing Company. (See Kaser, William J., assignor.)
Colborne Manufacturing Company. (See Smith, Dennis Colborne Manufacturing Company. (See Smith, Dennis Leaven, 1998).
Colborne Manufacturing Company. (See Smith, Dennis Colborne Manufacturing Company. (See Smith, Dennis Leaven, 1998).
Colborne Manufacturing Company. (See Smith, Dennis Colborne Manufacturing Company. V. Shoe and stocking protector. 1,640,334; Aug. 23.
Colburn, Walter A., Bridgeport, Conn. Radiator valve. 1,630,461; July 19.
Colby, Charles C. (See McKay, W. A., and Colby.)
Colby, Charles C. (See McKay, W. A., and Colby.)
Colby, Edward A., Maplewood, F. Maeulen, East Orange, and G. L. Van Allen, Newark, N. J., assignors to Baker & Company. Muffle furnace. 1,631,747; June 7.
Colby, Lawrence W., assignor of one-half to J. N. Anderson, Methuen, Mass. Glass cover for automobiles. Clipy, 1998. Appl. 11, 11.
Colby, Ora A., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radiant air heater. 1,614,230; Jan. 11.

Colby, Ora A., Irwin, Pa., assignor to Westinghouse Colby, Ora A., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radiant air heater. 1,614,230; Jan. 11.
Colby, Ora A., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric air heater. 1,416,688; Jan. 25.
Colby, Ora A., Mansfield, Ohlo, assignor to Westinghouse Electric & Manufacturing Company. Electric-heater unit. 1,638,829; Aug. 16.
Colby, Ora A., Mansfield, Ohlo, assignor to Westinghouse Electric & Manufacturing Company. Thermostatic disk. 1,654,320; Dec. 27.
Colchester, Arthur E., Dorchester, Mass. Engine valve. 1,638,694; June 28.
Colclouch, William, Norwood, assignor to The American electric mechanism for centrifugal machines. 1,634,651; July 5.
Colditz. Walter, and G. Thommel, Hillegossen, assignors to the Firm Koholyt Aktiengesellschaft, Berlin, Germany. Process and apparatus for moistening paper. 1,6417,704; Feb. 15.

the Firm Koholyt Aktiengeseilschaft, Berlin, Germany, Process and apparatus for moistening paper. 1.617.704; Feb. 15.
Coldwell, John S., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Web-feeding mechanism. 1.640.532; Aug. 30.
Coldwell, John S., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Web-supplying system. 1,640.533;

Aug. 30.

Oct. 18. Manden, N. Y. Transfer device for in-Columbia L. 16.35.575; July 12. Cole, Elwyn Z., Philadelphia. Pa. Lock nut. 1,649.666; Nov. 15. Cole, Elwyn Z., Philadelphia, Pa. Lock nut. 1,651,187; Nov. 25.

Cole, Elwyn Z., Philadelphia, Pa. Lock nut. 1,651,188; Nov. 29.

Cole, Elwyn Z., Philadelphia, Pa. Lock nut. 1,651,185; Nov. 29.
Cole, Eugene M., Charlotte, N. C. Attachment for agricultural implements. 1,627,954; May 10.
Cole, Eugene M., Charlotte, N. C. Attachment for ferCole, Eugene M., Charlotte, N. C. Lifting mechanism. 1,627,956; May 10.
Cole, Eugene M., Charlotte, N. C. Lifting mechanism. 1,624,411; Dec. 27.
Cole, Eugene M., Charlotte, N. C. Depth gauge and 1,624,412; Dec. 27.
Cole, Eugene M., Charlotte, N. C. Guano distributor. 1,654,413; Dec. 27.
Cole, Eugene M., Charlotte, N. C. Guano distributor. 1,654,412; Dec. 27.
Cole, Eugene M., Charlotte, N. C. Guano distributor. 1,654,412; Dec. 27.
Cole, Eugene M., Charlotte, N. C. Guano distributor. 1,654,412; Dec. 27.
Cole, Eugene M., Charlotte, N. C. Guano distributor. 1,654,412; Dec. 27.
Cole, Ergene M., Charlotte, N. C. Guano distributor. 1,654,412; Dec. 27.
Cole, Ergene M., Charlotte, N. C. Guano Distributor. 1,654,413; Dec. 27.
Cole, Ergene M., Charlotte, N. C. Guano Distributor. 1,654,413; Dec. 27.
Cole, Ergene M., Charlotte, N. C. Guano Distributor. 1,654,913; Dec. 27.
Cole, Ergene M., Charlotte, N. C. Guano Distributor. 1,634,931; July 5.
Cole, Harvey S. and N. A., Syracuse, Ind. Drag-line-excavator counterbalance. 1,644,979; Jan. 18.
Cole, L. Pulmer, et al. (See Joseph, Sheldon, assignor.)

Cole. Harvey S. and N. A., Syracuse, Ind. Drag-line-execustor counterbalance. 1.614.919; Jan. 18. E., as-Cole, I. Plumer, et al. (See Joseph, Sheldon, assignor, Cole, I. Plumer, et al. (See Joseph, Sheldon, assignor, Cole, I. Plumer, et al. (See Joseph, Sheldon, assignor, Cole, I. Plumer, et al. (See Joseph, Sheldon, assignor, Cole, I. Lorne A., Brantford, Ontario, Canada. Coil-forming machine. 1.634.668; June 21.

Machine. 1.634.668; June 21.

Machine. 1.642,229; Sept. 1.016.

Gole, Lyndon C., Hamilton, Ohio, assignor to Niles-Bement-Pond Company, New York, N. Y. Counterbalance for lathes. 1.634,368; July 5.

Cole. Lyndon C., Hamilton, Ohio, assignor to Niles-Bement-Pond Company, New York, N. Y. Counterboring mill. 1,650,692; Nov. 29.

Cole, Lyndon C., Hamilton, Ohio, assignor to Niles-Bement-Pond Company, New York, N. Y. Check actuating and driving mechanism. 1,650,693; Nov. 29.

Cole, Lyndon C., Hamilton, Ohio, assignor to Niles-Bement-Pond Company, New York, N. Y. Tool turet for axle lathes. 1,652,426; Dec. 13.

Cole, Marjonic Quincy, Mass. Textile fabric or similar article. Des. 72,867; May 17.

Cole, Marjonic Quincy, Mass. Textile fabric or similar article. Des. 72,867; May 17.

Cole, Norman A. (See Cole, Harvey S. and N. A.)

Cole, Orin H., Ashland, Oreg. Folding-chair binge. 1,639,722; Aug. 23.

Cole, Pallip G., Forest Hills, assignor to A. Schrader's Son, Inc., Brocklyn, N. Y. Squash-ball tester. 1,630,110; May 24.

Cole, Robert L. (See Denslow, Muth W., assignor.)

Cole, Robert L. (See Penslow, Muth W., assignor.)

Cole, Cranter Development Company, Secondary battery. 1,622,767; Mar. 20.

Cole, Theodore S., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Art and apparatus for making storage-battery grids. 1,639,641; Cole, Theodore S., New Haven, Conn., assignors to The Safety Car Heating & Lighting Company.

Safety Cur Henting & Lighting Company. Art and apparatus for making storage-battery grids. 1.630.641; Aug. 16.

Cole. Theodore S., and S. Johnson, New Haven, Conn., assignors to The Safety Car Heating & Lighting Company. Art of and apparatus for making storage-battery are storage of the sto

Coleman, Arthur E., Danby, Vt. Gradometer. 1,617,108; Feb. S.
Comin Automatic Transmission Company. (See Coleman George B., assignor). Coleman, Bernard L., Elmira, N. Y. Wire-fence tool. 1,613,871; Jan. 11.
Coleman, Charles R., and C. M. Johnston, Brashear, Mo. Automobile stand. 1,648,474; Nov. S.
1,635,538; July 12. Los Angeles, Calif. Plowpoint 1,635,638; July 12. Coleman, George B., Dayton, Ohio. assignor to Coleman Automatic Transmission Company, San Francisco, Calif. Automatic transmission Company, San Francisco, Calif. Automatic transmission. 1,632,694; June 14.
Coleman, George B., Philadelphia, Pa., assignor to Coleman George B., Philadelphia, Pa., assignor to Coleman Automatic Transmission Company. Transmission. 1,632,695; June 14.
Coleman, George C., Terre Hauto, Ind. Adjustable pin Coleman, George C., Terre Hauto, Ind. Adjustable pin Coleman, George C., Terre Hauto, Ind. Adjustable pin George S., New York, N. Y. Moving-picture baseball scoreboard. 1,616,304; Feb. 1.
Coleman, Harry S., Dayton, Pa. Hay fork. 1,634,177; June 28.

Coleman, Jennings B., et al. (See Fuetterer, Otto F., assignor.)

d. Wilcox Company, Bayonne, N. J. Liquids-separating device. 1,624,092; Apr. 12.

Coleman, John A. (See Coleman, Anna and J. A.)

Coleman, John A. (See Cock, G. C., and Coleman, Onh A. (See Cock, G. C., and Coleman, John A. (See Cock, G. C., and Coleman, John H., Hanford, Calif. Fish elevator. Coleman, John P., Bagewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-braking apparatus. 1,626,920; May 3.

Coleman, John P., Bagewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-braking apparatus. 1,626,920; May 3.

Coleman, John P., Bagewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-braking apparatus. 1,624,4711; Oct. 11.

Coleman Lamp Co., The (See Ranck, Edward D., assignor.)

Coleman, Metcalfe C., Drumwright, and E. D. Shoemaker Tuisa, Okla. Oll-tank cleaner. 1,635,539; July 12. Coleman, Robert C., Wind Gap, Pa. Tire rim. 1,823,307; Apr. 5.

Coleman, Robert C., Wind Gap, Pa. Tire rlm. 1,623,307; Apr. 5.
Coleman, Stephen N., Sylacauga, Ala. Hand clamp. Coleman, Stephen N., Sylacauga, Ala. Hand clamp. Coleman, Stephen N., Sylacauga, Ala. Shoe jack. 1,640,584; Aug. 30.
Coleman, Stewart P. (See Parsons, L. W., and Coleman, Coleman, William C., Wichita, Kans. Centriugal separation of the Coleman, William C., Wichita, Kans. Centriugal machine. 1,637,552; Aug. 2.
Coleman, William C., Wichita, Kans. Centriugal machine. 1,637,552; Aug. 2.
Coleman, William C., Wichita, Kans. Receptacle-supporting means. 1,637,553; Aug. 2.
Coleman, William C., Wichita, Kans. Heating stove. Coleman, William C., Wichita, Kans. Traft turbine. 1,651,054; Nov. 29.
Coleman, William S., Midland, Pa. Draft turbine. 1,651,054; Nov. 29.
Coleman, William S., Midland, Pa. Draft turbine. 1,651,054; Nov. 29.
Coleman, Turbine of the Coleman of

signor, Coles, Thomas, Homestead, Pa, Pressure regulator, 1,637,764; Aug. 2: Coles, Walter H., Troy, Ohio, Lawn-sprinkling device, 1,628,118; May 10. Coles, Walter H., assignor to The Skinner Irrigation Company, Troy, Ohio, Lawn sprinkler, 1,637,140; July 26.

July 26. Coles, Wilfred G., assignor to Madison Kipp Corporation, Madison, Wis. Lubricator. 1,617,199; Feb. 8. Coles, Wilfred G., assignor to Madison Kipp Corporation, Madison. Wis. Lubricator. 1,635,540; July 12. Coley, George F., assignor to American Specialty Co., Okinhoma City, Okia. Radius-rod attachment. 1,623,046; Apr. 5. Coley, George F., assignor to America.
Coley, George F., assignor to America.
1,623,046; City, Okla.
1,623,046; Apr. 5.
Coley, Joseph, Detroit, Mich. Combination lawn cleaner.
1,619,851; Mar. 8.
Colin, Erick J., Bock. Minn. Milk and cream cooling flevice. 1,650,326; Nov. 22.
Colladay, Edward F. (See Clement, Edward E., assignor.)
Colladay, Edward F. (See Hoge, J. B., and Clement, assignors.)
Colladay. Edward F. (See Lowenstein, H. F., and

signors.)
Colladay, Edward P. (See Lowenstein, H. F., and Clement, assignors.)
Clement, assignors.
Clement, assignors.
Colladay, Grand Haven, Mich. Frame for automobile license plates. 1,621,582; Mar. 22.
Collander, Stanley, Scrauton, Pa. Pen attachment.
1,622,775; May 24.
Collar, Lloyd D., assignor to Collar Valves Corporation, Oakland, Calif. Packing-gland structure. 1,638,619;

Aug. 9. Collar Valve Corporation. (See Collar, Lloyd D., as-

signor.)

Colledanchise, Saivatore, Boston, Mass. Making jointed toys. 1.636.589; July 19.

Collett, Frederick W. H., deceased, Cambridge, Mass., by Simmons Company, Kenosha, Wis., assignee. Mattress-side-stitching machine. Re16.555; Feb. 22.

Collette, Clarence C., Amsterdam, N. Y. Play ball. Collette, Charmer C., Amsterdam, N. Y. Play ball. Collette, Manufacturing Company, The. (See Ross, Charles E., assignor.)

Colley, Fed, assignor to The Goodyear Tire & Rubber Company, Aktron, Ohio. Bale-tearing machine. 1623.936; Apr. 5. siznor to H. H. Weedon, Richmond. Colley, George F., accentering device. 1,632.805; June 28.

Colley, George E., accentering device. 1,632.805; June 28.

Colley, George E., assignor to H. H. Weedon, Richmond. Colley, George E., assignor to H. H. Weedon, Richmond. Sept. 6. Sept. 6

Colliard, Emil C., Arcade, N. Y. Charge-forming device colliard, termal-combustion ensines, 1,631,362; June 7, Collier, John W., Augusta, Ga. Foldable sunshade for automobiles, 1,645,616; Oct. 11. Collier, Vincent, Worcester Park, England. Support for seats and the like. 1,633,476; June 21.

Collignon, William C., assignor to The Cable Company, Chicago, Ill. Pneumatically-operated musical instrument. 1,627,011; May 3.
Collin, Theodor. (See Svensson, C. A., and Collin.) Collin, Theodor, Falun, and L. G. H. Helmstein, Gottenborg, Sweden. Bogie for railway cars and the like. 1,640,647; Aug. 30.
Collingham, Robert H., Rugby, England, assignor to General Electric Company. Vapor generator. 1,623,391; May 10.
Collingham, Robert H., Rugby, England, assignor to General Electric Company. Vapor generator. 1,645,391; Collings, Orlando A. Kansas City Mo. assignor to W. A. Collings, Orlando A. Kansas City Mo. assignor to W. A.

Oct. 11. ollings, Orlando A., Kansas City. Mo., assignor to W. A. Collings, Santa Monica, Calif. Waterproof plastic. 1.650,864: Nov. 29. ollings, William A. (See Collings, Orlando A., as-

1.650.864: Nov. 29.

Collings, William A. (See Collings, Orlando A., assolingor.)

Collins, Alf C., deceased; O. Collins, administratrix, assignor to F. N. Collins, B. Cavins, and O. Collins, Rogers, Ark. Connection for storage-battery terminals. 1.614,880; Jan. 18.

Collins, Arthur, assignor to The Miller Rubber Company, Akron, Ohlo. Ruching forming and applying machine. 1.613,983; Jan. 11.

Collins, Cassius M., Bakersfield, Calif. Inclinometer. 1.622,463; Apr. 5.

Collins, Charles B., Bentley, Kans. Grain door. 1,613,162; Collins, Charles B., Bentley, Kans. Grain door. 1,613,162; Collins, Charles D., assignor to American Cyanamid Company, Collins, Charles D., assignor to American Cyanamid Company.

Jan. 4.
Collins, Charles D., assignor to American Cyanamid Company, New York, N. Y. Closure. 1,563,785; May 31.
Collins, Charles H. R., Marrickville, near Sydney, New South Welles, Australia. Apparatus for the manufac-Collins, Charles W. (See Collins, Guy E., assignor.) Collins, Charles W. (See Collins, Guy E., assignor.) Collins, Charles W., Seattle, Wash. Automatic carburetor-feed control. 1,636,851; July 2-6. ower device for operating car brakes. 1,637,440; Aug. 2.
Collins, Charles W., Seattle, Wash. Pag. 2, 1,651,674; Collins, Cornelius, assignor to Arthur W. Nash Inc., Los

June 7.

Collins, Herbert F. (See Collins, George H. and H. F.)

Collins, Hobart, Union Township, Hardin County, Iowa.

Tire-chain-locking tightener. 1, 651, 512; Dec. 6.

Collins, J. N., Company. (See Johnson, C. E., and

Pearce. assignors.)

Collins, J. N., Company. (See Napier, Actibald S., assignors.)

Collins, James D., Wakefield, Mass. Cross-chain anchorling member for vehicle wheels. 1,647,784; Nov. 1.

Collins, James G., assignor to Atlas Press Company.

Kalamazoo, Mich. Mantrel press. 1,645,521; Oct. 18.

Collins, James H., Fullerton, assignor to W. D. Sharett.

Mar. 1, 1411. Fump-rod-rotating device. 1,618,700;

Mar. 1,411. Fump-rod-rotating device. 1,618,700;

Brea, Calif. Pump-rousessand Mar. I, Sohn R., Wichita, Kans. Hammer. 1,646,993; John R., Wichita, Kans. Hammer. 1,646,993;

Collins, John T., et al., trustees. (See Conner, Lester C.,

Collins, John T., et al., Hustees. (See Coulors, assignor.)
Collins, Joseph. (See Tuleikis, L., and Collins,)
Collins, Julius D., Vineland, N. J. Automatic switch.
Collins, Martin W. (See Bambach, J. J., and Collins,
Collins, Marthu W. (See Kiam, Edward, assignor.)
Collins, Olin C. (See Allensworth, J. N., Keltner, and Collins, Ol Collins.)

Collins, Ollie, administratrix. (See Collins, Alf C.)
Collins, Ollie, et al. (See Collins, Alf C., assignor.)
Collins, Fatrick W. (See Westhury. W., and Collins.)
Collins, Fatrick W. (See Westhury. W., and Collins.)
Collins, Robert K., Caton, N. C. (Combination square.
1.618,862; Feb. 22.
Collins, Rollin E., Parnassus, assignor to The Aluminum
Company of America, Pittsburgh, Pa. Rack for roastcre. 1,630,471; May 31.

Collins, T. B., also known as T. B. Collins, deceased, Daytona, Fla.; G. R. Collins, administrator, Kansus City, Mo. Boat 1,631,400; June; T. Collins, Thomas. (See Hammer, Peter, assignor). Collins, Thomas, jr., assignor to The American Separator Company, Bainbridge, N. Y. Speed indicator. 1,631,796; June 7.

Company, Bainbridge, N. Y. Speed Indicator. 1,001,180 June 7.
Collins, Walter H. (See Moore, Max J., assignor.)
Collins, William A., assignor. by mesne assignments, to The Safe-T-Stat Co., Philadelphia, Pa. Thermo-electric indicator and safety device. 1,621,386; Mar. 15.
Collins, William A., Brooklyn, N. Y. Shutter-operating Collins, William A., Brooklyn, N. Y. Shutter-operating Collins, William A., Brooklyn, N. Y. Window-sash fastener. 1,638,988; Aug. 9.
Collins, William S., Detroit, Mich. Adjustable golf club. 1,644,177; Oct. 4.
Collins, William S. (See Robinson, Douglas, G., assignor.)
Collinson, Gordon T. (See Storey, O. W., and Collinson.)
Collinson, Stanley E., Newton Center, Mass. Golf club and making the same. 1,637,735 Aug. 2.
Collins Company, The. (See Spulding, J. D., and Bouda assignors.)

Collis, Lloyd, New York, N. Y. Rallway train. 1,634,490;

Collis, Lloyd, New York, N. Y. Railway train. 1,004,200. Iuly 5 Colloidal Equipment Corporation. (See Butler, Edward A., assignor.)
Collton, Norman L., Newport News, Va. Screen for automobiles. 1,639,589; Aug. 15.
Colman, George A., Scattle, Wash. Timber-perforating Colman, Howard D., Sesignor, by mesne assignments, to Barber-Colman Company, Rockford, Ill. Spinning. 1,614,879; Jan. 18.
Colman, Howard D., assignor to Barber-Colman Company, Rockford, Ill. Warp-drawing machine. 1,624,928; Apr. 19.
Colman, Howard D., Bockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford, assignor to E. S. Nether-granger of the Colman Howard D., Rockford of the Colman Howard D

cut. Evanston, Ill. Yarn-mass support. 1,641.661; Sept. 6.
Colman, Howard D., and B. A. Peterson, assignors, by mesne assignments, to Barber-Colman Company, Rock-ford, Ill. Spinning machine. 1,614.718; Jan. 18.
Colomb, Henri, Tavannes, Switzerland. Manufacturing process of making blanks for watch movements pro-the second s

Mar. 15.

Olomb, Henri, Tayannes, Switzerland, Manufacturinz, Colomb, Hornests of watches, 1,629,287; May 17.

Colomb, Henri, Tayannes, Switzerland, Making concentric bushings for jewel bearings, 1,640,348; Aug. 30.

Colomb, Henri, Tayannes, Switzerland, Jewel setting for watches and making same, 1,642,102; Sept. 13.

Colomb, Frunk, et al., (See Book, Charles S., ascience, Colomb, Frunk, et al., (See Book, Charles S., ascience, 2000, Manufacturing, Colomb, Frunk, et al., (See Book, Charles S., ascience, 2000, Manufacturing, Colomb, Colo Colona Manufacturing Company. (See Shrum, P. J., and

Henigen, assignors.) Colona Manufacturing Company. (See Shrum, Peter J..

Colonia Manuelectoria assignori. Colone, James, Collinsville, Ill. Curtain bracket. 1.626.186; Apr. 26. Colonial Fireplace Company. (See Guy. Walter W., as-

Colonial Firepince Company, Signor.)
Colonial Lomp & Fixture Works, Inc.
Colonial Lomp & Fixture Works, Inc.
Colonia, Angelo. Philadelphia, Pa.
machine. 1.643.576: Sept. 27.
Color Cinema Productions, Inc.
Arthur G., assignor.)
Colorado Carburetor Company, The.
(See Tangye, Roy.

assignor.)
Colorado Vanadium Corporation. (See Thews, Karl B.,

Colorgado Vannetten assignor, Colorgaph Laboratory, Inc. (See Hernandez, Melia, Arturo, assignor, D. Bost Orange, N. J., assignor to West

Colorgraph Laboratory, inc.
Arthuro, assignor.) Section of the Arthuro, assignor.) Section of the Color of th

signor.)
Colson Company, The. (See Roe, Mayo E., assignor.)
Colt, Thomas C., Orange, N. J. Knockdown or foldable
building, 1.629,150; May 17.
Colt's Patent Fire Arms Manufacturing Company. (See
Couch. Elbert L., assignor.)
Colt's Patent Fire Arms Manufacturing Company. (See
Tamsley, George II., assignor.)
Colt's Patent Fire Arms Manufacturing Company. (See
Webb, George, assignor.)
Coltman, Bertram W. (See Miller, Myron, assignor.)

Coltman, Bertram W., Chicago, Ill. Flaking soap. 1,653,390; Dec. 20. Colton, Stanley J., Binford, N. Dak. Trace carrier. 1.632,368; June 14. Columbia Lighting Fixture Co. (See Peinlich, Max, as-

Columbia Machine Works & Malleable Iron Co. (See Gass, William L., assignor.) Columbia Mills Incorporated. (See Whitmore, John P.,

Columbia Mills intersperature assignor.)
Columbia Phonograph Company. (See Cowan, Charles H., assignor.)
Columbia Phonograph Company. (See Hadley, Walter C., assignor.)
Columbia Phonograph Company. (See Hinckley, Frank

C., assignor.)
Columbia Phonograph Company. (See Mowitz, Albert C.,

assignor.) Columbia Phonograph Company. (See Webster, Benjamin

assignor.)
abia Quarry Company. (See Glassen, Charles E., Columbia Quarry Company. (See Glassen, Charles E., assignor.)
Columbia Steel Equipment Company. (See Bergmann, Conrad, assignor.)
Columbia The Corporation. (See Cullen, Julien F., assignor.)

Columbus Angelo, Stockton, Calif. Continuous press. 1.638.881; Aug. 16. Columbus Heating and Ventilating Company, The. (See Note, 1974). Assignor J. Columbus Machine Company, The. (See Sparks, Stanley Columbus Machine Company, The.

Columnus Naturales Control W. assignor.)
Columbus Vending Company, The. (See Kubn, L. V., and Vogel, assignors.)
Colvin, Charles H., et al. (See Titterington, Morris M.,

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Oct. 11.
Colvin, Chase, South Charleston, Ohio, Fencepost.
1.634,739; July 5.
Colvin, Henry M., Kansas City, Mo. Key compact.
1.621.831; Mar. 22.
Colvin, Isanc E. (See Manison, G. N., and Colvin.)
Colvin, Valter J., and L. Rirschbraun, Omaha, Nebr.
Scal for car doors, 1.628,635; May 17.
Billingham, Ala Bottle or similar article. Des.
71.777; Jan. 4.
Comay, Salmen. (See Morrell, J. C., and Comay.)
Combes, Maurlee. (See Continsousa, V., and Combes.)
Combination Fountain Co. The. (See Mackey, Harry J.,
assignor.)

assignor.)
Combination Machine Company. (See Peterson, Jonathan.

Combination Machine Company. (See Thom, James C.,

assignor.)
Combination Woodworking Machine Co. (See Plerce, John D. assignor.)
Combs, De Titte B., Philadelphia, Pa. Card-holding device, 1.630.373; May 31.
Combs, Rabert L. Herington, Kans.
Pneumatic bed. 1.627.835; May 10.
Combs, Rabert L. Herington, Kans.
Liczy, S. May 10.
Combon Rabert L. Herington, Kans.
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D., assignor.) Combustion Engineering Corporation. (See Bell, John E., assignor.)

Combustion Engineering Corporation. (See Kreisinger.

Combustion Engineering Corporation, (See Lundgren, Edwin, assignor.)
Combustion Engineering Corporation, (See Lundgren, Edwin, assignor.)
Combustion Engineering Corporation. (See Nygaard, Osen O., assignor.)
Combustion Utilities Corporation, (See Herzig, Harold Lagrance) assigno

Combustion Utilities Corporation. (See Loebell, Henry O.,

comean, Larry L., Bradford, Mass. Shoe and method of manufacture. 1.634.397; July 5. Comer, John A. and L. M., Calexico, Calif. Cement bullding form. 1.636.354; Feb. 1. Comer. Lee M. (See Comer. John A. and L. M.) Comerford. John, New York, assignor of one-third to M. J. Martley, Browstile, and one-third to I. Byrne. Apr. 50k, N. Y. Vent cap for soil pipes. 1,623.659; Comerford, John J. Philoschein.

Comerford, John J., Philadelphia, Pa., assignor of one-third to M. J. Martiev, Bronxville, and one-third to H. Byrne. New York, N. Y. Thermostatic alarm. 122 1628: Mar. 22. Comet Radiator Company. (See Steats, Gilson C., as-

signor.)

signor.)
Comins, Frank B., Newton, assignor to American Moistening Company, Boston, Mass. Control means for resulating the output of atomizers and the like.

1.631,475: June 7.
Comins, Frank B., Newton, Mass., assignor to American Moistening Company, Providence, R. I. Atomizing means. 1.650.821; Nov. 29.

Comins, Frank B., Newton, and J. Armstrong, Malden, assignors to American Moistening Company, Boston, Mass. Self-cleaning nozzle. 1,622,090; Mar. 22. Comite, William H. (See Corson, Henry J., assignor.) Comies Walter T., Montreal, Quebec, Canada, assignor.) For the Company, Company, Company, Draft appliance. 1,648,833; Nov. 15. Company, Draft appliance, 1,648,838; Nov. 15. Company, Commercial 1,648,838; Nov. 15. Company, Commercial 1,648,838; Nov. 15. Company, Commercial 2,648,838; Nov. 15. Company, Company, See Froger, Henricus, assignor.) Commercial Shearing & Stamping Company, The. (See Cushwa, Charles B., assignor.) Commercial Shearing & Stamping Company, The. (See Cushwa, Charles B., assignor.) Commercial Shearing & Stamping Company, (See Proctor, R. V., and Schaab, assignor.) (See Bogin, Charles, assignor.) Commercial Solvents Corporation. (See Bogin, Charles, and Bogin, assignors). Commercial Solvents Corporation. (See Brown, B. K., and Boomfold, assignors). Commercial Truck Company. (See Whitney, Eddy R., assignor.)

Commonwealth Brass Corporation. (See Kellum, Charles S., assignor.)

Commonwealth Steel Company. (See Hallquist, Einar G., assignor.)
Commonwealth Steel Company. (See Johnson, Boone
V. H., assignor.)
Commonwealth Steel Company. (See McCormick, John
A., assignor.)

A., assignor.)
Commonwealth Steel Company. (See Pflager, Harry M., assignor.) Commonwealth Steel Company. (See Sheehan, William

M., assignor.)
Commonwealth Steel Company. (See Westlake, Charles

Commonwealth Steel Company. (See Westlake, Charles T., assignor.)
Commonwealth White Lead and Paints Proprietary Limited. (See Lloyd, G. F., and Campbell, assignors.)
Commonwealth White Lead & Paints Proprietary Limited, The. (See Wilhelm, Reinhold, assignor.)
Comp. Charles A., assignor to Buhl Stamping Company, Detroit, Mich. Apparatus for tinning milk cans.
Comp. Charles A., assignor to Buhl Stamping Company, Detroit, Mich. Thomping articles. 1,653,255; Dec. 20.
Compact Coffee Corporation. (See McColl, Francis P., assignor.)

signor.)
Compagnie D'Applications Mecaniques. (See Rouanet, Compagnie de l'Azote et des Fertilisants S. A. (See Breslaner, Joseph, assignor.)
Compagnie de Produits Chimiques et Electrometallurgiques Alais Froges et Camargue. (See Rochet, Joseph,

assignor.)
Compagnie des Forges et Acleries de la Marine et d'Homecourt et al. (See de Courselles, Robert, as-

d'Homecourt et al. (ces de Cousselles, signor.)
Compagnie Francaise Thomson Houston. (See Salles, Pierre M. R., assignor.)
Compagnie Industrielle et Commerciale du Cycle et de l'Automobile. (See Chollet, Louis, assignor.)
Compagnie Industrielle de Mechanique Horlogère. (See Henel, Francois L., assignor.)
Compagnie Industrielle des Moteurs a Explosion (C. I. M. E.) (See Perrier. Daniel, assignor.)
Compagnie Internationale Trichromia. (See Cuenin, Gilbert, assignor.)

Compagnie Internationate Trienroma. [See Queuin, Ori-bert, assignor.] Economizadora de Combustible S. A. Complex Ores Recoveries Company, The. [See Read, J. B., and Coolbaugh, assignors.] Compound and Pyrono Door Co., The. [See Ludlow, Frederick O., assignor.]

Compressed Gas Corporation. (See Mott, Chester, as-

Compressed Gas Corporation. (see Mott, Caester, assignor.)
Compton, L. T. (See Burress, Herman N., assignor.)
Compton, Leroy Waukesha and F. B. Galvin, Portage,
Wis. Flash light. 1.617,793; Feb. 15.
Comstock-Castle Store Company. (See Castle, Timothy

P., assignor.)
Comstock Castle Stove Company. (See Castle, Timothy
W., assignor.)

Comstock Castle Stove Company. (See Spake, Richard W., assignor.)
Comstock, Charlie A., Fullerton, Calif. Vine holder.
1.635.071; July 5.
Comstock, Charlie A., Fullerton, Calif. Piston and concomments.
Comstock, Charlie A., Fullerton, Calif. Piston and concomments.
Comstock, Charlie A., assignor to Technicolor, Motion Pieture Corporation, 1837. Technicolor, Motion Pieture Corporation, Boston, Mass. Cinematography.
1.641.202. Sept. 6.
Comstock, Frederick E., Valparaiso, Ind. Automatic line guide. L641.204; Jan. 11.
Comstock Frederick E., 106. Jan. 11.
Comstock & Wescott, Inc. (See Atwood, Francis C., assignor.)

Comyn, Bernard D., assignor to White & Comyn, Limited, Hebburn-on-Tyne, England. Oil separator. 1,645,093;

Compn. Bernard D., assignor to White & Comyn. Limited, Hebburn-on-Tyne, Enjand. Oil separator. 1,645,093; Cot. II. Arthur P., Fort Thomas, assignor to The Wadsworth Watch Case Company, Dayton, Ky. Watchcase bow. Des. 71,778; Jan. 4.
Conant, Arthur P., Fort Thomas, assignor to The Wadsworth Watch Case Company, Dayton, Ky. Watchcase bow. Des. 73,558; Oct. 4.
Conant, Ellsworth T., and L. S. McLane. Honomu, Conant, Ellsworth T., and L. S. McLane. Honomu, Conant, Enderick W., Conwy, Mass. Reaming apparatus. 1,646,054; Oct. 18.
Conant, Leon B., Cambridge, assignor to G. M. Conant, Bridgewater, Mass. Mold for combination heels. 1,653,441; Aug. 2.
Conant, May C., and J. E. Gottes, Provo, Utah. Gear-drive pump. 1,644,817; Oct. 11.
Conant, May C., and C. Seely, Cleveland, Ohio. Hair curler. 1,620,722; Mar. 15.
Conand, Waiter H., et al. (See McCullough, Joseph P., assignor.) Conceled Door Check Company. (See Eastman, Floyd K., assignor.) Company. (See Eastman, Floyd Company).

assignor.)
alo Fixture Company. (See Noack, William A., assignor.)

Concentrate Products Company. The. (See Lapp, William H., assignor.)
Concrete Engineering Company. (See Meyer, Charles L., assignor.)

Concrete Engineering Company. (See Meyer, Charles L., assignor.)
Concrete Mixing and Conveying Company. (See Kirk-land, Harry B., assignor.)
Concrete Piling Co. (See Bignell, Edward, assignor.)
Condrete Piling Co. (See Bignell, Edward, assignor.)
Condit Electrical Manufacturing Corporation. (See Alnsworth. Chester D., assignor.)
Condit Electrical Manufacturing Corporation. (See Condit Electrical Manufacturing Corporation. (See Condit Sears B., assignor.)
Condit Electrical Manufacturing Corporation. (See Condit Sears B., assignor.)
Condit Electrical Manufacturing Corporation. (See Koch, Paul W., assignor.)
Condit Electrical Manufacturing Corporation. (See Koch, Paul W., assignor.)
Condit Electrical Manufacturing Corporation. (See Condit Electrical Manufacturing Corporation. (See Wood, Joseph D., assignor.)
Condit, Sears B., Brookline, assignor to Condit Electrical Manufacturing Corporation systems. Electric switch. 1,650,190; Nov. 22. Anderson, Brooklyn, N. Y. Condon, Gertrude G., Oaliand, Calif., assignor to The Hoover Company. Hand and finger protector. 1,625,191; Apr. 19.
Cone, Charles N. (See Davidson, G., Rippey, Cone, Laucks, and Banks.)

and Banks.) Congdon, Claude L., Homer, N. Y. Smoking-pipe accessory. 1.617,322; Feb. 15. Congdon, Harry R., San Francisco, Calif. Powdering ma-chine. 1.638.566; Aug. 9. Chine. 1.638.566; Aug. 9.

ongdon, C Aug. 23.

Congon, Clem H., Cleveland, Ohio. Afterart. 1,653,749; Aug. 20 Lunde M. assignor to Irving Pitt Mannfacture, Company, Kansas City, Mo. Loose-leaf-binder cover. 1,632-434; June 14.
Congoleum-Nairn, Inc. (See Fauser, Oscar W., assignor.) Congoleum-Nairn, Inc. (See Kenyon, F. C., Jr., and Goodell, assignors). (See Sloate, Alfred C., assignor.) Conkey, Iri M. (See Johnstone, John L., assignor.) Conkin, Bruce, London. England. Pump, compressor, or the like. 1,629,202; May 17.
Conklin, Bruce, London. England. Pump, compressor, or the like. 1,629,202; May 17.
Conklin, David L. Omaha, Nebr. Lubricating gun. 1,646,081; Monnfacturing Company, The. (See Blemestein, Andreas, assignor.)
Conklin, Roscoe D. (See Rowntree, H., and Conklin.) Conklin, Roscoe D., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Emergency—Conklin, Roscoe O., Omaha, Nobr. Flagstaft. 1,632,726; June 14.
Conklin, William F., Tarentum, Pa. Electric socket switch. 1,632,174; June 14.

June 14.
Conklin, William F., Tarentum, Pa. Electric socket switch. 1.632/174; June 14.
Conklin, William F., Tarentum, H. S. Hopkins, Crafton, and J. M. Hover, Pittsburgh, Pa. Sheet-piling mechanism. 1.618,042; Mar. Conley, Clinton V. (See Richardson, A. S., and Conley, Conley, John E. (See Marden, J. W., Thomas, and Conley, Conley, John E. (See Marden, J. W., Thomas, and Conley).

ley) Conley, John M., Stockton, Calif. Football game board. 1.614.881; Jan. 18. Conley, John M., Stockton, Calif. Doorcheck. 1,649,339; Nov. 15.

Nov. 15.

Conley, Matthias L. (See Boland, Edward J., assignor.)

Conlon, Charles S. Portsmouth, N. H., assignor of one1.614829; Jan. 18.

Comlon Corporation. (See Dady, Arthur O., assignor.)

Conlon, Thomas A. (See Dady, Arthur O., assignor.)

Conlon, Thomas A., Silver Spring, Md. Vehicle mount

for guns. 1,614655; Jan. 18.

Conlon, Thomas A., Silver Spring, Md. Loader for guns. 1.619,193; Mar. 1. Conlon, Thomas A., Silver Spring, Md. Trail connection. 1.627,836; May 10. Conn. C. G., Ltd. (See Coe, Edward D., assignor.) Conn. Ray H., Winamac, Ind. Manufacturing fish lures. 1.640,599; Aug. 30. Connally, Charles D., Fort Worth, Tex. Water trap for air-brake equipment. 1,652,021; Dec. 20. Conneaut Shovel Company, The. (See Denning, James M., assignor.)

Connecticut Electric Manufacturing Company. (See Both,

assignor.)
Connecticut Electric Manufacturing Company. (See Both, Tonjes A., assignor.)
Connecticut Telephone & Electric Company, The. (See Both, Tonjes A., assignor.)
Connecticut Telephone & Electric Company, The. (See Both, Tonjes A., assignor.)
Connell, Edwin L., assignor to The Van Dorn Electric Tool Company, Cleveland, Ohio. Electric switch. Metal doo: 1,618,814; Feb. 22.
Connell, Edwin L., assignor to The Van Dorn Electric Tool Company, Cleveland, Ohio. Electric switch. Metal doo: 1,618,814; Feb. 22.
Connelly, Gorge A. (See Cramer, T. M., and Connell.)
Connellsylle Manufacturing and Mine Supply Co. (See Connelly, Clyde A., Shelby, Ohio. Door-operating means. 1,641,067; Aug. 30.
Connelly, Edward R., Boston, Mass. Outsole for shoes. 1,636,044; July 19.
Connelly, Frank W., assignor to Dravo Equipment Company, Pittsburgh, Pa. Joint for structural towers. 1,641,801; Sept. 6.
Conner, Englamin G., Los Angeles, Callf., assignor to 2-Way Window-Shade Company. Adjustable window shade. 1,642,480; Sept. 13.
Conner, Charles E., Aburn, Me. Tool. 1,636,853; Conner, Charles E., Astraford, Conn., assignor to Americans and Conner and Conn Conner, July 26

July 26. Conner, Edward A., Stratford, Conn., assignor to American Cable Company, Inc. Attachment for whre strand and producing the same. 1,643,150; Sept. 20.
Conner, Frank S., et al. (See Frengle, F., and Rohan, assisted.)

Conner, Fr

diguors.)
Conner, James S., Roanoke, Ala. Playing attachment for stringed instruments. 1,635,542; July 12.
Conner, Lester C., Malden, assignor to A. S. Williams, Boston, and J. T. Collins, trustees, Sandwich, Mass. Composition of matter derived from black liquor and dealing with the same. 1,614,025; Jan. 11.
Conner, William, Philadelphia, Pa. Maclilne for separating the whites from the yolks of eggs. 1,622,181; Mar. 22.

Mar. Ze. Conner, William W., Sewaren, N. J. Refrigerating appa-ratus. 1.639,986; Aug. 23. Conners. James, Crescent City, Calif, Grid leak. 1,621,832; Mar. 22. Connersville Blower Co., The. (See Houghton, Carl R.,

assignor Connersville Blower Company, The. (See Wilkin, John

T., assignor.)
Connolly, Charles M., assignor to Cluett, Peabody & Co.,
Inc., Troy, N. Y. Collar-display device. 1,626,514;
Apr. 26.

Connoily, Frank M. (See Lass, Frederic J., assignor.) Connoily, James E., Baltimore, Md. Safety razor. 1,651,917; Dec. 6. Connoily, Thomas J., assignor to The Hiker Manufactur-ing Company, Toledo, Ohio. Wheel skate. 1,632,907;

poration, New York, N. Y. Beacon minp. 1,63,612, July 26.
Conover, Courtney, assignor to Monsanto Chemical Works, St. Louis, Mo. Producing benzoic acid from phthalic anhydride. 1,645,180; Oct. 11.
Conques, Joseph L. L. Gee, Conrad, Conrad, Consea, Curtis P., Issaquah, Wash. Package holder and opener. 1,614,283; Jan. 11.
Conrad, David E., assignor of one-half to V. V. Baldwin, Eldon, Iowa. Sliding door for cars or harns. 1,635,265; July 12.
Conrad, Frank. (See Nyman, A., and Conrad.) Conrad, Frank. Pittsburgh, Pa., assignor to Westing-device. 1,635,541; July 12.
Conrad, Frank. Pittsburgh, Pa., assignor to Westing-device. 1,635,541; July 12.
Conrad, Frank. Pittsburgh, Pa., assignor two Westinghuse Electric & Manufacturing Company. Wireless antenna system. 1,640,534; Aug. 30.
Conrad, Frank, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio transmitting system. 1,652,516; Dec. 13.

Conrad, Frank, Pittsburgh, Pa., assignor to Westinghouse Blectric & Manufacturing Company. Radio sending system. 1,654,322; Dec. 27. Conrad, Fred A., assignor to American Lace Paper Co., Milwaukee, Wis. Paper napkin. Des. 73,123; July 26. Conrad, Frederick, assignor of one-half to B. L. Conrad, Bogota, N. J. Sedlment trap for bollers. 1,625,700;

Conrad, Frederick, Sediment trap to Bogota, N. J. Sediment trap to Apr. 19.

Apr. 19.

Conrad, George N. (See Miller, John A., assignor, Conrad, Hollis C., Beaver Falls, Pa. Amusement house, 1,629,258; May 17.

Conrad, Boward F. Vincennes, Ind. Sport storm hose.

Conrad, Islaih, assignor to F. O. Schoedinger, Columbus, Ohio. Combination table and tray, 1,640,440; Aug.

Conrad, Isiah, assignor to F. O. Schoedinger, Columbus, Ohio. Portable and collapsible table or tray. 1,640,441:

Conrad., Islan, assignor to r. O. Schoedinger, Commons, Ohlo. Portable and collapsible table or tray. 1,640,441; Aug. 30. Conrad, Islah, Columbus, Ohlo. Operating table. 1,650,327; Nov. 22. Conrad, James W., Rockbridge, Ohlo. Starting and

Nov22.

Conrad, F tric Co Oct. 18. Conrad, V Oct. 18.

Conrad, William L., Boston, Mass. Conditioning textile materials. 1,630,786; May 31.

Conrader, Rudolph, Erle, Pa. Pump-control mechanism. 1,627,376; May 3.

Conrader, Rudolph, Erle, Pa. Gate valve. 1,637,736; Aug. 2.

Conrad M., Green Bay, Wis. Rotary pump.

Colradison, Conrad M., Green Bay, Wis. Motary pump. 1,621,495; Mar. 22. Conradson, Conrad M., Green Bay, Wis. Gyratory grinding machine. 1,631,247; June 7. Conradt, Hermann. (See Sprenger, R., and Conradison, R., & Co. Inc. (See Timmis, William W., as-

Conselman, William M., Los Angeles, Calif. Doll. Des. 72,001; Feb. 15. Conservation Corporation of America. (See Rice, George

E., assignor.) Conservation Corporation of America. (See Rice, G. E., and Simmons, assignors.

Considire, Robert P., Fulton, III. Combined tweezers, Grossidire, Robert P., Fulton, III. Combined tweezers, finger-nail file and cleaner. 1,616,355; Feb. 1. Consoil, Frank, Brooklyn, N. Y. Cutting machine. 1,645,181; Oct. 11. Consoildated Boilers Corporation. (See Johanson, Adolph Consolidated Boilers Corporation.)

T., assignor.)
Consolidated Car-Heating Company. (See Hypes, Lee P., assignor.)
Consolidated Electric Sign Corporation. (See Russell,

Charge C. Selmon Sign Corporation. (see Russen, 1976). Consolidated Iron-Steel Manufacturing Company, The. (See Lehman, Joseph, assignor.). Consolidated Machine Tool Corporation of America. (See Metzger, Claude W., assignor.). Consolidated Paper Company, The. (See Jones, James F.,

assignor.) Consolidated Safety Pin Company. (See Hagel, Albert,

Consolidated Textile Corporation. (See Bennett, Joseph, assignor.) Consolidated Water Power & Paper Company. (See Hill,

Consolidated Water Fower & Paper Company, Consortium Fuer Elektrochemische Industrie, (See Herrmann, W. O., and Haehnel, assignors.)
Consortium für Elektrochemische Industrie, (See Herrmann, W. O., and Hoehnel, assignors.)
Consortium für Elektrochemische Industrie, (See Meingast, R., and Mugdyn, assignors.)
Consortium für Elektrochemische Industrie G. m. b. H. (See Herrmann, W. O., Deutsch, and Haehnel, assignors.)

signors.)
Gir Elektrochemische Industrie. (See MugGnasortia, and Winmer, assignors.)
Constam, Ernst, Zurich, Switzerland, assignor to Aktiebelaget Vaporackumulator, Stockholm, Sweden, Steam
plant, 1.634,609; July 5.
Constant, C. L., Company. (See Stewart, Alexander, assignor.)

Constant, C. L., Company. (See Stewart, Alexander, assignor.) Jouis H. (See McEntee, B. C., and Constant, Constant, Louis H. (See McEntee, B. C., and Constant, Constant, Constant, Constant, Constantine, Constantine, Constantine, Shickralla, New Bedford, Mass. Windowshade and curtain-rod holder. 1.646.011; Oct. 18.
Constantinesco, George, Weybridge, England. Power Constantinesco, George, Weybridge, England. Clutch and unidirectional driving device. 1.617.010; Feb. 8.
Constantinesco, George, Weybridge, England. Unidirectional driving device. 1.617.010; Feb. 8.
Constantinesco, George, Weybridge, England. Unidirectional driving device. 1.618.915; Feb. 22.
Constantinesco, George, Weybridge, England. Advancing and retarding a driven shaft relatively to a driving Constantinesco, George, Weybridge, England. Elastic link. 1.642.602; Sept. 13.
Constantinesco, George, Weybridge, England. Elastic link. 1.642.602; Sept. 13.

Contact Filtration Company. (See Chappell, M. L., Davis, and Moore, assignors.) Contact Filtration Company. (See Prutzman, Paul W., Corporation. (See Phelan, Louis A. M.,

Con-The-Tof Corporation. (See Phelan, Louis A. M., assignor.)
Container Corporation of America. (See Walter, Harrison B. assignor)
Son B. assignor in the Content of the Co

June 7. Conti, John D., Philadelphia, Pa. Package-filling ma chine. 1,635,643; July 12. Continental Can Company. (See Coyle, John, assignor.) Continental Can Company. (See Fink, Henry A., assignor.) Continental Can Company. (See Fink, H. A., and Flook,

Can Company. (See Hodgson, William W., assignor.) Continental Can Company. (See Hurley, Charles, as-Continental Can Company. (See Kronquest, Alfred L.,

assignor.] Continental Can Co. (See O'Brien, A. D., and Gesseman, assignors.)
Continental Can Company. (See O'Neil, James H., as-

Continental Can Company. (See Plumb, Walter, as-Continental Can Company. (See Prahl, Frederick A., as-Continental Can Company. (See Sedwick Matthew M.,

asignor.) Continental Can Company. (See Taliaferro, John C., astinental Engineering Corporation. (See Anthony,

Marcus O., assignor.)
Continental Gin Company. (See Munger, Eugene, as-

signor.)
Continental Mills, Inc. (See Brown, Millard D., assignor.)
Continental Optical Corporation. (See Bugbee, Lucian
Continental Optical Corporation. (See Bugbee, Lucian
W., 1r., assignor.)
Continental Optical Corporation. (See Bugbee, Lucian
W. and L. W., 1r., assignors.)
Continental Optical Corporation. (See Bugbee, Lucian
W. and I. W., 1r., assignors.)

P., assignor.)
Continental Optical Corporation. (See Durgin, Edgar R., assignor.)
Continental Products Company, The. (See Kuhlhoff, Henry O., assignor.)
Continental Products Corporation. (See Fabbrin, Frank,

Continental Railway Supply Corporation. (See Hyle, J. A., and Scott, assignors.)

Continental Scale Works. (See Weber, Mathias, J., as-

Continentale Aktiengesellschaft für Chemie. Gerngross, Otto, assignor.) Continsouza, Victor, and M. Combes, Parls, France tinuous-feed chematograph apparatus. 1,6: Feb. 15. 1,617,323;

Continuous Train Control Corporation. (See Clark, Thomas E., assignor.)
Continuous Train Control Corporation. (See Clark, T. E. and J. E., assignors.)
Continuous Train Control Corporation. (See Clark, T. E., and Stone, assignors.)
Conturier Company. (See Lemm, Frederick L., assignor.)
Contry, Rene H., Chicago, Ill. Electric switch. 1,617,324; Feb. 15.

Conty, Rene H., Unreasy, M. Feb. 15.

Converse, Atherton D., assignor to Morton E. Converse & Son Co., Winchendon, Mass. Folding table. 1,644,818; Oct. 11.

Converse, Charles D., Los Angeles, Calif. Conduit switch box. 1,625,882; Apr. 26.

Converse, Morton E., & Son Co. (See Converse, Atherton Angeleson)

onverse Rubber Shoe Co. (See Thomas, George C., as-signor.)

Converters Paper Company. (See Ringel, Herman, as-Converters Paper Company. (See Ringel, Herman, assignor.)
Convertible Wagon Trailers Inc. (See Cooke, William H., assignor.)
Conveyors Corporation of America. (See Zimmermann, Carl F., assignor.)
Conway, Alfred A., Cincinnati, Ohio. Friction clutch. 1,630,636; May 81.
Conway, Alfred A., Cincinnati, Ohio. Friction clutch. 1,530,636; May 81.
Conway, Dora, Tulsa, Okla. Clothespin bag. 1,616,572; Feb. 8.

Conway, Joseph E., Baltimore, Md. Pipe wrench. 1.639,833; Aug. 23. Conway, Martin J., Steubenville, Ohio. Reenforced mine prop. 1,642,603; Sept. 13. Conway, Roy D. (See Davis, R. C., and Conway.)

Conway, William J., San Francisco, Calif. Lifting mechanism. 1,649,574; Nov. 15. Conwell Graphic Company. (See Hornecker, George,

Conway, William J., San Francisco, Calif. Lifting mechanism. 1.649,574; Nov. 15.
Conwell Graphic Company. (See Hornecker, George, assignor). Onwell Graphic Company. (See Hornecker, George, assignor). W., Grand Blver, Iowa. Combined seat and desk. 1.654,465; Dec. 27.
Convers. Lifting Company. Elimwood, Ind. Drawer guide. 1.622,422; Mar. 29.
Conwill, Fred F., Berkeley, Calif. Apparatus for decorating. 1.644,238; Oct. 4.
Conyers. Lucile, Salt Lake City, Utah. Costume slip. Conyers, Mark M., Custer, S. Dak. Antenna for use with radio sets. 1.640,234; Aug. 23.
Coove, Edward W., deceased; M. L. Brundage, administratik, Malden, Mass. Rotary engine. 1.613,634; One. 1.654, Cook. Adoniram J., Westerlo, N. X., assignor to The P & M. Company, Chicago, Ill. One-piece spring rail Cook, Adoniram J., Westerlo, N. Y., assignor to The P & M. Company, Chicago, Ill. One-piece spring rail Cook, Adoniram J., Westerlo, N. Y., assignor to The P & M. Company, Chicago, Ill. One-piece spring rail Cook, Adoniram J., Westerlo, N. S., assignor to C. B. Cook, Chicago, Ill. Auto marine vehicle and trailer. 1,631,248; Unit. 1.644,414; Oct. 4.
Cook, Albert B., Evanston, assignor to C. B. Cook, Chicago, Ill. Auto marine vehicle and trailer. 1,631,248; Unit. 1.644,644; Oct. 4.
Cook, Albert E., Evanston, assignor to C. B. Cook, Chicago, Ill. Sectional pontoon. 1,637,336; Aug. 2.
Cook, Charles B., (See Cook, Albert E., assignor). Cook, Charles L., Louisville, Ky. Piston packing. 1,634,618; June 28.
Cook, Charles L., Louisville, Ky. Piston packing. 1,634,618; June 28.
Cook, Charles L., Louisville, Ky. Piston packing. 1,634,618; June 28.
Cook, Charles L., Louisville, Ky. Piston packing. 1,634,618; June 28.
Cook, Charles L., Louisville, Ky. Piston packing. 1,634,618; June 28.
Cook, Charles L., Louisville, Ky. Piston packing. 1,634,618; June 28.
Cook, Charles L., Louisville, Ky. Crossing guard for Cook, Charles L., Louisville, Ky. Piston packing. 1,634,618; June 28.
Cook, Charles L., Louisville, Ky. Crossing guard for Cook, Charles L., Louisville, Ky.

Apr. 1 Cook, Ch Cook, C Apr. Cl. 28. (See Chapman, A. E. and Cook.)

obs. Charence P., assignor to Scovill Manufacturing
Company, Waterbury, Conn. Vanity box. 1,620,999;
Mar. 15.

obs. Clarence P., assignor to Scovill Manufacturing
Company, Waterbury, Conn. Vanity box. 1,621,105;
Company, Waterbury, Conn. Vanity box. 1,621,105;

Allarence P., assignor to Scovill Manufacturing Company, Waterbury, Conn. Vanity box. 1,621,105; Mar. 15.

(Cook, Clarence P., assignor to Scovill Manufacturing Company, Waterbury, Conn. Vanity box. 1,643,844;

Company, Waterbury, Oct. 4.
Cook, Edward G. (See Rotthouse, Charles A., assignor.)
Cook Electric Company. (See Bogle, John C., assignor.)
Cook, Everett J., assignor to The Dura Company, Toledo,
Onlio, Retaining device for operatively connecting
window-control mechanism to windows. 1,616,527
Th. 2

Cook, Everett J., assignor to The Dura Company, Toledo, Ohio. Vehicle lamp mounting. 1,640,923; Aug. 30. Cook, Everett J., assignor to The Dura Company, Toledo, Ohio. Weather strip for sliding closures. 1,641,157; Cook, Eve Ohio.

Ohio. Weather strip for sliding closures. 1,641,157; Sept. 6.
Cook. Floyd J., Medford, Oreg. Assorting machine 1,646,951; Oct. 25.
Cook, Frank J., Cleveland, assignor of seventy-five per cent to A. J. Kleuver, Lakewood, Ohio. Heating and drying device. 1,034,649; July 5.
Cook, George C., Millington, N. J., and J. A. Coleman, Woodharga, N. Y. Tube-cleaning projectile. 1,634,094; June 28.
Cook, George E., Detroit, Mich. Antomatic air-vaporizing device for radiators. 1,646,810; Oct. 25.
Cook, George W., Doniphan, Mo. Washboard. 1,630,170; May 24.

May 24.

Cook, George W., Los Angeles, Calif. Adjusting device for brake-actuating mechanisms. 1,646,012; Oct. 18.

Cook, George W., Rainier, Oreg. Steering-post guard. 1,647,903; Nov. 1.

Cook, Hal L. (See Van Hamersveld, J. J. N., and Cook.)

Cook, Harvey S., Valparaiso, Ind., assignor to Cook.

Cook, Harvy S., Valparaiso, Ind., assignor to Cook.

Cook, Harvy, Sag Harbor, assignor to Joseph Fahys & Cook, Harvy, Sag Harbor, assignor to Joseph Fahys & Aug. 2.

Cook, Harvi, Sag Harbor, assignor to Joseph Fahys & Cook, Harvi, Sag Harbor, assignor to Joseph Fahys & Cook, Harvi, Sag Harbor, assignor to Joseph Fahys & Cook, Harvi, L. (See Bedrag M. et al., Cook)

Aug. 2.
Cook, Harris J., (See Bodner, C., and Cook.)
Cook, Harris J., assignor to The Stanley Works, New
Cook, Henry D., Kingsway, London, and G. H. Lundgren,
Putney, London, England. Pipe joint and connection,
1,622,768; Mar. 29.
Cook, Herbert A., Bioomfeld, N. J. Lustrous varlegated
plastic product and making same. 1,638,529; Aug. 9.

Cook, Herbert R., assignor to Chicago Fuse Mfg. Co., Chicago, III. Outlet box. 1,642,142; Sept. 13. Cook, Howard D., Elyria, Ohio, assignor to National Tube Company. Method of and apparatus for forming pipe skelp. 1,656,607; Nov. 29. Cook, Johns, Hohokus, and 1,553,149; Dec. 20. Fabrik-folding machine 1,453,149; Dec. 20. Wurphy. Springfield, T. J. Brusnicki, and H. C. Goldsmith. West Springfield, Mass. Metal-working apparatus. 1,645,372; Oct. 11. Cook, Jesse C. (See Austin, H. E., and Cook.)

Cook, James ff., Jr., West Springfield, J. W. Murphy. Springfield, T. J. Brusnicki, and H. C. Goldsmith, West Springfield, Mass. Metal-working apparatus. 1,645,372; Oct. 11.

Cock, John, Nairobi, East Africa. Decorticating apparatus for the treatment of sisal and other fibrous leaves and stalks. 1,641,119; Aug. 30.

Cook, John A., Franklin Furnace, N. J. Power attachment for mowers. 1,638,680; Aug. 9.

Cook, John H., Salt Sake City, Utah. Window cleaner. Cook, John H., Salt Sake City, Utah. Window cleaner. Cook, John T., Howell, assignor of one-half to F. J. Flinch, Jackson, Mich. Window screen. 1,632,022; June 14.

Cook, John W. (See Boone, E. H., and Cook.) Cook, John W., Manchester, England. Apparatus for the cook. John T. Golds, John C. Cook, John W., Manchester, England. Apparatus for the cook, Joseph, assignor to Blue Valley Creamery Company, Chicago, Ill. Liquid measuring gauge. 1,619,919; Mar. S. Cook, Joseph, assignor to Blue Valley Creamery Company, Chicago, Ill. Liquid measuring gauge. 1,619,919; Mar. S. Cook, Joseph, assignor to Blue Valley Creamery Company, Chicago, Ill. Liquid measuring gauge. 1,619,919; Mar. S. Cook, Joseph, assignor to Blue Valley Creamery Company, Chicago, Ill. Liquid measuring gauge. 1,619,919; Mar. S. Cook, Joseph, assignor to Cook, Harvey S., assignor, Cook, Norman, Manchester, England. Lappet and thread guide of spinning, twisting, and like machines. 1,620,969; May 17.
Cook, Orville E. assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Temperature control for folding machines, 1,620,969; May 17.
Cook, Stanley S. (See Parsons, C. A., Cook, and Kimber.) Cook, Theodore H. (See Butler, Henry R., assignor.) Cook, Thomas B., Loo Angeles, Calif. Can holder. 1,653,651, Aug. Scranton, Pa. Car underframe. 1,627,484; May 3.
Cook, William A., assignor to The Marion Machine. Cook, William A., assignor to The Marion Machine.

Cook. Thomas R., and D. N. Smitt, Resignors to The Indian Josephson Cook. Thomas C. 20. Cook. Wilfred L., Mlami, Fla. Building tile. 1,652.890; Dec. 13.
Cook. William A., (See Stroup, E. P., and Cook.)
Cook. William A., assignor to The Marion Machine. Butty of the Cook. William A., assignor to The Marion Machine. Butty of the Cook. William E. (See Vierling, F. J., and Cook.)
Cook. William E., (See Vierling, F. J., and Cook.)
Cook. William E., assignor to Wheeling Steel Corporation. Wheeling, W. Va. Producing galvanized corrugated metal pipe. 1,623,618; Apr. 5.
Cook. Alexander H., assignor to Atlantic Coast Fisheries Corporation of New York, New York, N. Y. Refrigerating apparatus. 1,614,455; Jan. 18.
Cooke, Alexander H., assignor to Schaffer Poldometer Comporation of New York, New York, N. Y. Refrigerating apparatus. 1,614,455; Jan. 18.
Cooke, Charles A., Sloux City, Iowa. Bridge-score recorder, 1,620,077; Mar. 8.
Cooke, Charles J., Washington, D. C., and J. A. Ronnie, Cooke, Charles J., Washington, D. C., and J. A. Ronnie, Island City, N. Y. Repenting attachment for sound reproducing machines. 1,631,797; June 7.
Cooke, Conway W., assignor of one-half to W. M. Mac. Nichol, Washington, D. C. Dispensing cap for bottles. 1,636,215; July 19.
Cooke, George M., Wey York, N. Y. Safety lock for brake-lock, George T., New York, N. Y. Safety lock for brake-lock, George T., New York, N. Y. Producing mid-lock of the Cooke, George W., Cooke, Hervaurd L., Princeton, N. J., assignor to Cooke Patents Incorporated, New York, N. Y. Producing distorted images. 1,638,147; Ph. J., Lassignor to Cooke Patents Incorporated, New York, N. Y. Producing distorted images. 1,638,147; Ph. J., Lassignor to Cooke Patents Incorporated, New York, N. Y. Producing distorted images. 1,638,147; Ph. J., Lassignor to Cooke Patents Incorporated, New York, N. Y. Producing distorted images. 1,638,147; Ph. J., Lassignor to Cooke Pa

Cooke Patents Incorporated. (See Cooke, Hereward L., assignor.)
Cooke, William E., Sydney, New South Wales, Australia, Clock. 1,680,891 'May 31.
Cooke, William H., assignor to Convertible Wagon Trailiers Inc., Buffalo, N. Y. Street fusher. 1,623,478;

Apr. 5.
Cookinham, Edward F., assignor to Acme Road Machiney
Company, Frankfort, N. Y. Stone crusher. 1,620,078;

Mar. 5. Cool. David E., St. Louis, Mo. Shoe. 1,640.067; Aug. 23. Coolbaugh, Melville F. (See Read, J. B., and Coolbaugh.) Cooley, Edward C., Elgin, Ill. Valve tool. 1,627,886;

May 10.

Cooley, Floyd S. and F. A., McHenry, Ill. Block wall
and constructing same. 1,623,094; Apr. 5.

Cooley, Frederick A. (See Cooley, Floyd S. and F. A.)

Cooley, Ilenry B., assignor to The American Paper Goods

Company, Kensington, Conn. Vending apparatus.
1,627,837; May 10.

Coolidge, Joseph R., 3d, Brookline, assignor to Montan,
Inc., Boston, Mass. Impregnating wood. 1,648,294;

Nov. 8.

Apr. A. Boston, Mass. Company, assignor to Montan,
Coolidge, Jesph R., 2d, Brookline, assignor to Montan,
Coolidge, Assignor to Montan,
Coolidge, Assignor to Mont

Coolidge, Joseph R., 3d, Brookline, assignor to Montan, Inc., Boston, Mass. Impregnating wood. 1,648,294; Coolidge, Joseph R., 3d, Brookline, assignor to Montan, Inc., Boston, Mass. Impregnated wood and treating wood. 1,648,295; Nov. 8.
Coolidge, William D, Schenectady, N. Y., assignor to General Electric Company. Regulating method and apparatus. 1,631,625; June 7.
Coombes, William D, Schenectady, N. Y., assignor to General Electric Company. Regulator for electrical discharges. 1,631,626; June 7.
Coombes, William, Wollaton, Endand. Cutting fabrics into lengths or portions. 1,652,033; Dec. 6.
Coombes, William, Nottingham, England. Cutting fabrics into lengths or portions. 1,652,033; Dec. 6.
Coombes, Edward (See Grimble, F., Caird, and Coombs.) Coombs, Edward A., Plainville, Mass., assignor to Whiting Chain Company. Bracelet. 1,622,769; Mar. 29.
Coombs, Edward A., Plainville, Mass., assignor to Whiting Chain Company. Bracelet. 1,622,770; Mar. 29.
Coon, All Company. Bracelet. 1,622,770; Mar. 29.
Coon, Chester C., Fresho, Calif. Come-along safety guard. 1,642,874; Sept. 20.
Coon, Frederick M. (See Hooth, Alba C., assignor.)
Coon, Leslie D., Chatham, N. J., assignor to Western Electric Company, Incorporated, New York, N. X. Signaling system. 1,632,057; June 14.
Cooney, Frank, Detroit, Mich. Shade-roller bracket. 1,633,069; June 21.
Cooney, Robert K., Toledo, Ohlo, assignor to Campbell-Cooney Patents Co., Homer, Mich. Butter and cream

Hou, New Jork, N. Toledo, Ohio, assignor to Campbell-Cooney, Robert K., Toledo, Ohio, assignor to Campbell-Cooney Patents Co., Homer, Mich. Butter and cream Rel Services. Rel 6,576; Mar. 1.
Cooney, Robert K., Toledo, Ohio, assignor to Campbell-Cooney Patents Co., Homer, Mich. Cream-treating process. Rel 6,576; Mar. 22.
Cooney, Thomas F., New Haven, Conn. Fruit-coring device. 1,638,798; Aug. 9.
Coons, Arthur M., assignor to Scovill Manufacturing Company, Waterbury, Conn. Vanity case. 1,649,891; Nov. 22.

Coons, Burton C., assignor to Coons Manufacturing Company, Inc., Rochester, N. Y. Seed-cell-removing apparatus. 1.650.694; Nov. 29.
Coons Manufacturing Company. (See Coons, Burton C.,

Coons Manufacturing Company. (See Coons, Burton C., assignor).

Cooper, Abraham, Brooklyn, N. Y. Electric-lighting fixture. Des. 72,510: Apr. 26.

Cooper, Albert J., Timaru, New Zealand. Concrete-wall
boxing. 1,647,635: Nov. 1.

Cooper, Allyn R., Marshalltown, Iowa. Dash control.
1,637,737: Aug. 2.

Cooper, Alva H., Atlanta, Ga. Repair patch. 1,653,989:
Dec. 27.

Dec. 27.

Cooper, Basil P., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for leveling shoes, 1,615,869; Feb. 1.

Cooper, Charles, and D. M. Henshaw, assignors to W. C. Holmes and company, Limited, Huddersheld, England, Manufacture of fuel gases. 1,614,347; Jan. 11.

Cooper, Charles G., and A. J. Dinkel, Yuma, Arlz. Grease gun. 1,621,657; Mar. 22.

Gopt of Corporation, Tables, No. 1,614,675; Feb. 22.

Cooper Corporation, The. (See Percy, Leon O., assignor).

Signor.)

Cooper, Doctor L., Newton, Miss. Roll-paper holder and feeder. 1,615,539; Jan. 25.

Cooper, Edward R. (See Larson, a. G. and Cooper.)

Cooper, Sidward R. (See Larson, a. G. and Cooper.)

Cooper, Sidward R. (See Larson, and A. Larson, Piedmont, assignors of one-fhird to L. F. Larson, Onkland, Calif. Washing machine, 1,614,248; Jan. 11.

Cooper, Francis W. Montreal, Quebec, Canada, assignor, by messa ensignments, to Stead Rall Anchora Incorporated, Wilmington, Del. Rail anchor. 1,618,576; Feb. 22.

Coper, Francis W., Montreal, Quebec, Canada, assignor to Stead Rail Anchors Incoreprated, Wilmington, Del. Rail anchor. 1,618,671; Feb. 22.
Cooper, George S. (See Larson, C., and Cooper.)
Cooper, Harold M., Marshaltown, Iowa.
Cooper, Herold M., Marshaltown, Iowa.
Gasoline gauge. 1,629,994; May 24.
Coper, Herry O., Columbia, S. C. Folding-check-book holder. 1,650,608; Nov. 29.
Cooper, Herbert, Brooklyn, N. Y. Flexible tubing. 1,636,1414; July 26.
Logic Herold M., School Cooper, Herold M., Saignor Electric Company. (See Buttolph, Leroy Jd., assignor) Electric Company.

Cooper Hewitt Electric Company. (See Buttolph, Leroy Cooper Hewitt Electric Company. (See Clover, George Cooper Justin III.

Hewitt Electric Company. (See Hewitt, Peter C.,

R., assignor.)

Cooper Hewitt Electric Company. (See Hewitt, Peter C., assignor.)

Cooper Hewitt Electric Company. (See Mailey, Roy D., Cooper Hewitt Electric Company. (See Walker, Warren K., assignor.)

Cooper Hewitt Electrical Company. (See Rollinson, Earl H., assignor.)

Cooper, James F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Balloon. 1.617.611; Feb. S. Cooper, James H. (See Stukenborg, L. C., and Cooper.)

Cooper, John J., New York, N. Y. Sannel M., assignor, light the dodmen. 1.618.916; Feb. 22.

Cooper, John J., New York, N. Y. Crattus for treating the abdomen. 1.618.916; Feb. 22.

Cooper, Joseph M., Denver, Colo. Candy box. 1,625,192; Apr. 19.

Cooper, Josephine W. (See Larson, A. G., and Cooper, Josephine W. (See Larson, A. G., and Cooper, Josephine W. (See Larson, A. G., and Cooper,

Apr. 19.

Apr. 19.

Coper, Josephine W. (See Larson, A. G., and Cooper, Coper, Coper,

Gooper, Robert S., Connellsville, Pa. Telephonic testing set. 1615,374; Feb. 1.

1.628,120; May 10.

Cooper, Simon, Brooklyn, N. Y. Packaging machine. 1,628,120; May 10.

Cooper, Simon, Brooklyn, N. Y. Cargo unloader. 1,638,474; Aug. 9.

Cooper, Simon, assignor to Cooper Ten Packet Co., Inc., Brooklyn, J. T. T. E. Borger, 1,629,612; May 24.

Brooklyn, J. T. T. E. Borger, 1,629,612; May 24.

Gooper, Warren E., Flushing, N. Y., and V. Willoughby, Ridgewood, N. J., assignors to American Car and Foundry Company, New York, N. Y. Multiple-unit tank car. 1,631,307; June 7.

Cooper, William D., White Bear, assignor of forty-nine two-hundredths to R. C. Sweet, St. Paul, Minn. Telegraph transmitting instrument. 1,632,273; June 14. Products Corporation, New York, N. Y. Electrical testing apparatus. 1,037,472; Jung. 2.

Coote Products Corporation. (See Coote, John M., assignor), J. T. Roser, Langer, 10, 10. Telestrical testing apparatus. 1. Telestrical tes

concer Products of Signor. Signor. Cope, Frank T., assignor to The Electric Furnace Company, Salem, Ohio. Electric furnace. 1,624,217; Apr. 12. pany, Apr. 12.

Apr. 12.

pp. Frank T., assignor to The Electric Furnace Company, Salem, Ohio. Recuperative furnace. 1,647,725;

Cope, L. C. et al. (See Bowes, Thomas D., asstgnor, Cope, L. et al. (See Bowes, Thomas D.), asstgnor, assignor, assignor, assignor, assignor, assignor, assignor, cope, L. C. et al. (See Bowes, Thomas D., asstgnor, Cope, L. C. et al. (See Bowes, Thomas D., asstgnor, Aug. 9)

Copeland, Jacob, Chicago, Ill. Retinoscope. 1,648,013;

Nov. 8.
Copeland, Lucius D., Los Angeles, Calif. Dirigible lamp for automobiles. 1,631,519; June 7.
Copeland, Lucius D., Los Angeles, Calif. Steam boller. 1,640,535; Aug. 30.
Copeland Products, Inc. (See De Luiz, Edward R., as-

Signor.)
Copeland, Robert J., Toronto, Ontario, Canada. Golf tee. 1,627,012: May 3.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)

copeman Laboratories Company. (See Sherman, George B., assignor.) Copeman, Lloyd G., Flint, Mich. Refrigerator construc-tion. 1.644.981; Oct. 11. Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. D'linking-water supply for refrigerators. 1,618.514; Feb. 22.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Flash water cooler. 1,633,372; June 21.

Copeman, Lloyd G., assignor to Copeman Laboratories Match-plate pattern. 1,644,808; Oct. 4.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerator. 1,644,982; Oct. 11.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerator. 1,644,983; Oct. 11.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerator manufacture. 1,644,985; Oct. 11.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerator manufacture. 1,644,986; Oct. 11.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerator construction. 1,644,986; Oct. 11.

Copeman, Lloyd G., assignor to Copeman Laboratories Oct. 11.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerator. 1,644,987; Oct. 11.

Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Cabinet construction and building the same 1,644,988; Oct. 11.

Copeman, Percival G. (See Bagnall, J., and Copeman.) Copens, Simon 1, Chelsea, Mass. Paste tube. 1,613,949; Copinovich, Jacob, St. Paul. Minn. Automatic lighting means for gas stoves. 1,625,297; Apr. 19.

Copen, Simon L, Cheista, mass-Jan. 11.
Copilovich, Jacob, St. Paul, Minn. Automatic lighting means for gas stoves. 1,625,297; Apr. 19.
Copilovich, Jacob, St. Paul, Minn. Gas stove. 1,625,298; Apr. 19.
Copilnorn. Walter E., Natick, Mass. Demountable rim. 1,636,045; July 19.
Copilan, William, Baltimore, Md. Neckie. 1,616,113;

Coplan, V Feb. 1. Copland,

Feb. 1.

Copland, Alexander W., Detroit, Mich. Dough-depositing machine. 1,624,316; Apr. 12.

Copland, Charles, Chicago, Ill., assignor to International Patents Development Company, Wilmington, Del. Maker Copland, Janes F., Hebon, Chicago, Signor to Una Welding and Bonding Company, Apparatus for use in uniting metallic articles. 1,631,343; Nov. 29.

Copp. John F. (See Pryc. C. M., and Copp.)

Copp. Raiph. (See Kerckhoff, D. C., and Copp.)

Coppock, Andrew J., Detroit, Mich. Humiditying device for use with internal-combustion engines. 1,631,308;

Coppock, Andrew J., Detroit, Mich. Humidifying device for use with internal-combustion engines. 1,631,308; June 7.
Coppock, Andrew J., Detroit, Mich. Fuel vaporizer. Coppock, Andrew J., Detroit, Mich. Auxiliary charge-forming device. 1,638,507; Aug. 9.
Coppock, Frederick D., Greenville, Ohio. Concrete slab. 1,637,215; July 26.
Coppock, Maurice J. (See Coppock, Paul W., assignor, Depock, Perry, Ohio. Oil stove. 1,641,475; Sept. 6.
Coppock, Erry, Ohio. Oil stove. 1,641,475; Sept. 6.
Coquille, Emile H., Paris, France, assignor to Rudge-Whitworth Limited, Coventry, Warwick, England. Spoked metal wheel for motor vehicles and the like. 1,623,989; Apr. 26.
Coram, Roy S., Apr. 26.
Coram, Roy E., Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Seeret signaling. 1,632,058; June 14.
Corash, Julius H., et al. (See Methot, John A., assignor.)
Corbett, Charles F. & Gomono 3, M. Mat. 31.
Corbett, Charles F. & Gomono 3, M. Mat. 31.
Corbett, James, assignor of one-half to B. Cohen, Toronto, Ontario, Canada. Feather blade for use in rotary pumps, rotary engines, and like machines. 1,635,348; Corbett, James C., Rochester, N. Y. Machines for wash-

Ontario, Canada. Feather blade for use in rotary pumps, rotary engines, and like machines. 1,653,548; Dec. 20. Corbett, James C., Rochester, N. Y. Machine for washing, rinsing, and drying dishes. 1,626,022; Apr. 26, Corbett, Matt Q., Carnegie, Pa. Hangar floor valve. 1,634,982; July 5. Corbin, B. A., & Son. (See Albee, William H., assignor.) Corbin, B. A., & Son Company. (See Albee, William H., Corbin, Elbert A., fr. Philadelphia, Pa. Double-deck bus. 1,654,492; Dec. 27. Corbin. Elmett T., Hamilton, Ohio. Concrete-column clamp. 1,6438,938; Sept. 27. Corbin, Empry P., assignor to Moline Implement Company, Moline, Ill. Agricultural Implement. 1,647,607; Nov. 1.

Modine III. Agricultural implement. 1,647,607; Nov. 1.
Corbitt, Hugh B. (See Dubin, H. E., and Corbitt.)
Corcoran, Cornelius B., deceased, New York; M. J. Corcoran, Cornelius B., deceased, New York; M. J. Corcoran, administrator, Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,643,005; Sept. 20.
Lind. Window fixture: 1,540,143; Auc. 23.
Corcoran, Michael, Anaconda, Mont. Water-cooled roof for reverberatory furnaces. 1,635,5319; July 12.
Corcoran, Michael J., administrator. (See Corcoran, Cornelius B.)
Corcoran, William E., South Plainfield, N. J. Device for supporting containers. 1,641,531; Sept. 6.
Cord Thing containers. 1,641,531; Sept. 6.
Cord Thing Container Company, The. (See Morris, Howard I., assignor.)

Cordes, Silas, Boise, Idaho. Headlight attachment, 1,618,365; Feb. 22.
Cordley, Curistopher M. New York, N. Y. Beverage container, Des. 72,593; May 10.
Cordo-Hyde Co. (See Eddins, Sextus A., assignor.)
Cordory, Lee K., San Diego, Calif. Vehicle speed-limit Cordinates and Cord

Dec. 13

Dec. 13.
Cordrey, Joseph T., Auburn, Wash. Apparatus for reclaiming and sharpening files. 1,648,112; Nov. 8.
Corell, Minnie D., New York, N. Y. Automobile doorlock. 1,614,656; Jnn. 13.
Corey, Joseph Habans, Cuba. Pedal operator for flush Lorey, Arthur B. 34 See Mentzer, Claude E., assignor.)
Corey, Harry R., Brooklyn, assignor to American Can Company, New York, N. Y. Talcum-powder box. 1,644,989; Oct. 11.
Corey, Howard S. (See Boehm, W. H., and Corey.)
Corey, Janues H., Greenville, N. C. Device for locking the transmissions of automobiles trucks, and other Corey. Orey, Matt M., assignor to R. D. Swisher Mg. Co., Chicago, Ill. Lock for pocket seals. 1,646,612: Oct. 25.

Corey, Matt M. Chicago, Ill. Oct. 25.

Oct. 25.
Corfman, Clifford L. Spokane, Wash. Investment composition. (1631,249; June N. J., assignor to Packard Motor Car Company, Detroit, Mich. Radiator-cap ornament. Des. 73,026; July 12.
Corkran, Levin O., Rhodesdale, Md. Screen cleaner. 1.633,590; Aug. 16.
Corkscrew Steel Fences Ltd. (See Watson, George D.,

assignor.)

Corless, Thomas K., New York, N. Y. Turbine. 1,653,391; Dec. 20.

orlett, Edwin H., East Cleveland, Ohio. Method and apparatus for effecting optical projections. 1,626,787; May 3. Corlett, Edwin H.,

spharatus for electing optical projections. 1,020,761; May C.
Coret Edwin H., and M. W. Garnett, Cleveland, Ohio. 1654,070; Dec. 27.
Corlett, Webster D. (See Ehrman, E. H., and Corlett.) Corlew, Clarence M., and G. A. Blohm, assignors of one-ninth to F. P., Hall, one-ninth to N. L. Nelson, and one-sinth to W. L. Alerd, Stoux Falls, S. Dak. Crank-Hall, S. C. Liquid-dispensing apparatus. 1,641,577; Sept. 6.
Corley, Hugh R., Lexington, S. C. Liquid-dispensing apparatus. 1,641,577; Sept. 6.
Corley, Marshal D., Norphiet, Ark. Lubricant-transporting receptacle. 1,637,635; Aug. Edwin Committee Corney, Marshal D., Norphiet, Ark. Lubricant-transporting receptacle. 1,637,635; Aug. Clevens, Delgium. Combing macromal Corner, Marked J., Long Beach, Call. Shock-absorbing means for vehicles. 1,639,369; Aug. 16.
Cornely, Raired J., Long Beach, Call. Shock-absorbing means for vehicles. 1,639,369; Aug. 16.
Cornely, Raired J., Long Beach, Call. Shock-absorbing means for vehicles. 1,639,369; Aug. 16.
Cornell, Raired J., Long Beach, Call. Shock-absorbing min for the cornel of the corn

Oct. 18. Cornell, George V. D., Boundbrook, N. J. Puzzle, 1,838,216; July 19.
Cornell, John E. (See Kronmiller, C. G., and Cornell.)
Cornett, Sherman, Reece, Kans. Display sign and producing the same. 1,634,174; June 28.
Corning, Charles S., Rockford, assignor to W. S. Corning, Charles S., Rockford, assignor to W. S. Corning, Chicago, Ill. Method and apparatus for treating hydrocarbons. 1,652,394; Dec. 13.

carbons. 1,652,394; Dec. 13.

Corning Glass Works. (See Pulcher, Gordon S., assignor.)

Corning Glass Works. (See Littleton. Jesse T., assignor.)

Corning, Glass Works. (See Littleton. Jesse T., assignor.)

Corning, Glass Works. (See Caylor, William C., assignor.)

Cornman, George W. (See Corning, Charles S., assignor.)

Cornman, George W. W., and R. P. Brown. assignors to

The Brown Instrument Company, Philadelphia, Pa.

High-temperature thermometer. 1,2415,505; Jan. 25.

Cornwall, George R., Rye. N. Y., assignof. by mesne as
signments, to Gough Stemming Machine Corporation.

Stemming machine.

All L. R. Grames, Wellsville, N. Y.

Wheel puller. 1,633,314; June 21.

Cornwell, Carl., Oakland. Calif. Bifuel system for gas

engines. 1,635,460; July 12.

Cornwell, Virgil O., and A. Moeller, assignors to The

Federal Glass Company, Columbus, Ohlo. Method and

apparatus for shaping articles of glass. 1,638,620;

Aug. 9.

Aug. 9.

Corona Corporation. (See Dahl, Thure, assignor.)

Corrall, Herbert, Helensburgh, and J. Heggle, Clydebank,
Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Looper mechanism for sewing
machines. 1613,605; Jan. 11.

Corrall, Herbert, Helensburgh, and J. Heggle, Clydebank,
Scotland, assignors to The Singer Manufacturing Company. Elizabeth, N. J. Sewing-machine attachment,
1,620,249; Mar. 8.

Corrall, Herbert, Helensburgh, and J. Heggie, Clydebank, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Overedge-sewing machine. 1,647,594; Nov. 1.

Corren, Frank M., Honolulu, Hawail. Adjustable bedding clamp. 1,619,593; Mar. 8.

Corren, Manuel P., Jr., Kalawao, Hawaii. Figure toy. 1,631,918; June 7.

Correct Measure Company. (See Foster, J. R., and Wood-Correct Measure Company. (See Foster, J. R., and Wood-Correct Measure Company. (See MacKenzie, George W., assignot.)

assignor.) Correct Measure Company. (See Woodruff, F., and Fos-

Correct Measure Company. (See Woodruff, F., and Moster, assignors.)
Correct Measure Company. (See Woodruff, F., and Mostenzie, assignors.)
Corrigan, Frederick S., assignor to The Sheet Metal Products Co. of Canada Limited, Toronto, Ontario, Canada. Sink, washbasin, and the like, 1,635,311; July 12.
Corriston, Katherine, Westerleigh, assignor to W. S. Swift, New York, N. Y. Revolver holster, 1,635,984; July 19.

July 19. Corry, John S., San Pedro, Calif. Vanity case. 1,625,455;

July 19.

Corry, John S., San Pedro, Calif. Vanity case. 1,625,455;
Apr. 19.

Corsalil, Friedrich W., Berlin, Germany. Smelting furnace. 1,647,608; Nov 1.

Corsalil, Friedrich W., Heavy-oil internal-combustion centime. 1,621,525; Mr. Heavy-oil internal-combustion centime. 1,621,525; Mr. 22.

Corson, Blake W. (See Dalton, J. T., and Corson, J. Corson, Harry P., Lakewood, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Insecticide and making the same. 1,648,577; Nov. 8.

Corson, Henry J., assignor of one-half to W. H. Comkle, Corson, Michael G., 1648,577; Nov. 8.

Corson, Henry J., assignor of one-half to W. H. Comkle, Corson, Michael G., 1688,574; June 14.

Cortes, Augusto J. D., New York, N. Y. Douche nozzle. 1,632,541; June 14.

Cortese, Sam, Dunsmuir, Calif. Thread cutter for sewing machines. 1,622,329; Apr. 26.

Corfield Howard L. (See Hopkins, L. S. R., and Corthell, Cort. Louis, Long Beach, Calif. Quick-action waffie iron. 1,625,243; Apr. 19.

Corwin, Frank E., Toledo, Ohio. Egg beater. 1,637,103; July 20.

Cowwin, Frank E., Toledo, Ohio. Egg beater. 1,637,103; July 20.

Loward R., Newark, N. J. Liquid-bead-maintain-iro-level. 1,632,175; July 19.

Corwin, Howard R., Newark, N. J. Liquid-head-maintain-ing device, 1,635,175; July 12. Cory. Chas., & Son, Incorporated. (See Wood, Frank W., Cory. Chas., assignor.)

Cory. Chas., & Son, Incorporated. (See Wood, Frank W., assignor.)
Cory, Russell C., and C. M. Terry, Chicago, Ill., assignors appliance. Lails 415; Feb. 22.
Cory, Samuel I., Elmburst, N. Y., assignor to American Telephone and Telegraph Campany. Telegraph distortion-measuring system. 1,627,633; May 10.
Cory, Samuel I., Elmburst, N. Y., assignor to American Telephone and Telegraph Company. Telegraph distortion-measuring system. 1,627,633; May 10.
Cory, Samuel I., Elmburst, N. Y., assignor to American Telephone and Telegraph Company. Telegraph distortion-measuring system. 1,627,633; May 10.
Coryell, Charles N., Mamaroneck, N. Y. Vanity case. 1,626,023; Apr. 26.
Coryell, Charles N., Mamaroneck, N. Y. Vanity case. 1,626,023; Apr. 26.
Coryell, Charles N., New York, N. Y. Compact case. 1,626,114; Apr. 19.
Coryell, William C., Youngstown, Ohio. Metal working. 1,618,515; Feb. 22.
Coryell, William C., Youngstown, Ohio. Sash. 1,619,811; Mar. 8.

July 5.

July 6.

July 5.

July 6.

Jul

Costa, Eugene S., Chattanooga, Tenn. Turn-page clamp. 1,646,747; Oct. 25.
Costakos, Theodore M., Minneapolis, Minn. Measuring faucet for cream. 1,647,086; Nov. 1.
Costakos, Theodore M., Minneapolis, Minn. Measuring faucet for cream. 1,647,086; Nov. 1.
Coste, Jean F. P., Billancourt, France. Resilient wheel for vehicles. 1,640,349; Aug. 30.
Costello Engineering Company. (See Costello, Thomas J. 1885) Costello Company. (See Costello, Thomas J. 1885) T. T., Vaccaville, Calif., assignor to Standard Spray, Pump Company. Plunger pump. 1,625,299; Apr. 19.

Costello, Frank T., McKruny, Plunger pump. 1,625,299;
Spray Pump Company, Plunger pump. 1,625,299;
Costello, Joseph A., assignor to The Cleveland Brass
Manufacturing Company, Cleveland, Ohio. Hose and
pipe coupling. 1,613,644; Jan. 11.
costello, Mose M., et al., executors. (See Costello, Thomas
H.)
Costello, Hose M., et al., executors. (See Costello, Thomas
H.)

Rose M., trustee. (See Costello, Thomas H.,

Costello, Rose M., trustee. (See Costello, Thomas H., assignor.)
Costello, Thomas H., deceased, Chicago, Ill.; R. M. Costello, Thomas H., deceased, Chicago, Ill.; R. M. Costello, trustee. Hinge. 1,627.274; May 3.
Costello, Thomas H., deceased, Chicago, Ill.; R. M. Costello and W. E. Costello, executors, assignors to R. M. Costello, Thomas H., deceased, Chicago, Ill.; R. M. Costello, Thomas J., Warren, Ohio, assignor, by mesne assignments, to Costello Engineering Company, Pittsburgh, Pa. Pair-heating furnace and method of heattreating material. Re16,526; Jan. 11.
Costello, Thomas J., Warren, Ohio, assignor, by mesne assignments, to Costello Engineering Company, Pittsburgh, Fa. Operating heating furnaces. Re16,527; Jan. 11.

burgh, Fa. Operating heating furnaces. Rel6,527; Jan. 11. Costello, William E., et al., executors. (See Costello,

Jan. 11.

Costello, William E., et al., executors. (See Costello, Thomas H.)

Costello, William P. (See Kevlin, M. F., and Costello.)

Costello, William P. (See Sunderland, J. C., and Costellow.)

Costellow, John F. (See Sunderland, J. C., and Costellow.)

Coster, Dirk, Haariem, Netherlands, and G. Von Hevesy,

Copenhagen, Denmark, assignors to Naamlooze Ven.

Separating zirconium and hafnium. 1,613,961; Feb. 22.

Cote, Alfred, Montreal, Quebec, Canada. Electric water heater. 1,632,821; June 21.

Cote, Edward V. (See Cote, Theodore, and E. V.)

Cote, Theodore, and E. V. Cote, Tupper Lake, N. Y. Hold
Cote, Edward V. (See Cote, Theodore, and E. V.)

Cote, Theodore, and E. V. Cote, Tupper Lake, N. Y. Hold
Cote, Talendore, and E. V. Cote, Tupper Lake, N. Y. Hold
Cote, Charles A., New York, N. Y. Textile fabric. Des. 74,908; Dec. 20.

Cottaz, Charles A., New York, N. Y. Textile fabric. Des. 74,908; Dec. 20.

Cottaz, Charles A., New York, N. Y. Heterodyne re
ceiving system. 1,647,609; Nov. 1.

Cotteril, Walter, Philadelphia, Pa. Clutch-control device. 1,634,983; July 5.

Cotternan, Roy B. Farmersville, Ohio. Apparatus for Cotternan, Rory B. Farmersville, Ohio. Apparatus for Cotternan, Henry E., et al. (See Anthony, Daniel L., as
signor.)

Cotton, Alfred, deceased, by L. P. Cotton, executrix, as-

Nov. 29.
Cotton, Emmett W., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tire-vulcanizing apparatus. 1,616,076; Feb. 1;
Cotton, Laura F., executix. (See Cotton, Alfred.)
Cotton, Valter H., Chicago, Ill. Draft gear. 1,614,657;

Jan. 18.
Cotton, Walter H., assignor to Union Draft Gear Company, Chicago, Ill. Draft gear. 1,624,929; Apr. 19.
Cotton, Walter H., assignor to Union Draft Company, Chicago, Ill. Draft gear. 1,648,296; Nov. 8.
Cotton, William, Limited. (See Aldridge, Charles H.,

Cotton, W assignor. Octon. William, Hochst-on-the-Main, Germany, assignor to Grassell Dysetuff Corporation, New York, N. Y. Obtaining fast-colored discharges on fast dycings 1.638.475; Ang. 9. Cottonwood Fiber Company. (See Loepfe, Charles M.,

John, West Liberty, Ohio. Wrench. 1,615,440:

Jan. 25.

Cottrell, C. B., & Sons Company. (See Barber, Howard M. assignor).

Cottrell, C. B., & Sons Company. (See Greenway, Richard J. Station of Company). (See Greenway, Richard J. 1633, 392). Dec. 20.

Cottrell, John, and J. Marker, Ionia, Mich. Valve lifter, 1827, 597; May 10.

Cottrell, Norman M., Chicago, Ill. Fountain brush. 1,985,114; July 6.

Coty, Francois J. de S., Paris, France, assignor to Coty, Inc., New York, N. Y., Bottle, Des. 71,779; Jan. 4. Coty, Francois J. de S., Paris, France, assignor to Coty, Coty, Inc. (See Coty, Francois, J. de S., assignor). Counde, Maurice, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France, Obviating the action of heat in a projector upon the backing of the images to be projected, 1,652,817; Dec. 13. Counting the Store City, Iowa. Loose-leaf binder. Couch, David H., Warwick, R. I. Shaft coupling, 1,613,502; Jan. 4. Couch, David H., Warwick, R. I. Rotary drier. 1,646,373; Oct. 11. Couch, Ebert L., Manaroneck, N. Y., assignor to Colf's Couch, Ebert L., Manaroneck, N. Y., assignor to Colf's Couch, Ebert L., Manaroneck, N. Y., assignor to Federated Engineers Development Corporation, Jersey City, N. J., Vaire, 1,624,218; Apr. 12.
Couch, Steineers Development Corporation, Jersey City, N. J., Vaire, 1,624,218; Apr. 12.
Couch, Machine for washing dishes and other articles rated Engineers Development Corporation, Jersey City, N. J., Vaire, 1,624,218; Apr. 12.
Couch, Steiners Development Corporation, Jersey City, N. J., Vaire, 1,624,218; Apr. 12.
Couch, Machine Archie, and W. L. Phillips assignors of one

July 5.

Couchman, Archie, and W. L. Phillips, assignors of one-third to L. F. Drinkhahn, Detroit, Mich. Lubricator. 1,622,036; Mar. 22. Couchman, Archie, L. F. Drinkhahn, and W. L. Phillips, Detroit, Mich. Lubricating system. 1,622,027;

Mar. 22.

Coufal, John, Bomarton, Tex. Lock for automobile steering wheels. 1,654,456; Dec. 27.

Cough, Adoniram B., Watertown, Mass. Dental cleansing device. 1,637,738; Aug. 2.

Coughin, J. M. (ISee Moone, Albert E. F., assignor.)

Coughin, J. M. (ISee Moone, Albert E. F., assignor.)

Coughin, J. M. (ISee Moone, Albert E. F., assignor.)

Coughin, Joseph D., New York, N. Y., assignor of one-third to R. Eckert and one-third to P. Keremes. Attachment for stoppers and the like. 1,650,264; Nov. 22.

Coughlin, Robert J., Richmond Heights, Mo. Refrigerator. 1,647,735; Nov. 1.

Coughlin, William G., Philadelphia, Pa. Rail. 1,610,403;

erator. 1.647,785; Nov. 1.

Coughlin, William G., Philadelphia, Pa. Rail. 1,619,403; Mallin, William G., Philadelphia, Pa. Rail-joint support 1,632,998; June 21.

Coughlin, William G., Philadelphia, Pa. Rail-holding device for anticreeper. 1,640,292; Aus. 30.

Coughtry, Arthur J., Portsmouth, N. H. Motion-retarding mechanism (fire escape). 1,647,506; Nov. 1.

Coullery, Henri, La Chaux de Fonds, Switzerland. Call-Coulled Coulled Coulle

Coures, Frank, et al. (See Allen, Charles S., assignor.) Court, Frank T., Independence, and A. B. Walker, Cedar Rapids, Iowa. Tractor-drawn cultivator. 1,648,639; Courtaulds Limited. (See Clément, L., and Rivière, as-

signors.) Courtaulds Limited. (See Glover, W. H., and Van Wey-

Courtaulds Limited. (See Glover, W. H., and Van Wey-cnbergh, assignors.) Courtenay, Frederick D., Chicago, Ill., assignor to Emboso-graf Corporation of America, New York, N. Y. Making embossed show cards. 1.646.013; Oct. 25. Courtis, Rene C., Martinez, Calif. Dispensing cabinet. 1.621.971; Mar. 22. Courting, Louis J. (See Heffelfinger, L. W., and Court-courting, Louis J. (See Heffelfinger, L. W., and Court-

Courtney, S. Jennie. (See Palmer, Ralph V., assignor.) Courtois, Gaston F.. Lyon, France. Device for spraying liquids. 1,651,808; Dec. 6.

Cousin, Arthur J. F. J., assignor to Société Anonyme John Cockerill, Seraing, Belgium. Checkerwork. I.648.164; Nov. 8. Cousinard, Albert, Courbevoie, France. Friction gripping means. 1,647,745; Feb. 15. Cousins, Cairence C., assignor, Ocusins, Clarence C., assignor.) Cousins, Cairence C., assignor of one-third to A. Cousins, Alton, Ill. Safety valve for the train lines of air-brake systems. 1,647,459; Nov. 1. Courly, Joseph, East Vandergrift, Pa. Clasp. 1,634,321; Coutant. Genze E. Postant P.

July 5.
Coutant, George E., Decatur, Ill. Buffer device for rail-way cars. 1,652,395; Dec. 18.
Coutant, George E., Decatur, assignor to Union Metal
Products Company, Chicago, Ill. Corrugated end wall
for railway cars. 1,645,182; Oct. 11.
Coutif, Georges, Paris, France. Tooth facing. 1,639,830;
Aug. 16.
Couts, Oliver C., Lansing, Mich. Combined oll gauge and
drain device for crank cases. 1,613,312; Jan. 4.
Covalence, Leon, Linden, N. J. Door bumper. 1,628,826;
May 17.

Covilence, Leon, Linden, N. J. Door Dumper. 2,020,000, May 17.

Covel, Nathan E., Newtonville, Mass. Package. 1,628,121; May 10.

Coventry, William A., Lancaster, assignor to Grey Iron Casting Company, Mount Joy, Pa. Pulley. 1,634,773; Cover, Henry T., and E. Bond, London, England. Apparatus for breaking up concrete-road foundations and like structures. 1,644,110; Oct. 4.

Cover, Jay D., Huntington, W. Va. Metal Joist. 1,620,479; May 24.

Cover, Leotre E., assignor to Armstrong Cork Company, Package, P

Pittsburgh, Pa. Fire-resisting container. Dec. 13.
Cover, Ralph, Baltimore, Md. Corn-husking machine and method. 1,627,838; May 10.
Covey, Charles A., San Antonio, Tex. Cement-block mold. 1,647,436; N.A., San Antonio, Tex., assignor of one-half to C. v. Birkhead. Clamp. 1,653,990; Dec. 27.
Covey, Mark H., Blue Mountain, Miss. Bedstead. 1,640,754; Aug. 30.
Coville, John E., assignor of one-third to T. W. Mc-Caville, John E., assignor of One-third to T. W. Mc-Caville, John E., assignor of One-third to T. W. Mc-Caville, John E., assignor of One-third to T. W. Mc-Caville, John E., assign

1640,754; Aug. 30.

Coville, John E., assignor of one-third to T. W. McNichol and one-third to T. T. McNichol, Swampscott,
Mass. Cutter head. 1,639,488; Aug. 15.

Cowan, Arch D., assignor to Patcut Novelty Company,
Cowan, Charles H., New Rochelle, N. Y., assignor to
Columbia Phonograph Company, Inc., Bridgeport, Conn.
Cabinet for sound-reproducing mechanism. Des. 72,087;
Mar. 1.

Cowan, Charles H., New Rochelle, N. Y., assignor to
Columbia Phonograph Company, Inc., Bridgeport, Conn.
Columbia Phonograph Company, Inc., Bridgeport, Conn.
Mar. 1 for sound-reproducing mechanism. Des. 72,088;
Mar. 1 for sound-reproducing mechanism.

Country of the Countr

Cowie, John, Sutherland, Saskatchewan, Canada. Stovepipe damper. 1,627,013; May 3. Cowin, James, Minneapolis, Minn. Silo door and ladder structure. 1,622,428; Dec. 13. Cowies, Andrew E., Kellogg, Idaho. Electric water heates. 1,010,166; Jan. 18. Companies E., El Paso, Tex. Directory. 1,637,685; Aug. 2.

May 10.

May 10.

Cowlin, Arthur H., Sidney, British Columbia, Canada.

Interchaugeable rubber heel. 1,643,294; Sept. 27.

Cowperthwaif, George L., Clarks Summit, Pa. Locking
bar and plate for railway-switch points. 1,641,578;

Sept. 6.

Cox. Abram, Stove Company. (See Mott, Abram C., jr.,
assignor.)

assignor.)

Cox, Abram, Stove Company. (See Mott, Abram C., Jr., assignor.)
Cox, Andrew L., Renton, Wash. Target game. 1,650,935; Nov. 29.
Cox, Bertam, London, England. Holder for labels. Cox, Burton K., Jacksonville, Fla. Combined bumper and Jack. 1,627,317; May 3.
Cox, Claude E., Detroit, Mich. Testing and recording device. 1,638,637; Aug. 9.
Cox, Elizada H., Boselle, N. J. Tire-repair device. 1,638,637; Aug. 9.
Cox, Floyd, Sheridan, Wyo. Trailer coupler and brake actuator. 1,613,086; Jan. 4.
Cox, Floyd, Sheridan, Wyo. Trailer coupler and brake actuator. 1,613,086; Jan. 4.
Cox, George E., Niagara Falis, assignor to American 1,649,911; Nov. 15.
Cox, George H., Detroit, Mich. Cooking appliance. 1,642,643; Apr. 26.
Cox, George H., Detroit, Mich. Cooking appliance. 1,622,613; Spr. 13.
Cox, George W., assignor to National Assorting Company, Washington, D. C. Sorting device. 1,625,711; Apr. 19.
Cox, Harold N., Glen Ridge, N. J., assignor to Cox Multi-Ox, Harold N., Glen Ridge, N. J.,

Cot. 11.

Cox, Harold N., Glen Ridge, N. J., assignor to Cox Multi-Color Photo Company. Color photography. 1,645,417; Oct. 11.

Oct. 11.

Cox. Herbert T., Los Angeles, Calif. Card rack. 1,629,070; May 17.

Cox. Irwin W., Denver. Colo. Dry-steam sleeve-finishing board. 1,635,335; Apr. 26.

1,634,471; July 5.

Cox. Irwin W., Denver, Colo. Dry-steam sleeve-finishing board. 1,636,590; July 19.

Cox. John L., Plainview, Nebr. Medical appliance. 1,622,903; Mar. 29.

Cox. Joseph D., Healdsburg, Calif. Holder for bags during filling operation. 1,633,393; Dec. 20.

Cox. Louis Company. N. Y., assignor to Western Testing system. 1,632,886; June 21.

Cox. Millard F., Louisville, Ky. Feed-water heater. 1,627,595; May 10.

Cox. Millard F., Louisville, Ky. Feed-water heater. 1,627,595; May 10.

Cox. Millard F., Louisville, Ky. Feed-water heater. 1,627,595; May 10.

Cox. Nostrand & Gunnison. Inc. (See Nostrand. Elitab.)

assignor.)

CN. Noetrand & Gunnison, Inc. (See Nostrand, Elijah H., assignor.)

CN. Oscur. (See Willis, O. C., and Cox.)

COX, Gscur. (See Willis, O. C., and Cox.)

COX, Gscur. (See Willis, O. C., and Cox.)

COX, Stephen A. D., Huntington Beach, Calif. Gasburner deflector. 1.618.269; Feb. 22.

COX, Walter J., Bridgeport, Conn., assignor to Franklin Railway Supply Company. Device for lubricating locomotive-arts journals. 1.620.620; Mats. S.

COX, Walter J., Bridgeport, Conn., assignor to Franklin Railway Supply Company. Device for lubricating locomotive-arts journals. 1.620.620; Mats. S.

COX, William G., Cleveland, Ohio, Shock absorber for Cox. William G., Cleveland, Ohio, assignor to The Eaton Axle and Spring Company. Automobile bumper and fitting. 1,503.674; May 31.

COX, William J., Lebanon, Pa. Brush. 1,631,015; May 31. Cox. William J., Lebanou, J., May 31.
May 31.
Coxon, Albert. (See Birkin, Charles W. and H. L., and Coxon.)

Coyer, Henry S., New York, N. Y. Metallic oscillion and constructing same. 1,652,164; Dec. 13.
Coyle, Albert A., St. Łouis, Mo. Calipers. 1,617,669; Feb. 15.

Geb. 15.

Coyle, Claud L., Clarence, Mo. Vanity case. Des. 72,602; May 10.

Coyle, Edward S., Naton, Alberta, Canda. Automatic gate. 1,613,672; Jan. 11.

Coyle, John, Baltimore, Md. Sheet-metal container. Coyle, John, Baltimore, Md. assignor to Continental Can Company, Inc., New York, N. Y. Seaming head for can-closing machines. 1,647,687; Nov. 1.

Coyle, Joseph L., Los Angeles, Calli. Processing machine. 1,637,686; Aug. 2.

Coyne, Albert E., Sheffield, assignor to A. Page, Leeds, England. England. State 1,627,634; May 10.

1,652,094; Dec. 6.

Cozart, R. B. (See Williams, Alvin L. and M. O., assignors; M. B. (See Williams, Alvin L. and M. O., assignors)

Baby Carriage Co. (See Mahr, Julius A., assignor.) ens Trading Company. (See Fitch, Frank E., as-

signor.)
Cozzolino. Saverio. Bossburg, Wash. Refrigerator.
1.639,591; Aug. 16.
Cozzone, John A., Newark, N. J. Dough-forming machine.
Crabbs, Bernari E.
Crabbs, Bern

Crabirve, R. W., & Sons, Limited. (See Smith, Edgar W., assignor).

Sasignor, W., & Sons, Limited. (See Smith, Edgar W., assignor).

Crabiree, Thomas H. (See Crabiree, David and T. H.)

Cradick, Joel E., Los Angeles, Cailf. Clutch. 1,643,544;

Sept. 27.

Cradick: William P., Denver, Colo. Scarf holder.

Cratte. Edward B., Hackensack, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., Condenser. 1,629,020; May 17.

Craft, Edward B., Hackensack, N. J., and L. Keller, New York, N. Y., assignors to Western Electric Company, tem. 1,614,2285; Jan. H.

Crafts, Otis T., assignor to Crafts Process, Inc. Manchester, N. H. Making heel bases. 1,652,610; Dec. 13.

Crafts Process, Inc. (See Crafts, Otis T., assignor; Cragg, George L., Chicago, Ill., assignor to H. A. Douglas, Feb. 22.

Cragg, George L., Chicago, Ill., assignor to H. A. Douglas, Cragg, George L., Chicago, Ill., assignor to M. A. Douglas, Cragg, George L., Chicago, Ill., assignor to M. A. Douglas, Cragg, George L., Chicago, Ill., assignor to M. A. Douglas,

Grafts Process, Inc. (See Crafts, Otis T., assignor.)

Cragg, George L., Chicago, Ill., assignor to H. A. Doughas,
Bronson, Mich. Locking unchanism. I,618,732;
Feb. 22.

Crast. Grover L., Chicago, Ill., assignor to H. A. Doughas,
Bronson, Mich. Electric switch. 1.634,4355; July 5.

Craib, Frederick, Martinez, Calif. Electric wall bracket.
Des. 71,862; Jan. 18.

Craib, Grederick, Martinez, Calif. Electric wall bracket.
Des. 73,869; Aug. 30.

Craig, Andrew, Motulou Island, New Zealand. Plow
Craig, Andrew, Los Angeles, Calif. Cover wrench and
can opener. 1,683,186; Aug. 9.

Craig, Andrew, Los Angeles, Calif. Cover wrench and
can opener. 1,683,186; Aug. 9.

Craig, Arthur A., Chicago, Ill. Window ventilator.
1,613,022; Jan. 8.

Craig, Arthur A., Chicago, Ill. Window ventilator.
1,613,022; Jan. 9.

Craig, Arthur B., Betheada, Md. Rotary internal-com1,633,326; June 28.

Craig, Charles, Boksburg, Transvaal, South Africa. Device for supporting the hand while writing. 1,627,635;
Arg. Charles, Charles,

Crain, John, Painesville, Ohio. Stove. 1,632,176;
June 14.
Crain, Lewis F. (See Allerheiligen, A. H., Erichsen, and
Crain,)
Crain, Robert S. (See Wilson, Robert J., assignor.)
Crain, Rollie, Marion, assignor to B. Peterson Company,
Johnston City, Ill. Fuel-feed apparatus for internalcombustion engines. 1.642,579; Sept. 13.
Cram, Danvers, Newport, Me. Falling-mill stop motion.
Cram, Danvers, Newport, Me. Falling-mill stop motion.
Cram, Danvers, Cassignor to Great Northern Paper Company, Millinocket, Me. Paper-making apparatus.
1.629,681; May 24.
Cramblet, Paul K., Beloit, Wis. Switch. 1,625,456;
Apr. 19.
Cramer, Albert N., assignor to The Owens Bottle Com-

pany, Millinocket. Me. Paper-making apparatus. La29,0841. May 24. Cramblet. Paul K., Beloit, Wis. Switch. 1,625,456; Cramer, Albert N., assignor to The Owens Bottle Company, Toledo, Ohio. Glass-feeding mechanism. 1,618,271; Feb. 22. Cramer, Albert N., assignor to The Owens Bottle Company, Toledo, Ohio. Glass-feeding mechanism. 1,626,616; Apr. 26. Cramer, Bessie B., Garnett, Kans. Can washer and steamer. 1,626,616; Apr. 26. Cramer, Henry B., San Diego, Calif. Baking pan. 1,025,525; Apr. 19. Cramer, Henry B., San Diego, Calif. Baking pan. 1,025,525; Apr. 19. Cramer, John B., Carrollton, Ga. Aquatic signboard. 1,025,393; May 10. Cramer, Raymond H., Newark, N. J., assignor to General Motors Corporation, Detroit, Mich. Feeding mechanomers, to Deleo-Light Company, Dayton, Ohio. Refrigerating apparatus. 1,642,015; Sept. 13. Cramer, Stuart W., Cramerton, and W. B. Hodge assignors to Wm. B. Hodge Company, Charlotte, N. C. Humidifier. 1,626,663; May 3. Cramer, Stuart W., Cramerton, and W. B. Hodge. Assignors to Wm. B. Hodge Company, Charlotte, N. C. Humidifier. 1,626,663; May 3. Cramer, Stuart W., Cramerton, and W. B. Hodge assignors to Wm. B. Hodge Company, Charlotte, N. C. Cramer, Stuart W., Cramerton, and W. B. Hodge assignors to Wm. B. Hodge Company, Charlotte, N. C. Cramer, Stuart W., Cramerton, and W. B. Hodge assignors to Wm. B. Hodge Company, Charlotte, N. C. Humidifier. 1,626,663; May 3. Cramer, Thomas M., Long Beach, and G. A. Connell, Wilmington, Calif., assignors to Praclic Coast Borax Company. Treating fruit and solution therefor. 1,626,663; May 3. Cramer, Stuart W., Cramerton, and W. B. Hodge Cramer, William, St. Louis, Mo., assignor, by mesne as signments to I. M. Jacobs. Belt-lacing device. 1,640,840; May 2. Cramer, Stuart W., Cramerton, Charlotte, N. C. Cramer, Gramer, Milliam S., See Winters, A. F., and Crampton. Crampton, George S., Irhiadelphia, Pa. Trail Cons mountains. 1,614,830; Jan. 18. Cramer, Charles J., Santa Paula, Calif. Drier. 1,648,640; Nov. 8. Crame C. (See Allen, William E., assignor.)

Crane Co. (See Allen, William E., assignor.)
Crane Co. (See Beckwith, Clinton H., assignor.)
Crane Co. (See Beckwith, Clinton H., assignor.)
Crane, Daniel, Saginaw, Mich. assignor of one-balf to
J. G. Crane, Kendain, N. Y. Table. Des. 72,591;
June 21.
Crane, James G. (See Crane, Daniel, assignor.)
Crane, John T., Los Angeles, Calif. Brake. 1,637,894;

Crane Packing Company. (See Payne, Frank E., as-

Signor.).
Crane, Pearl M., Kansas City, Mo. Pantaloon dress.
1.626,024; Apr. 26.
Snadecki, William J., assignor.).
Crane, Samuel G., assignor to Toledo Scele Company,
Toledo, Obio. Advertising scale. 1.640,112; Aug. 23.
Crankless Engines (Ans) Proprietary Limited. (See
Michell, Anthony G. M., assignor.).
Crankless Engines (Ans).

Crankless Engin M., assignor.)

an, assignor.) Crankshaw, Richard L., Dunlewy, Gweedore, Ireland. Golf club. 1,619,666; Mar. 1.
Coupling means for chains. 1,622,697; June 14.
Crannell, Orlo G., assignor of two-fifths to O. M. Crannell, Revere, Mass. Ventilating system. 1,642,605; Sept. 18.
Crannell, Orlo M. (See Crannell, Orlo G., assignor.)
Cranston, Louic C., Kansas City, Mo. Container for transporting hot food. 1,622,494; Mar. 29.

Crary, James H., New York, N. Y. Hull construction.
1,618,645; Jan. 11.
Crary, James H., New York, N. Y. Internal-combustion engine. 1,652,830; Dec. 13.
Crasilneck, Jake N. Sun Antonio, Tex. Binding for shoe-Craun, Noel E., Bogota, N. J. Fower-transmission device. 1,629,270; Apr. 26.
Cravath, Albert B., Holtville, Calif. Float-controlled faucet. 1,639,556; Aug. 16.
Craven, Andrew J., Brooklyn, N. Y. Chair. 1,652,165; Dec. 13.
Craven, John L., Indianancilla, Ind.

Liec. 13. Craven, John L., Indianapolis, Ind. To. 1,631,016. May 31. Craven, Robert J., Battle Creek, Mich. Co-broom and door holder. 1,636,627; July 19 Cravens, Frank S., Olive Hill, Ky. Valve. Toy motor. Combination 1,627,486;

May 3.

All 197 (1972)

Cravens, Graham H., Kansas City, Mo., assignor of one-half to F. P. Sargent, Leavenworth, Kans. Trailer truck. 1,648,676; Nov. 8.

Cravens, Ridgway M., Brooklyn, N. Y. Resilient vehicle wheel. 1,650,601 Nov. 29.

Cravens, Ridgway M., Brooklyn, N. Y. Resilient vehicle wheel. 1,650,610; Nov. 29.

Cravens, Ridgway M., Brooklyn, N. Y. Resilient vehicle wheel. 1,650,611; Nov. 29.

Craver, Augustus E., Cliffside, N. J., assignor to The Barrett Company. Catalytic oxidation of aromatic hy-Craver, Augustus E., Cliffside, N. J., assignor to The Barrett Company. Catalytic oxidation of aromatic hy-Craver, Augustus E., Cliffside, N. J., assignor to The Barrett Company. Production of aromatic aldehydes. 1,638,635; July 26.

Barrett Company, Production of aromatic aldehydes. 1,636,835; July 26. Craver, Augustus E., Cliffside, N. J., assignor to The Barrett Company, Producing anthraquinone. 1,636,856; July 26.

Craver, Augustus E., Cliffside, N. J., assignor to The Barrett Company. Producing acetaldehyde. 1,636,952; July 26.

Barrett Company. Producting acetaldehyde. 1,636,952; July 26.
Craver, Augustus E., Cleveland, Ohio, assignor to The Barrett Company. Production of maleic acid. 1,636,857; Craver, John B. (See Joerger, J. N., and Craver.) Craveroller Company of America. (See Joerger, J. N., and Craver, assignors.) Crawford, Charles S. (See Bastien, P. and Crawford.) Crawford, Charles S., and W. G. Wall, assignors to F. E. Marchard, Charles S., and W. G. Wall, assignors to F. E. Crawford, Emerick B., assignor to Oven Equipment & Manufacturing Company, New Haven, Conn. Externally-insulated oven. 1,649,975; Nov. 15.
Crawford, Emerick B., assignor to The Oven Equipment & Manufacturing Company, New Haven, Conn. Vont. Crawford, Frank ser., assignor to The Crawford, Willey Crawford, Frank ser., assignor to The Crawford Manufacturing Company, New Brunswick, N. J. Stop motion for knitting machines. 1,621,397; Mar. 15.
Crawford, Frank E., York, Nebr. Differential. 1,632,787; June 21. Evank M. (See Miller, F. V. and Crawford, Crawford, Evank M. (See Miller, F. V. and Crawford, Crawford, Evank M. (See Miller, F. V. and Crawford.)

Crawford, Frank M. (See Miller, F. V., and Craw-

Crawford, Frank M. (See Miller, F. V., and Crawford, Fred, Prosser, Wash. Mower-knife fastening. 1.652,238; Dec. 13.
Crawford Frederics C., Detroit, Mich., assignor to The Steel Products Company, Cleveland, Ohio. Making a drag-link element. 1,625,795; Apr. 26.
Crawford, Frederick C., and M. P. Graham, Detroit, Mich., assignors to The Steel Products Company, Cleveland, Ohio. Tie rod or the like. 1,619,291; Mar. 1.
Crawford, George E., Trenton, N. J., assignor to American Dressler Tunnel Kilns, Inc., Cleveland, Ohio. Kiln Crawford George M. See London, 1623,704 A. Kiln Crawford, Gus J., Baker, Mont. Tractor device. 1,625,788; May 3.
Crawford, Harry H., Chicago, Ill. Radiator hanger. 1,643,553; Oct. 18.
Crawford, Henry B., et al. (See Lemon, Frank R., assignor.)

Crawford. Herry H., Chicago, III. Radiator hanger. 1,645,853; Oct. 18.
Crawford, Henry B., et al. (See Lemon, Frank R., assignor.)
Crawford, Henry B., et al. (See Lemon, Frank R., assignor.)
Crawford, Howard H., Detroif, Mich., assignor to Pines for automobiles. 1,649,389; Nov. 15.
Crawford, James B., Bismarck, N. Dak. Stop and brake for twine machines. 1,632,477; June 21.
Crawford, James L. (See Swan, H. B., and Crawford, James L., assignor to Laclede-Christy Clay furnaces. 1,630,892; May 31.
Crawford, James M., assignor to Auburn Automobile Company, Auburn, Ind. Closed-body ventilator. 1,635,609; July 12.
Crawford, James M., assignor to Auburn Automobile Company, Auburn, Ind., Closed-body ventilator. Crawford, July 12.
Crawford, Jefferson A., Lake Charles, La. Coffee percolator. 1,645,809; Cot. 18.
Crawford, John H., Harrisburg, III. Mining apparatus. Crawford, John H., A. W. Helmholtz, and D. Ferrell, assignors to Safety Pressure Mining & Equipment Company, Harrisburg, III. Blasting cartridge. 1,632,857; June 21.
Crawford, Lulu L., et al. (See Lemon, Frank R., assignor.)

Crawford, Mamie, Sawtelle, Calif. Skin cleaner. 1,651,085; Nov. 29.
Crawford Manufacturing Company, The. (See Crawford, Marquis L., Osceola, Ark. Automatic traffic Crawford, Marquis L., Osceola, Ark. Automatic traffic Crawford, McGregor and Canby Company, The. (See Long, Claud L., assignor.)
Crawford, McGregor and Canby Company, The. (See Mattern, George W., assignor.)
Crawford, McGregor and Canby Company, The. (See Crawford, McGregor and Canby Company, The. (See Crawford, Millard F., Natalbany, La. Log-unloading machine. 1,618,917; Feb. 22.
Crawford, Millard F., Natalbany, La. Log-unloading machine. 1,636,591; July 19.
Crawford, Millard F., Natalbany, La. Log-unloading machine. 1,636,591; July 19.
Crawford, Raiph F., Salina, Kans. Self-oiling hub for vadiator fam. 1,638,340; June 28.
Crawford, Raiph F., Salina, Kans. Power take-off mechanism for motor vehicles. 1,633,847; June 28.
Crawford, Raiph F., Salina, Kans. Power take-off mechanism for motor vehicles. 1,633,847; June 28.
Crawford, Stuart L., Rochester, N. Y. Preserving or canning fruit. 1,631,017; May 31.
Log-3,491; May 10.
Creamery Package Mfg. Company, The. (See Ladewig, Cramery Package Mfg. Company, The. (See Larsen, Olaf, assignor.)
Creamery Package Mfg. Company, The. (See Valerius, T. L., and Larsen, assignor.)

Olar, assignor.)
Creamery Package Mfg. Company, The. (See Valerius, T. L., and Larsen, assignors.)
Creamery Package Mfg. Company, The. (See Williams, G. W., and Walstrom, assignors.)
Creametre Company, The. (See Quiggle, Arthur W., as-

Creamette Company, The. (See Quiggle, Artnur W., assignor.)
Crecellus, Carl F., Falmouth, Ky. Toilet appliance.
Crede, Julius (See Lissauer, A. W., and Credo.)
Crede, Traillus (See Lissauer, A. W., and Credo.)
Crede, Frederick G., Croydon, England. Electric transmitter for use in automatic telegraphy. 1,632,274;
June 14.
Creed, Frederick G., Croydon, England. Telegraphic transmitting apparatus. 1,639,212; Aug. 16.
Creed, Frederick G., Croydon, England. Telegraphic receiving apparatus. 1,639,213; Aug. 16.
Creed, Grederick G., Croydon, England. Electromagnetic conference of the Company of the Company

signor. Creel, Edwin J., Spokane, Wash. Method and apparatus for compression or expansion of a gas. 1.641,121;

for compression or expansion or a gas. 1.641,121; Aug. 30. Creevy, John L., New Orleans, La. Packing. 1,631,520; June 7. Cregan, John F., Pueblo, Colo., assignor to American

Creeny, John L., New Orleans, La. Packlug. 1,631,520; June 7.
Cregan, John F., Pueblo, Colo., assignor to American Smelting and Refining Company, New York, N. Y. Treatment of furnace gases to recover gine oxide. Gregan, John F., Pueblo, Colo., assignor to American Smelting and Refining Company, New York, N. Y. Making zine oxide. 1,628,953; May 17.
Cregier, Nathaniel B., Chicago, Ill. Photographic camera. 1,633,373; June 21.
Cregor, Nathanial, Los Angeles, Callif., assignor to Ward out. 1,640,182; Aug. 23.
Crejgton, Elmer E. F., Schenectady, N. Y., assignor to General Electric Company. Protective device. 1,651,872; Dec. 6.
Creighton, Henry J., Swarthmore, Pa., assignor to Atlas Powder Company, Wilmington, Del. Economical re-1,653,094; Dec. 20.
Creighton, Thomas A., Long Beach, Calif. Releasable drill collar. 1,621,583; Mar. 22.
Cremieu, Victor, Colombieres-sur-Orb, France. Apparatus for cooling by the expansion of gases. 1,625,712; Colong by the expansion of gases. 1,625,712; Connectinity of Ganny and A. J. Gordon, assignors of one-third to J. E. Gaynor, Attleboro, Mars. Electric

Apr. 19. Cremo, Aristide L. N., and A. J. Gordon, assignors of one-third to J. E. Gaynor, Attleboro, Mass. Electric time switch for automobile lights. I,624,539; Apr. 12. Crenshaw, John R. (See Schaeffer, J. A., Calbeck, and Crenshaw).

Crescent Brass Mfg. Co. (See Abrams, Herman, assignor.) Crescent Machine Company, The. (See Wilderson, Clinton G., assignor.) Crescent Pump Company. (See Hatcher, William A., as-

signor. Crescent Stove Works. (See Pape, Edwin W., assignor.) Cresci, Anthony L., Vineland, N. J. Turntable. 1,640,982;

Aug. 30. Cresco Creamery Supply Co. (See Goldberger, Morris,

assignor.)
resco Creamery Supply Co. (See Ratezenstein, William, assignor.)

Cresmer, John H., Riverside, Calif. Automobile steering knee control. 1,626,331; Apr. 26. Cressler, Edward P., Newton, Kans. Interchangeable tooth. 1,613,744; Jan. 11. Cressler, Edward P., Newton, Kans. Artificial tooth. 1,646,232; Oct. 18. Cresson: Lionel, Singapore, Straits Settlements. Terraculthous block. 1,614,348; Jan. 11. Cresson:Morris Company. (See Stone, Edward N., as-

signor.)
Crewdson, Eric, Kendal, England. Control of prlme
movers. 1,637,636; Aug. 2.
Crewes, James A., Indianapolis, Ind. Door opening and
closing mechanism. 1,621,459; Mar. 15.
Crews, Clarence M., Brooklyn, assignor to Underwood
Typewriter Company, New York, N. Y. Typewriting
machine. 1,647,274; Nov. 1.
Crews, Lucenius M., 21,100; May 10.
Crews, Robert H. (See Dager, Albert, assignor.)
Crews, Robert H. (See Dager, Albert, assignor.)
Crews, Thomas B., St. Louis, Mo. Combined safety razor
and blade sharpener. 1,622,904; Mar. 29.
Cribben & Sexton Company. (See Harter, Augustus F.,
assignor.)

Cribben & Sexton Company. (See Wilkinson, George D., assignor.)

Cribbs, Hyatt M. (See Gruber, Samuel A., assignor.)

Cricbt, Payatt M. (See Gruber, Samuel A., assignor.)

Cricchio, Paul, New York, N. X., assignor to Royal Metal

Lighting Fixture Co., Inc. Lighting-fixture bracket. Des. 71,956; Feb. 8.

Cricchio, Paul, New York, N. X., assignor to Royal Metal

Lighting Fixture Co., Inc. Lighting-fixture part.

Cricchio, Faul, New York, N. Y., assignor to Sun Rise

Lamp Mfg. Co., Inc. Table ornament or analogous

article. Des. 72,988; July 5.

Cricchio, Paul, New York, N. Y., assignor to Sun Rise

Lamp Mfg. Co., Inc. Tray or analogous article. Des.

Cricchio, Paul, New York, N. Y., assignor to Sun Rise

Lamp Mfg. Co., Inc. Candiestick or analogous article.

Des. 73,968; July 19.

Cricchio, Paul, New York, N. Y., assignor to West
Crichton, Leslie N., Bdgewood Park, Pa., assignor to West
Crichton, Leslie N., Bdgewood Park, Pa., assignor to West
Crichton, Leslie N., Bdgewood Park, Pa., assignor to West
Crichton, Leslie N., Bdgewood Park, Pa., assignor to West
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Crichton, Leslie N., Bdgewood Park, Pa., assignor to West
Crichton, Leslie N., Bdgewood Park, Pa., assignor to West
Crichton, Leslie N., Bdgewood Park, Pa., assignor to Westcuit bre Crimmel, Oct. 18.

Crimmel, Alvie C., Hartford City, Ind. Jar. Des. 73,643; Cri. 18.

Crimmel, Alvie C., Hartford City, Ind. Newspaper recrements of the control of the control

Mar. 22.
Crisson, George, East Orange, N. J., assignor to American
Telephone and Telegraph Company. Vacuum-tube-echo
suppressor. 1,64,222.
Telephone and Telegraph Company. Telephone
repeater station. 1,619,058; Mar. 1.
Crisson, George, East Orange, N. J., and H. C. Silent,
Brooklyn, N. Y., assignors to American Telephone and
Telegraph Company. Multiway connection. 1,623,095;
Apr. 5.

Telegraph Company, attaining Apr. 5.
Crist. William C., Blue Island, Ill. Smoke deflector. 1.636.217; July 19.
Cristalini. Anteres O., assignor to Peck Shoe Company, Cristalini. Anteres O., assignor to Peck Shoe and method of manufacture. 1.631.919; June 7.
Critchfield. Robert M., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Manufacturing Commutators. 1.641.414; Sept. 6.
Worcester, Mass. Cylinder-head-lifting tool. 1.645, 255; July 12.

Crittall, Richard G. and J. L. Musgrave, London, England. Heating and cooling of buildings. 1,625,987; Apr. 26

innd. Heating and cooing of buildings. 1,623,981; Apr. 26.
Crnoev, Jan, St. Louis, Mo. Necktie holder. 1,616,608; Crnoev, Jan, St. Louis, Mo. Necktie holder. 1,616,608; Croan, Walter B., assignor to Drying Systems, Inc., Chicago, Ill. Sheet-metal oil-burning air heater. 1,619,567; Mar. 1.
Croan, Walter B., assignor to Drying Systems, Inc., Chicago, Ill. Direct air heater. 1,644,180; Oct. 4.
Croan, Walter B., Chicago, Ill. Heat interchanger. 1,645,801; Oct. 18.
Crockard, Frank H. Birmingham, Ala. Gas seal. 1,615,931; Cel. Choler for bathrubs and basins. 1,645,986; Oct. 18.
Crocker, Charles C., Newark, N. J., assignor of one-half to S. J. Wolff, New York, N. Y. Package opener. 1,646,348; Oct. 18.
Crocker, Charles D. (See Cadwell, W. H., Ott, and Crocker.)

Crocker, Charles D. (See Cadwell, W. H., Ott, and Crocker).
Crocker, Clarence T., Schenectady, N. Y., assignor to General Electric Company. Fluid-pressure-operated device. 1,623,780; Apr. 5.
Crocker, Elimer S., assignor to O. R. Fuller, Los Angeles, Calif. Four-wheel truck for motor vehicles. 1,615,860; Jan. 25.
Crocker, Elimer S., assignor to O. R. Fuller, Los Angeles, Crocker, Elmer S., assignor to O. R. Fuller, Los Angeles, Trocker, Elmer S., assignor to O. R. Fuller, Los Angeles, Crocker, Elmer S., assignor to O. R. Fuller, Los

signor.) Crocker-Wheeler Company. (See Aceves, Julius G., as-

signor.)
Crocker-Wheeler Company. (See Aceves, Julius G., asCrocker-Wheeler Electric Manufacturing Company. (See
Spencer, Millard C., assignor.)
Crockett, Frank L., North Uxbridge, assignor to Whitin
Machine Works, Whitinsville, Mass. Waste-removal
apparatus. 1,629.092; May 17.
Crockett, Thomas E., Eldorado, Kans. Water-elevating
apparatus. 1,642.990; Sept. 20.
Crockett, William P., Chicago, Ill. Call switch for hospital signal systems. 1,620,351; Mar. 15.
Crockett, William P., Chicago, Ill. Electric-light fixture.
Crocse. Dirk. London, England. Electric furnace.
1,642.359; Sept. 13.
Crofoot, John B., Arlington Heights, Ill. Stapler.
1,614.331; Jan. 18.
Crofoot, John B., Arlington Heights, Ill. Stapler.
Crofoot, John B., Chicago, Ill. Stapler. 1,638,831;
Aug. 16.
Croft, Humm, D. (See Perkins, J. L., and Croft.)

Croftot, John B., Chicago,
Aug. 16.
Croft, Hiram D. (See Perkins, J. L., and Croft.)
Crofton, William M., Dublin, Ireland. Carburetor.
1,619,656; Mar. 1.
Croker, Mark V., Newton Upper Falls, Mass. Insulating section for pipes. 1,630,657; May 31.
Croll, Andrew G., Weatherly, Pa., assignor to The Atlas Portland Cement Company. Furnace lining. 1,647,068; Oct. 25.
Crom. John M., Chlcago, III., assignor to Cement Grunders Company. Allentowa, Pa. Device for use

Oct. 20.

Crom, John M., Chicago, Ill., assignor to Cement Gun Contracting Company, Allentown, Pa. Device for use in and process of incasing structural members. 404.088; Aug. 30.

Cromar Company, The. (See Crooks, Kenneth E., as-

signor.) combie, Charles G. (See Shields, B. F., Crombie, and Crombie, Cl. Windell.)

Windell.)
Crompton, Arthur, Manchester, England. Fabric-printing
machine. 1,649,812; Nov. 22.
Crompton Company. (See Nichols, John F., assignor.)
Crompton, Francis M. (See Smith, Charles M., assignor.)
Crompton & Knowles Loom Works. (See Arthur, Harrison N., assignor.)
Crompton & Knowles Loom Works. (See Bardsley, Henry,
Crompton & Knowles Loom Works.

Crompton & Knowles Loom Works. (See Blanchard, Harold L., assignor.) Crompton & Knowles Loom Works. (See Blanchard, H. L., and Wakefield, assignors.) Crompton & Knowles Loom Works. (See Brouwer, Ben-jomin W., assignor.)

jamin W., assignor.)
Crompton & Knowles Loom Works. (See Buckley, Charles E., assignor.) assignor.)

Crompton & Knowles Loom Works. (See Came, Samuel, assignor.)

assignor.)
Crompton & Knowles Loom Works. (See Cederlund, A.,
and Turner, assignors.)
Crompton & Knowles Loom Works, The. (See Chevrette,
Augustin J., assignor.)
Crompton & Knowles Loom Works. (See Crutchlow,
Crompton and Knowles Loom Works. (See Dacey, E. J.,
and Robertson, assignors.)

Crompton and Knowles Loom Works. (See Dacey, Edward J., assignor.)

Yowles Loom Works. (See Donelly, Loom Works.)

Crompton & Inovies Loom Works. (See Donnelly, Crompton & Lassimor).
Crompton & Knowles Loom Works. (See Findlay, G. P., and Johnston, assignors).
Crompton & Knowles Loom Works. (See Frechett, G., and Owen, assignors).

Crompton & Knowles Loom Works. (See Gordon, Albert A., assignor.) Crompton & Knowles Loom Works. (See Hering, Paul, assignor.)

Crompton & Knowles Loom Works. (See Hoffman, L. F., and Wakefield, assignors.) and Wakofield, assignors.)
Crompton and Knowles Loom Works, The. (See Hollingworth, Edward, assignor.)
Crompton & Knowles Loom Works. (See Holmes, Elbitdge R., assignor.)

bridge R., assignor.)

Crompton & Knowles Loom Works. (See Holmes, E. R., and Wakefield, assignors.)

Crompton & Knowles Loom Works. (See Holmes, E. R., and Wakefield, assignors.)

R., assignor.)

Crompton & Knowles Loom Works. (See Howard, Charles R., assignor.)

assignor.)

Crompton and Knowles Loom Works. (See Hutchins, George F., assignor.)

Crompton & Knowles Loom Works. (See Jennings, Victor H., assignor.)

Crompton & Knowles Loom Works. (See Jennings, V. H., and Watson, assignors.)

Crompton & Knowles Loom Works. (See King, William Crompton & Knowles Loom Works. (See Lane, Edward L., assignor.)

Crompton & Knowles Loom Works. (See Laue, Ecoward L., assignor.), owles Loom Works. (See McGuiness, Crompton & F. Anssignor.)
Crompton & Knowles Loom Works. (See Needham, William H., assignor.)
Crompton & Knowles Loom Works. (See Paine, Arthur P., assignor.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., Crompton & Knowles Loom Works. (See Payne, Oscar V.)

assignor.)

Crompton & Knowles Loom Works. (See Robertson, William W., assignor.) Crompton & Knowles Loom Works. (See Ryon, Eppa H.,

Crompton & Knowles Loom Works. (See Ryon, Eppa H., assignor.)
Crompton & Knowles Loom Works. (See Turner, Richard G., assignor.)
Crompton & Knowles Loom Works. (See Unwin, Keanerh J., assignor.)
Crompton & Knowles Loom Works. (See Unwin, K. J., and Wakefield, assignors.)
Crompton & Knowles Loom Works. (See Verry, Irving H., assignor.)
Crompton & Knowles Loom Works. (See Wakefield. Walter H., assignor.)
Crompton & Knowles Loom Works. (See Wakefield. Walter H., assignor.)
Crompton & Knowles Loom Works. (See Wattie, William M., assignor.)
Crompton & Knowles Loom Works. (See Wattie, William M., assignor.)

Cron, Lon H. (See Brauer, H., and Cron.) Cronan, James W., Portageville, Mo. Harness buckle. 1,625,389; Apr. 19. Crone, Francis G., Buffalo, N. Y. Carburetor. 1,637,104; July 26.

July 26.

Crone, Francis G., Buffalo, N. Y. Tire-deflaticn indicator. 1,638,883; Aug. 16.

Cronenweth, Barl E., Wilkinsburg, Pa. Antiskid chain. 1,621,398; Mar. 15.

Cronenweth, Barl E., Glendale, Calif. Tire-chain applier. 1,630,111; May 24.

Cronenweth, Barl E., Glendale, Calif. Tire-chain applier. 1,642,921; Sept. 20.

Cronin, John H., assignor to The Enro Shirt Company, Louisville, Ky. Shirt and shirt pocket. 1,636,858; July 26.

England, Aug. 23.

Cronshaw, Cecil J. T., and W. J. S. Naunton, assignors to British Dyestuffs Corporation Limited, Manchester, England, Manufacture of diarylguanidines. 1,639,725;

Aug. 23.
Crook dwais H. Washington, D. C. assignor of one-half of H. Jakobsson, Takona Park, Md. Indating and injecting device. 1, 433-945; Oct. 4.
Crook, Louis H. Washington, D. C. assignor of one-half to H. Jakobsson, Takona Park, Md. Nongrounded transmission line. 1,645,643; Oct. 18.
Crook, Thomas L., Hicksvile, Ohio. Tool handle. 1,648,788; Nov. 8.
Crook, Thomas L., Hicksvile, Ohio. Tool handle. 1,648,788; Nov. 8.
Crook, Charles L. and F. M. Vandervoort, assignors to The Positive Lock Company, Pueblo, Colo. Latch or keeper means. 1,634,635; July 5.
Crooks, Kennett E., assignor to The Cromar Company Williamsport, Pa. Prefinished flooring, 1,644,710; Oct. 11.

Crooks, William, assignor to Belmont Packing & Rubber Company, Philadelphia, Pa. Machine for folding packing and the like. 1,644,416; Oct. 4. Croom, Hardy. Savannah, Ga. Ticket-holding device. 1,629,682; May 24. Cropp, Claude J., Detroit, Mich. Vehicle cab. 1,623,830; Apr. 5.

Crosby, Arthur P., assignor of one-half to W. T. Price, Minneapolis, Minn. Radiator return trap. 1,646.686;

Minneapolis, Minn. Radiator return trap. 1,646.686; Oct. 25.
Crosby Company, The. et al. (See Klinger, A. E., and Burkhardt, assignors).
Grosby Company, The. Moneely. Earl E. assignor.)
Crosby, Herbert A. (Steffler, Alberta, Canada. Goldsaving device. 1,616,743; Feb. 8.
Crosby, J. D., Co. (See Crosby, Justin D., assignor.)
Crosby, John J., assignor of one-half to P. F. Lenhy, Detroit, Mich. Binding post. 1,645,854; Oct. 18.
Crosby, Justin D., assignor to J. D. Crosby Co., Pawtucket, R. J. Finishing cold-rolled steel. 1,623,648; Apr. 5.

Crosby, Ralph H., assignor to American Plumbing & Heating Company, Minneapolis, Minn. Gauge trap. 1,340,600; Aug. 30.
Crosby Steam Gage & Valve Company. (See Clark, George

II., assignor.)
II., assignor.)
Crosgrove, William E., Jamestown, N. Y. Table.
1,651,586; Dec. 6.
Crosley, Powel, fr., Cincinnati, Ohio. Adapter. 1,627,077;
May 3. May

Crosley, Powel, jr., Cincinnati, Ohio. Adapter. 1,627,077; May 3.

Crosley. Powel, ir., Cincinnati, Ohio. Rheostat. 1,640,028; Aug. 23.

Cross, Alexander D., Irvington, N. J. Golf bag. 1,621,107; Mar. 15.

Cross Bros. Co. (See Phill). George R., assignor.) Cross Bros. Co. (See Phill). George R., assignor.) Cross Charles H. C. Cheyenne, Okt. Safety catch for watch folse. 1,648,217; Nov. 8.

Cross, Charles S., Brooklyn, and C. A. Smith, Flushing. N. Y., assignor to Circle F. Mfg. Co., Trenton, N. J. Electric switch socket. 1,644,990; Oct. 11.

Cross, Claud. Stanford University, Calif. Mechanically-operated toy. 1,647,507; Nov. 1.

Cross, Claud. Stanford University, Calif. Mechanically-operated toy. 1,647,507; Nov. 1.

Cross, Frank. St. Louis, Mo., assignor of one-half to T. M. Hobbs, Carmi, Ill. Templet. 1,644,636; Oct. 4.

Cross, Frank L., Port Washington, N. Y., assignor to Cross Paper Feeder Company. Sheet-feeding machine. 1,637,555; Aug. 2.

Cross, Garrett P. S., Grand Rapids, Mich., assignor to United Shoe Machinery Corporation, Paterson, N. J. Last-removing device. 1,636,268; July 19.

Cross, Garrett P. S., Grand Rapids, Mich., assignor to United Shoe Machinery Corporation. Paterson, N. J. Mechanical movement. 1,648,114; Nov. 8.

Cross, Grevenor M., Minneapolis, Minn. Spring-tension neutralizer. 1,618,516; Feb. 22.

Cross, Harry E., assignor to Cross Motor Corporation. Indianapolis, Ind. Automobile chassis. 1,288,292; Aug. 9.

Cross, James A., Denver, Colo. Vulcanizer. 1,653,621;

Cross, James A., Denver, com.

Dec. 27.

Cross, John H., assignor to The Waterman-Waterbury
Company, Minneapolis, Minn. Crescent radiator.

Cross, Lester H., assignor to C. M. Smillie & Company,
Detroit, Mich. Tire cover. 1,625,593; Apr. 19.

Cross Manufacturing Company. (See Bishop, S. II., and
McNaught, assignors.)

Cross Motor Corporation. (See Cross, Harry E., asstempt.)

Cross Paper Feeder Company. (See Cross, Frank L., assignor.)

Cross Paper Feeder Company. (See Hallstream, Henning,

assignor.) ross, Roy, Kansas City, Mo. Treating petroleum. 1,623,018; Mar. 29. ross, Roy, Kansas City, Mo. Treating coffee. 1,640,648; Aug. 30.

Aug. 30.

Cross, Roy, Kansas City, Mo., assignor to Gasoline Products Company, New York, N. Y. Coking still.
1.622.573; Mar. 29.

Cross, Roy, Kansas City, Mo., assignor to Gasoline Products Company, New York, N. Y. Process and apparatus Aug. Cross, Colory, Kansas City, Mo., assignor to Gasoline Products Company, Inc., New York, N. Y. Making motor fuel. 1.631.401; June 7.

Cross, Waiter M., Kansas City, Mo. Method and apparatus for treating petroleum hydrocarbons. 1,621.475;

Cross, Waiter M., Kansas City, Mo. Turbine. 1,637,105;

July 26.

Cross, Walter M., Kansas City, Mo. Turbine. 1,634,109; July 26.
Cross, Walter M., Kansas City, Mo., assignor, by mean assignments, to Gasoline Products Company. Method of treating hydrocarbons. 1,624,889; Apr. 12.
Cross, Walter M., Kansas City, Mo., assignor to Gasoline Products Company, New York, N. Y. Treating pe-troleum hydrocarbons. 1,643,446; Sept. 27.

Cross, Walter M. Kansse City. Mo. assignor to Gasoline Products Company 1a.c., New York, N. Y. Converting oil 1.643.91; nc., New York, N. Y. Converting oil 1.643.91; oct. 11.

Crossen, Edgar H. (See Sheasky, C. H., and Crossen, Degar H. (See Sheasky, C. H., and Crossen, Goke. 1.614.466; Jan. 18.

Crossland, George, assignor to Mohawk Carpet Mills, Inc., 1.631.92; June 7.

Crossland, George, assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y. Spool support. 1.631.921; June 7.

Crossland, George, assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y. Axminster loom. 1.631.809; Local Crossland, George, assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y. Tube frame for looms. 1.651.947; Dec. 6.

Crossley, Aifred, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Radiofrequency choke coll system. 1.627.958; May 10.

Crossley Aifred, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Radiofrequency choke coll system. 1.627.958; May 10.

Crossley Aifred, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Amplifying system. 1.651.810; Dec. 6.

Crossley, Aifred, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Amplifying system. 1.651.810; Dec. 6.

Crossley, Moses L., Somerville, assignor to The Calco Chemical Company, Boundbrook, N. J. Sait of a 1.618.172; Feb. 22.

Crossley, Moses L., Boundbrook, and M. L. Dolt, Somerville, assignors to The Calco Chemical Company, Boundbrook, N. J. Mercury sait of 2-phenylquinoline-4-carboxylic acid and making the same. 1.638.832; Crossley, Moses L., Boundbrook, and M. L. Dolt, Somerville, assignors to The Calco Chemical Company, Boundbrook, N. J. Mercury sait of 2-phenylquinoline-4-carboxylic acid and making the same. 1.638.832; Crossley, Moses L., Boundbrook, and M. L. Dolt, Somerville, assignors to The Calco Chemical Company, Boundbrook, N. J. Mercury sait of 2-phenylquinoline-4-carboxylic acid and producing the same. 1.638,832; Crossley, Moses L., Boundbrook, and M. L. Dolt, Somerville, assignors to The Calco

prook, N. J. Mercus, producing the same. 1,638,833; Aug. 16.
Crossley, Moses L., Boundbrook, and M. L. Doit, Somer-Pille, assignors to The Calco Chemical Company, Bound-pille, assignors to The Calco Chemical Company, Bounder and Marking the Same. 1,638,834; Aug. 16.
Crosthwaite, Ralph L., Chicago, Ill. Ventilator and the like. 1,630,691; May 31.
Crosthwaite, Ralph L., Chicago, Ill. Ventilator. 1,630,692; May 31.
Crostwaite, Ralph L., Chicago, Ill. Ventilator. 1,630,632; May 31.
Croswell, Ernest L., Chicago, Ill. Automobile direction indicator. 1,646,445; Oct. 25.
Crotto, Frank E., assignor to Western Supply Company. Tuisa, Okla. Liner for cable-engaging tools. 1,639,390; Nov. 16.
Croud, Marion L., Milwaukee, Wis, Machine for molding soap and other material. 1,560,981; Nov. 29.
Crouch, Walter L., assignor to The Blakesley Novelty Company, Bristol, Conn. Floor mop. 1,643,878; Sept. 27. ing rosy, Bristol, Conn.
Company, Bristol, Conn.
Company, Bristol, Conn.
Sept. 27.
Crouch, Walter T., San Antonio, Tex. Necktie adjuster
1,614,882 Jan. 18.
Crouch, William F., Oakland, Calif. Internal-explosion
tragine, 1,636,289; July 19.
1,636,280; July 19.
1,636,

ratus. 1,855,192; Nov. 22.

Crouse-Hinds Company. (See Bissell, Carl H., assignor.)

Crouse, Nathan H., assignor of one-half to O. Hayes, Akron, Ohio. Roller and like bearings. 1,652,766; Dec. 13.

Crouse, Stadman P., West Somerville, Mass. Drafting Crouse, Stadman P., West Somerville, Mass. Drafting Crows. Lawrence M., Waco, Tex. Awning for closed cars. 1,643,948; Nov. 22.

Crow. Lawrence M., Waco, Tex. Awning for closed cars. 1,649,948; Nov. 22.

Crow. Marven W., Fort Dodge, Iowa. Pipe wrench. 1,640,265; Aug. 23.

Crow., William M., Cole, S. Dak. Four-horse-wagon evener. 1,619,059; Mar. 1.

Croder, Clarence C., Best, Tex. Wrist-pin bearing. 1,640,640; Clarence C., Best, Tex. Wrist-pin bearing. Crowe. Charley W. St. Joseph, Mo. Auto lamp. 1,650,822; Nov. 29.

Crowe, Charley W. St. Joseph, Mo. Auto lamp. 1,650,822; Nov. 29.

Crowe, Charley W. St. Joseph, Mo. Auto lamp. 1,645,897; Oct. 18.

Crowe, Charley W. St. Joseph, Mo. Auto lamp. 1,645,897; Oct. 18.

Crowe, Charley W. St. Joseph, Mo. Proventing Composition of the Crowe Length M., Colengton, Ky. Portable motor-driven saw. 1,644,826; Oct. 4.

Crowe, Lawrian Corporation, Covington, Ky. Portable motor-driven saw. 1,644,826; Oct. 4.

Crowe, Manufacturing Corporation, The. (See Crowe, John M., assignor.)

Crowe, Paul L., Baltimore, Md. Ball mill. 1,627,487; May. 3.

Crowe, Paul L., Baltimore, Md. Ball mill. 1,627,488; May. 3.

owe. Paul L., Baltimore, Md. Ball mill. 1,627,488;

crowe, Paul L., Baltimore, Md. Grinding and separating apparatus. 1,639.214; Aug. 16.
Crowe, Paul L., Baltimore, Md. Centripetal compressor. 1,644.565; Sect. 4.
Crowell, Charles H., White Plains, N. Y. Corrugated-board container and blanks therefor. 1,631.521; June 7.
Crowell, Charles H., Brooklyn, N. Y. Filled gummed cloth and making the same. 1,634.70; July 5.
Crowell, Charles H., Brooklyn, N. Y. Cloth treating. 1,642.360; Sept. 13.
Crowell, Charles H., White Plains, N. Y. Cloth treating. 1,642.360; Sept. 13.
Crowell, Charles W., Salisbury, N. C. Steam boller. 1,634.50; June 21.
Crowell, Charles W., Salisbury, N. C. Steam boller. 1,634.60; June 22.
Company Inc., Rochester, N. Y., Liquid-dispensing apparatus. 1,633.519; June 21.
Crowell, Emerson, Dalzell, S. Dak, antiskid chain tightening device. 1,632.644; June 14.
Crowell, Erd V., Los Angeles, Calif., Apparatus for and Jan. 4.
Crowell, Erd V., Los Angeles, Calif., Assignor to The Guiberson Corporation, Dallas, Tex. Gas-emergency control for flowing oil or gas wells. Re16,577; Mar. 29.
Crowell, Erd V., Los Angeles, Calif., assignor of one-half to The Guiberson Corporation, Dallas, Tex. Gas-emergency control for flowing oil or gas wells. Re16,577; Mar. 29.
Crowell, Erd V., Los Angeles, Calif., assignor of one-half to The Guiberson Corporation, Dallas, Tex. Contined casing, head, oil saver, and tubing lander. 1,641,921; Sept. 6.
Crowell, Erd V., Los Angeles, Calif., assignor of one-half to The Guiberson Corporation, Dallas, Tex. Contined Corporation, Dallas, Tex.

Sept. 6.
Crowell, Erd V., Los Angeles, Calif., assignor of one-half to The Guiberson Corporation, Dallas, Tex. Control-head packer. 1,648,377; Nov. 8.
Crowell, Frank M., Tulsa, Okla. Support for well casings. 1,646,639; Oct. 25.
Crowell, Frank S., assignor to The Edward N. Riddle Company, Toledo, Ohio. Plate for lighting fixtures. Des. 72,002; Feb. 15.
Crowell, George H., Bertila, N. H. Oil burner. 1,621,313;

Crowell, George H., Berling, and Mar. 15.
Crowell, Joyce H., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Making halogen derivatives of aromatic organic compounds. 1,646,235;

Mar. 15.

Crowell, Joyce H., Buffalo, assignor to National Anline & Chemical Co., Inc., New York, N. Y. Making halogen derivantes of atromatic organic compounds. I,646,255;

Crowell, Tracy M., assignor to Wilcox, Crittenden and Company, Incorporated, Middletown, Conn. Port-light screen and the like. I,648,445; Nov. 8.

Crowell, Tracy M., assignor to Wilcox, Crittenden and Company, Incorporated, Middletown, Conn. Port-light Screen and the like. I,648,445; Nov. 8.

Crowley, Edwin, Minneapolis, Minn. Gate latch. Crowley, James J. (See Hoilinger, Emil F., assignor, Crowley, James J. (See Rosenthal, U. I., and Crowley, Idward, Connection of the Dill Manufacturing Company, Cleveland, Ohio. Method and apparatus for vulcanizing rubber packing upon a cylindrical article. I,621,009; Mar. 15.

Crowley, John C., assignor to The Libbey-Owens Sheet I,626,395; Apr. 26.

Crowley, Josephan, Toledo, Ohio. Drawing sheet glass. I,626,395; Apr. 26.

Crowley, Sylvester W. (See Hunter, F. L., Jr., and Crowley).

Crown Cork and Seal Company of Baltimore City, The. (See Goebel, George, assignor.)

Crown Cork & Seal Company of Baltimore City, The. (See Goebel, George, assignor.)

Crown Cork & Seal Company of Baltimore City, The. (See Goebel, George, assignor.)

Crown Cork & Seal Company of Baltimore City, The. (See Warth, Albin H., assignor.)

Crown Cork & Seal Company of Baltimore City, The. (See Warth, Albin H., assignor.)

Crown Cork & Seal Company of Baltimore City, The. (See Warth, Albin H., assignor.)

Crown Cork & Seal Company of Ratimore City, The. (See Warth, Albin H., assignor.)

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Crown Cork & Seal Company of Ratimore Ci

Crum, John M., Johnstown, Pa. Door hanger.
1.647,610; Nov. 15e Ashmore, F. F., and Crum.)
Crum, Milton W., (5e Ashmore, F. F., and Crum.)
Crumbach, Hubert, and J. H. Deal, Cleveland, Ohlo. Load
Crumbaugh, Henry M., and H. M. Wilson, sr., Columbus,
Oblio, Attachment for filling machines. 1,640,482; M.,

Ohio.

Crumbaugh, Henry M., and H. M. Wilson, sr., Columbus, Oblo. Attachment for filling machines. 1,640,482; Aug. 30.
Crumley, Le Roy A., assignor to H. M. Feltenstein, New York, N. Y., doing business as M. Eisenberg & Son. Crumley, Le Roy A., assignor to H. M. Feltenstein, New York, N. Y., doing business as M. Eisenberg & Son. Lighting-fixture strap. Des. 72,351; Apr. 5.
Crumley, Le Roy A., assignor to H. M. Feltenstein, New York, N. Y., doing business as M. Eisenberg & Son. Lighting-fixture bracket. Des. 72,352; Apr. 5.
Crumley, Le Roy A., assignor to H. M. Feltenstein, New York, N. Y., doing business as M. Eisenberg & Son. Lighting-fixture strap. Des. 72,353; Apr. 5.
Crumley, Le Roy A., assignor to H. M. Feltenstein, New York, N. Y., doing business as M. Eisenberg & Son. Lighting-fixture backplate. Des. 72,353; Apr. 5.
Crumley, Le Roy A., assignor to H. M. Feltenstein, New York, N. Y., doing business as M. Eisenberg & Son. Lighting-fixture backplate. Des. 72,354; Apr. 5.
Crumley, Le Roy A., Rew York, assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Bracket back. Des. 72,568; May 17; Apr. 26.
Crumley, Le Roy A., assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Arm for lighting-fixture backplay (Crumley, Le Roy A., assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Lantern panel. Des. 72,629; May 17; Assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Lantern panel. Des. 73,669; July 19.
Crumley, Le Roy A., assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Lantern panel. Des. 73,669; July 19.
Crumley, Le Roy A., assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Lantern panel. Des. 73,669; July 19.
Crumley, Le Roy A., assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Lantern panel. Des. 73,669; July 19.
Crumley, Le Roy A., Sargnor to J. H. White Manufacturing Company, Brooklyn, N. Y. Lantern panel. Des. 73,669; July 19.
Crumley, Le Roy A., Sargnor to J. H. White Manufacturing Company, Brooklyn, N. Y. Lantern panel. Des. 73,669;

rine.)
Crumrine, Chester W., assignor, by mesne assignments,
to North East Appliances, Inc., Rochester, N. Y. Power
mechanism. 1,643,057; Sept. 20.
Cruncleton, Fred L. (See Cruncleton, Lawrence, and

mechanism. 1,643,057; Sept. 20.
Cruncleton, Fred L. (See Cruncieton, Lawrence, and F. L.)
Cruncleton, Lawrence, and F. L., Pharr, Tex. Combined grains and spray for refrigerator cars. 1,632,370; Cruncieton, Lawrence, and F. L., Pharr, Tex. Combined grains, and the control of the control of

L, assignor.) R. Empire City, Oklá. Rotary drill bit. 1641.321; Sept. 6.
Cuddy-Gardner Company. (See Hathaway, Charles E., assignor.)

assignor.)
Cudlipp, George R., Los Angeles, Calif. Toy casket.
Des. 72,003; Feb. 15.
Cuenin, Gibert.
Assignor to Compagnie Internationale
Cuenin, Gibert.
Assignor to Compagnie Internationale
three-color photographs. 1,637,294; July 26.
Cuff. James S., New London, Conn. Carburetor.
1,615,111; Jan. 18.
Cumin, George P., Erle, Pn. Amusement device.

London H. G. B. Erle, Pa. Amusement device. 1638,365 ; July 19. Culhertson, Albert L. assignor to The Chapman-Stein Furnace Co. Mount Vernon, Ohlo. Furnace and operating the same. 1,637,473; Aug. 2. Culbertson, Francis B. (See Carroll, E. E., and Culbertson, Francis B. (See Carroll, E. E., and Culbertson).

son.)
Culhane, Patrick, Cleveland, Ohio, assignor, assignments, to W. T. Hensley, Indiana Pulley, 1,639,489; Aug. 16. Indianapolis,

Culhane, Patrick, Cleveland, Ohlo, assignor, by mesne assignments, to W. T. Hensley, Indianapolis, Ind. Pulley. 1,639,490; Aug. 16.
Culhane, Patrick J., Ir., assignor to The Hydraulic Steel Cunhane, Patrick J., Ir., assignor to The Hydraulic Steel Culhane, Catherine F., New York, N. Y. Cooking utensil. 1,630,787; May 31.
Cullen, Gatherine F., New York, N. Y. Cooking utensil. 1,630,787; May 31.
Cullen, Julien F., Portland, Oreg., assignor to Columbia Tire Corporation. Pneumatic tire. 1,614,286; Jan. 11.
Cullen, Julien F., Portland, Oreg., assignor to Columbia Tire Corporation. Pneumatic tire. 1,614,285; Jan. 11.
Cullinan, Thomas F., Providence, R. I. Drainling system for mausoleums. 1,641,123; Aug. 30.
Cullinan, Thomas F., Providence, R. I. Ventilating system for mausoleums. 1,641,124; Aug. 30.
Cullinan, Thomas F., Providence, R. I. Ventilating system for mausoleums. 1,641,124; Aug. 30.
Cullinan, Harvey L., 1618,366; Teb. 22.
Cullison, Harvey L., St. Petersburg, Fla. Toy boat. 1,616,121; Jan. 18.
Cullison, John F., Oberlin, Kans. Corn knife. 1,625,713; Apr. 19.
Culp. Herbert, Willoughby, Ohio. Bottle receptacle. 1,620,079; Mar. 8.
Culp. Herbert, Chicago, Ill. Steamboat construction. 1,622,994; Mar. 29.
Culp. Jay S., Cleveland, Ohio. Tire carrier. 1,652,560; Culp. Herbert, Chicago, Ill. Steamboat construction. 1,622,994; Mar. 29.
Culp. Jay S., Cleveland, Ohio. Tire carrier. 1,652,560; Culver-Bevan Fruit Jar Company. (See Culver, Lewis O., assignor.)

Dec. 13. Culver-Bevan Fruit Jar Company. (See Culver, Lewis O.,

Cuiver-Isevan Fruit Jar Company. (See Cuiver, Lewis O., assignor.)
Culver, Cari H., Detroit, Mich., assignor to Culver Stearns Manufacturing Company, Worcester, Mass. Support for concealed dash lamps. 1,621,873; Mar. 22.
Culver, Charles A., Northfield, Minn, assignor to Wired Radio, Inc., New York, N. Y. Microphone. 1,616,414; Feb. 1.

Culver, Lange.

Co., Los Angeles, Calif. Automoune

Jan. 4.

Co., Los Angeles, Calif. Automoune

Culver, Lwis O., West Pittston, assignor to Culver-Bevan

Culver, Lewis O., West Pittston, assignor to Culver
Evens O., West Pittston, assignor to Culver
Bevan Fruit Jar Company, Wilkes-Barre, Pa. Fruit

jar and closing mechanism. 1.636,684; July 28.

Culver, Orin S. (See Fletcher, J. B., and Culver.)

Culver Stearns Manufacturing Company. (See Culver,

Carl H., assignor.)

jar and closing mechanism. 1.636,684; July 26.
Culver, Orin S. (See Fletcher, J. B., and Culver.)
Culver Stearns Manufacturing Company. (See Culver,
Culver Stearns Manufacturing Company.) (See Culver,
Culver Stearns Manufacturing Company.) (See Culver,
Culver Stearns Manufacturing Company.) (See Culver,
Culver, Marshall Company, Boston, Mass. Roofing element.
1,619,598; Mar. 1.
Cumfer, Harry A., Chicago, III., assignor of one-half to
The Flinkote Company, Boston, Mass. Shingle element. 1,619,590; Mar. 1.
Cumfer, Harry A., Chicago, III., assignor of one-half to
The Flinkote Company, Boston, Mass. Shingle strip.
Cumfer, Harry A., Chicago, III., assignor of one-half to
The Flinkote Company, Boston, Mass. Shingle strip.
Cumfer, Harry A., Chicago, III., assignor of one-half to
A. D. Stewart, Hutchinson, Kans. Plaster-receiving
Cuming, James S., E. Louis, Mo. Plural lamp socket.
1,616,528; Feb. 8.
Cummer, Harry, deceased; J. W. Van Allen, Buffalo,
N. Y., and H. W. Cummer, Detroit, Mich., executors,
Indicator for measuring instruments. 1,615,572;
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Larry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Larry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Marry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Larry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer,
Cummer, Harry, deceased; Buffalo, N. Y.; H. W. Cummer

Cummer, Harry, deceased, Buffalo, N. Y.; H. W. Cummer and J. W. Van Allen, executors, assignors to The Cummer Scale Company, Inc. Weighing scale. 1,622,092;

Cummer, Harry W., et al., executors. (See Cummer, Harry.) Cummer Scale Company, The. (See Cummer, Harry, as-

Cummer Scale Company, The. (See Cummer, Harry, assignor.)
Cumning, Percy G. (See Snook, Dlamond A., assignor.)
Cumnings, Alfred J., Kyabram, Victoria, Australia. Supporting attachment for trousers. 1.638,921; Aug. 16.
Cumnings, Earle W., assignor of one-half to Santa Barbara Lumber Company, Santa Barbara, Calif. Ironing board. 1.622,495; Mar. 29.
Cumnings, Earle W., Santa Barbara, Calif. Casement-window mounting. 1.640.483; Aug. 30.
Cumnings, Earle W., assignor of one-half to Santa Barbara, Calif. Santa Barbara Calif.
Elinga, 1.636.462; July 12.
Cumnings, George A., assignor to Everite Signal Company, Spokane, Wash. Direction indicator. 1.648,579; Nov. 8.

Cummings, George C., Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Contact device. 1,624,476; Apr. 12.

Cummings, Helen J., Cleveland, Ohio, assignor to The Miller Company, Meriden, Conn. Glass Globe. Des. 71,780; Jan. 4.

Cummings, Helen J., Cleveland, Ohio, assignor to The Miller Company, Meriden, Conn. Glass globe. Des. 71,781; Jan. 4.

Cummings, Fan. 4.

Cummings, Jan. 4.

Cummings, Follow, J. 104, J. 1

Clumings, Statics and Statics

Cummiskey, James. (See Thomson, C. H., Cummiskey, Miller, and Jones.) Cumner, Matthew S. (See Geissenhainer, F. W., and

Miller, and Jones.

Cummer, Matthew S. (See Geissenhalner, F. W., and Cummer.)

Cumperson, Ira E., and L. N. Pyzer, Tryon, Nebr. Stock grand. 1,646,476; Oct. 25.

Cunday, Grance E., Philadelphia, Pa. Fiber-head spool.

Cundy, Oscar R., Dormont, Pa., assignor to Sullivan Machinery. Company. Compressor unloader mechanism. 1,634,491; July 5.

Cunliffe, Wilfred, Stamford, Conn. Indicator. 1,634,176; June 28.

Cunniff, Bulkbergele. Welchem, assignor to Draper Cornniff, Bulkbergele.

Clumiff, Edward A., Waitham, assignor to Draper Corporation, Hopedale, Mass. Intermittent temple-thread cutter for automatic filling-replenishing looms. 1,615,441; Jan. 25.
Cunniff, Edward A., Waltham, assignor to Draper Corporation, Hopedale, Mass. Filling clamping and parting mechanism for shifting shuttle-box looms. 1,628,307;

mechanis May 10.

May 10.

Cunniff, Edward A., Waltham, assignor to Draper Corporation, Hopedale, Mass. Filling clamping and parting mechanism for shifting shuttle-box looms. 1,628,308; May 10.

Cunniff, Edward A., Waltham, assignor to Draper Corporation, Hopedale, Mass. Feeler mechanism for looms. 1,638,599; July 26.

Cunniff, Edward A., Waltham, assignor to Draper Corparion, Hopedale, Mass. Feeler mechanism for looms. 1,649,776; Nov. 15.

Cunniff, Edward A., Waltham, assignor to Draper Corporation, Hopedale, Mass. Feeler mechanism for looms. 1,654,478; Dec. 27.

Cunningham, Arthur B., Chicago, Ill. Radial averaging planimeter. 1,638,984; Aug. 16.

Cunningham, Arthur B., assignor to Republic Flow Meters Co., Chicago, Ill. Pressure indicator. 1,614,457; Jan. 18.

Jan. 13.

Cunningham, Arthur B., assignor to Republic Flow Meters
Co., Chicago, Ill. Pen lifter for recording instruments
I,619,241; Mar. 1.

Cunningham, Clyde F., Clarksburg, W. Va. Rope.
I,631,085; May 31.

Cunningham, David F., Kansas City, Mo. Milk bottle.
I,639,385; Aug. 16.

Cunningham, E. T. (See Mise, Roger M., assignor.)
Cunningham, E. T. (See Wise, Roger M., assignor.)
Cassignors.)

Lansing, Mich. Freight car.

Cassignors.)

Parl T., Lansing, Mich. Freight car.

assignors.)

canningham, Barl T., Lansing, Mich. Freight car.
1,619,920; Mar. 8.

Lansing, Mich. Automobile shipping deck. 1,614,713; Oct. 11.

cunningham, Katherine E., assignor to The H. W. Gossard
Co., Chicago, III. Brassière. 1,640,232; Aug. 30.

cunningham, Owen E. (See Cunningham, Thomas E.
and O. E.)

Cunningham, Owen E. (See Cunningham, Thomas B. and O. B.)

Cundinghal Percy C. Los Angeles, Calif. Front for an Cunningham, Boter Le. Fannin County, Ga. Clod-break-ing attachment for plows. 1,612,908; Jan. 4.

Cunningham, Robert E. Fannin Cone-third to F. J. Hassell and one-third to J. R. Kell, Los Angeles, Calif. Cunningham, T. S. et al. (See Hansen, John, assignor) Cunningham, T. S. et al. (See Hansen, John, assignor). Cunningham, T. S. et al. (See Hansen, John, assignor). Cunningham, Thomas E. and O. E. Minneapolis, Minn. Undergarment. 1,638,922; Aug. 16.

Cunningham, William H., and J. T. Rowan, Pittsfield, Mass. Water-cooled grate. 1,637,216; July 26.

Cunningham, William H., and J. T. Rowan, Pittsfield, Mass. Water-cooled grate. 1,637,216; July 26.

Cuno Engineering Corporation, The. (See Liebing, Howard C., assignor).

Cupples Company, Manufacturers. (See Thener, A. F., and Kountzman, assignors.)
Curdy, Jay A., Cleveland, Ohio. Line traverser for fishing-reel lines. 1,649,154; Nov. 15.
Cureton, Edward, Stockton, Calif. Masquerade novelty.
Cureton, Samuel. (See Loftus, S. A., and Cureton, assignors.)
Cureton, William, Chicago, Ill. Foundry sand. 1,614,659;
Curley, Robert S. (See Loftus, S. A., and Cureton, assignors.)
Curley, George L., Minneapolis, Minn. Cam stop strip for keyboard assemblies of machines for casting lines of type. 1,638,799; Aug. 9.
Curley, Robert S. (See Whittler, J. K., Langevin, and Curley, Robert S. (See Whittler, J. K., Langevin, and Curley, Robert S., Lowell, Mass., assignor, by mean assignments, to Kitson Machine Shop. Cotton-distributing mechanism. 1,630,375; May 31.
Curley, Robert S., Lowell, Mass., Assignor, by mean assignments, to Kitson Machine Shop. Cotton-distributing mechanism. 1,630,375; May 31.
Curley, Robert S., Lowell, Mass., Assignor, by mean decine. 1,625,122; May 10.
Curna, George O., Jr., Charles Corporation. Thermal decomposition of hydrocarbons. 1,645,349; Oct. 18.
Curne, George O., Jr., Charles Corporation. Thermal decomposition of hydrocarbons. 1,645,349; Oct. 18.
Curne, George O., Jr., Charles Corporation. Thermal decomposition. Gas apparatus. 1,653,434; Jug. 9.
Curnan, Edward T., Detroit, Mich. Automobile radiator Curran, Eugene, Cardiff, and J., J. Hickey, Llanishen, near Cardiff, Wales. Vehicle. 1,634,921; June 28.
Curran, Harry L., New York, N. Y. Automobile radiator Shield. 1,631,948; June 7.
Curran, John B., Westfield, Mass., assignor, by mesne assignments, to The Fuller Brush Company, Hartford, Conn. Collapsible receptacle. 1,620,803; Mar. 15.
Curran, Harymond W., Kanass City. Mo. Order carrying Curran, Staley T., Monutain Lakes, and E. C. Mueller, Jr., Elizabeth, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated. Telephone jack. 1,616,114; Feb. 1.
Curran, Fasser, Marchand, Mass. Stiffening reenforce-Curran, Jengoh A., Bester, Oreg. Currette.

Currey, Hi-Wanda, et al. (Scotterey, Hi-Wanda, et al. signor.)
Currey, Pinney A., Baker, Oreg. Curette. 1,640,113;

signor.)
Currer, Pinney A., Baker, Oreg. Curette.
Aug. 23.
Currie, Gail G., Los Angeles, Calif. Fan wheel.
1,620.875; Mar. 15.
Currie, Robert A., Syracuse, assignor to R. E. Dietz Company, New York, N. Y. Bail fastening or attaching means for lantenus and the like. 1,643,446; Nov. 8.
Currie, William, assignor to Chrome Steel Works, Carteret, N. J. Screen grate for ball mills. 1,637,986; Carteret, N. J. Screen grate for ball mills. 1,637,986;

Currie, William, Carteret, N. J. Sercen grate for ball mills. 1,001,000, Carteret, N. J. Sercen grate for ball mills. 1,001,000, Carteret, N. J. Sercen grate for ball mills. 1,001,000, page 1,001,000, page 1,001,000, page 1,000, page

ceral Electric Company. Transformer-voltage-regulating system. 1,620,619; Mar. 8.

Currigan, E. J., et al. (See Farmer, C. D., and Libby, assignor.)

Currivan, John F., Cambridge Mass. Automatic cutCurry, Charles D., Henryetta, Okla. Rall tle. 1,626 517:

Apr. 26.

Curry, Clarence, Richmond, Va. Sausage-making machine.

1,629,955; May 24.

Curry, Clarence, Richmond, Va. Sausage-making machine.

1,629,955; May 24.

Curry, John K., Sausage Marking Machine.

Curry, John K., Peoria, H., Fruit-Juice extractor.

1,646,527; Oct. 25.

Curry, Joseph, Iv. (See Guider, Henry B., assignor.)

Curry, John K., Peoria, H., Fruit-Juice extractor.

1,646,527; Oct. 25.

Curry, Joseph, Iv. (See Curry, Joseph W., assignor.)

Curry, Malcolm, Scarsdale, assignor to American Thread Company, New York, N. Y. Wound sewing-machine

Cursons, Edward C., Buffalo, N. Y. Cashier's box.

1,647,275; Nov. 1.

Curtain Supply Company. (See Holt, Thomas W., assignor.)

Curtin, David F., assignor, by mesne assignments to The Vortex Miz. Co., Chicago, Ill. Container for paper cups. 1,625,193; Apr. 19.

Curtin, Leo P., Freehold, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Preserving wood and solutions therefor. 1,020,152; Mar. 8. C. Linion Telegraph Company, New York, N. Y. Wood preservative. 1,624,393; Apr. 19. Curtis, Alfred S. (See Nordenswan, R., and Curtis.) Curtis, Alfred S. Ests Orange, N. J., assignor to Western Liketric Company, Incorporated, New York, N. Y. July 22 (Instantished September 1), 1,636,765; July 22 (Instantished September 2), 1,636,765; Ju

Curtis, Arthur H., S. R. Wright, and A. H. Mackley, Bedford, England. Coil holder for wireless signaling systems. 1,613.222; Jan. 4. Curtis, Arthur L., Chicago, Ill. Perpetual calendar.

Curtis, Arthur H., S. R. Vright, and A. H. Mackley, Bedford, Empland. Coil holder for wireless signaling systems. 1,613,222; Jan. 4.

Curtis, Asthur H., Cleveland, Ohio. Automatic releasing switch. 1,646,189; Oct. 18.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Submarine signaling system. 1,624,396; Apr. 12.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Submarine signaling system. 1,624,396; Apr. 12.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Alarm system. 1,632,059; June 14.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Curtis, Austen M., East Orange, N. J., assignor to Bell Italephone Laboratories, Incorporated, New York, N. Y.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Curtis, Austen M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Vibrating device. 1,641,251; Sept. 6.

Curtis, Charles C., assignor to Halstead Specialites Co., Oakland, Calif. Liquid-dispensing device. 1,616,077; Feb. 1.

Oakiand, Chin. Feb. 1.
Curtis Companies. (See Madsen, Sern, assignor.)
Curtis, Edward E. (See Carman, E. S., and Curtis.)
Curtis, Edward E., assignor to The Osborn Manufacturin,
Company, Cleveland, Ohio. Wire-base brush. 1,620,008
Mar. S. Newton, Earle R. Company, Clevenau, Care. Mar. 8.

Curtis Gas Engine Corporation. (See Newton, Earle R., Curtis Gas Engine Corporation).

assignor.) Curtis, George A., Framingham, Mass. Clinching wire nail. 1,623,465; Apr. 5. Curtis, Harry D., Oshkosh, Wis. Snow remover. 1,623,910; Apr. 5. Curtis, Henry E., San Jose, assignor of one-half to J. H. Betts, Long Beach, Calif. Shackle assembly. 1,620,756; Mar. 15.

Betts, Lohg Beach, Carl.
Mar. 15.
Curtis, Henry E., San Jose, assignor of one-half to J. H.
Curtis, Henry E. San Jose, assignor of one-half to J. H.
1647,084; Oct. 25.
Curtis, Jeremiah J., Wollaston, Mass. Trap. 1,652,702;
Dec. 13.
Curtis, John S., Oakland, Ill. Retaining the dumping Curtis, John S., Oakland, Ill. Retaining the dumping elements of vehicles. 1,631,018; May 31.
Curtis, Kenneth L. (See Bushman, E. L., Curtis, and Ward.)

Ward).

Ward).

Ger Co. (See Burke, Lawrence J., assignor.) Curtis, Lewis E., Milwaukee, Wis., assignor to The Youngstown Fressed Steel Company. Continuous lath-expanding machine. 1,619,499; Mar. 1.

Curtis, Lewis E., Milwaukee, Wis., assignor, by mesne assignments, to A. C. Paul, Minneapolis, Minn., and G. A. Chritton, River Forest, III., trustees. Apparatus for expanding metal corner beads. 1,024,542; Apr. 12.

Curtis, Lewis E., Milwaukee, Wis., assignor, by mesne assignments, for expanding metal corner beads. 1,024,542; Apr. 12.

Curtis, Lewis E., Warren, Ohlo, assignor, by mesne assignments, to A. C. Paul, Minneapolis, Minn., and G. A. Chritton, River Forest, III., trustees. Apparatus for expanding metal lath. 1,624,543; Apr. 12.

Curtis, Lewis E., Warren, Ohlo, assignor, by mesne assignments, to A. C. Paul, Minneapolis, Minn., and G. A. Chritton, River Forest, III., trustees. Corner bead. 1,624,541; Apr. 12.

Curtis, Mabel B., et al. (See Kaufmann, Jacob L., assignor.) B. Elterford, N. V. Redle receiving system.

Curtis, Nanori B., et al. (See Kaulmann, Jacob L., #8signor.) to E., Pittsford, N. Y. Radio receiving system
Curtis, Robbins. (See Gray, B., and Curtis.)
Curtis, Robbins. (See Gray, B., and Curtis.)
Curtis, Robert E., Benton Harbor, Mich. Indicator.
1.643-628; July 19.
Curtis, Ross E., Lincoln, Kans. Attachment for tractors.
1.636-628; July 19.
Curtis, Ross E., Lincoln, Kans. Attachment for tractors.
1.636-628; July 19.
Curtis, Thomas S., assignor, by mesne assignments, to
Robbins. Calif. Grinding ball and process of making.
1.640-6885; Aug. 30.
Curtis, Thomas S., assignor, by mesne assignments, to
Robbins. Calif. Something Samples Bank, trustee. Los
Angeles, Calif. Somethin & Savings Bank, trustee.
Curtis, Timothy H., Westminster, England. Ladder.
1.631,922; June 7.

Curtiss Aeroplane and Motor Co. (See Beisel, Rex B., Curtiss Aeroplane & Motor Co. (See Ray, William A., assignor.)

assignor.)
Curtiss Aeroplane and Motor Company. (See Birming-ham, Thomas H., assignor.)
Curtiss Aeroplane and Motor Company. (See Gilmore, William L., assignor.)
Curtiss Aeroplane and Motor Company. (See Mummert,

Curties Aeroplane and Motor Company.

Harvey C., assignor.)

Curties Aeroplane and Motor Company. (See Mummert,

II. C., and Meade, assignors.)

Curties Aeroplane and Motor Company. (See Nutt,

Arthur, assignor.)

Curties Aeroplane and Motor Company. (See Thurston,

Arthur L., assignor.)

Curtner, Rolland, Marion, Ind. Cutter. 1,620,153;

Curtner, Rolland, Marion, Ind. Cutter. 1,620,153; Mar. 8.
Curtright, Amos F., Meeker, Colo. Insulator for antennæ. 1,617,589; Feb. 15.
Interpretation of the color of the colo

Cushman, Joseph W. (See Groves, H. T., and Gushman, Joseph W. (See Tranner, P. A., and Irgens, Cushman Motor Works. (See Tanner, P. A., and Irgens,

Cushman Motor Works. (See Tanner, F. A., and cashing Motor Works.)

assignor, John P., Ashtabula, Ohio. Car-platform cradle Cushwa, Charles B., assignor to The Commercial Shearing & Stamping Company, Youngstown, Ohio. Drying tille. 1,629,151; May 17.

Cushwa, Charles B., assignor to The Commercial Shearing & Stamping Company, Youngstown, Ohio. Grating E. (1998). Assignor to The Commercial Shearing & Cushwa, Charles B., assignor to The Commercial Shearing and Stamping Company, Youngstown, Ohio. Pallet. 1,637,411; Aug. 2.

Cushwa, Charles B., assignor to The Commercial Shearing and Stamping Company, Youngstown, Ohio. Pallet. 1,637,411; Aug. 2.

Cushwa, Charles B., assignor to The Commercial Shearing and Stamping Company, Youngstown, Ohio. Pallet. 1,637,641; Aug. 16.

Cushwa, Charles W., Cash Forger, J. A., and Cushek, Owen, R. S., Mackinaw, assignor to The Revo Manufacturing Co., East Peerla, III. Power take-off device. 1,639,630; Aug. 16.

Custer, Arthur E., Los Angeles, Calif. Carpet, rug, and floor brush. 1,617,103; Feb. 8.

Custer, Arthur E., Los Angeles, Calif. Carpet, rug, and floor brush. 1,617,103; Feb. 8.

Custer, Charles W., Quinter, Rans. Inclinometer. 1,630,172; May 24.

Westernport, Md. Flatiron handle.

Custer, Charles W., Quinter, Kans. Inclinometer. 1.630,172; May 24.
Custer, James W., Westernport, Md. Flatiron handle. 1.629,260; May 17.
Custer, Levitt L., Dayton, Ohio. Aerial cable transportation means. 1.628,827; May 17.
Custer, Levitt L., Dayton, Ohio. Coin-controlled lock for electric switches of motor vehicles. 1,651,377; Dec. 6.

Dec. 5.
Cuthbert, William R. and W. H. Lindemon, Fort Madison, Iowa, assignors to W. A. Sheaffer Pen Company, Pencil. 1, 653,151; Dec. 20.
Cutler, David A., Wollaston, assignor to Alfred Hale Rubber Company, Atlantic, Mass. Rubber-sole shoe, 1,622,860; Mar. 29.
Cutler, Elimer D., et al. (See Daugherty, Claude, as-

1.622,860; Mar. 29. Cutler, Eliner D., et al. (See Daugherty, Claude, assignor.) Cutler, Frank W., assignor to Cutler Manufacturing Company, Portland, Oreg. Conveyer. 1.629,776; May 24. Cutler, Frank W., assignor to Cutler Manufacturing Company, Portland, Oreg. Fruit grader. 1,633,002; June 21.

Cutler, Frank W., assignor to Cutler Manufacturing Company, Portland, Oreg. Sorting and grading device. 1.644.052; Oct. 4. Cutler-Hammer Mfg. Co. (See Cherry, Oscar A., as-Cutler-Hammer Mfg. Co. (See Coldwell, John S., as-

signor.) Cutler-Hammer Mfg. Co., The. (See Evans, Clarence T.,

Cutler-Hammer Mfg. Co., The. (See Evans, C. T., and Holder, assignors.) Cutler-Hammer Mfg. Co., The. (See Horter, Bayard M.,

Cutler-Hammer Mfg. Co. (See Hutton, Uric O., as-

Cutler-Hammer Mfg. Co., The. (See Layman, Frank E. assignor.)

Cutler-Hammer Mfg. Co., The. (See Lightfoot, Edwin N., assignor.) Cutler-Hammer Mfg. Co., The. (See Lockett, Ralph G., assignor.) Cutler-Hammer Mfg. Co., The. (See Meuer, George J., assignor.)
Cutler-Hammer Mfg. Co., The. (See Meyer, Friedrich W., assignor.)
Cutler-Hammer Mfg. Co., The. (See Miller, William W., Cutier-Hammer Mfg. Co., The. (See Mortensen, Niels L., assignor.) Cutier-Hammer Mfg. Co., (See Oberschmidt, Frederick H., assignor.)
Cutler-Hammer Mfg. Co., The. (See Packard, Horace N., assignor.)
Cutler-Hammer Mfg. Co., The. (See Re Qua, Frederick L., assignor.)
Cutier-Hammer Mfg. Co., The. (See Reed, Harrison P., assignor.)
Cutler-Hammer Mig. Co., The. (See Rodman, T. H., and Darlington, assignors.)
Cutler-Hammer Mig. Co., The. (See Seeger, Edwin W., assignor.) Cutler-Hammer Mfg. Co., The. (See Stoelke, Erwin R., assignor.)
Cutler-Hammer Mfg. Co., The. (See Stone, David, assignor.) Cutjer-Hammer Mfg. Co., The. (See Taylor, Herman Cutler Hammer Mfg. Co., The. (See Wade, Henry N., as-Cutler-Hammer Mfg. Co., The. (See Wiegand, Henry J., assignor.) Cutler-Hammer Mfg. Co., The. (See Wilson, John C., as-Signot.) Cutler, Isabella M. (See Cutler, William C., assignor.) Cutler Manufacturing Company. (See Cutler, Frank W.,

Cutter, Samuel R., administrator. (See Furber, Frank W., assignor.)

Cutter, Samuel R., administrator. (See Furber, Frederick M., assignor.)

Cutter, William C., assignor to I. M. Cutter, Glendale, Calif. Selective vending machine for stacked articles. 1,619,292 Mar. 1.

Cutter, William C., assignor to I. M. Cutter, Glendale, Calif. Rotary selecting mechanism for vending machines. 1,619,294; Mar. 1.

Cutter, William C., assignor to I. M. Cutter, Glendale, Calif. Rotary selecting mechanism for vending machines. 1,619,294; Mar. 1.

Cutter, William C., assignor to I. M. Cutter, Glendale, Calif. Coin carrier for multiple-vending machines. Cutter, William C., Gendale, assignor, by messe assignments, to W. M. Armstrong, F. A. McBurney and F. C. Wolf. trustees. Los Angeles, Calif. Central-discharge selective vending machine. 1,653,347; Dec. 20.

Cutter, William C., Los Angeles, Calif. Perumatic book. Cutter, William C., Los Angeles, Calif. Perumatic book. Cutter, William C., Los Angeles, Calif. Perumatic book. Cutter, Prank T., Indianapolis, Ind., assignor to O. Schellert. Athetic arch support. 1,627,596; May 10. Cuttaff, Georges E., assignor to the Société Anonyme des Anciens Etablissements Cuttat & Cle., Paris, France. Turret lathe. 1,644,566; Oct. 4.

Cutter, Charles W., Long Beach, Calif. Grade indicator. 1,622,284; Apr. 5.

Charles Court C., Oswego, Ill. Insulator. 1,620,804; Mar. 15.

Cutter, S Mar. 15

Cutts, Richard M., sr. (See Cutts, Richard M., jr., as-Signori, Dard M., jr., assignor to R. M. Cutts, sr., Wash-tt, to D. C. Anticiland device. 1,636,357; July 19. Cutuli, Vincenzo, assignor of one-half to F. Perella, Pitts-burgh, Pa. Lock. 1,649,512; Nov. 15. Cuyahoga Spring Company, The. (See Hoffman, John A., assignor). Uncertainty of the Company of the

assignor.)
Cuypers, Jean, Uerdingen-on-the-Rhine, Germany. Drum
for drying materials. 1,648,542; Nov. 8.
Cyclo Corporation. (See Honig, Frank, assignor.)
Cyclo Corporation. (See Lee, J. H., and Honig, as-

signors.)
Cyclone Fence Company. (See Harter, Noah S., assignor.)
Cyclone Manufacturing Company, The. (See Spelcher,
Harold S., assignor.)
Cyklop Akt. Ges. (See Staehle, Gustav, assignor.)
Cylinder Top Oilers, Limited. (See Heywood, James H.,
assignor.)

assignor.)
Cylkowski, Frank A., Detroit, Mich., device. 1,646,190; Oct. 18.
Cyphers, James F., Baltimore, Md. Rectifying column. 1,640,068; Aug. 23.
Cyphers, James F., Baltimore, Md. Rectifying column. 1,640,069; Aug. 23.
Cyr., William A., Auburn, Me. Window fixture. 1,617,470; Feb. Tagnest, Hungary. Holding films in Canko Lagalo, Franciscology, Park 12.
Caspek, Emil, and R. Weingand, Bomiltz, near Walsrode, Germany, Production of film-like bands from cellulose solutions and similar initial materials. 1,641,322; Sept. 6.

Sept. 6. Zarnecki, Wiadyslaw. (See Murphy, T. W., and Czar-

Czech, Fred. Wichita Falls, Tex. Incandescent electric Lang, 1,641,068; Aug. 36.
Lang, 1,641,068; Aug. 36.
Czepiak, Csamiur.
Czerniak, Jozeph and C., South Chicago, Ill. Railway-Switch-operating device, 1,262,326; Mar. 8.
Czichos, Paul A., Washington, D. C. Golf accessory. 1,634,662; July 5.
Czochralski, Johann, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to Allied Process Corporalithium. 1,620,682; Mar. 8.
Czochralski, Johann, and G. Welter, Frankfort-on-the-Main, Germany, assignors, by mesne assignments, to Allied Process Corporation, New York, N. Y. Alloy of Illthium and aluminum. 1,620,681; Mar. 8.
Czochralski, Johann, and G. Welter, Frankfort-on-the-Main, Germany, assignors, by mesne assignments, to Allied Process Corporation, New York, N. Y. Alloy of Illthium and aluminum. 1,620,681; Mar. 8.
Czorhoy, Minhy S., et al. (See Moinar, Zolton, assignor.) C. Limited, Montreal, Quebec, John, assignor to Vanderweghe Limited, Montreal, Quebec, John, assignors, J. P., and Stevenson, assignors.)
D. P., Battery Company Limited. (See Waddell, John, assignors)

P. and Stevenson, D. P. Battery Company Limited. (See Wadden, soning assignor.)

D. P. Battery Company Limited. (See Wadden, soning assignor.)

D. P. Battery Company Limited. (See Wadden, soning assignor.)

1.637,807; Aug. Chicago, Ill. Ink-distributing roller.

1.637,807; Aug. Chicago, Ill. Ink-distributing roller.

1.614,719; Jan. 18.

Dabrasky, August, Washington, D. C. Semiautomatic rammer for guns. 1,629,683; May 24.

Dabrasky, August, Washington, D. C. Semiautomatic rammer for guns. 1,629,683; May 24.

Dacey, Edward J., and W. W. Robertson, assignors to Crompton and Knowles Loom Works, Worcester, Mass. Movable grid for filling stop motion. 1,651,116; Nov. 29.

Crompton and Knowles Loom Works, Worcester, Mass. Movable grid for filling stop motion. 1,651,116: Dachman, Somuel, Brooklyn, N. Y. Stewpan or similar article. Dos. 73,070; July 10. Dachs, Artur. (See Siegtried, W., and Dachs.) Dackmine. Desire, and H. Monier, Lewiston, Me. Thread cutter and stop motion for weft-replenishing looms. 1,637,217; July 26. D. 10. Dackmine. Desire, and H. Monier, Lewiston, Me. Thread Daddisman. Reginald A. (See Barrymore, O. C., and Daddisman.) Dadde, Thomas G., Dayton, Ohlo. Wheel. 1,643,700; Sept. 27. Haroutune M. Hartford, Conn. Spectacle Paddusman, San St. 27: Aug. 9. Dady, Arthur O., Highland Park, assignor, by meane assignments to Conlon. Corporation, Cleero, Ill. Ironing machine. 1,682,561; Dec. 13. Daemicke, Paul J., Company. (See Huening, William T., assignor.)

Assignof, and so, company. (See Huening, William T., assignof, ass

Dahl. George B., New York, N. Y. Oil burner. 1,613,820;

Dahl, George B., New York, N. Y. Oll burner. 1,613,820; Jan. 11.
Dahl, Jack F., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,612,965; Jan. 4.
Dahl, John, Pittsburgh, Pa. Roller skate. 1,616,952; Feb. 8.
Dahl, Sigvald, Myrvall Pr., Oslo, Norway, assignor of one-half to H. Carleen, Brooklyn, N. Y. Safety device for burners, 1,630,925; May 31.
Dahl, Branner, Mey York, N. Y. assignor to Lightolier Company. Lighting-dature wall bracket. Des. 74,100; Dec. 90.

Dec. 20.

Dahl, Thure, assignor to Corona Corporation, New York, N. Y. Lamp-shade holder. 1637,739; Aug. 2.

Dahlberg, Charles, Anaconda, Mont. Shaking screen.

Dahlberg, Charles L., Des Moines, Iowa. Notebook holder. 1,622,235; Apr. 5.

Dahlberg & Company. (See Lathrop, E. C., and Munroe, assignors.)

Dahlberg & Company. (See Munroe, Trendway B., assignors.)

Signot.)

Dahlin, Horace O., Harrisburg, Pa. Water storage and filter tank. 1.653.204; Dec. 20.

Dahlman, Alfred, Ripple, Oreg. Undercutting-saw support. 1.632,727; June 14.

Dahlquist, Ernest A., Long Beach, Calif. Fishing lure. 1.627,637; May 10.

Dihlquist, Theedore W., Dedham, Mass. Boiler. 1,648,043;

Dahlstrand, Hans P., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Manipulative appliance. 1,641,415; Sept. 6.

Dahlstrand, Hans P., Wauwatosa, assignor to Allis-Chal-mers Manufacturing Company, Milwaukee, Wis. Cou-pling, 1.641,740; Sept. 6. Dahlstrand, Josef Y., Wellsyille, N. Y. Rotary fluid motor, 1.616,953; Feb. 8. Dahlstrom, Alger. (See Chadwick, L. S., Resck, and

Dallstrom)
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Dallstrom)
Dallstrom)
Dallstrom)
Dallstrom)
Dallstrom)
Dallstrom, John J., assignor to Walkee Toy & Novelty Co., Inc., New Orleans, La. Toy. 1,621,353; Mar. 15. Dallstrom Metallle Door Company, The. (See Johnson, Axel Z., assignor.)
Dallstrom Metallle Door Company, The. (See Johnson, Axel Z., assignor.)
Dallmen, Josef, Dusseldorf, assignor to Dusseldorfer Werkzeugmaschlen-Fahrlk und Eikengiesserei Haber-Werkzeugmaschlen-Fahrlk und Eikengiesserei Haber-Werkzeugmaschlen-Fahrlk und Eikengiesserei Haber-Werkzeugmaschlen-Fahrlk und Eikengiesserei Haber-Werkzeugmaschlen-Dallsten Dusseldorf-Oherbilk, Germany. Heddspindlestock guide. 1,622,375; Mar. 29. Dalne, Harry. (See Welstock, A. E., and Dahne.)
Dalge, Charles V., ir., Newton, Mass. Lomp stand. Des. 74,140; Dec. 27.
Dalgle, Edward J., Sheridan, Wyo. Box or similar receptacle for candy. Drs. 73,889; Nov. 22.
Dalley, Fank L., assignor to Johnson & Johnson, New Brunswick, N. J. Toothbrush. 1,646,082; Oct. 18.
Dalley, John A., and L. W. Gerth, Burlington, Iowa. Rallroad-grade crossing, 1,623,911; Apr. 5.
Dalley, Owen R., Davenport, Iowa. Toy top. 1,644,182; Oct. 4.
Dalley, Theodore W., Cleveland, Ohio. Boiler tube or flue cleaning implement. 1,641,875; Sept. 6.
Dailmer-Benz Aktiengesellschaft. (See Alchele, Gottlob, assignor.)

assignor.) Daimier-Benz Aktiengesellschaft. (See Klemm, Hanss,

assignor.)
Dnimler-Benz Aktiengeschlschaft. (See Porsche, Ferdinand, assignor.)
nand, assignor.)
Marschall, and G. Balle, Hochst-on-the-Main, Germany, assignors, by messe assignments, to Grasselli Dyestuff Corporation, New York, N. Y. Watersoluble condensation product and making same.
1,635.823; July 12.
Daimler-Motoren-Gesellschaft. (See Porsche, Ferdinand,

assignor.)
Daimler - Motoren - Gesellschaft. (See Schwerdtfeger,

Walter S., assignor.)
Dains, Irven F., Monmouth, Ill., assignor to
Stoneware Company. Loading device. 1

1,639,649;

Aug. 23.
Dairy Equipment and Container Company. (See Barlow, William E., assignor.)
Dairymen's League Co-Operative Association, Inc. (See Lewis, William W., assignor.)
Daisy Manufacturing Company. (See Lefever, Charles

Date: Manufacturing Company.

P. assignor)

Dake, Charles W. (See McGlinnis, C. P., and Dake.)

Dake, Charles W., Chicago, III. Lens clip. 1,616,306;

Dake, Charles W., Chicago, III. Flectric-light housing.

Dake, Charles W., Chicago, III. Electric-light housing. 1,634,399; July 5.
Dake, Charles W., Chicago, Ill. Turbo blower. 1,637,474;

Aug. 2.

Dake, Charles W., and R. S. Levis, assignors to The Pyle-National Comnany, Chicago, Ill. Glass-polishing machine, 1,626,025; Apr. 26.

Dike, Charles W., and R. S. Levis, assignors to The Pyle-National Company, Chicago, Ill. Glass-polishing machine, 1,626,026; Apr. 26.

Dakin, Frederick W., westmount, Quebec, Canada. Bullding enclosure, 1,648,724; Nov. 8.

Dakin, John E., Milton, Pa. Hosiery, 1,651,677; Dec. 6, Datota Koolaire Company. (See Sawdey, John M., assignor.)

Datota Robuste Company, Signor.)
D'Albora, John, Yonkers, N. Y. Scouring implement. 1,638,800; Aug. 9.
Dale, Albert C., Columbus, Ohio. Apparatus for making tile. 1,634,740; July 5.
Dale, Charles E., Barasdall, Okla. Wrench. 1,634,610;

Dale, Christopher C., et al. (See Smith, Lawrence F.,

assignor, over the content of the co

Daley, James C., assignor to Jefferson Electric Manufac-turing Company, Chicago, Ill. Making core laminae, 1,653,152 Dec. 20. Daley, Michael T. (See Booty, Phillip C. P., assignor.) Daley, Robert H., et al. (See Woodward, Jesse H., as-

Daley, Robert II. C. Signor, Dalgaard, Edvard Z., Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Grinding cement material, etc. 1,649,813; Nov. 22.

Daiglish, John, Birmingham, England, assignor to Dunlop Tire and Rubber Corporation of America, Buffalo, N. Y. Apparatus for the manufacture of rubber or the like Dailin, Arvid G., assignor to Burd High Compression Ring Company, Rockford, Ill. Shock absorber, 1,645,183; Oct. 11. Dans, gate-operating apparatus, 1,647,508; Nov. I. Dans, gate-operating apparatus, 1,647,508; Nov. II. Dans,

Dalkner, Frank, Allentown, Fa. Coat. 1,623,781;
Dalkner, Frank, Allentown, Fa. Coat. 1,623,781;
Dall, F. B., et al. (See Nill, E. A., and Acker, assignors,)
Dallas, Charles D., Winnetka, Ill. Tube-cleaning apparatus for tinning purposes. 1,643,545; Sept. 27.
Dallas, Charles D., Winnetka, Ill. Method of and machine for making tubing. 1,652,396; Dec. 13.
Dallas, Granvil F. (See Pischer, F. W. and Dallas.)
Dallimore, George W., Oakland, Calif. Variable-speed fransmission mechanism. 1,634,4138; June 23.
Dallugge, Rudolph A., Los Angeles, Calif. Apparatus for relevision. 1,634,671; July 6.
Dallugge, Rudolph A., Los Angeles, Calif. Apparatus for relevision. 1,634,671; July 6.
Dalluge, Chiles Company. (See Chiles, George S., assignor.)
Dalrymple, William P., Chicago, Ill. Pressure gauge.

Dalman, Chiles Company, (See Chiles, George S., assignor.)
Dalrympie, William P., Chicago, Ill. Pressure gauge.
1,645,184; Oct. 11.
Dalton Adding Machine Company, The. (See Landsiedel, Harry, assignor.)
Bruce H. (See Signor.)
Dalton, Charles J., New York, N. Y. Tire remover.
1,638,476; Aug. 9.
Dalton, Charles J., New York, N. Y. Vehicle wheel.
1,641,663; Sept. 6.
Dalton, Harry, Sr., Pbiladelphia, Pa. Combined tank and carburetor. 1,634,022; June 28.
Dalton, Harry M., assignor to The Hall's Safe Company, Cincinnati, Ohio. Locking mechanism for safes.
1,634,933; July 5.
Dalton Hossiery Mills. (See Williams, James C., assignor.)

Datton Hostery Mills. (See Williams, James C., assignor.)
Dalton, Hubert, New York, N. Y. Combined lathe, drilling and milling machine. 1,620,522; Mar. & Corson, Dalton, John L., Durham, N. C., dr. & Corson, Dalton, John L., Durham, N. C., dr. & Corson, Company, New York, N. Y. Tohacco-stripping machine. 1,632,177; June 14.
Dalton, Michael P. (See Owen, T. M., and Dalton.)
Dalton, Raymond S., assignor to The Cleveland Folding Machine. Company, Cleveland, Ohio. Folding machine. Machine Company, Cleveland, Ohio. Folding machine. Blectric Company. Block flooring, 1,632,590; June 14.
Dalton, William, Schenectady, N. Y. Railroad track. 1,643,701; Sept. 27.
Daly, Charles W., Davenport, Iowa. Hot-plate auto-cooker, 1,620,094; May 17.
Dalton, Drease Hild Equipment Corporation, Philadelphia, Pa. Snow melter. 1,652,767; Dec. 13.
Daly, John J., (See Batterman, John J., assignor, Daly, John J., West Newton, Mass. Manufacturing shoe stiffeners. 1,613,314; Jan. 4.
Daly, John J., Newton, Mass. Box-toe shoe. 1,630,788; May 31.
Daly, Joseph. (See Agrillo, J., and Daly.)

May 31.

Daly, Joseph. (See Agrillo, J., and Daly.)

Daly, Joseph. A., assignor, by mesne assignments, to The

Prosperity Company, Inc., Syracuse, N. Y. Pressing

machine. 1,62971; May 17.

Daly, Joseph P., Syracuse, T., assignor, by mesne as
transmitting mechanism. 1,639,428; Aug. 16.

Daly, Joseph P., assignor, by mesne assignments, to The

Prosperity Company, Inc., Syracuse, N. Y. Mechanism

for pressing machines having a start and stop motor.

1,640,144; Aug. 23.

Daly, Joseph P., assignor to The Prosperity Company

Inc., Syracuse, N. Y. Clutch construction. 1,652,704; Dec. 13.

Daly, Joseph P., assignor to The Prosperity Company Inc., Syracuse. N. Y. Automatic clutch-throw-out mechanism. 1,652,705 Dec. 13.

Machinery Company. Comp

Dam, Henry M. R., Brooklyn, N. Y., assignor to Noma Electric Corporation, New York, N. Y. Christmas decorative lighting fixture. Des. 72,937; June 28.

Dam, Henry M. R., Brooklyn, N. Y., assignor to Noma Electric Corporation, New York, N. Y., Christmas Georgian of the Corporation, New York, N. Y., Christmas Dam, Henry M. R., Brooklyn, N. Y., assignor to Noma Electric Corporation, New York, N. Y. Christmas decorative lighting fixture. Des. 72,939; June 28.

Daman, Arthur C., Denver, Colo. Oil feeder for flotation machines. 1,627,014; May 3.

Daman, Arthur C., Denver, Colo. Continuous filter. 1,630,434; Nov. 22.

Damado, Domonick, New Haven, Conn. Motor vehicle. Dame, Charles A., Providence, R. I. Stop-motion mechanism for braiding and like machines. 1,617,795; Feb. 15.

Agil Add S. Jan. 4.

Dame, Charles A., Providence, R. I. Stop-motion mechanism for braiding and like machines. 1,617,795; Feb. 5.

Damed Charles A., Providence, R. I. Stop-motion mechanism for braiding and like machines. 1,617,795; Feb. 5.

Damed S. Mark H., assignor to Wyman-Gordon Company, chine. 1,640,395; Jug. 30.

Dames, John P. (See Harmon, C. N., and Dames, John P. (See Kurz, Robert F., assignor.) Damon, George B., Belvidere, N. J., assignor to Vulcan Iron Works, Wilkes-Burre, Pa. Briquetting apparatus. Damone, Antonio, Brooklyn, N. Y. Painter's scaffold 1,642,333; Sept. 13.

P'Amours, Léon, Trois-Pistoles, Quebec, Canada. Rall Joint. 1,622,183; Mar. 22.

Damone, Leon, Trois-Pistoles, Quebec, Canada. Rall Joint. 1,622,183; Mar. 22.

Dans, Leelle, St. Louis, Mo. Automatic regulator. 1,624,339; Apr. 12.

Dans, Leelle, St. Louis, Mo., assignor to Charter Oak Stove & Range Company. Oven ventilator. 1,649,449; Nov. 15.

Nov. 15.

Nov. 15.

Nov. 16. (See Fahestock, A. P., and Danda, Dandeneau, Paul J., Lawndale, Calif., Cotter-pin tool. 1,649,513; Nov. 15.

Dandridge, Higher St. (See Fahestock, A. P., and Danda, Dandeneau, Paul J., Lawndale, Calif., Cotter-pin tool. 1,649,513; Nov. 15.

Dandridge, Higher St. (See Fahestock, A. P., and Danda, Dandeneau, Paul J., Lawndale, Calif., Cotter-pin tool. 1,649,513; Nov. 15.

Dandridge, Higher St. (See Fahestock, A. P., and Danda, Dandeneau, Paul J., Lawndale, Calif., Cotter-pin tool. 1,649,513; Nov. 15.

Dandridge, Higher St. (See Fahestock, A. P., and Danda, Dandeneau, Paul J., Lawndale, Calif., Cotter-pin tool. 1,649,513; Nov. 15.

Dandridge, Higher St. (See Fahestock, A. P., and Danda, Dandeneau, Paul J., Lawndale, Calif., Cotter-pin tool. 1,649,513; Nov. 15.

Dandridge, Higher St. (See Fahestock, A. P., and Danda, Dandeneau, Paul J., L

Baldauf.)
Daniel, Alexander, Cleveland, Ohio. Reversing-gear mechanism. 1,628,233; May 10.
Daniel, Alexander, Cleveland, Ohio. Washing machine. 1,638,491; Aug. 16.
Daniel, Alexander, Cleveland, Ohio. Washing machine. 1,633,573; June 28.
Daniel, Federick W., Sr., Jacksonville, Fla. Boltless sleeve coupling. 1,631,250; June 7.
Daniel, Lester E., Croft, Kans. One-man hay or headed-machanistrativity. Gee Daniel, Paul U.)
Daniel, Olen D. (See McLain, R. E., and Daniel.)
Daniel, Paul U., deceased, Brookdawn, N. J.; M. Daniel, Olen D. (See McLain, R. E., and Daniel.)
Daniel, Paul U., deceased, Brookdawn, N. J.; M. Daniel, Olen D., May 24.
Administrativity, assignor of one-half to F. C. Rogers, Philadelphia, Pa. Amusement device. 1,629,570; May 24.

Daniel, Rogers W., Indianapolis, Ind. Whistle-control valve. 1.646.640; Oct. 25.

Online, Rogers G., Devre, Colo, assignor to The Universal G., Devrey Company, New York, N. Y. Silencing device for typewriters. 1.613,602; Mar. I. Daniel, Willie C., Lonia, Va. Floor-laying device. 1.638,985; Aug. 18.

Daniels, Ceell C., assignor of one-fourth to F. W.

1.638,985; Aug. 16.
Daniels, Ccell C., assignor of one-fourth to F. W.
Stephens and one-fourth to L. Hughes, Weslaco, Tex.
Vegetable-washing machine. 1.633,437; June 21.
Daniels, Charles E., Atchison, Kans. Valve-spring removing and replacing tool. 1,636,046; July 19.
Daniels, Charles E., assignor to The American Crayon
Company, Sandusky, Ohio. Pencil mold. 1,635,261;
July 12.

July 12.

Daniels, Charles E., assignor to The American Crayon Company, Sandusky, Ohlo. Method and apparatus for making pencils. 1.648,892; Nov. 22.

Daniels, Dwight C., Worcester, Mass. Card index Data Company, Sandusky, Ohlo Data Card Data Card

Daniels, Lee G., Rockford, Ill. Automatic machine tool. 1,651,948; Dec. 6.
Daniels, Lee G., Rockford, Ill. Automatic machine tool. Daniels, Dec. 6.
Danielson, Daniel B., Milwauke, Wis. Building construction. 1,639,399; Aug. 16.
Danielson, Edna, Berkeley, Calif. Butterfly ornament for garments. Des. 72,940; June 28.
Danielson, Ernest G., (See Wise, R. M., and Danielson, Danielson, Ernest G., assignor to E. T. Cunningham, San Danielson, Oustay, Omaha, Nebr. Casement-window adjuster. 1,617,898; Feb. 15.
Danielson, Martin J. (See Peterson, M., and Danielson, Danielson, Martin J. (See Peterson, M., and Danielson, Martin J. (See Peterson, M., and Danielson, Martin J. (See Peterson, M., and Danielson, Danielson, Rubh Chicago, Ill. Composition for and conting metal surfaces. 1,629,672; May 17.
Danielson, Rubh Chicago, Ill. (See Peterson, M.) Banielson, Axel U. S., Ulfsunda, assignor to Aktiebolaget Atlas Diesel, Stockholm, Sweden. Arrangement for governing internal-combustion engines. 1,617,378; Feb. 15.

Danielsson, Azel U. S., Ulfamida, assignor to Akticholaget Atlas Dissel, Stockholm, Sweden. Compressed air starting device of internal-combustion engines. 1,632,023; June 14. Danks, Alfred C., Cleveland, Ohio. Water-tube boller. 1,614,048; Jan. 18.

Alleed C., Cleveland, Ohio. Water-tube boiler. 1,614,948; Jan. 18.

Danks, Roy L., and M. L. Baker, assignors to The Regal Silver Mig. Co., New Haven Conn. Spoon or similar Panks, Roy L., and M. L. Baker, assignors to The Regal Silver Mig. Co., New Haven, Conn. Spoon or similar Danks, Roy L., and M. L. Baker, assignors to The Regal Silver Mig. Co., New Haven, Conn. Spoon or similar Danks, Roy L., and M. L. Baker, assignors to The Regal Silver Mig. Co., New Haven, Conn. Spoon or similar Danks, Roy L., and L. Baker, Company, Chieago, Ili. Tractor. 1,641,802; Sept. 6.

Danly, Philo H., assignor to International Harvester Company, Chicago, Ili. Tractor. 1,641,803; Sept. 6.

Danly, Philo H., assignor to International Harvester Company, Chicago, Ili. Tractor. 1,641,803; Sept. 6.

Lago 1995; May 17.

Danmar, William. (See Feeley, W. B., and Danmr.) and Chicago, Ili. Tuning pin hook and making the same. 1,629,095; May 17.

Dann, Ernset G., Chicago, Ili., assignor to The Cleveland Graphite Erose Company, Cleveland, Ohio. Segmental Dann, Walter M., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. Transformer radiator. 1,619,832; Mar. 1.

Dann, Walter M., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company, Radiator. 1,619,333; Mar. 1.

Dann, Walter M., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company, Radiator. 1,619,333; Mar. 1.

Dann, Walter M., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company, Transformer radiator. 1,619,832; Mar. 1.

Dann, Walter M., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company, Transformer radiator. 1,619,832; Mar. 1.

Dann, Walter M., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company, Transformer radiator. 1,619,834; Mar. 1.

Dann, Walter M., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company, Transformer radiator. 1,619,834; Mar. 1.

Dann, Walter M., Wilkinsburg, Pa., assignor to Westing-house Electric & M

D'Arcy, Frank P., Kalamazoo, Mich. Spring construction. 1,618,579; Feb. 22.
D'Arcy, George W., Boston, Mass. Vaporizing apparatus, 1,640,484; Aug. 30.
D'Arcy, William A., Rochester, N. Y. Safety device for power presses. 1,615,617; Jan. 25.
Darker, Alfred H., Upper Norwood, London, assignor to J. Stone & Company, Limited, Deptford, England. Electromagnetic switch for controlling the circuits of train-lighting and similar installations, 1,636,900; Darkins. Samuel P. Pittsburgh. Pa. Trunk heav.

July 26.
Darkins, Samuel P., Pittsburgh, Pa. Trunk hasp.
1,625,351; Apr. 19.
D'Arieux, Roger M. G. M., Paris, France. Receptacle.
1,627,233; May 3.
Darling, Frank W., assignor to The L. A. Thompson
Scenic Railway Company, New York, N. Y. Coaster for
children. 1,618,272; Feb. 22.
Darling, George F., Briarbrae, Cawnpore, British India.
Axle-box cover for railway or like vehicles. 1,648,378;

Nov. 8.
Nov. 8.
Parling, James G., Norwood, Ohio. Cutting-blade attachment. 1,632,823; June 21.
Darling, Nathan C., Orleans, Mass. Lawn mower. 1,617,045. Feb. 8.
Darling, Theodore H., Long Beach, Calif. Casing-perforating device. 1,644,637, Oct. 4.
Darlington, Honelor., assence to M. B. Schuster, trustee, soliet, Ill. Cracking or treating oils and other similar hydrocarbons. 1,614,660; Jan. 18.
Darlington, Paul W. (See Rodman, T. H., and Darlington, Paul W. (See Rodman, T. H., and Darlington).

Dario Bround (1998) And A. S. H., and Darlington, Paul W. (See Rodman, T. H., and Darlington, Philip J., Brookline, Mass. Micrometer call-per. 1,629,450; May 24.
Darlington, Philip J., Brookline, Mass. Micrometer call-pers. 1,631,019; May 31.
Darlington, Philip J., Brookline, Mass. Internal microm-pers. 1,632,854; Dec. 13.
Darlington, Philip J., Brookline, Mass. Micrometer callper. 1,632,854; Dec. 13.
Darlo Company. (See Loomis, Ormond E., assignor.)
Darnell Walter R., Long Beach, Calif. Swivel caster with brake and lock. 1,632,435; June 14a. L., assignor.)
Darrall, Walter R. (See Chesnutt, John L., assignor.)
Darra, Ser Sttiene. (See Darrasse, Léon and E., and Dupont.)
Darrasse, Eténne. (See Darrasse, Léon and E., and Duporrasse, Léon and E., Paris, and L. Dupont, Vipcennes,

pont.)

Darrasse, Léon and E., Paris, and L. Dupont, Vincennes, France, Manufacture of synthetic camphor by means of a liquid catalyst, 1.641579; Sept. 6.

Darrin, Marc, Pittsburgh, Pa., assignor to F. N. But Company, Limited, Toronto, Canada. Composition of matter and forming same. 1.644,711; Oct. 11.

Darrow, Benjamin H., Woodstock, assignor to The Sani-Tabl-Tub Company, Alliance, Ohio. Tub. Re16.597; Apr. 19.

Darrow, Bengamin H.,
Tabi-Tub Company, Alliance, Olilo. Tub. Re16.597;
Tabi-Tub Company, Alliance, Olilo. Tub. Re16.597;
Darrow, William W. (See Madland, G., and Darrow.)
Darst, George H. (See Orth, W. G., and Darst.)
Darst, George H. (See Orth, W. G., and Darst.)
Darst, George H. (See Orth, W. G., and Darst.)
Dart, Herbert W., decensed; M. S. Dart, executrix, assignor of one-half to W. H. Ziegler, Jr., Colbert, Wash.
Vending machine. (See Darth, H. C., Colbert, Wash.
Vending machine. (See Darth, Herbert W.)
Darwin, Walton P., Washington, D. C. Method and apparatus for the manufacture of hollow afticles.
1,648.475; Nov. 8.
Darst, Garden, M. J., assignor to Ellis-Foster
Company, Milsugar biscult. 1,635,972; July 12.
Company, Milsugar biscult. 1,635,972; July 12.
Company, Milsugar biscult.
1,635,932; July 12.
Daubenmeyer, Homer, Detroit, Mich. Hydraulic drive for vehicles. 1,642,103; Sept. 13.
Daubenmeyer, Homer, Detroit, Mich. Hydraulic drive for vehicles. 1,642,103; Sept. 13.
Daubenspeck, Henry C. (See Winder, S. E., and Daubenspeck, Henry C. (See Winder, S. E., and Daubenspeck, Menry C. V. Manns Grave: A. E. Parmelee.

speck.)
Daudt, Herhert W., Penns Grove; A. E. Parmelee,
Carneys Point; and W. S. Calcott, Penns Grove, N. J.,
assignors to E. I du Pont de Nemours & Company,
Wilmington, Del.
Dauer, Ernest t., assignor to A. Weiner, Providence, R. I.
Mounting for articles of jewelry. 1,653.260; Dec. 20.
Daugert, Peter, Wilkes-Barre, H. Frey, Kingston, and
J. J. Dunleavy, Plymouth, Pa. Thread cleaner,
1,625.352; Apr. 19.
Daughaday, Frank P. (See Matteson, Frederick R., asPauchaday, Frank P., Norton, Mass., Puckle, Daes

signor.)
Daughaday, Frank P., Norton, Mass. Buckle. Des.
73,559; Oct. 4.
Daughaday, Frank P., Norton, Mass. Belt buckle.
1,613,444; Jan. 4.
Daughaday, Frank P., Norton, Mass. Belt buckle.
Daugharty, Arthur H., Russellville, Tenn. Child's slide.
1,622,093; Mar. 22.
Daugherty, Claude, Butler, assignor of one-fourth to L. A.
Woods and one-fourth to E. D. Cutler, Smithville, Mo.
Daugherty, George H., Berkeley, Calif. Signaling device.
1,630,730; May 31.

Daugherty, Thomas E., Baltimore, Md. Signal for road vehicles. 1,617,671; Feb. 15.

Vanicles. 1,617,671; Feb. 15.

Baltimore, Md. Theft-preventing device. 1,621,925; Mar. 22.

Baugherty, William F., Cleveland, Ohio. Rail bond. 1,617,836; Feb. 15.

Baughs, Charles W., Alameda, Calif., assignor to Daughs Ship Crane Company. Method and apparatus for hundling lumber. 1,622,932; June 21.

Daughs, Charles W., Portland, Oreg. Steam connection. Daughs Charles W., Portland, Oreg., assignor to Daughs Ship Crane Company. Rotary pipe-connecting device. 1,650,788; Nov. 29.

Daughs Ship Crane Company. (See Daughs, Charles W., assignor).

assignor.

Daul Oil Burner Company. (See Swartz, H., and Mulli-

Davenport, Hugh McC., Los Angeles, Calif. Cigarette helder, damper, and preserver. 1643,703; Sont. 27. Davenport Mickine & Foundry Company. (See Seeman, Frederick A., assignor.) Davenport Manufacturing Company. (See Hansen, John, assignor.)

assignot.)
Davenport, Mayon S., Los Angeles, Calif. Piston-packing-removing appliance. 1,635,743; July 12.
Davenport, Ranson W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. W., Working substance for heat engines. 1,619,194;

cago Pneumane Working substance Mar. 1

Working substance for heat engines. 1,619,194; Mar. 1.

Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Heat engine. 1,619,195; Mar. 1.

Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Heat engine. 1,619,197; Mar. 1.

Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Apparatus for refrigerating systems. 1,622,376; Mar. 29, Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Con-Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Cylinder lubrication. 1,632,119; June 14.

Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Cylinder lubrication. 1,632,119; June 14.

Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Refrigerating apparatus. 1,634,400; July 5.

Davenport, Sam F., Aburn, assignor to To Creek Chub. Oct. 18.

Daven Abert I. et al. (Sac Larch William IV.)

Oct. 18.

Davey, Albert I., et al. (See Leach, William W., assignor.) Davey, Francis A., et al. (See Leach, William W., assignor.)

Davey, George W. (See Walte, F. H., and Davey.) Davey, Harold, et al. (See Leach, William W., as

signor.)
Davey Jimes A., Sound Beach, Conn., and P. H. Davey and C. L. Gaucher; said Gauler assignor of his orthogen of the or

Davey, James A., Sound Beach, Conn., and P. H. Davey and C. L. Gaugler; said Gaugler assignor of his entire right to The Davey Tree Expert Company, Kent, Ohio, Power-appliance attachment for automotive vehicles. 1,638,292; July 19.
Davey, James A., Sound Beach, Conn., P. H. Davey, and C. L. Gaugler; said Gaugler assignor of his one-third to The Davey Tree Expert Company, Kent, Ohio. Apparatus for excavating tree cavities. 1,646,512, Oct. 20.
C. L. Gaugler; said Gaugler assignor of his entire right to The Davey Tree Expert Company, Kent, Ohio. Apparatus for excavating tree cavities. 1,646,613 (Oct. 25. Davey, James A. G. (See Davey, Paul H., assignor.) Davey, James A. G. (See Davey, Faul H., assignor.) Davey, James A. G. (See Davey, William W., assignor.)

Davey, Paul H., Kent, Ohio, assignor of one-half to Davey, Paul H. (See Davey, James A. and P. H., and Gaugler).

Gaugier.)
Davey, Paul H., Kent, Ohio, assignor of one-half to
J. A. G. Davey, Sound Beach, Conn. Power-connecting
device. 1,636,293; July 19.
Dayey, Samuel, et al. (See Leach, William W., as-

1,022,526; Apr. 19.

Davey Tree Expert Company, The.

and P. H., and Gaugler, assignors.)

Davian, Arthur R., Waterville, Me. Bird cage.

1,632,906; Dec. 6.

David, Bruce W., Cleveland Heights, Ohio, assignor to Moonbeam Manufacturing Company.

Signal-viewing Street Company, Signal-viewing attachment for automobiles.

1,637,309; July 26.

David, Tanous H., Sacramento, Calif. Chiropractic adjusting and messaging device.

1,640,536; Aug. 30.

David, Tanous H., Sacramento, Calif. Chiropractic adjusting and messaging device.

1,640,536; Aug. 30.

David Malter, et al. (See Kliewer, Edward A., assignor.)

Davidson, Alec S., London, England. Locomotive and other boller or steam generator.

Javidson, Alec S., London, England. Locomotive and other boller or steam generator.

Javidson, Charles L., New York, N. Y. Stoker.

1,626,791; May 3.

Davidson, Onaries W., Big Spring, Tex. Sash-pulley marker.

1,632,824; June 21.

Javidson, Daniel W., Big Spring, Tex. Sash-pulley marker.

1,632,824; June 21.

Javidson, Glenn, H. F., Rippey, C. N. Cone, I. F. Laucks, and H. P. Banks, assignors to I. F. Laucks Inc., Senttle, Wash. Celliose-fiber product treated with a size embodying soy-bean flour and process of making the same.

Davidson, Harry O., assignor to Blaw Knox Company, Pittsburgh, Pa. Bridging, 1,642,945; Sept. 20.

Davidson, James Montreal, Quebec, Canada. Draining 1,623,532; Apr. 5.

Davidson, James Montreal, Quebec, Canada. Draining 1,622,671; Sept. 20.

Davidson, James M., Gee Adams, R., Davidson, and Gubelmann.

Davidson, James M. (See Adams, R., Davidson, and Gubelmann).

Davidson, James M. (See Adams, R., Davidson, and Gubelmann).

Davidson, James M. (See Adams, R., Davidson, and Gubelmann).

Davidson, James M. (See Adams, R., Davidson, and Gubelmann).

Davidson, James M. (See Adams, R., Davidson, and Gubelmann).

Davidson, Joseph G., Yokers, N. Y., assignor to Carbide and Carbon Chemicals Corporation. Solution of cellulose esters. 1,644,474; Oct. 4.

Davidson, Joseph G., Yokers, N. Y., assignor to Carbide and Carbo

Davidson, William D. Los Angeles, assignor, by mesne assignments, of one-half to Emsco Derrick & Equipment Company, Los Angeles, Calif., and one-half to Titusville Forge Company, Titusville, Pa. Pipe slip. 1,630,732; May 31.

Davidson, William W., Evanston, Ill., assignor to Davidson Manufacturing Company, Madison, Wis, Machine Son Manufacturing Company, Madison, Wis, Machine Lordon, William W., Evanston, Ill., assignor to Davidson Manufacturing Company, Madison, Wis, Polding machine, 1,620,444; Mar. 8.

Davidson, William W., Evanston, Ill., assignor to Davidson Manufacturing Company, Madison, Wis, Machine Son Manufacturing Company, Madison, Wis, Machine Company, William W., Evanston, Ill., assignor to Davidson, William W., Sasignor, Company, Gee Davidson, William W., assignor, Company, Gee Davidson, William W., assignor, Johnson, Geen Bay, Wis, Davies, David R., Machines, 1,623,046; Apr. 5.

Davies, David R., Manchester, England, assignor to Westinghouse Electric & Manufacturing Company, Switch contact for circuit breakers, 1,621,969; Mar. 1.

Switch contact for circuit breakers, 1,618,969; Mar. 1.
Davies, David R., Manchester, England, assignor to Westinghouse Electric & Mandacturing Company. Electric Davies, Frederick A., assignor to The Steel Construction Company Limited, Auckland, New Zenland. Bitumen boiler. 1,620,932; Mar. 15.
Davies, Gliebert, and A. C. Mires, Montreal, Quebec, Canada. Electric-cord connecter. 1,613,647; Jan. 11. Davies, Heiori L., Gowerton, mars Sending mill for the production of metal sheets or plates. 1,624,931; Apr. 13.

S. R. Cound. Aberavon, Waies. Rolling mill for the production of metal sheets or plates. 1.624.931; Apr. 19.
Davies, Henry R., Valley Cottage, N. Y., assignor to Industrial Research Corporation, Toledo. Onio. Light-control of the control of the c

May 17.

Davis, Arthur P., Brooklyn, N. Y. Electrical contact device for follow-up systems. 1,621,835; Mar. 22.

Davis, Augustine, jr. (See Shield, Paul S., assignor.)

Davis, Augustine, fr., Cincinnati, Ohlo. Measuring bucket or vessel. 1,620,610; Mar. 8.

Davis, Augustine, jr., Cincinnati, Ohlo. Measuring bucket or vessel. 1,624,477; Apr. 12.

Davis & Bennett, Inc. (See Davis, L., and Bennett, assignors.)

Dayis, Bernard H., Fullerton, Calif. Pitman end. 1.641.533; Sept. 6. Dayis Boring Tool Company. (See Dayis, Emery E., as-

signor.) Davis Boring Tool Company. (See Koeln, Christian C.,

Davis Horing Tool Company. (See Koeln, Christian C., assignor.)
Davis Brick Machinery Company. (See McClelland, William H., assignor.)
Han H., assignor.)
Cushioning means for tiltable automobile seats.
1.633.697; June 28.
Davis, Charles B., New York, N. Y. Purifying carbohydrate solutions, etc. 1.618,148; Feb. 15.
Davis, Charles B., New York, N. Y. Absorbent decolorizing medium. 1.618,149; Feb. 15.
Davis, Charles C., Fenton, Mich. Loud speaker.
Davis, Charles C., assignor to Goodman Manufacturing Company, Chicago, Ill. Scraper. 1.614.351; Jan. 11.
Davis, Charles E., assignor to Goodman Manufacturing Company, Chicago, Ill. Scraper. 1.614.351; Jan. 11.
Davis, Charles E., assignor to Goodman Manufacturing Company, Chicago, Ill. Scraper. 1.614.351; Jan. 11.
Davis, Charles E., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,626,132; Apr. 26.

Davis, Charles E., assignor to Goodman Manufacturing Company, Chicago, Ill. Power shovel. 1,643,704;

Sept. 27.

vis, Charles E., assignor to Goodman Manufacturing

Company, Chicago, Ill. Cutter chain. 1,644,181;

Davis, Charles E., assignor to Goodman Manufacturing Company, Chicago, Ill. Cutter chain. 1,464,181; Oct. 4.

Davis, Charles H., Inverell, New South Wales, Australia. Tension distributing produces for machine-shear hand Davis, Charles H., Cheshire, assignor to The American Brass Company, Waterbury, Conn. Granular brazing solder and producing the same. 1,617,285; Feb. 8.

Davis, Charles H., and H. W. Lueck, Chicago, Ill. Protective garment. 1,642,670; Sept. 20.

Davis, Charles V., Morganiton, N. C. Electric awarmer and appear for windshields of automobiles. 1,640,887; Aug. 300cc for windshields of automobiles. 1,640,887; Aug.

wiper for windshields of automobiles. 1,640,887; Aug. 30. Clyin C., Loo Angeles, Calif. Ple conformer. 1,612,223; Jan. 4. Davis, Claud A., assignor, by mesne asignments, to The Hall Mig. Company, Toledo, Ohio. Power tool. 1,635,463; July 12. Davis, Clawson, Ann Arbor, assignor of one-half to C. J. Seyfried, Morenci, Mich. Air-heating oil stove. 1,622,134; Mar. 22. Davis, Herbert A. and C. F.) Davis, Cleveland G., Grand Ranids. Mich. Apparatus for washing ice-cream cans. 1,025,300; Apr. 19. Davis, Clirton I., et al. (See Thietten, Frank, assignor.) Davis, Clirton I., et al. (See Thietten, Frank, assignor.) Davis, Clirton I., et al. (See Thietten, Frank, assignor.) Davis, Clordand W. Oak resident of the Mantle Davis, David. (See Adsit, G., and Davis.) David. (See Letter, Pa., assignor to Westinghouse Electric & Manufacturing Company. Blade lashing. 1,618,274; Feb. 22.

1053.256; Dec. 20.
Davis, David. (See Adsit, G., and Davis.)
Davis, David. (Co., Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company. Blade lashing.
10.18,274; Peb. 22.
Davis, David. (C., Chester, Pa., assignor to Westinghouse Electric and Manufacturing Company. Auto-stop governor. 1,624,093; Apr. 12.
Davis, David C., Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company. Demand meter. 1,632,192; June 44.
1632,192; June 44.
1632,192; June 44.
1633,193; July 5.
Davis, David M., Whitestone, Va., and W. B. Freeman, Washington, D. C. Drying plate-printed sheets. Washington, D. C. Drying plate-printed sheets. 1,633,898; June 28.
Davis, David R. (See Coates, W. A., Gittins, and Davies.) Davis, Davight C., Monterey Park, Calif. Envelope scaler. 1,633,698; June 28.
Davis, David R. (See Coates, W. A., Gittins, and Davies.) Davis, Davight C., Monterey Park, Calif. Envelope scaler. 1,633,698; June 28.
Davis, Edward E., Chicago, Ill. Column-form clamp. 1,303,6462; July 19.
Davis, Edward E., Chicago, Ill. Column-form clamp. 1,103,6462; July 19.
Davis, Edward E., Chicago, Ill. Column-form clamp. 1,103,640; July 19.
Davis, Edward E., Chicago, Ill. Column-form clamp. 1,103,640; July 19.
Davis, Edward E., Calf weaner. 1,636,047; July 19.
Davis Edward E., Calf weaner. 1,636,047; July 19.

July 19.

Davis, Emerson, assignor of one-half to G. P. Ruth, Indianapolis, Ind. Automatic vehicle spring controller, 1,631,687; May 31.

Davis, Emerson, assignor of one-half to G. P. Ruth, Indianapolis, Ind. Shock absorber and rebound check, 1,633,631; Aug. 16.

Davis, Emery E., assignor to Davis Boring Tool Company, Davis, Emery E., assignor to Davis Boring Tool Company, Local Company, Ind., 1985; Mar. 8, Davis, Company, Local Company, Ind., Syricous, N. Y. Pressing-machine mechanism. 1,635,610: July 12.

ments, to The Prosperity Company, Inc., Syracuse, N. Y. Pressing-machine mechanism. 1,635,610 July 12.

Davis, Ernest. Chicago, Ill., assignor, by mesne assignments, to Liberty National Bank truster. Pressing-ments, to Liberty National Bank truster. Pressing-ments, to Liberty National Bank truster. Pressing-Davis, Ernest W., Oak Park, assignor to The Bassick Manufacturing Company, Chicago, Ill. Lubricant compressor. 1,645,898; Oct. 18.

Davis, Ernest W., Oak Park, assignor to The Bassick Manufacturing Company, Chicago, Ill. Lubricating Davis, Ernest W., Oak Park, assignor to The Bassick Manufacturing Company, Chicago, Ill. Lubricanting Davis, Ernest W., Oak Park, assignor to The Bassick Manufacturing Company, Chicago, Ill. Davis, Ernest W., Oak Park, and F. D. Reynolds, Hubbard Parks, Ernest W., Oak Park, and F. D. Reynolds, Hubbard Parks, Ernest W., Oak Park, and F. D. Reynolds, Hubbard Parks, Ernest W., Oak Park, and F. D. Reynolds, Hubbard Parks, Ernest W., Oak Park, and F. D. Reynolds, Hubbard Parks, Ernest W., Oak Park, and F. D. Reynolds, Hubbard Parks, Francis F., assignor to F. H. Davis, Francis F., Mount Vernon, Ohio, assignor to F. H. Davis, Francis F., Mount Vernon, Ohio, assignor to F. H. Davis, Francis H. (See Davis, Francis F., assignor).

Davis Francis H. (See Davis, Francis F., assignor.)
Davis, Francis H., and J. W. Klohe, Monterey, Calif.;
said Klohe assignor to said Francis H. Davis,
chine for scaling and grading 58h. 1,620,953; Mar. 15,
Davis, Frank, Portland, Oreg. Show case. 1,622,771;
Mar. 29,

Davis, Frank, Brooklyn, N. Y. Noise-making alarm.

1,635,985, July 19.

curing layers of rubber to layers of other material or to rubber, particularly with reference to footwear.

1,654,240; Dec. 27.

Davis, Frank M., Milwaukee, Wis. Work feeding and the footwear states of the control of the footwear states of the footw

Davis, George H., Newark, N. J. Modding press and method. 1,641,923; Sept. 6.

1,641,922; Sept. 6.

1,641,923; Sep

Davis, Hamiton L. (See Mettler, J. W., and Davis.)
Davis, Hamiton L. (See Mettler, J. W., and Davis.)
Davis, Hamiton M. Cambridge, Mass. Window-cleaning
Davis Hamiton (G. 188) and G. 188
G. (See Mettler) to The Davis and Son Manufacturing Company, Denver, Colo. Display device for
oils. 1,646,573; Oct. 25.
Davis, Harry A., (See Burnbam, E. C., and Davis.)
Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Shuttle check for looms. 1,615,189;
Jan. 18.

Jan. 18.
Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Lay assembly for looms. 1,616,890.
Feb. 8.

Feb. 8.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Tension device for yarn-winding machines, 1.618.699; Feb. 22.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Stop mechanism for looms. 1,620,194; Mar. 8.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Loom frog. 1,620,354; Mar. 15.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,626,578; Apr. Apr. 4, assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,626,578; Apr. 4, assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,626,578; Apr. 4, assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,626,578; Apr. 4, assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,626,578; Apr. 4, assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,626,578; Apr. 4, assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,626,194; Apr. 4, assignor to Draper Corporation, Hopedale, Mass. 2, and 3, and 4, and

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. I,626,573; Apr. 26.

Davis, Harry A. assignor to Draper Corporation, Hopedale, Mass. Drag roll and clearing plate for looms. Davis, Harry A. assignor to Draper Corporation, Hopedale, Mass. Automatically-threading shuttle for looms. 1,631,090; May 31.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Automatically-threading shuttle for looms. 1,631,090; May 31.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Automatically-threading shuttle for looms. 1,630,901; July 26.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Eabling suide for filling-replenishing looms. 1,642,769; Sept. 20.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Lay-actuating mechanism for looms. 1,642,769; Sept. 20.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Loom shuttle. 1,651,191; Nov. 29.

Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Elling-replenishing-loom bobbin cleaner, Mass. Filling-replenishing-loom bobbin cleaner, Mass. Brittle-replenishing-loom bobbin cleaner, Javis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Spilling-replenishing-loom bobbin cleaner, Loopedale, Mass. Spilling-replenishing-loom bobbin cleaner, Javis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Spilling-replenishing-loom bobbin cleaner, 1,654,493; Dec. 27.

Davis, Harry C., Brighton, Mass. Vacuum-tube socket. 1,651,257; Nov. 29.

Davis, Harry C., Brighton, Mass. Vacuum-tube socket. 1,651,257; Nov. 29.

Davis, Henry C., Piymouth, Mass. Natling plate for lasts. 1,631,581; June 7.

Davis, Henry W., East Liverpool, Ohlo. Bench clamp. 1,654,493; Dec. 27.

Davis, Henry C., Piymouth, Mass. Natling plate for lasts. 1,631,581; June 7.

Davis, Henry C., Elizabeth, N. J. Steam trap. 1,663,3165; June 21.

Dayls, Irving J., Syracuse, N. Y. License-plate holder. 1,680,658; May 31, Dayls, Isadore, Des Moines, Iowa, assignor to Interlocking Shingle Co., Des Moines, Iowa. Interlocking multiple shingle. 1,027,429; May Dayls. Jack bingle. 1,027,429; May Dayls. Dayls, Jack, Harlan, Ky. Bit holder. 1,613,693;

Davis, James D., Los Angeles, Calif. Combination cane and sunshade. 1,618,065; Feb. 15. Davis, James J. (See Crisenberry, Benjohn F., as-

signor.)
Davis, James M. (See Gowan, Lee L., assignor.)
Davis, James M., Newberry, S. C. Loom counter,
1,629,023; May 17.
Davis, Jasper N., Denver, Colo. Machine for the manufacture of storage-battery plates. 1,651,678; Dec. 6,
for incubators, 1,616,307; Feb. 1.
Davis, John, (See Lorenz, E. H., and Davis.)
Davis, John, East Hartford, assignor to Hartford Empire Company, Hartford, Conn. (Jassware-shaping machine, 1,642,722; Sept. 20
Davis, John E., Brocklyn, N. Y. Transforming inaudible
Davis, John E., Brocklyn, N. T. Transforming inaudible of the control of the control

Davis, John E., Cincinnati, Ohio. Flagpole. 1,645,645; Oct. 18.

Oct. 8, John E., Chelmant, Ohlo. Protective housing for attachment to flagpoles. 1,645,691; Oct. 18. Davis, John E., Cincinnati, Ohlo. Flag protector. 1,646,015; Oct. 18. Davis, John S., near Felton, Del. Cultivator attachment. 1,643,200; Sept. 20. Davis, John W., Washington, D. C., assignor to Underwood Typewriter Company, New York, N. Y. Typewrit-Davis, Joseph B., Daytona Beach, Fla. Aerial delivery device. 1,648,759; Nov. 8. Davis, Joseph L., Abingdon, Ill. Temperature regulator for incubators. 1,634,401; July 5. Davis, Joseph L., Abingdon, Ill. Temperature regulator for incubators. 1,634,401; July 5. Davis, Joseph L., Abingdon, Ill. Temperature for incubators. 1,634,401; July 5. Davis, Joseph L., Abingdon, Ill. Temperature regulator for incubators. 1,634,401; July 5. Davis, Kenneth, St. Benedict, Pa., assignor to Rembrandt Peale. New York, N. Y. Mining machine. 1,614,257; Jan. 11. Davis, Kenneth, assignor, by mesne assignments, to R.

Jan. 11.

Davis, Kenneth, assignor, by mesne assignments, to R. Peale, St. Benedict, Pa., W. S. Davies, New York, N. Y., and W. S. Wallace, Philadelphia, Pa., trustees. Mining-machine carrier. 1,628,369; May 10.

Davis, Leslie W., and E. S. Bursiey, Dexter, Mc. Automatic speed control for motor cars., 1638,565; Ang. 8.

matic speed control for motor cars., 1638,565; Ang. 8.

matic speed control for motor cars., 1638,565; Ang. 8.

Max emulsion. 1,637,475; Aug. 2.

Davis, Lewis F., Huntington Beach, Calif. Oil saver and antisplasher. 1,622,889; June 21.

Davis, Lewis F., Santa Ana, Calif. Method of and apparatus for spirally winding wire in tubes. 1,645,803; Oct. 18.

Oct. 18.

Davis, Lewis F., and L. W. Schnepp, Huntington Beach, Calif. Water heater. 1,632,888; June 21.

Davis, Lewis H., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Engine-starting apparatus. 1,638,246; Aug. 9.

Davis, Lewis W., Seattle, Wash. Driving mechanism for motor vehicles. 1,633,316; June 21.

Davis Lumber Co., The. (See Hail, Bernard E., assignor, Davis, Mannell A., et al. (See Savage, Basil H., assigns and the seater of the seater

signor.)

signor.)
Davis, Mansell A., Los Angeles, Calit. Found...
1,634,572; July 5.
Davis, Maryin B., Kansas City, Mo., assignor to G. Krell,
Sapulpa, Okla. Draw works. 1,642,230; Sept. 13.
Davis, Marvin B., Kansas City, Mo., assignor to G. Krell,
Davis, Marvin B., Kansas City, 1,688, assignor to G. Krell,
Davis, Marvin B., Kansas City, 1,689,451;
Sapulpa, Okla. Pipe-elevating clamp. 1,649,451;
Sapulpa, Okla.

Davis, Matthew J., Portland, Oreg. Log raft. 1,631,403; June 7. Davis, Matthew J., Portland, Oreg. Log raft. 1,638,324;

Aug. 9.

Davis, Merritt J., Wellsburg, W. Va. Bag-valve-forming mechanism. 1,623,170; Apr. 5.

Davis, Miriam L., assignor of nine-twentleth to J. H. Berry, Portland, Oreg. Sandal. 1,631,625; Sept. 6.

Davis, Monroe, Enid, Okla. Combined grain thrasher and cleaner. 1,653,153; Dec. 20.

Cleaner. 1,653,153; Dec. 20.

Lösz, Sali; Dec. 13.

Davis, Moses J., Peublo, Colo. Device for polishing buttons. 1,618,518; Feb. 22.

Davis, Nortis K., San Francisco, Calif. Apparatus for treating fhee-bearing materials. 1,622,7117; Apr. 12.

Davis, Olin B., Los Angeles, Calif. Silencer for valve-in-head motora. 1,613,484; Jan. 4.

Davis, Paul, Virginia City, assignor of one-third to J. W. Franks, one-eighth to J. S. and C. Horne, Coeburn, and one-half to S. Aston, Lebanon, Va. Steam turbine. 1,613,694; Jan. 11.
Davis, Paul H. (See Coates, S. D., Davis, and Jenks.)
Davis, Philip W., Cambridge, Mass. Refining lead. 1,640,488; Aug. 30.
Davis, Philip W., Cambridge, Mass. Refining lead. 1,640,487; Aug. 30.
Davis, Rate W., West Allis, assignor to Allis-Chalmers stallation. 1,633,161; June 21.
Davis, Rae W., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Power installation. 1,633,161; June 21.
Davis, Raip M., Brocton, assignor of one-half to J. J. Moriarty, Boston, Mass. Card index. 1,637,866; Aug. 2.

MoTharty, Dosony Manager and Davis, Davis, Ralph J. (See Bartlett, F. A., and Davis, Opavis, Ray W., Brownville, Fa. Runway. 1,652,614; Dec. 13.
Dev. 13.
Dev. 13.
Davis, Reginald M., London, England. Smoker's ash tray and like receptacle. 1,625,884; Apr. 26.
Davis, Rex E., assignor to Brenco Corporation, Minneapolis, Minn. Electrically actuated valve. 1,638,325;

apons, Minn. Electrically-actuated vaive. 1,688,320; Aug. 9, Lawrence C., New York, N. Y., and R. D. Conway, Bernardsville, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Manual telephone system. 1,615,395; Feb. I.
Davis, Richard F. (See Chappell, M. L., Davis, and Moore.)

oratories, Incorporated, New York, N. Y. Manual telephone system. 1,615,935; Feb. 1.

Davis, Richard F. (See Chappell, M. L., Davis, and Moore.)

Davis, Richard T., Chicago, Ill. Grille for musical instrument. Des. 71,863; Jan. 18.

Davis, Robert, assignor to Elco Shoe Manufacturers, Inc., Des. 72,145; Mar. 8.

Davis, Robert, assignor to Elco Shoe Manufacturers, Inc., Brooklya, N. Y. Shank stiffener. 1,642,362; Sept. 13.

Davis, Robert, assignor to Elco Shoe Manufacturers, Inc., Brooklya, N. Y. Shank stiffener. 1,642,362; Sept. 13.

Davis, Robert L. (See Little, D. G., and Davis) Westingshows the Company of Protective System for hot-cathode devices. 1,649,391; Nov. 15.

Davis, Robert L. Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective system of hot-cathode devices. 1,649,391; Nov. 15.

Davis, Robert L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Modulation system. 1,642,821; Dec. 20 messic assignments, to St. Louis Reaming Tool. Co., St. Louis, Mo. Reming or boring tool. 1,027,887; May 10.

Davis, Roberta M., administratrix. (See Davis, Glenn S.)

Davis, Roperta M., administratrix. (See Davis, Glenn S.)

Davis, Roperta M., administratrix. (See Davis, Glenn S.)

Davis, Roperta M., Mount Union, Pa. Brick-making machine. 1,631,251; June 7.

Davis, Roy P. M., Mount Union, Pa. Brick-making machine. 1,631,251; June 7.

Davis, Royall O. E., Chapel Hill, N. C., and L. E. Olmstead, Peru, Nebr. Recovering ammonia from gases containing same. 1,623,482; May 24.

Davis, Rayall O. E., Chapel Hill, N. C., cand L. E. Olmstead, Peru, Nebr. Recovering ammonia from gases containing same. 1,623,482; May 24.

Davis, Royall O. E., Chapel Hill, N. C., and L. E. Olmstead, Peru, Nebr. Recovering ammonia from gases containing same. 1,623,482; May 24.

Davis, Royall O. E., Chapel Hill, N. C., and L. E. Olmstead, Peru, Nebr. Recovering ammonia from gases containing same. 1,623,482; May 24.

Davis, Taube, assignor to Franklin Simon & Co., Inc., New York, N. Y. Bote. D

Davis, William C., et al. (See Wilkinson, Stanley W., assignor.)
Davis, William H. H., San Francisco, Calif. Hairpin. 1,621,924; Mar. 22.

Dayis, William H. H., and F. Celentano, assignors of one-half to said Dayis and one-half to H. White, San Francisco, Celif. Hairpin. 1.637,766; Aug. 2. Dayis, William L., Renton, assignor of one-half to F. A. and L. I. Wilson, Seattle, Wash. Buckle. 1,644,513; Oct. 4. Dayis, William N., assignor to General Motors Cor-Dayis, William N., assignor to General Motors Cor-

Oct. 4.

Oct. 4.

Oct. 4.

Oavis, William N., assignor to General Motors Corporation, Detroit, Mich. Latch-operating device. 1,616,609; Feb. 8.

Davis, William R., Wallace. Idaho. Creel carrier. 1,635,692; July 12.

Davis, William T., Comstock, Mich. Engine governor. 1,632,239; Dec. 20.

1,639,250; Devision T., Comstock, Alexandrian Company, Pattimore, Md. Pump. 1,634,028; June 28.

Devision David. (See Hosford, L. V., and Davison.)

Machine Company, Baltimore, Md. Pump. 1,634,028; June 28.
Davison, David. (See Hosford, L. V., and Davison.)
Davison, Gregory C., New London, Conn. Coin-operated gasoline pump. 1,619,637; Mar. 1.
David. George H., New York, N. Y. Sanding roller. 1,631,798; June 7.
Davol. Horry A., Methuen, Mass., assignor to U. S. Bobbin & Shuttle Co., Providence, R. I. Tension device for Davol Hore 1,604, 150 Dec. 27.
Davol Hubert Cod. 151, Dec. 27.
Davoran, Michael F., assignor to The Crane & Breed Manufacturing Company, Cinclinati, Ohio. Burial-casket handle. Des. 42,990; July S. Surgical instrument. 1,640,311; Aug. 23.
Dawkins, George, Shavertown, Pa. Safety signal. 1,618,580; Feb. 22.
Dawkins, George, Shavertown, Pa. Safety signal. 1,618,580; Feb. 22.
Dawkins, Giernec A., Plainfield, N. J. Pulsation compensated meter. 1,621,354; Mar. 15.
Dawn, Richard W., assignor to W. E. Castleton, Deer Lodge, Mont. Attachment for steam boards. 1,624,829; Apr. 12.

and protector. 1,618,066; Feb. 15.
Dawa, Richard W., assignor to W. E. Castleton, Deer Lodge, Mont. Attachment for steam boards. 1,624,829; Apr. 12.
Daviders Limited, Westminster, London, England. Ordnance breech mechanism. 1,622,861; Mar. 29.
Dawson, Carl E., Lakewood, assignor to The Ohio Body & Blower Company, Cleveland, Ohio. Windshield construction. 1,629,439; May 17.
Dawson, Cecil F., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Blank for conical vessels. Dawson, Cecil E., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Method and apparatus for securing closure caps to paper receptacles. 1,641,742; Sept. 6.
Dawson, Cecil F., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Apparatus for securing Course caps to paper receptacles. 1,641,743; Sept. 6.
Dawson, Cecil F., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Apparatus for securing Course of the Company, Inc., Easton, Pa. Apparatus for securing Company, Inc., Easton, Pa. Dawson, Cecil F., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Dawson, George F., Boston, Mass., and H. F. Frease, Canton. Ohio, Pressed structure. 1,018,788; Jan. 11, Dawson, George H., Eoston, Mass., and H. F. Frease, Canton. Ohio, Pressed structure. 1,018,788; Jan. 11, Dawson, George H., Cambridge, Mass., assignor, by mesne assignments, to Remiration Rand Inc., Tonawanda, N. Y. Card bolder. 1,615,443; Jan. 25.
Dawson, George H., Cambridge, Mass., assignor, by mesne assignments, to Remiration Rand Inc., Tonawanda, N. Y. Card bolder. 1,615,443; Jan. 25.
Dawson, Joseph W., and J. L. Herold, assignors to Barry-Welmiller Machinery Company, St. Louis, Mo. Petaining device. 1,628,709; May 17.
Dawson, Joseph W., and J. L. Herold, assignors to Barry-Welmiller Machinery Company, St. Louis, Mo. Petaining device. 1,628,709; May 17.
Dawson, Hower M., Rock Hill, S. C. Loom-beam lock. 1,628,709; May 17.
Dawson, Robert K., Akron, N. Y. Furnace. 1,620,805; Mar. 16.
Dawson, Sidney, assignor to E. J. Morse, Chicago, Ill.

Mar. 22.
Dawson, Robert K., Akron. 25.
Mar. 15.
Dawson, Sidney, assignor to E. J. Morse, Chicago, Ill.
Dawson, Sidney, assignor to E. J. Morse, Chicago, Ill.
On Chicago, Ill. Golf club. 1,618,640;
Dawson, Sterling W., Chicago, Ill. Golf club. 1,618,640;
Dawson, Sterling W., Chicago, Ill. Golf club. 2,618,640;
Cons. City, Mo. Valve mechanism.

Feb. 22
Dawson, William A., Kansas City, Mo. Valve mechanism, 1,621,712; Mar. 22
Day, Albert V. T., Paris, France. Telephonic and telegraphic repeater or relay, 1,645,987; Oct. 18.
Day, Charles, Glasgow, Scottland, Joint and Jointing tool for tube wells. 1,652,562; Dec. 13.
Day, Charles E. (See Grabler, Peter, assignor, Day, Charles P., East Orange, N. J., assignor to Day-Elder, Inc. Oil burner. 1,618,607; Feb. 15.
Day, Courtenay P., New York, N. Y. Carrier, 1,650,496; Nov. 22. Day, C

Nov. 22.
Day, David L. (See Bacon, F. J., and Day.)
Day, David T., decensed, Washington, D. C.; F. J. Goble,
administrator. Insecticide and preparing the same.
1.647.214; Nov. 1.
Day-Elder, Inc. (See Day, Charles P., assignor.)
Day, Fred, Alcester, S. Dak, Carburetor, 1,631,923;
June 7.

Day, George H., assignor to Bausch & Lomb Optical Compuny, Rochester, N. Y. Spectrade case. Des. 74,101; Diec. 20; T. J. C. L. C. L.

Oct. 11.

Duy, Harry S., Hawthorne, assignor to Pennsylvania Textile Mills, Inc., Clifton, N. J. Textile fabric, Des. 73,966; Nov. 29.

Day, Harry S., Hawthorne, assignor to Pennsylvania Textile Mills, Inc., Clifton, N. J. Textile fabric. Des. 73,967; Nov. 29.

Day, Harry S., Hawthorne, assignor to Pennsylvania Textiles, Inc., Clifton, N. J. Textile fabric. Des. 73,967; Nov. 29.

Day, Harry S., Hawthorne, assignor to Pennsylvania Textile Mills, Inc., Clifton, N. J. Textile fabric. Des. 73,969; Nov. 29.

73,968; N. 20.

By, Harry S., Hawthorne, assignor to Pennsylvania Textile Mills, Inc., Clifton, N. J. Textile fabric. Des. 73,969; Nov. 29.

Day, Harry S., Hawthorne, N. J., assignor to Pennsylvania Textile Mills, Inc., Clifton, N. J. Textile fabric. Des. 74,102; Dec. 20.

Day, J. H., Company, The., N. J., assignor to Pennsylvania Textile Mills, Inc., Clifton, N. J. Textile fabric. Des. 74,141; Dec. 27.

Day, J. H., Company, The. (See Kirchhoff, William G., assignor.)

Day, J. H., Company, The. (See Schiff, Sigmund, assignor.)

Day, J. H., Company, The. (See Schiff, Sigmund, assignor.)

Day, J. H., Company, The. (See Schiff, Sigmund, assignor.)

Day, Janse B., Brooklyn, N. Y., Piston rine. 1,614,616; Aug. 12.

Day, Janse B., Brooklyn, N. Y., Piston rine. 1,614,616; Aug. 20. Apr. 12. uv. James B., Brooklyn, N. Y. Piston ring. 1,614,602;

Day, Jan

Apr. 12.
Day, James B., Brooklyn, N. Y. Piston ring. 1,614,602;
Jan. 18.
Day, James C., Maplewood, N. J., assignor to The WhiteBay, James C., Maplewood, N. J., assignor to The WhiteBay, James C., South Orange, assignor to The Whitehead
& Hong Company, Newark, N. J. Button receptacle.
1,623,725; June 28.
Day, L. B. (See Scott, Nelson H., assignor.)
Day, Ferey C., assignor to The Falk Corporation, MilJay, Ferey C., assignor to The Falk Corporation, MilJay, Ferey C., assignor to The Falk Corporation, Milwaukee. Wis. Elevator drive. 1,637,476; Aug. 2.
Day, Salisbury M., Rochester, N. Y., assignor to General
Radiway Signal Company. Gates, N. Y. Universal
A. C. relay. 1,624,478; Apr. 12.
Day, William H., East Daven, and C. R. Thomas,
West
Haven, Count, assignors, by mesne assignments, to
Radia Radex Bureau, Inc., Tonawanda, N. Y. Index
or file. 1,623,124; May Le. R. D., and Day.)
Dayde, René and J., Paris, France. Apparatus for
nautical sports. 1,630,497; Nov. 22.
1930e. Jacques. (See Dayde, René and J.)
Dayde, René and J., Paris, France. Rolling lift bridge
1,613,504; Jan. 4.
Brooklyn, N. Y. Battery clamp and
Fruscon Steel Company, Youngstown. Ohio. Stripper
for Slitting machines. 1,650,193; Nov. 22.
Dayling Ledward W., assignor, by mesne assignments, to
Fruscon Steel Company, Youngstown. Ohio. Stripper
for Slitting machines. 1,650,193; Nov. 22.
Dayling Motion Picture Co. (See Macbeth, Arthur L.,
assignor.)

assignor.)

assignor.)
Dayton Engineering Laboratories Company, The. (See Bradford, Zerbe C., assignor.)
Dayton Engineering Laboratories Company, The. (See Haas, Nelson R., assignor.)
Dayton Engineering Laboratories Company, The. (See Hunt, J. H., Fiizsimmons, and Embshoft, assignors.)
Dayton, Ernest L. (See Michaud, Elsear, assignor).
Dayton Initiation Company, The. (See Keys, John H., assignor).

assignor.)
Dayton, James M., assignor to The Dayton Manufacturing Company, Torrington, Conn. Flow meter.
1,627,234; May 3.
Dayton Malicable Iron Company. (See Runyan, William

H. assignor.)
Dayton Manufacturing Company, The. (See Dayton, James M., assignor.)
Dayton, Max E., Hibbing, Minn. Windshield cleaner. 1,618,608; Feb. 15.
Dayton Paper Novelty Company, The. (See Neumann, Theodore L., assignor.)
Dayton Pump & Manufacturing Company, The. (See Elekmeyer, Earl E., assignor.)
Dayton Pump & Manufacturing Company, The. (See Hartingte, Oliver C., assignor.)
Diditingte, Oliver C., assignor.)

Dayton Scale Company. Dayton Scale Company. (See Craig. Robert, assignor.) (See Gilbert, William N., as-

signor.)
vion Scale Company. (See Hopkinson, Joseph, assignor.)
ayton Scale Company. (See Kepler, George W., as-

Dayton S

Dayton Scale Company. (See Strachan, Thomas H., assignor.)
Dayton Scale Company. (See Wood, George R., assignor.)
Dayton Steel Foundry Company, The. (See Walther,
George, assignor.)
Dayton Steel Racquet Company, The. (See Larned, Willinn A., assignor.)
Dayton Steel Racquet Company, The. (See Norton.
Harold W., assignor.)

Dayton Siret anaton.

Harold W., assignor.)
Dayton-Wright Company.
(See Clark, Virginius E., assignor.)
Dayton-Wright Company.
(See Geyer, Harvey D., as-

signor.)
Dayton-Wright Company. (See Kettering, Charles F., as-

Dayton-Wright Company. (See Kettering, Charles F., assignor.)
Dencon, Edward F., assignor to Gus V. Brecht Butchers'
Supply Company, St. Louis, Mo. Refrigerator display
case. 1.630.841; Aug. 23.
Deacon, Robert E., Cleveland, Ohio, Safety key holder.
1.618,408; Feb. 22.
Deacon, Robert E., Cleveland, Ohio, Crane. 1.622,574;
Mar. 29.
Deagle, John M., Cataract, Ontario, Canada. Washing
machine. 1,630,112; May 24.
Deakin, Geraid. Antwrp. Belgium, assignor to Western
Electric Company, Incorporated
Selectors which. 50,2,366; Jan. 4.
Selectors which. 50,2,366; Jan. 4.
Selectors which. 50,2,366; Jan. 4.
Party-line revertible ringing system. 1,651,017;
Nov. 29.
Deakin, Geraid, Antwrp, Belgium, assignor to Western

Nov. 29.

Denkin, Gerald, Antwerp, Belgium, assignor to Western
Electric Company, Incorporated, New York, N. Y.

Telephone system. L658, 890; Dec. 27.

Deal, Claude A. (See Amos, O., and Deal)

Deal, James H. (See Crumbach, H., and Deal)

Deal, Leonard C., Hampton, Iowa. Lacing device.

1,615,073; Jan. 18.

De Alcocer, Eugenlo N. and F. O., Mexico, Mexico. Spark

plug. 1,633,425; June 21.

De Alcocer, Francisco O. (See De Alcocer, Eugenio N.

and F. O.) plug, 1,00 De Alcocer, and F. O.)

plug. 1,633,435; June 21.

De Alcocer, Francisco O. (See De Alcocer, Eugenio N.

and F. O.)

and F. O.)

and F. O.)

and F. O.)

Deale. Rober C. Plainfield. N. J., assignor to Niles
Berling States of the States

Sept. 20.

Dean, George J., Campbell, Tex. Cotton planter.

1.651.327: Nov. 29.

Dean, Henry A., assignor to Towers & Suillvan Manufacturing Co., Rome, Ga. Heel sweep and making the same. 1.639.593; Aug. 16.

Dean Hill Pump Company. (See Schleyer, Victor, assignor.)

Aug. 30.

Dean-Minnick Steel Wheel Company. (See Kemoe, E. W., and Price, assignors.)

Dean, Seward A., Hastings, assignor to Dean Card Peoria, Ill. Apparatus for molding articles from plastic substances. 1.618,864; Feb. 29.

Dean, William E., Edgewood, assignor to The Westing-Bouse Air Brake Company. Wilmerding, Pa. Circuit-De Araujo, Olavo, Mondon, England. Vehicle wheel. 1,638,621; Aug. 9.

Dearborn Company. The, (See Kochn, August W., assignor.)

signor.)

Dearborn, Morris L., San Diego, Calif. Camber-measuring means for vehicle wheels. 1,644,111; Oct. 4.

Dearborn, Moses S., Oakland, Calif. Miter box. 1,640,312; Aug. 23.

Dearborn, Moses S., Oakland, Calif. Grass-shears attachment. 1,647,085; Oct. 25.

Dearborn, Rapin W. (See Affel, H. A., and Dearborff.)

Dearborn, Rapin W. (See Affel, H. A., and Dearborff.)

Dearborn, Rapin W. (See Carpe, Allen, and Dearborff.)

Can Telephone and Thegraph Company. Carrier telegraph circuit. 1,615,345; Jan. 18.

Deardorff, Ralph W., Kensington, Calif., assignor to American Telephone and Telegraph Company. Multiplex telegraphy with magnitude discrimination. 1,614,546; Jan. 18.

Deardorff, Ralph W., Kensington, Calif., assignor to American Telephone and Telegraph Company. System of multifrequency circuits. 1,619,060; Mar. 1

De Armond, William C., and W. R. H. Watt, Philadelphila, 2a. Mixed-beverage-vending apparatus. 1,637,808;

Dearwood, William C., and W. R. H. Watt, Philadelphia, Pa. Coin-controlled device. 1638,682; Aug. 9.
De Armond, William C., and W. R. H. Watt, Philadelphia, Pa. Water-carbonating apparatus. 1,645,320; Oct. 11.
Dearsley, Irwin E., assignor to Walker Mannfecturing Company, Racine, Wis. Lifting Jack. 1,621,314; Mar. 18.
Dearwood, Joseph, Sault Sca. March, Mich. Cabinet iron-cast, William H. Richmond, Va. Metal-sheet fastener. 1,650,194; Nov. 22.
De Back, William, San Leandro, assignor to Sprague-Sells. Corporation, Hoopeston, III. Exhaust box. 1,638,760; Aug. 9.

1.550.194; Nov. 22.

De Back, William, San Leandro, assignor to Spragne-Sells Corporation, Hoopeston, Ill. Exhaust box. 1,638,760; Aug. 9.

De Bats, Jean H. L., East Orange, assignor to De Bats Agent H. Company. Hoomfield, N. J. Making alloys. 1,639,369; Aug. 43.

De Bats Metals Company. (See De Bats, Jean H. L., assignor.)

De Bellescize, Henri J. J. M. de R., Toulon, France. Wireless-telegraph station. 1,639,686; Aug. 23.

De Benederti, Francesco, Turin, Italy. Connecting member of the Company. (See Batz, Margaret C., assignor.)

De Beordesc, Chas. E., Company. (See Batz, Margaret C., assignor.)

De Boer, Jan H. (See Van Arkel, A. E., and De Boer.)

De Boer, Jan H., See Van Arkel, A. E., and De Boer.)

De Boer, Jan H., Elndhoven, Netherlands, assignor to General Electric Company. Incandescent electric lamp. 1,648,677; Nov. 8.

De Boer, Jun H., Elndhoven, Netherlands, assignor to General Electric Company. Incandescent electric lamp. 1,648,677; Nov. 8.

De Boer, Mudolph, Grand Rapids, Mich. Wall pocket or almilar article. Des. 72,882; June 21.

Corporation, Grand Rapids, Mich. Wall pocket or similar article. Des. 72,892; June 21.

De Boer, Rudolph, assignor to Grand Rapids Metalcraft Corporation, Grand Rapids, Mich. Wall pocket or similar article. Des. 73,288, Aug. 28.

De Boer, Rudolph, assignor to Grand Rapids Metalcraft Corporation, Grand Rapids, Mich. Wall pocket or similar article. Des. 73,288, Aug. 28.

De Boer, Rudolph, assignor to Grand Rapids Metalcraft Corporation, Grand Rapids, Mich. Wall pocket or similar article. Des. 73,288, Aug. 28.

De Boer, Rudolph, assignor to Grand Rapids Metalcraft Corporation, Grand Rapids, Mich. Wall pocket or similar article. Des. 73,288, Aug. 28.

De Boer, Brandescent Company and Company

Debry, Jean A. (See Debry, André J. and J. A.)
De Bus, Louis K., Cincinnati, Ohio. Measuring device.
1,648,936; Nov. 15.
Debus, Sander, Hastings, Nebr. Box fastener. 1,621,630;

Mar. 22.
cea-Disc Phonograph Company. (See Bodwell, P. D., and Bellows, assignors.)
ceal Products Company. (See De Ville, Walter, as-

Decal Products Company, The. (See Hughes, Robert S.,

Decal Products Company, The. (See Hughes, Robert S., assignor.)
De Camp, Alfred J. (See De Camp, Louis C. and A. J., De Camp, Louis C. and A. J., Molina, Colo. Measuring tage. 1,624,779; Apr. Color of the Company of the Camp, William H., State Control. 1,654,282; Dec. 27.
De Camp, William H., Van Wert, Ohio. Pie-plate scoop. 1,621,355; Mar. 15.
Decarie, Fell's L., Montreal, Quebec, Canada. Boller. 1,651,446; Dec. 6, Sergio, Habana. Cuba. Combination-lock-opening key. 1,635,392; Dec. 27.
Decatur Brick Mfg. Co. (See McCune, Herbert R., assignor.)

Decatur Pump Company et al. (See Borneman, Herman-

Decatur Pump Company et al. (See Borneman, Herman A. F., assiknor.)
Decatur Rotary Display Company. (See Bell, C. L., and Keesler, assignors.)
De Causse, Frank, New York, assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y. Automobile-radiator or the like. Des. 72.821; June 14.
De Cesare, Matrico, Newrik, N. J., assignor, by mesneassignments, to Yolees Incorporated. Sound-reproducing device. 1,642.767; Sept. 20.

De Cesare, Matteo, Newark, N. J., assignor, by messe assignments to Voices Incorporated. Voice-reproducing device. 1,642,768; Sept. 20.
De Cesare, Matteo, assignor by messe assignments, to Moral 1643,058 (Sept. 20.)
De Cew. J. 1642,496 (Sept. 20.)
De Cew

Decker, Frank A., New York, assignor to L. G. Pacent, Winfield, N. Y. Boring tool. 1.622.094; Mar. 22. Decker, Frank L., Kimble, Pa. Building form. 1,639,594; Aug. 16.

Decker, Frank L., Kimble, Pa. Building form. 1,639,594; Aug. 16.
Decker, Frank W., Santa Barbara, Calif. Spring wheel. 162,205; Mar. 29.
L0541.744; Sopt. 6.
Decker, Harold E., Allentown, Pa., assignor of one-half to J. G. Fleck, Bala, Fa. Drain device. 1,646,994; Oct. 25.
Decker, Hugh L. (See Adams. H. E. and Decker.)
Decker, Hugh L. sastemor to The W. G. Nagel Electric cating instrument. 1,633,947; Dec. 27.
Decker, William W., 15.
Decker, William W., 15.
Decker, Milliam W., 15.
De

De Osse, Charles F. Les Angeles, Calif. Boller-water-level control. 1.617.437; Feb. 15.

De Corse, Charles F. Los Angeles, Calif. Automatic pump attachment. 1.648.799; Nov. 8.

Decot, Theodore, Sauk City, Wis. Siren. 1,624.587; Apr. 12.

pump attachment. 1.648.799; Nov. 8.

Pecot, Theodore, Sauk City, Wis. Siren. 1,624.587;
Abr. 12

Pecoter and Company. Chremont. N. H. assignor to Claremachine. 1.634.731; July Company. Flock-cutting
machine. 1.634.731; July Company. Flock-cutting
machine. 1.634.731; July Company. Flock-cutting
machine. 1.634.731; July Company. Chremony. Chremony.

Peconomic Polix, Pendin, France. Fluid-tight array
switch. 1.636.501; July 19.

Bectrams. Polix, Pendin, France. Prash-button electric
switch. 1.636.501; July 19.

Be Curris. Frank, Medford, Mass. Permutation lock.
1.628.712; May 17.

Dedman, Joseph M. (See Frakes, Frank F., assignor.)

Dedoub, Joseph A., Oak Park, III. Expansible fastening.

Dedouch, Joseph A., Oak Park, III. Expansible fastening. 1013.639; Mar. 1.

Dee, Donald, et al. (See Ovenshire, Hattle R., assignor.)

Dee, Simon, Chicaro, III. Brake. 1.653.948; Dec. 27.

Dec. Thomas L., Chicago, III., assignor to Sullivan Machinery Company. Core drill. 1.627.235; May 3.

Deenhan, James, Hedondo Beach, Call. Combined door

Deemar, Henry V., assignor to J. H. Bruninga, trustee,
St. Louis, Mo. Heater, 1.627.235; May 3.

Deenhan, James, Redondo Beach, Call. Combined door

Peere & Company. (See Coultas, Wilbur J., assignor.)

Deere & Company. (See Coultas, Wilbur J., assignor.)

Deere & Company. (See Coultas, Wilbur J., assignor.)

Deere & Company. (See Brown, Theophilus, assignor.) Deere & Company. (See Coultas, Wilbur J., assignor.)

Deere & Company. (See Farrington, Frederick J., as-

signor.)
Deere & Company. (See Hairington, Franciscon, signor.)
Deere & Company. (See Livesay, Robert C., assignor.)
Deere & Company. (See Neighbour, Leonard B., signor.)

C. (See Paul, William L., assignor.)
(See Peterson, Julius, assignor.)
(See Silver, Walter H., assignor.)
(See Silvesky, Max, assignor.)
(See Strandlund, Carl G., assignor.)
(See Strandlund, C. G., and Brown, Deere and Company. Deere & Company,
assignors.)

eere & Company. (See Thomann, Frederick A., assignor.)

Deere, John, Tractor Company. (See McCray, Harold E., assignor.)
Deere, John, Tractor Company. (See Witry, Louis W., assignor.)

assignor.)
Deery, Daniel H., assignor to The H. & H. Lamp Co.,
Bridgeport, Conn. Indicator for automobile lamps.
1.652.707; Dec. 13.
Dees, Charles A., Pittsburgh, Pa. Washboard attachment.
1.650.696; Nov. 29.
De Fazi, Fulvio, assignor of one-half to L. De Paola,
Cleveland, Ohio. Sanitary noodle hand press.
1.653.134; Dec.
1.653.134; Dec.
De Festenburg, Arthur G. (See Lenhardt, Lawrence, assignor.)
De Festenburg, Arthur G. (See De Festenburg, Emile G.
and A. G.)

De Festenburg, Emile G. and A. G., New York, N. Y. Roller ball skate. 1.616.442; Feb. 8. Deffenbaugh, Chester S., Oroville, Calif. Tool. 1,651.258;

Defiance Sales Corporation. (See Oakley, Theophield D., assignor.)

Defiance Sales Corporation. (See Oakley, Theophield D., assignor.)

De Filippis, Raymond, Brooklyn, N. Y. Toy vehicle. 1,627,150; May 3.

De Florez, Lido, The Texas Company, New York, N. Y. Method and apparatus for the control of temperature. 1,650,887; Nov. 29.

De Florez, Luis, Pomfret, Conn., assignor, by mesne assistenments, to The Texas Company, New York, N. Y. Temperature control. 1,650,887; Nov. 29.

Temperature control. 1,650,881; Nov. 29.

De Ford, John W., Los Angeles, Calif. Attachment for storm pressing machines. 1,639,282; Aug. 9.

De Ford, John W., Los Angeles, Calif. Attachment for storm pressing machines. 1,639,232; Aug. 9.

De Ford, John W., Los Angeles, Calif. Attachment for storm pressing machines. 1,639,232; Aug. 9.

De Forest, Lee, assignor to De Forest Phonofilm Corporation, Jersey City, N. J. Recording sound. 1,618,641; Feb. 22.

De Forest, Lee, assignor to De Forest Phonofilm Corporation, Jersey City, N. J. Electrical sound-reproducing apparatus. 1,641,664; Sept. 6.

De Forest, Lee, assignor to De Forest Phonofilm Corporation, Jersey City, N. J. Electrical sound-reproducing apparatus. 1,641,664; Sept. 6.

De Forest, Lee, assignor to De Forest Phonofilm Corporation, Jersey City, N. Y. Telephone device, 1,642,363; De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Telephone device, 1,642,363; De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Telephone device, 1,642,363; De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Telephone device, 1,642,363; De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Telephone device, 1,642,363; De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Telephone device, 1,642,363; De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Telephone device, 1,642,363; De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Telephone device, 1,642,363; De Forest, Lee, Assignor to De Forest Phonofilm

Sept. 10.

De Forest, Lee, assignor to De Forest Phonofilm Corporation. New York. N. Y. Talking-moving-pleture equipment. 1683.165; Dec. 20.

De Forest, Lester C., Westfield. N. J., assignor to Hills Brothers Company, Inc. Date pitter. 1.622.309; Mar. 29.

De Forest Phonofilm Corporation. (See De Forest, Lee, assignor.)

De Forest Radio Company. (See Elenschuelder, John B.,

De Forest Radio Telephone & Telegraph Co. (See Dieges, Robert T. asskanr.) De Forest Radio Telephone & Telegraph Company. (See Gowen, Robert F. asskanr.) De Forest Radio Company. (See Taylor, Edward N., asskgnor.)

assignor.)

De Forest Radio Telephone & Telegraph Co. (See Hunter, F. L., fr., and Crowley, assignors.)

De France, Murrell R., Bellevu, Assignors.)

De Frances, Murrell R., Bellevu, Fry Comany, New York, N. Y. Making brake shoes. 1,615,573. Jan. 25.

De Franciscl, Emil. (See de Franciscl, Nicholas and E.)

De Franciscl, Nicholas and E., New York, N. Y. Cheese cutter. 1,551,918; Dec. 6.

De Frehn, Charles H., Johnstown, Pa. Chair. 1,650,697:

Nov. 29.

De Fries, Alfred, Cassel, Germany. Bolt-finishing ma-chine 1,615,861; Jan. 25. De Garkovenko, Whadmir. Vallauris, and M. Fichiera, Cannes, France. Cartridge-closing machine. 1,646,083; Oct. 18.

Walter, Fresno, Calif. Oil burner. 1,639.167; Degen, Wa Aug. 16.

Degener, Gustave O., Brooklyn, assignor to Royal Type-writer Company, Inc. New York, N. Y. Adding at-tachment for typewriting machines, 1,624,318; Apr. 12. Degener, Gustave O., Brooklyn, assignor to Royal Type-writer Company, Inc. New York, N. Y. Adding at-tachment for typewriting machines. 1,624,319; Apr. 12.

Degener, Gustave O., Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y. Adding attachment for typewriting machines. 1,633,242; June 21.

June 21.

De Graaf, Martin, (See Sailock, J. W., and De Graaf, J. C., and De Graef, Graaf, Martin, (See Sailock, J. W., and De Graaf, Oct. 11.

De Graaf, Antonius, Eindhoven, Netherlands, assignor to Genard, Antonius, Eindhoven, Netherlands, assignor to Graef, Graef,

July 26. Melvin, St. Louis, and W. C. Adams, University City, assignors to Wm. S. Barnickel & Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,641,804. Sept. 6. Guedalia, Mauricio M. A., Paris, France. Ornamenting glass and like transparent substances. 1,639,716;

glass and like transparent substances. 1,639,716; Aug. 23. egueldre, Fernand, Brussels, and Lievine Demaret, nee Degueldre, La Louviere, Belgium. Fastener. 1,629,779; Degueldre, La Louviere, Lescand May 24.
Deguire, Adelard.
and McDermid.)
De Haan, Paul A., Des Moines, Iowa. Shoe-string fastener. 1,629,684; May 24.
De Haes, Jerome, Chicago, Ill. Film-shifting mechanism. 1,622,580; May 10.
De Haven, Avery S. (See Fremon, J. A. and De Haven.)

tener. 1,623,684; May 24.

De Haes, Jerome, Chicago, Ill. Film-shifting mechanism. 1,628,580; May 10.

De Haven, Avery S. (See Fremon, J. A. and De Haven.)

De Haven, Avery S. (See Fremon, J. A. and De Haven.)

De Haven, Avery S. (See Fremon, J. A. and De Haven.)

De Haven, Avery S. (See Fremon, J. A. and De Haven.)

De Haven, Avery S. (See Fremon, J. C. Ratchet wrench. 1,646,365; Oct. 18.

Debelot, Chicago, A. A. A. Dearstus for dyeing keylong to the control of the

May 10.

Delster, Emil, Fort Wayne, Ind. Appuratus for concentrating materials such as coal. 1,644.112; Oct. 4.

Delster, Emil, Fort Wayne, Ind. Concentrating table. 1,644.113; Oct. 4.

Pelster Machine Company. (See Delster, William F. and E. assignors.)

and E. assignors.)

1,642.843; Sept. 20.

Delster, William F. and E., assignors to Delster Machine Company. Fort Wayne, Ind. Concentrating table. 1,642.843; Sept. 20.

Delster, William F. and E., assignors to Delster Machine Company. Fort Wayne, Ind. Concentrating table. 1,643.600; Sept. 20.

Nov. 8. Ernst, Berlin, Germany. Tire. 1,648,218; Nov. 8.

Deltrick, Frank, assignor to Laurens Glass Works, Laurens, S. C. Bottle. Des. 71,907, Jan. 25. Deitsch, Alan B., New York, N. Y. Traveling case. 1.614,108; Jan. 11. Deltsch, Haln B., assignor to Deltsch Brothers, New York, Deltsch Brothers, Deltsch Brothers, Deltsch Brothers, Deltsch Brothers, Deltsch Brothers, C. B. 25, 8677, Aug. 183 (2002). Deltsch Brothers, Deltsch

assignor.) De Jong, Hendrik, and W. Koning, Eindhoven, Netherlands, assignors to General Electric Company, Hook forming and inserting machine. 1,620,523; Mar. 8.

General Electric Company, Metherlands, assignor to General Electric Company. Wire spool and carrier. 1,637,037; July 26.

De Jong, Hendrik, assignor to Naamlooze Vennootschap Philips' Gloellampenfabrieken, Eindhoven, Netherlands, Machine for securing plate-shaped electrodes to carriers. 1,639,857; Aug. 23.

De Jong, Hendrik, Eindhoven, Netherlands, assignor to General Electric Company. Stem-making machine. 1,640,442. Aug. 30.
De Jouëtte, Albert, Nanterre, France. Clutch device. 1,642,042. Aug. 30.
De Jouëtte, Albert, Nanterre, France. Clutch device. 1,642,065 sept. 18.
De Journo, Breast, New York, N. Y., assignor, by meanedding apparatus for making articles of plastic material. 1,639,081; Aug. 16.
De Jur Products Co. (See Engstrom, Henry O., assignor.)
De Kalss. Isaac, Pittsburgh, Pa. Radio speaker stand. De Lur Products Co. (See Engstrom, Henry O., assignor.)
Delacommune, Charles E. E., Paris, France. Device for regulating the advance of a band with reference to a cinematographic apparatus controlling said band. 1,633,478; June 21.
De La Concha, Toman. New York, N. Y., assignor of one-tres. 1,650,688; Dec. 20.
Delage, Phileas. (See Roy, Joseph W., assignor.)
Delahanty, Harland K. (See Brown, Stewart, assignor.)
Delahanty, Harland K., et al. (See Wood, Joseph E., assignor.)
Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,408; Apr. 12.
Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,409; Apr. 12.
Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,409; Apr. 12.
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Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,409; Apr. 12.
Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,607; May 17.
Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,607; May 17.
Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,607; May 17.
Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,607; May 17.
Delaize, Paul C., New York, N. Y. Box or similar container. Des. 72,607; May 17.
Delaize, Paul C., New York, N. Y. Box Des. 71,782; Jan. 4.
Dela Lamara and appara

Oct. 25.

Oct. 25.

De Lambert, Léonce, Lyon, France, assignor of one-half to P. Zucco, San Francisco, Calif. Producing a hydraulic aluminous binding material together with an iron alloy. 1,628,872; May 17.

Delange, John H., Los Angeles, Calif. Mold board for the formation of wall slabs. 1,648,874; Nov. 8.

Delange, Auguste, Roben, France. Mud guard. 1,616,115; Peb. 1.

Delano, William H., Saugus, Calif. Sanitary straw-vending machine. 1,637,767; Aug. 2.
Delany, Charles M., assignor to Economy Tool Manufacturing Company, Green Bay, Wis. Tool holder. 1,632,408; Dec. 13.
Brooklyn, N. Y. Mixing valve. 1,624,479; Apr. 12.
Delany, Edward L., Brooklyn, N. Y. Flush-valve float. 1,629,571; May 24.
Delany, Edward L., assignor to Delany Realty Corporation. Brooklyn, N. Y. Flush-tanks. Delany, Edward L., assignor to Delany Realty Corporation. Brooklyn, N. Y. Flush-tank-operating lever. 1,653,799; Dec. 27.

Delaw, 1891, and L. assignor to Delany Realty Corpora-tion. Frooldyn, N. Y. Flush-tank-operating lever. 1,653,799; Dec. 27. Delany, James H. South Orange, N. J. Chuck. 1,617,672; Feb. 15. Delany, Realty Corporation. (See Delany, Edward Le-

Delany Real

e Lape, David E., Boston, Mass. Retting tank. 1,621,658; Mar. 22. e Lape, David E. Los Angeles. Calif. Apparatus for treating hydrocarbons and other materials. 1,652,563; Dec. 13.

Dec. 13.

Helas, Albert, Paris, France, assignor to Delas Condenser Corporation, New York, N. Y. Condenser, Corporation, Property of Condenser Corporation, New York, N. Y. Refrigerating machine. 1,636.294; July 19.

Delas Condenser Corporation. (See Delas, Albert, assignor.)

signor.)

De Lasik & Thropp Circular Woven Tire Company, The.

(See Moreland, Lester A., assignor.)

De Lasik & Thropp Circular Woven Tire Company, The.

(See Nevius, James R., assignor.)

De Lathauyer, Arthur, Flawinne, Belgium. Apparatus
for braking railway vehicles. 1,646,900; Oct. 25.

De la Torriente, Calixto, Habana, Cuba. Apparatus for
catching files. 1,632,276; June 14.

Delaurier, Vetal, Jordan, assignor of one-fourth to B. B.

Butts, Winner, S. Dak. Lister plow. 1,613,648;
Jan. 11.

Delaval-Crow, Thomas C., assignor to The New Departure Manufacturing Company, Bristol, Conn. Bearing. 1.643.382: Oct. 4. 1,643,982; Oct. 4. e Laval Separator Company, The. (See Allen, Samuel De Lavai Separator Company, The.

E., assignor.)

De Lavai Separator Company, The.

R. C., assignor.)

De Lavai Separator Company, The.

(See Boyd, Frederic R. C., assignor.) signor.) il Separator Company, The. (See Hall, Selden Laval assignor.) H., assignor.)
Laval Separator Company, The. (See Hapgood, Cyrus H., assignor.)
Laval Separator Company, The. (See Lindgren, Hans D., assignor.) O., assignor.)
De Lavai Steam Turbine Company, The. (See Birmana, Rudoiph, assignor.)
De Lavai Steam Turbine Company. (See Kennedy, Frank W., assignor.)

De Laval Steam Turbine Company. (See Waller, Carl R., Delayan, Frederic N., Pittsburgh, Pa. Dogging means for vehicle door latches. 1,615,829; Feb. 1. De La Vergne Machine Company. (See Kates, Edgar J., Delaware Chemical Engineering Company. (See du Pont, Francis I., assignor.) Delaware Punch Company of America. (See Lyons, Earle K., assignor.)
Delciello, Domenick, Mansfield, Ohio. Embroidery frame.
1,649,340; Nov. 15.
Delco-Light Company. (See Buvinger, G. A., and Warner, assignors.)
Delco-Light Company.
Delco-Light Company.
Delco-Light Company. (See Campbell, John G., assignor.) (See Cramer, Robert, assignor.) (See Hull, Harry B., assignor.) (See Jordan, Silas V., assignor.) (See Keilholtz, L. S., and Dickey, assignors.)
Delco-Light Company. (See Kettering, C. F., and Chryst, assignors.)
Delco-Light Company. (See Kettering, C. F., and Federle, assignors.)
Delco-Light Company. (See Kettering, Charles F., assignor.) Delco-Light Company. (See King, Jesse G., assignor.) (See Lee, Ralph L., assignor.) (See Starr, Frank F., assignor.) (See Stock, Anthony T., as-Delco-Light Company. Delco-Light Company. Delco-Light Company. signor.) elco-Light Company. (See Van Rennes, Cornelis, as-Delco-Light Company. (Delco-Remy Corporation. (See Warner, Clarence, assignor.) n. (See Berkdoll, Charles E., assignor.) Delco-Remy Corporation. (See Bradford, Zerbe C., assignor.) -Remy Corporation. (See Campbell, John G., as-Delco-Remy Corporation. (See Carter, John J., as-Delco-Remy Corporation. (See Chryst, W. A., and Hunt, assignors.) Delco-Remy Corporation. (See Chryst, William A., as-Delco-Remy Corporation. (See Critchfield, Robert M., as-Delco-Remy Corporation. (See Davis, Lewis H., as-Delco-Remy Corporation. (See Dewey, Fred G., assignor.)
Delco-Remy Corporation. (See Elsey, George W., assignor.) Delco-Remy Corporation. (See Embshoff, George F., assignor.) Delco-Remy Corporation. (See Emmert, Rodger J., assignor.) Delco-Remy Corporation. (See Godfrey, Edward R., assignor.)
Delco-Remy Corporation. (See Gomory, Albert B., assignor.)
Delco-Remy Corporation. (See Haas, Nelson R., assignor.)
Delco-Remy Corporation. (See Hardman, Frederick J., assignor.)
Delco-Remy Corporation. (See Hunt, J. H., and Wallace, assignors.)
Delco-Remy Corporation.
Delco-Remy Corporation. (See Hunt, John H., assignor.) (See Jones, R. G., and Zwiebel, Delco-Remy assignor.) Delco-Remy Corporation. (See Kennington, William O., Corporation. (See Kindl, Carl H., assignor.)
Delco-Remy Corporation. (See Kroeger, F. C., and Delco-Remy Con Corporation. (See Kroeger, Frederick C. Delco-Remy Corporation. (See Norviel, Harry E., assignor.) Delco-Remy Corporation. (See Riedel, Walter W., assignor.)

Delco-Remy Corporation.
assignor.) (See Schneider, William G., Delco-Remy Corporation. (See Whalen, James, assignor.)

Delco-Remy Corporation. (See Wilson, Charles E., as-Delco-Remy Corporation. (See Wilson, Charles E., assignor.)
Del Éau, John P., Los Angeles, Calif. Key case.
1,639,514 Nov. 15. Plainfield N. J., assignor to The
Claw. And De Leeuw Machine Company, New Britain,
Conn. Threading mechanism. 1,620,187; Apr. 26.
De Leeuw, Adolph L., Plainfield, N. J., assignor to The
Goss and De Leeuw Machine Company, New Britain,
Conn. Machine tool. 1,628,234; May 10.
De Leeuw, Adolph L., assignor to one-half to A. F., Nathan, New York, N. Y. Permutation switch. 1,632,708;
Dec. 13. Dec. 13.
Delehanty, Robert J., assignor to The American Multi-graph Company, Cleveland, Ohlo. Printing device. 1,642,016; Sept. 13.
De Lellis, Alfred, Providence, R. I. Dental kit. 1,649,814; Nov. 22.
De Lemme, Philip, New York, N. Y. Toy dog. Des. 79 991: 1101 5. Dell, Samuel M., & Co: (See alcalibation, respirator).
Deliagala, Sabato, Worcester, Mass. Reservoir pen.
1,629,483; May 24.
Deliagala, Samuel, Worcester, Mass. Spraying device.
1,614,777; Jan. 18.
Deller, George E., Covington, Ky. Fire shutter.
1,632,219; June 14.
Dellinger, John M. Lancaster, Pa. Handle for unbrellas.
1,643,376; Oct. 11.
Dellinger, John M., Lancaster, Pa., assignor to Follmer.
1,643,376; Oct. 11. Spraying device. Dellinger, John M., Lancaster, Pa., assignor to Follmer-Clogg & Company, New York, N. Y. Umbrella handle. 1,645,497; Oct. 11. Clogg & Company, New York, N. Y.

1.645.497 | Oct. 11.

Del Mar, Harry, New York, N. Y. Pipe-joint union.
1.615.536 | Jan. 25.

Del-Mar-Va Sales Company. (See Jefferson, Jerome D.,
assignor.)

Del Monte, Joseph L., et al. (See Hedrickson, Henry P., assignot.)

e Loach, Douglas D. (See Foss, C. C., and Le Loach.)

e Loach, George W., assignor to The Larkin Automotive Parts Company, Dayton, Ohio. Fitting for quick-detachable coupling. 1,623,097; Apr. 6,elohi, Nicholas J., Springfield, Ill. Dental flask. De Loach, Douglas De Loache, Georg motive Parts C quick-detachable elohi, Nicholas J., Springfield, Ill. Dental flask. 1,613,506; Jan. 4. elohay, J. C., et al. (See Ransdell, Clarence C., as-Del Deloney, J. assignors.) C. (See Harrison, Walter L. and C. W., De Long, Frederic T., assignor to Chicago Railway Equipment Company, Chicago, Ill. Safety support. 1,647,278; ov. 1. Long Hook and Eye Company, The. (See Bebel, De Lorg Hook and Eye Company, The. (See Bebel, Abraham, assignor).
DL Lorg, Wallee W., Appleton, Wis. Garage-door-opening the Company of th Delphos Mop Company, The. (See Barber, William J., as-Delphos Moy Company, Tute. (see Burder, william 3, assignor.)
Delburg Joné L. Buenos Aires, Argentina.
Delburg for pneumatic tires and the like. 1,642,104; Sept. 13.
Del Riccio, Lorenzo, New York, N. Y. Motion-picture exhibiting. 1,646,855; Oct. 25.
Delsasso, Leo P. R. F. Dengler, and E. R. Stauffacher, Los Angeles, Calif. Device for testing insulators cantum live with the property of the company of the comp

Mar. 8.

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Mar

Delwiche, Jean, New York, N. Y. Gas-neared Turnace, 1,650.498; Nov. 22.
Demand, Joseph, New York, N. Y., assignor, by mesue assignments, to All Clear Windshields, Inc., Boston, Mass. Windshield wiper, 1,623,308; Apr. 5.
Demarchi, Mario, Biella, Italy. Shield for use in the production of radioscopes or radiographs. 1,638,683; Aug. 9

production of radioscopes of radiographs. 1,050,000. Aug. 9.

De Mare, Douglas, assignor to Mohawk Corporation of Illinois, Chicago, Ill. Escutcheon plate for radio receiving sets. 71,827; Jan. 11.

Demarcst. Charles S., Ridgewood, N. J., assignor to fact the company. Telescope of the company. Telescope of the company. 1653,069; p. 100. Demarcst. Charles S., Ridgewood, N. J., and M. L. Almquist, Brooklyn, N. Y., assignors to American Telephone and Telegraph Company. Frequency-controlling system. 1,626,724; May 3.

Demarcst. Harry T., Wawnick, N. Y., Fruit scrubber and polisher. 1,631,925; June 7.

Demarcst. Rhomas W. Pittsburgh, Pa., assignor to The Company, Chicago, Ill. Valve. 1,632,220; June 1.

Okadee Company, Unicago, June 14. June 14. Lievine, née Degueldre, (See Degueldre, Fer-

Démarcé, Lievine, nec Déguente. (See Augusta)
nand, assignor.)
De Markus, Louis. (See Shields, P. W., and De Markus,
De Markus, Louis. (See Shields, P. W., and De Markus,
De Martin, C. (See Walder, John, assignor)
De Martin, Barthold, Clifton, assignor to De Mattia
Brothers, Inc., Garfield, N. J. Tire-building core.
1,631,855; June 7.
De Mattia Brothers, Inc. (See De Mattia, Barthold, assignor).

signor.) e Mattia Brothers, Inc. (See De Mattia, Peter, as-

signor.)

De Mattia, Peter, Passalc, assignor to De Mattia, Peter, assignor.)

De Mattia, Peter, Passalc, assignor to De Mattia Brothers, Inc., Garfeld, N. J. Tire-vulcantaing moid, 1,630,113; May 24.

Dembit, Isalor, New York, N. Y. Lamp shade. Dement, Isaac S., assignor to Printing Index Company, Dayton, Ohio. Registering device. 1637,606; Aug. 2.

Dayton, Ohio. Computing machine. 1,641,126; Aug. Dayton, Ohio. Computing machine. 1,641,126; Aug.

Dayton, Ohio. Computing machine. 1,641,126; Aug. 30.

Demers, Arrestid, Sherbrooke, Quebec, Canada. Billiard cue. rod. and like article, rack hanger and locker. 1,663,064; June 21.

1,633,064; June 21.

1,633,064; June 21.

1,633,064; June 21.

1,633,064; June 21.

1,643,645; June 21.

1,643,645; June 21.

1,643,645; June 21.

1,643,645; May 10.

1,642,645; May 10.

1,642,645; May 10.

1,642,645; Sept. 24.

1,643,679; Sept. 27.

1,643,679; Lune 1,643,670; June 1,643,670; June

Demmer, Many, Device for milling polygona.
June 7.
Demmer, George, Herndon, Kans. Butcher's gambrel.
1,624,320; Apr. 12.
Demmeric. Walter F. (See Wickenden, L., and

emming, William J., Lakewood, assignor to The American Multigraph Company, Cleveland, Ohio, Apparatus for removing printing strips from holders. 1,644,773;

Oct. 11. emnitz, Albert, Dresden, Germany, laying machine. 1,625,527; Apr. 19, Pneumatic soleDe Monte, Robert W., Jersey City, and T. E. Shea, Rutherford, N. J. assignors to Western Electric Company, Incorporated, New York, N. Y. Electrical wave filter, 1,654,071; Dec. 27.

De Montmollin, Gulliaume, and G. Bonhôte, assignors to Society of Chemical Industry in Basie, Basel, Switzerland. Stable diazo compound and making same, 1,629,906; May 24.

De Montmorency, Beresford B., Detroit, Mich. Coffee retainer for urns. 1,625,334 May 10.

retainer for urns. 1,625,334 May 10.

Ped Moos, Charles, Fort Lee, N. J., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-dimdeveloping machine. 1,631,476; June 7.

De Moos, Charles, Fort Lee, N. J., assignor to Bastman Kodak Company, Rochester, N. Y. Photographic-dimdeveloping machine. 1,631,476; June 7.

De Mott, Richard H., Tenaffy, N. J. Surgical device, 1,633,674; June 21.

Dempewolf, Carl A., Henderson, Ky. Planter. 1,627,017;

May 3.
Dempier, George P., Pittsburgh, Pa. Fluid-control valve. 1.636,839; July 26.
Dempsey, Irving L., Wilmington, Del. Game apparatus. 1.616,216; Feb. 1.
Dempsey, James B., and L. E. Burton, Johnston City, Ill. Corn popper. 1,624,049; Apr. 12.
Dempsey, Thomas, decased, Proctor, Minn; F. C. Burton, Johnston City, Ill. Corn popper. 1,624,049; Apr. 12.
Dempsey, William L. (See Shickman, A. J., Thum, and

hipsey, White Dempsey, bempsey, James B., Iowa City, Iowa. 1.621.659: Mar. 22.

Dempsey, James B., Iowa City, Iowa. Condenser. 1,621,653 Mar. 22.
Local Local Mar. 22.
Local Local Mar. 24.
Local Local Mar. 25.
Local Local Mar. 25.
Local Local Local Mar. 25.
Local Local Local Mar. 25.
Local Local

Demuta, Feter A., Colome, S. Dak. Brooder. 1,630,196; Nov. 22.

Denaro, James, Cambridge Mass. Automatic machine for making cup pastry. 1,615,739; Jan. 25.

Learner of the container for the cream. 1,637,556; Aug. 2.

Denault, Albert H., Sault Ste. Marie, Ontario, Canada. Incubator. 1,639,025; Aug. 16.

Den Besters, Gerrit, Holland, Mich. Safety hitch. 1,618,531; Feb. 22.

Den Neen, Albert W., assignor of one-half to C. L. Martin, St. Joseph, Mo. Refrigerator. 1,649,299; Nov. 15.

Dencka, Stephen, Hubbard, Saskatchewan, Canada. Dencenari, Jacob, Trenton, N. J. Pressing machine. 1,626,792; May 3.

Denger, Arthur, Davcuport, Iowa. Concrete form. 1,017,746; Feb. 15.

Dengler, Berjamin F. (Sce Delsasso. L. P., Dengler, Denjamin, Den F., Laurel, Miss. Gang saw or other saw guide. 1,614,188; Jan. 11.

Denham, Reginald I., Hampstead, London, England. Mounting vehicle wheels. 1,646,352; Oct. 18.

Denis, Albert P., Springfield, Mass. Towrope. 1,640,183; Denis, Charles A., et al. (See Dominguez, Manuel D. Denis, Albert P., Springfield, Mass.

Aug. 23. enis, Charles A., et al. (See Dominguez, Manuel D., Denis, Cha assignor. Denison, Adam B. (See Woods, G. H., Denison, and Wiley.)

Wiley.)
Denison, Charles P., Mazeppa, Minn. Road grader.
1.641,580; Sept. 6.
Denison, Frederick S., Minneapolis, Minn. Centrifugal
fuel burner. 1,627,690; May 10.
Denison, Frederick S., assignor to Minneapolis Heat Reguswitch. 1,620,506; Mar. 15.
Denison, Frederick S., assignor to Minneapolis Heat
Regulator Company, Minneapolis, Minn. Ignition-controlling means. 1,625,796; Apr. 26.
Denison, Frederick S., assignor to Minneapolis Heat
Regulator Company, Minneapolis, Minn. Centrifugal fluidmint of the company Minneapolis, Minn. Centrifugal fluidDenison, George W. (See Denison, Leonard L. and G.
W.)

Denison, George W., Bay Villiage, Ohio. Mechanism for progressing cars in kilns. 1,646,901; Oct. 25. Denison, Howard P., et al. (See Ruoff, Leroy R., as-

signor.)
Denison, Leonard L., Delaware, and G. W. Denison, Bay Village, Ohio; said G. W. Denison assignor to said Leonard L. Denison. Apparatus for producing brick.
Denison, Apparatus for producing brick.
Denison, Albert J., jr. (See Swangren, Edwin V., assignor).
Denivelle, Otto E., Pleasantville, N. Y. Combination doll and toy nursing bottle. 1,618,4845, Feb. 8.
Denker, Charles T., assignor of one-fifth to O. M. MacLaren, Chicago, Ill. Apparatus for heating street pavements. 1,616,611, Feb. 8.
Denker, Lander, Chicago, Ill. Apparatus for heating street pavements. 1,616,611, Feb. 8.
Signor.)

signor |

Deman, Earl W., Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Oil cup for ceiling fans. 1,643.807: Sept. 27. Deman, Rene E. (See Nichols, Leonard O., assignor.)

Denman, Rene E., Kansas City, Mo. Lingerie clasp.
1,619,242; Mar. 1.
Denmend, John W., assignor of one-half to W. A. Johnston, Akron, Ohlo. Pie-rolling machine. 1,628,828;
May 17.
Denmire, Haroid A., assignor to The General Tire and
fabric on the bias. 1,617,012; Feb. 8.
Denmire, Haroid A., assignor to The General Tire and
Rubber Company, Akron, Ohlo. Fabric-cutting machine.
1,617,013; Feb. 8.
Denmire, Haroid A., assignor to The General Tire &
Denmire, Haroid A., assignor to The General Tire and
Rubber Company, Akron, Ohlo. Tire-making machine.
1,617,705; Feb. 15.
Denmire, Haroid A., assignor to The General Tire and
Rubber Company, Akron, Ohlo. Apparatus for covering
tire beads. 1,621,239; Mar. 15.
Denmire, Haroid A., assignor to The General Tire and
Rubber Company, Akron, Ohlo. Bead-placing ring.
1,635,073; July 5.
Denmire, Haroid A., assignor to The General Tire and
Rubber Company, Akron, Ohlo. Apparatus for use
in the manufacture of pneumatic tires. 1,648,202;
Denmire, Haroid A., assignor to The General Tire and

Rubber Company, Akron, Ohio. Apparatus for use in the manufacture of pneumatic tires. 1,648,202; Sept. 20. Denmire, Harold A., assignor to The General Tire and Rubber Company, Akron, Ohio. Tire-building machine. 1,647,104; Oct. 25. Denmire, Harold A., assignor to The General Tire and Rubber Company, Akron, Ohio. Attachment for tire-Building Haroldines. 1,648,447; NY. The General Tire and Rubber Company, Akron, Ohio. Method and apparatus for applying fabric to tire-building cores. 1,648,642; Nov. 8.

Denmire, Haroid A., assignor to The General Tire and Rubber Company, Akron, Ohio, Method and apparatus for applying fabric to tire-building cores. 1,634,842; Nov. 8.

Denne, Mark T., London, England. Evening and grading machine. 1,651,588; Dec. 6.

Dennert, Francisco, assignor to F. Kuhn, Detroit, Mich. 1,651,688; Dec. 6.

Dennert, England. Statistics of P. Kuhn, Detroit, Mich. like. 1,648,165; Nov. 8.

Denney, Milo, Tipton, Mich. Strainer and dirt collector. 1,632,699; June 14.

Denney, William J., Malone, N. Y. Shade and curtain hanger. 1,643,661; Sept. 20.

Denning, James M., assignor to The Conneaut Shovel Combening, James M., assignor to The Conneaut Shovel Combening, Joseph M., Denver, Colo. Fence machine. 1,652,624; Apr. 19.

Dennis, Alfred A., Grand Rapids, Mich. Friction-drive mechanism. 1,629,452; May 17.

Dennis, Alfred A., Grand Rapids, Mich. Friction-drive mechanism. 1,629,452; May 17.

Dennis, Alfred A., Grand Rapids, Mich. Friction-drive mechanism. 1,629,452; May 17.

Dennis, Arrhur C., Piedmont, Calif. Placer machine. 1,632,691; June 14.

Dennis, Ernest V., New York Mills, N. Y. Sanitary. Dennis, Altred A., Grand Rapids, Mich. Treating veneers. Dennis, James H., Seattle, Wash. Horn button for steering posts. 1,627,678; May 10.

Dennis, Canney, M., Berton, Canada. Sliding metal window. 1,636,593; July 19.

Dennis, Kennet W. (See Broyn, Leeland F., assignor, John E., London, Ontario, Canada. Sliding metal window. 1,636,593; July 19.

Dennis, Kennet W. (See Broyn, Leeland F., assignor, Dennis, Oliver C., Wilmette, Ill. Cigar lighter. 1,020,627; May 13.

Dennis, Samuel K., assignor to International Harvester Company, Chicago, Ill. Eleyating and depressing mecha-

Company, Chicago, III. Implement hitch. 1,629,105, May 17.

Dennis, Samuel K., assignor to International Harvester Company, Chicago, III. Elevating and depressing mechanism for cultivators. 1,643,153; Sept. 20.

Dennis, Welcome C., Oakiand, Calif. Ship governor. 624,118; Apr. 12.

Attleboro, Mass. Vermifuge and inception of the control of the contro

Dennison Manufacturing Company. (See Flood, C. A., and Gibbs, assignors.)

Dennison, Robert L. New York, N. Y. Fluid-pressure regulator. 1,632,024; June 14.

Denniston, Urian R. Hammond, Ind. Hot-water heater. 1,650,612; Nov. 29.

To Plant Research, Inc., Yonkers, N. Y. Sprouting buds and plants. 1,628,035; May 10.

Denny, Harold D. (See Lynn, John W., assignor.)

De Nordiske Fabriker, De-No-Fa A/S. (See Holmboe, Carl F., assignor.)

De Nordiske Fabriker, De-No-Fa A/S. (See Holmboe, Carl F., Carlon, May 10.

Denser, Charles, New Brighton, Pa. Audible alarm. 1,633,374; June 21.

Dent Hardware Company, The. (See Schrader, Thomas

Deht Hardware Company, the Green Sasgnor.)

Dent, Hezekiah. Gee Hawley. Thomas W.)

Dent, Leonard M. E., and A. Mackenzie, London, and J. White. Sunningdale, England. Golf tee. 1,623,782; Apr. 5.

Dentists' Supply Company, The. (See Off, Edward P., assignor.)

Dentists' Supply Company, The. (See Sanders, Joseph

Dentists' Supply Company,

A, assignor.)
Dentler, Arnold E., Chicago, Ill., assignor, by mesue assignments, to W. H. Miner, Inc. Friction shock absorbing mechanism, 1,820,634; Mar. 16.
Denton, James T., Danbury, Conn. Wool-pulling device 1,653,090; Dec. 20.
Dentzel, William H. (See Strickler, William H., as-

signor.)
Denver Ice & Cold'Storage Company. (See Kofford, Earl
J., assignor.)
Conver Rock Drill Manufacturing Company. (See
Gustafson, Halmer C., assignor.)
Gustafson, Halmer C., assignor.)
Gustafson, Halmer C., assignor.)
Company, The.
Katterfold, August H., assignor.)
Denver Rock Drill Mfg. Co., The. (See Naismith, William G., assignor.)
Denver Rock Drill Manufacturing Company, The. (See
Nell, Gustave M., assignor.)
Denver Rock Drill Manufacturing Company, The. (See
Nelson, Paul A., assignor.) Nelson, Paul A., assignor.) Denver Rock Drill Mfg. Co., The. (See Skaer, Arthur H.,

aggignor.)

See Took Drill Manufacturing Company, The. (See Skaer, A. H., and Clark, assignors.)

Denver Rock Drill Manufacturing Company, The. (See Skaer, A. H., and Downing, assignors.)

Denyes, Harry M., and W. A. Kull, Saginaw, assignors to General Motors Corporation, Detroit, Mich. Steering genr. 1,627,839; May 10.

De Omacta, Harold, assignor to Winchester Repeating Company, New Haven, Conn. Dry cell.

ing gear. 1,627,839; May 10.

De Olanetal, Harold, assignor to Winchester Repeating Arms Company, New Haven, Conn. Dry cell. 1,623,719; Apr. 3.

Arms Company, New Haven, Conn. Dry cell. 1,653,800; Dec. 27.

De Olanetal, Harold, assignor to Winchester Repeating Arms Company, New Haven, Conn. Dry cell. 1,653,801; Dec. 27.

De Olanetal, Harold, assignor to Winchester Repeating Arms Company, New Haven, Conn. Dry cell. 1,653,801; Dec. 27.

De Pollow, Stephen, Detroit, Mich. Hood fastener. De Pamphilis, Gennaro, New York, N. Y. Wrist paste container and distributor. 1,632,890; June 21.

De Paningua, Isabel. (See Neveu, Hippolyte, assignor.) De Paoli, Bruno O. A., Palisade, N. J. Terrazzo flooring. 1,633,653; July 5.

De Paningua, See Baker, Otis M. C., assignor.) De Paoli, Bruno C. A., Palisade, N. J. Terrazzo flooring. 1,653,653; July 5.

De Paole, Bernard J., New York, N. Y. Badge or similar article. Des. 72,764; May 31.

De Pavola, Louis. (See De Vazi, Fulvio, assignor.) Dependable Auto Parts Company. (See Marsden, George, assignor.) Dependable Auto Parts Company. (See Marsden, George, assignor.)

assignor.)

assignor.)
De Penning, John C., Portland, Oreg. Forming strips.
1,614,720; Jan. 18.
De Penning, John C., Portland, Oreg. Sanding machine.
1,639,216; Aug. 16.
De Penning, John C., assignor to Central Door and Lumber Company, Portland, Oreg. Saw. 1,635,465; De Penning, John C., assignor to Central Door and Lumber.

De Penning, John C., assignor to Central Door and Lumber Company, Portland, Oreg.

July 12.

De Penning, John C., assignor to Central Door and Lumber Company, Portland, Oreg. Wooden panel door. 1.635.466; July 12.

De Penning, John C., assignor to Central Door and Lumber Company, Portland, Oreg. Method of patching. 1.639.082; Aug. 16.

De Penning, John C., assignor to Central Door and Lumber Company, Portland, Oreg. Panel clamp. 1,639.083; Aug. 16.

De Penning, John C., assignor to Central Door and Lumber Company, Portland, Oreg. Making wooden doors. 1.645.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.645.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.645.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.645.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.645.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.650.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.650.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.650.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.650.692; Oct. 18.

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Logic Company, Portland, Oreg. Making wooden doors. 1.650.692; Oct. 18.

Logic Company, Portland, Oreg. Making wooden doors. 1.650.692; Oct. 18.

Logic Company, Por

Deppe, William P. (See Parsons, C. E., and Stevenson, assignors.)
Deppermann, Hermann, Nowawes, near Potsdam, Germany, Support and brake for bobbins of spinning machines. 1,630,610; Mny 31.
De Pries, John W., McCoy, Oreg. Oil filter. 1,628,955; May 17.
Depto, Paul B., Montville, N. J. Riveting tool. 1,652,770; Dec. 13.

Depue, Roy, Milford, Iowa. Barber's dispensing bottle. 1.637,557; Aug. 2. De Puy Manufacturing Company. (See Foulke, Roy D.,

pe ruy Manufacturing Company. (See Foassignor.)
Dequer, John H., Los Angeles, Calif. E
therapeutic-compress-heating appliance.

Apr. 12. Electromagnetic

De Ram, Georges H. F., Boulogue-sur-Seine, France.
Universal joint for shafts. 1,625,419; Apr. 18.
De Ram, Georges H. E., Boulogue-sur-Seine, France.
Suspension of automobiles and other vehicles.
1,626,188; Apr. 26.
De Ram, Georges H. E., Boulogne, France. Connecting
rod for the suspension of vehicles. 1,047,438; Nov. 1.
Derby, Frank H., assignor to Erle Foundry Company,
Drie, Pa. Power hammer. 1,620,252; Mar. 8.
Derby, John H., New York, assignor of one-half to H. D.
Spencer, White Plains, N. Y., Valve. 1,616,742; Feb. 8.
Derby, William V. (See Goobel, G., and Derby.)
De Remmer, Frank C., Brüggeoft, Conn., assignor to
July 26.
De Remmer, Frank C., Brüggeoft, Conn., assignor to
July 26.
De Remmer, Blackford Company.

July 26.

De Remer Blatchford Company. (See May, Maxwell F., assignor.)

Derk, Joseph, assignor to The Derk Manufacturing Company, Philadelphia, Pa. Valance for window draperies.

Des., 71,783, Jan. 4. The Derk Manufacturing Company, Philadelphia, Pa. Valance for window draperies or similar article. Des. 71,359; Feb. 8.

Derk, Joseph, assignor to The Derk Manufacturing Company, Philadelphia, Pa. Table scarf. Des. 72,250;

Mar. 22.

Derk, Joseph, assignor to The Derk Manufacturing Company, Philadelphia, Pa. Table scarf. Des. 72,549;

Derk, Joseph, assignor to The Derk Manufacturing Company, Philadelphia, Pa. Table scarf. Des. 72,549;

Derk, Joseph, assignor to The Derk Manufacturing Company, Philadelphia, Pa. Table scarf.

Joseph, assignor to The Derk Manufacturing Com-y, Philadelphia, Pa. Pillow top. Des. 72,992; erg, Joseph, assignor to The Derk Manufacturing Com-pany, Philadelphia, Pa. Pillow top. Des. 72,992; July 5. erk, Joseph, assignor to The Derk Manufacturing Com-pany, Philadelphia, Pa. Table scarf. Des. 72,993; July 5.

July 5.

Derk, Joseph, Philadelphia, Pa., assignor to The Derk Manufacturing Company, Doylestown, Pa. Table cover. Des. 73,644; Oct. 18.

Derk, Joseph, Philadelphia, assignor to The Derk Manufacturing Company, Doylestown, Pa. Pillow cover or similar article. Des. 73,740; Nov. 1.

Derk, Joseph, Philadelphia, assignor to The Derk Manufacturing Company, Doylestown, Pa. Table scart. Des. 73,718; Nov. 8.

Derk, Joseph, Philadelphia, assignor to The Derk Manufacturing Company, Doylestown, Pa. Table scart. Des. 73,719; Nov. 8.

Derk, Joseph, Philadelphia, assignor to The Derk Manufacturing Company, Doylestown, Pa. Table scart. Des. 73,780; Nov. 8.

Derk, Joseph, Philadelphia, assignor to The Derk Manufacturing Company, Doylestown. Pa. Fillow cover or similar article. Des. 73,970; Nov. 29.

Derk Manufacturing Company, The. (See Derk, Joseph. assignor.)

assignor.) Derleth, Charles P., Chicago, Ill., assignor, by mesne assignments, to The Celite Company. Disposal of sewage. 1,617,014; Feb. 8.

Beroche, Joseph W., Sanford, Me. Power-transmiting mechanism. 1,639,260; Aug. 16.

De Roelm, Clarence L., Waterville, Me. Indicator for automobile radiators. 1,622,095; Mar. 22.

De Roo, William C., assignor to The Dreses Machine Tool Company, Cincinnati, Ohlo. Friction clutch.

automobile radiators. 1,622,095; Mar. 22.
De Roo, William C., assignor to The Dreses Machine
Tool Company, Cincinnati, Ohio. Friction clutch.
De Roo, William C., and J. E. Larsh, assignors to The
Dreses Machine Tool Co., Cincinnati, Ohio. Variablespeed mechanism. 1,647,087; Oct. 25.
De Roode, Trimble, New York, N. Y. Car. 1,635,467;
July 12.

Car. 1,635,467;

July 12.

De Roos, Milton J., New York, N. Y. Electrical cooking apparatus. 1,628,310; May 10.

De Roos, Ronald M., San Francisco, Calif. Hand lift De Ross, Ronald M., San Francisco, Calif. Hand lift De Ross, Steve, Brooklyn, N. Y. Window-cleaning device. 1,633,479; June 21.

De Roysancour, Otto G. J. S., Delft, Netherlands. Twisting device. 1,613,519; Feb. 22.

Derr, Ralph B., Flushing, assignor to General Chemical Calif. Aug. 20.

New York, N. Y. Fungicide. 1,635,689; Aug. 20.

Aug. 9.

Lefek, John P. Carmine, Tex. Plowing device. Local Annual Annual Cardial Annual Cardial Annual Cardial Annual Cardial Cardial Annual Cardial Cardia Cardial C

Derry, Jasper, Medford, assignor to A. Terkelsen, Boston, Mass, Strip-edge folder. 1,650,198; Nov. 22. Derry, Jasper, Medford, assignor to A. Terkelsen, Boston, Mass. Work supporting and rotating means for wrapping machines. 1,650,199; Nov. 25.

Derujinsky, Gleb W., assignor to Sterling Bronze Company, New York, N. Y. Emblem for automobile hoods and radiators. Des. 73.161; Aug. 2.
Derus, John, Bast St. Louis, III. Awning-roller center Derus, John, Bast St. Louis, III. Awning-roller center Derus, John, Bast St. Louis, III. Awning-roller center Description of the Stamanca, Marquis, Madrid, Spain, assignor to Societe Electromecanique d'Apparelliage pour l'Essence, Bois-Colombes, France. Unleakable and uninflammable gasoline tank. 1,616,116; Feb. 1.
Des Allimes, Carlos, Jerez de la Frontera, Spain. Sporting cartridge. 1,624,436; Apr. 1.
Des Aulies, Charles A. H., Westbury, assignor to American Charles, A. H., Westbury, assignor to American Charles, P. L., Englewood, N. J. Index rack. 1,643,547; Sept. 27.
De Saussure, William P., jr., Englewood, N. J. Index rack. 1,650,850; Nov. 29.
Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Pocket-build-1,619,102; Mar. 1.
Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Fabric-feeding device for bead wire-covering machines. 1,624,544; Desautels, Charles H. H., Montreal, Quebec, Canada.

Desbarats, Charles H. H., Montreal, Quebec, Canada. Advertising medium, 1,023,223; Mar. 22.
D'Escayrac, Bernard, assignor to Sueriain Perfumery Corporation of New York, New York, N. Compact case. Des. 72,700; May 24.
Deschamps, Louis, Le Havre, France. Sporting shoe.

Corporation of New York, New York, N. Y. Compact case, Des. 72.700; May 24.
Deschamps, Louis, Le Havre, France. Sporting shoe, 1,634,611; July 5.
Deschenes, Adelard G., Lisbon, Me., assignor of one-half to E. A. Brunelle, Somersworth, N. H. Machine for frying peanuts and the like. 1,625.797; Apr. 26.
Desha, Ovville U., assignor of one-fifth to The Desha Typelex Trust Estate, Fore. (See Desha, Ovville U., assignor.)

Design Laboratories, Incorporated. (See Wilson, Edwin

Design Laboratories, Incorporated. (See Wilson, Edwin B., assignor.)
Design Laboratories, Incorporated. (See Wilson, E. B., and Spencer, assignors.)
Des Jardins, Clarence B. (See Trout, W. M., and Des

Jardins, Desiauriers, Albert J., St. Paul, Minn. Milk-can cover. 1.653,261; Dec. 20. Desmond, James J., South Norwalk, Conn. Hat. 1.626,272; Apr. 26. Swissvale, assignor of one-half to C. M. Clarke, Pittsburgh. Automobile parking decreases of the Conference of the

signor.)

Desoutter, Charles, London, England. Beading and the like. 1,632,277; June 14, Despard, Victor R., assignor to McGill Manufacturing Company, Valparaiso, Ind. Insulated mounting for electrical contacts. 1,632,005; June 2007.

De Sperati, Mariano, Tutin, Italy, assignor to Argento-collographic printing plate and producing the same. 1,625,714; Apr. 1019.

DESpujols, Robert L. La Varenne St. Hilaire, France. Böller. 1.647,960; Nov. 1. Des Rosiers, John A., Toronto, Ontario, Canada. Signal. 1.640,266; Aug. 23. Des Rosiers, John B., assignor to Des Rosiers Patents Company, Inc., Providence, R. I. Transmission tool. 1.614,426; Jan. 11. Des Rosiers Fatents Company. (See Des Rosiers, John B., assignor.)

B, assignor.)

lessem, Elwood C. (See Schroyer, C, T., and Dessem.)

lessetfani, Tully, assignor to Liquid Carbonic Company, Chicago, Ill. Cooler cabinet for soda fountains.

1.651,782; Dec. 6.

les Stefani, Tully, assignor to Liquid Carbonic Company, Chicago, Ill. Cooler cabinet for soda fountains.

1.651,873; Dec. 6.

lesster, William E., Newark, assignor to U. S. Tool Co.

Inc. East Orango, N. J. Safety lighter for gas stoves.

le Stubner, Emile, New York, N. Y. Filter. 1,620,083;

Mar. 8.

Mar. 8.

De Suarez, Laura M. (See Marino, Francesco, assignor.)

De Sudrez, Laura M., Brooklyn, N. Y. Shoe for rheumatism. 1,616,254: Feb.

Dethier, Joseph. (See Linon, I., and Dethler.)

Detmer, Ralph G., assignor to The American Frog &
Switch Company, Hamilton, Ohio. Switch-point protector. 1,629.817; May 24.

Detmers, Fred E. Los Angeles, Calif. Electric adults

signul. 1,522.862; Mar. 29. Electrokenisk Industri of

Det Norske Aktieselskah for Elektrokenisk Industri of

Norway. (See Westly, Jens, assignor.)

Det Norske Aktieselskah for Elektrokenisk Industri of

Norway. (See Westly, Jens, assignor.)

Det Norske Aktieselskah for Elektrokenisk Industrie.

(See Söderberg, Carl W., assignor.)

158 De Trairun, Martin K., London, England, and H. Jüsternitz, Vienna, Austria. Process and apparatus for improving the efficiency of internal-combustion engines. 1.614,234; Jan. 11. Detrick, M. H., Company. (See Hosbein, L. H., and Foltz, assignors) (oppony. (See Stevens, N. D., and Hosbein, assignors). Detroit Belt Lacer Co. (See Knott, Frank W., assignor.) Detroit Cord Maunifacturing Company. (See Emery, Earle A., assignor.) Detroit Cord Maunifacturing Company. (See Kerr, Robert M., assignor.) Ostroit Constant Manufacturing Company. (See Watson, Archibald S., assignor.)
Detroit Hoist and Machine Company. (See Watson, Archibald S., assignor.)
Detroit Insulated Wire Company. (See Hunter, Joseph H., assignor.) H., assignor.) Detroit Lubricator Company. (See Duffield, George B., assignor.)
Detroit Lubricator Company. (See Lanning, John G., assignor.)
Detroit Specialty Products Corporation. (See Ross, Rufus R., assignor.)
Detroit Steel Products Company. (See Barclay, G. Ivar, assignor.) Detroit Steel Products Company. (See Barclay, Gustaf I., assignor.) Detroit Steel Products Company. (See Franzen, Tore, assignor.) Detroit Stoker Company. (See Beers, Royce L., assignor.) Detroit Stoker Company. (See Trotter, Walter F., assignor.)
Detroit Trailer Company. (See Hartwick, Ernest F., assignor.) Detroit Vapor Stove Company, The. (See Sherman, Alvin

Detroit Vapor Stove Company, Ane.

G. assignor.)

Detroyes, Theodore, Villeneuve-sur-Yonne, France. Securing leather disks to the ends of billiard cues.

1,630,417; May 31.

Det Tekniske Forsgaktiesskab. (See Goldschmidt, Rudoif, assignor.)

Dettner, George W., San Francisco, Calif. Rule miter and cut-off. 1,613,087; Jan. 4.

Detwiler, Forest V., Philadelphia, Pa. Broller. 1,614,661; Jan. 18.

Detveller, Forest V., Philadelphla, Pa. Broiler, 1,612,001, Jan. 18.

Jan. 18.

Jan. 18.

Detwiler, Forest V., Pottstown, Pa. Fireless cooker. 1,652,300; Dec. 13.

Deubel, Karl, Newark, N. J. Beautifying set for ladies' hand bags. 1,652,771; Dec. 13.

Deubener, Walter H. (See Sandin, David A., assignor.) Deutecher, Eugene G., Everland, assignor to The Universal Companion of Compa

Haehnel.)

Deutsch, Leo, and F. A. Pfeifer, Springfield, Ohio; said
Pfeifer assignor to said Deutsch. Apparatus for cleaning containers and the like. 1,625,115; July 5.

Deutsch, Walther, Frankfort-on-the-Main, Germany, assignor to International Precipitation Company, Los
Angeles, Calif. Insulator for high-tension electric current. 1,654,212; Dec. 274 Vertriobs-Geegleschaft m. b.
He Maschitentein, Edmund, assignor.)
Deutsche Post- und Gisenbuln-Verkehrswesen Aktiengesellschaft (Dapag-Efubag). (See Ramdor, Leopold, assignor.)

r.) e Werke Aktiengesellschaft. (See Altwickler, Deutsche

Carl, assignor.)

Carl, assignor, Deutsche Wolenwaren Manufaktur Aktiengesellschaft. (See Rossmann, Rudolf, assignor,) Deutschmann, Walter, assignor in Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, Artificial line. 1.647,985; Nov. 8. mayir Artificial line. 1.647,985; Nov. 9. mayir Artificial line. 1.647,985; Nov. 9. mayir Marien, Devary, Sturgle, Betherville, Iowa, Freel-supply means for internal-combustion engines. 1,613,788; Jau. 11. Devaud, Albert J., Schenectady, N. Y., assignor to General Electric Company. Turbine nozzie diaphragm. Biectric Marie, N. A., Paris, France. The for vehicle wheels. 1,619,812; Mar. 8. Devens, H. F., et al. (See Carpenter, Charles U., assignor).

Devens H. F., et al. (See Carpenter, Charles U., as-signor.)
Deverall, Charles N., Buffalo, assignor to The Rudolph
Wurlitzer Manufacturing Company, North Tonawanda,
N. Y. Combination stop mechanism for organs.
1,621,973; Mar. 22.
Deverall, Charles N., Buffalo, assignor to Rudolph Wurlitzer Manufacturing Company, North Tonawanda.
N. Y. Contact block for electric organs and the like.
1,623,085; Apr. 5.
Deverenux, 1,111am C., Detroit, Mich. Door latch.
1,629,614; May 24.
Deverenux, William C., Detroit, Mich. Door latch.
1,639,400; Aug. 16.

Devereaux, William C., Detroit, Mich. Rotary bolt and striker plate for automobile door latches. 1,639,401; Devereaux, William C., Detroit, Mich. Door-lock construction. 1,643,764; Sept. 27.
Devereaux, William C., Detroit, Mich. Door latch. 1,644,240; Oct. 4.
Devereaux, William C., Detroit, Mich. Lock construction. 1,652,660; Dec. 13.
Devers, Philip K. (See Berry, E. R., and Devers, Devers, Philip K. (See Berry, E. R., and Devers, Devers, Philip K., Lynn, Mass., assignor to General Electroit Michael Company. Electrical discharge device. 1,640,443; Deviatkoff, Aready. San Francisco. Calf. The Act.

Aug. 30.

Deviatkoff, Arcady, San Francisco, Calif. Telephone relay. 1,640,267; Aug. 23.

Devices Corporation of New Jersey. (See Boetther, Jacob H. L., assignor.)

Devigny, Michel, Paris, rrance. Manufacture of cut matrices adapted for the production of photographic surfaces comprising refracting elements. 1,026,134;

Apr. 26.

Apr. 26. Vilbiss, John M., Modesto, Calif. Wrench. 1,652,977; Dec. 13. (See Bailey, Dec. 13. e Vilbiss Manufacturing Company, The. (See Bailey, De

Dec. 13.

De Vilbiss Manufacturing Company, The. (See Bailey, Frank A., assignor.)

De Vilbiss Manufacturing Company, The. (See Gradolph, W. R., and Mueller, assignors.)

De Villos Manufacturing Company, The. (See Gradolph, W. R., and Mueller, assignors.)

De Ville, Stat Liverpool, Dito. Plate or similar article. Dec. 73,072; July 19.

De Ville, Walter, assignor to East Liverpool Potteries Company, East Liverpool, Ohio. Plate or similar article. Dec. 73,162; July 2.

Devine, Bullet Liverpool, Ohio. Plate or similar article. Dec. 73,162; July 2.

Devine, Edward P., Indianapoli, Ditial Corporation, New York, N. Y. Lens-grinding machine. 1,624,683; Apr. 12.

Devine, Joseph P., Buffalo, N. Y. Vaccuum pump and compressor for milking machines. 1,643,296; Sept. 27.

Devine, William P., assignor to H. K. Halkman, Boston. Mass. Manufacturing compressed spectacle-frame blanks. 1,649,516, Nov. 15.

Distribution bucket for concrete pavers. 1,614,980; Jan. 18.

De Vivo, Aniello, Bayonne, N. J. Razor hone. 1,617,015; Feb. 8.

De Vivo, Aniello, Bayonne, N. J. Razor hone. 1,617,015; Feb. 8.

De Vleeschouwer, Camille, Amsterdam, Netherlands. Automatic door-latching device. 1,646,688; Oct. 25.
Devlin, Bertha T., administratrix. (See Devlin, John P.)
Devlin, Born P., deceased, Albany; B. T. Devlin, administratrix, assignor of one-half to A. Polakoff, Albany, N. Y. Bathing cap. 1,648,608; Nov. 8.
Delylin, Elizabeth, assignor of one-half of the property o

signor.)
De Vry, Herman A., Chicago, Ill. Film spool. 1,620,605;
Mar. 8.

Mar. 8.

De Vry, Herman A., assignor to The De Vry Corporation, Chicago, Ill. Film spool. Rel6,762; Oct. 4.

De Waart, Adrianus C., The Hague, Netherlands. Stamping or printing device, 1,652,709; Dec. 13.

De Wald, Daniel, Rawlins, Wyo. Retractable vehicle runner, 1,627,151; May 8.

Dewald, Edward A., Massillon, Ohlo. Jar closure. 1,613,383; Jan. 4.

Dewald, Edward A., Massillon, Ohlo. assignor to The Griscom-Russell Company. New York, N. Y. Vehicle dumping mechanism. 1,630,357; Jay Standard, Chicago, Chicago,

De Wana. Phoenix, Sept. 20

Sept. 20.

De Wallace, Harry, Syracuse, N. Y. Flush-valve-operating mechanism. 1,647,088; Oct. 25.

September 1,647,088; Oct. 25.

September 2,647,088; Oct. 25.

Reid,723; Aug. 30.

Dewandre, Albert, assignor to Societe Anonyme Servo-Froin Dewandre, Liege, Belgium. Power brake. Reid,6724; Aug. 30.

De Waters, Enos A., Flint, assignor to General Motors Corporation, Detroit, Mich. Transmission lock for motor vehicles. 1,619,972; Mar. 8. Dewend, William D., assignor to Oliver Chilled Plow Works, South Bend, Ind. Disk harrow. 1,619,857; Mar. 8. Dewey and Almy Chemical Company. (See Dewey, Bradley, assignor.) Dewey and Almy Chemical Company. (See Dewey, Br., and Miller, assignors.) Dewey & Almy Chemical Company. (See Dewey, Br., and Miller, assignors.) Dewey & Almy Chemical Company. (See Dewey, Br., and Miller, Bradley, Cambridge, Mass., Colloidal adhesive composition. 1,627,278; May 3. Dewey, Bradley, Cambridge, Mass., and T. T. Miller, Orange, N. J., assignors to Dewey & Almy Chemical Company, Cambridge, Mass., Apparatus for applying Lining material to covers. 1,623,529; Apr. 5. 1,618,327; Feb. 22. Dewey, Clarence L., Elkhart, Ind. Bridging table. 1,635,574; June 28. Dewey, Clarence L., Elkhart, Ind. Rod and reel. 1,643,567; Aug. 30. Michigan City, Ind., assignor to Dewey, Elvira M., Junction City, Kans. Combination garment. 1,648,569; Nov. 8. Dewey, Fred G., Anderson, Ind., assignor to International Harvester Company, Ind., assignor to International Harvester Company, Ind., assignor to Dewey, Frederick L., Canton, Ill., assignor to International Harvester Company, Ind., Canton, Dayton, Ohio. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewey, July 26. Dewey, Haywood G. (See Jones, J. G., and Dewe

Oct. 18.

Dewolfine, Emile, Toulouse, France. Construction of aeroplane wings. 1,636,902; July 26.

Devadle Hosiery Mills. (See Schulz, Albert E., assignor.) Devadle Hosiery Mills. (See Schulz, Albert E., assignor.) Device, Edward R., Goshen, N. Y. Tire fap. 1,464,391; Oct. 18.

Device, Edward R., Goshen, N. Y. Making compound fabrics. 1,630,266; Nov. 22.

Device, Edward R., Goshen, N. Y. Making compound fabrics. 1,630,266; Nov. 22.

Signor, Miller Company. (See Christophel, Carl E., assignor, Signor, Miller Company.)

Signor.)

Dexter Folder Company. (See Kust, Edward R., assignor.)

Dexter Folder Company. (See Kust, Edward R., assignor.)

Dexter Folder Company. (See Machen. N. Y. Paper-feeding
machine. 1,282,125; May 10.

Dexter, Wallace J. (See Macheth. C., and Dexter.)

De Ybarrondo, Vincent C., Los Angeles, Calif. Apparatus for handling motion-picture films. 1,629,097;

May 17.

May 17.

De Ybarrondo, Vinceat C., Los Angeles, Calif. Pneumatic pulley for motion-picture films. 1.629,154; May 17.

De Ybarrondo, Vincent C., Los Angeles, Calif. Motion-picture-film-developing machine. 1.655,451; Dec. 20.

Dev., Gibert S. (See Clement, R., and Dey.)

Dev. Gibert S. (See Clement, R., and Dey.)

Dev. Gibert S. (See Clement, R.)

Dev. Gibert S. (See Clement, R.)

Dev. Grand Company, Inc. Optical test chart. 1.625,076; Apr. 19.

Dev. Erwin G., Newport, Ky., and H. F. Haverbusch, Clincinnati, Ohio. Device for use with routing mills. 20.

Dev. Grand R. (See Dean, Dolliver M., assignor).

De Young, Palmer L., Greer, S. C. Grave monument. 1.643,154; Sept. 20.

Dezendorf, Richard L., Richmond Hill, N. Y. Meter and Indicating means therefor. 1.645,231; Oct. 11.

Standard Company, Camden, N. J. Diagnostic instrument. 1,618,970; Mar. 1.

De Zeng, Henry L., Moorestown, assignor to De Zeng Standard Company, Camden, N. J. Diagnostic instrument. 1,618,971; Mar. 1.

De Zeng, Henry L., Geneva, N. Y., assignor to American Optical Company, Southbridge, Mass. Diagnostic instrument. 1,621,461; Mar. 15.

Standard Company, Camden, N. J. Diagnostic instrument. 1,635,822; July 12.

De Zeng, Henry L., Moorestown, assignor to De Zeng Standard Company, Camden, N. J. Otoscope. 1,636,463; July 13.

De Zeng, Henry L., Geneva, N. Y., assignor to De Zeng Standard Company, Camden, N. J. Diagnostic instrument. 1,638,985; Aug. 16.

De Zeng, Standard Company. (See De Zeng, Henry L., assignor).

De Zeng Standard Company. (See De Zeng, Henry L., assignor.)
De Zonia, Robert E., Denver, Colo. Meat block and table cleaner 1,630,688; Nov. 29.
Letter 1,630,688; Nov. 29.
Spain. Electric Induction furnace. 1,647,787; Nov. 1.
Dezurik, Mathias, Sartell, Minn. Nozzle for paper-making machines. 1,617,673; Feb. 15.
Dlume, Ross and R., assignors of one-third to G. W. July 12.
Dlume, Ross and R. phume, Ross and R.)
Dlume, Rosy. (See Dhume, Ross and R.)

Walker, Columbus, Ohio. Checkrow planter. 1,635,359; July 12.
Dhume, Roy. (See Dhume, Ross and R.)
D'Humy, Fernand E., Englewood, N. J. Storage building. Re16,738; Sept. 20.
1641,322 Stand E., Englewood, N. J. Airship. 1641,324; Sept. 6.
D'Humy, Fernand E., Englewood, N. J. Airship. 1641,324; Sept. 6.
D'Humy, Fernand E., Englewood, N. J. Airship. 1641,324; Sept. 6.
D'Humy, Fernand E., Englewood, N. J. Airship. 1641,324; Sept. 6.
D'Humy, Fernand E., Englewood, N. J. Airship. 1641,324; Sept. 6.
D'Humy, Fernand E., Englewood, N. J. Airship. 1641,624; Sept. 6.
D'Humy, Fernand E., Englewood, N. J. Airship. 1641,624; Sept. 6.
D'Humy, Fernand E., Englewood, N. J. Airship. 1641,624; Sept. 6.
D'Humy, Fernand E., Englewood, N. J. Airship. 1641,624; Sept. 1642,620; Apr. 19.
Diago, Federico G., Habana, Cuba. Ticket seller. 1,644,639; Oct. 4.
Diago, Federico G., Habana, Cuba. Ticket seller. 1,644,639; Oct. 4.
Diago, Federico G., Habana, Cuba. Voting machine. Dialo, 1646,639; Oct. 4.
Diago, Federico G., Habana, Cuba. Uquid-fuel burner. 1,644,639; Oct. 4.
Diago, Federico G., Habana, Cuba. Uquid-fuel burner. 1,644,639; Oct. 4.
Diago, Federico G., Habana, Cuba. Uquid-fuel burner. 1,644,639; Oct. 4.
Diago, Federico G., Habana, Cuba. Voting machine. Diamond Chain and Manufacturing Company. (See Kottlowski, Clarence P., assignor.)
Diamond Expansion Bolt Company. (See Penney, Harold Diamond Expansion Bolt Company. (See Penney, Harold W., assignor.)

Diamond Expansion Boit Company. (See Piester, Henry W., assignor.).
Diamond. Henry, Brooklyn, N. Y. Hat-block clamp. 1,639,331; Aug. 16.
Diamond, James K., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Fastener-settling ma-Company, Grand Rapids, Mich. Fastener-settling ma-Chifforobe. 1,618,642; Feb. 22.
Diamond Match Company, The. (See Donnelly, Joseph C., assignor.)

Diamond Match Company, The. (See Linebaugh, Edward

R., assignor.)
Diamond Match Company, The. (See Paridon, Michael,

Dillimin anter Company, The assignors, Diamond Match Company, The (See Ross, B. C., and Zomilr, assignors,)
Diamond Match Company, The (See Snyder, Eugene, assignor)
Diamond Match Company, The (See Wright, Charles

Diamond Match Company, The. (See Wright, Charles F., assignor.)
Diamond Match Company, The. (See Zomnir, Joseph E., assignor.)
Diamond Power Specialty Corporation. (See Bowers, Frank, assignor.)
Diamond Power Specialty Corporation. (See Herman, Diamond Power Specialty Corporation. (See Rawson, Grant I., assignor.)
Diamond Power Specialty Corporation. (See Rawson, Grant I., assignor.)
Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)

Diamold Fower Specialty Corporation. (See Thomas, Wills P., assignor.)
Diamond Power Specialty Corporation. (See Varian, Howard M., assignor.)
Diamond Power Specialty Corporation. (See Varian, Howard M., assignor.)

Diamond State Fibre Company. (See McIntosh, J., and Wolford, assignors.)
Diamond State Fibre Company. (See Taylor, John M.,

Diamond State Fibre Company. (See Taylor, John M., assignor.)
Diaz, Ernesto, New York, and I. Englander, Brooklyn, assignors to Oxyn Company, New York, N. Y. Powder puff and making the same. 1.654,161; Dec. 27.
Diaz, Vicente F., Lowell, Ariz. Device for making waffles. 1.642,062; Sept. 13.
Dibble, Albert C., Southwich, Mass. Leaf-lifting device for riding cultivators. 1.622,497; Mar. 29.
Dibble, Claude M., assignor to Moore Brothers Company, Joliet, Ill. Stove construction. 1.619,243; Mar. 1.

Dinle, Frank W., et al. (See Snyder, James R., assignor.)
Dibner, Abraham B., Brooklyn, N. Y. Electrical T connecter. 1,642,492; Sept. 13.
Dibner, Bernard, Brooklyn, N. Y. Electrical T connecter.
1,642,491; Sept. 13.
Dice, Andrew F., assignor of one-third to G. Dice and onethird to M. Dice, Joilet, III. Fishing device. 1,625,988;

pany, Rochester, N. Y.

pany, Rochester, N. Y.

pany, Rochester, N. Y.

Company, Rochester, N. Y.

Train control. 1,654,116;

Company, Rochester, N. Y.

Plement and making

Company, Rochester, N. Y. Train control. 1,654,116; Dec. 27.
Dickens, Charles, Oakland, Calif. Pigment and making the same. 1,615,316; Jan. 25.
Dickens, Charles, C. Air, beater, 1,633,137; Aug. 9.
Dickens, William R., Copperbill, Tenn. Lead plating of metals. 1,614,662; Jan. 18.
Dickernan, John A., Bridgeport, Conn., assignor to Remington Arms Company, Inc.
1,635,168 June 23.
L635,168 June 23.
Dickerson, Arthur, Salt Lake City, Utah. Valve-regulating device. 1,616,078; Feb. 1.
Dickerson, Arthur, Salt Lake City, Utah, assignor to Dickerson Carburetor Company. Carburetor. 1,645,945; Oct. 18.

Dickerson, Arthur, Salt Lake City, Utah, assignor to Dickerson Carburetor Company, Carburetor, 1,645,945; Dickerson Carburetor Company, The. (See Dickerson, Arthur, assignor.)
Dickerson, Charles L., Clinton, Ill. Storage battery. 1,652,997; Dec. 6.
Dickerson, Charles L., Clinton, Ill. Storage battery. 1,652,997; Dec. 6.
Dickerson, Walter H., East Orange, N. J., assignor to Industrial Waste Products Corporation, Dover, Del. Dickerson, Walter H., East Orange, N. J., assignor to Industrial Waste Products Corporation, Dover, Del. Spray-drying apparatus. 1,648,997; Nov. 1, assignor to Industrial Waste Products Corporation, Dover, Del. Spray-drying apparatus. 1,648,997; Nov. 1, assignor to Preparing pyrophosphates. 1,652,283; Dec. 2007; Dickey, Alexander, Honeyville, Utah. End wrench. 1,641,262; Sept. 6.
Dickey, Cephus H., Kansas City, Kans. Dust-preventing during the Corporation of Polickey, Dickey, Serges I., Toledo, Ohlo. Tent. 1,631,554; Dickey, Brnest. (See Keilholtz, L. S., and Dickey, July 19.
Dickey, Samuel J., Los Angeles, Calif., assignor to Gen-

July 19.

Dickey, Samuel J., Los Angeles, Calif., assignor to General Petroleum Corporation of California. Process of and apparatus for treating one liquid by another. 1,625,195; Apr. 19.

Dickey, Samuel J., Los Angeles, Calif., assignor to General Petroleum Corporation of California. Method of Andropaparatus for treating one full by another. On the California of the California California. Purifying petroleum Corporation of California. Purifying petroleum products. 1,639,988; Aug. 23.

fornia. Purlfying petroleum products. 1,639,988; Aug. 23.
Dickhaut, Charles A., Saugerties, N. Y. Sheet straightener, 1,634,984; July 5.
Dickie, James, Berwick, assignor of two-thirds to W. I.
1,646,140; Oct. 18-con, Nova Scotla, Canada. Wrench.
1,646,140; Oct. 18-con, Nova Scotla, Canada. Wrench.
Dickie, William A., and J. H. Rooney, Spondon, near Derby, England, assignors to Celmese Corporation of America. Manufacture of cornamental or effect manufacture of the Commental of t

assignor.)
Dickinson, Albert G. (See Simpson, Ward T., assignor.)
Dickinson, Bernard L., El Campo, Tex. Camera and tripod fastener. 1,647,986; Nov. 8.

Dickinson, Frederick S., et al. (See Dieterleh, Ludwig M., assignor.)
Dickinson, Harry R., San Antonio, Tex. Internal-combustion engine. 1,620,446; Mar. 8.
Dickinson, Harry S., Woline, III., assignor, by mesne assignor, by mesne assignor, by mesne assignments, to Beery Shocker, 1,614,778; Jun. 18.
Dickinson, Harry S., Moline, III., assignor, by mesne assignments, to Beery Shocker, Incorporated, Wilmington, Del. Grain shocker. 1,627,885; May 10.
Dickinson, Harry S., Moline, III., assignor to The Dunham Company, Beren, Ohio. Double-roller pulverizer.
Dickinson, Hov. 29.
Dickinson, Jony A., East Angus, Quebec, Canada, Pulp Dickinson, John A., East Angus, Quebec, Canada, Pulp

inson.)
Dickinson, John A., East Angus, Quebec, Canada. Pulp screen. 1,639,797; Aug. 23.
Dickinson, Merian H., Seattle, Wash., assignor to Lidger-wood Manufacturing Company, New York, N. Y. Hoisting and conveying device. 1,624,545; Apr. 12.
Dickinson, Paul, Incorporated. (See Filkins, Arthur Lassignor.)

Hoisting and conveying device. 1,624,546; Apr. 12. Holsting, Paul, Incorporated. (See Pilkins, Arthur J., assignor.) Pilckinson, Paul, Incorporated. (See Pilkins, Arthur J., assignor.) Pilckinson, Paul and other articles. 1,635,035; July 5. Sept. 1,635,035; July 12. Sept. 1,635,035; July 1,635,035

Dickson, George F., et al. (See Guenther, Bernard B., assignor.)
Dickson, George H., Chicago, Ill., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boller Cock & Wilcox Company, Bayonne, N. J. Boller Dickson, James T., Los Angeles, Calif. Centrifugal clutch. 1,618,643; Feb. 22.
Dickson, James T., Los Angeles, Calif. Centrifugal clutch. 1,618,644; Feb. 22.
Dickson, James T., Los Angeles, Calif. Control for sand reels, holsts, and the like. 1,652,661; Dec. 13.
Dickson, James T., Los Angeles, Calif. Reverse gear. 1,652,62; Dec. 20.
Dickson, Mohert L., Long Beach, Calif. Automobile signal. 1,622,096; Mar. 22.
Dickson, Waiter S., Milwaukee, Wis. Sound director. 1,644,439; Nov. 1.
Dickson, Waiter S., Milwaukee, Wis. Sound director. 1,644,983; Oct. the inhalation of medicinal powders. 1,643,983; Oct. the inhalation of medicinal powders. 1,644,983; Oct. the of the control of the components of the control of

signor.) Dictaphone Corporation. (See Carpenter, David E., as-Dictaphone Corporation. (See Goldsborough, Washing-

ton L., assignor.)
Dictaphone Corporation. (See Hinckley, Frank C., as-Dictaphone Corporation. (See Johnson, Arthur A., as-

signor.) Dictaphone Corporation. (See Lucarelle, Joseph M.,

assignor.)
Dictaphone Corporation, (See Lucarelle, J. M., and Frykman, assignors.)
Dictaphone Corporation. (See Renholdt, John E., assignor.)

Dictaphone Corporation. (See Roberts, Theodore C., assignor.) Dictaphone Corporation. (See Woodbridge, Charles K.,

assignor.)
ictograph Products Corporation. (See Koch, Henry, assignor.)

assignor.)
Dictograph Products Corporation. (See Koch, H., and Wohlers, assignors.)
Dicus, Clarence C. (See McCarty, E. E., Dicus, and Didion, Jacob, Valley Park, Mo. Runner bar for plate-giass-grinding machines. 1,643,928; Sopt. 27.
Diebold, Charles J., Winnipeg, Manitoba, Canada. Whisting ball. 1,632,925; June 21.
Diebold, Leo A., Stuart, Iowa. Display box. 1,646,902; Oct. 25.

Die Cast Art Bronze Corporation, The. (See Richardson, James D., assignor.)

Dieckmann, Edward H., Florissant, Mo. Tractor. 1.643,375; Sept. 27. Dieckmeyer, Leo M. (See Roop, C. E., Dieckmeyer, and Barutio.)

Banterson, Lee M. (See Robp. C. E., Dieckneyer, and Banterson, Lee M. (See Robp. C. E., Dieckneyer, and Diedrich, Fred C., Tacoma, Wash. Closet valve. 1.638,436; Aug. 9. Dieges, Charles J., Brooklyn, assignor to Dieges & Clust, New York, N. Y., Ring. Des. 72,412; Apr. 12. Dieges & Clust. (See Dieges, Carles J., &ssignor.) Dieges, Robert T., New York, N. Y., assignor to De Forest Engraving apparatus. 1.612,967; Jan. 4. Diehl. Adam. Springfield, Ohio. Overjacket for molds. 1,635,074; July 5. Diehl, Frederick, assignor to The Singer Manufacturing Company. Elizabeth. N. J. Electrical connecter and terminal block. 1,635,512; July 12. 1.630,025; Aug. 16. Chicago, Ill. String-maker's peg. 1,630,025; Aug. 16. Chicago, Ill. String-maker's peg. Diehl Manufacturing Company. (See Karle, John D., assignor.)

assignor.)
Diehm, Ernst F., assignor to XXth Century Heating and
Ventilating Company, Akron, Ohio. Auxiliary heater
for furnaces. 1.636.173; July 19,
Diel Watch Case Company. (See Dinstman, Isidor, as-

signor.)
Diener, Geo. W., Mfg. Co. (See Waggoner, Albert E., assignor.)

assignor.)
Diener, Hyman, Washington, D. C., assignor to United States Hoffman Machinery Corporation. Pad for pressing machines. 1,461,356; Feb. 1.
Diener, Riley M., assignor, by mesne assignments to Lack fox. 1,632,788; June 21.
Dienner, John A. (See Ringwald, Clarence, assignor.)
Dienner, John A. (See Ringwald, Clarence, assignor.)
Dienner, John A., Chicago, and A. C. Mabee, Villa Park, Ill. Controller for fish lures. 1,627,078; May 3.
Diescher, Samuel E., Pittsburgh, Pa. Swaging mill roll.
Diefer, Jackstowe, Chicago, Ill. Doorlock. 1,613,023; June 1,321, June 1

Jesener. Samuel E. Pittsourgh, Pa. Swaging mil foli.

1,034,352; July 5.

Jan. 1,034,352; July 5.

Jan. 1,034,352; July 5.

John H. 1,034,352; July 5.

John H. 1,034,353; July 6.

John H. 1,034,353; July 12.

John H. 1,034,353; July 13.

John H. 1,034,353; July 14.

John H. 1,034,353; July 14.

John H. 1,034,353; July 15.

John H. 1,034,35

Jistickon, William F., Webster Groves, Mo., assignor to American Car and Foundry Company, New York, N. Y. Hatch-cover operating means for refrigerator cars. 1,631,309; June 7. Dietrick. Herman T., Philadelphia, Pa. Combined re-ceptacle opener and fluid conductor. 1,619,708; Mar. 1.

Dietz, Frank L., Brooklyn, N. Y. Fuel oil. 1,620.635; Mar. 15. Dietz. Joseph M., Ridgway, Pa. Arctic. 1,632,390; June 14.

Dletz, R. E., Company. (See Currie, Robert A., as-

Dietz, R. E., Company. (See Currie, Robert A., assignor.)

Signor.)

B., assignor.)
Diggett, Joseph H. (See Young, C. W., and Diggett.)
Diggs, Dudley M., assignor of one-half to H. E. Butlet,
Schenectady, N. Y. Paper fastener. 1,640,398;
Aug. 30.
Di Giullo, Ernesto, Lynn, Mass. Parachute. 1,635,823;

Aug. 30.

Di Giulio, Ernesto, Lynn, Mass. Parachute. 1,635,823;
July 12.

Digna, Léon, Mous, assignor to Acieries de Haine St.

Pierre et Lesquin, Societe Anonyme, Haine St. Pierre,
Belgium. Railway rail for detaching brake skids.

1,648,379; Nov. 8.

Di Ianni, Frank Park, Working, N. Y., assignor to American
Machine and Foundry Company. Mount for the tongues
May 31 retter rod-forming mechanism. 1,630,488;

Di Ianni, Frank Park, Park, N. S.

May 31.

May 31.

Frank. Brooklyn, N. Y., assignor to American
i Hanni & Foundry Company. Cigarette-machine
catcher. 1.647,286; Nov. 1.

Di Ionno, Frank, Milburn, N. J. Penholder or similar
article. Des. 72,603; May 10.

article. Dileo, Do Oct. 25

Oct. 25.
Dilger, Frank S., Yankton, S. Dak. Legging. 1,643,620;
Sept. 27.
Dill and Collins Co. (See Topper, Pius A., assignor.)
Dill, John. (See Shmyroff, A., Bogoslowsky, and Dill.)
Dill Manufacturing Company, The. (See Bronson, Adelhert E., assignor.)
Dill Manufacturing Company, The. (See Bronson, A. E., and Tobold, assignors.)
And Tobold, assignors.)
On the Company of the Company.

assignor.)

Dill Manufacturing Company, The. (See Hansen, Henry assignor. Dill Manufacturing Company, The. (See Tobold, Ewald

Dill Manufacturing Company, The. (See Tobold, Ewald F., assignor.)
Dillahunt, John W.. Hartford, Conn. Snow-cleaning apparatus. 1.621.156; Mar. 15.
Dillenbach, Daniel S., Hastings, Nebr. Twine and rope cutter. 1,621.357; Mar. 15.
Dilled, See S., Hastings, Nebr. Mail box. Dilled, See S., Mar. 16.
Dilled, See S., Mar. 16.
Dilled, Feed M., and C. F. Hallberg, Oelwein, Iowa. Pressure oil can. 1,620.595; Mar. 8.
Dillhoefer, Henry M., Cleveland Heights, assignor to The Byrne Manufacturing Company, Cleveland, Ohio. Rung-seat construction. 1,619.603; Mar. 1.
Dillingham, Frederick A., assignor to The Trov Sunshade Company, Trov, Ohio. Windshield, 1,630,330; May 31.
Dillo, 116; 117; Feb., Los Angeles, Calif. Ash tray. 1011on Bank Protection Service. (See Dillon, William C., assignor.)

Dillon-Gaw Motor Company. (See Gaw, Luther A., assignor.)

Dillon-Gaw Motor Company. (See Gaw, Luther A., assignor.)
Dillon, Harry L. (See Poling, G. N., and Dillon.)
Dillon, James E. P., South Bend, Ind. Trash receptacle.
Dillon, Joseph F., Wilmette, assignor to Dillon Pulley
Dillon, Joseph F., Wilmette, assignor to Dillon Pulley
Co., Chicago, Ill. Pulley. 1,625,640; Apr. 19.
Dillon, Joseph H., Wilmette, assignor to Dillon Pulley
Co., Chicago, Ill. Pulley. 1,625,640; Apr. 19.
Dillon, Gear L., Jr., Hernando, Miss. Preparing roadDillon, Gear L., Jr., Hernando, Miss. Preparing roadDillon, Gear L., Jr., Hernando, Miss. Preparing roadDillon, George C., Jr., Hernando, Miss. Preparing roadDillon, Stephen V., Tulsa, Okla. Automatic catching device for well tubing. 1,629,263; May 17.
Dillon, Stephen V., Tulsa, Okla. Catching device for well tubing. 1,629,263; May 17.
Dillon, Stephen V., Tulsa, Okla. Tubing catcher. 1,1640,756; Aug. 30.
Dillon, Walter H., Indianapolis, Ind. Telephone signal Dillon, William C., Fort Dodge, Iowa, assignor to Dillon Eank Protection Service. Combined electrical and mechanical safety lock for vault doors. 1,635,075; July 6.

Di Lorenzo, Antonio, Astoria, N. Y. Flour sifter. 1.617.797: Feb. 15.

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Di Martino, Carmelo, and E. Lindquist, Paterson, N. J.
Coin-controlled mechanism. 1,623,466; Apr. 5.
Di Marzo, Francis, Tufo, Italy, assigno, N. J.
Di Marzo, Francis, Combined laundry washing machines and hydro-extractor, 1,637,930; Aug. 2.
Dimatos, Archie, and G. D. Michal, Sydney, New South Wales, Australia. Machine for washing table utensits.
Di Marteo, James. (See Luisa, F., and Di Matteo, Joimes, Taul C., Wauwatosa, assignor to Allis-Chaimers Manufacturing Company, Milwaukee, Wis. Manufacturing truing to Marteo, James, Manufacturing Company, Milwaukee, Wis. Manufacturing truing to Marting Manufacturing Company, Milwaukee, Wis. Manufacturing Company, Milwaukee, Wis. Manufacturing Company, Milwaukee, Wis. Uniting blades. 1,641,745; Sept. 6.
MacKinnon, York, Pa. Dental facing, 1,634,612; July 5.

McKinnon, York, Pa. Dental facing. 1,634,612; July 5. Dimes, Richard, Co. (See Dimes, Richard, Ir., assignor.) Dimes, Richard, Jr., Everett, assignor to Richard Dimes Co., South Boston, Mass. Dish or analogous article. Des. 73,284; Aug. 23. Dimmig, Howard, Chicago, Ill., assignor to The Texas Company, New York, N. Y. Soluble 6il. 1,621,483; Mar. 18. Dimond, Clark W., Minneapolis, Minn. Manifold heat Minneapolis, Minn. Manifold heat

retainer. 1,637,768; Aug. 2.
Dinesen. Laurits, Minneapolis, Minn. Reciprocating

Dinesen, Laurits, Minneapolis, Minn, Reciprocating pump, 1,682,436; June 14.
Dingee, George W., Utica, N. Y. Expansible and contractible mandrel, 1,627,729; May 10.
Dingman, Thomas C., South Bend, Ind., assignor to The White Motor Company, Cleveland, Ohio. Instrument panel. Des. 73,163; Aug. 20.
Dingman, Thomas C., assignor to The White Motor Company, Cleveland, Ohio. Instrument panel. 1,620,328; Mar. 8.

White Motor Company, Cleveland, Onlo.

Danel. Des. 78, 163; Aug. 2.

Danel. Des. 78, 163; Aug. 2.

Danel. Des. 78, 163; Aug. 2.

Mar. 8.

Dinhofer, Julius, New York, N. Y. Finger Ring. Des. 72, 204; Mar. 15.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 357; Apr. 5.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 358; Apr. 5.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 358; Apr. 5.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 360; Apr. 6.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 360; Apr. 6.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 413; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase. Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Cigar lighter. 1, 646, 576; Oct. 18.

Dinhofer, Julius, New York, N. Y. Cigar lighter. 1, 646, 576; Oct. 18.

Dinhofer, Julius, New York, N. Y. Matchcase. Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Matchcase. Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase, Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Matchcase, Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Matchcase, Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Matchcase, Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase, Des. 72, 416; Apr. 12.

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Dinhofer, Julius, New York, N. Y. Watchcase, Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase, Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase, Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase, Des. 72, 416; Apr. 12.

Dinhofer, Julius, New York, N. Y. Watchcase, Des. 72, 416; Ap

West New York, N. T.

DiNoo Manufacturing Company, The (see 1822.

Dinsmore, Oliver R., Olympia, Wash. Motor-vehicle signal device. 1648.581; Nov. 8. 6G. Atlas Systems, Tripe. New York, assignous device for pneumatic dispatch carriers. 1.647.788; Nov. 1.

Dinstman, Isidor, assignor to Diel Watch Case Co., Inc., New York, N. Y. Watchcase. Des. 73.646; Oct. 18.

Dinstman, Isidor, assignor to Diel Watch Case Co., Inc., New York, N. Y. Combined wrist-watch case, strap. New York, N. Y. Combined wrist-watch case, strap. Dinstman, Isidor, assignor to Diel Watch Case.

Dinstman Isidor, New York, N. Y. Watchcase.

and buckle. Des. '13,647; Oct. 18.
Dinstman, Isidor, New York, N. Y. Watchcase.
1,651,194: Nov. 29.
Dinstman, Isidor, New York, N. Y., assignor to Diel Watch
Case Company. Making watchcases. 1,633,661;

June 28.
Dinwiddie, Joseph G., Penns Grove, N. J., assignor to
E. I. du Pont de Nemours & Company, Wilmington,
Del. Indophenol and producing the same. 1,628,534; May 10.
Dinwiddy, Ralph G., et al. (See Bowell, George B., as-

Dinwiddy, Ralph G., et al. (See Bowell, George B., assignor.)
Dinzl. Kidnard W., Bywood, assignor to Southwark Found.
Dinzl. Kidnard W., Bywood, assignor to Southwark Found.
Company, Philadelphia, Pa. Rubbercutting machine. 1.646.447; 0ct. 25.
Dion, Aifred J., Indian Orchard, Mass.
Automatic signal
indicator for creeling frames. 1.683.459; June 21.
Zion. Pierre E., Gardenn, Chilf. Attachment for shovel
cultivators. 1.636.219; July 19.
Dippel, William T., New Xork, assignor to H. S. Martin,
May 3., N. Y. Visual annunclator. 1,626,795;
May 3.

May 3.

Dippert, Charles W., Kenmore, N. Y. Apparatus for use in assembling radiator cores. 1,629,780; May 24. Di Rebayllo, Leo, Bloomfield, N. J. Multicolor penell case. 1,652,047; Dec. 6. Corporation, (See Koppe, Alexander T.,

case. 1,632,047; Dec. 6.
Directoplate Corporation. (See Koppe, Alexander T., assignor.)
Directoplate Corporation. (See Dick, A. and Directonuer.)
Directonuer. (See Dick, A. and Directonuer.)
Discovered to the Company. (See Dick, A. and Directonuer.)
Discovered to the Company. (See Dick, A. and Directonuer.)
Discovered to the Company. (See Dick, A. and Directonuer. (See Dick). (See Dick).

Storage building for motor cars and the like. 1,627,959; May 10.

Dissette, John W., assignor to Ward's Products Co.
Inc., Chicago, Ill. Bottle. Des. 72,604; May 10.

Distance-Speed Recording Company. (See Wallbillich,
Distance-Speed Recording Company.
Des. 73.164; Aug. 2.
Distelle, Hans, Feuerbach, near Stuttgart, assignor to the
firm Spezial-Werkzeug-Fabrik Feuerbach-G. m. H.,
District of The Werkzeug-Fabrik Feuerbach-G. m. H.,
District of Columbia Paper Manufacturing Company.
(See Smith, D. A., and Stirling, assignors).
Ditcham, William T., Tolchester, England, assignor to
Radio Corporation of America. Electrical condenser.
Ditcham, William T., Twickenham, England, assignor to
Radio Corporation of America. New York, N. Y. Wireless telephony. 1,629,685; May 24.

Dittlinger, Alphons, N., and E. V., jr., St. Louls, Mo.
Electric liquid-quantity indicator. 1,616,529; Feb. 8.

Dittlinger Crow Process Company, The. (See Dittlinger,
Hippolyx, assignor).

Dittlinger, Hippolyx, assignor, by meane assignments to

Dittlinger, Hippolyt, assignor, by mesne assignments, to The Dittlinger Crow Process Company, New Braunfels, Tex. Hydration of lime. 1.640,602; Aug. 30. Dittlinger, Nicholas. (See Dittlinger, A., N., and E. V.,

Dittman, William F., Arlington, assignor, to Elevator Supplies Company, Inc., Hoboken, N. J. Indicator. 1,645,513; Oct. 18. Ditzler, Guy E., Hinsdale, assignor of one-third to J. T. Cochran and one-third to R. M. Krieser, Chicago, Ill. Surprise device. 1,645,500; Nov. 8. Divor. Thomas M., sr. Baltimore, Md. Acid or sea-water resting alloy. 1,652,301; Dec. 18. Desicting alloy T. 1652,301; Dec. 18. Desich Company, The. (See Willard, assign Curvert & Metal Company, The.

Dixie Dental Manufacturing Co. (See Pecker, Joseph S., assignor.)
Dixie Gin Compress Company, The. (See Taft, John A., assignor.)

nssignor.")

Dixon. Abner F., assignor of one-third to T. C. Bannon and one-third to D. Upham, New York, N. Y. Apparatus for orienting geological specimens in bore holes. 1,630,634; May 31.

Dixon. Gustave G., et al. (See Koehn, Daniel W., as-

signor.)

Signory annes, Phoenix, Ariz. Snubber. 1,043,927; Dixon. 37. Sept. 37. Sept.

assignor, Dixon, Mark C. (See Brown, E. H., and Dixon, Dixon, Paul, Atlanta, Ga. Card protector. 1,624,719; Apr. 12. Dixon, Robert, Newark, N. J. Barber pole, Des. 73,425; Sept. 13.

Dixon, Thomas. (See Dixon, James and T.)
Dixon, Walter L., assignor to Recce Folding Machine
Company, Boston, Mass. Folding method and product,
1,633,849; June 28.

ixon, Walter L., assignor to Reece Folding Machine Company, Boston, Mass. Folding machine. 1,648,450;

Dixon, Walter L., assignor to Reece Folding Machine Company, Boston, Mass. Folding machine, 1,648,450; Nov. 8.

Phildee Alexander, Tamaqua, Pa., assignor to Atlas Powders, Wilmington, Del. High-explosive detonators, Company, Wilmington, Del. High-explosive detonators, Company, Wilmington, Del. High-explosive detonators, Company, Wilmington, Conn., assignor to H. L. Judd Co., Inc., New York, N. Y. Curtain-pole end. Des. 72,005; Feb. 18.

Dlouby, August, Wallingford, Conn., assignor to H. L. Judd Co., Inc., New York, N. Y. Curtain-pole end. Des. 72,251; Mar. 12.

Dlouby, August, Wallingford, Conn., assignor to H. L. Judd Co., Inc., New York, N. Y. Curtain-pole end. Des. 73,165; Aug. 2.

Dlouby, August, Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y. Curtain crane, Des. 73,165; Aug. 2.

Doak, Leonard, W. Tayaosburg, Pa. Suspension apparaDoak, Russell H., Pine Bluff, Ark. Cigar and cigarette alighting container. 1,631,620; May 31.

Doak, Alexand, Pine Bluff, Ark. Cigar and cigarette ilighting container. 1,632,620; May 31.

Doan, Althur, Berkeley, Call. Third-vallway electricMay 17.

May 17.

Donne, John A., Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Milling lathe. 1,618,275; Feb. 22.

Donne, Leny Company, New York, N. Y. Wheil head for machine tools. 1,634,402; July 5.

Donne, Leroy C., assignor to The Miller Company, Meriden, Conn. Lighting unit. 1,612,856; Jan. 4.

Menden, Conn. Lighting unit. 1,612,856; Jan. 4.

Menden, Conn. Hoor lamp. 1,628,395; May 10.7, Meriden, Conn. Floor lamp. 1,628,395; May 10.7, Meriden, Conn. Shade holder. 1,632,391; June 14.

Daniel A. (1997). Assignor to The Miller Campany, Meriden, Colin. Lighting fixture. 1,654,163; Dec. 27.
Dobbin, Albert J., Excelsior, Minn. Piece-goods-display support. 1,617,676; Feb. 13.
Dobbins, George R., Alhambra, assignor of one-fourth to H. H. Hammond and one-fourth to W. R. H. Miller, Los Angeles, Calif. Hold-up airm. 1,645,185; Oct. 11.
Dobbins, Giver B., Champaign, Ill. Closure operator. Dobbins, Rev. B., Champaign, Ill. Closure operator. Dobbins, Ray H. (See Perkins, L. B. C., and Dobbins, Doberstein, Edward J., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining-manufacturing Company, Chicago, Ill. Mining-manufacturing Company, Chicago, Ill. Mining-manufacturing Company, Chicago, Ill. Mining-manufacturing Company, Chicago, Ill. Mining machine. 1,644,183; Oct. 4.
Doberstein, Edward J., Blue Island, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,644,183; Oct. 4.
Doberstein, Edward J., Blue Island, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,644,183; Oct. 4.
Dobles, Frank C., Cambridge, Mass. Apparatus for indi-

Liou-4,231; Uct. 4:
Doble, Frank C., Cambridge, Mass. Apparatus for indicating voltage stress. 1,644,421; Oct. 4.
Doble, Frank C., Cambridge, Mass. Apparatus for testing Doble Laboratories.
Doble Laboratories. (See Doble, William A., assignor.)
Doble, William A., assignor to Doble Laboratories, San Francisco, Calif. Oil-burner ignition device. 1,617,677; Feb. 15.

Feb. 15.

Dobrik, Samuel, Brooklyn, N. Y. Dental molding plate.
1,613,384; Jan. 4.

Dobron, Weronika, Milwaukee, Wis. Under-sea-illuminatDobron, Weronika, Milwaukee, I. S. 2,186; Mar. 22;

Ding means for submarines. 1,622,186; Mar. 22;

May 10.

Dobrowsky, Emmanuel, assignor to Motor Car Advertising Device Co., Inc., New York, N. Y. Taxi advertising Device Co., Inc., New York, N. Y. Taxi advertising Doson, Marion L., Kevin, Mont. Pump jack. 1,620,009;

Mar. 8.

Dobson, Percy R., Rockyford, Ontario, Canada. Door-op-erating mechanism. 1,650,332; Nov. 22.
Dobson, William A., Bridgeport, Conn., assignor to Un-derwood Typewriter Company, New York, N. Y. Type-writing machine. 1,614,604; Jan. 18.
Dobson, William A., Bridgeport, Conn., assignor to Under-wood Typewriter Company, New York, N. Y. 1,642,196; Sept. 13.

Sept. 13.

Dobson, William A., Bridgeport, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriten Machine. 1,643,114; Sept. 20.

Dobson, William A., Bridgeport, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,643,654; Sept. 27.

Dobson, William A., Bridgeport, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,646,362; Cot. 25.

Dobson, William A., Brigeport, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,647,125; Nov. 1.
Dock Engine Company, The. (See Dock, Herman. as-

fing machine. Advances of the control of the contro

brake. 1,629,781; May 24.

Dodd, John W. Biockline, assignor to George T. MeLauthlin Company, Boston, Mass. Brake. 1,652,400;
Doc. 13.

Jones M. Milton, Ind. Grave cover.

Doddridge, James M., Milton, Ind. Cemetery tent.

1,642,648; Sept. 13.

Dodds, Ethan I., Central Valley, N. Y., assignor to H. F.
Gilg, Pittsburgh, Pa. Metal car end. 1,643,204;

Dodds, Ethan I., Central Valley, N. Y., assignor to Union

Metal Products Company, Chicago, Ill. Sheet structure. 1,649,453; Nov. 15.

Dodds, Ethan I., Fr., Central Valley, N. Y., assignor, by

mesme assignments, to Flannery Bolt Company, Pitts
Dodds, Ethan I., Flitsburgh, Pa., assignor to Union

Metal Products Company, Chicago, Ill. Car part.

Dodds, Ethan I., Pittsburgh, Pa., assignor to Union

Metal Products Company, Chicago, Ill. Car part.

1, 1653,991; Dec. 20.

Dodds, Homer J., Pasadena, Calif. Mechanism for render
ing vehicle headlights dirigible. 1,650,115; Nov. 22.

02, 1627,137; May 3.

Dodds, Joseph J. (See Larkin, Arthur I., assignor.)

Doddis, Joseph J. (See Larkin, Arthur I., assignor.)

Doddis, Joseph J. (See Malley, F. T., and Doddy.)

Dodelin, Emil A. (See Malley, F. T., and Doddy.)

Dodelin, Emil A. (See Shetzline, S. R., Jr., and Doddin.)

Dodge, Addel Y., South Bend, Ind., assignor to Bendix

Brake Company, Chicago, Ill. Brake-applying con
nection. 1,613,024; Jan. 4.

Dodge, Adiel Y., South Bend, Ind., assignor to Bendix

Brake Company, Chicago, Ill. Brake-shee. 1,614,460;

Brake Company, Chicago, Ill. Brake-shee. 1,628,657;

May 17.

Dodge, Addel Y., South Bend, Ind., assignor to Bendix

Brake Company, Chicago, Ill. Brake-shee. 1,628,657;

May 17.

Dodge, Addel Y., South Bend, Ind., assignor to Bendix

Brake Company, Chicago, Ill. Brake-shee. 1,628,657;

May 17.

Dodge, Addel Y., South Bend, Ind., assignor to Bendix

Brake Company, Chicago, Ill. Brake-shee. 1,628,657;

May 17.

Dodge, Addel Y., South Bend, Ind., assignor to Bendix

Brake Company, Chicago, Ill. Brake-shee. 1,628,657;

May 17.

Dodge, Addel Y., South Bend, Ind., assignor

17.
Adlel Y., South Bend, Ind., assignor to Bendlx
e Company, Chicago, Ill. Brake. 1,630,059;

May 24.
dogs, Adiel Y., South Bend, Ind., assignor to Bendix
Brake Company, Chicago, Ill. Universal joint.
0502,121, June 4.
X. South Bend, Ind., assignor to Bendix
Brake Company, Chicago, Ill. Brake shoe. 1,634,369;

Deuge, Auter A. Schleago, III. Brake shoe. 1,634,369; Bully G. Company, Chicago, III. Pivoted brake shoe. 1,634,370; July S. Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company, Chicago, III. Pivoted brake shoe. 1,634,370; July S. Dodge, Adiel Y., South Bend, Ind., assignor to Bendix F. J. Company, Chicago, III. Ball joint. 1,635,468; July 29. 20dge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company, Chicago, III. Brake-operating mechanism. 1,636,504; July 29. Dodge, Adiel Y., South Bend, Ind., assignor, by mesne assignments, to Bendix Brake Company, Chicago, III. Brake-control-abricating means. 1,636,503; July 29. Dodge, Adiel Y., South Bend, Ind., assignor, by mesne assignments, to Bendix Brake Company, Chicago, III. Brake-control-abricating mechanism. 1,637,520; Aug. 2. Dodge, Adiel Y., South Bend, Ind., assignor, to Bendix Aug. 8, and 1,638,526; Aug. 9, and 1,7 South Bend, Ind., assignor to Bendix Aug. 9, and 1,7 South Bend, Ind., assignor to Bendix Aug. 9, and 1,7 South Bend, Ind., assignor to Bendix Aug. 9, and 1,7 South Bend, Ind., assignor to Bendix Brake.

Brake Company, Chicago, III. Brake shoe. 1,638,326; Aug. 9, Dodge, Adiel Y., South Bend, Ind., assignor to Bendt, Brake Company Chicago, III. Braking and steering Dodge, Adiel Y., South Bend, Ind., assignor to Bendtx Brake Company, Chicago, III. Brake. 1,643,548; Sept. 27. Dodge, Adiel Y., South Bend, Ind., assignor to Bendtx Brake Company, Chicago, III. Brake. 1,647,397; Nov. 1.

Dodge, Adiel Y., South Bend. Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,654,241; Dec. 27.
Dodge, Adiel Y., and E. G. McDonald, South Bend, Ind., assignors to Bendix Brake Company, Chicago, Ill. Brake. 1,642,844; Sept. 20.
Dodge, Arthur H., assignor to The J. G. Wilson Corporation, New York, N. Y. Offsetting support for Venetian blinds, 1,625,021; Apr. 19.
Dodge Brothers, Inc. (See Goddard, George E., assignor).

signor.)
Dedge Brothers, Inc. (See Walter, Robert C., assignor.)
Dodge, Gordon F. (See Tulte, F. J., and Dodge.)
Dodge, Lysander H., Huntington Beach, Calif. Follower
block for filing drawers. 1,638,987; Aug. 16.
Dodge, Marton L. (See Troyer, N., and Dodge.)
Dodge, Merton L. (See Troyer, N., and Dodge.)
Dodge, Owen, assignor to The Automatic Electric Control
Control (Topiciett's Salitonia 144,8776-Oct II.)
Dodge, Susan J., et al. (See Brown, George W., assignor.)

control for electric source.

control for electric source.

codes, Susan J., et al. (See Brown, George W., assignor, Susan J., et al. (See Brown, George W., assignor, Waldo C., Winthrop, Mass. Smoking appliance.

1.623.661, Apr. 5.

Dodge, Will K., Fort Bragg, Calif. Tool-sharpening mechine. 1,625.469; Dec. 13.

Dodge, William W., Jr., Asheville, N. C. Electric outlet.

1.625.811, May 17.

Dodman, Alfred C., Jr., Summit, N. J. Wall paper. Des.

73.829; Nov. 15.

Dodman, Alfred C., Jr., Summit, N. J. Preparing wall

Dodman, Alfred C., Fr., Summit, N. J. Preparing wall

1.630.733; May 31.

Doe, Alfred G., Quincy, assignor to American Boller Life

Company, Inc., Boston. Mass. Antiscale material for boilers. 1,639.27; Aux. 16.

Point Penell Corporation, New York, N. Y. Pencil.

1.650.116; Nov. 22.

Doehler Die-Casting Company. (See Morin, Louis H., assignor. Jacobene. Jacob. Hillsdale, Mich. Portable clevator.

assignor.)

assignor.)
Doelcher, Jacob, Hillsdale, Mich. Portable elevator.
1.643,448; Sept. 27.
Doelcher, Max A., and A. P. Fanelli, Louisville, Ky.
Tire liner. 1,628,582; May 10.
Doellner, William, Jersey City, N. J. Safety feed means.
1,627,491; May 3.
Doering, Albert L., Germantown, assignor to J. S. Thorn
Company, Philadelphia, Pa. Sash frame. 1,644,645;
Get. 4.

Oct. 4., Doering, Charles J. (See Doering, William W. and C. J.)

C. J. Julius E., Minneapolls, Minn. Boiler-water-leve indicator. 1,652,001; Dec. 6. Julius 1,652,001; Dec. 6. Julius 1,652,001; Dec. 7. Julius 1,652,001; Dec. 7. Julius 1,652,798; Apr. 26. Deert. Fred H., and G. E. Roedding, Grand Rapids, Mich., assignors to Cheney Talking Machine Company, Chicago, Ill. Phonograph mechanism. 1,622,423;

Mar. 29. L., Mannheim, assignor to I. G. Farben-berr, Georg L., Mannheim, assignor to I. G. Farben-industrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Roller for calendering machines. 1,644,819;

Oct. 11.

Oct. 11.

Doerr, Harry E., assigner to Scullin Steel Company. St.

Louis, Mo. Cartruck side frame. 1.652,002: Dec. 6.

Doerr, Louis H., Ventura, Calif. Flow nipple. 1,621,876:

Mar. 22.

Mar. 22.
Doerre. Otto J., Chicago, Ill. Game. 1.616.443; Feb. 8.
Doerschuk, Victor C., Massena, N. Y., Safety steering wheel for automobiles. 1.650.499; Nov. 22.
Doggett, Regland L. S., Bact Orange, N. J. Door knocker Deberty, Henry, L., Clifton, N. J. Stop motton. 1.646.642; Oct. 25.
Doherty, Henry L., (See Laird, Wilbur G., assignor.) Doherty, Henry L., New York, N. Y., Apparatus for generating steam. 1.619.244; Mar. 1.
Donning, New York, N. Y., Storage reservoir. 1.646.641; Oct. 25.

Doherty, Henry L., & Company. (See Griswold, John W., assignor.)

Doherty, Patrick, Gary, Ind. device. 1,628.036; May 10. Doherty Research Company. P., assignor.) Doherty Research Company. Vehicle headlight dimming (See Bjerregaard, August

(See Borden, Edmund G., assignor.)
Doherty Research Company. (See Brandt, David G., as-

signor Doherty Research Company. (See Coast, John W., jr.,

assignor.)
Doherty Research Company.
assignor.) (See Doherty, Henry L., Doherty Research Company. (See Fisher, James P., as-

nerty research signor.) herty Research Company. (See Griswold, Robert G.,

assignor.)

Doherty Research Company. (See Truesdell, Arthur E.,

assignor.) Obherty, Robert E., Scotia, N. Y., assignor to General Electric Company. Regulating system for dynamo-electric machines. 1,638,808; June 28.
Dohmann, Edward A., Weesatche, Tex. Automatic return gate. 1,628,632; May 1900.
Dohme, Alfred R. L., assignor to Sharp & Dohme, Inc., Baltimore, Md. Alkyl resorthol. 1,649,667; Nov. 15.
Dohme, Alfred R. L., assignor to Sharp & Dohme, Inc., Multimore, Md. Iso-alkyl resortion. 1,649,668;

Alfred R. L., assignor to Sharp & Dohme, Inc., nore, Md. Hexylyl resorcinol. 1,649,669; Baltimore,

Baltimore, Md. Hexylyl resorcinol. 1,649,669; Nov. 15.
Dohme, Alfred R. L., assignor to Sharp & Dohme, Inc., Baltimore, Md. Hexyl resorcinol. 1,649,670; Nov. 15.
Dohme, Alfred R. L., assignor to Sharp & Dohme, Inc., Baltimore, Md. Hexyl resorcinol composition. 1,649,671; Nov. 15.
Dohme, Alfred R. L., assignor to Sharp & Dohme, Inc., Baltimore, Md. N-butyl resorcinol. 1,649,672; Nov. 15.
Nov. 15.

Donne, Alfred R. D., Nebtyl resorcinol. 1,649,672;
Baltimore, Md. N-butyl resorcinol. 1,649,672;
Dol, Gennosuke, New York, N. Y. Fountain brush. 1,614,461; Jan. 18.
Dolgnon, Louis A., Malakoff, France. Centrifugal regulator. 1,635,314; July 12.
Dolan, David J., Cleveland, Ohio. Make and break device.
Dolan, David J., Cleveland, Ohio. Steering-wheel lock mechanism. 1,622,575; Mar. 29.
Dolan, Francis M., St. Paul, Minn. Slicing board. 1,623,100; Apr. 5.
Dolan, Francis M., St. Paul, Minn. Slicing board. 1,623,100; Apr. 5.
Dolan, Francis M., St. Paul, Minn. Slicing board. 1,623,100; Apr. 5.
Dolan, Joseph V. (See Stubblebine, R. F., and Dolan.) Dolbear, Samuel H., San Francisco, Calli., and B. Lements, to Selective Treatment Company Limited, Montreal, Canada. Classifying crushed ore and the like. 1,624,134; Apr. 12.

Dassman, New York, N. Y., assignor, by mene assignments, to Selective Treatment Company Limited, Montreal, Canada. Classifying crushed ore and the like. 1,624,134; Apr. 12.
Dolbear, Samuel H. and V Zachert, San Francisco, Contreatment Company Limited, Montreal, Canada. Concentrating fibrous materials. 1,624,163; Apr. 12.
Dold. Joseph H., Philadelphia, Pa. Extension table. 1,652,772; Dec. 13.
Dole, John A., Ironton, Ohio. Drier. 1,618,176; Feb. 22.
D'Oler, Teleny, Jr., Bridgeport, Conn. Lighting fixture. D'Oller, William L., Philadelphia, Pa. Sereen-Ceaning apparatus. 1,624,221; Apr. 12.
D'Oller, William L., Philadelphia, Pa. Sereen-Ceaning apparatus. 1,624,221; Apr. 12.
D'Oller, William L., and T. Tohlin, Philadelphia, Pa.; said Tohlin, assignor to said D'Oller. Screen plate. Diol. Charles E. (See Holcroft, C. T., and Doll.) Dollar Savings and Trust Company, The, et al., executors. (See Burt, Harry B., assignor.)
Dollor, Parly T., See Poindexter, R. W., and Dolley, Dollor, Savings and Trust Company, The, et al., executors. (See Burt, Harry B., assignor.)
Dollor, Eusene D., Boston, Mass. Automobile tag. Des. 74,049; Dec. 13.
Dolly, Bernard B., Superior, Ariz. Automatic safety switch, 1,640,695; Aug. 30.
Dries, Tellinied, Bristol, England. Coin-freed apparatus. 1,642,277; Oct. 18.
Dolon, Alice J. L. (See Hofmann, William H., assignor.)
Dolon, Theodore, Hopkins, Minn. Sash fastener. 1,613,315;

signor.) ols, Theodore, Hopkins, Minn. Sash fastener. 1.613,315;

Dols, Theodore, survivale and Dolt, Dolt, Maurice L. (See Crossley, M. L., and Dolt, Dolt, Maurice L. (See Crossley, M. L., and Dolt, Dolt

H., assignor.)

Domistic Stoker Company. (See Hall, C. H., and Lloyd, Domistic Stoker Company.)

Dominelli. Frank, Olean, N. Y. Wrench. 1,639,798; Aug. 23.

Dominguez, José A., Mayaguez, P. R. Watch charm or similar article. Des. 73,648; Oct. 18. A Denis and Q. Tominguez, Mannel D., assignor to C. 18. A Denis and Q. 1614,289; Jan. 11.

Dominick, Franklin, New York, N. Y. Electric-circuit-closing plug. 1,628,363; May 10.

Dominick, Theodore, Wenatchee, Wash. Subsoil ditcher. Dominicak, John. Braddock, Pa. Electrical switch. 1,627,158; May 3.

Dominic David F., Cleveland, Obio. Gear-testing machine. 1,644,876; Oct. 11 Encild. Obio. Brake-band-adjusting Dommer, Otto, Karlsruhe, Germany. Device for indicating and recording the specific gravity of gases. 1,640,313; Aug. 23.

Domore Chair Company. (See Adams. Arthur J.)
Domscheit, Frederick E., Brooklyn, N. Y. Window.
1.682.789; June 21
Window. 1.682.789; June 21
Window. 1.614.189; Jun. 11
Donaghy, Edward. Lisburn, Ireland. Vehicle wheel.
1.638.622; Aug. 9.
Donahoe, John A., Pittsburgh, Pa. Container for foods.
1.625.186; Apr. 18.
1.625.489; May 10.
Donahoe, John A., Pittsburgh, Pa. Container for foods.
1.625.189; May 10.
Donahoe, John A., Pittsburgh, Pa. Container for foods.
1.625.498; May 10.
Donahoe, John A., Pittsburgh, Pa. Container for foods.
1.628.498; May 10.
Donahoe, John A., Pittsburgh, Pa. Container for foods.
1.628.498; May 10.
Donahoe, John Sasjmor, by mesne assignments, to
New Beeman Tractor Company, Minneapolis, Minn.
Donald, Forrest V., assignor, by Minneapolis, Minn.
Donald, Forrest V., assignor to Glison Manufacturing
Company, Port Washington, Wis. Garden tractor,
1.638.762; Aug. 9.
Donald, Forrest V., assignor to Glison Manufacturing
Company, Port Washington, Wis. Tractor-cultivator
Company, Port Washington, Seculand, Steam-boiler and
evaporator. 1.633.398; June 21.
Donald, William Glasgow, Scotland.
Ponaldson, Polity Washington, Wis.
Company, Port Washington, Wis.
Company, Port

Donald. William H., assignor of one-half to F. A. Knowes, Cincinnati, Ohio. Chopping and slicing machine. 1.652.132; Dec. 6. Donaldson, Alfred S., Newark, N. J., assignor to Du Pont 72, 793; June 7. Wilmington, Del. Toliet box. Des. 72, 793; June 7. Minneapolls, Minn. Air Cleaner. 1.641,746; Sept. 6. Donaldson, Frank A., Minneapolls, Minn. Air Cleaner. 1.641,746; Sept. 6. Donaldson, George H., West Hartford, Conn. Nipple for nursing bottless. 1,520,329; Mar. 8. 1.634,693; July 5. New York, N. Y. Inclinometer. 1.634,693; July 5. Donaldson Manufacturing Company Limited. (See Hadden, William J., assignor.)

Donaidson Manufacturing Company Limited. (See Hadden, William J., assignor.)
Donat, Frank J., Eden Prairie, Minn. Antiskid device for automobile tires. 1,642,897; Sept. 20.
Donath, Harry, Philadelphia, Pa. Window. 1,634,985; July 5.

July 5.
Donathan, William F., Poteau, Okla., assignor to S. J.
Graham, Tuckerman, Ark. Vending machine. 1,619,245;

Mar. 1.

Donathan, William F., Memphis, Tenn., assignor to S. 3.
Graham, Tuckerman, Ark. Coin-controlled vending machine. 1.619,246; Mar. 1.

Donathan, William F., Winchester, Tenn., assignor to S. J. Graham, Tuckerman, Ark. Fraud preventer for coin-controlled devices. 1.619,247; Mar. 1.

Donathan, William F., Winchester, Tenn., assignor to S. J. Graham, Tuckerman, Ark. Vending machine. S. J. Graham, Tuckerman, Ark. Vending machine. Donaty and the property of the control of the company of the com

Aug. 23.

Dongan Electric Manufacturing Co. (See Osborne, Robert L., assignor.)

Donle, Harold P., assignor to The Connecticut Telephone & Electric Company, Incorporated, Meriden, Conn. Condenser. 1644;24; Cot. 4.

Donley, Harold B., assignor to The John W. Brown Company, Columbus, Ohio. Lamp. 1,648,37; Nov. 8.

Donley, Harold B., assignor to The John W. Brown Company, Columbus, Ohio. Automobile head lamp. 1,650,500; Nov. 22.

Donley, Harold B., assignor to The John W. Brown Manufacturing Company, Columbus, Ohio. Vehicle head lamp. 1,650,500; Nov. 22.

Donley, Harold B., assignor to The John W. Brown Manufacturing Company, Columbus, Ohio. Vehicle head lamp. 1,650,500; Nov. 22.

Donnelly, Edward F., Malden, Mass. Ball-cock valve. 1,612,857; Jan. 4.

Donnelly, Edward F., Malden, Mass. Vacuum valve.

Donnelly, Edward F., Malden, Mass. Vacuum valve. 1,627.840; May 10.

Johnselly, James, Philadelphia, Pa. Electric stop motion for looms. 1,621,358; Mar. 15. Donnelly, James J., Alexandria, S. Dak. Vapor condenser for motor vehcles radiators. 1,613,873; Jan. 11. Donnelly, James O., Herndon, and F. D. Simminger, Ludell, Kans. Hole-digging mechanism. 1,643,549; Sent. 27. Ludell, Sept. 27

Sept. 27.

Donnelly, Joseph C., Barberton, Ohio, assignor to The Diamond Match Company, Chicago, III, Mechanism for filling match safes and the like. 1,621,316; Mar. 15.

Diamond Match Company, Chicago, III. Box-filling machine, 1,635,262; July 12.

Donnelly, Joseph F., Lemont, III. Apparatus for controlling fluids. 1,613,335; Mar. 1.

Donnelly, R. K., and Sons Company. (See Ackley, Raymond E., assignor.)

Donnelly, Richard O., Victoria, British Columbia, Canada. Fuel-regulation device for internal-combustion engines. 1,633,928; June 28.

Donnelly, Thomas H., Dover, N. H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tool for Knowles looms. 1,639,842; Aug. 23.

Donnelly, Waiter W., Fort Worth Tex. Lift for sucker rods, pipes, and the like. 1,634,935; July 5.

Donnelly, William T., Brooklyn, N. Y. Dry dock.

Donnelly, William T., Brooklyn, N. Y. Dry dock.

Donnelson, Blanche, Pratt, Kans., assignor of one-tenth to F. Goyen, one-tenth to W. Pedigo, one-tenth to W. B. Hess, one-tenth to J. E. Hardesty, and one-tenth to A. S. Farmer. Pipe wrench. 1,641,025; Aug. 30.

Donner, Philip C., Summit, N. J. Carroting fur and treating the same. 1,625,458; Apr. 19.

Donnigan, Edward W. (See Knowlton, D. E., and Donnigan, Jichard J. (See Mohora Laber, Jossephere)

gan.)
Donobue, Michael J. (See Mahoney, John P., assignor.)
Donon, Pierre, Paris, France. Transmission device for
vehicles provided with two motors. 1,641,255; Sept. 6.
Donovan, Alfred, Barking, London, England. Rectal
appliance. 1,640,925; Aug. 30.
Donovan, Daniel S., and J. R. Brown, Dallas, Tex.
Froducing commercial baking dough. 1,647,514;

Producing commercia. Feb. 15.
Donovan, John F., East Cleveland, Ohio, assignor to General Electric Company. Apparatus for making in-candescent lamps and similar articles. 1,620,447; Feb. 15.

Donovan, John F., East Cleveland, Ohio, assignor to General Electric Company. Apparatus for making incandescent lamps and similar articles. 1,620,447;

Donovan, John J., Waterbury, Conn. Shaving mirror. 1,616,236; Feb. 1.

Donovan, John J., Lynn, Mass. Sewing machine. 1,618,461; Feb. 22.

Donovan, Roy W., Kansas City, Mo. Cutting device. 1,616,264; Feb. 22.

Donovan, William J., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Locating valve parts in rubber tubes. 1,646,693; Oct. 25.

Donowho, Robert W., and H. M. Ballweber, Home Gardens, Calif. Liner puller. 1,640,489; Aug. 30.

Dons, Henry N., assignor to N. A. Hailauer, trustee for the company of the

Doran, Maude M., Spokane, Wash. Counter and heel guard. 1,631,310; June 7.

Doran, Maude M., Spokane, Wash. Counter and heel guard. 1,631,310; June 7.

Dore, Frank M., Butte, Mont. Roller skate. 1,618,069; Feb. 15.

Dorer, Primus O., Lee, London, assignor to A. G. Smith, London, England. Operating auxiliary apparatus on motor-driven vehicles. 1,621,769; Mar. 22.

Dorey, George B., Evanston, assignor to W. H. Miner, 1,612,803; Jan. 4.

Dorey, George B., Montreal, Quebec, Canada, assignor, by mesue assignments. to W. H. Miner, Inc. Friction draft gear. 1,613,874; Jan. 11.

Dorey, George B., assignor to Enterprise Railway Equipment Company. Chicago, Ill. Car-door operating mechanism. 1,655,177; July 12.

Dorey, George B., dewark, Ohlo, assignor to Holonhane Dorey, William A., Newark, Ohlo, assignor to Holonhane Orens, Milliam A., Newark, Ohlo, assignor to Holonhane Jan. 4

Jan. 4.

Jan. 4.

Dorey, William A. Newark, Ohio, assignor, by messe company, tac, New York, N. V. Luminaire. 1.644.877; Oct. 11.

Dorey, William A., Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y. Luminaire. 1.644.877; Oct. 11.

Dorey, William A., Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y. Luminaire. 1.

Dorland, F. N. (See Robinson, George W., assignor.)

Dorland, F. N. (See Robinson, George W., assignor.)

Dorman, George W., assignor to Summer Iron Works, Dorman, Lewis L., and W. Y. Gage, Worland, Wyo. Clgar band. 1.647.906; Nov. 1.

Dorman, Neal W., and M. R. Hatch, assignors to The Toledo Machine and Tool Company, Toledo, Ohio. Toggie press. 1.621.713; Mar. 2 Oblinson & Johnson Longie press. 1.621.713; Mar. 2 Oblinson & Johnson it. 1.687.857; Aug. 2 Surgical dressing and making it. 1.687.857; Aug. 2 Surgical dressing and making it. 1.687.857; Aug. 2 Surgical dressing and making. Inc., Troy, N. Y. Collar and making same. 1,646.102; Oct. 18.

Dormann, August, Jr., et al. (See Wilson, John H., as-

Dormann, August, jr., et al. (See Wilson, John H., assignor.)

Dorment, Frank C., Weilington, Ohio. Applicator. 1,635,176; July 12. Dormer, John A. (See Malone, J. G., and Dormer.) Dorn, Carl, Haile-on-the-Sanle, Germany. Dough-dividing machine. 1,613,104; Mar. J. Dorn, Conrad, Trautenfurt, near Spalt, Germany. Lifting mechanism for stampers in stamping mills. 1,617,379; FCD. (See Vogt, F. P., and Dorn.) Dorn, Harry P., assignor to The Cleveland Trust Company, Cleveland, Ohio. Phonometer. 1,641,136; Anc. 30

York N. Y. Fastening for wait coresponding to Riley Nov. 22.

Dornbrook, Fred, Milwaukee, Wis., assignor to Riley Stoker Corporation, Worcester, Mass. Coal-feeding hopper. 1,639,931; Aug. 23.

Dorner, Hermann I. A., Hannover, Germany. High-pressure pump for Diesel engines. 1,628,657; May 17.

Dorner, Claudius, Friedrichshafen-on-the-Bodensee, Germany, assignor to Firm Zeppelinwerk Lindau, Geellaschaft mit beschrähtier Haftung, Lindau-Reutin, Germany. Landing gear for flying machines. 1,623,691; Adv. 12.

many 2. Landing gear for mying machines. 1,023,951; Dornier, Clauding, assignor of one-half to Dornler-Metallbauten Gesellschaft mit beschränkter Haftung, Friedrichsbafen, Germany. Landing chassis for flying machines. 1,626,382; Apr. 26.
Dornier, Clauding, assignor of one-half to the Firm Dornier Metallbauten Gesellschaft mit beschränkter Haftung. Friedrichshafen-on-the-Bodensee, Germany. Dornier, Clauding. Friedrichshafen-on-the-Bodensee, assignor to the Firm: Dornier Metallbauten Gesellschaft mit beschränkter Haftung, Friedrichshafen, Germany. Hollow light metal girder. 1,643,677; Sept. 27.
Dornier Metallbauten Gesellschaft mit beschränkter Haftung, See Dornier, Clauding assignor. The Gathmann Engineer, 1,618,411; Feb. 22.
Dornin, George A., assignor to The Gathmann Engineering Company, Baltimore, Md. Ingot mold. 1,620,010; Mar. 8.

Mar. 8.
Dornin, George A., assignor to The Gathmann Engineering Company, Baltimore, Md. Making ingot molds 1,620,011; Mar. 8.
Dorozynski, Casimir, Chicago, III. Roasting oven 1,639,168; Aug. 16.
Dorr Company, The.
(See Blomfield, A. L., and Ramsey,

Dorr Company, The. (See McHugh, Philip M., assignor.)
Dorr, Company, The. (See Bates, A. M., Dorr, and Dancker.)
Dorr, Wilhelm E. (See Baumeister, H., Dörr, and Hürt-

Dorris, Henry C. (See Faunce, B. F., and Dorris.)
D'Orsay Perfumeries Corporation. (See Delaize, Paul C.,
assignor.)

Assignor.)

Dorsey, Arthur. (See Ford, Seth B., ir., assignor.)

Dorsey, Arthur. (See Shapiro, Sam A., assignor.)

Dorsey, Arthur. (See Shapiro, Sam A., assignor.)

Dorsey, Arthur.

Copeland Co., Provocence, R. I. Radio dial plate.

Des. 73.316; Nov. 8.

Dorsey, Edgar O., Montpeller, Ind. Sanitary poultry

roost. 1,631,799; June 7.

Dorsey, Farnum F., Rochester, N. Y. Duster. 1,633,076; June 21.

Dorsey, Farnum F., assignor to North East Electric Commany Rochester, N. Y. Electric switch. 1,613,288;

Dorsey, Farnum F., assignor to North East Electric Company, Rochester, N. Y. Fuel-supply system. 1,623,049; Apr. 5.

Dorsey, Farnum F., assignor to North East Appliances

pany, Rochester, N. Y. Fuel-supply system. 1,623,049; Apr. 5.
Dorsey, Farnum F., assignor to North East Appliances Inc., Rochester, N. Y. Power mechanism. 1,628,037; May 10.
Dorsey, Farnum F., assignor to North East Electric Compression of the Compression of t

Doser, Theodore, St. Anthony, Iowa. Collapsible roost, 1,623,171; Apr. 5.
Dostal, Gustave A., Dalias, S. Dak. Lacing cutter, 1,646,141; Oct 18.
Dostal, John R., assignor to Dostal & Lowey Hydro Company, Inc., Milwankee, Wis. Bottle-washing machine. 1,629,155; May 17.
Dostal, John R., assignor to Dostal & Lowey Hydro Company, John R., assignor to Dostal & Lowey Hydro Company. Grant Research 1,644,515; Oct. 4,040,000; Grant Research Research

1.644.516; Uct. 4:
Dostal & Lowey Hydro Company. (See Dostal, John R.,
assigner,
assigner,
1.631.890; June 7.
Dotterweich, Andrew J., Pittsburgh, Pa. Apparatus for
softening water. 1.652.710; Dec. 13.
Doty, Dennis D., Garden City, Kans. Well casing.
1.647.907; Nov. 1.
D. 1.631.928; June 7.
Doty, John W., Olney, Ill. Mop-handle fastener.
Doty, John W., Olney, Ill. Mop-handle fastener.
1.647.960; May 10.
Doty, Vernon A., West Springfield, Mass. Vegetable
washer: 1.646.800; Oct. 25.
S. Rosenbaum, New York, N. X. Resilient member.
1.630.893; May 31.
Doud, Louie N., Noiwalk, Ohio. Traveling bag. 1,641.747;
Sept. 6.
Dougal, John W., Edinburgh, Scotland. Facing or preservation of walls and other surfaces. 1,636.829;

Feb. 8.

Dougherty, Charles T., deceased, Huntington Beach, Calif.;
W. W. Smith, administrator, Coalings, Calif., assignor operator. 1.647,961; Nov. 1.

Dougherty, Daniel A., Philadelphia, Pa. Cleaning containers, 1.629,486; May 24.

Dougherty, E. H., et al. (See Dougherty, Charles T., assignor). F. C. at al. (See Dougherty, Charles T., assignor).

assignor).

assignor, Dougherty, F. C., et al. (See Dougherty, Charles T., assignor.)

Dougherty, George, assignor to Economy Glass Company, Morgantown, W. Va. Tumbler or similar article of glassware. Des. 73,426; Sept. 13.

Dougherty, George, Des. 73,426; Sept. 13.

Dougherty, Hattle D., to S. Angeles, Calif. Pedal-actuated Dougherty, Hattle D., et al. (See Dougherty, Charles T., assignor.)

Dougherty, John J., assignor of one-half to W. P. Boland, Scranton, Pa. Dumping appliance. 1,621,462; Mar. 15.

Dougherty, John W., and W. E. Townley, Owensboro, K. P. Dougherty, Machine Corporation. (See Bieler, William D.)

assignor.)

Doughnut Machine Corporation. (See Bieler, William D.)

assignor.)

Doughty, George E., New York, and H. Forth, Ridge-

Doughty, George E., New York, and H. Forth, Ridge-wood, N. Y. File, binder, and the like. 1,636,408; July 19.

Doughty, James P., jr., trustee. (See Weathers, Henry W. assignor.)
Doughty, William E., Detroit, Mich. Display container.
Des. 73,689 (ct. 25,
Doughty, William E., assignor to James Vernor Company, Detroit, Mich. Carbonated-beverage-dispensing Doughas, Charles E., Hogulam, Wash, Rim jack. 1,616,891; Feb. E., Hogulam, Wash, Rim jack.

1,616,891; Feb. 8.

Douglas, Charles E., Nashua, N. H. Sheet metal snow guard. 1,647,345; Nov. 1.

Douglas, Elizabeth J., Crete, Nebr. Paper holder for toilet-seat covers. 1,638,247; Aug. 9.

Douglas, George. San Francisco, Calif. Nonwarping stove top. 1,632,060; June 14.

Douglas, Harry A. (See Nelson, John H., assignor.) Douglas, Harry A. (See Nelson, John H., assignor.) Douglas, Harry A. (See Nelson, John H., assignor.) The control of the control of

Douglis, Harry A., Bronson, Mich. Electric condenser. 1.037,618; Feb. 13. Bronson, Mich. Combined lighting and ignition switch. 1.622,706; Mar. 29. Douglas, Harry A., Bronson, Mich. Combined lighting and ignition switch. 1.622,707; Mar. 29. Douglas, Harry A., Bronson, Mich. Cowl lamp. 1.634,403; July 5. Douglas, Harry A., Bronson, Mich. Circuit-continuing device. 1,634,404; July 5.

Douglas, Harry A., Bronson, Mich. Circuit-continuing device. 1,634,405; July 5. Douglas, Flarry A., Bronson, Mich. Terminal connecter. 1,634,406; July 5. device. 1,534,905, vol.
Douglas, Harry A., Bronson, Mich. Terminal connected.
1,634,406; July 5.
Douglas, Harry A., Bronson, Mich. Contact carrier.
1,634,407; July 5.
Douglas, Harry A., Bronson, Mich. Electric switch.
1,634,408; July 5.
Douglas, Pectin Corporation. (See Douglas, R., and Loesch, assignors.)
Douglas, Robert, and H. G. Loesch, assignors to Douglas-Pectin Corporation, Rochester, N. Y. Emulsification of oils and fats and products made therefrom. 1,625,641;
Aur. 19.

oils and fats and products made therefrom. 1,625,641; Apr. 19.
Douglas, Robert W., Chico, Calif. Egg-beater holder. 1,617,747; Feb. 15.
Douglas, Theodore, Scarboro, assignor to Duplex Engine Governor Company, Inc., Brooklyn, N. Y. Safety attachment for aircraft. 1,626,921; May 3.
Douglas, Theodore, Scarboro, assignor to Duplex Engine Governor Company, Inc., Brooklyn, N. Y. Mechanism for safety controlling internal-combustion engines upon for safety controlling internal-combustion engines upon a control of the c

Co. Inc., Keyport, N. J. Universal John.
Co. Inc., Keyport, N. J., assignor to HealeyCo. Inc., Company, Inc. Universal joint.
1.651,379; Dec. 6.
Douglass, Frank J., Chicago, Ill. Steam-heating apparatus. 1.645,522; Oct. 18.
Douglass, Joseph, Okmulgee, Okla. Header for oil tanks.
1.613,876; Jan. 11.
Douglass, Leon F., Menlo Park, Calif. Method and apparatus for producing variable image effects in photogratus for Joseph, Skander, Calif. Producing colored
photographic films. 1.632,278; June 14.
Douglass, Neale, Brooklyn, N. Y. Chain wrench.
1.626,518; Apr. 26.

phofographic films. 1,632,278; June 14.
Douglass, Neale, Brookiyn, N. Y. Chain wrench. 1,626,518; Apr. 26.
Douglass, Samuel E., Raleigh, N. C. Toothbrush. 1,520,330; Mar. 8.
Douglass, Thomas L., 1849,505; Nov. 22.
Brush-cutting saw. A., Penus Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Concentrating ores and minerals by flotation. 1,632,930; Page 1.

Del. Concentrating ofes abu minerane of Activities, 1,652,099; Dec. 6.
Doujak, Maria, New York, N. Y. Automobile safety attachment. 1,619,709; Mar. 1.
Dourdouffs, Alexandros, Philadelphia, Pa. Saddle seat. 1,620,448; Mar. 8.
Dovan Chemical Corporation. (See Weiss, Morris L., as-

Dovan Chemical corporation. (See Weiss, Mortis L., assignor, inc., 1,622,629; Mar. 22.
Dover, Delmar S. (See Dover, George W. and D. S.)
Dover, George W., Longmeadow, R. I., assignor to The
Montgomery Tool and Machinery Company. Knurling
tool. 1,623,602; Apr. 5.
Dover, George W., Longmeadow, R. I., assignor to The
Dover, George W., Longmeadow, R. I., assignor to The
Dover, George W., and D. S., assignors to Dovereraft
Company, Inc., Providence, R. I. Curtain holder,
1,632,662; Dec. 13.
Dover, Samuel M., Chicago, Ill., assignor of one-half to
T. 22. Seeder, Chicago, Ill. Folding base or support.
Dovercraft Company. (See Dover, George W. and D. S.,
assignors.)

Dovercrart Company, case assignor.)
Dovidaitis, Mathew, Philadelphia, Pa, Finger attachment, John (1997), Aug. 30.
Down (1997), Aug.

signor.) ow Chemical Company, The. (See Hoy, John E., as-Signor.) sw Chemical Company, The. (See Nelson, Elving O..

Dow Chemical Company, The. (See Nelson, Elving O. assignors.)
Dow Chemical Company, The. (See Smith, A. K., and Dow, Chemical Company, The. (See Smith, A. K., and Elvert H., and E. O. Barstow, assignors to The Dow Chemical Company, Midland, Mich. Recovery of bromine. 1,614,663; Jan. 18.
Dow, Louis F., Company. (See Vierling, F. J., and Cook, Dew, Percival E. (See Bishop, B. S. T., and Dow.)
Dow, Percival E. (See Bishop, B. S. T., and Dow.)
Dow, Andrew D., Hoboken, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.
Printing telegraphy. 1,645,805; Oct. 18.
Dowd, Incorporated, Mass. Flying toy.
Dowd, Raymond E., Springfield, Mass. Flying toy.
Town, T. Thomas. Toy airplane. 1,653,039; Dec. 20.
Dowdell, Noble G., assignor to United Electric Co., Chicago, Ill. Radiofrequency transformer. 1,651,515; Esp.
Dowell, Jesse E. and J. F., Glendale, and M. O. Dowell, San Diego, Calif. Metal strip for window and door openings. 1,648,336; Nov. 8.

Dowell, John F. (See Dowell, Jesse E., J. F., and M. O.)
Dowell, John H. (See Smith, T., and Dowell, Manley O. (See Dowell, Jesse E., J. F., and
Dowel, Manley O. (See Dowell, Jesse E., J. F., and
Dowey, Thomas L., Newark, N. J., assignor to Western
Electric Company, Incorporated, New York, N. Y.
Synchronizing system. 1,617,991; Feb. 15.
Dowey, Thomas L., Newark, N. J., assignor to Western
Electric Company, Incorporated, New York, N. Y. Synchronizing mechanism. 1,635,443; Dec. 27.
Dowell Jesse E., Jackson, Mich., assignor to Jackson
Mar. S. & Teol Company. Ferch Puller. 1,620,684;
Mar. S. & Teol Company.

Mar. 8.

Mar. 8.

Dowling, Andrew J., Haverhill, Mass. Receptacle closure, 1,617,202; Feb. 8.

Dowling, Francis J., New York, N. Y. Rotary bolt lock. Dowling, Francis J., New York, N. Y. Doorlock, 1,623,509; Apr. 5.

Dowling, John J., Rathgar, Dublin, Ireland, indicating means responsive to light variations. 1,631,021; May 31.

Dowling, Joseph, Chicago, Ill. Can punch. 1,612,910; Dowling, Thomas B. (See Raiche, P. A., Dowling, and Brides.)

Dowing, Thomas B. (See Raiche, P. A., Dowing, and Brides.)

Down, Sidney G., Pittsburgh, assignor to The Westinghouse Ar Brake Company, Wilmerding, Pa. Motoriouse Art Research of the Westinghouse Arake Company, Wilmerding, Pa. Motoriouse, Andrew, assignor to Cartier Limited, London, England. Fastening for bracelets, necklaces, and other articles of jewelry, 1,628,494; May 10.

Downey, Harry C. (See Skaher, A. H., and Downing, Lower, 1,628,404; May 10.

Downing, Edwin J. (See Skaher, A. H., and Downing, 1,613,405; June 28.

Downing, John, New York, N. X. Mold-form hanger, 1,615,462; Jan. 28.

Downing, Robert H., St. Louis Park, Minn. Denture grinder, 1,652,815; Dec. 13.

Downs, Charles F., Cleveland, Ohio. Culinary apparatus, Downs, Charles E., Chorkers, N. Y. Production of catalyst carrier, 1,636,685; July 28.

Downs, Mary G., administratix. (See Downs, William F., assignor,)

Downs, Mona, Glendale, Ohio. Musical-instruction toy

F., assignor.)

Downs, Mona, Glendale, Ohio. Musical-instruction toy apparatus. 1,637,478; Aug. 2.

Downs, William F., deceased, Chatham, N. J., M. G., Downs, administratrix. Method and apparatus for distilling liquids. 1,616,079; Feb. 1.

Dowrello. Frank, Oakland, Calif. Brake tester. 1,639,844; Aug. 200 to 2,649,844; Aug. 200 to 1,639,844; Aug. 200 to 1,639,844;

Oct. 18.

Dox, Arthur W., assignor to Parke, Davis & Company, Detroit, Mich. Secondary butyl allyl barbituric acid. 1,615,879; Feb. 1.

Dox, Arthur W., Windsor, Ontario, Canada, assignor to Parke Davis & Company, Detroit, Mich. Ethyl-normal-hexyl-barbituric acid. 1,624,546; Apr. 12.

Doyle, Frank M., Brooklyn, N. Y. Surface condenser and method. 1,637,558; Aug. 2.

Doyle, Frank M., Brooklyn, N. Y. Cooling tower. 1,647,281; Nov. 1,588 Hodley, F., and Doyle.)

Doyle, John W., Seattle, Wash. Drill mechanism. 1,630,528; May 31.

Doyle, John W., Seattle, Wash. Utilizing expanding alr. 1,630,835; May 31.

1,630,835; May 31.

Doyle, Thomas, Chicago, III. Combination lamp and loud speaker. Des. 73,427; Sept. 13.

Doyle, William P., Mapilewood, Mo. Separable rim. Drabenstott, Glenn H., Wooster, Ohio. Parachute escape for airships. 1,626,796; May 3.

Drabing, Henry E., Mounds, III. Automatic electric and air switch. 1,643,239; Sept. 20.

Drachenberg, August T., Freeport, Tex. Sulphur mining. 1,628,873; May 27.

Libbook, Germany, Check, Valvey.

1,628,873; May 17.

Drüger, Alexander B., Lubeck, Germany. Check valve for respirating apparatus. 1,621,498; Mar. 22.

Drüger, Alexander B., Lubeck, Germany. Protective cover for breathing apparatus. 1,635,545; July 12.

Dräger, Alexander B., Lubeck, Germany. Carrying device or belt for breathing apparatus, particularly self-Dragon, Joseph, McKees Rocks, Pa. Work-handling device. 1,618,700; Feb. 22.

Drahelm, Max E., and C. E. Deming, Beaver Dam, Wis. Package tie. 1,647,398; Nov. 1.

Draher, John, and A. J. Krieger, Waterbury, Conn. Separative fastener. 1,615,118; Jan. 18.

Sept. 13.

Drake, Alden M., assignor to Greenfield Tap and Die Corporation, Greenfield, Mass. Spindle attachment. 1.622,234; Mar. 22.
Drake, Alden M., assignor to Greenfield Tap & Die Corporation, Greenfield, Mass. Wheel-truing device. 1.638 for Jan. 1.638

Orake, Warren C. (See Friede, 1997).
Drake, Warren C., Inwood, N. Y. Furnace. 1,621,241;
Mar. 15.
Mar. 15.
Mar. 15.
Mar. 15.
Mar. 16.
Mar. 16.
Mar. 16.
Mar. 17.
Mar. 18.
Mar. Draney, Joseph Signors.)

Draney, John J., et al. (See Weaver, J. C., and Ames, assignors.)
Draper, Arthur F., assignor to Chrysler Corporation, Detroit, Mich. Automobile instrument panel. Des. 73,073; July 19.
Draper, Charles H., assignor to The Draper Manufactural Company, Cleveland, Ohio. Sheet-metal drum. 1649,292; Nov. 15.
Draper, Charles T., assignor to The Draper Manufacturing Company, Cleveland, Ohio. Composite closure for sheet-metal containers. 1,651,342; Nov. 29.
Draper, Clare H., Hopedale, assignor to Hopedale Manufacturing Company, Milford, Mass. Weft-replenishing Loom. 1,613,650; Jan. 11.
Draper, Clare H., Hopedale, assignor to Hopedale Manufacturing Company, Milford, Mass. Harness mechanism for Looms. 1,613,651; Jan. 11.
Draper, Clare H., Hopedale, assignor to Hopedale Manufacturing Company, Milford, Mass. Weft-replenishing Loom. 1,621,242; Mar. 15.
Draper, Clare H., Hopedale, assignor to Hopedale Manufacturing Company, Milford, Mass. Shuttle-box tension-controlling mechanism for looms. 1,633,595; Aug. 16.
Draper Graper M., Morelling, Mass. Loom. 1,634,638; Draper Corporation, Hopedale, Mass. Loom. 1,634,638; Draper Corporation, Gee Brannon, Nem W., assignor. 15.

Dec. 27.
Draper Corporation. (See Brannon, Nem W., assignor.)
Draper Corporation. (See Brown, Frederick K., assignor.)
Draper Corporation. (See Brown, L. H., and Repass, as-

Signors.)
Draper Corporation.
Draper Corporation.
Signor.) (See Burdett, Horace H., assignor.) (See Burnham, Edward C., as-

Draper Corporation. (See Burnham, E. C., and Davis,

assignors.)
Draper Corporation,
Draper Corporation,
Draper Corporation,
Draper Corporation,
Draper Corporation,
Draper Corporation,
Draper Corporation. (See Burton, Harry H., assignor.) (See Cunniff, Edward A., assignor.) (See Davis, Harry A., assignor.) (See Draper, Clare H., assignor.) (See Draper, Clare H., assignor.) (See Glies, John W., assignor.) (See Keegan, Patrick, assignor.) (See Krik, John T., assignor.) (See Krik, John T., assignor.) Draper Corporation.
Draper Corporation.
Draper Corporation.

Draper Corporation,
Draper Corporation,
Draper Corporation,
signor.)
Draper Corporation.
Draper Corporation. (See Leonard, Harry A., assignor.) (See McGowan, Thomas H., sr.,

Draper Corporation, assignor.)
Draper Corporation, Draper Corporation, Draper Corporation, Draper Corporation. (See McRae, George H., assignor.) (See Merrill, Charles F., assignor.) (See Miller, Joseph A., assignor.) (See Mintel, William F., assignor.) (See Moore, E. S., and Garner.

assignors.) (See Nix, W. II., and McDaniel, as-

Draper Corporation, signors.)
Draper Corporation.
Draper Corporation.
Draper Corporation.
Draper Corporation.
Draper Corporation.
Draper Corporation. (See Northrop. Jonas, assignor.) (See Rheault, George, assignor.) (See Rhoades, Alonzo E., assignor.) (See Shaw John F., assignor.) (See Skedgell, John A., assignor.) (See Stimpson, Wallace I., as-

signor.) (See Willard, George H., assignor.)
raper, Jesse F., Seattle, Wash. Butt hook. 1.653,092;

Draper, J Dec. 20 Draper, Lawrence P., Mesa, Ariz. Buck-rake attachment for tractors. 1.654,323; Dec. 27. Draper Manufacturing Company, The. (See Draper, Charles T., assignor.)
Drath, Wilfred H., Butler, Pa. Method and apparatus for handling cement and bulk material. 1,634,255;

July 5.
Drauden, Artur, Brooklyn, N. Y. Toy whirligis, 1,646,278; Oct. 18.
Draver, Emil R., assignor of one-half to O. Draver, Richmond, Ind. Frictional window-sash holder. 1,650,011;

NOV. 22. Draver, Orrin. (See Draver, Emil R., assignor.) Dravers, Louis A., Ealing, assignor to Marechal Ruchon & Company Limited, London, England, Pipe and the like for smoking tobacco. 1.652.564; Dec. 13. Dravo Equipment Company. (See Connely, Bush W., as-

signor.)
Dreaper, William P., London, England. Manufacture of artificial silk and the like from viscose solutions. 1,626,454; Apr. 26.
Dredge, William, Manchester, England. Baker's oven. 1,635,824; July 12.
Dredge, William Manchester, England. Heating oven for the state of the

Dregge, 24; July 12.
Dredge, William Manchester, England Reature
1,636,504; July 19.
Dress, Arnold E. (See Drees, Charles E. and A. E.)
Dress, Charles E. and A. E., St. Louis, Mo. Combinationlock knob. 1,651,018; Nov. 29.
Dressen, Jerome J. B., Jefferson, Tex. Tool. 1,633,077;
Drefath, Louis C., Lakewood, assignor to The Grasselli
Chemical Company, Cleveland, Ohio. Distilling hydrochloric acid. 1,628,829; May 17.
Dreffeth, Henry A., Chicago, Ill. Apparatus for producing
and treating gas. 1,650,614; Nov. 29.
Drefter, William, Kensal, N. Dak. Quack-grass digger.
Dreger, Julius. Satter County, Calif. Article stacker.
1,617,149; Feb. 8.
1,680,618, Peb. 8.
1,617,149; Feb. 8.

Drefte, William, Kensal, N. Dak. Quack-grass digger. 1.636.048; July 19. Dreger. Julius. Sutter County, Calif. Article stacker. 1.617.149; Feb. 3. (See Glasspell, Herbert, assignor.) Bregge, Chas., et al. assignor to The American Laundry Machinery Company, Cluchnati, Ohio. Time derice for centrifugal machines. 1.616,031; Feb. 1. Dreher, Albert J., Cincinnati, and D. H. Benjamin, Cleveland Heights, assignors to The American Laundry Machinery Company, Norwood, Ohio. Shirt-ironing machine. 1.634.654; July 6. Dreher, Gustave E., Schenectady. N. Y., assignor to General Elegan Company, Waterproof cementing comprehending the Company, Waterproof cementing complexity. 1635,782; July 12. Dreibuss, Harry C., assignor to Scullin Steel Co., St. Louis, Mo. Separable Journal box. 1.645.074; Jan. 18. Dreibuss, Harry C., assignor, by messe assignments, to Scullin Steel Co., St. Louis, Mo. Separable Journal box. 1.636,767; July New Hayen, Conn., assignor to Dreisbach Motors Inc. (See Dreisbach, Charles A., assignor.)

signor.)

Drennan, James B., Portland, Oreg. Automobile body spring control apparatus. 1.632,728; June 14. Drenning, Percy R. (See Symington, T. H., and Drenning.

Dresses Machine 1001 company liam C., assignor.)
Dresses Machine Tool Co., The. (See De Roo, W. C., and Larsh, assignors.)
Dresner, Emanuel, Chicago, Ill. Fastener. 1,620,611;

Dresner, Mar. 8

Mar. 8.

Dresser, Clarence G., St. Francois, Mo., and F. S. Youtsey, Collinsville, Ill. Sampling apparatus and system. 1,641,743; Sept. 6.

Dresser, Eibert H., Duluth, Minn. Concrete cribbing. 1,627,639; May Monfacturing Company. (See Clark, J., Brance, assignor).

Dresser, S. R., Manufacturing Company. (See Clark, J., Smith, and Meese, assignors.)

Dresser, S. R., Manufacturing Company. (See Clark, J., Smith, and Meese, assignors.)

Dresser, Conrad, assignor to American Dressler Tunnel Kilns, Inc., Kew York, M. Y. Continuous kiln and Dressler, Conrad, assignor to American Dressler, Tunnel Kilns, Inc., Cleveland, Ohlo. Tunnel kiln. 1,646,279; Oct. 18.

Artier. 1.627,841; May 10.
Dressler, Conrad, assignor to American Dressler Tunnel
Kilns, Inc., Cleveland, Ohio. Tunnel klin. 1.646,279;
Oct. 18.
Dressler, Philip D., assignor to American Dressler Tunnel
Kilns, Inc., Cleveland, Ohio. Open-fire klin. 1,651,380;
Dressler, Philip d'H., assignor to American Dressler Tunnel
Kilns, Inc., Cleveland, Ohio. Tunnel-klin-heating
means. 1,615,217; Jan. 25.
Dressler, Philip d'Huc, assignor to American Dressler
Tunnel Kilns, Inc., Cleveland, Ohio. Reciprocating car
klins, 1638,883; Aug. 16.
Dressler, Polity d'Huc, 1651,380; Aug. 16.
Drovk, New York, N. Y.
Box cover paper or similar
article. Des. 7,2512; Apr. 26.
Drew, Eric S., London, England, and A. B. S. Laidlaw,
Beechwood, Skelmordie, Scotland. Liquid-fuel burner.
1,636,464; July 19.

Drew, George W. (See Grant, W. C., Thomas, and Drew.)
Drew, Harry A. (See Lazar, D., and Drew.)
Drew, Henry J., Brunswick, J. A. H. Drew, Elsternwick, and J. F. Gardiener, Gardenvale, Victoria, assignors to know the strain. G. Grantenvale, L. Gardenvale, Victoria, assignors to Materiow Tableside Co., Waterlown, Wis. Table slide, 1,626,189; Apr. 26.
Drew, John, Binghamton, N. Y. Milk strainer, 1,647,562;
Drew, John A. H. (See Drew, Henry J. and J. A. H., and Gardier.)
Drew, Paul, and L. C. Zabriskie, Ridgewood, N. J. Radio loud speaker. Des. 73,741; Nov. J. Thew. Thomas. West Springfield, Mass. Dirt-ejecting Drews, Henry, Otto, Tex. Choker-rod latch. 1,651,874; Dec. 6.
Drewse, Viggo, Brooklyn, assignor to West Virginia Pulp

Drewsen, Viggo, Larebmont, N. Y., assignor to west viginis Pulp and Paper Company, New York, N. Y.
Making magnesia and calcium pentasulphide.
1.828,31; May 10.
Drewsen, 1.1 May 10.
Drewsen, 1.1 May 10.
Drewsen, 1.1 May 10.
Drewsen, 1.2 May 10.
Drewsen, 1.2 May 10.
Drewsen, 1.3 May 10.
Drewsen, 1.3 May 10.
Drewsen, 1.3 May 17.
Drewler, Charles, assignor to L. G. S. Devices Corporation, Indianapolis, Ind. Spring clutch. 1.629,098; May 17.
Drewler, Earl J. J. Chicago, Ill. Fipe-line strainer, Indianapolis, Ind. Spring clutch. 1.629,098; May 17.
Drewler, Earl J. J. Chicago, Ill. Fipe-line strainer, 1.2 Dreyer, Bruno W. Chicago, Ill. Fipe-line strainer, 1.2 Dreyer, Bruno W. Chicago, Ill. Folding scat for window cleaning. 1.623,962; Apr 12.
Dreyer, Otto, Essen-on-the-Ruhr, Germany. Thermal protective device for electrical circuits. 1.634,953; July 26.
Dreyer, Otto, Essen-on-the-Ruhr, Germany. Safety device for electrical circuits. 1.647,482; Mor. 1.0 May 16.
Dreyfus, Henry, London, England. Manufacture of textiles 1.634,613; July 5.
Dreyfus, Henry, London, England. Manufacture of artificial threads and filaments. 1.620,638; Mar. 15.
Dreyfus, Henry, London, England, Manufacture of artificial threads and filaments. 1.620,638; Mar. 15.
Dreyfus, Selection of the May 10. Manufacture of artificial threads and filaments. 1.620,638; Mar. 15.
Dreyfus, Walter L. San Francisco, Calif. Automatic. 1611,631,613.

neial interest. Jesee, New York, N. 1. Hat Markey, Preyfus, Walter L., San Francisco, Calif. Automatic controlling mechanism for oll burners. 1,614,918; Drinkhahn, Louis F. (See Couchman, A., and Phillips, assignors.)

Drinkhahn, Louis F. (See Couchman, A., Drinkhahn, Drinkhahn, Louis F. (See Couchman, A., Drinkhahn, Louis F.) assignors, Drinkhahn, Louis F. (See Couchman, An Primarkahan, Louis F. (See Couchman, An Primarkahan, An Prima

Hartford, Conn. Motor cycle support. 1,643,006; Sept. 20.
Drissoil, Dennis L. (See Montgomery, G. A., and Drissoil.) Drissoil, James F., Buffalo, N. Y. Parement. 1,653,395; Dec. 20.
Drish, Frank W., Hollywood, Calif. Garden implement. 1,633,318; June 21.
Drissner, Alfred E., assignor to The National Acme Company, Cleveland, Ohio. Metal-working machine. 1,618,683; Feb. 22.
Dri-Steam Valve Corporation. (See Pascale, Pasquale, assignorthy).

Dri-Steam Valve Corporation. (See Pascale, Pasquale, assignor), then M., New York, N. Y. Racket string. 1,624,720; Apr. 12.

Dritz, Arthur M., New York, N. Y. Amusement device. 1,639,596; Aug. 16.

Driver, William, assignor to Hamilton Beach Mfg. Co., Racine, Wis. Motor controller. 1,644,820; Oct. 11.

Drida, Karl, Portland, Oreg. Radiator cover. 1,630,529; Droge, William H., Detroit, Mich. Dice shaking or throwing device. 1,627,492; May 3.

Drohan, Francis P., Jacksonville, Fla. Tube holder and paste ejector. 1,620,955; Mar. 15.

Drohan, Francis P., Jacksonville, Fla. Light. 1,622,187; Mar. 22.

Mar. 22.

Droitzour, Michael A., Providence, R. I. Method and mechanism for delivering and stacking sheets. 1,625,642; Apr. 19.

Trolshammer, Ivar O. G., Hamar, Norway. Brake valve. 1,635,342; Dec. 27.

Brown, Joseph A., Willimantic, Conn. Automobile door latch. 1,652,616; Dec. 13.

Truck, Herman, Broodlyn, N. Y. Mechanical toy book. 1,640,399; Aug. 30.

Druck, Herman, Broodlyn, N. Y. Mechanical toy book. 1,640,399; Aug. 30.

Druck, Herman, Broodlyn, N. Y. Mechanical toy book. 1,640,399; Aug. 30.

Drucker, Julius. (See Lueg, P., Drucker, and Thienemann.)

maun.)
Drucklieb, Jeanne L., New York, N. Y. Automobile radia-tor-cap ornament or similar article. Des. 74,003;

Drucklich, Jeanne I., New York, N. Y. Candlestick or similar article of manufacture. Des. 74,103; Dec. 20, Druiff, Ernest, Birmingham, England. Stopper or closure member for containers. 1,614,236; Jan. 11. Drumheller, William P., Springfield, assignor to The William Carter Company, Needham Heights, Mass. Yarn-control mechanism. 1,636,409; July 19. Drumm, Charles F., and E. R. Gurney, assignors to International Motor Company, New York, N. Y. Cushion connection for vehicle construction. 1,616,613; Feb. 8.

Feb. 8.
Drummond, Henry E. M., Frankton Junction, New Zealand. Grease and oil pump for motor cars and machinery, 1,621,109; Mar. 15.
Co., Inc., Chicago, Ill. Footwear case. Des. 72,550; May 3.

Co., 1nc., Chicago, III. Footwerr case. Des. 72,550; May 30, 1nc., Chicago, III. Utensil mitt. Des. 72,551; May 3. Drummond, Robertson P., assignor to Pacific Cast Iron Pipe & Foundry Company, Los Angeles, Calif. Composition of matter. 1,620,877; Mar. 15.
Drummond, Thomas N., Hamilton, assignor of one-half to L. B. Maunsell, &drige, Masterton, New Zealand. Ring 1,629,207; May 17, Grand Rapids, Mich., assignor to Haskelite Manufacturing Corporation. Insecticide. 1,630,836; May 31.
Drushel, William A., Grand Rapids, Mich., assignor to Haskelite Manufacturing Corporation. Container for Haskelite Manufacturing Corporation. Container for Place of the Manufacturing Corporation. Container for 1,612,858; Jan. 4.
Dryden, Heien, New York, N. Y. Theatrical scenery. 1,612,858; Jan. 4.
Dryden Rubber Company. (See Brown, William II., assignor).

signor.) Dryden Rubber Company. (See Kintzele, Julius H., as-

Dryden Rubber Company,
signori, Julia H., assignor of one-half to G. H. Dryer,
Dryer, Gentler, N. Y. Reversible dress. 1,630,838; May 31.
Dryer, Gerald H. (See Dryer, Beulah H., assignor).
Dry Ice Corporation of America. (See Campbell, Robert
B., assignor.).
Dry Ice Corporation of America. (See Josephson, Wal-

Dry Ice Corporation.

(See Bolling John E., assignor.)

Drying Systems, Inc. (See Croun, Waiter E., assignor.)

Drying Systems Inc. (See Szekely Ernest, assignor.)

Dry-Zero Corporation. (See Lindsay, Harvey B., as-Dual Oil Burner, Inc. (See Swartz, H., and Mulligan, as-

signor.)
Dual Oil Burner, Inc. (See Swartz, H., and Mulligan, assignors.)
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago. III Treating petroleum Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago. III. Treating hydrocarbon oils. 1628.127: May 10.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago. III. Process and apparatus Dor converting oils. 1628.236: May 10.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago. III. Process and apparatus Dos. 1,638.112; Aug. 9.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, III. Cracking oils. 1,638.13; Aug. 9.
Dubbs, Carbon P., Wilmette, III., assignor to Universal Oil Products Company, Chicago, III. Converting petroleum oils. 1,652.167; Dec. 13.
Dubbs, Carbon P., Wilmette, III., assignor to Universal Oil Products Company, Chicago, III. Treating hydrocarbon oils. 1,652.167; Dec. 13.
Dubb, Hertor, and R. X. Dupuis, Manchester, N. H. License-plate holder. 1,68e Rüping, Max, assignor.)
Dublisher & G. m. b. I. (58e Rüping, Max, assignor.)
Dassignor.)

assignor.)

Dubilier Condenser Corporation. (See Capicotto, James V., assignor.)

Dubiller Condenser Corporation. (See Dubilier, William,

Dubilier Condenser Corporation. (See Fried, Joseph A., assignor.)

Dubilier Condenser Corporation. (See Fried, Joseph A., assignor.)

assignor.)
Dubliler Condenser Corporation. (See Van Deventer, Harry R., assignor.)
Dubliler Condenser Corporation. (See Warren, Joseph A., assignor.)
Dubliler Condenser Corporation. (See Warren, Robert M.,

Dublier Coidenser Corporation. (See Warren, Robert M., assignor.) Dublier, William. (See Mountford, William S., assignor.) Dublier, William, New York, N. Y. Method and apparatus for interrupting electrical circuits. 1,623.531; Apr. 5. Dublier, William, New York, N. Y., assignor to Dublier Condenser Corporation. Electrical structure. 1,628,627; May 10.

Dubliler, William, New York, N. Y., assignor to Dubliler Condenser Corporation. Condenser. 1,639,597; Aug. 16. Dubliler. William, New York, N. Y., assignor to Dubliler Condenser Corporation. High-potential condenser. 1,639,650; Aug. 23.

Dubilier, William, New York, N. Y., assignor to Dubilier Condenser Corporation. Variable condenser. 1,646,236:

Condenser Corporation. Variable condenser. 1,646,236; Oct. 18. Dubilier, William, New York, N. Y., assignor to Dubiller Condenser Corporation. Insulating structure for high-potential condenser terminals and the like. 1,650,983;

Dublier, William, New York, N. Y., assignor to Dublier Condenser Corporation. Insularing structure for high-phenical condenser terminals and the like. 1,630,883; Dublier, William, New Rochelle, assignor to Dublier Condenser Corporation, New York, N. Y. Ellectrical condenser. 1,627,493; May 3.

Dublin, Harry E. (See Funk, C. and Dubin.)

Judin, Harry E. (See Moody, J. Y. Musical doli.)

Judin, Harry E. (See Moody, J. F. and Du Bols.)

Dubost, Michel, Parls, France, assignor to F. Ducharne Silk Co. Inc., New York, N. Y. Textile fabric. Des. 72, 475; Apr. 19.

Judin, Harry E. (See Moody, J. F. and Ducharne, Silk Co. Inc., New York, N. Y. Textile fabric. Des. 72, 475; Apr. 19.

Judin, Judin, Judin, J. St. Omer, France. Elastic wheel. (1,225,383; May 10. Ducharne, F, Silk Co. Inc. (See Dubost, Michel, assignor.)

Judin, Judin,

Duchemin, George W., Newara, May 31.

Duchemin, Howard A., Los Angeles, Calif. Building hollow-will constructions 1,619,570; Mar. 1.

1,645,187; Oct. 11.

Duchesne, Ernest, Schenectady, N. Y., assignor to Landis Machine Company, Waynesboro, Pa. Cutting threads. 1,647,037; Oct. 25.

Duck, Lawrence, Company, (See Flett, William, assignor).

Duckwall, Esther M. (See Signer, M., and Duckwall.)
Duckworth Chain & Manufacturing Company. (See Boutin, Stanley, assignor.)
Duckworth, Harold, et al. (See Boutin, Stanley, assignor.)

signor.)

Duckworth Joseph J., assignor of fifty-two per cent to T. O. Duckworth, Salt Lake City, Utah. Lifting device, 1,638,509; Aug. 9, See Duckworth, Joseph J., assignor.)

Duckworth, T. O. (See Duckworth, Joseph J., assignor.)

Duckworth, T. O. (See Duckworth, Joseph J., assignor.)

Respanding to the Company of the

May 11.

Dudley, Benjamin B., Visalia, and E. R. Dudley, Piedmont, Calif. Collapsing oil drill. 1.625.247; Apr. 19.

Dudley, Colon J., Hamburg, and M. H. Holmwood, Orchard Park, N. Y. Basket-cover fastener. 1,651,381; Dec. 6.

Dudley, Edward E. (See Dudley, Benjamin B. and E. R.).

Dudley, Frank R., (See Proctor, W. G., and Dudley, Dudley, Frank R., Fitchburg, Mass. Pump attachment. 1,617,017; Feb. 8.

Dudley, George E., Roseville, Calif. Vehicle wheel. 1.655.348; Dec. 20. Dudley, James G., New York, N. Y. Awning casement window. 1,633.375; June 21. Dudley, Sanuel W., New Haven, Conn., and C. S. Bushnell, assignors to General Railway Signal Company, Rochester, N. Y. Brake-applying apparatus. 1,628,312;

Dudley, William A., and K. B. Duerr, Brooklyn, N. Y., as-signors to The Western Union Telegraph Company, New York, N. Y. Multiplex-channel repeater system. 1,617,993; Feb. 15.

1.617.993; Feb. 15.
Duker, Charles, Fort Dodge, Iowa. Clearing device for corn snapping mechanisms. 1.627.021; May 3.
Duert, Karl B. (See Duer, Van J. K. and Ducrden.) Duert, Karl B. (See Duer, Van J. K. and Ducrden.) Duffay, Lonis, Versailles, France. Photographic printing in colors. [.03.1524; June 7.
Duff, Lee F., Los Angeles, Calif. Blade holder. 1.619.249; Mar. 1.

Duff Manufacturing Company, The. (See Schwerin, Frank II., assignor.) Duff, Sannul E. (See Heinle, Albert W., assignor.) Duffe, Allen M., assignor to W. H. Robinson, Buffalo, N. Y. Electric bester, 1,625,889, Apr. 26.

Duffield, George B., assignor to Detroit Lubricator Company, Detroit, Mich. Valve-operating device. In Co. 1,623,449, May S., Hamilton, Ontario, Canada. Instepnum, 1,626,725; May 3. Duffin, James R., Loulsville, Ky. Self-serving store. 1,633,886; June 28. Duffing, George, Hamburg, Germany, Lubricating device for axle bearings. 1,641,417; Sept. 6. Duffiner, Bearard J., Lynchburg, Va. Union suit. Dufford, Herbert, Butler, Pa. Rail anchor. 1,654,458; Dec. 27.

Dufford, Dufford, Herberf, Butler, Pa. Rail anchor. 1,654,458; Dec. 27.
Duffy, Edward E., San Antonio, Tex. Antifriction drawbar support. 1,628,356; May 10.
Den. Markett B., San Antonio, Tex. Pressure gauge. 1,614,032; Feb. 1.
Duffy, James T., San Antonio, Tex. Pressure gauge. 1,614,032; Feb. 1.
Duffy, James W., Maywood, Ill. Automobile bumper. 1,647,611; Nov. 1.
Duffy, Partick J., Holyoke, Mass. Pliers. 1,626,274; Duffy, Partick J., Holyoke, Mass. Pliers. 1,626,274; Duffy, Partick J., Holyoke, Mass. Spinor.

Duffy, Patrick J., Holyoke, Mass. Pilers. 1,628,274; Apr. 26.
Duffy, Raiph E., et al. (See Underwood, Walter O., assignor.)
10,49,392; Nov. 15.
Duffy, William J. (See Gilday, F., and Duffy.)
Dufresne, Oliver J. (See Gilday, F., and Duffy.)
Dufresne, Oliver J. (See Marsh, L., and Duffy.)
Dufresne, Oliver J. (See Gilday, F., and Duffy.)
Duffy. William J. (See Gilday, F., and Duffy.)
Duffy. Frederick W., Mexico, Mexico.
On the Company of the Company, Fred S. (147.046; Feb. 8.)
Dugan, Thomas, Wiehlta, Kans., assignor to J. I. Case
Threshing Machine Company, Racine, Wis. Straw spreader, 1,625,353; Apr. 19.
Dugan, Richard W., Dickens, Nebr. Hay sweep.
1,652.350; Dec. 13.
Duggins, Charles F., Richmond, Va. Radiator cover.
1,624.476; Nov. 8.
Duggins, Charles F., Richmond, Va. Radiator cover.
1,624.476; Nov. 8.
Dunhamel, Francois X. A., Ottawa, Ontario, Canada. Canera a. 1,623.534; Apr. 5.
Duisberg, Walter, Leverkusen, near Cologne, W. Hentrich, Duisberg, Walter, Leverhan, Wiesdorf, near Cologne, W. Hentrich, Marsham, V. S. (148, 148).
Duisberg, Walter, Leverkusen, near Cologne, W. Hentrich, and L. Zeh, Wiesdorf, near Cologne, W. Hentrich, Mexicon, C. (148, 158).
Duisberg, Walter, Leverkusen, near Cologne, W. Hentrich, and L. Zeh, Wiesdorf, near Cologne, W. Hentrich, and L. Zeh, Wiesdorf, near Cologne, W. Hentrich, Aryl, esters of nitro amino benzene sulphonic acids. 1,646,755; Oct. 25.
Duisberg-Kupwerhutte. (See Mattenklodt, K., and Schramm, assignors).
Duke, Charles A., New York, N. Y. Knockdown stand.
Duke, Charles A., New York, N. Y. Knockdown stand.
Duke, Charles A., New York, N. Y. Knockdown stand.
Duke, Charles A., New York, N. Y. Knockdown stand.
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Duke, Charles A., New York, N. Y. Knockdown stand.
Duke, Charles A., New York, N. Y. Knockdown stand.
Duke,

Sept. 20.

Duke, Harold H., Rockdale, Sydney, assignor of one-balf to J. Harris, Brighton le Sands, New South Wales, Australia. Roid-paving block. 1,642,846; Sept. 20.

Dulany, George W., fr. (See Page, C. B., and Burton, assignors.)

assignors.)
Duley, Harley H., Chicago, Ill. Detectormeter. 1,633,930;
June 28.
June

Dumms. Georges. assignor to The Société Anonyme des Chaux et Ciments de Lafarge et du Tell, Vivlers, Ardeche, France. Manufacture of fused cement and apparatus therefor. 1,615,290; Jan. 25.
Du Mazuel, Edmond G., New York, N. Y., assignor to Kas-So Kitch-E-Mon-E-Too So-Ne-Ah Limited. Breechock bearing. 1,615,810; Jan. 25.
Dumbleton. Harold F., Cleveland, assignor to The Reparatus of the Comparatus of Properties of Properties. 1,615,615,111; 19.
Dumke, Willy, assignor to High Frequency Laboratories, Chicago, III, Transformer and mounting therefor, 1,647,612; Nov. 1.

Chicago. III. Transformer and mounting therefor. 1,647,612; Nov. 1.
Duman, Clifford S., Winnemucca, Nev. Measuring and cutting apparatus. 1,647,689; Nov. 1.
Dumond. Edmond J. E., Parls. France. Purifying, enriching, or refining crude graphite. 1,614,352; Jan. 11.
Dumont. Guilhume. Esneux. near Liege, Beigium. Electrical relay switch. 1,618,446; Jan. 4.
Dickology and the comparation of the comparation of

Dumont, Margaret, Waco, Tex. Cabinet. 1,636,738;

July 26.

Dumont, Maude F. (See Dumont, Joseph R., assignor.)

Dunaime, Georges, Paris, France, assignor to Cherany,

Dunaway, Clarence, assignor to Hopedale Manufacturing

Company, Milford, Mass. Protector mechanism for

looms. 1, 648,261; Nov. 8.

Dunaway, J. H., et al. (See Dougherty, Charles T., assignor.) All, et al. (See Dougherty, Charles T., assignor.) All, exander G., Glassow Scotland, Piston

signor.)
Dunbar, Alexander G., Glasgow, Scotland. Piston.
1,637,837; Aug. 2.
Buckeye, Tex. Lamp extinguisher.
1,641,242; Sept. 6.
Dunbar, Exnest W., Hudson, and H. Westling, Boston,
assignors to Cambridge Rubber Company, Cambridge,
Maiss. Manufacturing rubber shoes. 1,641,128;
Aug. 30.

Ang. 30. Trancis F. (See Holcombe, J. R., and Dunbar, Dunbar, Francis F. (See Holcombe, J. R., and Dunbar, Dunbar, Francis W. Chicago, Ill., assignor, by mesne assignments, to Kellogg Switchboard & Supply Co. Telephone system. 1,623,336; Apr. 5.
Dunbar, Francis W., Chicago, Ill., assignor, by mesne assignments, to Kellogg Switchboard & Supply Company. Telephone-exchange system. 1,623,337; Apr. 5.
Dunbar, Frank H., Cleveland, Ohio. Ash gate. 1,630,378: May 31.
Dunbar, Thomas, Pittsburgh, Pa. Power-transmission mechanism. 1,652,378; Dec. 13.
Dunbar, Thomas L., assignor to Stebbins Engineering and Manufacturing Company, Watertown, N. Y. Method Manufacturing Company, Watertown, N. Y. Method Cot. 13.
Dunbar, George J., ir., assignor, to Chammida Manufacture, Manufacture, of Chammida Manufacture, and Manufacture, of Cot. 13.

Dunbaugh, George J., jr., assignor to Champion Manu-lumbaugh, Company, Chicago, III. Liquid-level gauge. 1,621,584; Mar. 22. Duncan, Arthur L., Oakland, Calif. Removing, the nit from and bisecting single-stone fruit. 1,653.552; Dec. 20.

trom and bisecting single-stone fruit. 1,000.002. Dec. 20.

Duncan, Charles H., assignor of one-third to F. C. Richardson and one-third to W. F. Johnson, Erie, Pa. Valve. 1,645.900; Oct, 18.

Duncan, Daniel E., Far Rockaway, N. Y., assignor of one-balf to M. J. McDonnell, San Francisco, Calif. Duncan Electric Manufacturing Company. (See Harris, Jesse, assignor.)

Duncan, Floyd E., Escondido, Calif. Ditching plow. 1,620,250; Mar. 8.

Duncan, George W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. 20.

Duncan, J. W., et al. (See Thompson, William H., assignor.)

Duncan, J. W., et al. (See Thompson, William H., assignor.)

Duncan, James H., and S. Rogow, New York, N. Y. Concrete folst floor forms. 1,616,846; Feb. S.

Duncan, Joseph S., assignor to Addressograph Company, Joseph S., assignor to Addressograph Company, Chicago, Ill. Printing machine. 1,623,396; Apr. 5.

Duncan, Joseph S., assignor, by mesne assignments, to Addressograph Company, Chicago, Ill. Printing device. 1,654,040; Dec. 27.

Duncan, Joseph S., assignor, by mesne assignments to Addressograph Company, Chicago, Ill. Printing device. 1,654,041; Dec. 27.

Duncan, Joseph S., assignor, by mesne assignments to Addressograph Company, Chicago, Ill. Printing device. 1,646,041; Dec. 27.

Duncan, Joseph S., and H. E. Hubbard, assignors to Addressograph Company, Chicago, Ill. Ribbon spool. 1,638,980; Aug. 16.

Duncan, Robert D., Jr., Benavxille, assignor to Wired Radio, Inc., New York, N. Y. Polyphase high-frequency-current generator. 1,623,163; Mar. 22.

Duncan, Robert D., Jr., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Polyphase high-frequency-current generator. 1,643,465; Sept. 27.

Duncan, William M., Alton, Ill. Chain grate. 1,613,316; Jan. 4.

Duncan, William M., Alton, Ill. Mechanical stoker.

device 1.635.744; July 12.

Duncan, William M., Alton, Ill. Chain grate 1,613.316;
Jan. 4.

Juncan, William M., Alton, Ill. Mechanical stoker,
1,625.077; Apr. 19.

Duncan, William M., Alton, Ill. Mechanical stoker.

Duncan, William M., Alton, Ill. Mechanical stoker.
1,625.079; Apr. 19.

Duncanson, Walter E., assignor to The J. G. Wilson Corporation, New York, N. Y. Automatic fire shutter.
1,617,438; Feb. 15.

Duncanson, Walter E., assignor to The J. G. Wilson Corporation, New York, N. Y. Fire shutter.
1,617,438; Feb. 15.

Feb. 15.

Duncanson, Walter E., assignor to The J. G. Wilson Corporation, New York, N. Y. Automatic fire-shutter mechanism. 1,617,449; Feb. 15. The J. G. Wilson Corporation, New York, N. Y. Venetian blind. 1,630,114; May 24.

Duncanson, Walter E., assignor to The J. G. Wilson Corporation, New York, N. Y. Blind or awning constructions of the J. G. Wilson Corporation, New York, N. Y. Blind or awning constructions of the J. G. Wilson Corporation, New York, N. Y. Blind or awning constructions of the J. G. Wilson Corporation, Charles M. (See Harris, Charles J., assignor.) Charles M. (See Harris, Charles J., assignor.)

signor.)
Dundas, James W., Detroit, Mich. Auxiliary lifting arrangement for aeroplanes. 1,633,006; June 21.

Dundon, John H. (See Farragher, J., and Dundon.) Dunham, A. H., et al. (See Rystedt, Ingemar K., as-

signor.)

Dunham, Bert G., Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,619,250; Mar. I. Dunham, Bert G., Hawthorne, and W. T. Haines, Montain Lakes, N. J.: said Haines assignor to American Telephone and Telegraph Company and said Dunham assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,620,012; Mar. 8.

Dunham, C. A., Company. (See Dunham, Clayton A., assignor.)

New York, N. Y. Telephone-exchange system. 1,620,012; Mar. 8.
Dunham. C. A., Company. (See Dunham, Clayton A., Dunham. C. A., Company. (See Eige, Falten, assignor; Dunham, C. A., Company. (See Eige, Falten, assignor; Dunham, Charles E., Los Angeles, Calif. Waste-pipe tool. 1,643,638; Sept. 27.
Dunham, Charles W., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electronic Comporation, Chicago, III. Temperature indicator for automobiles. 1,613,745; Jan. 11.
Dunham, Clayton A., Glencoe, assignor to Dunhameter Corporation, Chicago, III. Temperature indicator for Bunham Clayton A., Glencoe, assignor to Dunhameter Corporation, Chicago, III. Temperature indicator for Dunham Company, Marshalltown, Iowa. Heating by steam. Layton A., Glencoe, III, assignor to C. A. Dunham Company, The. (See Dickinson, Harry S., as-Dunham Company, The. (See Dunham, Wiley J. and R. E., assignor:)
Dunham Franklin G., Brooklyn, N. Y., assignor to The Acolian Company, Music roll for automatic pianos and the like. 1,652,003; Dec. 6.
He like. 1,652,003; Dec. 6.
Dunham, Ry E. (See Dunham, Wiley J. and R. E.)
Dunham, Wiley J. and R. E., assignors to The Dunham Company, Berea, Ohio. Tillage implement. 1,653,351; Dec. 200.
Dunham, William G., assignor to Weber Electic Company, Schenectady, N. Y. Chain pendant. Dec. 7,4050;

Dunham, William G., assignor to Weber Electric Com-pany, Schenectady, N. Y. Chain pendant. Des. 74,050; Dec. 13.

Dunhameter Corporation. (See Dunham, Clayton A., as-

Dunhameter Corporation. (Set Danusin, Carlossignor.)
Dunkel, Phillip A., Denver, Colo. Resilient vehicle wheel.
1.638,801; Aug. 9.
Dunkelsberg, Louis, Brooklyn, N. Y. Spectacle frame.
Des. 71,864; Jan. 18.
Dunkelsberg, Louis, New York, N. Y. Eyeglass frame.
Des. 73,900; Nov. 22.
Dunlap, Beraald M., Rockford, Ill., assignor to H. L.
Fischer, St. Paul, Minn. Writing pad. 1,631,102;
June 7.
Dunlap, Charles K., assignor to Sonoco Products Company, Hartsville, S. C. Paper tube. 1,634,492;
July 5.

July 5.

Dunlap, Frederick L., Chicago, Ill., and N. T. Ewer,
Swarthmore, Pa., assignors to Amdyco Corporation,
New York, N. Y. Fire-extinguishing composition,
1.624,398; Apr. 12.

Dunlap, Harley M., deceased, and D. M. Putnam, Battle
C. 1.683, 144; Apr. 8. Dunlap, executrix. Air compressor.

Dunlap, Janes E., and E. M. Horn, Wichita Falls, Tex.
Single control means for steam-engine supply valves and
reverse levers. 1.647,859; Nov. 1.

Dunlap, John W., Modesto, Calif. Direction-signal casing.
Des. 72,476; Apr. 19.

Dunlap, Raiph S., Chicago, Ill. Saucepan. 1,623,397;

Dunlap, Raiph S., Chicago, Ill. Saucepan. 1,623,397;

Dunlap, Rhoda S., executrix. (See Dunlap, H. M., and Dunleavy, John J. (See Daugert, P., Frey, and Dunleavy.)

Dunloy, James, assignor to Kaestner & Hecht Company, Chicago, Ill. Elevator. 1.619.405; Mar. I. Dunloy, James, Chicago, Ill., and J. F. Clancy, East Troy, Wis. assignors to Kaestner & Hecht Company, Chicago, Ill. Floor selector for elevators. 1,627,520; May 2.

Dunlop Rubber Company, Limited. (See Macbeth, Colin, Dunlop Rubber Company, The. (See Paull, Wallace H.,

Dunlop Rubber Company Limited. (See Penfold, Albert

Duniop Russer Company
E., assignoral Rusber Corporation. (See Young, H. C.,
and Burr, assignoral Corporation of America. (See
Dalgish, John, assignor.)
Duniop Tire and Rubber Corporation of America. (See
Macbeth, C., and Dexter, assignors.)
Duniop Tire and Rubber Corporation of America. (See
Macbeth, C., and Dexter, assignor of America. (See
Willshaw, Harry, assignor.)
Dunlop, William F., New York, N. Y. Dental chuck,
1,626,519; Apr. 26.

Bummire, Russell P., assignor to Erie Malleable Iron
Dummire, Russell P., assignor to Erie Malleable Iron

Dunmire, Russell P., assignor to Eric Malleable Iron Company, Eric, Pa. Conduit box. 1,647,511; Nov. 1. Dunmore, Francis W., Washington, D. C. Signal-receiv-ing system. 1,635,117; July 5.

Dunn, Djeby S., Kew, Melhourne, Victoria, Australia. Apparatus for ineasuring and dispensing inbricating oils and other liquids. 1,617,748; Feb. 16.
Dunn, Edward L. (See Lindquist, D. L., Dunn, and Larson.)
Junn, Frank J., Elmira, N. Y. Filling cabinet. 1,628,128; May 10.
Dunn, Gertrude E., ct al., executrices. (See Garber, D. H.)

Dunn, J. Struthers. (See Trent, Harold E., assignor.)
Dunn, James P., San Francisco, Calif. Shoe-shining
cabinet. 1,624,480; Apr. 12.
Dunn, John T., North Attleboro, Mass. Flexible shafting. 1,622,772; Mar. 29, 0. Jarvis, San Francisco,
Calif. Electrolletapor to G. D. Jarvis, San Francisco,
Calif. Electrolletapor to G. D. Jarvis, San Francisco,
San Francisco, Calif. Electrolletapor (See Grant, John, asNiguot). (See Grant, John, asNiguot).

Dunn Manufacturing Company. (See Rick, Edward L., assignor.) nn. Patrick P., and G. Shoenfeld, Great Falls, Mont. Typewriter-key remover. 1,623,912; Apr. 5. nn Road Machinery Company. (See Rathmell, John

Typewriter-key remover. 1,623,512; Apr. 5.

Dunn Road Machinery Company. (See Rathmell, John M., assignor.)

Dunn, Walter D. (See Bergonzoni, Joseph E., assignor.)

Dunn, William G., Clarinda, Iowa. Condenser control for radios. 1,632,688; Jan. 4.

Dunn, William G., Clarinda, 10wa. Vehicle Inclosure of the Company of th

Dunning, Elmer D., Philadelphia, Pa. Pump. 1,652,565; Dec. 13. Duplex Engine Governor Company. (See Douglas, Theo-

Diec. 15.
Duplex Engine Governor Company. (See Douglas, TheoDuplex Enginer).
Dunning, Stail C. (See Hamilton, William J., assignor.)
Dunning, Stail C. (See Hamilton, William E., and J. Bachofen, assignors to The
McCaskey Register Company, Alliance, Ohio. Adding
machine. 1,629,615; May 24.
Dunnock, John L., and C. R. Nixon, Baltimore, Md. Apparatus for removing waste glass from blowpipes.
1,623,581; Apr. 5.
Dunston, Wayne E., assignor to The C. G.
Spring & Bumper Company, Detroit, Mich. Bumper.
Dunston, Wayne E., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Bumper. 1,623,398;
Apr. 5.
Dunterman, John. (See Marsh, H. E., and Duntern.)
Dunterman, John. (See Callaghan, W., Cummings, and
Dunterman.)

Dunterman, Joan. (see Canagana, w., Cummings, and Dunterman.)
Dunwood, Harry H. C., Washington, D. C. Telephone Dunzweller. 1,638,188; Aug. 9.
Dunzweller. Carl J., assignor to Willard Storage Battery Company, Cleveland, Ohlo. Storage-battery container. 1,630,492; Aug. 16.
Dunzweller, Carl J., and M. W. Severance, assignors to Willard Storage Battery Company. Cleveland, Ohlo. Storage-battery container. 1,634,284; July 5.
Duo-Run Reversible Window Company. (See Whipps George, L., assignor.)
Du Faul, George H. Southbridge, Mass., assignor to Particle Company. Inc., Geneva, N. Y. Ophthalmic mounting. 1,625,885; Aur. 26.
Duplan, Francis, Arcuell, France. Distillation and carbonization retort and operating the same. 1,618,865; Feb. 22.

Feb. 22

Raymond R., Toledo, Ohio. Plowing device. 144; Sept. 13. Duplex Dilator assignor,) Corporation. (See Newton, Frank H.,

Duplex Electric Company. (See Williams, John P., assignor.) Duplex Engine Governor Company. (See Douglas, Theo-

dore, assignor.)

Duplex Motor Company. (See Nordwick, Henry A., assignor.)

Duplex Motor Company. (See Nordwick, H. A., and Marchetti, assignor.) (See Rodwick, H. A., and Mar-plex Motion Picture Industries, Inc. (See Badgley, Gerald J., assignor.) Gerald J., assignor.)

Duplex Printing Press Company. (See Bechman, Henry

F., assignor.)
Duplex Transmission Company. (See Stumpenhorst, John

Du Pont Cellophane Company. (See Webster, Paul F., assignor.)
Du Pont, E. I., de Nemours & Company. (See Bergelm, Du Pont, E. I., de Nemours & Company. (See Bishop, Oakley M., assignor.)
Du Pont, E. I., de Nemours & Company. (See Bishop, Oakley M., assignor.)
Du Pont, E. I., de Nemours & Company. (See Bradner, Donald B., assignor.)
Du Pont, E. I., de Nemours & Company. (See Bradner, Donald B., assignor.)
Du Pont, E. I., de Nemours & Company. (See Bridge, Charles E., assignor.)
Du Pont, E. I., de Nemours & Company. (See Burke, Charles E., assignors.)
Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., Hitch, and Mark, assignors.)
Du Pont, E. I., de Nemours & Company. (See Calcott, De Pont, E. I., de Nemours & Company. (See Calcott, De Pont, E. I., de Nemours & Company. (See Calcott, John H., Jr., assignor.)
Du Pont, E. I., de Nemours & Company. (See Daudt, H. W., Permelee, and Calcott, assignors.)
Du Pont, E. I., de Nemours & Company. (See Dinwiddle, John H., E. I., de Nemours & Company. (See Dinwiddle, John H., E. I., de Nemours & Company. (See Dinwiddle, L. I., de Nemours & Company. (See Dinwiddle, John H., E. I., de Nemours & Company. (See Dinwiddle, John H., E. I., de Nemours & Company. (See Dinwiddle, John H., E. I., de Nemours & Company. (See Elley, Harold W., assignor.)
Du Pont, E. I., de Nemours & Company. (See Elley, Harold W., assignor.)
Du Pont, E. I., de Nemours & Company. (See Engelmann, Max, and Albright, assignors.) Du Pont Cellophane Company. (See Webster, Paul F.,

Ju Pont, E. I., de Nemours & Company. (See Engelmann, Max, assignor.)

Du Pont, E. I., de Nemours & Company. (See Engelmann, M., and Albright, assignors.)

Du Pont, E. I., de Nemours & Company. (See Essex, H., Du Pont, E. I., de Nemours & Company. (See Flaherty. Edmund M., assignor.)

Du Pont, E. I., de Nemours & Company. (See Gibbs, H. D., and Frederick, assignors.)

Du Pont, E. I., de Nemours & Company. (See Haon, H. Du Pont, E. I., de Nemours & Company. (See Haon, H. Du Pont, E. I., de Nemours & Company. (See Jacobs, Charles B., assignor.)

Du Pont, E. I., de Nemours & Company. (See Kessler, Johannes M., assignors.)

Du Pont, E. I., de Nemours & Company. (See Kessler, Johannes M., assignor.)

Du Pont, E. I., de Nemours & Company. (See Manss, Waiter A., assignor.)

Du Pont, E. I., de Nemours & Company. (See Manss, Waiter A., assignor.)

John, assignor.)

De Font, E. I., de Nemours & Company. (See Monroe, I. St., assignor.)

Du Font, E. I., de Nemours & Company. (See Moran, Robert C., assignor.)

Du Pont, E. I., de Nemours & Company. (See O'Barr, Thomas A., assignor.)

Du Pont, E. I., de Nemours & Company. (See Pitman, Earle C., assignor.)

Du Font, E. I., de Nemours & Company. (See Fratt, L. S., Weltz, and Mills, assignors.)

Du Pont, E. I., de Nemours & Company. (See Sachs, John H., assignor.)

Du Font, E. I., de Nemours & Company. (See Sachs, John H., assignor.)

Du Font, E. I., de Nemours & Company. (See Schanche, I., assignor.)

Du Font, E. I., de Nemours & Company. (See Schwartz, George L., assignor.)

Du Font, E. I., de Nemours & Company. (See Schwartz, George L., assignor.)

Du Pont, E. I., de Nemours & Company. (See Schwartz, George L., assignor.)

Du Pont, E. I., de Nemours & Company. (See Scott, Winfield, assignor.)

Du Pont, E. I., de Nemours & Company. (See Sherts, James H., assignor.)

Du Pont, E. I., de Nemours & Company. (See Smith)

Du Pont, E. I., de Nemours & Company. (See Smith)

Du Pont, E. I., de Nemours & Company. (See Spotswood, J. B., and Gulick, assignors.)

Du Pont, E. I., de Nemours & Company. (See Sters, Newton I., assignor).

Du Pont, E. I., de Nemours & Company. (See Taylor. G. B., and Richardson, assignors.)

Du Pont, E. I., de Nemours & Company. (See Taylor. G. B., and Richardson, assignors.)

Du Pont, E. I., de Nemours & Company. (See Taylor. G. B., and Richardson, assignors.)

Du Pont, E. I., de Nemours & Company. (See Taylor. G. B., and R.)

Du Pont, Francis I., assignor to Delaware Chemical Engineering Company. (Wilmington, Del. Liquid-vend-Du Pont, Francis I. and E., assignors to U. S. F. Powder Company, Wilmington, Del. Making a smokeless explosive powder. I. (827, 638; May 10.)

Du Pont, Francis I. and E., assignors to U. S. F. Powder Company, Wilmington, Del. Flashless cannon powder. 1, 627, 639; May 10.

Du Pont, Francis I. and E., assignors, by mesne assign-

Du Pont, Francis I. and E., assignors, by mesne assignments, to U. S. F. Powder Company, Wilmington, Del Smokeless explosive powder and making same 1,627,691; May 10.

Du Pont, Francis I. and E., assignors, by mesne assignments, to U. S. F. Powder Company, Wilmington, Del. Smokeless explosive powder and making same. 1,627,692; May 10.
Du Pont, Francis I. and E., assignors, by mesne assignments, to U. S. F. Powder Company, Wilmington, Desmokeless explosive powder and making same.

u Pont, Francis I. and E., issignore, wilmington, Del. Smokeless explosive powder company, Wilmington, Del. Smokeless explosive powder and making same (1827,693; May 10.

I Pont, Francis J., Wilmington, Del. Smokeless explosive powder, 1(27,994; May 10.

upont, Georges H., Bordenux, France. Purification of abletic acid. 1(228,535; May 10.

upont, Lucién. (See Darrasse, Léon and E., and Dupont, Lucién. (See Darrasse, Léon and E., and Dupont).

pont.) Du Pont Viscoloid Company. (See Burke, Charles E.,

assignor.)
u Pont Viscoloid Company. (See Donaldson, Alfred S., assignor.) unont Viscoloid Company. (See Person, Earl R., as-

Dassignor.)
Dupont Viscoloid Company.
Signor.
Duffor Wilfred, Worcester, Mass. Reversible broomDuffor Louis J., Dorchester, assignor of one-half to
H. S. James, Brooklyn, Mass. Massage vibrator.
1,630,115; May 24.
Duponis, Henry, Manchester, N. H. Gane. 1,615,218;
Duponis, Henry, Manchester, N. H. and Dupuis.

Jan. 25.

Dupuis, Rene X. (See Dube, H., and Dupuis.)

Dupuis, Arthur O., Cleveland, Ohio, assignor to Lancaster Faren Works, Inc., Lancaster, Fa. Brickmaking matron Works, Inc., Lancaster, Fa. Brickmaking matron, Jan. 200, Ja

signor.)
Dura Company, The. (See Cook, Everett J., assignor.)
Dura Company, The. (See Graff, George, assignor.)
Dura Company, The. (See Nicholson, Stanley W.,

signor.) Dura Company, The. (See Nicholson, Stanley W., assignor.) Durable Floor Corporation. (See Boelkow, F. E., and

Durante Floor Corporation. (See Boelesow, F. E., and Disting, Says 1818). (See Sack, Leo S., assignor.) Durand, Eugène H. M. E., Paris, France. Circular-knitting machine. 1,024,482; Apr. 12. Durand & Huguenin S. A. (See Peterhauser, Fritz, assignor.)

Durand & Huguenin S. A. (See Wolfram, Arthur, as-

Durand & Huguenin S. A. (See Wolfram, Atthou, assignor.).
Durand, Nelson C., Newark, assignor, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J. Phonograph, 1,615,114; Jan. 18.
Durand, Paul, Paris, France. Automatic weighing madeline, 1,626,769; Apr. 26.
Durand, Paul, Paris, Prance.
Durand, Paul, Paris, Prance.
Automatic Medical Company. (See Vance, Walter N.,

assignor.)
Durand, Victor, fr., Vineland, N. J. Glass-molding machine. 1,616.308; Feb. 1.
Durant, Edward. (See Schane, E. H., and Durant.)
Durant, John D., assignor to The Schaap-Durant Control
Corporation, New York, N. Y. Indicator for fuel supply tanks and the like. 1,623.832; Apr. 5.
Durant Motors Incorporated. (See Sturt, Alfred T., as-

signor.)

signor.) Oburant Motors Incorporated. (See Sturt, A. T., and Durant Motors Incorporated. (See Sturt, A. T., and T. M. Marker, Massignor.) See Pfander, Walter F., assignor.) Duratex Corporation. (See Wilson, John A., assignor.) Duraten, Andro, Kelayres, Pa. Direction indicator. 1,632,437, June 14.
Durdit, Augustus C., jr., assignor to Chicago Pump Comput. (Incorporate Contribugal pump. 1,645,498; pump. 1,645,498

Durdin, Augustus C., jr., assignor to Chicago Pump Com-ponsy, Chicago, Ill. Centrifugal pump. 1,645,488; Duredl, Edward. (See Melanowski, Leo. assignor.) Durfee, Charles H. (See Szandrowsky, Anton, assignor.) Durgin, Edgar R., Newark, N. J., assignor, by mesne as-signments, to Continental Optical Corporation, New York, N. Y. Ergelass and spectacle frame. 1,630,258; May 31.

May 31.

Durgin, Edgar R., Newark, N. J., assignor, by mesne assignments, to Continental Optical Corporation, New York, N. Y. Combination metal and nonmetal spectacle and eyeglass frame. 1,640,824; Aug. 30.

Durham, Donald. (See Stevens, Harry S., assignor.)

Durham, Edward, fr., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Motor-driven traveling-crane mechanism. 1,615,115;

to Western 1.615.115

Duriron Company, The. (See Hough, Arthur, assignor.)
Duriron Company, The. (See Jacobsen, Oystein,

signor.) Duriron Company, The. (See Schenck, Peirce D., assignor.)

Durkee, Channey H., Bronx, assignor to Anchor Cap and Closure Corporation, Long Island City, N. Y. Ap-paratus for processing foodstuffs and the like. 1.627,770; May 10. Durkee, Eugene W. (See Alexanderson, Charles A., as-signor.)

Durkee, Henry E., Glastonbury, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Worm-grinding machine. 1,622,628; Mar. 20.
Durkee, Henry E., Glastonbury, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Tap grinder. 1,024,4935; Apr. 19.
Luckin, John T., et al. (See St. Jacques, Emile J. M.,

Durkin, John T., et al. (See St. Jacques, maner assignor.)
Durlacher, Hermann, Hamburg, assignor to the Firm;
Vereinigte Celluloidwarenfabriken Gesellschaft mit
beschränkter Haftung, Krefeld, Germany. Hairdressing implement. 1,654.117; Dec. 27.
Durnell, Harold G., Bartlesville, Okla. Roller box.
1,633.529; June 21.
Durnell, Harold G., assignor of one-half bo S. T. Steel,
Bartlesville, Okla. Pumping beam. 1,635.118; July 5.
1,612.911.3 an., 4.
1,628. Magles, Calif. Hair Curler.
1,102.911.3 an., 4.
1,628. Misholagan. Stanley W., assignor.

ignor.) ro Company, The. (See Nicholson, Stanley W., as-

Durr, Fritz, Munich, Germany. Internal-combustion engine. 1,633,851; June 28.
Durr, Louis, Milwaukee, Wis. Floor sander. 1,628,129;

gine Attourers, Milwaukee, Wis. Fluoi same of Durr, Louis, Milwaukee, Wis. Fluoi same of Durr, Loudwig, assignor to Luftschiftbau Zeppelin Gesell-schaft mit beschrünkter Haftung, Friedrichshaften, Germany. Gas-cell protection for airships. 1,023,663;

Apr. 5.

Dür, Ludwig, assignor to the Firm: Luftschiffbau Zeppelin Gesellschaft mit beschrinkter Haftung, Friedrichshafen-on-the-Bodensee, Germany. Auxiliary device for assembling airships. 1,651,764; Dec. 6.

Dürr, Ludwig, Bodensee, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschränkter Haftung, Friedrichshafen, Bodensee, Germany. Fin and rudder of airships. 1,651,755; Dec. 6.

Löd,1755; Dec. 6.

L

richshatten—Mar. 8.
Duryca, Charles E., Philadelphia, Fa., 1,648,298; Nov. 8.
Duryca, William F., Hackensack, N. J. Dust cap., 1,619,710; Mar. 1.
Duschnes, William. (See Blumenthal, R. L., and Duschnes, William.)

schnes.)
Dushman, Saul, Schenectady, N. Y., assignor to General
Electric Company, Vacuum discharge apparatus,
1,631,672; June 7.
Dusinberre, George B. (See Callahan, J. W., and Dusin-

berre.)
Dusinbere, George B., Wellsboro, Pa. Jew's-harp1,651,448; Dec. 6
Dusseldorfer Werkzeugunschinen-Fabrik und Eisengiesserei Habersang & Zinzen G. m. b. H. (See Dahmen,

Dussidorfer Werkzeugmaschhen-Fabrik und kontogatserei Habersang & Zinzen G. m. b. H. (See Dahmen,
Josef., assignor.)
Dustin, Blanche K. (See Sprague, Edward, fr., assignor.)
Dustin, George E. (See Friend, O. A., and Dustin,
Dustin, George E., Woodeliff, N. J., assignor to American
Phone system 1.625,025
Dustless Thresher Promotion Company, The. (See Noble,
Newell J., assignor.)
Dutcher, Frank, Versailles, Pa., assignor to Standard
Fuses Corporation, Boston, Mass. Railway signal torpedo. 1.631,557; June 7.
Dutchess Bleachery, Inc. (See Tice, Merlin E., asSignor.)

signor.) Dutchess Tool Company. (See Van Houten, Frank H.,

Dutchess You Company (see the Robert Robert

Duty, Dorsey G., Pennsboro, assignor to The Duty Air Brake Company, Janelew, W. Va. Air brake for motor vehicles. I,628,997; Many 24. Duval, William J., assignor to Smith & Davis Mg. Co., St. Louis, Mo. Metal folding bed. I,624,222; Apr.

Dux. Dr. H., Company. (See Rieffert, Wilhelm, assignor.)
Dvilnsky, Abraham, Brockton, Mass. Welted shoe and
welt therefor. 1,632,768; June 14.
Dvorak, Anton, Berwyn, assignor to Beardslee Chandelier
Manufacturing Company, Chicago, Ill. Lighting fixture.
1,619,061; Mar. 1.

Dvorak, Anton, Berwyn, assignor to Beardslee Chandeller Manufacturing Company, Chicago, Ill. Lighting faxture. 1,629,489; May 24. Povekovitz, Paul, London, England. Destructive dis-tillation of solid carbonaccous materials. 1,627,321; May 3.

May J.

Dwight & Lleyd Metallurgical Company. (See Hyde, Reed W. assignor.)
Ing Co. (See Knox, John, assignor.)
Dwight, Raibh W. (See Frick, C. A. and Dwight, Balbh W. (See Frick, C. A. and Dwight, Balbh W. (See Frick, C. A. and Dwight, Charles W., Dayton, Ohio. Self-feeding rotating lubricating system. 1,622,136; Mar. 2.

Dworack, Charles W., Dayton, Ohio. Target-glider re-lease mechanism. 1,650,515; Nov. 29.

Dwork Joseph H., Newark, N. J. Garment. 1,627,771;
May 1 David. (See Greenberg. J., and Dworkin.)
Dworkin, Harry. (See Fine, S., and Dworkin.)
Dworkin, Harry. (See Fine, S., and Dworkin.)
Dwyer, Arthur J., Auburn, N. Y. Device for removing
putty from window sashes. 1,648,610; Nov. 8.
Dwyer, Jerry T., Youngstown, Ohio. Game apparatus.
1,629,907; May 24.
Dwyer, Mortin, and R. J. Boyle, Waterbury, Conn. Rivetmaking machine. 1,637,107; July 26.
Dwyer, William G., and J. I. Mitchell, Auburn, N. Y., assignors to International Harvester Company, Chicago,
Ill. Tractor harrow. 1,632,122; June 14.
Dwyer, William S., Devon, Conn. Universal joint.
1,622,425; Mar. 29.
Dyal Company, The. (See Lauritsen, Charles C., assignor). Signor.)

D'Armett, Edward C., Wichita Falls, Tex., assignor of one-half to O. K. Herndon, Kansas City, Mo. Oll-distilling apparatus and method. 1,946,448; Oct. 25.

D'Armett, Edward C., assignor of one-half to O. K. Herndon, Kansas City, Mo. Oll distillation. 1,946,449; engine Company, Tex. D. S. S. S. J. July 5. Dyer, Matt, Whittenburg, Tex. July 5. Dyer, Orville K., assignor to Buffalo Forge Company, Buffalo, N. Y. Fan bracket or support. 1,614,190; Jan. 11. Tames H., Brooklyn, N. Y. Luggage guard. Dyresen, Dec. 27 Dyresen. Didrick, Malden, Mass. Fastener. 1,654,510; Dec. 27. Dyson, Charles E., et al. (See Lockwood, Virgil, assignor Signor, Martinius, (See Roberts, G., and Dysthe.)
Dietracna, Frank, Brooklyn, N. Y. Electric windowclosing device. 1,637,740; Aug. 2.
Dziuba, Wojciech, and M. Golinski, Bayonne, N. J. Utensil Hifter. 1,635,119; July St.
Dziuk, Ramund, Detroit, Mich. Needle. 1,633,726;

Eagle, Henry X., Brooklyn, assignor of one-half to A.E., Wheeler, New York, N. Y. Leaching apparatus. 1,651,680; Dec. 6. Eagle Lites, Inc. (See Horowitz, Julius, assignor.) Eagle Lock Co. (See Murphy, James J., assignor.) Eagle Peucil Company. (See Hanle, Benjamin W., as-Eagle Fench Company.

Signor.)

Eagle Pencil Company. (See Solinger, Leo, assignor.)

Eagle Pencil Company. (See Staubly, John, assignor.)

Eagle, Peter, Wallington, N. J. Hair-retaining comb.

1,642,364; Sept. 13.

Eagle-Pitcher Lead Company, The. (See Schaeffer, J. A.,

Calbeck, and Crenshaw, assignors.)

Engle Wagon Works. (See Avery, Courtney C., assignor.) Eagles, Joseph, Kansas City, Mo., assignor to S. Killm-nick, Picher, Okla. Laundry clothes holder. 1,650,824; Nov. 29. nick, Picher, Okla. Laundry clothes holder. 1,650,824; Nov. 29.

Baglesfield, Frederick R., assignor to The Kawneer Company, Niles, Mich. Seat molding. 1,652,302; Dec. 18.

Eagon, Lloyd. (See Johnson, H. B., and Eagon.)

Bagon, Lloyd. (See Johnson, H. B., and Eagon.)

Eagon, Lloyd. (See Johnson, H. B., and Eagon.)

Sayner (See Johnson, H. B., and Eagon.)

France (Johnson, H. B.)

France (Johnson, H. B. 1,520,110 April Denville, III. Mixer. 1,000 April Denville, III. Mixer. 1,000 April Denville, III. Mixer. 1,000 April Denville, IV. J. Device for promoting combustion. 1,637,741; Aug. 2. Device for promoting combustion. 1,637,741; Aug. 2. Jan. 11,2110 S., Detroit, Mich. Animal trap. 1,613,652; Jan. 11,2110 April Denville, III. Basiev. James J., Brooklyn, N. Y. Safety razor. Earle, Horatio S., Detroit, Mich. Animal trap. 1,613,602; Jan. II. James J., Brooklyn, N. X. Safety razor. 1,611,238; Feb. 8. Early, Harry H., Oshkosh, Wis. Changeable sign. 1,620,450; Mar. 8. Early, John N., Pittsburgh, Pa. Alloy. 1,622,576; Mar. 29. Early, John N., Pittsburgh, Pa. Alloy. 1,623,727; Mar. 29. Easley, Jackson Z., et al. (See McKenney, F. Y., and Cheney, assignors.) Easom, R. C., et al. (See McKenney, F. Y., and Cheney, assignors.) Easom, R. C., et al. (See McKenney, F. Y., and Cheney, assignors.) Easom, R. C., et al. (See McKenney, F. Y., and Cheney, assignors.) Last, Harry R., Los Angeles, Calif. Vehicle steering-wheel attachment. 1,643,706; Sept. 27. East Liverpool Potteries Company. (See De Ville water, assignor.) East Liverpool Potteries Company. (See De Ville, Walter, assignor).
Eastburn, Samuel L., Sloatsburg, N. Y. Water-closet seat.
Eastburn, Samuel L., Blatis Park, Pa. Folding seat.
1,632,100; Dec. 6.
Easter, Georg J. (See Hartmann, M. L., and Easter,)
Easter, John W., San Jose, Calif. Car coupling.
1,632,222; June 14.
Easter, John W., San Jose, Calif. Wheel. 1,648,762.
Nov. 8.
Nov. 8.
Nov. 8.
Douglas L. sesignor, to Lincoln Eubher Key. Nov. 8.

Easterlin, Douglas L., assignor to Lincoln Rubber Key
Company, New York, N. Y. Apparatus for making
caps for typewriter keys and the like. 1,624,224; Apr. 12 External H. B. (See Counts, Charles B., assignor.)
Eastern Finishing Works, Inc. (See Adams, William H.,
assignor.)
Eastern Machine Screw Corporation, The. (See Bettcher,
Carl W., assignor.)
Eastern Manufacturing Company. (See Callan, John G., assignor assignor.) Eastern Manufacturing Company. (See Ladd, F. C., and Neal, assignors.) Eastern Tool & Mfg. Co. (See Anderson, Carl E., assignor.)
astern Tool & Mfg. Co. (See Falstrom, Henry W., assignor.) Eastern Tool & Mfg. Company. (See Montan, A., and Falstrom, assignors.) Eastern Tool & Mfg. Co. (See Montan, Adolph, as-Bastern Tool & Mig. Company. (See Montan, A., and Falstrom, assignors.) Easterwood, Henry W., (See Brussert, H. A., Wagga-man, and Rasterwood.) Easterwood, Henry W. (See Waggaman, W. H., and E. and T. Fairbanks and Company. (See Starr, Morton Eastes, James A., Mount Comfort, Ind. Farm pulverizer, 1,628,874; May 17.
Eastigate, Frederick L. (See Wood, H. J., and Eastgate.)
Eastin, Henry T., Kingston, Mo. Fastener. 1,642,105; Sept. 13. E. And T. Fairbains and Company. (See Starr, Morton H., assignor.)
12-Z-Way Co. (See Boynton Kinnison S., assignor.)
12-degan, John W. (See Brown, Claude D., assignor.)
1621, John K., Providence, R. 1. Curtain fixture.
1,621,243; Mar. 15.

Eastlack, Oscar A., Camden, N. J. Lock and latch 1,625,595; Apr. 19. Eastman, Byron L. (See Dolbear, S. H., and Eastman.) Eastman, Floyd K., assignor to Concealed Door Check Company, Kokomo, Ind. Doorcheck. 1,446,580; Oct. 25.

Gastman, Ivan L., assignor to L. E. Eastman, Toledo,
Obio. Oil purifier. 1,632,001; June 14.

Eastman, James H., Detroit, Mich. Spark-gap device.
1,626,030; Apr. 26.

Eastman Kodak Company. (See Baybutt, R., and FarTown, Easignors.)

Eastman Kodak Company. (See Bent, Walter G., as-Eastman Kodak Company. (See Blyth, John, assignor.) Eastman Kodak Company. (See Cameron, James A., assignor.)
Eastman Kodak Company. (See Carroll, Stewart J., asistiman Kodak Company. (See Chamberlin, Benjamin Eastman D., assignor.) Eastman Kodak Company. (See Christie, John, assignor.) Eastman Kodak Company. (See Clarke, H. T., and Eastman Kodak Company. (See De Moos, Charles, assignor.)
Eastman Kodak Company. (See Farrow, Edward S., jr., assignor.) Eastman Kodak Company. Eastman Kodak Company. (See Favour, Paul, assignor.) (See Folmer, William F., assignor.)
sstman Kodak Company. (See Frederick, Charles W., Eastman Kodak Company. (See Frederick, C. W., and Altman, assignors.)
astman Kodak Company. (See Frederick, C. W., and Wood, assignors.)
Eastman Kodak Company. (See Folmer, William F., assignor.) Kodak Company. (See Fritts, Edwin C., assignor.) Eastman Kodak Company. (See Green, Newton B., assignor.)
Eastman Kodak Company. (See Hewitson, Edward H., assignor.)
Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)
Eastman Kodak Company. (See Jones, John G., assignor.)
Eastman Kodak Company. (See Jones, J. G., and Dewey, Eastman assigno Eastman Kodak Company. (See Jones, Loyd A., as-Kodak Company. (See Kroedel, Robert, assignor.) Eastman Kodak Company. (See Kroedel, R., and , assignors.)
Kodak Company. (See Lehr, Norman F., as-Eastman Kodak Company. (See Malm, Carl J., assignor.) Eastman Kodak Company. (See Marler, Harry I., as-Bastman Kodak Company. (See Marler, Harry I., assignor.)

Eastman Kodak Company. (See Marshall, Walter D., assignor.) Eastman Kodak Company. (See Meyering, Bernard H., Eastman Kodak Company. (See Ohlau, George H., as-signor.) Eastman Kodak Company. (See Riddell, William A., as-Kodak Company. (See Ruttan, Alfred A., as-Eastman Kodak Company. (See Scott, John W., jr., assignor.) Eastman Kodak Company. (See Seel, Paul C., assignor.) Eastman Kodak Company. (See Sheppard, S. E., and Eberlin, assignors.)
astman Kodak Company. (See Sheppard, S. E., and Eastman an nett, assignors.) an Kodak Company. (See Sheppard, S. E., and Eastman et, assignors.) an Kodak Company. (See Sheppard, Samuel E., Eastman Eastman Kodak Company. (See Smith, George A., as-Eastman Kodak Company. (See Speidel, Charles F., assignor.) Kodak Company. (See Stinchfield, Ray L., Eastman gnor.) an Kodak Company. (See Stuber, Adolph, as-Eastman signor.) sstman Kodak Company. (See Sulzer, Albert F., as-Eastman Kodak Company. (See Tessier, Julien, as-Kodak Company. (See Underwood, Ernest E., Eastman Kodak Company. (See Van Derhoef, Henry E., Eastman Kodak Company.

assignor.)

Eastman Kodak Company. (See Wittel, Otto, assignor.)

Eastman, Le Roy E. (See Eastman, Ivan L., assignor.)

Eastman, Le Roy E. (See Eastman, Ivan L., assignor.)

and Heller, assignors.)

Easton Car & Construction Company. (See Coffey, Sylvester V., assignor.)

Eastwood, Benjamin, Company. (See Adsit, George, assignor.) Eastwood, Benjamin, Company. (See Wells, William S., Eastwood, Behjamin, Company. (See Adsit, G., and Davis, assignor.)
Eastwood, Benjamin, Company. (See Adsit, G., and Davis, Batinger, Cloyde B., Carroll, Iowa. Heating system. 1,646,786; Oct. 25.
Eaton Axle and Spring Company, The. (See Cox, Willam G., assignor.)
Eaton Axle & Spring Company, The. (See Veale, George Eaton Axle and Spring Company, The. (See Weymouth, Harry G., assignor.)
Eaton, Charles F., et al. (See Eaton, Malcolm H., assignor.) Eaton, Ezra S., et al. (See Eaton, Malcolm H., assignor.) Eaton, George M., Pittsburgh, Pa. Pipe stem. 1,615,618; Jan. 25. Eaton, George M. (See Bouslough, J. A., and Eaton.) Eaton, George M., Wilkinsburg, Pa., assignor to West-inghouse Electric & Manufacturing Company, Method of and apparatus for making insulators. 1,615,800; Jan. 25. Jan. 25.

Eaton, George M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Flexible gear. 1,652,520; Dec. 13.

Eaton, George M., Pittsburge Pa., assignor to Westinghouse Electric & Manufacturing Company. Cab-suphouse Electric & Manufacturing Company. Cab-suphouse Electric & Manufacturing Company. Cab-suphouse Took Company. Cab-suphouse Took Company. Cab-suphouse Took Company. Cab-suphouse Took Company. Chicago, Ill. Telephone system. 1,638,295; Aug. 9.

Eaton, George R., Gak Park, and M. B. Stazak, assignors to Keloge Switchboard and Supply Company, Chicago, Ill. Telephone system. 1,638,295; Aug. 9.

Eaton, George, assignor to M. C. Eaton, Cleveland, Obio. Electric heater. Des. 13,500; Oct. 48.

Electric Company. Cab-suphouse Cab-su June 7.

Leslie E., assignor of one-half to C. E. Griffin, Kansas City, Mo. Artificial denture. 1,649,517; Nov. 15. Kansas City, Mo. Artificial denture. 1,649,517; Nov. 15.
Eaton. Malcolm H., Brookline, assignor of one-third to E. S. Eaton. Newton, and one-third to C. F. Eaton, E. S. Eaton. Newton, and one-third to C. F. Eaton, Control of the Control of Control of the Contro LOUALUGE W. Windsor, Ontario, Canada. Axle arrangement. 1,653,156; Dec. 20.

Beel, Charles M. Windsor, Ontario, Canada. Axle arrangement. 1,653,156; Dec. 20.

Beel, George F., and F. M. Zink, Canton, Ohio, assignors, Order of the Company. The Company of the Company of the Company. Base for lamp standard. 1,627,640; Way 10. Ebel, Siegfried S., Vienna, Austria. Electrotherapeutic device. 1,648,116; Nov. 8. Ebell, Helen, assignor to Bullock's, Los Angeles, Calif. Wrapping paper. Des. 72,513; Apr. 26. Eberhard Faber Pencil Co. (See Kappes, Carl H., as-Eberhard Faber Pencil Co. (See Turner, Joseph N., assignor.) Eberhard Faber Rubber Co. (See Faber, Eberhard L., assignor.) Eberhard Manufacturing Company, The. (See Hennicke, Learnes A., assignor.)

Eberhardt, Ernest, Waterloo, Iowa. Snow remover.

1633.150: Aug. B., assignor to Newark Gear Cutting
Eberhardt, Frank B., assignor to Newark Gear Cutting
1,615.371; Jan. 25.

Eberhart, Felix, Arlington, N. J., assignor to American
Can Company, New York, N. Y. Decorated box. Des.
73,400; Sept. 6.

Eberhart, Felix, Arlington, N. J., assignor to American
Can Company, New York, N. Y. Decorated box. Des.
73,971; Nov. 29.

Eberhart, Felix, Arlington, N. J., assignor to American
Can Company, New York, N. Y. Decorated box. Des.
73,971; Nov. 29.

Eberhart, Felix, Arlington, N. J., assignor to American
Can Company, New York, N. Y. Decorated box. Des.
73,972; Nov. 29.

Eberla, Anton. (See Jones W. M., Decorated box. Des. Charles A., assig Eberhardt, Ernest.

Eberle, Anton. (See Jones, W. H., and Eberle.) Eberle, John A., St. Louis, Mo. Folding gate. 1,618,328; Feb. 22. Eberlin, Leon W. (See Sheppard, S. E., and Eberlin.) Eberling, Charles M., assignor to The Eberling Machine Sales Company, Cleveland, Ohio. Gearing. 1,637,142;

Sales Company, thevendum, tone, July 26, Eberling Machines Sales Company, The. (See Eberling, Charles M., assignor.) Wilmersdorf, assignor to Ebro-Ebrone Company, Charles M., assignor to Ebrone Company, Apparatus for supplying combustible mixture to internal-combustion engines. 1,641,964;

Sept. 15. Eugène, assignor to Society Frères Koechlin, Mulhouse, Haut-Rhin, France. Printing upon textile fabrics. 1,639,218; Aug. 16. Ebert, Albert G. (See Ebert, William H., and Albert.) Ebert, Gus, Egg Harbor, N. J. Weapon. 1,614,353;

Ebert, Albert G. (See Ebert, Vine Wenpon. 1,614;350-; Jan. 11.

Ebert, John W., Frederick, Md. Smoke and gas collector. 1,630,927; May 31.

Ebert, John W., Frederick, Md. Smoke and gas collector. 1,630,927; May 31.

Ebert, Oswald G., Hamlin, Tex. Trailer-coupling device. Ebert, Swald G., Hamlin, Tex. Harler-coupling device. 1,025,713; May 17.

Ebling, Paul F. (See Brockel, T. W., and Ebling.)

Ebmeier, Harry E., Bertrand, Nebr. Seed-corn sheller. 1,633,365; June 21.

Lician, J. Harry E., Bertrand, Nebr. 1,622,577; Mar. 29.

Lician, J. Fire-tube boiler, 1,622,577; Mar. 29.

Ebro-Vergaser Gesellschaft mit beschränkter Haftung. (See Ebersbach, Otto, assignor).

Eburne, Robert, Somerville, assignor to The Housh Company, Inc., Boston, Mass. Loose-leaf binder. 1,633,498; Dec. 20.

Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. High-potential cable joint and in stallation. 1,652,893; Dec. 13. Ecco Manufacturing Company. (See Nelson, John H., as-

1,623,933; Apr. 5.
Eckardt, Richard, Forschengereuth, Germany. Harrow.
1,651,086; Nov. 29.
Eckard, Charles F., Oakland, Callf. Enhancing the growth of plants.
1,654,242; Dec. 27.
Eckart, George F., Cincinanti, Ohio, assignor, by mesne assignments, to J. M. Zane, Chicago, Ill. Flexible coupling.
1,623,682; Apr. 5.
Eckart, George F., South Bend, Ind., assignor to G. A. Chritton, trustee. Flexible coupling. 1,633,243; ckart, Geor

Eduart Jacob, Furth, Bavaria, Germany. Container. 1845, 19ct. 11.
Ecke, William R., and J. H. Matthews, assignors to Jas. H. Matthews & Company, Pittsburgh, Pa. Embossing die, 1,653,802; Dec. 27.
Eckenwher, Cleo W. (See Whaley, M. H., and Ecken-

Eckerlein, Eugène L., Paris, France. Toilet seat. 1,639,219; Aug. 16. Eckerman, Alien H., Sloux City, Iowa. Hog spray. 1,020,013; Mar. 8. Sontfie, E. M., and Eckert. Eckert, Grandon E., assignor to The R. Thomas & Sons, 2012, 20

June 21.

Eckert, Otto, assignor to Präcisionsguss-Fabrik Gebr.

Eckert, Nuremberg, Germany. Automatic machine for
casting metal under pressure. 1,644,054; Oct. 4.

Eckert, William A., Buffalo, N. X. Signal-control mechanism for automobiles. 1,637,218; July. 26.

Eckert, William F. (See Whitcomb. W. C., and Eckert,
Eckert, Rac, et al. (See Whitcomb. W. C., and Eckert,
Eckert, Rac, et al. (See Coughlin, Joseph D., assignors.)
Eckhardt, Walter L., Philadelphia, Pa. Radioreproducer.
1,653,168 Dec. 20.

Eckhardt, Borne Co.

Eckhardt, Albert P., Shohola, Pa. Radiator. 1,629,440;
May 17.

May 17.

May 17.

Eckhouse, Edgar A., Cleveland, Ohio, assignor to The Central Brass Manufacturing Company, Cleveland, Ohio, Blbcock or faucet, 1,626,031; Apr. 26.

Eckl. Edward, Los Angeles, Calif. Insect destroyer, 1,631,121; June 7.

Eckland, Charles J., Minneapolls, Minn. Bus ventilator, 1,621,770; Mar. 22.

Eckland, Emil O., Menominee Falls, Wis., and W. H. Young, Chienco, III, Fluid feeding and conducting means, 1,635,663; July 12.

Eckland, Cover 1. Owosco. Mich. Internal-combustion Fekles, Noble, assignor of three-fourths to L. W. Rhode, San Diego, Calif. Vacuum fuel system for carburctors, 1,023,237; Apr. 5.

Eckles. Noble. San Diego, assignor of three-fourths to L. W. Rhode. Los Angeles, and one-fourth to C. Spreckeils, San Diego, Calif. Carburetor. 1, 632,279; June 14. Eckley, James W. (See Hamer, Sylvester G., assignor.) Eckley. Paul. Wainut Creek, Calif. Spading tool. 1,621,715; Mar. 22. Eckmann. Aron, Bern-Wahern, assignor to Schwelz. Eckmann. 1,650,333; Nov. 22. Eckstein bertor. 1,654,248; Dec. 27. Eckstein belling control of the March Carlon Control of the March Carlon. 1,626,275; Apr. 26. Eckstein, George H., Beverly Hills, Calif. Toy plano. 1,626,275; Mar. 29. Eckstein, Reuben, New York, N. Y. Branch connecter. 1,622,708; Mar. 29. Eckstein, Reuben, New York, N. Y. Electric-miniature-luan holder. 1,625,248; Apr. 19. Elctpse Air Brush Company. (See Reichenbach, Carl L. assignor).

assignor.)
Eclipse Cigar Stemming Machinery Company. (See
Morris, John O., assignor.)
Eclipse Interchangeable Counterbore Company. See
Smith. John H., assignor.)
Eclipse Machine Company. (See Ferguson, Malcolm P.,

Eclipse Machine Company.

See Ferguson, Malcolm P.,

See Machine Company.

See McGrath, William L.,

assignor.)

Eclipse Machine Company.

See McGrath, William L.,

assignor.)

See Wild, M., and Goldberg, assignors.)

Clipse Taytle Devices, Iuc.

(See Hasbrouck, Louis B.,

Eclipse Textile Devices, Inc. (See Hasbrouck, Louis B., assignor.)
Eclipse Textile Devices, Inc. (See Van Ness, Henry assignor.)
Eclipse Tool Company. (See Ferguson, David, assignor.)
Econom. Louis G., North Plainfield, N. J. Portable reciprocating power saw. 1,623,309; Apr. 5.
Economic Machinery Company. (See Ekvall, Arvid P.,

assignor.)

assignor.) Michael J., Brooklyn, N. Y. Hinge. Lookaya, St. June 21, J., Brooklyn, N. Y. Hinge. 1, 1646,644; Oct. 25. Economy Baler Company. (See Barrows, Alfred C., assignor.) Economy Baler Company. (See Hill, Hermann. assignor.) Economy Baler Company. (See Laugford, George W.,

assignor.)

Economy Baler Company. (See Williams, T., and Swart, assignors.) Economy Barrel Corporation. (See Bell, Robert J., assignor.)

Economy Dispenser Corporation. (See Page, Charles E.,

Economy Dispenser Corporation. (See Page, Charles E., assignor.)
Economy Engineering Company. (See Young, Wiffred S., assignor.)
Economy Fuse & Manufacturing Company. (See Feld-kamp, Frederick A., assignor.)
Economy Fuse and Manufacturing Company. (See Gordon, David D., assignor.)
Economy Fuse and Manufacturing Company. (See Gordon, D. D., and Lindsay, assignors.)
Economy Fuse & Manufacturing Co. (See McDonnell. Cooper Company. (See Gordon) Fuse & Manufacturing Co.

George P. assignor.)
Economy Glass Company. (See Dougherty, George, assignor.)
Economy Glass Company. (See Schrader, Ernest C., assignor.)
Economy Products Corporation. (See Keas, Charles E. assignor.)
Economy Products Corporation. (See Volght, George F.,

assignor.)

Economy Tool Manufacturing Company. (See Delany, Charles M., assignor.) Economy Vaporizer Company. (See May, Harry E.,

Economy Vaportizer Company. (See May, Harry E., assignor.) Peter D. Port J. Greerson. N. Y. Automatic cut-off for pressure-fluid-supply lines. 1,619.500; Mar. 1. [Eddie, Elward C., et al. (See Zimmer, Samuel B., assignor.)

signor.)

Eddington, William R., assignor of one-half to The Morgan Cunning Company, Morgan, Utah. Selective dumping device for bucket conveyers. 1,636,229; July 19.

Eddins, Sextus A., assignor to Cordo-Hyde Co., Quincy, Mass. Shoe-upper supmort. 1,637,896; Aug. 2.

Eddins, Sextus A., assignor to Cordo-Hyde Co., Quincy, Mass. Shoe and making the same. 1,637,897; Aug. 2.

Eddy, Albert H., Pawtucket, assignor to A. L. Newman Company, Cranston, R. I. Securing name plates and the like. 2,634,936; July 5.

Eddy, Albert H., Pawtucket, assignor to A. L. Newman Company, Cranston, R. I. Altaching means for name Company, Cranston, R. I. Altaching means for name Company, Cranston, R. I. Securing means for name Company, George H., Foster, Wash. Golf tee. 1,616,683; Feb. 3.

Edeleanu, Lazar, K. Pfeiffer, K. Gress, and P. Jodeck, Berlin, Germany. Arrangement for refining heavy mineral olis. 1,681,328; Nov. 29. Edelman, Philip E. (See Lytton, W., and Edelman, Edelman, Samuel, Philadelphia, Pa. Lighting fixture. Des. 71,828; Jan. 11. Edelmann, Leo. Chicago, Ill. Window antirattler. Chicago, Ill. Window antirattler. Leo. Chicago, Ill. Hydrometer suction bulb or the like. Des. 73,401; Sept. 6.

III. Hydrometer suction one. Eddimann & Co., Chicago, Sept. 6. Eddimann, Leo, assignor to E. Eddimann & Co., Chicago, III. Hydrometer bubb. 1,637,210; July 20. Eddimann, Louis A., assignor to Unico-Motor Products Components, Louis A., assignor to Unico-Motor Products Corporation, St. Louis, Mo. Chuck. 1,634,536;

fill. Automobile clock. 1,639,098; Aug. 10.

Geleimant, Louis A., assignor to Unico-Motor. Products Corporation, St. Louis, Mo. Chuck. 1,634,536; Beleimant, Oskar, Schlettau, Erzgebirge, Germanny. Spinning machine. 1,021,158; Mar. 15.

Edeison, Oskar, Schlettau, Erzgebirge, Germanny. Spinning machine. 1,021,158; Mar. 15.

Edeison, Leon. (See Headerer, Gustave A., assignor.)

Edelson, Samuel, New York, N. Y. Door lock. 2,653,157; Beleisteu, Edwin, assignor to Illinois Wafch Case Company, Elgin, Ill. Watch holder. Des. 71,785; Jan. 4.

Eden. Hanois R., Montclair, N. J. Playing ball. 1,653,893; Dec. 27.

Eden. Hanoid W. Davenport, Iowa. Wringer drain and the control of the co

ford, III. Gear-roughening machine. 1,041,000; Sept. 6. Edgarton, George M., Boston, Mass. Shock absorber. 1,638,092; Aug. 9. Edge, George V. M. (See Barnes, E., and Edge.) Edge Moor tron Company. (See Falla, Fernando, as-

Edge Moor Iron Company. (See Vennum, George C.,

Edge Moor Iron Company, voee reasons assignor.

Edge, Walter S. and R. C. Olmsted, New York, N. Y. Reenforced concrete construction, 1.637.742; Aug. 2. Edgemont Machine Company, The. (See Anglemyer, C. M., and Coffman, assignors)

Edgerton, Israel V., assignor to Palace Poultry Car Company, Chicago, Ill. Sleeping berth for poultry cars. 1.641,376; Sept. 6.

Edgerton, Israel V., assignor to Palace Poultry Car Company, Chicago, Ill. Car ventilator. 1.643,765; Sont. 27.

pany, Chicago, Ill. Car ventilator. 1,043,700; Sept. 27. Edgewater Steel Company. (See Caughey, Edward G., as-

Edgewater Steel Company. (See Caugney, Edward G., assignor.)
Edison Electric Appliance Company. (See McCormick, Teacher E., assignor.)
Edison Electric Apoliance Company. (See McCormick, Teacher H., assignor.)
Edison Electric Apoliance Company. (See Randolph, Charles P., assignor.)
Edison Electric Appliance Company. (See Randin, William A., assignor.)
Edison, Teacher Company. (See Simmons, Teacher Company. (See Simmons, Teacher Company.)
Edison, Thomas A., assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Storage battery. Religon, Thomas A., assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Cablnet. 1.644,670; Company. (See Simmons, A., assignor to Thomas A., Edison, Incorporated, West Orange, N. J. Cablnet. 1.644,670; Company. (See Simmons, A., assignor to Thomas A., Edison, Incorporated, West Orange, N. J. Storage-battery electrode element and production thereof. 1.649,579; Nov. 15.
Edison, Thomas A., Llewellyn, Park, West Orange, as-

Edison, Thomas A., Llewellyn Park, West Orange, as-signor to Thomas A. Edison, Incorporated, West Orange, N. J. Storage battery, 1,651,196; Nov. 29, Edison, Thomas A., Incorporated. (See Durand, Nelson Edison. Thoma C., assignor.)

Edison, Thomas A., Incorporated. (See Edison, Thomas-A., a881gnor.)
A., a881gnor.)
B. Fancisco, Calif. Direction indicator. 1,615,746; Jan. 25.
Edman, John, assignor to Masterbilt Motor Company, Minneapolis, Minn. Internal-combustion engine.

Böllund, Ivar, San Francisco, Calif. Direction indicator. 1,615,746; Jan. 25.

Edman, John, assignor to Masterbilt Motor Company, Minacapolis, Minn. Internal-combustion engine. Minacapolis, Minn. Internal-combustion engine. Edmands, John W., Newton, Mass. Railway signal topedo. 1,628,740; June 14.

Edmonds, Courtenay II. W., London, England, assignor, by mesne assignments, to The Union Switch & Signal. Company, Swissyale, Pa. Illuminated railway signal. 1,628,711; May II. (See Edwards, Walter, assignor, Edmondson, John H., Pine Bluff, Ark. Carpenter's gauge. 1,634,178; June 28.

Edmunds, Glenn E., assignor to The Bonney-Floyd Company, Columbus, Ohio. Mine car. 1,644,011; Oct. 4.

Edmunds, Glenn E., assignor to The Bonney-Floyd Company, Columbus, Ohio. Mine car. 1,644,011; Oct. 4.

Edmunds, Glenn E., assignor to The Bonney-Floyd Company, Columbus, Ohio. Mine car. 1,644,011; Oct. 4.

Edmunds, Glenn E., assignor to The Bonney-Floyd Company, Columbus, Ohio. Mine car. 1,644,011; Oct. 4.

Edmunds, Howard M., Brighton, England. Machine for producing three-dimensional fagures from two-dimensional records of the same. 1,651,261; Jan. 20.

Edma Brass Manufacturing Company, The. (See GrantStan Brass Manufacturing Company, The.

gauge. Des. 71.829, 4nd R. L. McDonald, Wilson, Okla. Edwards, Des. 71.829, 4nd R. L. McDonald, Wilson, Okla. Edwards, Charles L. Assignor; Dewards, Charles L. Ges Edwards, Charles L. C. See Edwards, Charles L. E. Smith, C. F., and Edwards, Charles R. E. Manchester, N. H., assignor to C. Elimer Edwards Co., Inc. Method of and apparatus for marking shoe-upper sections. 1,639,332; Aug. 16.

Edwards, Charles R., Houston, Tex. Collapsible tape thread-cutting tool. A. Harsh, Columbus, Ohio. Gate Edwards, Charles R., Houston, Tex. Device for unscrewing and withdrawing pipe. 1,627,842; May 10.

Edwards, Charles R., Houston, Tex. Device for unscrewing and withdrawing pipe. 1,627,842; May 10.

Edwards, Charles R., Houston, Tex. Device for unscrewing and withdrawing pipe. 1,627,842; May 10.

Edwards, Donald V., Tory, N. Y., assignor to Pittsburgh Transformer Company. Casing for electrical apparatus, 1,622,0467, Apr. 5.

Edwards, Edward J., assignor to S. Karpen & Bros., Chicago, H. & Upholstered furniture and protecting the protection of the protec

Dec. 20.

Edwards, Jahn, Swansea, England. Agitating and stirring molten metal in open-hearth and like furnaces.

Gwards, John et al. (See Knofe, Karl R., assignor.)

Edwards, John C. (See Bossert, W. F., and Edwards, John F., Warren, Ark, Process and compound for tempering steel. 1.648.044: Nov. 8.

Edwards, John E., Warnen, Ark, Process and compound for tempering steel. 1.648.044: Nov. 8.

Edwards, John E., Vancouver, British Columbia, Canada. assignor to American Can Company, New York, N. Y. Can-cover-counting machine. 1.641.476; Sept. 6.

Edwards, Leroy, Stanley, N. Dak. Folding camp bed. 1,622,188; Mar. 22. Edwards, Lewis, Philadelphia, Pa. Badge or similar article. Des. 72,006; Feb. 15. Edwards, Lindsay E., Turnbridge Wells, England. Magnetic 7 square. 1,642,232; Sept. 15. Edwards, Relite V., et al. (See Edwards, George A.,

assignor.)
Edwards, O. M., Company Inc., The. (See Axe, Roy T.,

assignor.) dwards, O. M., Company, The. (See Chaffee, Edward

assignor.)

Edwards, O. M., Company Inc., The. (See Axe, Roy T., assignor.)

Edwards, O. M., Company, The. (See Chaffee, Edward Edwards, O. M., Company, The. (See Chaffee, Edward T. Charles, C. M., Company, The. (See Chaffee, Edward T. Charles, C. M., Company, The. (See Chaffee, Edward M.)

Edwards, C. M., Company, The. (See Chaffee, Edward M.)

Edwards, Walter, Kokomo, Ind. Stool and chair construction. 1,641,29; Aug. 30.

Edwards, Walter, assignor of 49 per cent to W. B. Edmonds, Terre Haute, Ind. Self-oiling pulley. 1,618,123; Feb. 15.

Edwards, William A., Chicago, Ill. Homogenizing Fluid-Fuel Mixtures. 1,627,161; May 3.

Edwards, William A., Bartlett, Ill. Supplying a combustible mixture to Internal-combustion motors. 1,628,367; May 10.

Edwards, William A., Bartlett, Ill. Supplying a combustible mixture to Internal-combustion motors. 1,628,367; May 10.

Edwards, William H., Brooklyn, N. Y., assignor to American Telephone receivers. 1,650,865; Nov. 29.

Edwards, William K., Big Spring, Tex. Grip tester. 1,640,630; Alliam K., Big Spring, Tex. Grip tester. 1,640,640; Alliam K., Big Spring,

Corporation. signor.)

Effley, Michael P., assignor of one-half to E. H. Lowville, N. Y. Bush or plant support. 1, 1.627.495 May 3 May 3.

Egan, Daniel J., Plcher, Okla. Automatic oiler. 1,621,771; Mar. 22.

Egan, George F., Jersey City, N. J. Vehicle fender. 1,620,136; Mar. 8.

Egan, George F., Jersey City, N. J. Display device. 1,634,244; Dec. 27.

Egan, George F., Jersey City, N. J. Display device. 3,634,245; Dec. 27.

Egan, George F., Jersey City, N. J. Sewer construction. 1,642,444; Dec. 27.

gan, teorge F., Jersey City, N. J. Sewer construction. 1,654,246; Dec. 27. gan, George F., Jersey City, N. J. Sewer construction. 1,654,247; Dec. 27. gan, James, Chicago, Ill. Oil burner. 1,641,581;

Egan, James, Chicago, In.
Sept. 6.
Sept. 6.
Egan, Mathew M., Fort Worth, Tex. Jack. 1,649,674; Sept. 0.

Rathew M., Fort Worth, Tex. Jack. 1,649,674;

Nov. 15.

Egan. Nellie N., et al. (See Gallagher, Philip J., as-

Egan. Patrick D., Fort Smith, Ark. Sign. 1,637,988; Aug. 2. Egbert, Cilo S., Dayton, Ohio. Propeller case. 1,622,137; Mar. 22.

Mar. 22.

Ege, Egbert I. (See Holman, C. B., and Ege.)

Ege) Egehert, Charles H., Columbus, Ohio. Forming an artistic paint finish. Rel6.760; Oct. 4.

Egenboff, William D., Maricopa, Calif. Pressure-relief mechanism for wells. 1,623,866; Apr. 5.

Egenolf, Jacob F., Maywood, Ill., assignor to American Can Company, New York, N. Y. Bail for containers. 1,648,856; Oct. 25.

Egert, Benjamin J., Brookfield, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Mensuring device. 1,614.605; Jan. 18. Egg Patents Limited. (See Bellamy, Archibald J., as-

Egg Pacsignor.)

signor.)

Eggan, Alfred J., Chicago, Ill. Soap container.

1.619,105; Mar. L.

Eggan, Walley W., and W. J. Flegel. Detroit, Mich., Eggenweller, by meane assignments. to Bohn Aluminum and Brass Corporation. Machine for trimming the edges of bearing or like sections. 1,926,924; May 3.

Eggers, Henry W., Prescott, Wis. Pump Jack. 1,650,825; Nov. 29.

Eggers, William M., and G. Mahr, jr., assignors of one-third to J. B. Townsend, Los Angeles, Calif., and two-thirds to said Mahr. Spring-opened clipping shears, 1,637,607; Aug. 2.

Eggert, Hans, Woltersdorf, near Erkner, Germany. Maing substitutes for horn and ivory from viscos 1,652,711; Dec. 13.

1.652,711; Dec. 13.
Eggerth, Alfred, McCammon, Idaho, Legging. 1,651,589; Dec. 6.
Eggiman, Alfred, and A. Perea, Paris, France. Coating process. 1,640,185; Aug. 23.
Eggimann, Alfred, and A. Perea, Paris, France. Manufacturing translucent article. 1,644,115; Oct. 4.
Eggleston Drilling Corporation. (See Smith, Eggleston,

assignor.)

Eggleston Spiral Drill Corporation. (See Smith, Eggleston, Spiral Drill Corporation. (See Smith, Eggleston, James F., Youngstown, Ohio. Score-sheet holder for golf club. 1.649,233; Nov. 15.

ton, assignor.) Egglestone, James F., Youngstown, Obio. Score-sheet holder for golf clubs. 1.649,293; Nov. 15. Egholm, James P., Chicago, Ill., Dumping truck. 1.631,627; June 7. Canton, Ohio, assignor of one-third to H. B. Groninger, Port Royal, and one-third to R. R. Vorthis, Beaver, Pa. Hot top for moids. 1,550,700; Egler, Nickias F., Canton, Unio, assignor or our survey to H. B. Groninger, Port Royal, and one-chird to R. R. Vorhis, Beaver, Pa. Hot top for molds, 1,650,700; Nov. 29.

Eglert, Charles, Rochester, N. Y. Heating or ventilating register. 1,640,666; Aug. 30.

Egler, Charles, Rochester, N. S. Heating or ventilating register. 1,640,666; Aug. 30.

Egler, Arnold A. Bern assignor, by meane assignments, and the control of the con

Schullnausen, Switzerland. Key controller. 1,652,430; Edec B. Riverside, III., assignor, by mesne assignments, to The Phoenix Burner Corporation. Air control for oil burners. 1,629,228; Apr. 26. Ed. of Pank S., Riverside, III. Furnace. 1,647,987; Edoff Towards.

EMOV. Sustav. (See Morrell, J. C., and Egloff.)
Eport Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking petroleum oil. 1,619,921;
Mar. S.
Egloff. Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Treating oil shale. 1,627,162;

mar, S.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Treating oil shale. 1,627,162; Bell Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Treating oil shale. 1,627,162; May 3.

Egloff, Gustav, Assignor to Universal Oil Products Company, Chicago, Ill. Treating oil shale. 1,627,163; May 3.

Egloff, Gustav, Independence, Kans., assignor to Universal Oil Products Company, Chicago, Ill. Cracking oil. 1,638,093; Aug. 9.

Egloff, Gustav, Independence, Kans., assignor to Universal Oil Products Company, Chicago, Ill. Process of and apparatus for cracking oil. 1,638,116; Aug. 9.

Egloff, Gustav, and J. G. Alther, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for cracking oil. 1,638,3116; Aug. 9.

Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for cracking oil. 1,617,619; Peb. 15.

Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for treating hydrocarbons. 1,618,645; Feb. 22.

Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for treating oil. 1,619,922; Mar. 8. Ill. Apparatus for cracking oil. 1,619,922; Mar. 8. Ill. Apparatus for cracking oil. 1,619,922; Mar. 8. Ill. Apparatus for cracking oil. 1,619,102; Nov. 15.

Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for treating emulsified oils. 1,649,103; Nov. 15.

Egloff, Gustav, Chicago, Ill. and R. T. Pollock. New Day Chicago, Ill. 1,649,104; Nov. 15.

Egloff, Gustav, Chicago, Ill. and R. T. Pollock. New Day Chicago, Ill. 1,649,104; Nov. 15.

Egloff, Gustav, Chicago, Ill. and R. T. Pollock. New Day Chicago, Ill. 1,649,104; Nov. 15.

Egloff, Gustav, Chicago, Ill. and R. T. Pollock. New Day Chicago, Ill. 1,649,104; Nov. 15.

Egloff, Gustav, Chicago, Ill. and R. T. Pollock. New Day Chicago, Ill. 1,649,104; Nov. 15.

Egloff, Gustav, Chicago, Ill. and R. T. Pollock. New Day Chicago, Ill. 1,64

Egry Register Company, The. (See Johnson, Arthur A.,

Egry Register Company, The. (See Neth, George J., assignor.)

Register Company, The. (See Pfeiffer, Frank E., assignor.

Egsieker, Albert H., assignor to Heine Boller Company, St. Louls, Mo. Water-tube boller, 1,615,006; Jan. 18, Ehinger, Carl F., Cleveland, Ohio. Automobile fan, 1,635,535 july 12. Debinger, Fred C., Palmyra, Mich. Maul. 1,633,007;

1,635,315; July 12. Ehinger, Fred C., Palmyra, Mich. Maul. 1 June 21. Ehlers, Carl H. Penfield, assignor to The Atl fining Company, Philadelphia, Pa. Filli 1,614,780; Jan. 18. Ehlers, Walther, Berlin-Grunau, Germany, as General Electric Company. Magnetic core. 1 The Atlantic Re-

Ehlers, Walther, Berlin-Grunau, Germany, assignor to General Electric Company, Making magnetic cores. 1.018,318; Feb. 22. Ehlers, Walther, Berlin, Germany, assignor to General Electric Company, Composite metal article. 1,648,678;

Ehlig, Harry, Pearl River, assignor to George R. Swart & Company, Inc., New York, N. Y. Sheet feeder. 1,618,584; Feb. 22.
Ehmsen, Heinrich, Munich, assignor to J. Stern, Gelsen-Ritchen, Germany. Augmenting adhesion between fric-Richen, Germany. Augmenting adhesion between fric-Richen, Germany. Augmenting adhesion between fric-Richen, Germany. With the Company of the Company. Washing machine. 1,627,730; May 10.
Ehnts, Frederic H., Germantown, Pa., assignor, by mesne assignments, to H. W. Butterworth & Sons Company. Washing machine. 1,650,617; Nov. 29.
Ehret, Cornad, Oklaboma City, Okia. Closure for manistry of the Company. Ironing machine. 1,650,617; Nov. 29.
Ehret, Cornelius D. (See Appleby, Thomas, assignor.) Ehrgott, Karl, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric heating unit. 1,628,876; May 17.
Ehrgott, Karl, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Resistor-supporting means. 1,647,346; Nov. 1.
Ehrgott, Karl, Erie, assignor to Electric Company. Resistor-supporting means. 1,647,346; Nov. 1.
Ehrgott, Karl, Erie, assignor to Electric Company. Particular Company. Resistor-supporting means. 1,647,346; Nov. 1.
Ehrgott, Karl, Erie, assignor to Electric Company. Particular Company. P

Oct. 25.
Ehrhardt, Paul G., Frankfort-on-the-Main, Germany.
Press-ring washer. 1,640,650; Aug. 30.
Ehrhart, Raymond N., assignor to Elliott Company.
Pittsburgh, Pa. Water-heating system for power plants.
1,620,807; Mar. 15.
Ehrhart, Raymond N., Edgewood, assignor to Elliott Company.
Pittsburgh, Pa. Condenser control.

Ehrhart, Raymond N., assignor to Elliott Pittsburgh, Pa. Water-heating system for power plants. Erhart, Raymond N., Edgewood, assignor to Elliott Company, Pittsburgh, Pa. Condenser control. 1,634,256; July 5. Ehrhart, William, Lancaster, Pa. Pretzel-cooking apparatus. 1,644,518 Oct. 4. Pretzel-cooking apparatus. 1,644,518 Company, Pittsburgh, Pa. Fountain inking roll. 1,643,488; Sept. 27. Ehrler, Albert, assignor of forty-nine one-hundredths part to E. Guerci, New York, N. Y. Automobile tire valve for multiple air tubes. 1,650,502; Nov. 22. Pretzel-cooking with the part to E. Guerci, New York, N. Y. Automobile tire valve for multiple air tubes. 1,650,502; Nov. 22. Ehrlich, Friederick W., Newark, N. J. Automobile radiatus. 1,622,629; Mar. 29. Ehrlich, Erfederick W., Newark, N. J. Automobile radiatus. 1,637,608; Aug. 2. Ehrlich, Erfederick W., Newark, N. J. Automobile radiatus. 1,637,608; Aug. 2. Ehrman, Edwin H., and W. D. Corlett, Oak Park, Ill., assignors to Standard Serew Company, Jersey City, Sichel, N., Stocken, C., Stockton, Calif. Header red. 1,638,556; Oct. 18. Eichenberger, Eugene, P., Plymouth, Wis. Shoe-repair Ei

signor.)

Bichhorn, Charles, assignor to V. Toabolla, Chicago, III.

Train-pipe coupling. 1,619,464; Mar. 1.

Elichhorst, Franz, Treptow-on-the-Rega, Germany, assignor of one-half to F. Schmekel, Mount Clemens, Montage of the Company, assignor of the Company, Inc., Rochester, N. Y. Belt buckle. Des. 72,146; Mar. S.

Elchner, Robert F., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. Company, Inc., Rochester, N. Y. Belt buckle. Des. Elchore, Arthur M., assignor, by mesne assignments, to Evernu Corporation, New York, N. Y. Rubber heel. 1,649,294; Nov. 15.

Elchstead, Arthur, Falls City, Nebr. Shiad-lifting mechellekeneyer, Caul, Brooklyn, M. Y. Rail joint. 1,640,985; Aug. 30.

Elckmeyer, Earl E. (See Hatmaker, W. T., and Elckmeyer, Earl E. (See Hatmaker, W. T., and Elckmeyer,

meyer, Berl E., assignor to The Dayton Pump & Manufacturing Company, Dayton, Ohio, Gasoline pump casing, Des. 72,701; May 24.
Elekworth, Regnier, Portmund, Germany. Oven. 1,636,939; July 26.
Eldermann, Frank L., North Bergen, assignor to H. S., Germond, Jr., Bayonne, N. J. Safety device for elevating trucks. 1,644,328; Oct. 4.
Eldilitz, Charles L., et al. (See Hartmann, Paul, assignor.)

Eidmann, Frank L. (See Germond, H. S., jr., and

Eidmann, Frank L., North Bergen, assignor to H. S. Ger-mond, fr., Bayonne, N. J. Collapsible handle for port-able elevators. 1,631,477; June 7.

Elermann, Karl, assignor to the Firm Gebr. Baumann Maschinen und Motorfabrik G. m. b. H. & Cie., Com-manditgsellschaft, Munich, Germany. Internal-com-bustion engine. 1,644.517; Oct. 4. Erfel, Joseph, Chicago, Ill. Loose-sheet holder. 1,652,521;

Dec. 13.

Eiffe, James M., assignor to White Mop Wringer Company,
Fultonville, N. X. Pail. Des. 73,649; Oct. 18.

Eiffe, James M., Fultonville, assignor to The White Mop
Wringer Company, New York, N. Y. Combined mop
Wringer Company, New York, N. Y. Combined mop
Eiffe, James M. assignor to White Mop Wringer Company, Fultonville, N. Y. Mop wringer. 1,633,008;

Gune 21.

Eige, Falten, Toronto, Canada, assignor to C. A. Dunham

Company, Marshalltown, Iowa. Bucket trap. 1,640,115;

Company, Marshalltown, Iowa. Bucket trap. 1,640,115;
Aug. 23.
Eliers, Jan. assignor of one-half to Tjoen Siang Ie,
Berney, Jan. Butch East Indies. Safety
device for appartus for forced for bustion engines. 1,637,412; Aug. 2.
Ellert, Adolf, Brunswick, Germany. Frame for stringed musical instruments. 1,638,521; Feb. 22.
Ellert, Adolf, Brunswick, Germany. Frame for sounding boards of stringed musical instruments. 1,653,555; Dec. 20.

Dec. 20.
Ellhauer, Friedrich, Neustadt, Germany. Power weaving loom. 1,642,335; Sept. 13.
Ellmess, John W. A., Newark, N. J. Typewriter attachment. 1,650,866; Nov. 29.
Elnarson, Thorvardur, Mountain, N. Dak. Clothespin. 1,618,277; Feb. 22.
Elinfeldt, Ernest E., assignor to G. W. French and J. L. Hecht, Davenport, Iowa, and W. H. Stackhouse, Springfield, Ohio, doing business as French & Heeth, Davenport, Iowa, and Springfield, Ohio. Metal wheel construction. 1,627,772; May 10.
Elnhorn, William M. (See Rabidoux, C. J., and Elnhorn.)

Einstein, Sol, and L. F. Nenninger, assignors, by mesne assignments, to Cincinnati Griuders Incorporated, Cincinati, Ohio. Steady-rest mechanism for grinding machines. 1,654,213; Dec. 27.
Einstein, Howard C., Cieveland, Ohio. Posting mechanism. 1,650,937; Nov. 29.
Eisele A. Bergar, Ohio. Line drive and clutch control.
Eisele, Edgar, Nashville, Tenn. Plunger control for hypodermic syringes. 1,649,022; Nov. 16.
Eisenberg, Abraham J., Chicago, Ill. Sanitary shaving
Cup. 1,641,805; Sept. 6.
Cup. 1,641,805; Sept. 6.
Ecup. 1,641,805; Sept. 6.
Combined animal scarf and vanity container. 1,647,514;
Nov. 1.

Nov. 1. Eisengiesserei Carl Luber & Sohn, (See Vokac, Johann.

Bisengiesserei Carl Luber & Sohn. (See Yokac, Johann, assignor.)
Eisenhauer, Charles P., Dayton, Ohio. Pump casing. Des. 71,961; Feb. 8.
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Trank. 1,613,746; Jan. 11.
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Fressure switch. 1,619,465; Mar. 1.
Eisenhauer, Charles P., assignor to The Duro Company, Charles P., assignor to The Duro Company, Charles P., assignor to The Duro Company, Dayton, Ohio. Water-softening apparatus. 1,623,399; Adr. 5.

Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Water-softening apparatus. 1,625,197; Apr. 19.

Apr. 19.
Apr. 19.
Senhauer, Charles P., assignor to The Duro Company,
Senhauer, Olio. Automatic water softener. 1,625,198;
Apr. 19.

Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Valve. 1,631,406; June 7.
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Water softener. 1,634,409; July 5.
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Bearing. 1,641,377; Sept. 6.
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Water softening apparatus. 1,644,714; Oct. 11.

Divion, Omo. Water sortening apparatus. 1,634,4714;
Oct. 11.

Eschauer Charles P., assignor to The Duro Company,
Ohio. Water sortener. 1,646,531; Oct. 25.

Eisenhauer Charles P., assignor to The Duro Company,
Dayton, Ohio. Pump. 1,651,682; Dec. 6.

Eisenschitz, Robert, Friedenau, Berlin, Germany, assignor,
by mesne assignments, to Bailey Meter Company. Gasanalysis apparatus. 1,643,155; Sept. 20.

Eisenstadt, Henry. (See Rose, Jay, assignor.)

Eisenstadt, Henry. (See Rose, Jay, assignor.)

Eiser, Charles, Newark, N. J. Machine for making radio
tube and lamp parts. 1,635, 161; July 12.

Eisler, Charles, Newark, N. J. Machine for making glass
mounts. 1,637,989; Aug. 2.

Eisler, Henry G., Wilmette, II. Hydraulle jacking sys
Eitsert, Albert N., Minneapolis, Minn. Collapsible container. 1,648,045; Nov. 8.

Ejk Anna L., South Plainfield, N. J. Table dolly or the
like. Des. 73,650; Oct. 18.

Ejk, Anna L., South Plainfield, N. J. Table cover or the like. Des. 73,651; Oct. 18. Ejk, Anna L., South Plainfield, N. J. Plano cover or the Des. 73,652; Oct. 18. Ek, Arvid, assignor to Brown Company, Portland, Me. Paper towel. 1,645,189; Oct. 11. Ekberg, Kurl A., New York, N. Y., assignor of one-half to E. Nordhund, Brooklyn, N. Y. Circuit-closing device. Evident, Albert Ebetton, Mass Artificial two.

Ekdahl, Albert, Boston, Mass. Artificial tree. 1,613,386; Jan. 4.

Jan. 4. Ekelund, John A., Minneapolis, Minn. Figure wheeled toy. 1,633,809; June 28. Ekholm, Herbert W., assignor to Chicago Railway Equipment Company. Chicago, Ill. Frake-beam guide.

nationi, lictiaci W., assignor to Chicago Railway Equipment Company, Chicago, Ill. Frake-beam guide. 1.632,061; June 12. Ekilund, Alexander, Attleboro, Mass, assignor to General Chain Company, Providence, R. I. Bracelet. 1,633,575; June 28.

June 28. Eklund, Alexander, Attleboro, Mass., assignor to General Chain Company, Providence, R. I. Strap hook. I.641,255; Sept. 6. Eklund, George, assignor to J. F. Sturdy's Sons Co., At-tleboro, Falls, Mass. Bracelet link. Des. 71,865;

Jan. 18. klund, Karl, Forest Park, and M. A. Loeck, La Grange, assignors to W. E. Keough Company, Forest Park, Ill. Hair-waving device. 1,621,527; Mar. 22. klund, Peter R., et al. (See Busha, Charley P., as-Eklund.

signor.) kunu, Andrew, Grand Rapids, Mich. Vehicle signal. 1,638,296; Aug. 9.

Ekman, Andrew, Grand Rapide, Mich., assignor to Bleick Syndicate. Packing 1,625,801; Apr. 25.
Ekman, Sven S., Gottenborg, Sweden. Hydraulic brake dynamometer. 1,641,693; Aug. 30.
Eksergian, Carolus L. (See Kelley, G. L., and Eksergian)

Eksergian, Carolus L. (See Kelley, G. L., and Eksergian.)
Ekström, Eric S., et al. (See Swenson, Carl E., assignor.)
Ekström, Gunnar C., Stockholm, and B. A. E., Johnson,
Mekaniska Verkstad, Stockholm, Sweden, Fortioning
cigarettes or other staff-shaped articles for the packing
of the same. 1,639,429; Aug. 16.
Ekström, Gunnar C., and G. Örström, Stockholm, and
B. A. E. Johnson, Appelviken, assignors to Aktiebolaget
Gerh. Archus Mekaniska Verkstad, Stockholm, Swedeu.
Pracking cigarettes. 1,619,662; Mar; L.
Ekvall, Arvid P., assignor to Economic Machinery ComEkvall, Arvid P., assignor to Economic Machinery. ComMay 24.
Ekvall. Arvid P., assignor to Economic Machinery.

Ekvall, Arvid P., assignor to Economic Machinery Company, Worcester, Mass. Article-propelling means for labeling machines and the like. 1,650,436; Nov. 22. Elam, J. F., Sales Service, Inc. (See Marsh, Esli A.,

assignor.)
Elbertz, Frank V. (See Prokop, John, assignor.)
Elco Shoe Manufacturers, Inc. (See Davis, Robert, as-

signor.)
Elden, Leonard L., et al. (See Adair, Thomas D., jr., assignor.)

assignor.)
Elder, Donald, Auckland, New Zealand. Apparatus for watering areas of land. 1,617,749; Feb. 15.
Elder, Donald, Onehunga, New Zealand. Apparatus for watering areas of land. 1,637,413; Aug. 2.
Elder, Donald, Onehunga, New Zealand. Spraying nozzle. 1,639,220; Aug. 16.
Elder, Earl B., Oak Park, assignor to Elder & Robinson Co., Chicago, Ill. Machine for check weighing and grading by weight. 1,619,187; Mar. J.
Elder, Erderick Lee Storn, J. M., and Elder, Foderick Lee, Storn, J. M., and Elder, Foderick Lee, Storn, J. M., and Elder, Enderick Lee, Storn, J. M., and Elder, Enderick Lee, Storn, Wash. Thrashing machine. 1,621,194; Mar. 15.
Elder Manufacturing Company. (See Elder, William G., assignor, assignor).

Elder Manu assignor.)

assignor.)
Elder, & Robinson Co. (See Elder, Earl B., assignor.)
Elder, Thomas W., fr., Brooklyn, assignor to American
Car. 1163,1311. Junophay, New York, N. Y., Cane
Car. 1163,1311. Junophay, New York, N. Y., Cane
Elder, Thomas W., fr., Brooklyn, assignor to American
Car and Foundry Company, New York, N. Y., Cardoor lock, 1.631,312; June 7.
Elder, William G., Barjatown, assignor to Elder Manu,
1.630,475; May, 31, Bardstown, Ky. Line reel and pin.
1.630,475; May, 31, Bardstown, Ry. Line reel and pin.
1.630,475; May, 31, Bardstown, Ry. Line reel and pin.
1.630,475; May, 31, Bardstown, Ry. Line reel and pin.
1.630,475; May, 31, Bardstown, Ry. Line reel and pin.

1.630.475; May 31. Elder, William G., assignor to Elder Manufacturing Compainy, Bardstown, Ky. Corner guide and plumb rule. 1.643.880; Sept. 27. Coffman, S. M., and Elder.) Elder. William M., Coffman, S. M., and Elder.) Elder. William M. de. C. Hutchings, Morris, Ill. Automobile radiator ornament. Des. 72.909; Mar. I. Elderdge, Clyde T., San Francisco, Calif. One-way motor way or street., 1.629.782; May 24. Eldridge, Horatio W., New City, N. Y. Measuring instrument. 1.054164; Dec. 27. Eldridge, Ida M., administratrix. (See Eldridge, Joa M., administratrix.)

Schor, San Slic-Eldridge, John, deceased, Oakland, and J. Schor, San Francisco, Calif.; I. M. Eldridge, administratrix. Slic-ing machine, 1.644,582; Nov. 8. Eldridge, John, deceased, Oakland, and J. Schor, San Francisco, Calif.; I. M. Eldridge, administratrix. Cheese cutter. 1,648,611; Nov. 8.

Eldridge, Ray W., Orleans, Vt. Handkerchief-display case, 1,52,868; Mar. 15.
Electrad, Inc. (See Moss, Arthur, assignor.)
Electreconomy, Inc. (See Tannenbaum, H. J., and Brown, assignors.)
Electric Arc Cutting, & Welding Company. (See Holslag,

Claude J., assignor.) lectric Auto-Lite Company, The. (See Gilchrist, Clarence F., assignor.)
Electric Auto-Lite Company, The. (See Saxon, Herman

Electric Auto-lite Company, The. (See Sagon, Herman Electric Auto-Lite Company, The. (See Sippel, E. H., and Wright, assignors.) Electric Boat Company. (See Cable, Frank T., assignor.) Electric Controller Company. (See Goldberg, Arthur M.,

assignor.)
Electric Furnace Company, The. (See Cope, Frank T., assignor.)
Electric Furnace Company, The. (See Cope, F. T., and

Benzinger, assignors.)
Electric Generator Corporation, The. (See Reilly, Hugh P., assignor.)
Electric Hand Saw Company. (See Howland, Harry W., assignor.)
Electric Heating Apparatus Company. (See Smalley,

Electric Heating Apparatus Company. (See Smalley, Edwin L., assignor.)
Electric Household Utilities Corporation. (See Chapman, Frank D., assignor.) Electric Machinery Mfg. Company. (See Hibbard, Charles T., assigner)

T., assignor.)
Electric Outlet Company. (See Hartmann, Povl, assignor.)
Electric Outlet Company. (See White, Ernest C., as-

Electric Outlet Company. (See White, Ernest C., assignor.) Porcelain and Manufacturing Company, The.
Electric Production Appliance Corporation. (See Cooney.
Peter A., assignor.)
Electric Railway Equipment Company, The. (See Johnston, Lynn, assignor.)
Electric Railway Equipment Company, The. (See Johnston, Lynn, assignor.)
Electric Refulway Equipment Company, The. (See Tice,
Francis A., assignor.)

P. B., assignor.)

Electric Refrigeration Corporation. (See Leonard, H. C., and Whittier, assignors.)

Electric Refrigeration Corporation. (See Replogle, John

Electric Refrigeration Corporation. (See Spreen, Charles

Electric Refrigeration Corporation. (See Tangenberg, Albert, assignor.)

Electric Refrigeration Corporation. (See Whittier, Walter H., assignor.)
Electric Vacuum Cleaner Company. (See Lang, Henry T.,

assignor.)
Electric Watcun Cleaner Company. (See Lang, Henry I., assignor.)
Electric Water Sterilizer and Ozone Company. (See Hartman, Harry B., assignor.)
Electric Wheel Company. (See Calkins, Addison N., assignor.)

signor.)

Signor.)

Electrical Development and Machine Company. (See Liversidge, Horace P., assignor.)

Electrical Engineers Equipment Company. (See Christensen, Christen, assignor.)

Electrical Engineers Equipment Company. (See Jacobs, Ernest H., assignor.)

Electrical Engineers Equipment Company. (See Lotz, Altred F. C., assignor.)

Electrical Engineers Equipment Company. (See Lotz, Altred F. C., assignor.)

W., assignor.)
Electrical Improvements Limited. (See Gregory, R. W.,

Electrical Improvements Diameter (See 2nd Grant, assignors.)
Electrical Inventions & Development Company. (See Veechlo, Luigl, assignor.)
Electrical Research Laboratories, Inc. (See Ballantine, Stuart, assignor.)
Electrical Testing Laboratories. (See Little, William F., assignor.)

assignor.)
Electro Company. (See Bassett, Harry P., assignor.)
Electro Dynamic Company. (See Mudge, Charles A., assignor.) ctrograph Advertising Service. (See Theilgaard,

Electrograph Advertising Service. (See Thengaard, Holger, assignor.)
Electrograph Advertising Service, Inc. (See Bryant, George F., assignor.)
Electrograph Company, The. (See Murphy, Robert S., as-

signor.) Electrol, Inc. of Missouri. (See Boyd, D. M., and Capen. assignors.)
Electrol, Inc. of Missouri. (See Russel, P. S., and Boyd, assignors.)
Electrol, Inc. of Missouri. (See Scott, Lewis L., as-

Electro-Laboratories, Inc. (See Wallace, Marcel, as-

signor.)
Electrolock Manufacturing Company, The. (See Hemingway, Wilson, jr., assignor.)
Electrolux Servel Corporation. (See Lenning, Alvar,

assignor.)

Electrolux Servel Corporation.
and von Platen, assignors.)

Electrolux Servel Corporation.
(See Munters, C. G.,
(See Persson, Nils, as-

signor.)
Electrolux Servel Corporation. (See Von Platen, B. C., and Munters, assignors.)

Electrolytic Zinc Company of Australasia Limited. (See Gepp, H. W., Hey, Rigg, Stevens, and Williams, as-

Electro-Mechanical Development Company. (See Lofgren. Elnar G. C., assignor.) Electro Metallurgical Company. (See Becket, Frederick

M., assignor.)
Electro Metallurgical Company. (See Feild, Alexander L. assignor.)
Electro Metallurgical Company. (See Hambuechen, Carl,

assignor.)
Electro Metallurgical Company. (See Jacobs, Charles B.,

Electro Metallurgical Company. (See Korsunsky, Michael G., assignor.)
Electro-Motive Devices, Inc. (See Asprooth, A. II., and

Leoni, assignors.)
Electron Relay Company, The. (See Laise, Clemens A..

Electrophone Record Corporation. (See Nielsen, Otto,

Assignor.)

Bleetrophone Record Corporation. (See Meisen, Otto, assignor.)

Bleetro Refractories Corporation. (See Hauman, Earl L., assignor.)

Bleetro Refractories Corporation. (See Hauman, Earl L., assignor.)

Bleetro Thermostatic Control Company. (See Goodne, J. G., and Sauvage, assignors.)

Bleetro Thermostatic Control Company. (See Sauvage, Herbert J., assignor.)

Bleetro Thermostatic Control Company. (See Sauvage, Herbert J., assignor.)

Electron Gesellschaft mit beschrünkter Haftung. (See Grumpelt, Oskar F. A. E., assignor.)

Elektrofrennmaschimen Gesellschaft mit beschrünkter Haftung. (See Neiss, Oskar H. L., assignor.)

Elenschneider, John B., Brooklyn, N. Y., assignor to De Forest Radio Company, Jersey City, N. J. Sound reproducing device construction. J. 64,1667; Sept. 6.

tional Malleable and Steel Castings Company, Cleveland Oblo. Car-door fastener. 1, 646,748; Oct. 25.

Elevator Company of America. (See Rice, Joseph, assignor.)

signor.)
Elevator Company of America. (See Schakel, Jacob D.,

assignor.) Elevator Safety Appliance Co. (See Guilbert, Nicholas jr., assignor.) tor Supplies Company. (See Bassett, Cyrus W.,

assignor.)
Elevator Supplies Company. (See Dittman, William F., assignor.)
evator Supplies Company. (See Haas, Richard E.,

assignor.)
Elevator Supplies Company. (See Jones, Arthur W.,
assignor.)
Clifford. as-

alsolutor; Supplies Company. (See Norton, Clifford, assignor.)
Elevator Supplies Company. (See Shonnard, Harold W.,

signor.)

Blevator Supplies Company. (See Shonnard, Harold W.,
assignor.)

Elevator Supplies Company. (See Weeks, William W.,
Elevator Supplies Company. (See Weeks, William W.,
Eley, Harry J., Sutton Coldfield, Birmingham, England.
Centritugal apparatus for spinning artificial silk and
viscose. 1,651,683; Dec. 6,
Eldiai, Harry A. (See Meyer, Adolph, assignor.)

Eldiain, Harry A. (See Meyer, Adolph, assignor.)

Elgey, John R. (See Abbott, W. E., and Elgey.)

Elgey, John R. (See Abbott, W. E., and Elgey.)

Elgin National Watch Company. (See Laffin, Lloyd A.,
assignor.)

assignor.) as. Edward, Brooklyn, N. Y. Hand bag. 1,627,496;

Elias, Justin Kline, Lon A., Philadelphia, Pa., assignor to F. J. g Island City, N. Y. Paper fastener. Ellas, Justin A., Philadelphia, Pa., assignor to F. J. Kilne, Long Island City, N. Y. Paper fastener. Rei6,610: May 3.
Ellason, Carl J. E., Sayner, Wis. Vehicle for snow travel. 1,650,334; Nov. 22.
Ellot, Samuel, Manchester, Mass. Internal-combustion engine. 1644,329: Oct. Reinstein, Harry, assignor.)
Elite Manufacturing Company. (See Burkholder, John H., assignor.)

H., assignor.)

Elk River Concrete Products Company. (See Longfellow, Dwight W., assignor.) Elkin, Catherine H., et al. (See Threefoot, L., and Elkin, Elkin, Cather

Elkin, George W. (See Threefoot, L., and Elkin.) Elkin, George W., et al. (See Threefoot, L., and Elkin,

Eldin, George W., et al. (See Threefoot, L., and Elkin, Bellin, George W., et al. (See Threefoot, L., and Elkin, assignors, assignor, assign

Eller, Jacob A., Clovis, N. Mex. Agricultural machine. 1,635,206; July 12. Ellerhorst, Walter, Chichmatl, Ohio. Barber's vacuum hair receiver. 1,635,613; July 12. Ellerman, Frank O., Bayton, Ohio. Aeroplane helicopter courtol. 1,622,138; Mar. 22. Ellett, Latther S., Milburn, Okia. Spark plug. 1,623,468;

Ellett, Latiner S., Miliura, Okia. Spark plug, 1,623,468; Apr. 5. Ellett, Richard E., London, England. Toy animal. Des. 72,007; Feb. 15. Elley, Harold W., assignor to E. I. du l'ont de Nemours & Company, Wilmington, Del. Rubber composition and preparing same. 1,624,724; Apr. 12. Elley, Harold W., and D. H. Fowers, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del Vulcanization accelerator and making same. 1,624,723;

Vulcanization accelerator and making same. 1,624,723; Apr. 12. Elley, Harold W., and D. H. Powers, assignors to E. I. Elley, Harold W., and D. H. Powers, assignors to E. I. Production of vulcanized rubber and accelerators therefor. 1,643,205; Sept. 20. Elley, Harold W., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Vulcanized rubber and production thereof. 1,652,101; Dec. 6. Elling, Jens W. A., Christiania, and B. Heger, Vestre Coupling, 1,650,201; Nov. 22. Centrifugal friction coupling, 1,650,201; Nov. 22. Ellinwood, George H., Milwaukee, Wis, assignor, by mesane assignments, to Fisk Rubber Company, Chicopee Fails, Mass. Inner tubes. 1,613,089; Jan. 4. Ellinwood, George H., Milwaukee, Wis, assignor to The Fisk Gubber Company, Chicopee Fails, Mass. Vulcani-Elliot, John T., Irvington, N. J., assignor to M. Weiss Corporation. Table. 1,624,862; Apr. 12. Elliot, William S., assignor to Prophylactic Brush Company, Northampton, Mass. Handle-bending machine. 1,626,109; Apr. 26. https://doi.org/10.1001/1

Elliot, William S., assignor to Pro-phy-lac-tic Brush Company, Northampton, Mass. Handle-bending machine, 1,626,190; Apr. 26.
Elliott Addressing Machine Company, (See Gray, Elmer E., assignor.)

E. assignor.)
Elliott, Albert G. (See Royce, F. H., and Elliott.)
Elliott, Alexander, Los Anceles, Calif. Osidizing ferrous
Elliott, Bannord, assignor to Warren Leather Goods Company, Worcester, Mass. Hand luggage. 1,014,061;
Jan. 11.
Elliott Company. (See Ehrhart, Raymond N., assignor)
Elliott Company. (See Musschaan, J. F., and West, as-

signors.)
Elliott Core Drilling Company. (See Oliver, Fay, as-

Elliott Core Drining Company, Standhai, China. Thread signori, being and H. Roebuck, Shanghai, China. Thread Fillott, Elwin, and H. Roebuck, Shanghai, China. Thread Fillott, Elizabeth S. G., New York, N. Y., assignor to W. H. & A. E. Margerison & Co., Philadelphia, Pa., a firm composed of W. H. and A. E. Margerison. Towel. Des. 72.362; Apr. 5. Elliott-Fisher Company. (See Footborap, Harry A., assignor).

Bliott, Frank (See McCullough, Charles H., assignor.)
Elliott, Frank (See MacCullough, Charles H., assignor.)
Elliott, Frank et al. (See Haibe, Ora F., assignor.)
Elliott, Frank W. (See Evrins, Dossa D., assignor.)
Elliott, Frank W., et al. (See Hayman, George R.,

Elliott, Frank W., et al. (See Bayman, George a., assignor.)
Elliott, George G., Ste. Anne de Bellevue, Quebec, Canada.
Automobile fender. 1,642.233; Sept. 13.
Elliott, Harmon P., Cambridge, Mass. Inking device for printing machines. 1644.547; Jan. 18.
Elliott, Harmon F., Walertown, Mass. stencil machine Elliott, Harmon F., Walertown, Mass. et al. (Blott) Elliott, Harmon F., Walertown, Mass. et al. (Blott) Elliott, Harmon F., Walertown, Mass. et al. (Blott) Elliott, Harry D., Beverly, Mass. assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Finishing machine. 1,615,446; Jan. 25.

Elliott, Howard B., Oakland, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automotive brake. 1.636.686; July 22. Elliott, Jay W. (See Infiner, Frank J., assignor.) Elliott, John M., Rimini, S. C. Wrench. 1,638.990; 1444.

Ang. 16.

Elliott. Noah W., New Castle, Pa. Rolling metal. 1,625,643; Apr. 19.

Elliott, Thomas, Birmingham, Ala. Rall brake for rail-way cars. 1,645,741; Oct. 18.

Elliott, Thomas, Birmingham, Ala., assignor to The Cincinnati Car Company, Winton Place, Ohlo. Rail-Elliott, Thomas, Clincinnati, assignor to The Chrcinnati Car Company, Winton Place, Ohlo. Electrically-operated railway-car door. 1,643,064; Sept. 20.

Elliott, William E. Lynn, Mass. Attaching machine. 1,627,389; May 10.

Elliott, Winfred W., Johnson City, assignor to himself and the company of the company of

Ellis, Carleton. (See Blyth, J. F., and Ellis.) Ellis, Carleton. (See Meigs, Joseph V., assignor.) Ellis, Carleton. Montclair. N. J. Paint and remover. 1,613,560; Jan. 4.

Ellis, Carleton, Montclair, N. J. Ethyl alcohol paint and varnish remover, 1,613,561; Jun. 4. Ellis, Carleton, Montclair, N. J. Composition of matter for treating animal tissue, 1,621,528; Mar. 22. Ellis, Carleton, Montclair, N. J. Making sulphur phenol resin, 1,636,596; July 19. Ellis, Carleton, Montclair, N. J. Oll hardening with nickel and copper formates, 1,645,377; Oct. 11. Ellis, Carleton, Montclair, N. J., Cold-modding composition containing orthogen-sladelyde resin binder and Ellis, Carleton, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Flame-coloring agent, 1,617,996; Feb. 15. Ellis, Carleton, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Removing composition containing ethyl acetate, 1,618,86; Feb. 22.

Chemical Company, New York, N. 1. Reducing composition containing ethyl nectate, 1,618,861; 1,618,8

Ellis-Foster Company. (See Lougovoy, Boris N., as-

Signor, D. & Sons, Incorporated. (See Reiling, Island) A. Sastenor, Distance and Company of the Signor to American Cellulose and Chemical Manufacturing Company Limited. Dyeing or coloring of products made with cellulose accetate. 1,618,418; Elli

Feb. 22. Ilis, George H., Spondon, near Derby, England, ss-signor to American Cellulose and Chemical Manu-facturing Company Limited. Dyeing or coloring of products made with cellulose acetate. 1,618,414.

Brounces made with Cettiose acetate. 1,618,414; products made with Cettiose and Chemical Mann facturing Company Limited. Dyeing materials comprising cellulose acetate and products produced. 1,618,415; Feb. 22.

Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Treatment of cellulose derivatives. 1,641,965; Sept. 13.

Ellis, Hubert C. and N. C., Evanston, Ill. Ironing materials. Company of the Co Feb. 22.

Feb. 15.
Ellis, Samuel J., Memphls, Tenn. Cooker sweep.
1.644-878; Oct. 11.
Ellis, Stuntt, Fredericksburg, Va. Irrigated and ventilated flower box. 1.623.720; Apr. 5.
Ellis, Stuart, Fredericksburg, Va. Irrigated flower box.
1.627-830; May 10.
Ellis, Walter R. Wilkinson, Pa., assignor to Westinghouse Bleethe & Manufacturing Company, Clamping
device. 1.623-830; Apr. 12.

Ellis, Wilson R., Berkeley, Calif. Agitator. 1,639,932;

Ellis, Wilson R., Berkeley, Calif. Agitator. 1,639,932; Aug. 23.
Ellis, Winfield H., Little Rock, Ark. Plumbing system. 1,635,745; July 12.
Ellison, Edward H., and A. W. Beckstrom, Jamestown, assignors to The Ellison Brass Manufacturing Co., Inc., Falconer, N. Y. Metal door. 1,620,451; Mar. Ellison, Hubbard, London, Ontario, Canada. Wind rotor. 1,640,269; Aug. 23.
Ellison, Lewis M., Chicago, Ill. Draft gauge. 1,613,033; Ellison, Lewis M., Chicago, Ill. Multiple draft cause.

Ellison, Lewis M., Chicago, Ill. Draft gauge. 1,613,033; Feb. 1.

Ellison, Lewis M., Chicago, Ill. Multiple draft gauge. 1,615,871; Feb. 1.

Ellison, Lewis M., Chicago, Ill. Multiple draft gauge. 1,615,871; Feb. 1.

Ellison, Lewis M., Chicago, Ill. Multiple draft gauge. 1,615,871; Feb. 1.

Ellison, Lewis M., Chicago, Ill. Multiple draft gauge. 1,615,871; Feb. 1.

Elliman, Walter, North Branch, N. Y. Chick feeder. Ellirich, Charles N., assignor to The Peck Stow & Wilcox Co., Southington, Con. Chuck. 1,651,087; Nov. 29.

Ellisworth, Frank H. (See Lewis, K. B., and Ellsworth, Erdedrick, Other Creek, N. D. Ball bearing. Elliwein, Frederick, Other Creek, N. D. Ball bearing. Elliwein, Frederick, Other Creek, N. D. Ball bearing. Elliwein, Frederick, 1,622,189; Mar. 22.

Elman, Samuel, Syracuse, N. Y. Manufacturing garments, 1,643,707; Sept. 27.

Elmen, Gustaf W., Leonia, N. J., assignor to Western Ellectric Company, Incorporated, New York, N. Y. Electromagnetic device, 1,620,878; Mar. 15.

Elmen, Gustaf W., Leonia, N. J., assignor to Western Ellectric Company, Incorporated, New York, N. Y. Receiver. 1,642,778; Sept. 20.

Elmendorf Armin, Chicago, H. assignor to Haskelite tion material. 1,615,801; Jan. 25.

Elmenthaler, William, Cleveland Heights, Ohio. Sifting directed of the Chicago, Health Syracus, 1,620,779; Ch. 25.

Elmenthaler, William, Cleveland Heights, Ohio. Sifting Hinge Construction. 1,632,102; Dec. 6.

Elmore, Green R., Saline, Mo. Sweep hayrake. 1,640,031; Aug. 23.

Elmstrom, Carl A., Medford, Mass. Shoe-tree. 1,651,329; Nov. 29.

Elmstrom, Carl A., Medford, Mass. Shoe-tree 1,651,329; Nov. 29.

Elmstrom, Carl A., Medford, Mass. Shoe-tree 1,651,329; Nov. 29.

Elmstrom, Carl A., Medford, Mass. Shoe-tree 1,651,329; Nov. 29.

Elmstrom, Carl A., Medford, Mass. Shoe-tree 1,651,329; Nov. 29.

Elmstrom, Carl A., Medford, Mass. Shoe-tree 1,651,329; Nov. 29.

Elmstrom, Carl A., Medford, Mass. Shoe-tree 1,651,329; Nov. 29.

Elmstrom, Carl A., Medford, Mass. Shoe-tree 1,651,329; Nov. 29.

Elmstrom, Carl A., Medford, M

Nov. 29. El Paso Sash and Door Company. (See Evans, George,

Paso Sash & Door Company. (See Trammell, Earl I., assignor.)

Thomas F., et al. (See Wright, Fred W.,

Elters, William S., assignor to The Gem City Sheet Metal Co., Dayton, Ohio. Hood for registers. Des. 72,514;

Apr. 26.
Elters, William S., assignor to The Gem City Sheet Mctal
Company, Dayton, Ohlo. Register hood. 1,622,031;
Mar. 22.
Elters, William S., assignor to The Gem City Sheet Metal
Company, Dayton, Ohlo. Register hood. 1,624,225;

Apr. 12.
ters. William S., assignor to The Gem City Sheet
Metal Company, Dayton, Ohio. Register hood
1624,228; Apr. 12.
ton, Oscar M. (See Carlson, C. J., and Elton,)
twood Corporation. (See Woodland, John E., as City Sheet

signor.)

Bivey, Frederick M., Wimbledon, Surrey, England. Music turner. 1.646.553; Oct. 18.

Ewell, George H., Cleveland, Ohio, assignor to Carr Faster Company, Cambridge, Mass. Shank and socket Blowell, George H., Cleveland, Ohio, assignor to Carr Fastener Company, Cambridge, Mass. Snap fastener. 1.652.139; Dec. 6.

Elwell, George H., Cleveland, Ohio, assignor to Carr Fastener Company, Cambridge, Mass. Separable fastener. Cambridge, Mass. Separable fastener. Cambridge, Mass. Separable fastener. Cambridge, Mass. Separable fastener. Elwell-Parker Electric Company. (See Cochran, Clyde E., assignor).

1.652.140; 1 brc. 0.
Elwell-Parker Electric Company. (See Cochran, Clyde E., assignor.)
Elwood, Willis D., Colville, Wash. Spoon hook. 1,636.904;
Elw. James. assignor to Taylor Instrument Companies, Rochester, N. Y. Sensitive diaphragm for light pressure. 1,630.292; May 31.
Ely. Raymond G., Trexlertown, Pa. Electric switch. 1,632.956; June 21.
Ely. Thomas M. (See Moore, I. A., and Ely.)
Ely. Thomas M. (See Moore, I. A., and Ely.)
Elev. Edsar P., Parkersburg, W. Va. Scat pad. 1,650.335; Nov. 22.
Elev. Edsar P., Parkersburg, W. Va. Scat pad. 1,650.335; Nov. 22.
Emanuel, Joseph L., and P. I. Jacoby, San Francisco, Callf. Biscuit-display case. 1,617.799; Feb. 15.
Emanuel, Charles, Cleveland, Assignor of one-half to F. J. Deibel, Cleveland, Heights, Ohio. Restlient lift Emanuele, Charles, Cieveland, Assignor of one-half to Frank J. Deibel, Cleveland Heights, Ohio. Restlient lift Emanuele, Charles, Cieveland, Hoio, assignor of one-half to Frank J. Deibel, Cleveland Heights, Ohio. Restlient material for soling and heeling shoes. 1,642.847; Sept. 20.

material for soung and Sept. 20.

Sent. 20.

Emanueli, Luigi, assignor to Pirelli & C., Milan, Italy.

High-tension electric cable, 1,647,563; Nov. 1.

Emanueli, Luigi, assignor to Societa Italiana Pirelli,

Milan, Italy. Machine for taping joints of electric

cables, 1,633,544; Dec. 27.

cables, 1,633,544; Dec. 27.

enbles. 1,653,894: Dec. 27.
Emanueli, Luigi, assignor to Societa Italiana Pirelli.
Milan, Italy. Eligh-fresion-cable joint and making the
Emand, Wilfred O., Brookfield, assignor to E. J., Nercil,
Oak Park, Ill. Plating equipment. 1,613,878; Jan. 11.
Embosograf Corporation of America. (See Courtenay,
Frederick D., assignor.)
Embossing Company, The. (See Grabam, Tom C., as-

Embshoff, George F. (See Hunt, J. H., Fitzsimmons, and

Embshoff, George F., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Fuel burner. 1.640.759; Aug. 30.
Emel, Joseph, Seabeck, Wash. Holder for clothes and other articles. 1.637.688; Aug. 2.
Emerica, Robert W., Homestead Park, Pa. Milk bottle Emerson, Afred C., Omaha, Nebr. Oil burner. 1,624,165; Apr. 12.

Emerson-Brantingham Corporation. (See Traphagen.

Emerson-Brantingham Corporation. (See Traphagen, Harry R., assignor.) Emerson-Brantingham Manufacturing Company. (See Traphagen, Harry R., assignor.) Emerson Drug Company. (See Hindes, Joseph F., as-

Emerson Electric Mfg. Co., The. (See Parker, King L.

assignor)

Emerson, Horton S., (See Gorin, Frederick P., assignor.)

Emerson, Ralph R., Brooklyn, N. Y., assignor to Hoffman
Specialty Company, Waterbury, Conn. Heating system

1.639.084; Aug. 16.

Emerson, Russell G., Modesto, Calif. Dispensing con
tainer, 1.658.896; Dec. 27.

Emert, George W., Endicott, N. Y. Device for coupling
alemite valves to speedometer cables. 1.618.819;
Feb. 22.

Emery, Charles B., River Forest, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Device for gauging and adjusting springs. 1,615,117; Jan. 18.

Emery, Charles B., River Forest, III., assignor to Western Electric Company, Incorporated, New York, N. Y., Elec-trical-circuit-connecting device. 1.631.019; Nov. 29 Emery, Earle A., assignor to Detroit Cord Manufacturing Company, Detroit, Mich. Finishing welt. 1.617.581; Feb. 15.

Emery, Elias J., Lynn, Mass. Friction connection for spinules and bobbins or spools. 1,630,760; Aug. 30. Emery, Herbert W., Holliston, assignor to Archer Rubber goods and product of same. 1,631,722; June 7. Emery, Louis S., Indianapolis, Ind. and J. J. Maginn, 1652,103; Dec. 6. Emery, Plato G., Chicago, Ill. Vestibule-curtain hendle. 1,638,625; Aug. 9. Emilg, Edmund J., Desplaines, Ill. Casement window or door construction. 1,620,526; Mar. S. Emig. John L., Philadelphia, Pa. Awaing. 1,652,586; Emilger, Don, et al. (Sea Linday Coarse C. castary.)

Eminger, Don, et al. (See Lindsey, George C., assignor.) Emienton Refining Company. (See Tarbox, Leon A., as assignor.)

signor Jans. (See Neresinemental, assignor, assignor, and assignor, and assignor, assignments, to Detockeny Corporation, assignments, assignments, as a second control of the Corporation of the Corpo

assignments, to Delco-Remy Corporation, Payton, Ohio. A-rmature-commutatori-lead-soldering machine. 1.619,400; Mar. 1. Emmet, Richard S., Schenectady, N. Y. Tool for golf greens and the like. 1.653,994; Dec. 27. Esignor to General Electric Company. Governing mechanism for prime movers. 1.620,527; Mar. 8. Emmet. William L. R., Schenectady, N. Y., assignor to General Electric Company. Governing mechanism for elastic-fuld turbines. 1,620,528; Mar. 8. Emmons, Harold H. (See Litte, Thomas J., Ir., assignor,) 1.622,098; Mar. 22. Emons, Ernest E., Philadelphia, Pa., assignor of one-half to R. E. Hillier, Akron. Ohio. Lens frame for Emons, Ernest E., Philadelphia, Pa., assignor of one-half to R. E. Hillier, Akron. Ohio. Lens frame for Emons, Ernest E., Philadelphia, Pa., assignor of one-half to R. E. Hillier, Akron. Ohio. Lens frame for Emons, Ernest E., Philadelphia, Pa., assignor of one-half to R. E. Hillier, Akron. Ohio. Lens frame for spectacles. Des. 73,076; July 19. Emory, Francis F., Leominster, Mass. 1,632,280; June 14. Empire Gas and Fuel Company. (See Fisher, James P., Empire Gas oline Company. (See Born. S., Bennette, and Empire Gasoline Company. (See Born. S., Bennette, and

assignor.)
Empire Gasoline Company. (See Born, S., Bennette, and Walker, assignors.)
Empire Milking Machine Co. (See Hazard, George E.,

Empire Milking Machine Company. (See Oakes, Ernest

C., assignor.) Empsall, George H., et al. (See Boutin, Stanley, assignor.)

Emrick, Frank W., Buchanan, Iowa. Chain. 1,623,172; Emrick, Frank W., Buchanan, Iowa. Chain. 1,652,932;

Emsco Derrick & Equipment Company. (See Black, Wal-

Dec. 13.

Disso Derrick & Equipment Company. (See Black, Walter G., assignor).

Equipment Company, et al. (See Davidson, William D., assignor).

Emseo Derrick & Equipment Company. (See Goeser, Edwin W., assignor).

Emseo Derrick & Equipment Company. (See Goeser, E. W., and Davidson, assignors).

Emseo Derrick & Equipment Company. (See Rawson, Ledic A., assignor.).

Emseo Derrick & Equipment Company. (See Trout, William A., assignor.).

Emseo Derrick & Equipment Company. (See Trout, William A., assignor.).

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Emseo Derrick & Equipment Company. (See Trout, William A., assignor.).

Emseo Derrick & Equipment Company. (See Trout, William A., assignor.).

Emselve, Reuben F., Rocky River, Ohlo. Container. 1.624,830; Apr. 12.

Enamel Products Company, The. (See Foster, Joseph, fr., assignor.).

Enamel Products Company, The. (See Geiger, F., and

Ramer Fronucks Company 1 100 (2012)
Swift, assignors.)
nberg, Stone R., assignor to Walden-Worcester, Incorporated, Worcester, Mass. Ratchet wrench. 1,621,499;
Mar. 22. Enberg.

Stone R., assignor to Walden-Worcester, Incored, Worcester, Mass. Tool handle, 1.626.671: porated, May 2

Enderes, Ernst, Albert Lea, Minn. Auxiliary reflector for automobile headlights, 1,624,166; Apr. 12. Enderich, Winfield S. (See Friegel, W., and Enderich.) Enders, Jacob M., Schenectady, N. Y., assignor to General Electric Company. Variable condenser. 1,641,749;

Edectric Company, Variance Condenses, Sept. 6.
Enders, Karl. Dresden, Germany, Internal-combustion turbine with rotary slide valve. 1,654,119; Drc. 27.
Endersby, Joseph P., Vancouver, British Columbia, Canada, Steam shovel. 1,637,899; July. 2.
Endicott, George F., and G. H. Goodell, St. Paul, Minn. Bearing for railway-sate journals. 1,633,852; June 28.
Endicott Johnson Corporation. (See Beebe, Stanley J.,

assignor. Endicott Johnson Corporation. (See Lord, Chester B.,

assignor.)
Endicott Johnson Corporation. (See Warner, Benjamin S., assignor.)

Endicott, Mary A., Terre Haute, Ind. Cooking utensil. 1,048,725; Nov. 8. Endiess Belt Corporation, Inc. (See Grupe, William F.,

Endiess Beit Corporation, Inc. (See Grupe, William F., assignor).

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Ladres, Herbert A., assignor to The Goodyear Thre & Rubber Company, Akron, Ohio.

Compounding rubber and product obtained thereby. 1.652.141; Dec. 6.

Endres, Herbert A., Lompoc, and L. Caldwell, Los Angeles, assignors to The Celife Company, Los Angeles, Allicous composition of matter. 1,1613.448; Jan 4.

Jan. 4. Jan. 4. Endsley, Louis E., Pittsburgh, Pa., assignor to Waugh Equipment Company, Chicago, III. Draft gear.

Jan. 4.

Sendsley, Louis E. Pittsburgh, Pa., assignor to Waugh Equipment Company, Chicago, III. Draft gear. 1.027.378: May 3.

Endsley, Louis E., Pittsburgh, Pa., assignor to Fort Pitt Mine Equipment Company. Cartransfer apparatus. 1.633,726; Aug. 23.

Endsley, Louis E., Pittsburgh, Pa., assignor to Fort Pitt Mine Equipment Company, Cartransfer apparatus. 1.639,726; Aug. 23.

Endley, Louis E., Alhambro, Calif., assignor to Chadeloid Chemical Company, New York, N. Y. Treating wax and the products resulting from same. 1,634,280; Oct. 18.

Endl. Otto E., Alhambra, Calif., assignor to Chadeloid Company, New York, N. Y. Finish remover containing wax. 1,946,281; Oct. 18.

Endl. Otto E., Los Angeles, Calif., assignor to Chadeloid Company, New York, N. Y. Finish remover containing wax. 1,946,281; Oct. 18.

Engl., Otto E., Los Angeles, Calif., assignor to Standard Otto Cartes and Cartes, and Cartes, Pruning Shears. 1,645,884; Nov. 15.

Engl., Otto E., Los Chicago, III. Picture-mounting device of the Cartes of Cartes and W. S., Kansas City, Mo. Loose-Margel, George.

Engel, Albert W., Chicago, III. Picture-mounting device. 1,652,471; Dec. 13.

Engel, Charles L. and W. S., Kansas City, Mo. Loose-Margel, George.

Hangel, Albert W., Chicago, III. Picture-mounting device. 1,652,471; Dec. 13.

Engel, George.

Engel, George.

Hangel, Albert S., Cee Engel, Charles L. and W. S.)

Engelhard, Charles, Inc. (See Rohn, Wilhelm, assignor.)

Engels, Frederich W., St. Louis, Mo. Elbow-bending

Engels and the color of the col

signor.)
Engineers Development Company. (See Cole, Theodore

Engineers Development Company. (See Cote, Theodore-S, assignor.)
Engl. Josef. (See Massolle, J., Engl. and Vogt.)
Engl. Josef. (See Massolle, J., Vogt. and Engl.)
Engl. Josef. (See Massolle, J., Vogt. and Engl.)
Engl. Josef. (See Massolle, J., Vogt. and Massolle, J.,
Engl. Josef. (See Massolle, J., Vogt. and Massolle, J.,
Engl. Josef. (See Josef. Jos

Englander assignor. Spring Bed Company. (See Klein, Conrad,

assignor.)
Engle, Andrew, Newton, Iowa. Portable incluerator.
1.644,879; Oct. 11.
Engle, Andrew, Newton, assignor of one-half to J. Maine, Des Moines, Iowa. Disposing of waste material and utilizing components thereof. 1.633.078; June 21.
Engle, Andrew, Newton, assignor of one-half to J. Maine, Des Moines, Iowa. Disposing of waste material and utilizing components thereof. 1.633.079; June 21.
Engle, Moines, Owan, Disposing of one-half to J. Maine, Des Moines, Iowa, Disposing of anter products and utilizing components thereof. 1.633.086; June 21.

Engle, Andrew, Newton, assignor of one-half to J. Maine, Des Moines, Iowa. Disposing of waste material and utilizing components thereof. 1,633,081; June 21. Engle, Edgar W., Lake Forest, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Battery-charging apparatus. 1,638,478; Aug. 9. Engle, Gerge S., Washington, D. C. Primary battery. 1,637,991; Aug. 2. Engle, Price S., Washington, D. C. Primary battery. 1,637,991; Aug. 2. Engle, Price Aug. 20. Ind. Scale. 1,641,070; Aug. 30. Englement. 1,635,826; July 12. Englement. Charles W., Abliene, Kans. Fuse. 1,624,322; Apr. 12. Englem, Charles W., Abliene, Kans. Fuse. 1,624,322; Engler, Martin, and E. A. Bendixon. Chicago. Ill.

plement, 1,535,526; July 12.
Engleman, Charles W., Abliene, Kans. Fuse. 1,624,322; Apr. 1.
Apr. 1.
Martin, and E. A. Bendixon, Chicago, Ill. Musical toy. 1,615,7075; Feb. 1.
Engler, Rudolf, Saalfeld, Germany. Driving gear for paper-sieve-stretching machines. 1,614,662; Jan. 11.
Engler, William B., Waterloo, N. Y. Hoisting device for while bodies. 1,636,655; July 19.
English, Analdo M., Brookline, Mass. Measure. 1,653,622; Dec. 27.
English, Analdo M., Brookline, Mass. Measure. 1,654,494; Dec. 27.
English Enothers Machinery Company. (See Barzen, English Enothers Machinery Company. (See Barzen, English Electric gupany Limited, The. (See Bremner, Francis D. H., assignor.)
English, Frank, Detroit, Mich. Flexible handled tool. 1,655,905; Dec. 27.
English, Fred S. (See Plandon, Conn. Sheet-delivery mechanism for presses. 1,628,768; May 17.
English, Fred S., and T. L. Ferry, assignors to The Babcock Printing Press Manufacturing Company, New London, Conn. Gripper-tensioning mechanism for presses. 1,628,969; May 17.
English, Fred S., and T. L. Ferry, assignors to The Babcock Printing Press Manufacturing Company, New London, Conn. Gripper-tensioning mechanism for presses. 1,628,969; May 17.
English, Fred S., and T. L. Ferry, assignors to The Babcock Printing Press Manufacturing Company, New London, Conn. Gripper-tensioning mechanism for presses. 1,628,969; May 17.
English, Fred S., and T. L. Ferry, assignors to The Babcock Printing Press Manufacturing Company, New London, Conn. Gripper-tensioning mechanism for presses. 1,628,960; May 17.
English, Fred S., and T. L. Ferry, assignors to The Babcock Printing Press Manufacturing Company, New London, Conn. Gripper-tensioning mechanism for presses. 1,628,960; May 17.
English, James R. (See Meyer, Theodore F. W., assignor.)

English, James R. (See Meyer, Theodore F. W., assignor.) English & Mersick Co. (See Kaimer, Richard V., as-

English & Mersick Co. (See Kaimer, Richard V., Signor.)

Diglish, Thomas A., Resselaer, N. Y. Adjustable connection. 1,649,651; Nov. 22.

Englund, Edwin H. L., assignor of one-third to S. M. Feterson, and one-third to H. M. Peterson, Muskegon and one-third to H. M. Peterson, Muskegon of the Company of the

Engravograph Capterions, assignor, by mesne assignor, Ralph W. Lake Mills, Wis, assignor, by mesne assignor, and the control of the control o

Engstrom, Elmer, South Windham, Conn. Apparatus for feeding folded paper tubes or the like. 1,619,711;

Mar. 7.

Engstrom, Ernst F., Maywood, and J. W. Benes, Hollywood, assignors to Everhot Manufacturing Company, Maywood, fil. Torch. 1,639,169; Aug. 16.

Engstrom, Gustaf W., Riverside, assignor to International Harvester Company, Chicago, III. Pressure regulator. 1,613,879; 1an 11.

Engstrom Henry C. assignor to The Bryant Electric switch. 1,638,658; Aug. 9.

Engstrom, Henry O., Bridgeport, Conn., assignor to De Jur Products Co., New York, N. Y. Jack plug. 1,642,064; Sept. 13.

Engstrom, Otto L., South Bend, Ind. Concrete-wall form. 1,618,367; Feb. 1.

Elstor.)

Enock, Arthur G., Wembley Park, assignor to Burlectas Limited, London, England. Valve mechanism for com-pressors. 1,649,394; Nov. 15. Enock, Arthur G., Halisham, assignor to Burlectas Lim-ited, London, England. Air or gas compressor.

Idan.

Joseph J. Strombard Company.

(See Chaffin, H. A., and Chemical Company.

(See Chaffin, H. A., and Chemical Company.

(See Chaffin, H. A., and Chemical Company. Enoz Chemical Company. (See Chaffin, H. A., and Holmes, assignors.) Enright, Stephen P., and J. F. Dillon, Philadelphia, Pa.; said Dillon assignor to said Enright, Flush valve. 1.652.104; Dec. 6.

Enright, Thomas P., assignor of one-half to J. H. Law-rence and of one-half to E. F. Lawrence, Sterling, III. Friction hinge. 1,619,107; Mar. I. Enright, Thomas P., assignor of one-half to J. H. Law-rence and one-half to E. F. Lawrence, Sterling, III. Hinge for swinging doors. 1,653,100; Dec. 20. Ensdorf, Walter. (See Sandberg, J., and Ensdorf, Der. Elizabeth, N. J. Electrical soldering iron. 1,046,238;

ign Carburetor Company. (See Ensign, Paul W., as-

signor.) signor.) (See Ensign, Paul W., assignor.)

signor.)
Ensign, Emory S., Brookline, assignor by mesne assignments, to National Refrigerating Company, Boston, Mass. Contacting device. 1,652,773; Dec. 13.
Ensign, Paul W., South Pasadena, assignor to Ensign Carburetor Company, Los Angeles, Calif. Carburetor. 1,663,041; Dec. 20.
Pasadena, assignor to Ensign Carburetor. Pasagena, Roy F., South Pasadena, assignor to Ensign Carburetor. Angeles, Calif. Oiling device for internal-combustion aggives. 1,615,363; Jan 25.
Ensrud. Herman F. Butte, Mont. Shee cabinet. 1,649,061; Nov. 15.

Enssie, Fred, Roselle, N. J. Fruit-juice extractor. 1.634.774; July 5. Enterman, Albert, Brooklyn, N. Y. Window construction. 1.629,264; May 17. Enterprise Boller & Tank Works. (See Tryner, Ben J.,

assignor.) Enterprise Machine Company, The. (See Harvey, George H., assignor.)

Enterprise Manufacturing Company, The. (See Adams, Walter L., assignor).
Enterprise Manufacturing Company, The. (See Case, Francis M., assignor).
Enterprise Manufacturing Company, The.
Charles T., assignor).

Enterprise Manufacturing Company, The. (See Pflueger, Charles T., assignor.)
Enterprise Manufacturing Company of Pennsylvania, The. (See Pflueger, Joseph E., assignor.)
Enterprise Manufacturing Company of Pennsylvania, The. (See Asbury, Harry E., assignor.)
Enterprise Manufacturing Company of Pennsylvania, The. (See Buckwalter, Jacob S., assignor.)
Enterprise Optical Manufacturing Company, The. (See Rochuck, Alvah C., assignor.)
Enterprise Railway Equipment Company. (See Batho, William F., assignor.)
Enterprise Railway Equipment Company. (See Campbell, A., and Zimmer, assignors.)
Enterprise Railway Equipment Company. (See Dorey, George B., assignor.)
Enterprise Railway Equipment Company. (See Dorey, George B., assignor.)
Enterprise Railway Equipment Company. (See Dorey, George B., assignor.)

Entwisle & Kenyon Limited. (See Kenyon, William H.

assignor.) Entwisle & Kenyon Limited. (See Shorrock, James L., assignor.)
Entwistle, Robert C. F. (See Goldstone, J., and Entwistle.)

Enyart, Raiph C., assignor to The P. H. & F. M. Roots Company, Comnersville, Ind. Stuffing-box vent. 1,637,371; Aug. 2. Enyart, Raiph C., assignor to The P. H. & F. M. Roots Company, Connersville, Ind. Fluid meter. 1,641,840; Sept. 6.

Sept. 6.
Enzenauer, Stephen C., assignor of one-third to J. F.
Brady, Bancroft, Idaho. Trap. 1,645,095; Oct. 11.
Epitaux, Albert, Peris, France. Electromagnetic device
Epitaux, Bulbert, Peris, France. Electromagnetic device
Epitaus, Otto, Ses Steinle, A., and Eppenstein, Otto, assignor to the Firm Carl Zeiss, Jena,
Germany. Device for the mechanical multiplication of
two factors. 1,638,196; Aug. 9.
Eppenstein, Otto, assignor to the Firm of Carl Zeiss, Jena,
Nov. 18. Device for testing bolt threads. 1,649,106;
Nov. 19.

Germany. Nov. 15.

Nov. 15.

Epperson, Charles B., assignor of one-third to J. H.
Tucker, Petersburg, and one-third to J. L. Rawlings, Sutherland, Va. Preventing chattering in transmissions. 1,633,440; June 21.

Eppley, Charles S., assignor to Self-Acting Switch Co.,
York, Pa. Overhead contact for electric-railway switch
circuits. 1,613,225; Jan. 4.

Eppley, Charles B., assignor to Self-Acting Switch Co.,
The Trolley contact. 1,644,013; Oct. 4.

Eppley, Grant S., assignor to Self-Acting Switch Co.,
The Trolley contact. 1,644,013; Oct. 4.

Eppley, Grant S., washington, D. C. Form clamp.
1,449,652; Nov. 22.

Epps, Claude A., Phoenix, Ariz. Chair seat. 1,613,317; Jan. 4. Eppstein, Lewis B., et al. (See Stewart, Frank H., as-

Eppstein, Lewis B., et al. (See Stewart, Frank H., assignort, Epstein, Henry J. (See Bayer, H. K., and Epstein, Elsethen, Hirsch, assignor to Hyperbo-Electric Flow Meter Co., Chicago, III. Electrical pressure gauge. 1,638,814; aug. 9.
Epstein, William C., Dayton, Ohio. Incinerator for garbage or the like. 1,643,206; Sept. 20.
Epworth Manufacturing Company. (See McDonald, Theodore V., assignor.)

dore V., assignor.)
Equipment Devices Company. (See Kortenhoeven, Peter, assignor.)
Equipment Specialties Co. (See Gillies, William R., as-

signor.)
Equipment Specialties Co. (See Hull, George A., as-

signor.)
Erb, Irwin H., West Liberty, Iowa. Highway map.
1,642,580; Sept. 13.
Erb, Lanious P., Anaconda, Mont., assignor of one-fourth
to W. M. C. Smith, Seattle, Wash., and one-fourth to
H. J. Alien, Anaconda, Mont. Variable transmission.
Lift, 380; Feb. 15.
Erba, Frank E., San, Austria. Swiveling-roller gearErba, Frank E., Fontac, Mich. Gas cut-off. 1,635,986;
July 19 Tank E., Fontac, Mich. Gas cut-off. 1,635,986;
July 19 Tank E., Fontac, Mich. Gas cut-off. 1,635,986;

Dany, Chicago. II. Unrestricted-return water heater 1,651,875. Dec. 6.

Erdahl, Bernard F., Duluth, Minn. Producing algin compounds and products derived therefrom. 1,625,301;
Apr. 19.

Erdahl, Bernard F., Duluth, Minn. Producing algin compounds and products derived therefrom. 1,625,301;
Apr. 19.

Erdaman, Friedrich, Hamburg, Germany. Manufacture of ergot-preparation. 1,645,096; Oct. 11.

Erdmann, Friedrich, Hamburg, Germany. Illuminated level. 1,654,248; Dec. 27.

Erdoes, Julius, New York, N. Y., assignor to Joseph Dizor Crucible Company, Jersey City, N. J. Dis-Erdoes, Julius, New York, N. Y., assignor to Joseph Dizor Crucible Company, Jersey City, N. J. Dis-Erickson, Albert O., assignor of one-half to K. Wold, Jasper, Minn. Spring tool. 1,623,401; Apr. 5.

Erickson, Albert O., assignor of one-half to K. Wold, Jasper, Minn. Spring tool. 1,623,401; Apr. 5.

Erickson, Arthur E., Rockham, S. Dak, Harrow. 1,617,997; Feb. 15.

Erickson, Arthur E., Rockham, S. Dak, Harrow. 1,617,997; Feb. 15.

Erickson, August, assignor of one-fourth to B. Olsen, Minnepolis, and one-fourth to H. L. Pederson, Anoka, Minn. Wind and water motor. 1,650,618; Nov. 29.

Erickson, Charles J., assignor, by mesne assignments, to-American Electric Company, Inc., Chicago, Ill. Switch-board signal. 1,654,325; Dec. 27.

Erickson, Daniel E. (See Meston, J. R., and Erickson, Erick E., Company, Inc., Chicago, Ill. Switch-board signal. 1,653,623; Dec. 27.

Erickson, Erick E., Seandia, Kans. Rail joint. Erickson, Erick G., Alexandria, Minn. Oarlock. 1,626,191; Apr. 26.

Erickson, Erick G., Alexandria, Minn. Oarlock. 1,626,191; Apr. 26.

Erickson, Erick G., Alexandria, Minn. Oarlock. 1,626,191; Apr. 26.

Erickson, Erick G., Alexandria, Minn. Oarlock. 1,626,191; Apr. 26.

Erickson, Herman A., Fresson, Calif. Piston, wrist pin, and connecting-rod aligning fig. 1,630,476; May 31.

Erickson, Erick G., Alexandria, Minn. Oarlock. 1,612,6191; Apr. 26.

Erickson, Herman A., Fresson, Calif. Piston, wrist pin, and connecting-rod aligning fig. 1,630,476; May 31.

matic Electric Inc., Chicago, Ill. Telephone receiver.

1.617.620: Frb. 15.

Erickson, John, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Electromagnetic relay: 1.641.256: Sept. Chicago, Ill. Electromagnetic relay: 1.641.256: Sept. Chicago, Ill. Electromagnetic relay: 1.646.556; Oct. 25.

Enderson, John, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Substation telephone set. 1.649.156; Nov. 15.

Erickson, John, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Electromagnetic relationship of the Erickson, John, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Substation Chicago, Ill. Substation telephone set. 1.649.157; Nov. 15.

Erickson, John, Chicago, and H. F. Obergfell, River Forest, assignor by mesne assignments, to Automatic Strument. 1.651.685; Dec. 6.

Erickson, John, Chicago, and H. F. Obergfell. River Forest, assignor by mesne assignments to Automatic Strument. 1.651.685; Dec. 6.

Erickson, John C., Marathon, Iowa. Motor mounting for corn harvesters. 1,639,402; Aug. 16.

Erickson, Joseph. (See Walker, William M., assignor.)
Erickson, Nels. (See Reimers, L., and Erickson, Dirokson, Otto H., Minneapolis, Minn. Artificial limb.
1.644,822; Oct. 11.
Erickson, Emil, assignor to Wm. A. Field Company, Chicago, Ill., Machine for correcting printing plates.
Ericson, Carl H., Boston, Mass. Coupling for wires, etc.
1.641,627; Sept. 6.
Ericson, Charles A., assignor to O. Meyer, Chicago, Ill.
Machine for grooving printing plates. 1,616,256;
Feb. 1.

Ericsson, Arvid, assignor to Union Special Machine Company, Chicago, Ill. Lapping machine. 1,635,469: July 12. Ericsson, Henry, Chicago, Ill. Scaffold. 1,616,743; Feb. 8. 1,635,469;

1.616.743:

Feb. 8. rie City Iron Works. (See Johnson, Theodore, assignor.) Erie City Iron Works. (See Jones, Jacob H., assignor.) Erie Feundry Company. (See Derby, Frank H., assignor.) Erie Foundry Company. (See Reed, MacDonald S., as-

signor.) Erie Glass Company, The. (See Bock, William E., as-

signor.) rie Malleable Iron Company. (See Dunmire, Russell P., assignor.) Erie Steam Shovel Company. (See Armstrong, Edwin J.,

Lere Steam Shovel Company. (See Armstrong, Edwin J., Eric Kool Works, The. (See Bacon, Edwin W., assignor.) Eriksen, Emil M., Oslo, Norway. Ski tie. 1,626,621; Apr. 26. Eriksson, Erik O. (See Broberg, I., Eriksson, and Sjolin.)

Sjoin.) Erikson, Erik O., Lidingo-Brevik, assignor to Aktie-bolaget Ljungströms Angturbin, Lidingo-Brevig, Sweden. Condenser for locomotives. 1,624,782; Apr. 12. Eriksson, Erik O. (See Ljungström, F., Eriksson, and

Broberg.) Eriksson, Erik Sweden. Flu Broberg. Eriks O., and G. V. Johansson, Stockholm, Sweden. Fluid-fuel burner. 1,643,579; Sept. 27. Ermatinger, Joseph H., Feshtigo, Wis. Thermostatic-controlled heating system for water-cooled engines. 1,613,647; Jan. 4. Ermentraut, Charles J., assignor of one-half to S. Schnee-weit aut, Charles J., Safety gas cock. 1,618,071; Web 13.

weiss, New York, N. I. Salety ges over the Step 18. Ermold, Elmer A., assignor to Wirt Company, Philadelphia, Pa. Lamp fixture. Des. 72,205; Mar. 15. Brne, John A., West St. Paul, Minn. Shock absorber, 1,614,721; Jan. 18. Erni, Waiter, Milwaukee, Wis. Steering mechanism for coaster wagons, 1,627,022; May 3. Erno Shirt Company, The. (See Cronin, John H., asterne).

Erni. Walter. Millaukee, Wis. Steering mechanism for coaster wagons. 1,627,022; May 3.

Erno Shirt Company, The. (See Cronin, John H., assignor.)

Prast, Charles A., Rainier, Wash. Double-gate balanced valve. 1,649,952; Nov. 22.

Ernst, Charles K., Buffalo, N. Y. Closure for area ways. Ernst, Charles K., Buffalo, N. Y. Closure for area ways. 1,635,709; July 12.

Ernst, Charles K., Buffalo, N. Y. Protecting device for areaways and the like. 1,643,207; Sept. 20.

Ernst, Charles K., Buffalo, N. Y., Protecting device for areaways and the like. 1,643,207; Sept. 20.

Ernst, Emile St., Suffalo, N. Y., Protecting device for areaways and the like. 1,643,207; Sept. 20.

Ernst, Emil, Maplewood, assignor to N. L. Lamm, I. W. Longacre, and E. Ernst, comprising the Firm of C. P., Root Beer Company, St. Louis, Mo. Beverage-dispensing apparaturs. 1,654,249; Dec. 72.

Ernst, Emil, Maplewood, assignor to N. L. Lamm, I. W. Longacre, and E. Ernst, comprising the Firm of C. P., Root Beer Company, St. Louis, Mo. Beverage-dispensing apparaturs. 1,654,249; Dec. 72.

Ernst, Lugene C. F., Pittsburgh, Pa. Machine for trimming wall paper. 1,652,522; Dec. 13.

Ernst, Lugene C. F., Pittsburgh, Pa. Machine for trimming wall paper. 1,652,522; Dec. 13.

Ernst, Joseph F., Chicago, Ill. Beam and post connecting bracket. 1,614,722; Jan. 18.

Ernst, Otto, and O. N. Rodemane, Sassignor.)

Ernst, Joseph F., Chicago, Ill. Beam and post connecting bracket. 1,614,722; Jan. 18.

Ernst, William, Assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. High-speed hydraulic press. 1,663,360; Dec. 20.

Ernst, William, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. High-speed hydraulic press. 1,663,360; Dec. 20.

Ernst, William, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. High-speed hydraulic press. 1,663,360; Dec. 20.

Ernst, William, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. High-speed hydraulic press. 1,663,360; Dec. 20.

Ernst, William, Assignor

Erskine, James E., Jacksonville, Fla. Pneumaticallyoperated lubricator. 1,62,176; Mar. 22.
Especial Components of the Components of the

Eschholz, (Eschholz.)

Eschholz, Öttö H. (See Goldsborough, T. R., and Eschholz.)
Eschholz, Otto H., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Welding. 1,615,686; Jan. 28
Bachholz, Otto H., Wilkinsburg, Pa., assignor to West-Bachholz, Otto H., Wilkinsburg, Pa., assignor to West-interrupter. 1,630,477; May 31.
Eschholz, Otto H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Baffing and separating structure. 1,637,372; Aug. 2.
Eschholz, Otto H., Beaver, Pa., assignor to Westinghouse Electric and Manufacturing Company. Automatic arcwelling apparatus. 1,615,687; Jan. 25.
Eschholz, Otto H., Pittsburgh, Pa., assignor to Westingscholz, Otto H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arcting contact. 1,622,639; Mar. 29
Eschholz, Otto H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Welding electrode. 1,652,107; Dec. 6.
Esgro, Samuel. Clarksdale, Miss. Merchandise-delivery cabinet. 1,645,694; Oct. 18.
Eshenbaugh, Alvin J. (See Claypoole, C. M., and Eshenbaugh, Alvin J. (See Claypoole, C. M., and Eshenbaugh, Alvin J.

baugh.)

baugh.)

Balleman, Edgar L., Rochester, N. Y. Portable music holder. 1,649,217; Nov. 15.

Eskholme, John W. (See Thomson, A., and Eskholme.)

Eskholme, John W., East Orange, N. J., assignor to Red Star Appliances, Inc. New York, N. Y. Stump-canceling machine. 1,632,281; June 14.

Star Appliances, Inc., New York, N. Y. Stamp-canceling machine. 1,633,245; June 21.

Eskholme, John W., East Orange, N. J., assignor to Red Star Appliances, Inc., Stamford, Conn. Stamp-canceling machine. 1,633,246; June 21.

Eskholme, John W., Glen Ridge, N. J., assignor to Red Star Appliances, Inc., Stamford, Conn. Stamp-canceling machine. 1,633,246; June 21.

Eskholme, John W., Glen Ridge, N. J., assignor to Red Star Appliances, Inc., Stamford, Conn. Stamp-canceling machine. 1,633,246; June 21.

Eskholme, John W., Glen Ridge, N. J., Envelope-scaling machine. 2,633,244; June 21.

Eskino Pie Corporation. (See Nelson, Christian K., assignor).

signor.)

Estimo Pis Corporation. (See Urschel, William E., Sangaro.)

Esmarian, Charles, Clifton, N. J. Score-Indicating ballreturn game. 1.61.2912; Jan. 4.

Esnault-Peiterie, Robert, Parls, France. Piston packing
capable of resisting to a high temperature. 1,616.330;

Feb. 1.

Esnault-Pelterle, Robert, Boulogne-sur-Seine, France, Progressive change-speed device, 1,316,311, Feb. 1.

Espannol, Agustin E. (See Espannol, Domingo and A. E.)

Espannol, Domingo and A. E., Buenos Aires, Argentina, Wramping paper, Dr. 72,252, Mar. 22.

Helphone and Telegraph Company, Multiple antenna system for radiocommunication, 1,622,370; Mar. 29.

Espenschied, Lloyd, Queens, N. Y., assignor to American Telephone and Telegraph Company, Distribution of Entellierne, 1,633,625; June 21.

Entellierne, 1,633,625; June 21.

Telephone and Telegraph Company, Secrecy system-1,633,625; June 28.

Espenschied, Lloyd, Queens, N. X., assignor to American Telephone and Telegraph Company. Carrier-current telegraphy, 1,685,207; July 12.

Espenschied, Lloyd, Queens, N. Y., assignor to American Telephone and Telegraph Company. Amplifying circuit, 1,647,2114, 150118, N. Y., and D. K. Martin, Orange, N. J. assignors to American Telephone and Telegraph Company. Duplex radio system. 1,616,892; Feb. 8.

Espenschied, Lloyd, Hollis, N. Y., assignor to American Telephone and Telegraph Company. High-frequency signaling system. 1,638,925; Aug. 16.

Esping, Conrad and R., Moline, assignors to Berry Shocker Jan. 18.

Esping, Conrad and R., Moline, assignors to Berry Shocker Jan. 18.

Esping, Conrad and R., Moline, assignors to Berry Shocker Jan. 18.

Esping, Robert. (See Esping, Conrad and R.) Espitallier, Louis, Jennings, Ls. Game. 1,633,887; June 28. Essary, John W., Hamlin, Tex. Trailer hitch. 1,644,916; Oct. 11.

Esselen, Gustavus J. Jr. (See Brown, C. A., and Esselen,)
Esseltine, Alfred B., assignor to Goodman Manufacturing
Company, Chicago, III. Scraper. 1,637,073; July 26,
Esseltine, Alfred B., assignor to Goodman Manufacturing
Company, Chicago, III. Draft-operated scrapers.
Esseltine, Alfred B., assignor to Goodman Manufacturing
Company, Chicago, III. Draft-operated scrapers.
Company, Inc., New York, N. Y. Gymnastic toy.
1,641,477; Sept. 6.
Essex, Harry, Syracuse, N. Y., and A. L. Ward, Upper
Darby, Pa., assignors to E. I. du Pont de Nemours &
Company, Wilmington, Del. Making polyhydroxy carCompany, Wilmington, Del. Making polyhydroxy carCompany, Wilmington, Del. Making polyhydroxy carEssex Motors. (See Fecte, S. I., and Whisler, assignors.)
Essex Motors. (See Fecte, S. I., and Whisler, assignors.)
Essex Motors. (See Fecte, S. I., and Whisler, assignors.)
Essex Motors.

Essex Motors. (See Fekele, S. 1, thu vinnes, the Sistex, Newman, Los Angeles, Callf. Plaster mixer, 1.630,789; May 31.

Essick, Newman, Los Angeles, Calif. Plaster-mixing de-Bostick, Newman, Los Angeles, Calif. Plaster-mixing de-Bostick, 1.600,100 May 32.

Essenan, 1.624,588; Apr. 12.

Esstate Stove Company, (See Kahn, Bertrand B., asalmort.)

signor.) Signor.) William, Bataugh, William, Wanstead, England, Means of and apparatus for transmitting messages through submarine and other like cables. 1,631,254; June 7.

Estep, William G., Duquesne, Pa. Valve. 1,655,996; Dec. 27.

Estep, William G., Duquesne, Pa. Faucet. 1,653,997; Dec. 27.

Dec. 27. Edward T. Filnt, assignor to General Motors Externook. Edward T. Mich. Wheel-shipping strap, 1,640,890; Aug. 30. Esterline, Albert M. and W. L., and L. E. Burns, Muncle, Ind. Combination tool. 1,642,493; Sept. 13. Esterline, Walter L. (See Esterline, A. M., and W. L.,

Beterine, Maiter L. (See Esterline, A. M., and W. L., Baterine, Waiter L. (See Esterline, A. M., and W. L., Tarry, New York, N. Y. Cigar lighter. Des. Baterow, Harry, New York, N. Y. Cigar lighter. Des. Baterow, Harry, New York, N. Y. Cigar lighter. Light-bands on pens or pencils. 1,614,606; Jan. 18. Esterow, Harry, New York, N. Y. Cigar lighter. 1,646,085; Oct. 18. Chicago Heights, assignor to American Manganese Steel Company, Chicago, Ill. Bar for foundry dasks. 1,627,165; May 3. Estes. Dana, Brookline, Mass. Fire extinguisher. 1,653,844; Dec. 27. Estes, George L., Oklahoma City, Okia. Stop signal for Estes, George L., Oklahoma City, Okia. Stop signal for Estes, George L., Oklahoma City, assignor to E. L. Estes, Shamee, Okia. Depressible traffic signal. 1,615,576; Jan. 25. H. and W. P. Williams, Fort Worth, Tex.

Shawnee, Okla. Depressions trans.
Jan. 25.
Estes, John H., and W. P. Williams, Fort Worth, Tex.
Railway-crossing signal. 1,626,459; Apr. 19.
Estey, Arthur C., Fayville, Mass, assignor to United Shoe
machine. 1,642,017; Sept. 13.
Estey, James R. (See Johnston, R. C., and Estey.)
Estrada, Luis, Buenos Aires, Argentina. Window.
1,621,463; Mar. 15.
Estem, Joseph O., administrator. (See Kittelson, Halmer C.)

Estem, Joseph O., administrator. (See Kittelson, Halmer C.)

Estwick, Charles F., assignor to General Railway Signal Company, Rochester, N. Y. Intermittent inductive train control. 1,619,712; Mar. 1. Estwing, Ernest O., assignor to Estwing Manufacturing Company, Inc., Rockford, Ill. Hand tool. Re16,820;

Estwing, Ernest O., assignor to Estwing Manufacturing Company, Inc., Rockford, Ill. Axe sheath. 1,633,319;

Company, the authority of the Estwing Company. (See Estwing Ernest O., assignor.)

Manual Company. (See Rodanet, Charles H. H., Blablissements Ed. Jaeger. (See Rodanet, Charles H. H.,

Etablissements Poulenc Frères. (See Vigreux, Charles, assignor.) Etablissements Samga et Bavox Reunis. (Sec Voreaux.

öternit," Pietra Artificiale Societa Anonima. (See Mattel, D. and Mazza, assignora.) holder. 1.643,580; Sept. 27. theridge, Harry, Zellenople, Pa. Railway-rail support. 1,615,327; Jan. 25.

Etheridge, Harry, Zelleinople, Pa. Railway-rall support. 1,615,237; Jan. 25.
Etherington, William J. (See Wille, H. V., Campbell, and Etherington.)
Etha Machine Company, The. (See Abbey, Nelson D., assignot.)
Ether, Lyle L. (See Livingston, Charley W., assignor.)
Etrel Company, The. (See Sheedy, J. M., and Myers, as-

Euclid Crane & Holst Company, The. (See Armington, Arthur P., assignors.)

Euclid Crane & Holst Company, The. (See Armington, Arthur P., assignor.)

Eureka Steel Range Company. (See Willard, Joseph T.,

rit, Tulsa, arl, assignor to Eurit Specialty Corporation, Okla. Pin attachment for cranks. 1,652,617; Dec.

Dec. 13. Eurit Specialty Corporation. (See Eurit, Carl, assignor.) Eustis, Harry C., Los Angeles, Calif. Snap-action valve for flush tanks and the like. 1,637,444; Aug. 2. Eustis. Warner, Newton, Mass. Mirror mounting

signor.)
Evanet, Emil, Alliance, Ohio. Swing, 1,623,913; Apr. 5.
Evanegline Iron Works, Ltd. (See Cameron, Jarrett L.,
assignor.)
Evanove, Samuel T., Seattle, Wash. Liquid slot machine,
1,649,615; Nov. 15.
Evans, Albert E. (See Rotheram, J., and Evans.)
Evans, Albert E., Pittsburgh, Pa., assignor to Pittsburgh
Plate Glass Company. Apparatus for cracking off and
Manufacture of the Company of th

Mar. 8 Evans, Archibald D., New Castle, Pa. Package. 1,648,612;

Nov. 8.

Nov. 8.

vans, Arthur B., Leeds, England. Inking mechanism of planographic rotary printing machines. 1,654,250; Dec. 27. Evans Auto Loading Co. Inc., The. (See Evans, Edward

., assignor.

S., assignor.; Srans, assignor to Fort Orange Paper Company, Castleton-on-Hudson, N. Y. Display carton, 1,620,197; Mar. 8.

Evans, Benjamin A., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Apparatus for coating strip material, 1,664,214; Dec. 27:

Evans, Benjamin A. (See Cadden, C. C., Shusher, and

Evans.)

Evans, Benjamin A. (See Jaquith, W. E., Evans, and Foerstner.) Evans Brake & Supply Co. (See Mehline, Emile, as-

Evans Case Co. (See Radley, Samuel S., assignor.)
Evans Case Company. (See Reilly, Alfred E., assignor.)
Evans Case Company. (See Reilly, Alfred E., assignor.)
Evans Case Company. (See Reilly, Alfred E., assignor.)
Evans. Charles S., Oakland, assignor to The Paraffine
Companies, Inc., San Francisco, Calif. Pipe-wrapping
machine. 1,022,427; Mar. 29.
Evans. Charles T., Titusville, Pa. Electrical resistance
Evans. Charles T., Titusville, Pa. Alloy steel and making
it. 1,639,889; Aug. 23.
Evans. Clarence T., Wauwatosa, assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor controller.
Evans. Clarence T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor controller.
Evans. Clarence T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Arc shield. 1,017,515; Feb. 16.
Evans. Clarence T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Operating mechanism for electric controllers. 1,649,893; Nov. 22.
Evans, E. S., & Co. (See Evans, Edward S., assignor.)
Evans. E. S., & Co. (See Evans, Edward S., assignor.)
Evans. E. S., & Company. (See Michod, Charles L., assignor)
Evans. E. Gavard S. (See Harry, Earl L., assignor.)

signor.)
Evans, Edgar I. (See Smith, G. A., and Evans.)
Evans, Edward S. (See Harry, Earl L., assignor.)
Evans Edward S. (See Harry, Earl L., assignor.)
Evans Edward S., Detroit, Mich. Two-part tie down.
1,637,92; Aug. 2. Detroit, Mich., assignor to E. S. Evans
Evans, Edward S., Detroit, Mich., assignor to E. S. Evans
Evans, Edward S., assignor to The Evans Auto Loading
Co. Inc., Detroit, Mich. Chock block. 1,651,260;
Nov. 29.

Nov. 29.

Nov. 29.

Evans. Edwin R., Detroit, Mich. Gear-shift-lever lock.
1,615,589; Jan. 25.

Evans. Edwin R., Detroit, Mich. Internal-combustion engine.
1,639,762; Aug. 23.

Evans. Edwin R., Detroit, Mich. Vehicle brake mechanism.
1,648,168; Nov. 8.

Evans. Fenton B., Redmond, Wash. Lubricating apparatus.
1,634,636; July 5.

Evans. Frank J., and H. C. Hansen, Minneapolis, Minn.
assignors, by mesne assignments, to Louden Machinery
Company, Fairfield, Iowa. Automatic oil burner.
1,637,398; Aug. 2. Company, Fai 1.637,898; Aug.

Evans, Fred, Summit, N. J., assignor, by mesne assignments, to Voices Incorporated. Talking toy mechanism. 1,630,260; May 31.

Evans, Fred, Summit, N. J., assignor, by mesne assignments, to Voices Incorporated. Talking toy mechanism. 1,630,261; May 31.

Evans, Gerge, Suguor to Bl. pass Sash and Door Company, El. Pass, Tex. Built-in telephone cabinet. 1,620,637; Mar. 15.

Evans, George, assignor to El. Passo Sash and Door Company, El. Passo, Tex. Ironing-board cabinet. 1,625,534; Apr. 19.

Evans, George, C., Cranford, N. J. Automatic pacumatic values, George S., Middle Brighton, Victoria, Australia. Evans, George S., Gsee Vial, F. K., and Evans.)

Evans, George S., Gsee Vial, F. K., and Evans.)

Evans, George S., Oak Park, Ill., assignor to The Muthieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y. Rehning Components of the Mathieson Alkall Works, New York, N. Y

Feb. 22.

Bvans, Harry L., and G. I. Hohl, Newport, R. I. Cartoning machine. 1,622,709; Mar. 29.

Evans, Harry L., and G. I. Hohl, assignors to Cartoning Machinery Corporation, Newport, R. I. Mechanism for lining cartons. 1,633,247; June 21.

Evans, Humphrey, and H. E. Heilbronner, assignor to Holeproof Hosiery Co., Milwaukee, Wis. Full-fashioned hosiery. 1,619,199; Mar. 1.

Evans, John M., assignor, by mean assignments, to Standard Oil Company of California, San Francisco, Calif. Evans, John R., Windsor, Ontario, Canada, assignor of one-fourth to B. W. Tanzy, Detroit, Mich. Steam generator, 1,644,715; Oct., 11.

Evans, Joseph M., et al. (See McCullough, Joseph P., assignor.)

Evans, a despoint assignor, assignor to General Electric Company. Lightning arrester. 1,651,876;

Evans, Lincoln B. (See Parks, W. J., and Evans Evans, Maurice, Barnston Nebr. Cultivator. 1, Apr. 19. 1,625,302;

Evans, Lincoin B. (See Parks, W. J., and Evans.)
Evans Maurice, Barnston Nebr. Cultivator. 1,625,302;
Apr. 19.
Evans Ore Reduction Company. (See Evans, George W. B., assignor and A. T. Wilson, Philadelphia, Pa., assignors to said Powell Evans. Flexible coupling. 1,650,202; Nov. 22.
Evans, Richard W., Spokane, Wash. Screen for automobiles. 1,619,501; Mar. 1.
Evans, Richard W., Spokane, Wash. Window screen.
Evans, Robert D. (See Fortescue, C. L., and Evans.)
Evans, Robert D., Fittsburgh, Pa., assignor to Westing-house Electric and Manufacturing Company. Metering system. 1,615,688; Jan. 25.
Evans, Robert D., Pittsburgh, Pa., assignor to Westing-house Electric and Manufacturing Company. Power-factor meter. 1,621,006; Mar. 1;
Evans, Robert D., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. Distributing system. 1,619,337; Mar. 1;
Evans, Robert D., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. Balance indicator. 1,624,484; Apr. 12.
Evans, Robert D., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. Balance indicator. 1,624,484; Apr. 12.
Evans, Robert D., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. Transmission system. 1,640,539; Aug. 30.
Evans, Robert D., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. Transmission system. 1,640,549; Jac. 3.
Evans, Robert D., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. System of Marchalla and Balance and

LOG2 2996; Mar. 29.

Evans, William F., Anderson, Ind.
LOG2 220; Dec. 13.

Evans, William L. Bridesport, Conn.

Evans, William L. Washington, Ind.
ring joints. LOG1 762; Feb. 15.

Evans, William L., Washington, Ind.
LOG2 176. 16.

Evans, William L., Washington, Ind.
LOG3 176. 16.

Evans, William L., Washington, Ind.
LOG3 176. 176. 176.

Evans, William S., Morsemere, N. J. Crown and traveling block pulley 1,615,170. Jan. 18. Frans, Wilson, assignor to Aluminate Sales Corporation, Chicago, Ill. Treating liquids. 1,620,332; Mar. S. Evans, Wilson, assignor to Aluminate Sales Corporation, Chicago, Ill. Treating liquids. 1,620,333; Mar. S. Evanus, Michael, Tottenville, N. Y. Astronomy device. Evans, Edward M., et al. (See Knauss, Harry A., assignor, Edward M., et al. (See Knauss, Harry A., assignor, Edward M., et al. (See Knauss, Harry A., assignor, A.)

Evairts, Edward M., et al. (See Knauss, Harry A., Basignor.)
Evelyn, Harry C., Chicago, Ill. Electric toy. 1,637,479:
Aug. 2.
Eveno, Georges, Parls, France. Lubricating paddle for journal boxes. 1,617,205; Feb. 8.
Eveno, Georges, Parls, France. Oil recovering and obturating ring. 1.652,153; Dec. 6.
Eveno, Georges, Parls, France. Device for the recovery of lubricant from axie boxes. 1,633,390; Dec. 27.
Evensen, William, Chicago, Ill., assignor to Goss Printing Press Company. Plate-clamping mechanism for printing presses. 1,637,890; Aug. 2.
Evensen, William, Chicago, Ill., assignor to Goss Printing Press Company. Plate-clamping mechanism for printing presses. 1,637,890; Aug. 2.
Evensen, William, Chicago, Ill., assignor to Goss Printing Press Company. Plate-clamping mechanism for printing Press Company. Cylinder bearing. 1,646,056; Oct. 18.

vensen, William, Chicago, Ill., assignor to Goss Print-ing Press Company. Printing-press inking mechanism. 1,646,057; Oct. 18.

ing Press Company. Printing-press inking mechanism. 1,646,057; Oct. 18.
Everedy Company, The. (See Lebherz, Harry J. and Everedy Company, The. (See Ingram, W. C., and Everest.) Everest, Joseph I., Langlois, Oreg. Snubber. 1,640,651; Aug. 30.
Everett, Edward A., New York, N. Y. Lamp socket. 16.52,388; Dec. 18.
Everett, Blarry, C. Sper, Wyo. Emergency brake. Everett, Blarry, C. Sper, Wyo. Emergency brake. Everett, James M., Clearwater, assignor of one-half to C. M. Hunt, Lake Wales, Fla. Transplanting pot. Rel.6,690; July 26.
Everett, Samuel J., Thornton Heath, England. Hypodermic svringe and needle therefor. 1,630,328; May 31.
Everett, William J., assignor of thirty per cent to B. L. locomotives. 1,652,106; Dec. 6.
Everhard, Harry H., Canton, Ohlo. Ventilating screen. 1,614,191; Jan. 11.
Everhot Heater Company. (See Shuell, Frank W., assignor.)

Everhof Heater Company. (See Saucu, Fillia V., Led-signor.)
Everhof Heater Company. (See Shuell, F. W., Led-better, and Tobey, assignor.)
Everhof Maunitacturing Company. (See Engstrom, E. F., Everist, Charles T. (See Sleber, Jacob, assignor.)
Everite Signal Company. (See Cummings, George A., as-

Everite Signal Company. (See Cummings, George A., assignor.)
Everitt. Walter E., assignor to Fireking Fire Extinguisher Company Inc., Seattle, Wash. Fire extinguisher. 1.652.105; Dec. 6.
Everlast Sporting Goods Mfg. Co. (See Golomb, Morris, assignor.)
Everlasting Valve Company. (See Wilson, Wylie G., assignor.)

Everlasting Valve Company. (See Wilson, White Us. assignor.)
Everlife Loung Co. (See Roottees, Frederick, Ws.) genor.)
Everlasting Company. (See Electron, Arthur M., assignor, Devers, Arthur J., assignor to Evers-Sauvage Company.
Chicago. III. Sheet cutting and transporting appliance.
1,617,381; Feb. 15.
Evers, Arthur J., assignor to Self Locking Machine Company.
Chicago. III. Pasteboard-box-making machine.
Evers, Edward H. Cincinnati, Ohlo. Radio apparatus.
1,619,407; Mar. 1.
Evers-Sauvage Company. (See Evers, Arthur J., assignor.)

Eversharp Manufacturing Co. (See Boylan, Thomas F., sr., assignor.) Evershed and Vignoles, Limited. (See Perry, Charles E.,

signor.) Evinrude Motor Company. (See Hillborn, Herbert J.,

Evinrude Motor Company. (See Mould, James A., assignor.)

Evins, Dossa D., et al. (See Hayman, George R., as-signor.) Dyins, Dossa D., assignor to F. W. Elliott. Davenport. Iowa. Attachment for chiropractic tables. Re16,653;

Iowa. Attachment for chiropractic tables. Ke10,003; June 14.

Evins, Dossa D., assignor of one-half to F. W. Elliott, Davenbort, Iowa. Diagnostic instrument. 1,648,939; Nov. 15.

Evr Klean Seat Pad Co. (See Wells, Frank, assignor.)
Ewak, A-G. (See Amsler, August, assignor.)
Ewald, Arno A., Oakfield, Wis. Stabilizing device.
1,629,265; May 17.
Ewald, Harry W., Schenectady, N. Y., assignor to Gen1,614,192; Jan. 11.
Ewald. Leo, Minneapolis, Minn. Filtering apparatus.
1,639,933; Aug. 23.
Ewald, Martin B., Preston, Ontario, Canada, assignor to
J. J. Schneider, Buffalo, N. Y. Tongue support for vehicles. 1,654,072; Dec. 27.
Ewan, Charles V., Long Beach, Calif. Gas-pressure reguEwan, John A., Brooklyn, N. Y., Pocket clasp for penSeven, John A., Brooklyn, N. Y., Pocket and pencil clasp.
1,639,651; Aug. 28.
Ewen, Myler H., assignor to Packard Motor Car ComOct. J. Detrott, Mich. Motor vehicle. 1,645,322;
Oct. 1.
Ewens, Samuel C., Springhill, La. Radius-rod clamp.
Ewens, Samuel C., Springhill, La. Radius-rod clamp.

Oct. 11. Ewens, Samuel C., Springhill, La. Radius-rod clamp. 1,627,695; May 10. Ewer, Nathaniel T. (See Dunlap, F. L., and Ewer.) Ewertz, Eric H., Elizabeth, N. J. Vessel. 1,619,063;

Ewertz, Eric H., Elizabeth, N. J. Vessel. 1,619,063; Mar. I.
Ewing, Ada F. (See Ewing, Urbane J. and A. F.)
Ewing, Charles A. Lansing, Mich. Method and material
Ewing, Claude. Brooklyn, N. Y., assignor to American
Telephone and Telegraph Company. Testing system.
1,621,480; Mar. 15.
Ewing, Frank K., Worcester, Mass., and S. R. Cummings,
Canton, Ohio, assignors to The Hoover Company. Air
Ewing, 162,807 May 10.
Ewing, Urbane J. and A. F., Wilkinsburg, assignors to
Pittsburgh Lavatory Supply Inc., Pittsburgh, Pa.
Mop holder, 1,630,418; May 31.
Ewing, Urbane J. and A. F., Wilkinsburg, assignors to
Pittsburgh Lavatory Supply Inc., Pittsburgh, Pa.
Mop holder, 1,630,418; May 31.
Ewing, Wilkins B., Chicago, Ill. Steam generator,
1,632,438; June 14.
Excaelum Corporation. (See Schröder, Paul, assignor.)
Excel Shoe Form Company. (See Niles, Waiter L. C.,
assignor.)

Excella Pattern Company. (See Laub, George M., as-

Excella Pattern Company. (See Laub, George M., assignor.)

Ex-Cell-O Tool & Manufacturing Co. (See Buffington, G. L., and Hopson, assignors.)

Excelsior Hardware Company, The. (See Komenak, Albert J., assignor.)

Excelsior Steel Furnace Company, The. (See Scherer, Albert G., assignor.)

Excelsior Steel Furnace Company, The. (See Scherer, Company, Clinton, Company, Clinton, Company, Clinton, Iowa, Renewable moisture trap. 1.649,318; Nov. 22.

Exton, Alfred H. (See Alexander, R. I., and Exton.)

Exton, William G., New York, N. Y. Method of and apparatus for measuring turbidities and color of fiulds. 1,635,470; July 12.

1.635.470; July 12.

1,655,470; July 12.

Exton, William G., New York, N. Y. Apparatus for measuring fluids for turbidity, color, and other charteristics and the second of the s

May 81.

Eyer, Churles H., West New York, N. J. Oil pressure feeding device. 1,641,221; Sept. 6.

Eyer, George H., and E. S. Sayder, Nutley, N. J. Bather's cigarette and match case. 1,628,961; May 17.

Eyman, Bradford. (See Van Zandt, H., and Ryman.)

Eyman, Thomas M., Philadelphia, Pa. Pressure indicator for showing gasoline height. 1,615,268; Jan. 25.

Eguge. 1,615,264; Jan. 25.

Eynon, Thomas M., Philadelphia, Pa. Liquid-level indicator. 1,624,659; Apr. 12.

Eynon, Thomas M., Philadelphia, Pa. Liquid-level indicator. 1,646,957; Oct. 25.

Eynon, Thomas M., Philadelphia, Pa. High-speed steam Fron, Thomas M., Philadelphia, Pa. High-speed steam Handelmaatschappily v. H. Harms & Co., Amsterdam, Netherlands. Electric-are welding apparatus. 1,635,208; July 12.

Strub Otto H., assignor.)

F. and H. Mfg. Co. (See Hennings, Charles H., assignor.)

Faas, Charles T., Ridgewood, N. J. Garbage container, 1.651,020; Nov. 29. Fabbrin, Frank, Tailman, assignor to Continental Prod-ucts Corporation, New York, N. Y. Umbrella cover, rib, and stde connection, 1,033,764; Aug. 9.

Fabens, Andrew L., assignor to The Buckeye Aluminum Company, Wooster, Ohio. Apparatus for finishing metal ware. 1651,167, 70v. 29.

The statement of the statem

Fabricord Incorporated, trustee. (See Lowry, George A.,

ranricord incorporated, trustee. (see Lowry, George A., assignor.)
Fabrique Nationale D'Armes de Guerre Societe Anonyme.
(See Mattiet, Ernest, assignor.)
Fabriques des Montres Zenith, successeur de Fabriques
des Montres Zenith Georges Fabre-Tacot & Co. (See

des Montres Zentth Georges Fabre-Tacot & Co. (See Rosat, Charles, assignor, Pabyan, George. (See Gruender, Hubert, assignor.)
Fabyan, George. (See Gruender, Hubert, assignor.)
Fabyan, George. (See Gruender, Hubert, assignor.)
Fackler, John M., assignor to New Holland Machine Company, New Holland, Pa. Humidifier pan. 1.615,689; Jan. 25.
Fackler, John M., assignor to New Holland Machine Company, New Holland, Pa. Damper. 1,652,712;
Fackler, John M., assignor to New Holland Machine Company, New Holland, Pa. Damper. 1,652,712;
Fackler, John M., assignor, to New Holland Machine Company, New Holland Machine Research Company, New Holland, Machine Research Rese

Dec. 13.
Fackler, John M., assignor to New Holland Machine Company, New Holland, Pa, Automatic damper.
1,652,713; Dec. 13.
Fackler, Louis, Ridgewood, N. J., assignor to The Stein-Davies Company, New York, N. Y. Adhesive and its manufacture. 1,618,150; Feb. 15.
Faessler, J., Manufacturing Company, The. (See Maupin, Grave R., assignor.)
Figure R., assignor.)
Figure R., assignor.

assignor.)
Fafnir Bearing Company, The. (See Harris, Howard C.,

Fafnir Bearing Company, The. (See Searles, Raymond assignor.)
r Bearing Company, The. (See Vile, Merwin S.,

R., assignor.)

Parinir Bearing Company, The. (See Vile, Merwin S., assignor.)

Paran. Charles D., Sharon, assignor to Sharpsville Boiler Andrews D., Sharon, assignor to Sharpsville Boiler Sharpsville, Pa., Drain pit and grease rack. 1,654,075; Dec. 79.

Pagan, Edward J., Rochester, N. Y., Radius-rod reenforcement. 1,649,158; Nov. 15.

Pagan, Bames P., La Junta, Colo. Vehicle signal. 1,644,640; Os. 4. J., Malloy, Cleveland, Ohio, assignors to General Electric Company. Glass working machine. 1,621,359; Mar. 15.

Pagan, Ryo D., Toronto, Ontario, Canada. Liquid purifier. 1,642,433; Sept. 13.

Pagan, Thomas J., Arlington, Mass. Watch-chain swivel. Pagan, Ryo D., Toronto, Ontario, Canada. Liquid purifier. 1,642,433; Sept. 13.

Pagan, Abraham A., Minnespolis, Minn. Coin-operated vending machine. 1,621,244; Mar. 15.

Pageol, Rollie B., (See Fageol, William B., assignor.) Pageol, Rollie B., (See Fageol, William B., assignor to American Chain Company, Inc., Bridgeport, Conn. Multibar bumper. 1,620,334; Mar. 8.

Pageol, Rollie B., Los Angeles, Calif., assignor to American Chain Company, Inc., Bridgeport, Conn. Multibar bumper. 1,623,583; Apr. 5.

Pageol, Rollie B., Cos Angeles, Calif., assignor to American Chain Company, Inc., Bridgeport, Conn. Parallelous bumper. 1,623,583; Apr. 5.

Pageol, Rollie B., Los Angeles, Calif., assignor to American Chain Company, Inc., Bridgeport, Conn. Fender guard. 1,037,770. Aug. 2.

Pageol, William B., assignor to R. B. Fageol, Okaland, Calif. Automobile brake. 1,633,776; June 28.

Pageor, H. A. (See Fager, Albert H., assignor.)

Faherty, Michael W., Los Angeles, Calif. Ram. 1.619.805; Mar. 1. Pahey, Hilarion S., Grafton, Mass. Thermostatic valve. 1.630.929; May 31.

Fahnenschmidt, Hans, Cassel, Germany. Screw connection for slphons of washbasins, fountains, and the like. 1,622,773; Mar. 29.

The control of the co

Fahrenwald, Frank A., Chicago, III. Furnace. 1,022,048 Apr. 12.
Fahrenwald. Frank A., Chicago, III. Rabble and rabble arm for furnaces. 1,622,465; May 10.
Fahrenwald, Frank A., Chicago, Heights, III. Heat-resisting dauper frank A., Chicago Heights, III. Heat-resisting dauper frank A., Chicago Heights, III. Heat-resisting plate. 1,643,766; Sept. 27.
Fahrenwald, Frank A., Cleveland Heights, Ohio. Electric iron. 1,648,169; Nov. 8.
Fahrency Emery H., Chicago, III. Cream separator. 1,631,104; June H., Chicago, III. Cream separator. 1,631,104; June See Nilson. Lars G., assignor.)
Fahly, Frank J., Co. (See Cook, Harry, assignor.)
Fahly, Joseph. & Company. (See Vermot, Henry E., assignor.)

Faby, Frank P. (See Cook, Harry, assignor.)
Fabys, Joseph, & Company. (See Vermot, Henry E.,
assignor.)
Fabys, Joseph, & Company. (See Vermot, Henry E.,
assignor.)
Fallor, Charles W. (See Thompson, H. A., and Failor.)
Fallor, Charles W. (See Thompson, H. A., and Failor.)
Fallor, Charles W. (See Thompson, H. A., and Failor.)
Fallor, Frank E., and R. W. Sprigg. (Malhoma Cit.)
Fallor, Frank E., and R. W. Sprigg. (Malhoma Cit.)
Fallor, Walter C., Michaele, Vallor, L. (Ed. Sa3; Apr. 26.
Fallor, Walter C., Michaele, Vallor, L. (Ed. Sa3; Apr. 26.
Fallor, Francis A., assignor to Falmers Instead Montarior, Francis A., assignor to Falmers Instead Montarior, Francis A., assignor to Falmers Instead Montarior, Francis A., assignor.)
Fairbanks, E. Haywidd, See Haag.
Fairbanks, E. Haywidd, See Haag.
Fairbanks, E. and T., and Company. (See Bousfield, Alfred, assignor.)
Fairbanks, E. and T., and Company. (See Hadley, Harlan A., assignor.)
Fairbanks, E. & T., and Company. (See Hadley, Harlan A., assignor.)
Fairbanks, Morse & Co. (See Adams, Edward T., assignor.)
Fairbanks, Morse & Co. (See Jahnke, Charles B., asFairbanks, Morse & Co. (See Jahnke, Charles B., asFairbanks, Morse & Co. (See Jahnke, Charles B., asFairbanks, Morse & Co. (See Jahnke, Charles B.,

signor.) Fairbanks, Morse & Co. (See Jahnke, Charles B., as-

signor.)

Silvania, William, Los Angeles, Calif. Jumping rope.

1,629,209 May 17.

Fairbanks, William, Los Angeles, Calif. Jumping rope.

1,629,630 May 17.

Fairbanks, William, Completely-inclosed double-deck bus.

1,636,6505; July 19.

Fairbrother, Frederic A., Providence, R. I. Jewelry component. Re16,741; Spi. 20.

Fairbrother, Thomas H., Providence, R. I. Jewelry component and the second component of the se Fairchild Aerial Camera Corporation. (See Henry, Ferdi-

Raichild Aerial Camera Corporation. (See Henry, Ferdinand G., assignor.)

Fairchild, Arthur B., Buhl, Idaho. Grease-cup valve.

1.625,717; Apr. 19.

Fairchild, Charles N., Milford, Conn., assignor to Fairchild Lock Corporation. New York, N. Y. Triger control. 1.62 Control. N., Milford, Conn., assignor to Fairchild Lock Corporation. New York, N. Y. Manually controlled lock. 1622,502; Mar. 29.

Fairchild, Charles N., Milford, Conn., assignor to Fairchild, Charles N., Milford, Conn. assignor to Fairchild Lock Corporation. New Gastle County, Del. Retarder for circum Milford, Conn. and F. J. Hull, The Conn. Among the Conn. and Conn. and Conn. Among the Conn. Among the Conn. and Conn. and Conn. Among the Conn. Among the Conn. and F. J. Hull, The Conn. Among the Conn. and F. J. Hull, The Conn. Among the Conn. and F. J. Hull, The Conn. Among the Conn. and F. J. Hull, The Conn. and F. J. Hull, The Conn. Among the Conn. and F. J. Hull, The Conn. Among the Conn. and F. J. Hull, The Conn. and F. J. Hull, The Conn. Among the Conn. and F. J. Hull, The Conn

Jan. 49.

Fairchild Deflector Corporation. (See Hainline, Russell C. assignor.)

C. assignor.

Fairchild Emer E. A. A. Adamson, and C. F. Morley, assignor.

Aderman, Fairchild Company, Rechester, as a company of the company of the

Signot.)

Fairchild, Gien G., Indianapolis, Ind. Automobile chassis-grasing apparatus. 1,645,097; Oct. 11.

Fairchild, Harry Prassignor to F. G. Fairchild, New York, N. Y. Magazine pencil. 1,614,463; Jan. 18.

Fairchild, Tulon B. Sanford, Miss. Radius-rod clamp. 1,618,373; Feb. 22.

Fairchild Lock Corporation. (See Fairchild, Charles N., Fairchild Lock Corporation. (See Fairchild, C. N., and

assignor,)

Fairchid Lock Corporation. (See Fairchild, C. N., and Iluil, assignors.)

Fairchid, Sherman M., New York, N. Y. Aerial camera.

1.012,560; Jan. 4.

Fairchid, Sherman M., New York, N. Y. Camera.

1.619,108; Mar. 1.

Fairchid, Sherman M., Onconta, N. Y. Photographic shutter. 1,626,032; Apr. 28.

Fairchid, Walter H., Chicago, Ill., assignor to Mid-West D. Starbeild, Walter H., Chicago, Ill., assignor to Mid-West D. Starbeild, Walter L., New York, N. Y. Vulcanizing apparatus. Re16,542; Feb. S.

Fairchid, Walter L., New York, N. Y. Pneumatic tube.

1,622,660; Apr. 18.

Fairchid, Walter L., New York, N. Y. Apparatus for producing pneumatic tubes. 1,622,304; June 14.

Fairchid, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,304; June 14.

Fairchid, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,304; June 14.

Fairchid, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

Fairch, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

Fairch, Walter M., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

Fairch, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

Fairch, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

Fairch, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

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Fairch, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

Fairch, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

Fairch, Walter L., New York, N. Y. Producing pneumatic tubes. 1,622,618; Dec. 13.

Fairch, Walter L., New York, N

A.)

Fairgrieve, Frederick M. and A., Toronto, Ontario, Canada. Tub for washing machines. 1,303.478; May 31.

Fairless, Oscar, Blackfoot, Idaho. Automobile safety
Fairley, William, Oskind, Calif. Window construction.

1,632.700; June 14.

Fairlie, Andrew M., Atlanta, Ga. Recovery of oxides of
nitrogen in sulphuric-acid manufacture. Rei6,709;

Fug. 23.

Fug. 23.

F. Wilson. (See Baker, William H., as-

Fairman, Knowlton C., and F. N. Wagner, Creekside, Pa. Automobile fan. 1.636,358; July 19. Fairmont Box Company. (See Wade, V. M., and Zuspan,

Fairmont Box Company.
assignors.)
Fairmont Gas Engine & Ry. Motor Car. Co. (See Kasper,
Walter F., assignor.)
Fairmont Railway Motors, Inc. (See Kasper, Walter F.

Fairmont Railway Motors, Inc. (See Kastler, Edward L.,

Fairmont Rallway Motors, Inc. (See Rastier, Edward 2., assignor.)
Fairmount Glass Works. (See Rau, John, assignor.)
Fairmount Glass Works. (See Rau, John, assignor.)
Fairweather, Charles B., West Chester, assignor of onehalf to F. E. Moore, Coatesville, Pa. Vehicle wheel.
1,619,607; Mar. 1.
Fairweather, Nelson H., Everett, assignor to Gillette
Safety Razor Company, Boston, Mass. Pile wire.
1,621,400; Mar. 15.
Faison, William A. (See Blue, Louis V., assignor.)
Faison, William A., et al. (See Gage, Charles H., assignor.)

Faison, William A., tat al. (See Guge, Charles H., assignor.)
Faison, William A., et al., trustees. (See Gage, Charles H., assignor.)
Faison, William A., et al., trustees. (See Gage, Charles H., assignor.)
Line. 1,618,606; Mar. 1.
Faitelowitz, Arnold, Berlin, Germany. Apparatus for the production of preserves of vegetable matter of unlimited durability. 1,647,089; Oct. 25.
Faith Mig. Co. (See Faith, S., and Klasstorner, assignors.)
Faith Stephen, and S. Klasstorner, assignors to Faith Mig. Co. (See Faith, St., and Klasstorner, assignors.)
Faith: Stephen, and S. Klasstorner, assignors to Faith Mig. Co. (See Faith, St., and Klasstorner, assignors.)
Faith: All Chicago, Ill. Automobile radiator-cap ornament. Des. 74,004; Dec. 6.
Faiver, Marshall A., Girard, Ohio. Meat-block cleaner. 1.643,882; Sept. 27.
Falck, Hans J. (See Halvorsen, B. F., Falck, and Ravner.)

Falck, Hans J. (See Halvorsen, B. F., Falck, and Ravner.)

Palck, Joseph E., assignor to National Casket Company,
Incorporated, Pittisburgh, Pa. Burial casket. Des.

Falck, Lilliage E., See Wendler, Alex, assignor.)

Falco, Ferdinand, Hasp, Germany, Manufacture of pure
barium carbonate. 1,640,652; Aug. 30.

Falco, Mick, Canonsburg, Pa. Penholder. 1,625,115;
Apr. 19.

Falconer, Harry W. (See Ross, H. C., and Falconer.)

Falconer, Harry W. (See Ross, H. C., and Falconer.)

Falconer, Harry W. (See Ross, H. C., and Falconer.)

Falconer, Harry W. (See Ross, H. C., and Falconer.)

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Falconer, Harry W. (See Ross, H. C., and Falconer.)

Falces, 1,635,039; July 5.

Falces, 1,635,039;

Electric company:

Mar. 15.

Falk Corporation, The. (See Banner, Otto A., assignor.)

Falk Corporation, The. (See Day, Fercy C., assignor.)

Falk, George F., assignor of one-half to S. A. Taylor,

La Crosse, Wis. Liquid-level gauge. 1,630.611;

May 31.

Falk, Morris, assignor to Independent Lock Company, Fitchburg, Mass. Key chain. 1,626,334: Apr. 26. Falkenberg, Wilhelm, assignor to A. Wielich, New York, N. Y. Calorimeter and measuring heat. 1,616,312;

Falkenthal, Erwin, Berlin-Dahlem, Germany. Supporting surfaces for flying machines, parachutes, and the like, rudder surfaces and protecting surfaces. 1,613,348;

Jan. 4.

Falkenthal, Erwin, Berlin-Dahlem, Germany. Process and apparatus for mixing gases. 1,643,065; Sept. 20.

Falkiner, Raiph S., Meibourne, Victoria, Australia. CaneFalkiner, Raiph S., Meibourne, Victoria, Australia. Canefalkiner, Berlin S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Wireless receiving system. 1,633,932; June 28.

Fall, Chaless, and F. Paul, Beserville, Mich. Latch lifter for freight car couplers. 1,641,924; Sept. 6.

Fall, Edward A., Rutherford, N. J. Heating hood for tankFall, Edward A., Rutherford, N. J. Tank car. 1,620,453; Mar. 8.

Fall, Edward A., Rutherford, N. J. Tank car. Proceedings.
Mar. 8.
Fall, Edward A., Rutherford, N. J. Placard holder for tank cars. 1,644,774; Oct. 11.
Falla, Fernando, Hoboken, N. J., assignor to Edge Moor Iron Company, Edge Moor, Del. Method and apparatus for supplying additional heat to waste-heat boiler plants. 1,614,109; Jan. 11.
Falla, Hedley, Milford, N. H. Can opener. 1,634,493; July 5.
Faller, Ernest A., and E. E. Kleinschmidt, Brooklyn, N. Y., assignors, by meene assignments, to Morkrum-Kleinsche Group of the Composition of the Compo

Fallot, Alfred, Plauen, Germany, deceased; H. Priester, executor. Sheet-delivering device for printing presses. 1.646.529; Oct. 25.

1.646.529; Oct. 20. Fallou, Jean G., assignor to L'Union Generale d'Electricite, Paris, France. Frequency reducing arrangement. 1.633.481; June 21. Falls Rubber Company, The. (See Schnedarek, Emil, as-

sugnor.)
Falor, Abram E., Akron, Ohio, assignor to T.
Goodrich Company, New York, N. Y. Fabr strip material and making the same. 1
May 17. The B. F bric-covered 1,628,832;

May 17.

Falor, Abram E., Akron, Ohlo, assignor to The B. F.
Goodrich Company, New York, N. Y. Tube-skiving
apparatus. 1,635,710, July 12.

Signors to The B. F. Goodrich Company, New York,
N. Y. Shoe. 1,636,905; July 26.

Falstrom, Henry W. (See Montan, A., and Falstrom, Falstrom, Henry W., assignor to Assignor to May 10.

Co., Bloomfold, N. J. Shide. 1,645,767; Sept. 27.

Jan. 1,89 B., Detroit, Mich. Rubber heel. 1,015,007;
Jan. 1,800.

Famous Players-Lasky Corporation. (See Garbutt, Frank

Famous Players-Lasky Corporation. (See Garbutt, F. E., and Fear, assignors.)
Famous Players-Lasky Corporation. (See Wyckoff, Alvin, assignor.) assignor.) anella, Carlo, Rome, Italy. Musical appliance. 1,628,039; May 10.

Farrell, Anthony P. (See Docktner, M. A., and Fancill.) Frankhauser, Charles W., Great Bend, Kans. Coupling for closets. 1.626.135; Apr. 26 Fanner Manufacturing Company, The. (See Schane, Ed-ward H., assignor.) Fanner Manufacturing Company, The. (See Schane, E.

H., and Durant, assignors.)
Fanning, Walter N., Vallejo, Calif. Radio receiving system. 1,649,341; Nov. 15.
Fansteel Products Company. (See Baker, John C., as-

gnor.)

insteel Products Company. (See Balke, Clarence W., assignor.)
insteel Products Company. (See Engle, Edgar W.,

assignor.) Farabee, Flenry E. (See Fraser, John J., assignor.) Faraber, Warren F., and W. A. Gruse, assignors to Guif carbon olio. 1,659,908; May 248. Cracking hydrocarbon olio. 1,659,908; May 249. Cracking hydrocarbon olio. 1,640,444; Aug. 30, and apparatus for cracking hydrocarbon olis. 1,640,444; Aug. 30, and apparatus for cracking hydrocarbon olis. 1,640,444; Aug. 30, and apparatus for cracking hydrocarbon olis. 1,640,444; Aug. 30, and apparatus for cracking hydrocarbon olis. 1,640,444; Aug. 30, and apparatus for cracking hydrocarbon olis. 1,640,444; Aug. 30, and apparatus for cracking hydrocarbon olis.

Aug. 30.

Farsh, Mansour, El Paso, Tex. Automobile lock.
1.625,249; Apr. 19.

Farber, Clayton W. (See Breyer, F. G., and Farber,)

Farber-Kraysler & Bro. (See Kraysler, Irving, assignor.)

Farber, S. W., Inc. (See Buckley, James J., assignor.)

Farber, Simon W., Brooklyn, N. Y. Lamp base. Des.
72.008; Feb. 15.

Farber, Simon W., Brooklyn, N. Y. Holder for a glasses.

Glash or similar article. Des. 74,005; Dec. 6.

Farber, Simon W., Brooklyn, N. Y. Holder for glasses.

Des. 74.007; Dec. 6.

Des. 74.007; Dec. 6.

Des. 74.007; Dec. 6.

Farber, Simon W., assignor to Simon W. Farber, Inc., Brooklyn, N. Y., Serving tray or similar article. Des. 72,702; May 24.
Farber, Simon W., assignor to Simon W. Farber, Inc., Brooklyn, N. Y. Casserole holder, Des. 72,703; Farber, Simon W., assignor to Simon W. Farber, Inc., Brooklyn, N. Y. Casserole holder, Des. 72,704; Farber, Simon W. assignor to Simon W. Farber, Inc., Farber, Simon W. assignor to Simon W. Farber, Farber, Simon W. assignor to Simon W. Farber, Farber, Simon W. assignor to Simon W. Simon W. Brather, Simon W. assignor to Simon W. Brather, Simon W

May 24.
Farber, Simon W., assignor to Simon W. Farber, Inc.,
Brooklyn, N. Y. Holder for glasses. Des. 72,705;
May 24.
Farber, Simon W., assignor to Simon W. Farber, Inc.,
Brooklyn, N. Y. Holder for glasses. Des. 72,706;
May 24.
Farber, Simon W., assignor to Simon W. Farber, Inc.,
Brooklyn, N. Y. Holder for glasses. Des. 72,706;
May 24.
May 24.
The property of the

Farber, Simon W., assignor to Simon W. Farber, Inc., Brooklyn, N. Y. Holder for glasses. Des. 72,708; Brooklyn, May 24. trber, Simon W., assignor to Simon W. Brooklyn, N. Y. Holder for glasses.

May 22:
Farber, Simon W., assignor to Simon W. Farber, Inc.,
Brooklyn, N. Y. Holder for glasses. Des. 72,709;
May 24:
Farber, Simon W., assignor to Simon W. Farber, Inc.,
Brooklyn, N. Y. Holder for glasses and bottle. Des.
72,794: June 7.
Farber, Simon W., assignor to Simon W. Farber, Inc.,
Brooklyn, N. Y. Cup or similar article. Des. 73,050.

Simon W., Inc. (See Farber, Simon W., as-

Farber, Simon W., Inc. (See Farber, Simon W., assignor.)
Farbman, Israel, Philadelphia, Pa. Coat. 1,625,355;
Apr. 19.
Fares, Joseph, Los Angeles, Calif. Antitheft device for

Apr. 19.
Fares, Joseph, Los Angeles, Calif. Antitheft device for automobiles. Lof5,364; Jan. 25.
automobiles. Lof5,364; Jan. 25.
Foldable wheel chair. 1,650,365; Nov. 29.
Faries, Charles Lu, Tippecano City, Ohio, assignor to American Telephone and Telegaph Company. Telegraph system. 1,624,935; Apr. 19.
Faries Manufacturing Company. (See Miller, George L.,

Farles Manufacturing Company, (see aniner, course anassignor.)
Farkas. Louis, New York, N. Y. Bust supporter. 1,620,335; Mar. 8, Farkas, Louis, Bronx, N. Y. Hat and neck protector. Farkoub, Henry, Brooklyn, N. Y. Portable radioantenna. 1,640,329; Aug. 30.
Farley, Edward L., Jonesboro, Ark. Cotton feeder and separator. 1,647,860; Nov. 1.
Farley, John W., administrator. (See Tolson, Robert L.)
Farley, John W., dministrator. (See Tolson, Robert L., assignor.)

Farley, John W., trustee. (See Tolson, Robert L., as-signor), h. W., Cleveland, Ohio. Plate thimble for pipes. Farley, John W., Cleveland, Ohio. Plate thimble for pipes. 1,651,261; Nov. 29. Farlow, Margaret E., et al. (See Fuetterer, Otto F., as-Farlow, Margaret E., et al. (See Fuetterer, Otto F., as-

pipes. 1,651,261; Nov. 25.
Farlow, Margaret E., et al. (See Fuetterer, Otto F., assignor.)
Farmer, A. S., et al. (See Donnelson, Blanche, assignor.)
Farmer, A. S., et al. (See Donnelson, Blanche, assignor.)
Farmer, A. S., et al. (See Donnelson, Blanche, assignor.)
Farmer, A. S., et al. (See Donnelson, Blanche, assignor.)
Farmer, Clarence R. (See Worster, Barold B., assignor.)
Farmer, Clarence R. (See Worster, Harold B., assignor.)
Farmer, Clyde C. (See Wildin, G. W., and Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Electric Parmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Variable-load brake. 1,615,366; Jan. 25.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Fuild-pressure brake. 1,615,367; Jan. 25.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Triple-valve device. 1,615,363; Jan. 25.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Variable-load brake. 1,615,369; Jan. 25.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Brake-cylinder device. 1,615,367; Jan. 25.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Brake-company, Wilmerding, Pa. Brake-company, Wilmerding, Pa. Electropneumatic brake. 1,626,604; May 3.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Electropneumatic brake. 1,626,604; May 3.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Electropneumatic brake. 1,626,604; May 3.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Electropneumatic brake. 1,626,605; May 3.
Farmer, Clyde C., Pittsburgh, assignor to The Westing-house Air Brake Company, Wilmerding, Pa. Flexible diaphragm device. 1,626,73; May 3.
Farmer, Clyde C., Pittsburgh, assi

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Refarmer, Clyde C., Pittsburgh, assignor to the Westinghouse Air Brake Company, Wilmerding, Pa. Compressor-controlling device. 1,633,3778; June 28, Parmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Compressor-controlling device. 1,633,3778; June 28, Parmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Electric train-line switch. 1,641,671; Aug. 30.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Piston packing ring. 1,641,672; Aug. 30.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluctsourch, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brakerylinder device. 1,644,570; Oct. 4.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Eleasevalve device. 1,644,571; Oct. 4.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Combined cock and switch. 1,449,023; Nov. 15.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. 1,650,336; Nov. 22.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. 1,650,336; Nov. 22.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. 1,650,336; Nov. 22.
Farmer, Clyde C., Pittsburgh, and T. H. Thomas, Edgewood, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Speed-Control equipment. Re-16,814; Dec. 13.
Farmer, Clyde C., Pittsburgh, and T. H. Thomas, Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Speed-Control equipment. Re-16,814; Dec. 13.

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Mar. 29.
Farmer, Clyde C., Pittsburgh, Pa., and J. S. McWhirter, New York, N. Y., said Farmer assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., and said McWhirter assignor to Westinghouse Electric & Manufacturing Company, Safety car-control equipment. 1,622,429; Mar. 29.
Farmer, Clyde C., Pittsburgh, and T. H. Thomas, Edgewood, assignors to The Westinghouse Air Brake Company, Wilmerding, Fa. Load-brake device. 1,644,567;

Farmer, Clyde C., Pittsourga, and T. H. Tandaus, acgewood, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Load-brake device. 1,644.567; Farmer, Cornelius D., and H. W. Libby, Eugene, Oreg., assignors of one-half to C. E. Force and one-half to E. J. Currigan, Portland, Oreg. Road-building machinery. Re16,782; Nov. 8. Farmer, Fank T., Detroit, Mich., assignor of one-half to E. Farmer, New York, N. Y. Ball race. Farmer, George W., Oakland, Calif. Station indicator. 1.632.465; June 14. Farmer, George W., Oakland, Calif. Station indicator. 1.635.363; Dec. 20. Farmer, Isaac H., Montezuma, Iowa. Reversible disk-sharpening tongs. 1.625.199; Apr. 19. Farmer, Isaac H., Montezuma, Iowa. Reversible disk-sharpening tongs. 1.625.199; Apr. 19. Farmer, Robert E. (See Trinay, E. J., jr., and Farmer, Farmer, Robert E. (See Gensmer, T., and Farmer, Farmer, Robert E. (See Gensmer, T., and Farmer, Farmer, Robert Z. (See Gensmer, T., and Farmer, Farmer, Robert Z. (See Gensmer, T., and Farmer, Farmer, Robert Z. (See Gensmer, T., and Farmer, Farmer, Robert Z., Portland, Oreg. Automatic variable speed transmission apparatus. 16.28.799; May 17. Sept. 19. Farmer, Robert Z., Portland, Oreg. Automatic variable speed transmission apparatus. 16.28.799; May 17. Sept. Schoolingth, Mayamillian C.).

Hewitt. Peter C.)
Farmers Loan and Trust Company, The, et al., executors.
(See Schweinert, Maximilian C.)
Farnet, Violet C. (See Levering, James F., assignor.)
F. 1641.966; Sept. 18.
Farpham, James P., New York, N. Y. Scavenging, fuel-humidifying, and volatilizing process and apparatus for internal-combustion engines. 1, 262.835; Apr. 26, UP.
Farpham, Sidney W., assignor to Goodmain Manufacture, Aug. 9, papara, Chicago, Ill. Locomotive, Rel6,700; Aug. 9, pages 1841.

Aug. 9.

Aug. 9.

Farnham, Sidney W., assignor to Goodman Manufacturing Company, Chicago, Ill. Electrical system for Parustion. Re16,721; Aug. 30.

Farnstront, Branch Carlott, assignor of forty-five one-coupling 1,623,132; May on Royal Oak, Mich. Pipe coupling 1,623,132; May on Royal Oak, Mich. Pipe coupling 1,623,132; May on Royal Oak, Mich. Pipe Carloworth, Frank S., London, England. Spring suspension of vehicles. 1,633,933; June 28.

Farnsworth, Walter M., Canton, assignor to Central Alloy Steel Corporation, Massillon. Ohio. Remelting chromium steel scrap. 1,641,326; Sept. 6.

Farnsworth, William H., assignor to Great Western Electric Chemical Co., San Francisco, Calif. Gastank valve. 1,642,412; Sept. 13.

Farny, Cyril, assignor to Wurlitzer Grand Plane Company.

Farquhar, A. B., Co. Ltd. (See Fisher, William J., as-

Farquhar, Henry S., Wayne, Pa. Valve mechanism. 1,617,516; Feb. 15.
Farquhar, Louis W., New York, N. Y. Game. 1,617,382; Feb. 15.

All Tolig Feb. 15.

All Tolig Feb. 16.

Farquian, Louis W., New York, N. Y. Game. 1,617,382; Feb. 15.

Feb. 16.

Farr, Raiple L., Atlantic City, N. J. Ash tray and stand. 1,653,397; Dec. 27.

Farr, Raiple C., Santa Barbara, Calif. Water drain for Farr, Raiple C., Santa Barbara, Calif. Water drain for Garne glass for boliers. 1,616,118; Jan. 18.

Farrand, Clair L., Forest Hills, N. Y., and E. Ross, East Orange, N. J., said Ross assignor to Farrand Mfg. Co. Inc., Long Island City, N. Y. Loud speaker. Farrand, May 31.

Farrand, Clair L., Forest Hills, N. Y., and E. Ross, East Orange, N. J., said Ross assignor to Farrand Mfg. Co. Inc., Long Island City, N. Y., Apparatus for making conical dinphragms. 1,641,327; Sept. 6.

Farrand, Clair L., Forest Hills, N. Y., and E. Ross, East Orange, N. J., said Ross assignor to Farrand Mfg. Co. Inc., Long Island City, N. Y. and E. Ross, East Orange, N. J., said Ross assignor to Farrand Mfg. Co. Inc., Long Island City, N. Y. and E. Ross, East Orange, N. J.; said Ross assignor to Farrand Mfg. Co. Inc., Long Island City, N. Y. Loud speaker. 1,651,785; Dec. 6.

Farrand, Clair L., Forest Hills, N. Y., E. Ross, East Orange, N. J.; said Ross and Said Godley assignors to Farrand Mfg. Co. Inc., Long Island City, N. Y. Loud speaker. 1,651,785; Dec. 6.

Farrand, Clair L., Forest Hills, N. Y., E. Ross, East Orange, N. J.; said Ross and Said Godley assignors to Farrand Mfg. Co. Inc., Long Island City, N. Y. Loud speaker. Des. 72,417; Apr. 12.

Farrand Mfg. Co. Inc. (See Farrand, C. L., and Ross, assignor.)

Farrar, Christy M., et al. (See Tuholske, Joseph, assignor.)

Farrar, Roy B., Spokane, Wash. Ash pan. 1,627,023;

Farrar, Roy B., Spokane, Wash. Ash pan. 1,627,023; May 3.

Farrel-Birmingham Company. (See Banbury, Fernley H., assignor.) Farrel, Franklin,

Faire Francisin, Jr., New Hayen, assignor to Farrel Foundry & Machinery Company, Ansonia, Conn. Cane-grinding mill. 1,635,263; July 12. Farrel Foundry & Machine Company. (See Bowen, D. R., Franklin, Jr., assignor.) Farrel Eyoundry and Machine Co. (See Kessler, Armin

Farrel, Royale La, Company, (See Farrel, and Schunck, assignors.)

Farrel Foundry & Machine Company, (See Farrel, and Schunck, assignors.)

Farrell, Archie W., assignor of one-half to E. L. Kulick, Chicago, Ill. Remotely-controlled interlocking means for ignition systems. 1616.756; Feb. 8.

Farrell, Richael. (See Dean, Mark, assignor.)

Farrell, Rupert I., Montreal. Quebec, Canada. Automatic gate. 1634.025; June 28.

Farren, Roy, Lake Worth, Fla. Saw. 1,620.454; Mar. 8.

Farrington, Frederick J., Omaha, Nebr., assignor to Deere & Company, Moline, Ill., Cultivator. 1,622,863; Mar. 29.

Mar. 20n. James C. La Fayette, Ind. Knockdown trellis. 1515,263; Dec. 20. Farrington, John F., Flushing, assignor to Western Electric Company, Incorporated. New York. N. Y. Twoway wave transmission system. 1,632 282; June 14. Farrington, John F., Flushing, N. Y., assignor, by mesue assignments, to Western Electric Company, Incorporated, Radio signaling system. 1,630 701; NN; 28. Farrington, Oscar I. (See Shaub, L., and Farrington, Oscar I., Carrington, Oscar I., Carrington, Oscar I., Carrington, Edition of Company, Incorporated, New York, N. Y. Wave modulating. 1,641,988; Nov. 8. Farrington, 1651,450; Dec. 6. For March 1961, 196

1.615,311,481.20. Therefore, Mountain City. Tenn. Table. 1.618,365,481.15. (See Baybutt, R., and Farrow. Farrow. Edward S., fr., assignor to Eastman Kodak Company. Rochester. N. Y. Treating cellulose acetate. 1.634,586; July 5. Faryer, Warner E., et al. (See Kaser, Walter I., assignor.)

Farwell Claude C. Groton. Mass. Shuttle-throwing device. 1641.882: Spt. 4 Farwell. Fay O., Toledo, Ohio. Plant-treating device. 1.614.365; Jan. 11. Farwell, Fay O., Toledo, Ohio. Road light. 1,620,198; Mar. 8.

Mar. 8.
Farwell, Fay O., Toledo, Ohio, Road-licht lamp, 1.834.637; July 5.
Francisco, Calif. Dishwashing appearance of the Control of the Con

Fasson, Patsy, Mount Pleasant, Pa., and D. Fasson, Rochester, N. Y. Automatic safety trolley. 1,628,536; May 10.
Fast, George M. (See Howell, B. S., and Fast.)
Fast, Gustave, Anuapolis, Md. Flexible shaft coupling, 10.
Fig. 10.

Past. One and the second secon

Mor. 29.

Fasting, Johan S., Valby, near Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Treating wet raw materials in the manufacture of cement. 1,627,553; May 10.

Fasting, Johan S., Valby, near Copenhagen, Denmark, assignor to a Smidth & Co. New York, N. Y. Pathauer, Alvin J., Cleveland, Ohio. Coil winder. 1,620,879; Mar. 15.

Fathoux, Raymond A., Neullly-sur-Seine, France. Coach body of automobiles. 1,634,656; July 5.

Faudi, Fritz, Dusseldorf Oberkassel, Germany. Ball and Faudi, Fritz, Dusseldorf Oberkassel, Germany. Ball and Fauliey, Dewey R., New Lexington, Ohio. Burial vault. 1,618,522; Feb. 22.

Faulkner, Austen, et al. (See Smith, Lawrence F., assignor.)

Signor.)
Faulkner, David C., assignor to The Moore Press, Inc.,
New York, N. Y. Combination candy box and toy
house, 1,630,117; May 24.
Faultless Caster Company. (See Noelting, William H.,

assignor.)

Faultless Caster Company. (See Noelting, W. H., and Brokuw, assignors.) Faultless Caster Company. (See Noelting, W. H., Smith-field, and Noelting, assignors.) Faultless Rubber Company, The. (See Miller, Thomas W.,

Faultless Rubber Company, The. (See Miller, Thomas W., assignor.)

Paunce, Benjamin F., Westmont, and H. C. Dorris, Johnstown, Pa., assignors to Bethielem Steel Company town, Pa., assignors to Bethielem Steel Company and the Company of the Compan

pany, Rocktord, III. Ironing board. 1,631.874; Feb. 22.

Faust, Levin, assignor to Rockford Steel Furniture Company, Rockford, Ill. Ironing board. 1,631.255; June 7.

Fauser, Oscar W., Bellerose, N. X., Lindeum or similar Bard-surfaced floor covering. Des. 73,903; Nov. 22.

Fauser, Oscar W., Bellerose, N. Y., Lindeum or similar hard-surfaced floor covering. Des. 73,903; Nov. 22.

Fauser, Oscar W., Bellerose, N. Y., Lindeum or similar hard-surfaced floor covering. Des. 73,904; Nov. 22.

Fauser, Oscar W., Bellerose, N. Y., Lindeum or similar hard-surfaced floor covering. Des. 73,905; Nov. 22.

Fauser, Oscar W., Bellerose, N. Y., Lindeum or similar hard-surfaced floor covering. Des. 73,906; Nov. 22.

Fauser, Oscar W., Bellerose, N. Y., Lindeum or similar hard-surfaced floor covering. Des. 73,906; Nov. 22.

Fauser, Oscar W., Bellerose, N. Y., assignor to Congolieum-Nairn, Inc. Lindeum or similar hard-surfaced Faville, Joseph C. (See Bricca, T. J., and Favilla.)

Favour, Paul, assignors, D. Favour, Paul, assignor to Eastman Kodak Company, Rochester, N. Y. Motlon-picture film strip. 1,631,478; June 7.

Favre, Pierre A., Crosne, France. Machine for working

Favre, Pierre A., Crosne, France. Machine for working cylindrical members of fusible material. 1,631,674; June 7.

June 1. Fawcett, Gerald D., Whittler, Calif. Casing cutter, 1.643.709; Sept. 27. Fawkes, Leelle H. (See Stroud, Charles M., assignor.) Fay, Augustine P. (See Wilder, A. P., and Fay.) Fay, Carl J., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Waffie iron. Des. 72,364; Apr. 5.

72535-P-13

Fay, Frederick L., Marshallton, assignor to Standard-Trump Brothers Machine Company, Wilmington, Del. Circular-knitting machine. 1,616,744; Feb. 8.
Fay, Horace H., Shaker Heights, Ohlo. Making metallic bellows. 1,644,823; Oct. 11.
Fay, 1,500, Figan Company. (See Johnson, Gustave T., Sassignor, Bgan Company. (See Johnson, Gustave T., Fay, John L., St. Louis, Mo. Fuel-mixing device for internal-combustion engines. 1,626,798; May 3.
Fay, Joseph W., Villa Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Soldering unit. 1,638,175; July 19.
Fay, Joseph W., Villa Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Forming composite articles. 1,639,652; Aug. 23.
Fay, Joseph W., Villa Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for handling and severing articles. 1,641,257; Sept. 6.

Sept. 6.

Fay, Joseph W., Villa Park, and C. Wales, La Grange, Ill., assignors to Western Ellectric Company, Incorporated, New York, N. Y. Method of and apparatus for Westing metal strands. 1,639,633; aug. 23.

Faylong and Strands. 1,639,633; aug. 23.

Submarine Signal Company, Portland, Me. Fluding direction. 1,619,017; Mar. 1.

Fay, Richard D., Nahant, and E. Wolf, assignors, by mesne assignments, to H. V. Hayes, trustee, Boston, Mass. Method and apparatus for producing alternating Fay. Thomas 3, Broodbyn, N. Y. Vehicle. 1,630,062; May 24.

May 24.

Fay, Thomas J., Brooklyn, N. X. Vehicle. 1,631,803; Fay, Thomas J., Brooklyn, N. X. Vehicle. 1,631,803; Fay, 11. June 7.

June 7.
Fay, Thomas J., Brooklyn, N. Y. Vehicle. 1,842,946;
Sept. 20.
Fay, Thomas J., Brooklyn, N. Y. Frequency transformer.
1,644,332; Oct. 4.
Fay, Thomas J., Brooklyn, N. Y. Vehicle suspension device. 1,648,170; Nov. 8.
Fayer, Charles. (See Wrappler, F. H., and Fayer.)
Fayfield-Knoil Company. (See Miller, J. C., and Faydeld, assignors.)

assignors.)

Fayfield, Robert H. (See Miller, J. C., and Fayfield.)

Fayle, Charles E., Montreal, Quebec, assignor to J. E.

Ward, Montreal, Canada. Sign. 1,623,585, Apr. 5.

Fazio, James, Venice, Calif. Fruit-juice extracting and
display device. 1,617,385; Feb. 13.

Feagans, John E., Dresden, Ohio. Railroad tie truss.
1,632,486; June 14.

assignors.)

Graph Company. (See Hague, Frank L.,
assignors.)

assignor.) Fean, William, Columbus, Ohio. Packing form. 1,641,073; Aug. 30. Fear, Ralph G. (See Garbutt, F. E., and Fear.) Fearing, John L., and H. F. Wellman, assignors to Thornton Trolley Wheel Co, Inc., Ashland, Ky. Trolley. 1,618,072; Feb. 15. Fearon, William M. (See Burnwatt, William W., as-Fearon, William M.)

signor.)

signor.)
Francis J., Baltimore, Md. License-plate holder.
1,644,423; Oct. 4,
1,644,423; Oct. 4,
1,644,423; Oct. 4,
1,641,027;
Aug. 30,
Feather, David C., assignor to The Feather Motor Appliance Company, Deuver, Colo. Spring compressor.
1,630,334; May 31,
Featherelge Rubber Company. (See Hood, Harry M.,

assignor.)
Featheredge Rubber Company. (See Wedlock, Frank V.,

assignor.)
Feather, George, Halifax, England. Radial drilling machine. 1631,256; June 7.
Feather, John A., New Bedford, assignor to Powdrell & Alexander, Inc., Boston, Mass. Textile fabric. Des. 73,691; Oct. 25.
Feather, John A., New Bedford, assignor to Powdrell & Alexander, Inc., Boston, Mass. Textile fabric. Des. 73,692; Oct. 25.
Feather Motor Appliance Company, The. (See Feather, David C., assignor:)
Feather stone, Edward B., assignor to The W. C. Nagel 1, 1653,951; Dec. 27.
Feazell, Wilson T., et al. (See Hobson, John H., assignor.)
Fecher, Frederick F., Rockville Center, T. Danhalsay, Naw.

Fecher, Frederick F., Rockville Center, T. Danbelser, New York, and R. Baldauf, Hempstead, N. J., assignors to The Beck Duplicator Company. Duplicator. 1,648,219;

Nov. 8:

Fedde, Nathanael, Booklyn, N. Y., Visible pulse and diastolic Indicator, 1,644,894; Oct. 11:

B. R. R. R. R. C. T. Gatier, Bristol, assignors to The Bristol Aeropiane Company Limited, Bristol, Gloucester, England. Lubrication of engines and machines. 1,618,870; Feb. 22.

Fedden, Alfred H. R., and L. F. G. Butler, Bristol, assignors to The Bristol Aeropiane Company Limited, Gloucester, England. Valve-operating mechanism. Gloucester, England. Valve-operating mechanism. P. 654,366; Dec. 27.

P. 654,366; Dec. 27.

Owatonus, Minn. Insulated window. 1,634,987; July 5.

Fedderman, George C., assignor to Auto Loading Device Manufacturing Company, Detroit, Mich. Holddown device for automobiles. 1,617,582; Feb. 15. Fedderman, George C., assignor to Auto Loading Develock Company, Inc., Buffalo, N. Y. Core for radiators. 1,617,751; Feb. 15. Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Core for radiators. 1,617,751; Feb. 15. Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator core. Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator core. 1,618,980; Mar, 1.

Fedders, John M., assignor to Fedders Manutacturing Company, Inc., Buffalo, N. Y. Radiator core. 1,618,930; Mnr. 1. Fedders, John M., Buffalo, and F. H. Stolp, Geneva, assignors to Fedders Manufacturing Company, Inc. Buffalo, N. Y. Machine for preparing metal strips. 1,640,147; Aug. 23. Fedders Manufacturing Company. (See Fedders, John M.,

assignor.)

Fedders Manufacturing Company. (See Fedders, J. M., and Stolp, assignors.)

Fedders Manufacturing Company. (See Yeager, Henry

M., assignor.)

Federal Addressing Machine Corporation. (See Smith, E. R., and Rice and Jackson, assignors.)

Federal Cement Tile Company. (See Freund, Cherl S.,

assignor.)
Federal Electric Company. (See Gilchrist, James M.,

Federal Electric Company. (See Hall, Lee, assignor.) Federal Electric Company. (See Ogle, Elmer L.,

Federal Electric Company, Signor.)
Federal Foundry Supply Company, The. (See Reilly, Thomas A., assignor.)
Federal Glass Company, The. (See Buell, Oren C., assignor.)
Federal Glass Company, The. (See Cornwell, V. O., and Moeller, assignors.) Moeller, assignors.)
Federal Glass Company, The. (See Hanford, Orin A.,

assignor.) Federal Glass Company, The. (See Middendorf, David L.,

assignor.)
Federal Gypsum Products Company. (See Parkhurst, Layton M., assignor.)
Federal Laboratories, Inc. (See Lawrence, Ruben B., as-

ignor.) eral Manufacturing Company. (See Olinger, T., and Brendel, assignors.)
Federal Motor Truck Company. (See Ingersoll, George

B., assignor.)
Federal Pressed Steel Company. (See Tinker, Herbert assignor.

Federal Products Corporation. (See Tingley, Leonard

C., assignor.)
Federal Steel Sash Company. (See Kuney, Clarence F.,

assignor.)
Federal Steel Sash Company. (See McIntosh, Charles J.,

assignor.)

Federal Telegraph Company. (See Beal, R. R., and Elliott, assignors.)

Federal Telegraph Company. (See Brower, William M.,

assignor.)
Federal Telegraph Company. (See Knoll, Lloyd M., as-

signor.)
Federal Telegraph Company. (See Kolster, Frederick A.,

Federal Telegraph Company. (See Kolster, F. A., and Sollie, assignors.)
Federal Telegraph Company. (See Spector David S., as-

r.) Telephone Manufacturing Corporation. (See Cot-

Federal Telegraph Company. (See Spector David S., assignor.)
Federal William F., assignor.)
Federal Telephone Manufacturing Corporation. (See CotHeyman, Nicholas, assignor.)
Federal Telephone Manufacturing Corporation. (See
Heyman, Nicholas, assignor.)
Federated Engineers Development Corporation. (See
Gouch, Frederick F., assignor.)
Federated Engineers Development Corporation. (See
Hock, DeLos N., assignor.)
Federhart, Edward F., Pasadena, Calif. Plaiting machine. 1,617,018; Feb. 8.
Federle, Joseph C., (See Kettering, C. F., and Federle.)
Federle, Joseph H., Kansas City, Mo.
Agitator for washing machines. 1,613,318; Jan. 4.
Engineers of the Company of the Condon, and H. Lomb, Chicago, Ill. Chilling and
nerating fluids and devices for carrying out said
process. 1,645,742; Oct. 18.
Fee Hern, Albert H., (See Fee Hern, Auncel B. and
A. H.).

Fee Hern, Albert H. (See Fee Lett.)

Fee Hern, Auncel B. and A. H., London, England.

Lifting jack. 1,632,821; Dec. 13.

Feed Water De-Scaling Corporation. (See Baker, George O., assignor.)

Feeley, Matthew R., Scranton, Pa., C. Stern, Jersey City,

N. J., and R. W. Braden, New York, N. Y., assignors to B.-S. Manufacturing Froducts Corporation, Jersey

Feeley, William R., and W. Danmar, Januarica, N. Y.

Station-indicating device. 1,642,234; Sept. 13.

Feeley, William B. and W. Danmar, Jamaica, N. Y. Station-indicating device, 1,642,234; Sept. 13. Feely, Donavan R., Shelbyville, Mo. Water collecting and separating attachment for oil cans. 1,613,507; Jan. 4.

Feeney, Thomas L., and H. Godoy, assignors of ninety percent to J. E. Cohen, Philadelphia, Pa., and ten percent to J. E. Cohen, Philadelphia, Pa., and ten percent to said Feeney, Firepreventing apparatus for motion-picture-projecting machines, 1,618,417; Feb. 22.
Feeney, William P., Cheboygan, Mich. Feit conditioner feeney, William P., Cheboygan, Mich. Feit conditioner feeney, William P., Cheboygan, Mich. Pressure gauge for paper-mill jordans. 1,650,993; Nov. 29.
Fefel, John E., Bridgeport, assignor to The Ludington Machine Co., Inc., Waterbury, Conn. Machine for producing lined pouches, 1,633,743; Jas. 11.
Fetel, John E., Bridgeport, Conn., assignor of one-half to F. J. Hoey, New York, Y. Fabric weaving machine. 1,629,952; Mey York, N. Y. Woven fabric. F. J. Hoey, New York, N. Y. Woven fabric. 1,634,412; July 5.
Fefel, John E., Bridgeport, Conn., assignor of one-half to F. J. Hoey, New York, N. Y. Fabric weaving machine. Fefel, John E., Bridgeport, Conn., assignor of one-half to F. J. Hoey, New York, N. Y. Tubular-fabric-forming machine. 1,644,116; Oct. 4.
Fegely, Nathan M., Iola, Kans., assignor, by mesne assignor, of the production of the prod

Pehse, Werner. (See Skaupy, F., Pirani, Bahr, and Fehse.) Ulrich, Chicago, Ill. Switch. 1,634,179; Fehrenger, John A. (See Broden, E. H., Feiernbend, and

Feichter, Ulrich, Chicago, Ill. Switch. 1,634,179; June 28.
Feierabend, John A. (See Broden, E. H., Feierabend, and Trott.)
Frotto. Trott.)
Frotto. Trott.)
Feierabend, John A. (See Broden, E. H., Feierabend, and Trott.)
Frotto. Trott.)
Feierabend, John A. (See Broden, E. H., Feierabend, and Trott.)
Feierabend, John A. (See Broden, E. H., Feierabend, See Feigelbann, Herman A., Paterson, N. J. Display container, 1,620,810; Mar. 15.
Feigelbann, Herman A., Paterson, N. J. Display container, 1,620,810; Mar. 15.
Feigelbann, Herman A., Paterson, N. J. Display container, 1,620,810; Mar. 15.
Feigelbann, Herman A., Paterson, N. J. Display container, 1,620,810; Mar. 19.
Feigelbann, Herman A., Paterson, N. J. Display container, 1,622,431; Mar. 29.
Feidld, Alexander L., New York, N. Y., assignor to Electro Metallurgical Company, Recovering metals from Ilquids and compositions therefor, 1,617,206; Feb. 8.
Feisld, J. (See Broden, 1,625,426; July 12.
Feind, Robert F., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Dust collector, 1,635,261; May 10.
Feislband, John Milwaukee, Wis. Dust collector, 1,635,262; Aug. 16.
Feinson, Joseph M., New York, N. Y. Neckwear, 1,635,226; Aug. 16.
Feinson, Joseph M., New York, N. Y. Neckwear, 1,635,222; Dec. 13.
Feiss, Richard A., assignor to The Joseph & Felss Co., Cleveland, Ohio. United vent for unlined garments and making it. 1,636,738; May 12.
Feist, Eugen, Berlin-Schoneberg, assignor to Roth-Buchner Aktiengesellschaft, Berlin-Tempelhof, Germany, Blade sharpner, 1,641,674; Aug 30.

1,618,385; Feb. 22.
Feister, George F., Maricopa, Calif. Metal saw, 1,618,389; May 1.
Felst, Eugen, Brudapest, Hungary, Pipe John L.,647,217; Nov. 1.
Felst, Eugen, Budapest, Hungary, Chassis framing more Fortellurity for motor vehicles.

Fejes, Enigen, Budapest, Hungary. Pipe Joint. 1,647,2317;
No. 1,700;
No. 1,70

Mich. Lubricating system for bearings. 1,648;299; Nov. 8, Fekete. Stephen I., and S. G. Balts. assignors to Hudson Motor Car Company, Detroit, Mich. Lubricating system for distributor-drive units. 1,613,027; Jan. 4. Fekete, Stephen I., and S. G. Baits, assignors to Hudson Motor Car Company, Detroit, Mich. Automobile engine, 1,625,718; Apr. 19. Fekete. Stephen I., Detroit, and R. H. Whisler, Halfway, assignors to Essex Motors, Detroit, Mich. Valve mechanism and valve tappet therefor. 1,637,020; July 20.

Feland, Oscar A., assignor of one-third to V. J. Wilson and one-third to T. Wright, Bismarck, N. Dak. Drawing head. 1,616,789; Feb. 8.

Feld. Elmer W. (See Van Doorn, F. E., and Feld.)

Feldschnetmer. William, London, England. Treatment of Feldschnetmer. 1, 222,099. Mr. Demountable wheel, 1,652,264; Dec. 20.

Feldder, Franz, New York, N. Y. Demountable wheel, 1,652,264; Dec. 20.

Felddhusen, Carl, Boise, Idaho. Food product and making the same. 1,631,023; May 31. N. J. Electric fuse or circuit testing device, 1,615,788; Jan 25.

Felddamp, Frederick A., Newark, N. J. Electric clockwinding mechanism. 1,639,990; Aug. 23.

Feldman, Frederick A., Newark, N. J. Electric clockwinding mechanism. 1,639,990; Aug. 23.

Feldman, Frederick A., Newark, N. J. assignor, by mesne assignments, to Economy Fuse & Manufacturing Com-Beldman, Charles L., et al., receivers. (See Arnold, Lester R., assignor.)

Feldman, Edward D. (See Papst, Herman, assignor.)

Feldman, Hram H., and J. Adler, Pittsburgh, Pa. Table.

Feldman, Isanc, Philadelphia, Pa. Oil pan for sewing machines. 1,622,258; Mar. 22.

Feldman, J. M., Co. Inc., The. (See Holdeman, Harry R., assignor.)

assgnor.; Feldman, Manuel, New York, N. Y. Mat. 1,654,416; Dec. 27. Feldmann, William, Chicago, Ill. Binder. 1,624,660; Apr. 12.

Feldmann, William, Chicago, Ill. Binder. 1,022,000; Apr. 12.
Feldmeier, Harvey, assignor to D. H. Burrell & Co., Inc., Little Falls, N. Y. Apparatus for agitating liquids. Feldmeier, Harvey, Little Falls, and C. F. Wray, Rochester, assignors to D. H. Burrell & Co., Inc., Little Falls, N. Y. Valve. Des. 74,144; Dec. 27.
Feldstein, Ben J., New York, N. Y. Baby rattle. 1.627,166; May 3.
Feldt, Adolf. Berlin-Wilmersdorf, W. Schoeller, Berlin-Westend, and E. Borgwardt, assignors to Chemische-Fabrik and Actien (vorm. E. Schering), Berlin, Ger-Fabrik and Actien (vorm. E. Schering), Berlin, Ger-Fabrik and Actien (vorm. E. Schering), Berlin, Ger-Fabrik and Actien (vorm. E. Schering), Fellin, Charles (L. 1633, 626; June 28.
Feliger, Gustav, Nuremberg, Germany. Pencil. Des. 73,781; Nov. 8.
Felicety, John B., Philadelphia, Pa, Clothes rack. 1,620,199; Mar. 8.
Felix, Charles R., Hatfield, Pa. Composition for treating products of fiber and making same. 1,643,116; Sept. 20.

products of noer and management Sept. 20.
Fell, Alfred G. (See Patterson, R. N., and Fell.)
Fell, Harold V. M., San Fernando, and W. F. Gaulke,
Buenos Aires, Argentina. Electrical cut-out.
1,645,476; Oct. 11.
Fell, James R., Haleyville, Ala. Cultivator. 1,616,359;
Fab. 1.

1,646,476; Oct. 11.

Fell, James R., Haleyville, Ala. Cultivator. 1,616,359; Feb. 1.

Fell, John M., Hackensack, N. J., assignor to American Telephone and Telegraph Company. Telegraph distortion-measuring system. 1,633,269 July 12.

Telephone and Telegraph Company. System of television. 1,649,819; Nov. 22.

Fell, William, assignor to Visible Gasoline Filter Company, Chicago, Ill. Gasoline filter, 1,639,170; Aug. 16.

Fellenbaum, Daniel T., Coatesville, Pa. Milk-can rack. 1,627,980; May 3.

Fellers, Albert E., Detroit, Mich. Tractor locomotive. 1,639,390; May 31.

Fellers, Albert E., Detroit, Mich. Tractor locomotive. 1,639,390; May 31.

Fellows, Generating machines. 1,626,811; Mar. 1,65.

Fellows, Edwin R., assignor to The Fellows Gear Shaper Company, Springfield, Vt. Automatic gear-generating machines. 1,628,584; May 10.

Fellows Gear Shaper Company, The. (See Fellows, Edwin R., assignor.)

Fellows, John W. Adlington, assignor to Boston Woven Flows, John W. Co., Cambridge, Mass. Resilient wear-ing surface. 1632,395; June 14. Fellows, Watter C., Philadelphia, Pa., assignor to C. R. Carver Company. Plate holder for printing presses. 1,633,310; June 28.

1,03,810; June 28.

Fellows, Walter C., Philadelphia, Pa., assignor to C. R.
Carver Company. Detachable feeding table for machines. 1,640,400; Aug. 30.

Fels, Walter T., New York, assignor to Felstone Fireproof Construction Company, Mount Vernon, N. Y.

Wall-molding apparatus. 1,630,080; May 24.

Feltone Fireproof Construction Company. (See Fels,
Felt, Dorr. B., Chicago, Ill. Windmill. 1,654,165;
Dec. 27.

Dec. 27.
Felt, Dorr E., Chicago, and J. A. V. Turck, Wilmette, assignors to Felt & Farrant Manufacturing Company, Chicago, Ill. Calculating machine. 1,612,989; Jan. 4.
Felt & Farrant Manufacturing Company. (See Felt, Felt, George G., Washington, D. C. Cap attachment for fountain pens. 1,615,506; Jan. 25
Felt, John M., administrator. (See Page, Robert F.)
Feltch, Eldon L. (See Moore, Herbert B., assignor.)
Felten & Guilleaume Carlewerk Actien-Gesellschaft. (See Zanf. Georg. assignor.)

Feiten & Guilleaume Carlswork Actien-Gesellschaft. (See Zapf, Georg. assignor.) Feltenstein, Harry M. (See Crumley, Le Roy A., as-

Feiton, Alfred, Newburgh, N. Y. Lawn trimmer.
1.651,759; Dec. 6.
Felton, Jack A. Los Angeles, Calif. Steering attachment for vehicles. 1.625.886; Apr. 26.
Felton, Walter A., Newburgh, N. Y. Game apparatus.
1.634,180; June 28.
Felz. Michael J., Kansas City, Mo. Safety purse.
1.651,921; Dec. 6.
Femmer. William A. (See Anson, Ruben, assignor.)
Femcl. Frank G., Onkland. Calif. Machine for knotting
Fencl. Frank G., Othergo, Ill. Circuit breaker. 1,638,686;
Aug. 9.
Fender, John B., Kaufman, Tex. Mineral machine.

Fender, John B., Kaufman, Tex. Mineral machine. 1,445.378; Oct. 11. Thenley, Juan, assignor of twenty-five one-hundredths to R. Wilson, ten one-hundredths to G. S. Clark, and ten one-hundredths to D. C. Brandon, Oaxnea, Mexico. Pendermostat. 1,631,262; Nov. 29.

Fennel, Friedrich, Jersey City, N. J. Traction attachment for automobiles. 1,638,329; Aug. 9.

Fennel, Friedrich, Jersey City, N. J. Traction attachment for automobiles. 1,638,329; Aug. 9.

Fennel, Charles H., Detroit, Mich. Wheel chock. 1,617,639; Feb. 15.

Fennell, Charles H., assignor of one-half to L. L. Ross, Detroit, Mich. Rotary polishing device. 1,617,639; Fennell, Chulles H., assignor of pripride Motor Com-

Fenniell, Charles H., assignor of one-half to L. L. Ross, Detroit, Mich. Rotary polishing device. 1,617,838; Feb. 15.
Fennell, William J., assignor to Evinrude Motor Compension, William J., assignor to Evinrude Motor Compension, William J., assignor to Evinrude Motor Compension, William J., assignor to George E., assignor of one-fourth to M. Ziegler, one-eighth to J. E. Wall, one-eighth to W. H. Busse, one-eighth to J. E. Wall, one-eighth to W. H. Busse, one-eighth to J. E. Wall, one-eighth to W. H. Busse, one-eighth to J. E. Wall, one-eighth to M. A. A. Morgan, Whitewater, Vis. Artificial bait. Fenner M. H. G. Clouse, Sumner, Nebr. Haystacker, 1,632,743; June 14.
Fennessy, John C., Brooklyn, N. Y. Bassball game apparatus, 1,651,686; Dec. 6.
Fenning, Louis T., Jackson, Ohio. Time-controlled electric-switch mechanism. 1,625,411; Apr. 19.
Fenno, George F. Bywood Pa. Fed-water regulator for Fenne, Frank, assignor to The Miller Rubber Company, Akron, Ohio. Treating cured inner tubes for pneumatic tires. 1,624,725; Apr. 12.
Fenton, John. (See Butler, Thomas J., assignor.)
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Single-pin fastener, 1,641,075; Aug. 30.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Single-pin Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Pin-stud fastener, 1,641,075; Aug. 30.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Pin-stud fastener, 1,641,075; Aug. 30.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Pin-stud fastener. 1,641,075; Aug. 30.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Pin-stud fastener. 1,641,075; Aug. 30.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Pin-stud fastener. 1,641,647,642.

pany, Waterbury, Conn. Double-pin socket. 1,645,500; Oct. 11.
Fenton, Paul W. New York, N. Y. Gasoline-dispensing apparatus. 1,635,687; Aug. 9.
apparatus. 1,635,687; Aug. 9.
block. 1,629,690; May 24.
Fentress, George E., assignor of one-half to H. H. Isanes, Los Angeles, Calif. Antifriction pipe sleeve. 1,651,688; Nov. 29.
Fentress, James, Chicago, Ill. Liquid-level gauge. 1,622,503; Mar. 29.
Fentress, James, Chicago, Ill. Thermostatic pump. 1,622,503; Mar. 29.
Fentress, James, Chicago, assignor to Chicago Tubing & Braiding Company, Chicago, Ill. Hook for forming steel tubing. 1,643,008; Sept. 20.
Fentress, James, Winnerka, and A. W. Junkunc, assignors to Chicago Tubing and Braiding Co., Chicago, 11.
1,617,583; Peb. 15.
Fenwick, Crete, St. Paul, Minn. Handkerchief or similar article. Des. 74,051; Dec. 13.
Ferad, Edward, New York, N. Y. Lec creeper. 1,637,691; Aug. 2.
Ferdinand, Jules, Paris, France. Dosing flask.

Aug. 2. Parls, France. Dosing flask, 1.641,828; Sept. 6. L.641,828; Sept. 6. L.641,828; Sept. 7. Chicago, III., assignor to Snilivan Municipal Compensor, 1.642,299; Nov. 15. Ferguson, Andrew D. (See Blevin, F. L., and Ferguson, Perguson, Benjamin H., Auburn, Wash. Lock for airbrake release rods. 1,614,833; Jan. 18. Ferguson, Carl J., Geneva, N. Y., assignor to W. S. Johnson, Syracuse, N. Y. Vacuum-tank feeder. 1,641,076; Aug. 30.

Ferrason, Charles, Spokane, Wash, beverage mixers, 1628,355; Apr. 5, Ferguson, Clarence E., Portland, Oreg. bolder. 1,619,408; Mar. 1. Ferguson. Clayton C., Jersey City, N. J. Li638,354; Dec. 20.

Ferguson, David, Indianapolis, assignor to Eclipse Tool
Company, Indianapolis, Ind. Rolling device for beading operation. 1,619,063; Mar. 1.
Ferguson, David W., Harrold, S. Dak. Ironing board.
1,619,409; Mar. 1.
Ferguson, Edward W., Ogdensburg, N. Y. Rail-securing
device. 1,644,184; Oct. 4.
Ferguson, Ernest E., Seattle. Wash. Portable power
cut-off saw. 1,642,145; Sept. 13.
Company, Philad-plaginor to David Lupton's Sons
Company, Philad-plaginor to David Lupton's Sons
Company, Philad-plaginor to David Lupton's Sons
Company, Philad-plaginor to David Lupton's Company,
1,645,232; Oct. 11.
Ferguson, George E., Spring Valley, N. Y., and L. G. M.
Timpson, Plainfield, assignors to Pyrene Manufacturing
Company, Newark, N. J. Fire extinguisher. 1,635,546;
July 12.
Ferguson, George J. (See Ferguson, J. J. 41.

Ferguson, George J. (See Ferguson, J. J., Maguire, Ferguson, Anderson, and McGuire.)
Ferguson, George W., Minneapolis, Minn. Toy. 1,613,349; Jan. 4.

Ferguson, George W., Minneapolis, Minn. Toy. 1,617,179;

Ferguson, Harry, Belfast, Ireland. Agricultural implement. 1,637,811; Aug. 2. Ferguson, Ivan P., assignor to Towson Body Co., Detroit. Mich. Removable closure for vehicles. 1,637,812; Aug. 2.

Aug. 2.

Ferguson, John E. (See Whitmore, J. B., and Ferguson.)

Ferguson, John G., Brooklyn, assignor to Western Electric

Company, Incorporated, New York, N. Y. Regulator.

1.632.062; June 14.

Ferguson, John J., fr. (See Ferguson, J. J., Maguire,

Ferguson, Anderson, and McGuire.)

Ferguson, John J., R. Maguire, G. J. Ferguson, J. J.

Ferguson, John J., R. Maguire, G. J. Ferguson, J. J.

Ferguson, J. J. H. Anderson, and P. McGuire. Glas
switches, 1.633.932; Dec. 77.

Ferguson, Luther R. Hinton, W. Va. Wheel gauge.

1.644.055; Oct. 4. Ferguson, John J., R. Maguire, G. J. Ferguson, J. J. Ferguson, Jr., J. H. Anderson, and P. McGuire, Glasgow. Scotland. Ground lever for railway points and switches. 1,653,952; Dec. 27.
Ferguson, Lyther R., Hinton, W. Va. Wheel gauge. Ferguson, Lyther R., Hinton, W. Va. Wheel gauge. Ferguson, Lythan H., Ithaca, assignor to J. W. Ellis, Buffalo, N. X. Combined tire carrier and rim remover. 1,623,914; Apr. 5.
Ferguson, Malcolm P., Elmira Heights, assignor to Eclipse Machine Company, Elmira, N. X. Engine starter. 1,650,619; Nov. 29.
Ferguson, Malcolm P., Elmira Heights, assignor to Ferguson, Militon B., assignor of one-half to E. Haas. Ferguson, Militon B., assignor of one-half to E. Haas. Ferguson, Richard E. (See Hughes, Roland M., assignor.) Ferguson, Richard E. (See Hughes, Roland M., assignor.) Ferguson, Richard E. (See Hughes, Roland M., assignor.) Ferguson, William C., St., Louis, Mo. Pipe-jointing approached the start of the starter of the starter

Corporated, Hoston, Mass. Automatic shoe machine. 1,628,002; May 10.

Fernald, Mark E., Southboro, Mass, assignor to C. C. Blake Incorporated, Beston, Mass.

Brisk Incorporated, Beston, Mass.

Fernandez, Hororo, Mass.

Fernandez, Aurora B. (See Fernandez, Manuel and A. B.)

Fernandez, John M., Jamaica, N. Y. Garland confetti.

1,652,855; Dec. 13.

Fernandez, John M., New York, N. Y. Napkin holder.

1,641,841; Sept. 6. New York, N. Y. Ticket-dispensing Fernandez, John M., Sek Sept. 6.

Fernandez, John M., Sek Sept. 6.

Fernandez, Manuel and A. B., New Orleans, La. Ironing board, 1,615,119; Jan. 18.

Ferngren, Enoch T., Toledo, Ohio. Molten glass-feeding mechanism. 1,628,283; May 10.

Ferngren, Enoch T., assignor to The Libbey-Owens Sheet Glass Company, Toledo, Ohio. Drawing flat sheet Glass Company, Toledo, Ohio. Method and apparatus for producing sheet glass. 1,631,804; June 7.

Ferngren, Enoch T., assignor to The Libbey-Owens Glass Company, Toledo, Ohio. Drawing sheet glass. 1,631,804; June 7.

Ferngren, Enoch T., assignor to The Libbey-Owens Glass Company, Toledo, Ohio. Drawing sheet glass. 1,631,804; June 7. 1,631.805; June

1.631.805 June 7.

Permaren Enoch assignor to The Libbey-Owens Sheet talaining shield 1.639.453. Aug. The Libbey-Owens Sheet class width-maintaining shield 1.639.453. Aug. The Libbey-Owens Sheet glass 1.641.806: Sept. 6.

Permaren Enoch T. assignor to The Libbey-Owens Sheet glass 1.641.806: Sept. 6.

Permaren Enoch T. assignor to The Libbey-Owens Sheet Glass Company Toledo, Ohio. The Libbey-Owens Sheet Glass Company Toledo, Ohio. Method and apparatus Permaren, Enoch T. assignor to The Libbey-Owens Sheet Glass Company. Toledo, Ohio. Method and apparatus for drawing sheet glass. 1.647.403. Nov. 1.

Permaren, Enoch T. assignor to The Libbey-Owens Sheet Glass Company. Toledo, Ohio. Leer-heating means. Class Company. Toledo, Ohio. Leer-heating means. Perodol Limited. (See Frond, Herbert, assignor.)

Perodol Limited. (See Frond, Herbert, assignor.)

Perodol Limited. (See Frond, Herbert, assignor.)

May 17.

Ferrainolo, Edoardo, Turin, Italy. Vehicle wheel. 1.651.811; Dec. 6. Ferrainolo, Albert F., et al. (See Caruso, Romeo O., as-Ferrainolo, Abert T., signor.)
Ferrara, Louis, Brooklyn, N. Y. Sandpaper and rubbing machine. 1,624,400; Apr. 12.
Ferrari, Climaco, Newark, N. J. Safety gas valve. 1,624,044; Apr. 12.
Ferrari, Michael, Detroit, Mich. Brush. 1,649,677;

NOV. 15.
erree, Harry L., assignor to Richardson Corporation,
Rochester, N. Y. Beverage-carbonating machine.
1,649,820; Nov. 22.
errell, Dent. (See Crawford, J. H., Helmholtz, and Ferrell, Ferrell

1.649,820; Nov. 22.

Ferrell, Dent. (See Crawford, J. H., Helmholtz, and Ferrell.)

Ferrell, Robert M., Irvine, Calif. High-pressure lubricator. 1,630,735; May 31.

Ferrette, Louis, Farls, France. Automatic regulator for France. Automatic regulator for France. Automatic regulator. 1,644,717; Oct. 11.

Ferretti, Louis, Farls, France. Automatic regulator. 1,644,717; Oct. 11.

Ferretti, Connad, France. Automatic rule regulator. 1,644,717; Oct. 11.

Ferretti, Antonio. (See Laconi, T., and Ferretti), Ferretti, John, Hastings, Pa. Mouthpiece. 1,646,530; Oct. 25.

Ferretti, Conrad, assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind.

Ferrits, Anton. W. 7bubuque, 10wa. Sand mold. 1,630,934; Aug. 23.

Ferris, Howard J., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill. Door-holding attachment. 1,636,468; July 17.

Ferris, Howard J., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill. Pullmotor. 1,614,111; Jan. 11.

Ferris, Company, Fipe protector. 1,624,485; Apr. 12.

Ferris, Company, Fipe protector. 1,624,485; Apr. 12.

Ferris, W., assignor to one-third to W. Carpenter and H. W. Jackson, copartners under the firm name of Carpenter and Jackson, Muskegon, Mich. Fingerpfint of Carpenter and Jackson, Muskegon, Mich. Fingerpfint of Carpenter and Jackson, Muskegon, Mich. Fingerprist, 1,619,200; Mar. 1.

Ferris, Walter, assignor to The Oligear Company, Milwaukee, Wis. Hydraulic transmission. 1,628,603; May 10.

Total Terris, Walter, assignor Ferris, Walter, assignor to The Oligear Company, Mil-Ferris, Walter, assignor to The Oligear Company, Mil-Ferris, Walter, Hydraulic transmission. 1,647,690; waykee, Wis Hydraulic transmission. 2,647,690; waykee, Wis Hydraulic transmission. 2,647,690; waykee, Wis Hydraulic transmission.

Ferris, Walter, was Warner transmission wave, Wis Hydraulic transmission wave, Wis Hydraulic transmission of Ferris, Walter, Milwaukee, and M. F. Keese, South Milwaukee, assignors to Bucyrus Company, South Milwaukee, Wis. Bushing, 1.629,818; May 24.

Ferris, Walton C., assignor to National Manufacturing Company Inc., Lincoln, Nebr. Scaffold holst,

Ferris. Walton C., assignor to National Manufacturing Company Inc., Lincoln, Nebr. Scaffold holst. 1,622,247; Mar. 22. Ferris, Wheaton C., University City, Mo. Lock. 1,620,757; Mar. 15. Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Door latch. 1,633,888; June 28. Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Door latch. 1,638,249; Aug. 9, Ferris, William D., assignor, National Co., Sterling, Ill. Co., Sterling, Ill. Sterling, National Co., Sterling, Na

signors.)
Ferriter, John P., Oceanport, and W. T. Guest, Eatontown, N. J. Alternating-current telegraph repeater. 1,631,675; June 7.
Ferriter, John P., Oceanport, and W. T. Guest, Eatontown, N. J. Alternating-current telegraph system. 1,631,678; June 7.
Boston, Mass., and E. E. Stradley, West, Oringe, N. J. Telegraph-printer system. 1,645,591; Oct. 18.
Ferro, Claude B., San Bernardino, Calif. Traffic signal for motor vehicles. 1,644,424; Oct. 4.
Ferro Machine and Foundry Co., The. (See Gill, Frank P., J., assignor).
Ferry, Elmer and C., Buffalo, N. Y. Combination brake and jack mechanism for automobiles. 1,625,936; Apr. 26.

and jack Apr. 26.

Ferry James, Co. (See Ferry, J. V., and Miller, as-

signors.)
Ferry, James V., Atlantic City, and A. P. Miller, Pleasantville, assignors to James Ferry Co., Atlantic City, N. J.
Underpinning, 1.644-572; Oct. 4.
Ferst. Monie A., Dekalb County, assignor to Scripton
Manufacturing Company, Atlanta, Ga. Container.
1028,133; May 10.
1079; Charles, Paris, France. Electric cell. 1,621,481;

or The Bassick Manufac-esler. Douglas F., assignor to The Bassick Manufac-turing Company, Chicago, Ill. Filter. 1,630.480; Fesler. 1

Fester Douglas F., assignor to The Bassick Manufactur-ing Company, Chicago, Ill. Lubricant receptacle, 1.445,901; Oct. Evanaton, assignor to The Bassick Manufacturing Co., Chicago, Ill. Lubricant compressor, 1.449,159; Nov. 15.

Fessenden, Reginald A., Chestnut Hill, Mass. Method and apparatus for coordinating radio and phonograph reproduction. 1,616,416; Feb. 1.
Fessenden, Reginald A., Chestnut Hill, Mass. Book reproducible by radiant energy. 1,616,848; Feb. 8.
Fessenden, Reginald A., Chestnut Hill, Mass. Wireless Researchen, Reginald A., Chestnut Hill, Mass. Wireless Researchen, Reginald A., Chestnut Hill, Mass. Wireless than the state of t

1622,710; Mar. 29.
Petters, George W., Toledo, Ohio. Vise. 1,651,263; Nov. 29.
Fetty, Charlie C., El Dorado, Kans. Counterbalacing means for well-pumping apparatus. 1,631,408; June 7.
Fetty, Charlie C., El Dorado, Kans. Counterbalacing means for well-pumping apparatus. 1,631,408; June 7.
Fetter, Karl M., Rutherford, and N. A. Newell, Lyndhurst, N. J. Testing system. 1,613,948; Jan. 11.
Fetzer, Karl M., Rutherford, and N. A. Newell, Lyndhurst, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,614,291; Jan. 1. os.
1,632,232; June 14
Fetpetacle for the dispensing of ice cream, ices, or the like. 1,638,480; Jau. 9.
Fetpusch, Martin, New York, N. Y., and P. W. Fleischer, Weehawken, assignors to New Jersey Machine Corporation, Hoboken, N. J. Machine for feeding sheets, Fetbusch, Martin, New York, N. Y., and P. W. Fleischer, Weehawken, assignors to New Jersey Machine Corporation, Hoboken, N. J. Clutch tripping mechanism. 1,641,258; Sept. 6.
Fetbusch, Martin, New York, N. Y., and P. W. Fleischer, Weehawken, N. J., assignors to New Jersey Machine Corporation, Hoboken, N. J. Tansping device for Filan, Joseph B., New York, N. Y., assignor to Standard England Instruments. 1,688,297; Aug. 9.
Fiberold Corporation, The. (See Kenyon, Silas F., assignor.)

Fiberioid Corporation, The. (See Kenyon, Silas F., assignor.)
Fibroc Insulation Company. (See Frederick, Louis T., assignor.)
Fichtenbaum. Oscar, Brooklyn, N. Y. Folding bed or couch. 1.626,801; May 3.
Fichtner, Joseph B., and H. H. Crouch, Uhrichsville, assignors to The Ric-Wil Company. Cleveland, Obio. Conduit construction. 1.642,161; Sept. 13.
Ficher, General Glenwood, Iowa. Mixing device. 1,636,127; July 19.
Fidelity Machine Company. (See Larkin, Walter, assignor.)

signor.)
Fiebiger, Joseph A., St. Paul, Minn. Circuit closer.
1,627,662; May 10.
Fleehter, John J., Willow Grove, assignor to Heintz Manufacturing Company. Philadelphia, Pa. Buffing wheelFleezel, William, and W. S. Enderich, assignors to Bohn
Aluminum and Brass Company. Detroit, Mich. Closing-in machine. 1,635-987; July 19. W., and Flegel.)
Fleezel, William J., Detroit, Mich., assignors, by mesne as1988. See Section of the Company of the Company
Flegel, William J., Detroit, Mich., assignor, by mesne asMachine, for boring bearings and the like. 1,615,372;
Jan. 25. Jan. 25.

Field, Alexander W., Gleichen, Alberta, Canada. Brake shoe. 1.647.218; Nov. 1. shoe. 1.647.218; Nov. 1. N. Y., assignors to Haynes Stellite Company. Wear-resisting alloy. 1.626.726; May 3. Field, Crosby, Brooklyn, N. Y., assignor to Gray Products, Inc. Consolidated metallic fiber article. 1.620.530; Mar. 8.

Mar. 8:

Field, Crosby, Brooklyn, N. 20:
facturing Company, Inc. Cleaning piece
Oct. 25.

Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., Scrubbing device and material
facturing Company, Inc., Scrubbing device and material
factor. 1,646.396; Oct. 25.

Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manu facturing Company, Inc. Metal-wool article 1,649,894; Nov

Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing. Company. Inc. Metal-wool article. 1,049,894; Nov. 2.
Fleid, Crosby, New York, N. Y., assignor to Chemical Machinery Corporation. High-temperature heating method. 1,619,660; Mar. 1.
Fleid, Crosby, Yonkers, N. Y., assignor to Chemical Machinery Corporation. Apparatus for heat transfer at Field. Crosby, Yonkers, N. Y., assignor to Chemical Machinery Corporation. Apparatus for heating and cooling at high temperatures. 1,619,663; Mar. 1.
Fleid, Crosby, Yonkers, N. Y., assignor to Chemical Machinery Corporation. Apparatus for heating and for Mar. 1.
Fleid, Crosby, Yonkers, N. Y., assignor to Chemical Machinery Corporation. Apparatus for heating and for Mar. 1.
Fleid, Crosby, Yonkers, Saslgnor to National Aniline & Chemical Company, Inc., New York, N. Y. Sublimation apparatus. 1,644,613; Oct. 4.
Fleid, Edward A., jr. (See Field, Edward A., and Fleid, Edward A., and E. A., Fleid, Fleid, Edward A., jr., assignors to Field Engineering Company, Chicago, Ill. Valve-control mechanism. 1630,863; Aug. 23.
A. Jr., assignors. Death, Cee Field, Edward A. and E. A., Jr., assignors. Death, Cee Field, Edward A. and E. A., Jr., assignors. Death, Cee Field, Edward A. and E. A., Jr., assignors. Death, Cee Field, Edward A. and E. A., Jr., assignors. Death, Cee Field, Edward A. and E. A., Jr., assignors. Death, Cee Field, Edward A. and E. A., Jr., assignors. Death, Cee Field, Frank E., Somerville, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Violuge-limiting device. 1,651,021; Nov. 29.
Fleid, Henry P., Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y. Mine car. 1,616,573; Eeb. S. Week, Pa., assignor to American Car and Foundry Company, New York, N. Y. Mine car. 1,616,313; June 7.
Fleid, Henry P., Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y. Mine car. 1,618,935; Nov. 15.
Fleid, Henry P., Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y. Mine car. 1,618,935; Nov.

Dec. 20.
Fleids, William B., New Albany, Miss. Shirt pocket.
1,618.418; Feb. 22.
Flene, William L. (See Pullen, J. R., and Flene.)
Fife. Itley C. Manchester, N. H. Garment fastener.
1,643.833; Sept. 27.
Flifield, Albert F., St. Catharines, Ontarlo, Canada. Rail
anchor. 1,648,300; Nov. 8.
Flüdd, Horace A., et al. (See Molnar, Zoltan, assignor.)
Fifth Avenue Coach Company. (See Forrester, Michael
J., assignor.)
Fifth Sevenue Corset Company. (See Leonard, Joseph,

Avenue Corset Company. (See Leonard, Joseph,

assignor, Marcel. (See de Garkovenko, W., and Fighiera.) Fighietti. Germano. San Francisco, Calif. Airplane. 1,633,895; June 28. Fikso, Adam, San Diego, Calif. Container. 1,612,861; Jan. 4.

Jan. 4.

Files, Adino F., Maumee, Obio. Triturating machine.
1,020,639; Mar. 15.

1,625,461; Apr. 19.

Files, Adino F., Maumee, Obio. Dispensing machine.
1,625,461; Apr. 19.

Files, Adino F., Maumee, Obio. Powdered butter coloring for butter and eleomargarine. 1,649,821; Nov. 22.

Filippi, Antoine F., Paris, France. Helicopter. 1,022,191;

Mar. 22.

Filkins, Arthur J., Riverside, Ill., assignor to Paul Dick-inson, Incorporated. Floor vent. 1.648,014: Nov. 8.

Filmer, George B., assignor of one-half to W. J. Harvey, Toronto, Ontario, Canada. Producing metallic oxides. 1,620,880; Mar. 15. Filter Sack Manufacturing Co., The. (See Furbish, Frank R., assignor.) Filtrators Company. (See Sanftleben, Joseph F., assignor)

Finch, Edward R. (See Smith, E. A., and Finch.) Finch, Frunk J. (See Cook, John T., assignor, Finch, Harry, Inglewood, Callf., assignor to Allied Metal Industries, Inc. Chandeller. Des. 72,823; June 14. Finch, Harry, Inglewood, Callf., assignor to Allied Metal Industries, inc. Lighting future bracket. Des. 72,824; June 14.

June 14.

Finch, Harry D., Long Beach, Calif. Match container, 16.0843 Aug. 23.

L. 16.0843 Aug. 23.

L. 16.0845 Aug. 23.

L. 16.0845 Aug. 23.

L. 16.0845 Aug. 23.

L. 16.0845 Aug. 23.

Finch, John H., et al. (See Minnis, Henry M., assignor.) Finch, John S., Bridgeoort, Conn, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Label-attaching seam. 1,643.406; Sept. 27.

Label-attaching seam. 1,643.406; Sept. 27.

Fincher and the session of the A.C. White, Des Moines, The Company of the Company

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Findlay, David H., Pasadena, Calif. Golf putter and forming the same. 1,622,864; Mar. 29.
Findlay Bectric Porcelain Company, The. (See Müller, Ferdhand C. H., assignor: W. Johnston, assignors to Findlay George H., assignor: W. Johnston, assignors to Michael Company, and the Company of the C

Findlay, George P., and W. W. Johnston, assignors to Crompton & Knowles Loom Works, Woreester, Mass. Drop-wire-polishing machine. 1,651,117; Nov. 2, Findlay, Robert, Manufacturing Company. (See Schwartz, Frederick, assignor.)

Friederick, assignor, brinder, John A., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa. Machine for shortening springs. 1,633,019; June 21.
Fine, Bernard M. (See Ruckert, H. E., and Fine.) Fine, Lewis, assignor, by mesne assignments, to Bud Wheel Company, Philadelphia, Pa. Vehicle wheel construction. 1,622,301; Mar. 29.

struction. 1,622,310; Mar. 29.
Fine, Solomon, and H. Dworkin, Montreal, Quebee, Canada. Adjustable necktie. 1,634,414; July 5.
Fine, William H. Los Angeles, Califf. Device for testing safety valves on tank cars. 1,637,743; Aug. 2.
Finger, Carl W. Wilkes-Barre, Pa. Segmental crushing roll. 1,614,784; Jun. 18.
Fingerbut, Alec E., Cleveland, Ohio. Tonsillotome. 1,653,953; Dec. 27.

1.653,953; Dec. 27.

Fingerman, Ira, assignor to Universal Leather Goods. Co., Chicago, Ill. Vanity box. Des. 73,907; Nov. 22.

Finizio, Thomas D., Yorktown Heights, N. Y. Attaching plus. 1,625,775; Apr. 26.

Fink. Edward J., Bronx, N. Y. Ornamental body. 1,622,775; Mar. 29.

Fink, Emil C. (See Masury, A. F., and Fink.)

Fink, Frederick B., New York, N. Y., assignor to Paragon Poly. 1,622,775; Mar. 29.

Fig. 1,622,775; Mar. 29.

Fink, Henry A., assignor to Continental Can Company, Inc., Syracuse, N. Y. Sealed metal containers, 1,619,411; Mar. 1.

Fink, Henry A., assignor to Continental Can Company, Inc., Syracuse, N. Y. Sealed metal containers. 1,619,412; Mar. 1. Fink, Henry A., Oak Park, Ill., assignor to Continental Can Company, Inc., New York, N. Y. Mechanism for feeding filled cans to closing machines. 1,629,616; May 24.

ink, Henry A., Oak Park, Ill., and G. Flook, Syracuse, assignors to Continental Can Company, Inc., New York, N. Y. Machine for closing filled cans. 1,640,762; 30. Aug.

Aug. 30.

Fink, Henry A., Oak Park, III., assignor to Continental Can Company Inc., New York, N. Y. Closing machine Finke, Hermin, J. St. Louis, Mo. Carburetor. 1.642.065; Sept. 13.

Finkelstein, David R. (See Clarkson, Guy S., assignor.)

Finke, Harry, Philmont, N. Y. Connecter. 1.629.783; May 24.

Finkle, William P., Castleton-on-Hudson, N. Y., assignor of one-half to H. A. Bailey, Burlington, Vt. Tool. 1,022,192; Mar. 22. Finkhaus, Oskar, assignor to Bohn & Herber Maschinen-fabrik und Elsengiesserel, Wurzburg, Germany. Two-revolution printing press. 1,647,285; Nov. 1. Finlay, Alexander, assignor to The Barrymore Seamless Wittons, Inc., Philadelphia, Pa. Carpet. Des. 73,654; Oct. 18.

Oct. 18.
Finlay, David B., Fresno, Calif. Airplane checker.
1.628,134; May 10.
Finlayson, Mima K., Los Angeles. Calif. Flower holder.
1.616,894; Feb. 8.
Finlayson, Mima K., Los Angeles, Calif. Flower receptafinlayson, Mima K., Los Angeles, Calif. Flower receptafinlayson, Jac. 1.
Finlay Checker, Calif. Sour. City, Iowa. Tire-chain tool.
1.642,542; Sept. 1.
1.642,542; Sept. Calif. Sour. City, Iowa. Tire-chain tool.

1.042.042; Sept. 13.
Finley, Clyde A., Galesburg, Ill., assignor of one-half to W. Mondgomery, Sauk City, Wis. Folding hatchet. W. Mondgomery, Sauk City, Wis. Folding hatchet. Finley, Dozfer, Berkeley, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Pipe-wrapping machine. 1,622,432; Mar. 29.
Finley, Dozfer, Berkeley, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Emulsion and making the same. 1,623,004; Apr. 10.
Danies, Inc., San Francisco, Calif. Treating paper. 1,641,478; Sept. 6.
Finley, Dozfer, Berkeley, assignor to The Paraffin Companies, Inc., San Francisco, Calif. Treating paper. 1,641,478; Sept. 6.
Finley, Thomas M., St. Louis, Mo. Flexible power transmission for internal-combustion engines. 1,621,977; Mar. 22.
Finley, Thomas M., and A. W. Brown, St. Louis, Mo.

Mar. 22.
Finley, Thomas M., and A. W. Brown, St. Louis, Mo.
Self-lubricating pitman. 1,621,976; Mar. 22.
Finley, Thomas M., and A. W. Brown, St. Louis, Mo.
Vaive gear. 1,649,518; Nov. 15.
Finn, Charley N. (See Walker, Arthur W., assignor.)
Finn, John, Mill Valley, Calif. Automobile armrest,
Des. 73,286; Aug. 23.
Finn, John, Metal Works, (See Finn, Robert B., assignog.).

signor.)
Finn, John C., Los Angeles, Calif. Wooden pot for plants, 1,631,409; June 7, Finn, Robert B., assignor to John Finn Metal Works, San Thin, Robert B., assignor to John Finn Metal Works, San metal dust. 1,622,435; M. Ling for the production of Finn, Robert B., assignor to John Finn Metal Works, San Francisco, Calif. Apparatus for the production of metallic dust. 1,622,434; Mar. 29.
Finne, William, Hibbing, Minn. Two-way water turbine. 1,615,619; Jan. 26.

1,615,610; Jan. 25.

Finnell, Watter S., assignor to American Scrubbing Equipment Co. 1987, Hannihal, Mo. Floor-scrubbing manning Co. 1987, May 7.

Finney, Cassius L., et al. (See Green, Lee B., assignor.) Finney, David P., Clairton, Pa. Coke-handing mechanism. 1,618,701; Feb. 22.

Finney, Harry F., Chicago, Ill., and F. A. Jacobs, Warren, Ohio, assignors, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car-Finney, James M. (See Schroeder, Anthony, assignor.) Finney, James M., et al. (See Ricke, Theodore W., assignor.)

Finsen, Eyvind, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y. Apparatus for and method of cutting gears. 1,613,860; Jan. 11. Finstone, Marx, New York, N. Y. Boudor desk set. Des. 71,768; Jan. 4. Finstone, Marx, New York, N. Y. Pen stand or similar article. Des. 71,908; Jan. 25. Finstone, Marx, New York, N. Y. Desk set. Des. 72,147; Mar. 6.

72,147; Mar. 8.
Finstone, Marx, New York, N. Y. Swivel pen support for desk sets. 1,648,544; Nov. 8.
Finstone, Marx, New York, N. Y. Pad-holding desk set. Fipos. William F., St. Louis, Mo. Automobile lock. 1,638,638; Aug. 9.
Fireking Fire Extinguisher Company Inc. (See Everitt, Walter E., nssignor.)
Fire Proof Wall Company. (See Makowski, John Rassignor.)

Firestone-Apsley Rubber Company. (See Baker, Charles

Firestone-Apaley Rubber Company. (See Baker, Charles H., assignor.)

Firestone, Floyd, assignor to The Regents of the University of Michigan, Ann Arbor, Mich. Machine for detecting flows. 1,640,567; Aug. 80.

Firestone Steel Products Company, The. (See Carroll, Dalins C., assignor.)

Max O., assignor.)

Firestone Steel Products Company, The. (See Senglar, John J., assignor.)

Firestone Steel Products Company, The. (See Swain. Joseph G., assignor.)

Firestone Tre and Rubber Company, The. (See Mitchell, Efrectone Tre and Rubber Company, The. (See Benner, W. W., and Houcet, assignors.)

Firestone Tire and Rubber Company, The. (See Cotton, Emmett W., assignor.)

Firestone Tire and Rubber Company, The. (See Hale, Firestone Tire and Rubber Company. (See Hoener, Edmund A., assignor Firestone Tire and Rubber Company, The. (See Jones, Robert R., assignor.) Firestone Tire and Rubber Company, The. (See Myers, Carmon A., assignor.) Firestone Tire and Rubber Company, The. (See Pade, Max H., assignor.) Firestone Tire and Rubber Company, The. (See Pade, Max H., assignor.)
Firestone Tire and Rubber Company, The. (See Putt, E. D., and Stevens, assignors.)
Firestone Tire and Rubber Company, The. (See Semier. Clyde M., assignor).
Firestone Tire and Rubber Company, The. (See Semier. Clyde M., assignor).
Firestone Tire and Rubber Company, The. (See Smith, Thomas J., assignor).
Firestone Tire and Rubber Company, The. (See Stevens, Horace D., assignor).
Firestone Tire and Rubber Company, The. (See Stevens, Horace D., assignor).
Firestone Tire and Rubber Company, The. (See Tevens, Horace D., assignor).
Firma Ernst Gessner Aktiengeselischaft, Auc/Erzgebirge.
(See Wenzel, Julius E., assignors).
Firma Kraft & Steudel Eabrik Theographischer Papiere (See Wenzel, Julius E., assignor.)
Firma Maschinenfabrik Kuppel. (See Hadam, Max, assignor.)
Firma Henry. (See Bridges, F., Firman, Tisdale, and Hoskins.)
Firman, Henry. (See Bridges, F., Firman, Tisdale, and Hoskins.)
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Firman Henry. (See Bridges, F., Firman, Tisdale, and Hoskins.)
Firman Henry. (See Bridges, F., Firman, Tisdale, and Hoskins.)
Firman He First National Bank, The, administrator. (See Stewart, Robert D.)
First National Bank of Anaheim, trustee. (See Schnepp, Louis W., assignor.)
First National Bank & Trust Co. (See Hardison, Edwin Elect National Sank & Trust Co. (See Hardison, Edwin A, assignor.)

First Trust and Deposit Company, administrator. (See Latta, Emmit G.)

First Trust and Savings Bank of Pasadena, trustee. (See Key, James F., assignor.)

First Wisconsin Trust Company, executor. (See Miller, Henry C., assignor.)

Firth, Alfred T., New York, N. Y. Shears or scissors and the like 1.633,441; June 21.

Fischer, Albert, assignor to the Firm Bergedorfer Elsenwerk Aktiengesellschaft, Bergedorf-Hamburg, Germany. Sterilizing device. 1,614,950; Jan. 18.

Fischer, Albert C., Chicago, Ill. Elastic and expansible paving joint. Rel6,554; Feb. 22.

Fischer, Albert C., Chicago, Ill. Rail filler. 1,619,924; Mar. 8. Mar. 8.

Fischer, Albert C., Chicago, Ill. Deformable expansioncontraction joint. 1,622,311; Mar. 29.

Fischer, Albert C., Chicago, Ill. Roofing attachment.
1,628,802; May C.

Ling C. Chicago, Ill. Hinged expansion joint.
1,637,163; July 26.

Fischer, Albert C., Chicago, Ill. Contraction expansion joint.
1,639,763; Aug. 23.

Fischer, Albert C., Chicago, Ill. Expansion joint.
1,639,764; Aug. 23.

Fischer, Albert C., Chicago, Ill. Repansion joint.
1,639,764; Aug. 23.

Fischer, Albert C., Chicago, Ill. Reenforcing and the 15c.
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Pischer, Albert C., assignor to Roach-Appleton Manufacturing Company, Chicago, Ill. Outlet-box connection. 1.629,267; May 17.

Pischer, Albert E., Mason City, Iowa. Head-wall structure for culverts 1,620,089; Mar. 8.

Fuel burner, 1,620,089; Mar. 8.

Fischer, Charles, New York, N. Y. Mount for finger-ring facings. 1,620,252; Mar. 8.

Fischer, Charles, New York, N. Y. Boudoir lamp.

Fischer, Charles, I., Chicago, Ill. Grain-car-door latch. 1,615,120; Jan. 18.

Fischer, Charles, L., assignor to The Goliath Rubber Company, Cleveland, Ohio, Mold. 1,642,947; Sept. 20.

Fischer, Charles, L., assignor to The Goliath Rubber Company, Cleveland, Ohio, Mold. 1,642,947; Sept. 20.

Fischer, Ernest, assignor of one-half to C. Cikanek, Chicago, Ill. Garment hanger. 1,615,748; Jan. 25.

scher, Ernest, Budapest, Hungary. Orthopedic appliance. 1,646,194; Oct. 18. Fischer, Ferdinand, Berlin, Germany. Printing plate and production thereof. 1,639,171; Aug. 16.
Fischer, Frances K., Brooklyn, N. Y. Baby carriage, gocart, and the like, 1,652,004; Dec. 6. gocart, and the like, 1,652,004; Dec. 6.
Fischer, Fred W., and G. F. Dallas, assignors to Tennessee Tool Works, Inc., Knoxville, Tenn. Composition for sealing leaks in tires and tubes and its production. 1,650,867; Nov. 29.
Fischer, Gervasius W., Madison, Wis. Tollet seat and cover. 1,652,304; Dec. 13. Fischer, Geza S., Berlin, Germany. Automatic circuit breaker. 1,646.904; Oct. 25. Fischer, H. G., & Co. (See Osborn, Howard H., assignor.) Fischer, H. S., Co. (See Isherwood, Paul A., assignor.) Fischer, Hans, assignor to Maschinenfabrik-Augsburg-Nuernberg Aktiengesellschaft, Augsburg, Germany. Fischer, Har Nuernberg Fischer, Hans, assignor to Maschinenfabrik-Augsburg, Nuernberg Aktiengesellschaft, Augsburg, Germany, Intaglio printing machine for printing on sheets. 1,650,639; Nov. 22.
Fischer, Hermann, See Green, Henry, assignor.) Flischer, Hermann, New York, N. Y. String musical Instrument. 1,623,667; Apr. 5.
Fischer, Hermann, New York, N. Y., assignor to Tower Stocker, Hermann, New York, N. Y., assignor to Tower thring Corporation, Beston, Mass. Electrical Sound Causismitting and receiving apparatus. 1,635,170; June 21 June 21.

Fischer, Hermann, assignor to Tower Manufacturing Corporation, Boston, Mass. Sound amplifier. 1,633,366; June 21.

Fischer Hollinshed Co. (See Grönningsaeter, Sigurd, as-Fischer Hollinshed Co. (See Grouningsacter, Again signor.)
Fischer, Howard L. (See Dunlan, Bernald M., assignor.)
Fischer, Howard L. (See Reiland, Ernest S. and P. M.,
assignors)
Fischer, Howard L. (See Reiland, Ernest S. and P. M.,
assignors)
Fischer, Joseph, Faith, S. Dak. Aerial propeller.
Fischer, Joseph, Faith, assignor to A. Hanneman, Redelm,
S. Dak. Gun sight, 1,622,193; Mar, 22.
Fischer, Joseph, Basignor to F. Meyer, Redelm, S. Dak.
Marine propeller. 1,623,868; Apr. 5.
Fischer, Joseph B., Chicago, Ill. Balloting system and
Fischer, Joseph B., Chicago, Ill. Balloting system and
Fischer, Max W., Forthand, Oreg. Hinge. 1,643,621;
Sept. 27. Fischer, Josep the like. 1, Fischer, Max Sept. 27. Fischer Motor Company. (See Spillman, Edward O., assignor.)

Signor.)

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Signor.)

Signor.

Signor Fischer Motor Company. (See Spillman, Edward O., as-Fish, Fred O., Winchester, Mass. Golf tee. 1,647,440; Nov. 1.

Fish, Fred O., Winchester, Mass. Attachment for golf clubs. 1,651,264; Nov. 29.

Fish, Frederick K., fr., San Francisco, Calif. Process and apparatus for making pulp from fibrous material. 1,632,467; June 14.

Fish, Frederick K., fr., San Francisco, Calif. Apparatus and making pulper pulp. 1,633,730; June 29.

Fish, Frederick K., fr., San Francisco, Calif. Treating plant material. 1,633,731; June 28.

Fish, Frederick K., fr., San Francisco, Calif. Process and apparatus for making pulp from fibrous materials. 1,633,732; June 28.

Fish, Frederick K., fr., San Francisco, Calif. Process and apparatus for making pulp from fibrous material. 1,633,733; June 28.

Fish, Frederick K., fr., San Francisco, Calif. Process and apparatus for digesting or cooking fibrous material. 1,633,734; June 28.

Fish, Frederick K., fr., San Francisco, Calif. Process and apparatus for digesting or cooking fibrous material. 1,633,737; June 28.

Fish, Frederick K., fr., San Francisco, Calif. Process and 1,633,737; June 28.

Fish, Frederick K., fr., San Francisco, Calif. Process and paper pulp. 1,633,736; June 29.

Fish, Frederick K., jr., San Francisco, Calif. Proparing paper pulp. 1,633,736; June 29.

Fish, Frederick K., jr., San Francisco, Calif. Process and material and producing the same. 1,633,737; June 28.

Fish, Frederick K., jr., San Francisco, Calif. Pulp fiber. 1,631,734; June 28.

Fish, Frederick K., jr., San Francisco, Calif. Pulp fiber. 1,631,734; June 28.

Fish, Frederick K., jr., San Francisco, Calif. Pulp fiber. 1,631,734; June 28.

Fish, Richard H., Fall River, Mass. Doup heddle, 1,644,573; Oct. 4.
Fish, Samuel W., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Multiple-tool-spindle machine, 1,625,116; Apr. 19.
Fish, William L., Pompton Plains, N. J. Card camera. 1,626,060; May 3.
Fishback, F. M. (See Loy, James W., assignor.)
Fishback, J. M. (See Loy, James W., assignor.)
Fishback, J. M. (See Loy, James W., assignor.)
Fishbain, Abraham. (See Glowitz, Benjamin, assignor.)
Fishbain, Rubin, New York, N. Y. Hand bag. 1,639,454;
Aug. 16.

Fishbain, Abraham. (See Gilowitz, Bendamin, assignor.)
Fishbain, Rubin, New York, N. Y. Hand bag. 1,638,454;
Fishbuit.

F

Fisher, Charles, New York, N. Y. Rack for boots and sboes. 1,026,399; Apr. 26. Fisher, Charles, assignor of one-third to A. C. Grunwald, one-third to C. E. Carlson, and one-third to F. H. Leescher, Chicago, Ill. Tollet-paper fature. 1,614,112;

Jan. 11. Fisher, Charles, Chicago, Ill., assignor to The Automatic Recording Safe Company, Chicago, Ill. Savings bank. 1,631,315; June 7. Fisher, Charles E., Baltimore, Md., assignor to The Fisher Automatic Brush Machine Company, Inc., Baltimore, Md. Brush-making machine. 1,639,557; Aug. 16.

Aug. 16.

Aug. 16.

Fisher, Charles O., Wellsville, Kans. Gasoline-reserve 1.618,028; Jan. 4.

Fisher, Charles R., Rogers City, Mich. Apparatus for loading and unloading materials. 1620,531; Mar. 8.

Fisher, Charles R., Rogers City, Mich. Control system for endless-belt conveyers. 1,620,532; Mar. 8.

Fisher, Charles T., assignor to E. N. Rowell Co., Inc., Batavin, N. Y. Cablnet. 1,621,525; Sept. 6.

1.027,023; May 3.

Fisher, Clifford H., Fort Lauderdale, Fla. Garment hanger. 1,621,160; Mar. 15.

Fisher, David, assignor to Paden City Glass Manufacturing Company, Paden City, W. Va. Candiestick. Des. 71,908; Jan. 25.

Titsburgh, Pa. Laboratory tongs. 1,653,808; Dec. 27.

Fisher Engineering Corporation. (See Fisher, Thomas,

Assignor, Pisher, Ernest F., St. Louis, Mo. Fabric-renovating machine, 1,619,814; Mar. S.
Fisher, Fenton B. (See White, Ernest C., assignor.)
Fisher, Fenton B. (See White, Ernest C., assignor.)
J.653,558; Dec. 20.
Fisher, Frank C., Toledo, assignor to The Bryan Screw Machine Products Company, Bryan, Ohio. Automobile lock, 1,627,081; May 3.
Fisher, Frank C., Toledo, assignor to The Bryan Screw Machine Products Company, Bryan, Ohio. Automobile lock, 1,627,082; May 3.
Fisher, Frank C., Toledo, assignor to The Bryan Screw Machine Products Company, Bryan, Ohio. Automobile lock, 1,627,082; May 3.
Fisher, Frederick-George, Quincy, Mass. Display package.
Fisher, Garriedd W. (See Jones, L. S., Fisher, and Henrik-Sol), George F., Roselle, N. J., assignor, to Margan, Elaber, George F., Roselle, N. J., assignor, to Margan, Elaber, George F., Roselle, N. J., assignor, to Margan, S.

Fisher, George F., Roselle, N. J., assignor to Morgan & Wright. Manufacturing hollow cushion tires. 1,613,697; Jan. 11.

Fisher, George F., Roselle, N. J., assignor, by mesne assignments, to Morgan & Wright, Detroit, Mich. Manufacture of cushion tires. 1,625,644; Apr. 19.
Fisher Governor Company, The. (See Browne, Lyle W.,

Fisher, Harold A., Denver, Colo. Tee box. 1,639,765;

Aug. 23.
Fisher, Harold J., Jersey City, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,647,286; Nov. 1.

Fisher, Harry C., Cincinnati, assignor to The Richardson Company, Lockland, Ohio. Coloring granulated mineral, particularly slate. 1,631,628; June 7.
Fisher, Harry F., St. Paul, Minn. Dwelling incinerator. 1,628,537; May 10.
Fisher, Harry F., St. Paul, Minn. Dwelling incinerator Fisher, Harry H., and W. B. Rittenhouse, Chirago, Ill., assignors to Byllesby Engineering and Management Corporetion, Wilmington, Del. Lining water courses and lining therefor. 1,630,839; May 3t.
Fisher, Harry L., Muscatine, Iowa. Fish lure. 1,639,766; Fisher, Harry L., Akron, Ohio, assignor to The B. F. Goodrich Company, New York. N. Y. Ruhher games.

Fisher, Harry L., Muscatine, Iowa. Fish lure. 1,633,766; Aug. 23.

Goodrich Company, New York, N. Y. Rubber conversion product and making same. 1,642,018; Sept. 13.

Fisher, Henry W., Perth Amboy, N. J., assignor to Standard Underground Cable Company, Pittsburgh, Pa. Electric cable. 1,648,641; Nov. 8.

Fisher, Henry W., and R. W. Alkinson, Perth Amboy, Pisher, Henry W., and R. W. Alkinson, Perth Amboy, Pany, Pittsburgh, Pa. Construction of cubies. 1,651,590; Dec. 6.

Fisher, Hubert. (See Grose, O. W., and Fisher.) Fisher, Hubert. (See Grose, O. W., and Fisher.) Fisher, Jacac W., Laguna Beach, Calif. Casement-window weather strip. 1,621,361; Mar. 15.

Fisher, Jacob, Wabash, Ind. Tool for wrapping wire. 1,633,401; June 21.

Fisher, James B. (See Horning, H. L., Fisher, and Pope.)

Dec. 13.
Fisher, James P., Ceredo, W. Va. Pipe wrench.
1,617,150; Feb. 8.
Fisher, James P., Bartlesville, Okla., assignor, by mesne
assignments, to Doherty Research Company, New York,
N. Y. Fluid-controlling mechanism. 1,620,881;

Fisher, James P., Bartlesville, Okla., assignor, by mesne assignments, to Empire Gas and Fuel Company, Dover, Del. Hydraulic vibratory drilling tool. 1,646,959; assignments, to adapte and the property of the

Ogden, Mountainville, N. Y. Bolt anchor. 1,649,160; Nov. 15.
Fisher, Julia, Bolckow, Mo. Generating power plant. 1,631,257; June 7.
Fisher, Julia, Bolckow, Mo. Generating power plant. 1,631,257; June 7.
Fisher, Lyle H., Kansas City, Mo., assignor to American Optical Company, Southbridge, Mass. Lens-testing instrument. 1,622,76; Mar. 29.
Fisher, Lyle H., Kansas City, Mo., assignor to American 1,633,469; July 10.
Fisher, Lyle H., Kansas City, Mo., assignor to American 1,633,469; July 10.
Fisher, Lyle H., Kansas City, Mo., assignor to American 1,633,469; July 10.
Fisher, Chief J., Albert M., Charley, Mass. Edging machine. 1,634,69; July 10.
Fisher, Perry W., Yreka, Calif. Fire locater. 1,615,507; Fisher, Perry W., Yreka, Calif. Fire locater. 1,615,507; Fisher, Raph E., Cleveland Heights Village, Ohlo. Surgical needle. 1,648,461; Nov. 8.
Fisher, Roy, Pasadean, Calif. Traffic signal. Des. 74,145; Dec. 27.
Fisher, Koy, Pasadean, Calif. Traffic signal. Des. 74,145; Dec. 27.
Fisher, San W., See Castillo, Miguel, assignor. Fisher, S. W. (See Castillo, Miguel, assignor; Urbiling appuratus. 1,630,118; May 24.
Fisher, Son, Cleveland, Ohlo, Hair waving. 1,641,751; Fisher, Edwin H., as-Fisher, Sol. Cleveland, Ohlo, Hair waving. 1,641,751;

signor.)
Fisher, Sol, Cleveland, Ohio. Hair waving.

1,641,751; Sept. 6. Fisher, Stanley

Sept. 6.
Fisher, Stanley L. Chester, assignor to Pratt Read
Player Action Company, Deep River, Conn. Pneumaticcontrol device. 1,626,192; Apr. 26.
Fisher, Thomas, Philadelphia, Pa. Apparatus for separating liquids of different specific gravity. 1,618,151;
Feb. 15.
Fisher, Thomas, Philadelphia, Pa., assignor to Fisher
Engineering Corporation, Rallimore, Md. Apparatus
for separating liquids of different specific gravity.

for separating liquids of different specific gravity, 1,641,843; Sept. 6. Fisher, Walter S., assignor to The Willys-Overland Company, Teledo, Ohio. Lubrication of sieeve-valve engines. 1,644,826; July 5. Fisher, Wilbur H., Ottawa, assignor to A. Stein & Company, Chicago, 111. Work holder for sewing machines. 1,616,635; Feb. 1.

Fisher, Wilbur H., Ottawa, assignor to A. Stein & Company, Chicago, Ill. Work feed for sewing machines. 1,637,373; Aug. 2.
Fisher, William A., and R. Amicarelli, Lowellville, Ohio. Bottle. 1,615,677; Jan. 25.
Fisher, William C., assignor to The Russell Manufacturance of American Conn. Making selvaged-edged fabrica. 1,639,224; Aug. 16.
Fisher, William J., assignor to A. B. Farquhar Co. Ltd., York, Pa. Boiler. 1,615,789; Jan. 25.
Fisher, Winfield S., Elmhurst. Ill. Tooth-canal-filling compound. 1,641,344; Sept. 6.
Fish, Eracst. Double Buy, and Sydney, New South dows and doorways. 1,617,834; Peb. 15.
Fisk Rubber Company, The. (See Benson, Fred J., assignor). signor.) sk Rubber Company, The. (See Castricum, Martin, signor.) Rubber Company, The. (See Castricum, M., and Taylor, assignors.)
Fisk Rubber Company, The. (See Desautels, Charles H., Fisk Rubber Company, The. (See Donovan, William J., Fisk Rubber Company. (See Ellinwood, George H., ask Rubber Company, The. (See Freeburg, Walter S., assignor.) Fisk Rubber Company, The. (See Hansen, Raymond, asgnor.) Rubber Company, The. (See Hennessy, Daniel E., assignor.)
Fisk Rubber Company, The. (See Irrgang, William F., assignor.) Fisk Rubber Company, The. (See Jennerjahn, W., and Fomplum, assignors.) Fisk Rubber Company, The. (See Krall, Stanley, as-Rubber Company, The. (See Little, Thomas P., as-Fisk Rubber Company, The. (See Marquette, Melvon A.. assignor.)
Fisk Rubber Company, The. (See Maynard, Charles E., assignor.) sk Rubber Company, The. (See Mead, George J., assignor.) sk Rubber Company, The. (See Midgley, Thomas, as-Fisk Rubber Company, The. (See Mincher, Joseph F., assignor.)
Fisk Rubber Company, The. (See Peglow, Albert H., assignor.) assignor.)
Fisk Rubber Company, The. (See Richey, Albert E., assignor.) Fisk Rubber Company, The. (See Scherner, John, assignor.) sk Rubber Company, The. (See Southmayd, Leon N., Rubber Company, The. (See Wikle, George F., Fisk Rubber Company, The. (See Wikle, George F., assignor.)
Fisk Rubber Company, The. (See Williams, Job J., assignor.)
Fisk Rubber Company, The. (See Williams, Job J., assignor.)
Fisk Rubber Company, The. (See Fisk, Jonathan P. B., assignor, by mesne assignments, to Electric Refrigeration Corporation, Detroit, Mich. Cooling unit. 1,632,283; June 14.
Fisker, Charles W., Indianapolis, Ind.
Fisker, Charles W., Indianapolis, I Fisk Rubber Company, The. (See Williams, Job J., as-

Fitch, Hugh C., Missouri Valley, Iowa. Serum-syringe filler and bottle carrier. 1,615.873; Feb. 1. Fitch, John S., and J. F. Tobin, Favaris, Alberta, Canada. Gate. 1,642.875; Sept. 20. Fitch, John S., and J. F. Tobin, Evarts, Alberta, Canada. Gate. 1,643.297; Sept. 27. Fite. Jeremiah T., Springfield, Mo. Vehicle ventilator. 1,644.180; Oct. 4. Philadelphia, Pa. Bottle holder. 1,633.035; June 21. Fitl, Henry G., assignor of one-half to H. Lambros, Washington, D. C. Automatic dispenser. Rel6,524; Jan. 4. Fitts, Charles F., et al. (See Hilgerink, Frank M., assignor).

signor.)
Fitts, James L., Merchantville, N. J., and K. W. Rohlin, Philadelphia, Pa., assignors to Warren Webster & Company, Canden, N. J. Apparatus for withdrawing water stems heating systems. 1,621,629 dar. 22.
Fitts, V. B. (See Knowles, Rosco C., assignor.)
Fitts, Walter H., assignor to The Foxboro Company, Foxboro, Mass. Thermometer. 1,619,109; Mar. 1,719,109; Mar. 1,719,109;

articles. 1.644,574; Oct. 4.

Fitz-Geral, Edward T., Newark, N. J. Pipe. 1,625,849;

Fitzgerald, Francis A. J., Niagara Falls, N. Y., assignor to Harper Electric Furnace Corporation. Electric furnace. 1,643,808; Sept. 27.

Fitz Gerald, Francis A. J., Niagara Falls, N. Y., assignor to Harper Electric Furnace Corporation. Electric furnace. 1,646,058; Oct. 18.

The Corporation of the Corporati

F., assignor.)

Fitzgerald Manufacturing Company, The. (See Fitzgerald, Patrick J., assignor.)

Fitzgerald Manufacturing Company, The. (See Reichold,

Fitzgerald Manufacturing company, The (See Smith, Alva T., assignor.)
Fitzgerald Mig. Company, The. (See Smith, Alva T., assignor.)
Fitz Gerald, Maurice E. W., and F. F. Maynard, Eltham, New Zealand, Means for use in spreading discrete road-forming materials. 1,444,575; Oct. 4.
Fitzgerald, Maurice F., assignor to The Fitzgerald Mfg. Company, Winsted, Conn. Curling iron. 1,633,171;

Fitzgerald, Maurice F., assignor to The Fitzgerald Mfg. Company, Winsted, Conn. Curling iron. 1,633,171; June 21. Fitzgerald, Maurice F., Winsted, assignor to The Fitzgerald Mfg. Co., Torrington, Conn. Electric toasting Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Gasket, 1,627,167; May 3. Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Armature. Fitzgerald, Ref. 1. Fitzgerald, May 3. Fitzgerald, Fitzgerald, Robert L. (See McLaughlin, James, assignor) Fitzgerald, Robert L. (See Butler, W. J., and Fitzgerald). Fitz Gibbon & Crisp, Inc. (See Herron, Joseph D., assignor).

signor.)
Fitzgibbon, John E., assignor to Phoenix Hosiery Company, Milwaukee, Wis. Stocking. Des. 73.501; Oct. 4.
Fitzgibbons, Gerald A., St. Louis, Mo. Medal. Des. 73.402; Sept. 6.
Fitzgibbons, Harry A. (See Balluff, Edward J., as-

signor.)
Fitz Hugh, Mayo M. (See Baillui, Edward J., asFitz Hugh, Mayo M. (See Heard, E. F., and Fitz Hugh.)
Fitzner, Arthur G., Chicago Heights, Ill. Subgrade template. 1,627,731: May 10.
Fitzpatrick, John, Parkerton, Wyo., assignor. by mesne
assignments, to The Texas Company, New York, N. Y.
Well pumping apparatus. 1,649,454; Nov. 15.
Fitzpatrick, Son Elitchins Car Roofing Company, Detroit,
Mich. Car-coupler uncoupling mechanism. 1,630,481;
May 31.
Fitzpatrick, Keene Princton N. J. and D. W.

May 31.

Firpatrick, Keene, Princton, N. J., and R. T. Mullins, Brooklyn; said Fitzpatrick assignor to H. R. Hart and sold Mullins assignor to A. G. Spalding & Bross, New States of the State of the St

Pitosimona, John T., assignor to General Motors Re-tained Corporation, Dayton, Ohlo. Electrical generat-ing system 1,633,780; June 28. Pitzsimmons, John T., and H. Wallace, assignors to General Motors Reseach Corporation, Dayton, Ohlo. Ignition system 1,641,378; Sept. 6.

72535-P-14

Fitzstad Tob E., Chicago, III. Steaming device.

1,610,036; Feb.

E. Dotroit, Mich. Safety device for acroFixel. At the E. Dotroit, Mich. Safety device for acroFixel. At the E. Dotroit, Mich. Safety device for acroFixel. Frankin E., Mendon, III. Powder-distributing
attachment for wagons. 1,613,988; Jan. 11.
Flad. Artur, Berlin, assignor to Siemens & Haiske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin,
Germany. Telephone system. 1,620,000; Mar. 8.
Flags. Ernest, New York, N. Y. Firepiace construction.
1,622,997; Mar. 29.
Flags. Ernest, New York, N. Y. Hinge. 1,634,181;
June 28.
Flagse, Phillipp F., assignor to Klauer Manufacturing

Flagg, Ernest, New York, N. Y. Hinge. 1,634,181; June 28.
Flagge, Phillipp F., assignor to Klauer Manufacturing Co., Dubuque, Iowa. Building structure. 1,643,934; The Company of the Company Minneapolis, Minn. Collapsible crate. 1,646,284; Oct. 18.
Flagstad, Cornell and O. A., Minneapolis, Minn. Crate. 1,617,444; Feb. 15.
Flagstad, Cornell and O. A., Minneapolis, Minn. Crate. 1,617,444; Feb. 15.
Flagstad, Cornell and O. A., assignors of ninety-five per cent to The Folding Crate & Box Company, Minneapolis, Minn. Collapsible crate. 1,618,420; Feb. 22.
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagstad, Oscar A. (See Flagstad, Cornell and C. A.)
Flagsta

May 24.

Flaherty, Louis C. (See Hill, George N., assignor.)

Flam, Stephen, Walnut Park, assignor to Supertile Machinery Corporation, Los Angeles, Calif. Mold core,

1,618.647; Feb. 22.

Flam, Stephen, Walnut Park, assignor to Supertile Malian, Stephen, Walnut Park, assignor to Supertile Malian, Stephen, Walnut Los Anceles, Calif. Mold for building material. 1,618.648; Feb. 22.

Flammer, Edward F., New York, and H. E. Silliman, Brooklyn, assignors, by mesne assignments, to Rainbow Photo-Reproductions, Inc., New York, N. Y. Photoprinting. 1,634.658; July 5.

Flammer, Edward F., New York, and H. E. Silliman, Inc., New York, N. Y. Photoprinting. 1,634.659; July 5.

Brooklyn, assignors to Rainbow Photo Reproductions, Inc., New York, N. V. Photoprinting, I,634,659; July 5. Flammer, Howard A., Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical regulating device, 1,613,606; Jan. 11. Flanagan, James A., T. P., jr., and J. J., Brooklyn, N. Y. Roofing or siding for buildings, I,648,940; Nov. 15. Flanagan, John J. (See Flanagan, James A., T. P., jr., and J. J.)

and J. J.)

Flanagan, Thomas, Rochester, N. Y. Game apparatus.
1,617,243; Feb. 8.

Flanagan, Thomas P., jr. (See Flanagan, James A., T. P.,
jr., and J. J.)

Flanagan, Thomas P., jr. (See Flanagan, James A., T. P.,
jr., and J. J.)

Flanagan, Willian, Hijon, Callif., and one-half to
The transport of the state of the s

inghouse Electric and Manufacturing Company. Governing mechanism for steam turbines. J.622,100; Flanders, Warren B., Philadelphia, Pa., assignor to Westinghouse Electric and Manufacturing Company. Automatic ston valve. 1,626,804; May 3. Flanders, Warren B., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Cou-Flanders, Warren B., Essington, Pa., assignor to Westinghouse Electric and Manufacturing Company. Clearance indicator for turbines. 1,639,494; Aug. 16. Flanigan, John J., Oak Park, Ill. Spindle. 1,633,084; June 21.

June 21.

Flannery Bolt Company. (See Flannery, John R., assignor.)

Flannery Bolt Company. (See Dodds, Ethan I., jr., assignor.)

Burt V., Philadelphia, Pa., assignor to Cannon Manufacturing Company. Kannapolis, N. C. Towel or the like. Des. 73.167; Aug. 2.

Flannery. Burt V., Philadelphia, Pa., assignor to Cannon Manufacturing Company. Kannapolis, N. C. Towel or the like. Des. 73.562; Oct. 4.

Flannery. John F., Newark, N. J., Sash fastener. 1,652.865; Dec. 13.

Flannery, John R., assignor Flannery Bolt Company, Pittsburgh Pa. Lubricating device. 1614.1915.jnn.11. Flannery, Martin A., New York, assignor to Will & Baumer Candle Company Inc. Syracuse. N. Y. Apparatus for cleaning candle receptacles. 1.619.110; Mar. I. Flash, Radio Corporation. (See Wikstrom. Aganr, as-

Flash-Way Corporation, The. (See Johnson, Albert S.,

Plash-Way Corporation, The. (See Johnson, Albert S., assignor.)

Flatley, John H., Little York, Ill. Scraper for harrow disks and operating the same. 1.648,381; Nov. 8.

Flauder, Alfred J., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,263; Mar. 22.

Flauder, Alfred J., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,264; Mar. 22.

Flauder, Alfred J., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,251; Mar. 22.

Flauder, Alfred J., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,311; Mar. 29.

Flauder, Alfred J., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,311; Mar. 29.

Flauder, Alfred J., Bridgeport, Conn. Combined sait said pepper shaker. Des. 72,515; Apr. 26.

Flauder, Alfred J., assignor to The Weidlich Bros. Mfg. Co., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,515; Apr. 26.

Flauder, Alfred J., assignor to The Weidlich Bros. Mfg. Co., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,516; Apr. 26.

Flauder, Alfred J., assignor to The Weidlich Bros. Mfg. Co., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,516; Apr. 26.

Flauder, Alfred J., assignor to The Weidlich Bros. Mfg. Co., Bridgeport, Conn. Combined sait and pepper shaker. Des. 72,516; Apr. 26.

Fleck, John G. (See Decker, Harold E., assignor.)

Fleeger, David P., and F. P. Osborn, Wichita, Kans. Apparatus for purifying crude oil. 1,616,119; Feb. 1.

Fleeman, William J., St. Joseph, Mo. Burial casket. 1,622,777; Mar. 29.

Fleege, Harrison D., assignor to Arnold Electric Company.

Fleetwoor, Executy and Feb. 22.
Flees, Harrison D., assignor to Arnold Electric Company,
Racine, Wis, Ice-cream disher, 1,615,929; Feb. 1.
Flees, Harrison D., assignor to Arnold Electric Company,
Racine, Wis, Dispenser, 1,639,370; Aug. 16.
Fleisch, Elmer. (See Vogt, F. A., Fleisch, and Gold-

Semith, Service of the Inkwell Films, Inc., New York, N. Y. Device for teaching drawing. 1,61,207; Feb. 8.

Fleischer, Faul W. (See Feybusch, M., and Fleischer, Fleischer, Faul W. (See Feybusch, M., and Fleischer, Fleischer, Faul W., Weehawken Heights, N. J., assignor topper, 1,641,480; Sept. 6.

Fleischer, Faul W., Weehawken Heights, N. J., assignor to American Can Company, New York, N. Y. Fleeding and spacing mechanism for filled-can-closing machines. In Geometry, 1,641,645, Jan. 28.

Fleischer, Tull W., Weehawken Heights, N. Y. Fleeding and spacing mechanism for filled-can-closing machines. In Geometry, 1,641,645, Jan. 28.

Fleischmann Company, (See Brown, Elmer B. assignor.)

Figure 1. See Hildebrandt, F. M., and Frey, assignors.)
Fyleischmann Company, The. (See Hixson, A. W., and Balls, assignors.)
Fileischmann Company, The. (See Kohman, Henry A.,

assignor.)

Peissner I. Hnns. Lochen. Austria. Drying coal and the like. 1,632,829; June 21.

Pleiter Andrew J., and T. A. Miller, assignors to The Akron Standard Mold Company, Akron. Ohio. Moldengraving machine. 1,629,910; May 24.

Pleikstein, Anton, Detroit, Mich. Mail-box cover-actuated switch. 1,630,081; May 24.

Pleming, Charles T., assignor of one-half to W. J. Hay, Taft. Call. The for fishing and drilling tools. 1,630,081; May 24.

Pleming, Charles T., assignor of one-half to W. J. Hay, Taft. Call. Jar for fishing and drilling tools. 1,655,094; Dec. 20.

Pleming, Edward E., Hagerstown, Md. Envelope opener. 1,624,599; Apr. 12.

Pleming, George W. (See Blanch, S. M., and Fleming, Fleming, George W. (See Blanch, S. M., and Fleming).

ing.)*
Fleming, Ivan R., Ainsdale, England. Boat propelled by manually-operated mechanism. 1,648,955; Nov. 15.
Fleming, James, Mountainsdie, Manitoba, Canada. Road machine. 1,653,559; Dec. 20.
Fleming, James R., Seranton, Pa. Truck for mine cars 1,643,298; Sept. 27.
Floming, John J., Vineland, N. J. Grate bar. 1,622,634;

Fleming, J Mar. 29

Fleming, John J., Vineland, N. J. Method and apparatus for making sash-weight molds. 1.629-492; May 24. Fleming, Lawrence A., Fairmont, W. Va. Portable refreshment booth. Des. 73.693; Oct. 4. Fleming Machine Company. (See Blanch, Sven M., as-

eming Machine Company. (See Blanch, S. M. and

Fleming Machine Company. (See Blanch, S. M. and Fleming, assignors.) Fleming, Marion C. D., Farmersville, Tex. Collapsible chicken coop. 1.655.620; Nov. 29. Fleming, Michael J., Ely, Minn. Belt shifter for stepped pulleys. 1.630.031; May 31. Fleming, Raphael S., assignor to Merrell-Soule Company, Syracuse, N. Y. Moistureproof article. 1,616.849;

Fleming, Rives, Richmond, Va. Cane. 1,624,591; Apr. 12. Fleming, Robert G., Bloomfield, N. J., assignor to Smokedor Manufacturing Co., Inc., New York, N. Y. Smoker's stand. 1,645,525; Oct. 18. Fleming, Robert G., Bloomfield, N. J., assignor to Smokador Manufacturing Co., Inc., New York. Ash stand. 1,646,089; Oct. 18.

Fleming, Walter H. Luck, Wis. Valve-stem rim nut. 1,652,169 Dec 13.

signors, by messe assignments, to The Storad Manufacturing Company, Cleveland, Ohio. Storage-cell cover. 1,616,615; Feb. 8.

Fleming, Wills M., Holyoke, Mass., assignor to Worthing ton Fump & Machinery Corporation, New York, N. Y. Fleming, Thomas, Ottawa, Ontario, Canada. Door-operating means. 1,639,130; Aug. 16.

Flemen, Thomas, Ottawa, Ontario, Canada. Door-operating means. 1,639,130; Aug. 16.

Fleener, Orll, Fort Smith, Ark. Current-theft indicator. 1,631,025; May 31.

Fleshner, Lawrence P., assignor of one-half to W. L. Fleshner, Lawrence P., assignor of one-half to W. L. 1,632,533; June 14.

1,632,533; June 14.

1,632,533; June 14.

Fletcher, Andrew, fr., Morristown, and J. A. Capstaff, Grantwood, N. J. Steamship-driving mechanism. 1,632,533; June 14.

Fletcher, Arthur T., Bristol, assignor to The Fletcher-Terry Company, Forestville, Conn. Glass cutter. 1,634,323; July 5.

Fletcher, Earl W., Cuero, Tex. Insulating means for storage-battery plates and separators. 1,641,542; Sept. 6.

Sept. 6.

Sept. 6.
Fletcher, Estella M., Portland, Oreg. Lingerie clasp.
1,628,692; May J. See Beach, J. M., and Fletcher, J. See Beach, J. M., and Fletcher, George H., Sheffield, and H. Rusby, Stockshrlige, England, assignors to Westinghouse Electric & Manufacturing Company, Coupling. 1,623,935; June 28.
Fletcher, Gilbert S., Watertown, Mass. Container for fragile acticles. 1,630,337; Nov. 22.
Fletcher, Harold W., assignor to Hughes Tool Company, Aug. 9, Tex. Soft-formation well drill. 1,638,253; Aug. 9, Tex. Soft-formation well drill. 1,638,253;

Aug. 9.

Ang. 9.

Fletcher, Harold W., assignor to Hughes Tool Company,
Houston, Tex. Pipe wrench. 1,641,260; Sept. 6.

Fletcher, Harold W., assignor to Hughes Tool Company,
Houston, Tex. Combined washer and shield for drills.
1,641,261; Sept. 6.

Fletcher, Harvey, assignor to Western Electric Company,
Incorporated, New York, N. Y. Compensating network
for carrier transmission circuits. 1,613,607; Jan. 11.

Fletcher, Harvey, New York, N. Y., and L. J. Sivian,
Bloomfield, N. J., assignor to Western Electric Company,
Incorporated Sept. J. J. Flandard Idephone cys
Fletcher, Henry V.

See Havir, A. H., and Fletcher,
Bell Siding, Ariz. Waterproof cap and fuse. 1,645,370;
Oct. 11.

Oct. 11.
Fletcher, Joseph C., assignor to Armstrong Bros. Tool
Co., Chicago, Ill. Die-cutting machine. 1,613,577;

Jan. 4.

Fletcher, Otho H., and J. A. Tenney, Queens, W. Va. Saw-sharpening machine. 1.624,864; Apr. 12.

Fletcher, Robert J., Irvington, N. J., assignor to The Amalgamated Dyestuff and Chemical Works, Inc., New York, N. Y. Diazo dye of diphenyl urea and chromotrope acid. 1.617,244; Feb. B.

Fletcher, Squire F., and H. J. Smith, Lowell, Ind. Dirighle headlight construction for automobiles. Pletcher, June 14.

Betcher, June 14.

Betcher, Wilford, Billaries, Mass. Pump. governor.

Fletcher, Wilford, Billerica, Mass. Pump governor. 1,629,073; May 17. Fletcher Works, Incorporated. (See Bartholomew, Robert

Fletcher Worss, shorty-J., assignor.)
Flett, Lawrence H., Hamburg, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Production of polyazo coloring matters. 1,616,850;

Feo. 8.

Flett, William, Wakefield, assignor to Lawrence Duck Company, Lawrence, Mass. Bobbin magazine. 1,621,536; Mar. 22.

Fleuker, Harold M., Salem, Wis. Gas moistener. 1,641,028; Aug. 30.

Flevvitt, Edwin J., assignor to Hoyle Hoyle & Co. Limited. Rawtenstall, England. Elastic closure for ladies' boots. 1,641,709; Feb. 15.

Flexible Slate Froducts Co. (See Heppes, Otto A., assignormal control of the cont

signor.)
Flexo-Industrie-Gesellschaft m. b. H. (See Sauveur,
Harry, assignor.)
Flick, Henry, assignor to Hayes Wheel Company, Jackson, Mich. Manufacturing semiwood wheels. 1,622,504;

Flick, Henry, assignor to Hayes Wheel Company, Jackson, Mich. Spoke-turning latch. 1,629,501: May 24.
son, Mich. Spoke-turning latch. 1,629,691: May 24.
son, Mich. Wheel-making machine. 1,629,692: May 24.
Flickinger, William F., Endicott, N. Y., assignor to United Shoe Machinety Corporation. Paterson, N. J.
Lasting machine. 1,640,697; Aux. 30.
[See Sachs, M., and Flieder-baum, Solomon. (See Sachs, M., and Flieder-baum, Solomon. (See Sachs, M., and Flieder-baum).

baum.)
Pliedner, Carlyle S., Newark, N. J., assignor, by mesne assignments, to The Prest-O-Lite Company, Inc., In-dianapolis, Ind. Internal-combustion engine. 1,644.719; Oct. 11.

Fliedner, John, Flushing, assignor to American Manufacturing Company, New York, N. Y. Waste collector for carding machines. 1,642,255; Sept. For Carding machines. 1,642,255; Sept. Fliehmann, William H., St. Charles, Mo. Cleaning device. 1,628,585; May 10.

Flier, Leo, Brooklyn, assignor to Universal Jewelry Case Co., New York, N. Y. Display holder. 1,635,500; Flinchbaugh, Frederick T., York, Pa., assignor, by mesne assignments, to Flinchbaugh Anchine Company, Incorporated. Cutter head. 1,634,494; July 5.

Flinchbaugh Machine Company. (See Flinchbaugh, Frederick T., assignor.)

Flinchbaugh Machine Company. (See Flinchbaugh, Frederick T., assignor.)

Flint, Charles, Birningam, England. Identification dearticles. 1,618,073; Feb. 13.

Flint, Raiph N., Detroit, and L. Blackmore, Highland Park, Mich., assignors to General Motors Corporation, Detroit, Mich. Transmission lock. 1,613,698; Jan. 11.

Flint & Walling Mfg. Co. (See Macomber, Herbert H., Willie & Walling Mfg. Co. (See Macomber, Herbert H.)

Filnt & Walling Mfg. Co. (See Macomber, Merkett M., assignor.)

Pilot & Walling Mfg. Co. (See Macomber, Herbert H., assignor.)

Flinterman, Rudolph F., Detroit, Mich., assignor, by mesne assignments, to General Electric Company. Oxidation-resisting material. 1,641.752; Sept. 6.

Flinterman, Gerhard, West Orange, N. J. Bearing. 1,640.352; Aug. 30.

Light Markett M. J. Bearing. 1,641.752; Sept. 6.

Flinterman, Williander, West Orange, N. J. Bearing. 1,640.352; Aug. 30.

Flintham, Williander, and E. H. Bridenbaugh, Denyer, Flintham, Washing and sterilizing device. 1,640.401; Aug. 30.

Flinthote Company, The. (See Clapp, Albert L., assignor.)

Flintkote Company, The. (See Cumfer, Harry A., assignor.) Flintkote Company, The. (See Griffes. Arthur R., as-

signor.) Flintkote Company, The. (See Heppes, George P., as-

signor.) Flintkote Company, The. (See Kirschbraun, L., and Rahr, assignors.)
Flintkote Company, The. (See Overbury, Frederick C.,

Rahr, assignors.)

Flinttote Company, The. (See Overbury, Frederick C., Flinttote Company, The. (See Overbury, Frederick C., Flinttote, Company, The. (140,825; Aug. 30.)

Flockhart, James, San Francisco, Calif. Machine for washing, cleaning, waxing, and polishing sheet material. (1,619,925; Mar. 8.

Fial. 1,619,925; Mar. 8.

Flock, Frederick S., Saginaw, Mich., assignor to Wickes Brothers. Girt-pin connection for gang saws. Flock, Grey Girt-pin connection for gang saws. 1,628,586; May 10.

Flock, Frederick S., Saginaw, Mich., assignor to Wickes Brothers. Girt-pin connection for gang saws. 1,600, Carl A., and J. H. Gibbs, assignors to Dennison Manufacturing Company, Framingham, Mass. Paper article, method, and apparatus. 1,638,298; Aug. 9.

Flood, Carl A., and J. H. Gibbs, assignors to Dennison Manufacturing Company, Framingham, Mass. Creperatick, George. (See Fink, H. A., and Flook.)

Floorica Corporation, The, et al. (See Gillis, Lyle N., assignor). Thorance, Allen E., Dallas, Tex. Garbage receptacle.

assignor.)

assignors.) assignors.)

Florey, Edward C., assignor of one-half to C. E. Sturges,
San Jose, Calif. Alr intake for internal-combustion
engines. 1,023,74, Apr. 5.

Apr. 5.

Lorentz S. L. 1, Apr. 5.

Lorentz S. L.

O.S. Berlin S. Hoe Company, The. (See Allerton, Oscar J., assignor.) lory, Arthur M., Lone Star, Kans. Pulley. 1,618,074; Feb. 15.

Floto, Julius, assignor to J. W. Telling, Chicago, Ill. Bumper. 1.621,501; Mar. 22. Flournoy, Josiah. (See Treadwell, A. P., and Flournoy.) Flournoy, W. G., et al. (See Bellman, John A., as-

signor.) Flowers, Henry F., Findlay, Ohio. Dumping device. 1,624,323; Apr. 12. Flowers, Henry F., Findlay, Ohio. Dump car. 1,628,963; May 17.

Howers, John B., Brooklawn, N. J. Rubber ball. 1.628,717; May 17. Flowers Mausoleum Company, The. (See Zengerle, Joseph W., assignor.) Flowers, Stanley A., assignor to Pittsburgh Tinware Manufacturing Company, Pittsburgh, Pa. Fern stand or article of similar nature. Des. 72,813; Mar. 29.

Flowers, Stanley A., assignor to Pittsburgh Tinware Manufacturing Company, Pittsburgh, Pa. Construction for metal stools, stands, and the like, 1,621,245; Mar. 15.
Flowers, Stephen, Port Arthur, Tex. Exhibitor. 1,662,683; Dec. 18.
Floyd, Carles Bany, Incorporated, New York, N. Y.
Tension measuring device. 1,647,287; Nov. 1.
Floyd, Earl T., near Temple, assignor to The Nolde and Horst Company, Reading, Pa. Striping attachment for circular-knitting machines. 1,64,695; Oct. 25.
Floyd, George G., Riverside, Ill. Container. 1,646,531; Oct. 25.

Floyd, George G., Riverside, Ill. Container. 1,646,531; Oct. 25.
Floyd, Roy C., assignor to Unique Spark Plug Cleaner Co., Chicago, Ill. Spark-Plug attachment. 1,624,937; Flunharty, William G., Rockville Center, assignor to The Western Union Telegraph Company, New York, N. Y. Telegraph transmitter, 1,640,541; Aug. 30.
Flum, Robert A., Kee Jandus, H. S., and Flum., Flum, Robert A., Kalamazoo, assignor to The C. G. Spring & Bunper Company, Detroit, Mich. Bumper Fluor, John S., assignor.) Fluor, John S., assignor.) Fluor Construction Co. (See Fluor, John S., assignor.) Fluor, John S., assignor to Flour Construction Co., Los Angeles, Call. Cooling tower. 1,622,397; June 14.
Fluor, John S., assignor to Flour Construction Co., Los Angeles, Call. Cooling tower. 1,622,397; June 14.
Fluor, John S., assignor to Flour Construction Co., Los Angeles, Call. Cooling tower. 1,622,397; June 14.
Fluor, John S., assignor to Flour Construction Co., Los Angeles, Call. Cooling tower. 1,622,397; June 14.
Fluor, John S., assignor to Flour Construction Co., Los Angeles, Call. Cooling tower. 1,623,397; June 14.
Fluor, John S., assignor to Flour Construction Co., Los Angeles, Call. Cooling tower. 1,623,397; June 14.
Fluor, John S., assignor to Flour Construction Co., Los Angeles, Call. Cooling tower. 1,623,397; June 14.
Fluor, John S., assignor to Flour Construction Co., Los Angeles, Call. Cooling tower. 1,624,401. Apr. 22.
Flynn, George W., Blundellsands, near Liverpool, England. Selective signaling system. 1,638,330; Aug. 9.
Flynn, Walter P., Ulysses, Nebr. Grain-car-door fastener. 1,653,433; Dec. 20.

Fonmite-Childs Corporation. (See Erwin, Orlando R., assignoris)

Fonmite-Childs Corporation. (See Gilbert, V. G. W., and Steinicke, assignors.)

Fonmite-Childs Corporation. (See Gilbert, V. G. W., and Steinicke, assignors.)

assignor:)

assign

Focus, 1,617,752; Feb. 1,617,752; Feb. 1,617,752; Feb. 1,617,752; Feb. 2,718; Feb. 2,719; Feb. 2,716,52,655; Dec. 20, 1,653,655; July 19. Foerstering, Hans, Jamesburg, N. J. Making air gas. 1,635,988; July 19. Foerster, George. (See Jaquith, W. E., Evans, and Roerstner.)

Foerstner.)

Fogarty, John G., West Webster, assignor of one-fourth for Sweeney and Boland, Rochester, N. Y. Apparatus for driving railroad spikes. 1,620,3812; Mar. 15.

Fogel, Louis E., Brooklyn, N. Y. Closure cap for gas tanks and radiators. 1,634,737; Cloure cap for gas tanks and radiators. 1,634,737; Cloure cap for gas tanks and radiators. 1,634,835; Aug. 16.

Folian Bench, waste-paper receptacle, and automat stand. 1,630,985; Aug. 16.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,983; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,983; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,983; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,983; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

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Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

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Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

Folian Bench, waste-paper receptacle, and automat stand. 1,650,981; Nov. 29.

Folian Bench, waste-paper receptacle, and

olb, David, Akron, Obio.

Aug. 18.

Folberth, Fred G., Cleveland, Ohio, assignor, by mesne assignments, to Trico Products Corporation, Buffalo, N. Y. Windshield cleaner motor. 1,835,601, July 12.

Folberth, Frederick G. and W. M., Cleveland, Ohio, Indicator for low liquid levels. 1,642,848; Sept. 20.

Folberth, Frederick G. and W. M., Cleveland, Ohio, assignors to Trico Products Corporation, Buffalo, N. Y. Windshield cleaner. 1,631,629; June 7, Windshield cleaner. 1,631,629; June 7, Windshield cleaner, 1,645,502; June 7, Windshield, cleaner, 1,645,502; Oct. 18.

Folberth, William M. (See Folberth, Frederick G. and W. M.)

Folbert W. B M.)

Folding Crate & Box Company, The. (See Flagstad, Cornell and O. A., assignors.)
Folding Crate and Box Company. (See Flagstad, Cornell, assignor.)

Foley, Charles B., Dayton, Ohio, assignor to Charles B. Foley, Inc. Electrothermic crucible, 1,638,669, Aug. 9. Foley, Charles B., Pottstown, Pa., assignor to Charles B. Foley, Inc., New York, N. Y. Electric furnace, 1,640,826; Aug. 30.

Foley, Charles P., Fottstown, P.A., assignor to Charles B., Fottstown, P.A., assignor to Charles B., Lodo, S.C., York, N. Y. Electric furance, 1.640-826, Aug. 30, Foley, Charles B., Inc. (See Foley, Charles B., assignor, Foley, William, Cestratal Point, Org., Tractor hitch, 1.554-417, Dec. 27. Foley, William, assignor to International Shoe Company, St. Lonis, Mo. Stapling machine, 1.638,117, Aug. 9. Foley, William, assignor to International Shoe Company, St. Lonis, Mo. Stapling machine, 1.638,117, Aug. 9. Foley, William, St. Johnson, St. Johnson, C. Foley, Folger, Frederick S., Flushing, and H. W. Altman, College Point, N. Y., Spring winding machine, 1.635,747; July 12. Folger, Henry C., Waverly, assignor, by mesne assignation, 1.651,198; Nov 29. Folion, Arminio, Rochester, N. Y., Bridge construction, 1.624,325; Apr. 12. Foliott, James M., and L. Lehner, Bay City, Mich. Clean-out router bit. 1,632,440; June 14. Folimer-Clogg & Company. (See Dellinger, John M., assignor, William F., Rochester, N. Y., Grocery box.

Signor, William F., Rochester, N. Y. Grocery box. Follow, William F., Rochester, N. Y. Wind-propelled device, 1,650,702; Nov. 29. Folmer, William F., Rochester, N. Y. Wind-propelled device, 1,650,702; Nov. 29. Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Cut-film holder, 1,631,479; June 7. Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Cut-film holder, 1,641,420; Nat. 4.

Folmsbee, Clyde H., Bayonne, N. J., assignor to American Car and Foundry Company, New York, N. Y. Tank manhole arrangement. 1,649.897; Nov. 15. Folitic Chair Corporation. (See Bauer, William J., as-

signor.

signor.)

Foltz, Andrew, Lambertville, N. J. Housing for pipe connections. 1,629,693; May 24.

Foltz, Harry E., Granville, Pa. Combined automobile top and support. Des. 72,009; Feb. 15.

Foltz, Ira W., Chicago, Ill. Furnace. 1,642,019; Sept. 13.

Foltz, Raymond D. (See Hosbein, L. H., and Foltz.)

Fonda, Gorton R., Schenectady, N. Y., assignor to General Electric Company. Incandescent filament. 1,623,784; Apr. 5.

Apr. 5. Fonda, Gorton R., Schenectady, N. Y., assignor to General Electric Company. Incandescent lamp. 1,632,647;

June 14.
Fonda, Gorton R., Schenectady, N. Y., assignor to General Electric Company. Incandescent lamp. 1,648,679;
Nov. 8.

Nov. 8.
Fondevila, Antonio, Chicago, III. Drive gearing.
1,632,468; June 14.
Fondiller, William, assignor to
pany, Incorporated, New York, N. Y. Loading system.
1,654,074; Dec. 27.
Fonder, NewYork, Dr. Y. Loading system.
1,654,074; Dec. 27.
Foner, NewYon F., Fittsburgh, Pa. Engine. 1,626,457;
Apr. 26.
Fonrobert, Ewald. (See Amann, A., and Fonrobert.)
Fons, Stanley. (See Farnstrom, Albin, assignor.)
Fonseca, Edward L., assignor to The Wilcolator Complete, See Farnstrom, Albin, assignor.)
Fonseca, Edward L., assignor to The Wilcolator Complete, See Farnstrom, Albin, assignor.

ART. 29.

Reference Edward L., assignor, by mesne assignments, to The Wilcolator Company, Newark. N. J. Thermostatic oven control. 1,623.080; Apr. 19.

Fonseca, Edward L., assignor, by mesne assignments, to The Wilcolator Company, Newark, N. J. Thermostatic control for electric ovens and the like. 1,627,732;

Fontaine, Phillza H., assignor of one-halt to L. F. Boedigheimer, Petersburg, N. Dak. Oil can. 1,621,362;

Mar. 16.

Mar. 15.

Fontaine, Robert A., Martinsville, Va. Power holst. 1,637,338; Aug. 2. Prontaine, Robert A., Martinsville, Va., assignor to R. C. Anderson, Moureat, N. C. Transmission mechanism. 1,626,229; Apr. 26.

Anderson, Montreat, N. C. Transmission mechanism, 1,626,229; Apr. 26.

Fontaine, Robert A., and T. H. Self, assignors of one-half to said Self and one-half to H. A. Richardson, Martinsville, Va. Potato-chip cooker. 1,641,262;

Sept. 6.

Sept. 6.

Fontana, Paul F. M. A., assignor to Societe des Apparells Mephisto Jules Manfredl & Cle., Cluses, France. Vulcanizer. 1,620,597; Mar. 8.

Fontana, Paul F. M. A., Cluses, assignor to Societe des Appareils Mephisto Jules Manfredl and Cle., Cluses, (Haute - Savoie), France. Vulcanizer. 1,637,931; Aug. 2.

Footy, James T. (82: Davis, Elias V. O., assignor.)

Footen T. 1,643,567; Jan. 1,648,649; Cles Meller, Daniel, assignor. 1

Foote-Burt Company, The. (See Kelleher, Daniel, assignor.)

signor. Foote Company, The. (See De Vinney, Floyd W., as-

Floor Company, Signor, 1917.

Foote, Edward B., assignor to Taylor Instrument Companies, Rochester, N. Y. Process-control apparatus. 1,630,294; May 31.

Poote, Edward B., and F. W. Stalker, assignors to Taylor Instrument Companies, Rochester, N. Y. Hygrometric apparatus. 1,632,729; June 14.

Poote, Florian, Oakwood, Wis. Cotter pin and staple puller. 1,622,953; May 24.

Poote, Leonard, Fedro Miguel, Blee. 1,643,269; Sept. 20.

Poote, Lewis A., New York, N. Y. System of accrual accounting. 1,618,124; Feb. 15.

Foothorap, Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company. Type bar. 1,618,075; Feb. 15.

Floothorap, Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company, New York, N. Y. Toll-slip platen. Foothorap, Apr. 28.

Foothorap, Apr. 28.

Harrisburg, Pa., assignor to Elliott-Fisher Company, New York, N. Y. Toll-slip platen. Foothorap, Apr. 28.

Foothorap, Pa., assignor to Elliott-Fisher Company, Line-spacing mechanism. 1,638,191; Aug. 9.

Fisher Company. Line-spacing mechanism. 1,638,191; Aug. 9.
Footborap. Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company. Portable hand-operated flat platen. Fisher Company. Portable hand-operated flat platen. Fisher Company. For the second flat platen. For the second flaten. For the second flaten. For the second flaten. For the second flaten. For the s

Forced, J. Pedro V., Barcelona, Spain. Radiator. 1,632,108; Porced, D. C. Emil, et al. (See Farmer, C. D., and Libby, assignors.)

Force, J. Dan L., University City, Mo. Lubricating mechanism. 1,646,018; Oct. 18.

Force, John W., Cleburne, Tex. Tank-cleaning device. Porce, John W., Cleburne, Tex. Tank-cleaning device. Force, John W., Cleburne, Tex. Tank-cleaning device. Force, John W., Cleburne, Tex. Tank-cleaning device. In the state of the s

May 24.

Ford, Ben K., Oak Park, assignor to Union Bed and Spring Company, Chicago, Ill. Bed-spring construction. 1,638.556; July 19.

Ford, Clara P. (See Ford, Silas M., assignor.)

Ford, Clara P., executivit. (See Ford, Silas M.)

Ford, David L., Palco, Kans. Windmill. 1,617,385;

Ford, David O., Lynchburg, Va. Paper sait shaker. Des. 72.532; May S. Inte Glass Company, The. (See Platt, Terchie W. assignor).

Ford, Edward, Plate Glass Company, The. (See Schutz, Harold R., assignor).

Ford, Edward, Plate Glass Company, The. (See Schutz, Harold R., assignor).

Ford, Elmer A., et al. (See Mason, Frank B., assignor).

Ford, Ernest B., Union, assignor to Foster Engineering Company, Newark, N. J. Sight flow box. 1,630,335; May 31.

Company, Newark, N. J. Sight How box. 1,630,335; May 31.

Ford, Eugene A., West Newton, Mass., assignor to The Tabulating Machine Company, Endicort, N. Y. Perforation-rending device for sorting machines and the like. 1,633,936; June 28.

Machine Company, Endicort, N. Y. Card-feeding apparatus. 1,633,937; June 28.

Ford, Frank H. Hattlesburg, Miss. Insulation composition. 1,620,001; Mar. 8.

Ford, Frank H. Hattlesburg, Miss. Insulation composition. 1,620,001; Mar. 8.

Ford, Frank H. Tattlesburg, Miss. Insulation composition. 1,621,001; Mar. 8.

Ford, George L., Java, Y. Dibble 1,624,448; Apr. 12.

Ford, George L., Java, Ya. Dibble 1,624,448; Apr. 12.

Ford, Hannibal C., Jamaica, N. Y., assignor to Ford Instrument Company. Inc. New York, N. Y. Electrical transmitter. 1,627,163; May 3.

Ford, Hanny, Dearborn, Mich. Making axle housings. 1,621,007; Mar. 15.

Ford, Henry, Dearborn, Mich. Manifold construction for 1,629,403; May 24.

Ford, Henry, Dearborn, Mich. Verming Mar. 1,631,316; June 7.

Ford, Henry, Dearborn, Mich. Manifold construction for 1,629,403; May 24.

Ford, Henry, Dearborn, Mich. Pump. 1,631,316; June 7.

Ford, Henry, Dearborn, Mich. Steering-gear reduction. 1,629,403; May 24.

Ford, Henry, Dearborn, Mich. Steering-gear reduction. 1,633,890; June 28.

Ford, Henry, Dearborn, Mich. Sound-proofing gear mechanisms. 1,638,118; Aug. 9.

Ford, Henry, Dearborn, Mich. Explosive engine, 1,639,333; Aug. 16.
Ford, Henry, Dearborn, Mich. Crank and pitman mechanism. 1,639,334; Aug. 16.
Ford, Henry, Dearborn, Mich. Valve mechanism for internal-combustion engines. 1,640,118; Aug. 23.
Ford Instrument Company. (See Ford, Hannibai C., as-

Instrument Company. (See Tanner, Harry L.,

Ford instrument Company, tocc assignor, (See Little, G. M., and Ford.)
Ford, James G. (See Little, Idaho. Boat-operating mechanism. 1618,180; Feb. 22.
Ford, Karl L., East Crange, N. J., assignor to Glass Conford, Karl L., East Crange, N. J., assignor to Glass Conford, Karl Company, C. (See Allison, Fred, assignor, Ford Motor Company, (See Allison, Fred, assignor, Frod Motor Company, (See Allison, Fred, assignor, Motor Company, (See Avery, C. W., and Moody,

Company. (See Avery, C. W., and Moody, consistency).

Ford Motor Company. (See Galamb, Joseph, assignor.)

Ford Motor Company. (See Garden, Henry, assignor.)

Ford Motor Company. (See Smith, C. J. and Hicks., as-

signors.)
Ford Motor Company. (See Smith, William H., assignor.)
Ford Motor Company of Delaware. (See Avery, Clarence (See Avery, Clarence

signors.)
Ford Motor Company. (See Smith, William H., assignor.)
Ford Motor Company of Delaware. (See Avery, Ciarence World Motor Company of Delaware. (See Avery, Ciarence Ford, Raiph L., et al. (See Kurten, Peter J., assignor.)
Ford, Robert H., C. P. Richardson, and A. L. Greenabaum, Chicago, Ill., and H. M. Priest, Last Orange, N. J., assignors to Charles P. Richardson, trustee, Chicago, Ill. Keentored-concrete cribbing. Rel 5,889; July 26.
Ford, Silas M., deceased, St. Paul, Minn.; C. P. Ford, executrix, assignor to C. P. Ford. Lath board and making the same. 1,916,651; Feb. S.
Ford, Silas M., deceased, St. Paul, Minn.; final decree housed. 1,616,652; Feb. S.
Ford, Silas W., Geesead, St. Paul, Minn.; final decree housed. 1,616,652; Feb. S.
Ford, Silas W. (See Burton, T. P., and Ford.)
Ford, Staurt M., Bridgeport, Com. Bunch-building attachment for winding machines. 1,614,834; Jan. 18.
Fords, Gently, New York, N. Y. Advertising device. 1,020,092; Mar. 8.
Fordyce, Rufus G., Chicago, Ill. Machine for deposition of coating. 1,642,667; Sept. 18.
Fordhand, Thomas H., (See Jones, M., and Forehand, Forehand, Thomas H., Nashville, Tenn. Adjustable bearing and shim. 1,618,649; Feb. 22.
Foreman, Amos L., assignor to Milk Bottle Crate Company, Chicago, Ill. Box or crate. 1,621,363; Mar. 15.
Forehand, Thomas H., Nashville, Tenn. Adjustable bearing and shim. 1,618,649; Feb. 22.
Foreman, Amos L., assignor to Westing-house Electric and Manufacturing Company. Refuse Coresman, Robert A., Moore, Pa., assignor to Westing-House Leichte and Manufacturing Company. Refuse Comp

Forest Oil Corporation. (See Rammond, Mark C., us-signor.)
Forfar, Donald, Minneapolis, Minn. Backwater value.
1,623,686; Apr. 5. Forssels, Belgium. Heat-exchanging apparatus. 1,637,276; July 26.
The State of Section of Section 1,637,276; July 26.
Forest Actions of Constructions Electriques de Jeumont, Societe Anonyme. (See Charpentier, Paul, assignar).

signor.)
Forgey, Joe A., and J. E. Cusick, Gadsden, Ala. Heading machine, 1,613,449; Jan. 4.
Forgrove Machinery Company Limited, The. (See Grover, Frederick, assignor.)
orgy, Glen, Frankford, Kans. Plow bottom. 1.642.301:

Forgrove Machinery Company Limited, The. (See Grover, Frederick, assignor.)
Forgy, Gleo, Frankford, Kans. Plow bottom. 1,642,301;
Sept. 13.
Forgrower, Washington, D. C. Column spacer.
Forkey, Williard G., Chicago, III. Bullding construction.
1,616,444; Feb. 8.
Forkey, Williard G., Chicago, III. Bullding construction.
1,646,450; Oct. 25.
Forkin, John. Manchester. England. Machine for cleaning, opening, and combing cotton. cotton waste, and
Forkin, John. Manchester. England. Machine for cleaning, opening, and combing cotton.
18.
Forkin, John. Manchester. England. Machine for cleaning, opening, and combing cotton.
18.
Forman, Charles, Taft, Calif. Patch for pneumatic tires.
1,653,162; Dec. 20.
Forman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, assignor to National Pneumatic Company, New York.
18.
Forman, Solomon, New York, N. Y. Quick application and release valve. 1,633,763; July 26.
Forman, Golomon, New York, N. Y. Dish mounting. Des.
72,010; Feb. 16.

Forman, Solomon, New
1,610,065; Mar. 1.

Formica Insulation Company, The. (See
Clarence M., assignor,
Formway, Verla L. and R. F., Roby, Tex. Pump.
1,621,918; Mar. 22.

Formaca, Guido, Turin, Italy. Self-centering chuck.

Formaca, Guido, Turin, Italy. Device for preventing
Turin, Italy. Device for preventing
Turin, Italy.

Localistics and the second sec

motor vehicles. 1,050,338; Nov. 22. Forner, Georg, Berlin, Germany. Steam plant. 1,617,047; Feb. 8. Forney, Cal A., Goshen, assignor to First National Bank of Peru, Ind., trustee. Ironing table, 1,653,355;

18.
Forrester, David L., Globe, Ariz. Flotation method and apparatus, 1,646,019; Oct. 18.
Forrester, John D., Kanass City, Mo., assignor to P. J. McInerney, Dallas, Tex. Making asphaltic road material, 1,620,813; Mar. 15.
Forrester, McIvin B., assignor to J. S. Timmons, Inc., Philadelphia, Pa. Electron-tube construction, 1,613,791; Jan. 11.
Forrester, Michael J., Astoria, N. Y., assignor to Fifth Avenue Coach Company. Vehicle top. 1,630,739; May 31.

Avenue May 31.

May 31.

Porrow, Elwin W., Anaheim, Calif. Flexible swab.

1,628,928; May 3.

Forry, Archie D., Clarksville, Iowa. Implement for cutting and opening pasteboard boxes. 1,626,806; May 3.

Forsberg, Charles, St. Louis, Mo. Oil indicator for gas motors. 1,636,049; July 19.

Forsberg, Frik A., Stockholm, Sweden. assignor to The De Laval Separator Company, New York, N. Y. Edge filter. 1,640,598; Aug. 30.

Forsberg, Oskar E. (See hancetady, N. Y., assignor to General Electric Company, Regenerative braking control. 1,617,151; Feb. 8.

Forsdahl, Peter A., Sulphur Springs, Alberta, Canada. Wrench. 1,635,930; July 12.

Forsell, Martin J., Seattle, Wash. Insecticide. 1,618,702; Feb. 22.

Forsbaw, Richard, Weaste, near Manchester. England.

Forsel, Martin J., Sestite, Wash. Insecticities. 1,613,702; Feb. 22.

Forshaw, Richard, Weaste, near Manibester. England. Knife-sharpening machine. 1,633,885; June 21.

Knife-sharpening machine. 1,633,885; June 21.

Forshee, Frank F., Mansfield, Ohlo, assignor to Westinghouse Electric & Manufacturing Company. Percolator. Des. 71,787; Jan. 4.

Forshee, Frank F., Mansfield, Ohlo, assignor to Westinghouse Electric & Manufacturing Company. Percolator. Des. 71,787; Jan. 4.

Forshee, Frank F., Mansfield, Ohlo, assignor to Westinghouse Electric & Manufacturing Company. Flower of the Manufacturing Company. Electrical heating apparatus. 1,624,402; Apr. 12.

Forshee, Frank F., Mansfield, Ohlo, assignor to Westinghouse Electric & Manufacturing Company. Rangeswitch assembly. 1,649,024; Nov. 15.

Forslund, Gust. (See Schroeder, R. O., and Forslund, Forslund, Forslund, Gust. (See Schroeder, R. O., and Forslund, 1,652,401; Dec. 13.

Forster, Joseph A. (See Kittredge, E. E., Forster, and Johansen.)

Forster, Merle, Oakland, Calif. Piston ring. 1,646,143; Oct. 18. Forsyth, Charles A., Atlanta, Ga. Sign. 1,622,637; Oct. 18. Forsyth, Mar. 29

Forsyth, Charles A., Atlanta, Ga. Sign. 1,622,637; Mar. 23.

Mar. 23. avid. (See Frydern, R., and Forsyth.)

Forsyth, George H., San Francisco, Calif., assignor to Motor Wheel Corporation, Lansing, Mich. Wheel rim assembly. 1,617,999; Feb. 15.

Forsyth, George H., assignor, by mesne assignments, to The Adams & Westlake Company, Chicago, Ill. Bolt Forsyth, George H., Chicago, Ill., assignor to Motor Wheel Corporation, Lansing, Mich. Disk wheel. 1,630,740; May 31.

Forsyth, George H., Chicago, Ill., assignor, by mesne assignments, to the companies of the corporation, Lansing, Mich. Disk wheel. 1,652,343; Checoperation, Lansing, Mich. Disk wheel. 1,652,343; Checoperation, Lansing, Mich. Disk wheel. 1,652,434; Checoperation, Lansing, Mich. Porsyth, Robert, Chicago, Ill., assignor, by mesne assignments, to H. J., Rodgers, received S.

Forsyth, Valoris L., Fort Worth, Tex. Self-aligning pitman-bearing box. 1,615,940; Feb. 1.

Fort, Frank, Glen Ridge, N. J. Combined bathtub and shower casing. Des. 72,942; June 28.

Fortescue, Charles L., Pittsburgh Pa. assignor to West-Ortescue, Charles L., Pittsburgh Pa., assignor to West-Ortescue, Charles L., Pittsburgh Pa. assignor to West-Ortescue, Charles L., Pittsburgh Pa.

pitthan-bearing box. 1,615,940; Peb. 11.

Port, Frank, Glen Ridge, N. J. Combined bathtub and Foth, Frank, Glen Ridge, N. J. Combined bathtub and Foth, Foth Louis, Jersey City, N. J. Insulator. 1,625,645; Apr. 19.

Portescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Insulator. 1,637,374; Aug. 2.

ansignors to Westinghouse Electric and Manufacturing Company. Measuring system. 1,616,691; Jan. 25.

Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,644,467; Oct. 4a., assignor to Westinghouse Electric & Manufacturing Company. System of distribution. 1,647,348; Nov. 1.

Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. System of distribution. 1,647,348; Nov. 1.

Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric and Manufacturing Company. Transmission system. 1,651,519; Dec. 6.

Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Superpower system. 1,651,519; Dec. 6.

Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Superpower system. 1,651,519; Dec. 6.

Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Modulating system. 1,661,253; Dec. 13, assignor to Westinghouse Electric & Manufacturing Company. Modulating system. 1,664,285; Dec. 27.

Forth, Charles, assignor to Capital Manufacturing Co., Detroit, Mich. Exhaust gas heater. 1,633,285; June 28.

Forth, Charles, J., Grand Rapida, Mich. Automatic llquid-weighing machine. 1,631,657; June 44.

Fortin, Joseph O., Ottawa, Ontario, Canada. Camping Fortin, Joseph O., Ottawa, Ontario, Canada. Drafting machine. 1,631,629; Jan. 11.

Fortin, Leon J., Springvale, Me. Rotatable electric connecter for chairs. 1,651,266; Nov. 29.

Fortin, Frank, Washburn, Wis. Trap. 1,630,419; May 31.

Fortin, Joseph O., Ottawa, Ontar

assignor.)
Fort Pitt Bedding Company. (See Findora, John A., as-

Fort Pltt Bedding Company. (See Trimble, Charles P., assignor.)

assignor.)
Fort Pitt Bridge Works of Pittsburgh. (See Wilson,
Frederick R., assignor.)
Fort Pitt Mine Equipment Company. (See Endsley,
Louis E., assignor.)
Fort Pitt Mine Equipment Company. (See Johnson,
George M., assignor.)
Fort Siranwix Tool and Die Co. (See Ahles, Albert P.,

Fort Wayne Engineering & Mfg. Co. (See Astrom, John,

Assignor.)
rt Wayne Engineering and Manufacturing Co. (See Tannchill, Vernon L., assignor.)
rt William Paper Co. (See Larbalester, Ernest, as

signor.)

signor.)

Port Worth Well Machinery & Supply Co. (See Parr, Harris G., assignor.)

Forwood, David F., Taylor, Tex, Grave marker.

1.036, 1.036

Foss-De Loach Company. (See Foss, C. C., and De Loach, assignors.) Loach, assignors.)
ss, Leland L., Pulaski, Ga. Far-distant weighing scale
with improved hopper-supporting means. 1,617,245;
Feb. 8

Feb. a Fosseen, Arthur B. (See Rasmussen, Albert E., assignor.) Fosseen, Arthur B., Spokane, Wash. Roof construction. 1,623,102; Apr. 5. Fosseen, Arthur B., Spokane, Wash. Roof. 1,627,027;

Foster, Albert, Philadelphia, Pa. Curtain support. 1,648,171; Nov. 8.
Foster, Ashford, L., Denver, Colo, Lawn edger. 1,622,398; Mar. 29.
Foster, Charles E., Letchworth, England. Measuring Foster, Charles E., Letchworth, England. Measuring straing instrument. 1,624,155; Apr. 12.
Foster, Charles E., Letchworth, England. Electrical measuring instrument. 1,624,155; Apr. 12.
Foster, Claud H., Wickliffe, Ohio. Shock absorber. 1,619,815; Mar. 8.
Foster, Edgar E., Montgomery, Ala. Boxing apparatus. Foster, Edward C. (See Kirchman, Ferdinand H., assignor.)

Foster, Edward E., Beverly, Mass. Machine for operating upon casting patterns. 1,627,696; May 10.

Foster, Edward E., Beverly, Mass. Puzzle. 1,642,236;

Sept. 13.

Foster, Edward J., Mount Arbun, Ill. Form for constructing drain and sever files. 1,642,531, Sept. 13.

Foster Engineering Company. (See Ford, Ernest B., assignor.)

Foster, Frank M., Columbus, Ohio. Machine for cutting
green corn from the cob. 1,651,591; Dec. 6.

Foster, Frederick */Sea. Bund.

Foster, Frederick. (See Boucher, G. F., Price, and Foster.)

Foster, Frederick. (See Boucher, G. F., Price, and Foster.)

Poster, George P., North Abington, Mass. Antiskid device. 1,618,156; Feb. 15.

For Commercial Commercial

assignor.)

assignor.) Foster, Joseph, jr., assignor to The Enamel Products Company, Cleveland, Ohio. Enameled-metal cover for washtubs, etc. 1,614,364; Jan. 18.
Foster, Julius E., Pittsburgh, P.a., assignor to Westinghouse Electric & Manufacturing Company. Automatic synchronous-converter system. 1,638,341; Aug. 16.
Foster Machine Company. (See McKean, John O., assignor.)

Foster, Mary F., trustee. (See Bollmann, Hermann,

Poster, Raymond L., Apponaug, R. I. Liquid-fuel burner. 1,637,900; Aug. 2. Foster, Raymend L., Apponaug, R. I. Liquid-fuel burner. 1,637,900; Aug. 2. Foster, Samuel P., assignor to R. C. Lynn, Chattanooga, Tenn. Dirigible headlight. 1,633,442; June 21. Foster, Theodore W., & Brother Company. (See Noble, Arthur H., assignor.) Forcer, Theodore W., Bro. Company. (See Wilson, Ralph Forter, Thomas J., Ridgewood, N. J. Floor construction. 1,643,300; Nov. 15. Foster, Thomas J., Ridgewood, N. J. Reenforced concrete construction. 1,637,392; Aug. 2. Foster, Walter H. (See Eden, James A. Jr., assignor.) Foster, Walter H. (See Markland Wyllin H., assignor.) Foster Wheeler Corporation. (See Primrose, John, assignor.)

signor.)
Foster, William. (See Chase, P. H., and Foster.)
Foster, William. Philadelphia, assignor to P. H. Chase,
Bala, Pa. Rack. 1.616.360; Feb. 1.
Foster, William B., Cincinnati, Ohio, assignor to Union
Special Machine Company, Chicago, Ill. Waistband for
trousers. 1.652.567; Dec. 13.
Foster, William E., Detroit, Mich. Polishing wheel and
tracting same. 1.633.523; June 2.
Fostoria Glass Co. (See Green, Edgar M., assignor.)
Fostoria Glass Company. (See Magee, William H., assignor.)

Fotch, John M., Chicago, Ill. Automatic air and gas check valve. 1,619,066; Mar. 1. Fothergill, Harry, and H. Hillier, Westminster, London, England. Steam-condensing and boiler water-supply apparatus of steam-power plants. 1,629,028; May 17. Fotheringham, Thomas B., and M. McIntyre, Seattle, Wash. Street and station indicator. 1,638,631;

Wash. Street and station indicator. 1,638,661; Aug. 9.
Föttinger, Hermann, Zopoch, near Danzig, Free City of James and James a

Founds, Edison A., assignor of one-fourth to R. B. Grimes, Philadelphia, Pa. Aeroplane kite. 1,620,882; Mar. 15.

Mar. 15.
Fountain, Adolph, F. Balzarini, and T. Thiel, San Francisco, Calif. Refiarcing tool. 1,639,173; Aug. 16.
Fountain, Clark O., Moorestown, N. J. Automobile rebound checking device. 1,627,379; May C.
Cutting pilers. 1,641,647; Aug. 20. ce. Binding and
cutting pilers. 1,641,647; Aug. 20. ce. Binding and
cutting pilers. 1,641,647; Aug. 20. Toy auto device.
1,617,480; Feb. 15.
Fourness, Wilfred. (See Marcus, H. C., and Fourness,
Fourness, Wilfred. Pasadena, Calif., assignor to E. G.
Burghard, Cienciale, Calif. Automatic valve control.
Fournier, Oscar, Symmes Township, Hamilton County, as-

LOUGH, USE SEPT. 6. DUTNIER, OSCAR, Symmes Township, Hamilton County, assignor to The United States Playing Card Company, Norwood, Ohio. Step and repeat machine. 1,620,336; Mar. 8.

Mar. 8. Fousek, Joseph, San Francisco, Calif. Pastry dough. 1,625,022; Apr. 19. Fowle, Arthur E., assignor to The Libbey-Owens Sheet Glass Company, Toledo, Ohio. Floater. 1,614,114;

Jan, 11.

Fowler, Arthur E., assignor to The Libbey-Owens Sheet Glass Company, Toledo, Ohlo. Floater. 1, 614,114; Jan. 11.

Fowler, Alfred B., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel Fowler, Alfred B., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in the manufacture of boots and shoes. The state of the state of

Fowler, Ernest U., Santa Ana, Calif. Tree support. 1.644.994; Oct. 11. Fowler, Fred D., Watertown, Mass. Tire. Des. 73,168; Aug. 2.

Homer J., et al. (See Hodges, B. D., and Owen,

Fowler, James N., Mobile, Ala, Heel-attaching device.
1.042,931; Sept. 20.
Fowler, John S., San Mateo, assignor to Pacific Foundry Company. San Francisco, Calif. Dry-pan crusher.
1.025,887; Apr. 20.
Fowler, Lester A., Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa.
Brake-valve device. 1,626,607; May 3.
Fowler, Faul L., assignor to Arthur-Fowler Co., Spokane, Powler, Paul L., assignor to Arthur-Fowler Co., Spokane, Wash. Clamp-on electric heater. 1,642,197; Sept. 13.
Fowler, Stanley, Yorkshire, and E. Edser, London, England. Prevention of corrosion. 1,624,338; Apr. 13.
Fowler, Stanley, Yorkshire, and E. Edser, London, England. Frevention of corrosion. 1,624,338; Apr. 13.
Fowler, Stanley, Yorkshire, and E. Edser, London, England. E. Fowler, Stanley, Sorkshire, and E. Edser, London, England. E. Fowler, Stanley, Yorkshire, and E. Edser, London, England. E. Fowler, Stanley, Yorkshire, and E. Edser, London, England. E. Fowler, Francisch, Spokane, Fowler, Stanley, Sorkshire, and E. Edser, London, England. E. Fowler, Francisch, Spokane, Fowler, Francisch, Spokane, Spo

cx, A. H., Gun Company. (See Henke, Frederick, assignor.)

Testan J.

Cor. Abraham, assignor to The Patricia Pettleont Company. New York, N. Y. Slip, 1,643.884; Sept. 27.

Fox. Anna E. (See Fox, Ivan, assignor.)

Fox Austen H. (See Wright, John E., assignor.)

Fox Automotive Products Corporation. (See Henke, Frederick, assignor.)

Fox Automotive Products Corporation. (See Henke, Frederick W., fr., assignor.)

Fox Automotive Products Corporation. (See Henke, Frederick W., fr., assignor.)

Fox Charles W., Toledo, Ohio. Automatic control for arc lamps, 1,622.605; Mar. 28.

Motor Company. Projection apparatus for stereopticus views and cinematographic films. 1,620.956; Mar. 15.

Fox. Charles E. Sunningdale, and W. Fox. Manchester, England. Oil filter or strainer. 1,652.620; Dec. 13.

Fox. Enrist C., Cleveland, Ohio. Thimble structure for partitions. 1,645.419; Oct. 11.

Fox. George B., and J. G. Christian, Wolcott, N. Y. Counting mechanism for paring machines. 1,616.081; Feb. 1. (See Mettree). P. J. and Fox. (See Mettree).

Feb. 1.
Feb. 1.
Fox. Gordon. (See McIntosh. R. L., and Fox.)
Fox. Gordon. assignor to Freyn Engineering Company.
Chicago, Ill. Heating means for rolls. 1,638,626;
Aug. 9.
Finetave. Company, The. (See Fox. Milford G.

Aug. 9.
Fox, Gustave, Company, The. (See Fox, Parallel Fox, Harold E., Pittsburgh, Pa., assignor to National Electric Manufacturing Company, Reciprocating electric motor, 1.637,813; Aug. 2.
1.628,964; May 17.
Fox, Ivan, assignor to A. E. Fox, Media, Pa. Eye-exercising device. 1.647,117; Oct. 25.
Fox, John C., Rutland, Vt. Siruping-off pan. 1,647,908; Nov. 1.

Nov. 1.

Fox. John H., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making sheet glass. 1,638,723; Aug. 9.

Fox. Julius, assignor of one-fourth to J. II. Grummer and one-fourth to E. O. La Fevre, Cleveland, Ohio. Dirigible aeroplane. 1,630,336; May 31.

Fox. Julius A., assignor to H. Mendes & Company, New York, N. Y. Textile fabric. Des. 72,671; May 17.

Fox. Llewelyn M. (See Addeburg, J. T., and Fox.)

Fox. Martin, Chicago, Ill. Concealed hinge. 1,619,502; Mar, I.

Fox, Mar

Mar. 1.
Fox. Maud C., New York, N. Y. Device for illuminating clocks or the like. 1,628,497; May 10.
Fox. Milford G., assignor to The Gustav Fox Company, Cincinnati, Ohio. Attaching means. 1,636,222; July 19.
Fox. Morris, Norwich, Conn. Bottle. Des. 73,226;

Aug. 9.

Pox. Otto, Lakewood, assignor to The Bryant Heater Manufacturing Company, Cleveland, Ohio. Water heater, 1629,658, May A. E. Stark, East Cleveland, Ohio. The Bryant Heater and Manufacturing Company, Cleveland, Ohio. Thermostatic plot-control system for burners. 1,636,770; July 26.

Pox. Richard W., Birningham, Ala. Tire-repair scraper. 1,632,544; June 14.

Fox. Richard S., Ford City, Pa. Vehicle jack. 1,617.753;

Fox.

Feb. 15.
Fox. Rudolph H., Denver, Colo. Rope-guide roller.
1,019.413; Mar. 1.
Fox. Walter, (See Fox. Charles E. and W.)
Fox. Walter E., Omak, Wash,
alarm. 1.642.649; Sept. 13.
Fox. Werner J., New Orleans, La.
Autor-cycle trailer
attachment. 1,613.946; Jan. 11.
Fox. Werner J., New Orleans, La.
Motor-cycle trailer
attachment. 1,633.986; June 21.
Fox. William H., Minneapolls, Minn.
and producing the same. 1,633.317; June 7.
Foxhoro, Company, The. (See Bristol, Edgar H., aselgmon.)

Foxboro, Company, The. (See Bristol, Edgar II., as-signor.)
Foxboro Company, The. (See Brown, W. C., and Spink, assignors.)
Foxboro Company, The. (See Fitts, Walter H., assignor.)

Forgrover, Joseph A., Chiengo, Ill. Brake-beam safety bracket. 1,650,503: Nov. 22. Foy, Fernand, Gentilly, France. Pulp-molding machine. 1,621,401; Mar. 15. Fr. Hesser Maschinenfabrik Aktiengesellschaft. (See Gangler, Paul, assignor.) Frackeiton, Robert J., Summit, and F. C. Sixt, assignors to The Chandler and Price Company, Cleveland, Ohlo. Adjustable roller track for Gordon printing pressee. 1610,018; Mar. 1. For the Union Metal Manufacturing Company Company, 1,638,431; Aug. 9. Fraim, Samuel R., Lancaster, Pa. Locking device. 1,633,172; June 21. Fraim, Samuel R., Lancaster, Pa. Padlock. 1,635,711; July 12. Fraim, Samuel R., Lancaster, Pa. Locking device. Fraim, Samuel R., Lancaster, Pa. Locking device.

Fraim, Samuel R., Lancaster, Pa. Locking device. 1.652.823; Dec. 13. Fraim-Slaymaker Hardware Co. (See Hanton, Henry H.,

Fram:-Snymaker Hardware Co. (See Hanton, Henry H., assignor.)
Fraim, Walter E., Lancaster, Pa. Padlock for tire carriers. 1,014,066; Jan. 18.
Fraizer, Frank L., assignor to the New Favorite Manufacturing Company, Troy, Ohio. Valve litter. 1,013,450; Frank F., assignor of one-half to J. M. Dedman, Commbin. Tran. Benawahla frasastickness there is the company of the common of the

Jan. 4.
Frakes, Frank F., assignor of one-half to J. M. Dedman,
Columbia, Tenn. Renewable fuse-attachment plug.
1,648,764; Nov. 8.
Frambach, Mathew J., assignor of one-third to E. Neebel
and one-third to J. B. Olhausen, Harrley, Iowa. Theechain link. 1,647,627; Yeb. 15.
Frankley, H. A., & Co. (See Framburg, Henry A.,

and one-third to J. B. Olhausen, Hartley, Iowa. Tirechinin link. 1,617,627; Feb. 15.
Framburg, H. A., & Co. (See Framburg, Henry A., assignor).
Franburg, H. A., & Co. (See Framburg, Henry A., assignor).
Franburg, H. Lighting fature, 1,647,288; Nov. 1.
Frame, William S., Schenectady, N. Y. Manhole. 1,639,495; Aug. 16.
Frampton, John A., Columbus, Ohio. Figure toy. 1,643,066; Sept. 20.
Francetail Frampton, John A., Columbus, Ohio. Figure toy. 1,643,066; Sept. 20.
Francetail Frampton, John A., Columbus, Ohio. Figure toy. 1,643,066; Sept. 20.
Francetail Francetail Francetail France, Antoine, Liege, Belgium, Mineral-concentrating plant. 1,616,791; Feb. 8.
France, Antoine, Liege, Belgium, Mineral-concentrating plant. 1,616,791; Feb. 8.
France Foundry & Machine Co., The. (See Slee, Daniel G., assignor).
Franchetti.
Franchetti. Oreste, assignor to G. Ratti, Turin, Italy. Goggles. 1,647,107; Oct. 25.
Franchouse, The Machine Co., The. (See Slee, Daniel G., assignor).
Franchetti. Oreste, assignor to G. Ratti, Turin, Italy. Goggles. 1,647,107; Oct. 25.
Franchouse, The Machine Co., The. (See Slee, Daniel G., assignor).
Franchetti. The Machine Co., The. (See Slee, Daniel G., assignor).
Franchetti. Oreste, assignor to G. Ratti, Turin, Italy. Goggles. 1,647,107; Oct. 25.
Franchetti. Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.
Francis, Andrew J., George West, Tex. Sweep. 1,648,843; Nov. 8.

Nov. 8

Francis, Bertram, Kisil, Africa. Flying machine of the biplane type. 1,613,091; Jan. 4.

Francis, Jacob R. (See Redmond, Albert G., assignor.)

Francis, Jacob R., Flint, Mich. Thermostatic heat control for internal-combustion engines. 1,613,029; Jan. 4.

Francis, Jacob R., Flint, Mich. Heat control for internal-combustion engines. 1,626,727; May 3.

Francis, Louis, Miami, Fla. Woven-wire art canvas. 1,616,445; Feb. 8.

Francis, Louis, Miami, Fla. Paint formula. 1,639,599; Aug. 16.

1.616.440; reus.

Francis, Louis, Miamil, Fila. Paint Reus.

Aug. 16
Francis, Debert L., Hendersonville, N. C. Hydraulic
Francis, The mechanism. 1.615.075; Jan. 18.
Francis, Roy E. (See McCulloch, J. W., and Francis,)
Francisc, George D., assignor to The Jeffrey Manufactur
ing Company, Columbus, Obio. Conveyer mechanism
and particularly conveyer pulley supports. 1.630.651;
July 19. July 19. Franck, Ed Hutchins

Industry Contents of the Supports 1,636,631, July 19.

Franck, Edwin G., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Repair construction for wooden-frame box cars. 1,630,483; May 3, 686, Shockley, William I., assignor, Francke, Elizabeth A., New York, N. Y. Doll made of fibrous materials. 1,612,805; Jan. 4.

Francke, Louis S., New Orleans, La. Numbered playing cards. 1,652,979; Dec. 13.

Francke, William J., assignor, by mesne assignments, to John Waldron Corporation, New Brunswick, N. J. Power-transmitting device. Rela.829; Dec. 27.

Francke, William J., assignor, by mesne assignments, to John Waldron Corporation, New Brunswick, N. J. Flexible coupling. 1,622,101; Mar. 22.

Francke, William J., assignor, by mesne assignments, to John Waldron Corporation, New Brunswick, N. J. Flexible coupling. 1,622,101; Mar. 22.

Francke, William J., assignor, by mesne assignments, to Jerstble coupling. 1,623,458; Apr. 26.

Francke, William J., assignor, by mesne assignments, to Jerstble coupling. 1,623,458; Apr. 26.

Francke, William J., adecassed, New Brunswick, N. J. Flexible coupling. 1,623,458; Apr. 26.

Beals, Plainfield, R. G. Savoye, Westfield, and R. E. Watson, Highland Park, N. J., executors. Testing machine. 1,654,495; Dec. 27.

Francke Computation Company, The. (See Neclands, Abrom R., assignor.)

Francis Computation Company, The. (See Neclands, Abrom R., assignor.)

Franche Michael Company, The. (See Neclands, Abrom R., assignor.)

Franche Michael Company, The. (See Neclands, Abrom R., assignor.)

Frangedakis, Emmanuel J., Philadelphia, Pa. Coloscope, 1,633,443; June 21. Franic, Adolph, assignor to Tamboritza Manufacturing Company, Fort Recovery, Ohio. Stringed instrument. 1,637,639; Aug. 2. Frank, Benjumia E. (See Schuman, I., and Frank, Prank, Edward, Berkeley, Calif. Shoe tip. 1,651,345;

Frank, Benjamin E. (See Schuller, 1972).

Frank, Raward, Berkeley, Calif. Shoe tip. 1,651,345;

Nov. 29.

Frank, Harrison J. L., assignor to Mutual Electric and Company.

1.633,578; June 28.

Frank, Harrison, J. L., assignor to Mutual Electric and Machine Company, Detroit, Mich. Electric switch.

1,643,768; Sept. 27.

Frank, Isanah, Flushing, N. Y. Ray-filter glass. 1,615,448;

Jan. 25.

Frank, John G., Buffalo, N. Y. Magnet-power-transmission gearing. 1,623,669; Apr. 5.

Frank, John G., Buffalo, N. Y. Magnet-power-transmission gearing. 1,623,669; Apr. 5.

Frank, John M., and A. G. Sutcliffe, assignors to Ilg Electric Ventilating Company, Chicago, Ill. Ventilating apparatus. 1,633,579; June 28.

Frank, John M., and A. G. Sutcliffe, assignors to Ilg Electric Ventilating Company, Chicago, Ill. Ventilating apparatus. 1,633,579; June 28.

Frank, M. C. (See Myers, Genevieve H., assignor.)

Frank, M. C. (See Myers, Genevieve H., assignor.)

Frank, M. C., Cet al. (See Hendrickson, Henry P., assignor, Martin Eraschivn, N. Y. Waterproof, vest-pocket

Figure.)
Frank, Martin, Brooklyn, N. Y. Waterproof vest-pocket sun watch. 1,621,661; Mar. 22.
Frank, Milton A., San Francisco, Calif. Bearing-pin lubricator and obstruction ejector. 1,628,833; May 17.
Frank, Milton A., San Francisco, Calif. High-pressure vacuum grease gun. 1,628,834; May 17.
Frank, Faul A., Zakron, Ohio. Razor sharpener.
Frank, Samuel K. (See Powell, Dalton U., assignor.)
Frank, Watter N., assignor to The Grolan Manufacturing Company, Dayton, Ohio. Liquid-level gauge. 1,630,000; May 24.

Company, Dayton, Unio. Laquid-level gauge. 1,530,000; May 24;
Franke, Bernard E., Catonsville, Md. Paper spool. 1,628,040; May 10.
Franke, Charles A. (See Bilderback, H. S., and Franke.)
Franke, George O., assignor to A. E. Probst and P. A.
Franke, Thrall, Tex. Cultivator standard. 1,622,865;
Mar. 29.

Markey Hardin, Tex. Chirakter standard. 1,022,805; Markey Harden, C. Evanston, Ill., and R. C. Banes, Providence, R. I. Baseball game. 1,625,200; Apr. 19
Pranke, Hermann, Hanover, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshobe, Germany. Closure means for manhole openings in steam boilers. 1,632,957; June 21.
Franke, P. A., et al. (See Franke, George O., assignor.)
Frankel, Gustave, Chicago, Ill. Receptacle for connecting plugs. 1,628,369; May 24.
1,623,470; Apr. 1,629,463; May 24.
1,623,571; Apr. 5, Deboken, N. J. Exercising apparatus. 1,623,671; Apr. 5, Franklin, Albert W., assignor to Chas. Freshman Co. Inc., New York, N. Y. Variable-condenser drive. 1,618,525; Feb. 22.

Franklin, Albert W., assignor to Chas. Freshman Co. Inc., New York, N. Y. Vernier tuning dial. 1,619,338;

Franklin, Albert W., assignor to Class. Freshman Co.
Franklin, Albert W., assignor to Chas. Freshman Co.
Inc. New York, N. Y. Variable mica condenser.
Franklin, Charles S., London, England, assignor to Radlo
Corporation of America. Electrical condenser.
I,628,669; May 17.
Franklin, Edward J., Salt Lake City, Utah. Water-tube
bridge-wall baffle for steam bollers. I,634,139; June 28.
Franklin Equipment Company. (See Langer, Rudolph J.,
assignor.)

Franklin Equipment Company. (See Langer, Rudolpa v., assignor.)
Pranklin, H. H., Manufacturing Company. (See Burns, John L., assignor.)
Franklin, H. H., Manufacturing Company. (See De Causse, Frank, assignor.)
Franklin, H. H., Manufacturing Company. (See Wilkin-Franklin, Ned G. assignor of one-half to I. A. Smith, Independence, Mo. Rail joint. 1,630,003; May 24.
Franklin Pottery. (See Schweiker, Roy W. assignor.)
Franklin Radio Company. (See Clarke, Ralph A., assignor.)

signor.)
Franklin Railway Supply Company. (See Comley, Walter T., assignor.)
Franklin Railway Supply Company. (See Cox, Walter J.,

Franklin Rallway Supply Company. (See Cox, Walter J., assignor.)
Franklin Rullway Supply Company. (See Fritcher, Variable W. assignor.)
Franklin Rallway Supply Company. (See Martin, Frederick W., assignor.)
Franklin Rallway Supply Company. (See Peters, Frank R., assignor.)
Franklin Rallway Supply Company. (See Roberts, Montague H., assignor.)
Franklin Rallway Supply Company. (See Vincent, Franklin Rallway Supply Company. (See Vincent, Franklin Rallway Supply Company. (See Zouck, George H., assignor.)

Franklin, Robert B. W., Dallas, Tex. Automatic time-controlled switch for electric circuits. 1,616,120; Simon & Co. (See Burns, Katherine E., as-

Franklin Simon & Co. (See Davis, Taube, assignor.) Franklin, Simon & Co. (See Schmolze, Mildred C., as-

Franklin Simon & Co. (See Siegel, Maude, assignor.)
Franklin Simon & Co. Inc. (See Davis, Taube, as-Franklin signor.)

Franklin Simon & Co. Inc. (See Siegel, Maude, as signor.)

Franklin' Simon & Co. Inc. (See Siegel, Maude, assignor.)
Franklin, William E., Earlham, Iowa. Well-water-lifting device. J.616,219; Feb. 1.
Franklin, William S., Cambridge, Mass. Pump and internal-combustion engine therefor. 1,623,402; Apr. 5.
Franks, Clem H., La Grange, Ill., assignor to Western Device of the Company articles from Puploos maternal. 1,632,398; June 14.
Franks, Clem H., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Protective Coating. 1,633,576; June 28.
Franks, Clem H., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Protective Coating. 1,633,576; June 28.
Franks, Clem H., La Grange, Ill., assignor to Western trical coll. 1,633,577; June 28.
Franks, Massell, (See Field, B. E., and Franks, Pranks, Thomas, Walsall, England. Coupling for vehicles. 1,627,430; May 3.
Franks, Thomas, Walsall, England. Drawbar coupling. 1,623,671; May 10.
Frantz, Charles T., assignor to Recording Thermometer Company, Los Angeles, Callf, Frinting machine. 1,626,401; Apr. 26.
Frantz, George A., et al., trustees. (See Baker, William E., assignor.)
Frantz, Grover C., assignor to Modern Utilities Company, June 1977, Prantz, Grover C., assignor to Modern Utilities Company, June 1977, Prantz, Grover C., assignor to Modern Utilities Company, June 1977, Prantz, Grover C., assignor to Modern Utilities Company, June 1977, Prantz, Manufacturing Co. (See Ferris, William D. assignants). Frantz, Grandemeasuring device. 1,633,554; June 1977, Prantz Manufacturing Co. (See Ferris, William D. assignants).

Frantz Manufacturing Co. (See Ferris, William D., as-

Frantz Manufacturing Co. (See Frantz, Peter, assignor.) Frantz, Peter, assignor to Frantz Manufacturing Company, Sterling, Ill. Padlock-hasp device. 1,623,050;

pany Sterling, Ill. Padlock-hasp device. 1,623,050; Apr. 5.
Frantz. Peter, assignor to Frantz Manufacturing Co., Sterling, Ill. Door latch. 1,630,379; May 31.
Frantz. Walter A., Cleveland, Ohio. Ironing machine. 1,634,535; July 5.
Frantz. Walter A., Cleveland Ohio. Laundry apparatus. 1,634,539; July 5.
Frantz. Walter A., Cleveland Heights, assignor to The Apex Electrical Manufacturing Company. Cleveland, Ohio. Operating mechanism. 1,653,266; Dec. 20.
Ohio. Operating mechanism. 1,653,266; Dec. 20.
1,640,071; Aug. 3.
Franz. Josef, Bischofswerda, Germany. Cop tube. 1,628,457; May 10.
Franz Manufacturing Co. (See Thorne, Lawrence C., assignor.)

Franz Manufacturing Co. (See Thorne, Lawrence C., assignor.)
Frauz and Summers. (See Summers, Louis D., assignor.)
Franz and Summers. (See Summers, Louis D., assignor.)
Franzen, Richart F., Defiance, Ohio. Camp stool.
1,635,828; July 12.
Franzen, Nicklas, Long Beach, Calif. Production of sheet
glass. 1,617,800; Feb. 15.
Franzen, Tore, assignor to Detroit Steel Products Compathy, Detroit, Mich. Vehicle spring suspension.
1,644,481; June 28.
Franzen, Torington, Conn.
1,633,781; June 28.
Frasch, Louis, Tortrington, Conn.
1,633,781; June 28.
Frasch, Laus, Tortrington, Conn.
1,632,781; June 28.
Frasch, Hans A., New York, N. Y. Reclaiming waste
lubricating mineral oil containing soaps. 1,651,688;
Dec. 6.

lubricating mineral oil containing soaps. 1,651,688; Dec. 6.
Fraser, Alfred J., El Paso, Tex. Gas-burner valveoperating device. 1,637,143°. July 26.
Fraser, Charles E., Brooklyn, N. Y., assignor to the
1,642,436; Sept. 13.
Fraser, Chelsea C., and J. A. Goss, Grand Rapids, Mich.
Deck. 1,652,744; Dec. 13.
Fraser, Frank. (See Baker, N. M., and Fraser.)
Fraser, Frank. assignor to The Libbey-Owens Sheet Glaseratus. 1,623,051; Apr. 5.
Multiple-sheet-flowing apparatus. 1,623,051; Apr. 6.
Maring ophthalmic blanks.
1,630,262; May 31.
Fraser, Frank. assignor to American Optical Company,
Southbridge, Mass.
Making ophthalmic blanks.
1,630,262; May 31.
Fraser, James, Edgemoor, assignor to Speakman Company, Wilmington, Del. Foot-actuated valve. 1,629,496; Any 24.
May 24.
Fraser, James, Edgemoor, assignor to Speakman Company, Wilmington, Del. Foot-actuated valve. 1,629,496; Any 24.
Fraser, Kenneth G., Wellton, Ariz. Filter funnel.
1,627,083; May 3.
Fraser, Malcoim E., and L. Schultz, Detroit, Mich.
Aerial. 1,639,727; Aug. 23.

Fraser, Samuel O., Pittsburgh, Pa. Badge. Des. 71,963;

Fraser, Samuel O., Pittsburgh, Pa. Badge. Des. 71,963;
Freb. 8.
Fraser, Varren F., Westboro, Mass. Lapping machine
Fraser, William D., Cleveland, Ohio. Portable charcoal
stove. 1,614,785; Jan. 18.
Fraser, William D., Cleveland, Ohio. Portable charcoal
stove. 1,614,785; Jan. 18.
Fraser, William J., Toronto, Ontario, Canada. Switch.
1,629,497; May 24.
Frasier, Lee, and C.
Straightener. 1,616,635; Feb.;
atralgatener. 1,616,635; Feb.;
Britkin, Corinth, N. Y. License-plate holder. 1,652,664;
Dec. 13.
Frater, William H., assignor to American Autoparts
Company, Detroit, Mich. Adjustable form for shaping
articles. 1,640,827; Aug. 80.
Frater, William H., assignor to American Autoparts
Company, Detroit, Mich. Adjustable form for shaping
articles. 1,640,827; Aug. 80.
Frater, William H., assignor to American Autoparts
Company, Detroit, July 19.
Frattallone, Theodore R., Bronx, N. Y. Washing attachment for tubs. 1,634,261; Dec. 27.
Frattallone, Theodore R., Bronx, N. Y. Washing attachment for tubs. 1,634,491 bec. 20.
Frauenthal Harold.
Frater, Harold.
Frater, Harold.
Fravel, Tarak, Washington, D. C. Mooring mast.
1,634,989; July 5.
Fravel, Tarak, D., Springfield, W. E., and Frazler,
Frazler, Frank D., Springfield, W. E., and Frazler,
Frazler, Bert, Pittsburgh, Pa. Concealed stairway
1,633,321; June 21.
Frazler, Frederick A., Berkeley, assignor to F. A. Frazler
Company, San Francisce, Calif. Sulphu compound and
Frazler, George H., Crafton, and A. E. Herrold, Pittsburgh, Fa. Derailer. 1,643,376; Sept. 27.
Frazler, George H., Crafton, and A. E. Herrold, Pittsburgh, Fa. Derailer. 1,643,376; Sept. 27.
Frazler, George H., Crafton, and A. E. Herrold, Pittsburgh, Fa. Derailer. 1,643,376; Sept. 27.
Frazler, George H., Crafton, and A. E. Herrold, Pittsburgh, Fa. Derailer. 1,643,376; Sept. 27.
Frazler, George H., Crafton, and A. E. Herrold, Pittsburgh, Fa. Derailer. 1,643,376; Sept. 27.
Frazler, George H., Crafton, and F. E. Hansen, Lakewood, assignors to The Hansen Manufacturing Company, Cleveland, Ohio. Spraying device

pany, Feb. 8.

pany, Cleveland, Ohio. Spraying device. 1,616,685; Feb. 8, John W., assignor-to Uyalde Rock Asphalt Company, San Antonio, Tex. Trenting rock asphalt for particle and the special spec

Nov. 29.
Fredenburg, William M., Paso Robles, Calif. Account system. 1,630,840; May 31.
Fredenburgh, Mark N., East Orange, N. J., assignor to Westinghouse Lamp Company. Inking device for obtaining uniform printing on lamp bulbs. 1,645,045; Oct. 11.
Fredenburgh: Charles W., assignor to Eastman Kodik Com-

Frederick, Charles W., assignor to Eastman Kodak pany, Rochester, N. Y. Projection system. 1,62 Mar. 8. Codak Com-1.620.338 :

pnny, Rochester, N. Y. Projection system. 1,620,338; Mar. 8.
Frederick: Charles W., assignor to Eastman Kodak Company, Rochester, N. Y. Lens. 1,627,832; May 10.
Frederick: Charles W., and P. E. Altman, assignors to Eastman Kodak Company, Rochester, N. Y. Objective. 6,203,337; Mar. 8.
Frederick: Charles W., and D. L. Wood, assignors to Eastman Kodak Company, Rochester, N. Y. Projection objective. 1,620,339; Mar. 8.
Frederick: Edwin L. (See Gibbs, H. D., and Frederick. Frederick Iron & Steel Company, The. (See Raun, Feter Frederick Iron & Steel Company, The. (See Raun, Feter Frederick Iron and Steel Company, The. (See Winkle, George J., assignor.)
Frederick, John E., Kokomo, Ind. Wire reel. 1,634,899; July 5.
Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Composite gear and making same. 1,626,230; Apr. 26.
Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Composite gear and making same. 1,623,230; Apr. 26.
Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Composite gear and making same. 1,628,230; Apr. 26.
Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Telephone diaphragm. 1,636,410; Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Telephone diaphragm. 1,636,410; Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Telephone diaphragm. 1,636,410; Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Telephone diaphragm. 1,636,410; Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Telephone diaphragm. 1,636,410; Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Telephone diaphragm. 1,636,410; Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Composite gear and making the Company Valparai

Frederick, Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Composite gear and making same. 1,638.41; July 19.
Frederick Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Composite gear and making same. 1,638.41; July 19.
Frederick Louis T., assignor to Fibroc Insulation Company, Valparaiso, Ind. Making tubes. 4,646,479;

Frederick, Rheuel H., Irvington, N. J., assignor of twofifths to C. F. Ames, Brooklyn, and one-fifth to A. H. E.
Berchem, New York, N. Y. Vacuum-producing apFrederick, Rheuel H., Irvington, N. J., assignor of twofifths to C. F. Ames, Brooklyn, and one-fifth to A. H. E.
Berchem, New York, N. Y. Centrifugal pump,
1,623,104; Apr. 5.
Frederick, Adolf, Monterey Park, Calif. Low-level alarm
Fredericks, Walter F., Minneapolis, Minn. Window-raising device. 1,627,697; May 10.
Fredericks, Walter F., Minneapolis, Minn. Window-raising device. 1,627,697; May 10.
Frederickson, Azel L., San Francisco, and E. C. Pitcher,
Hayward, Calif. Wall-board machine. 1,636,645;
Peterickson, Otto A., assignor to The American Wiremold
Con, Hartford, Conn. Electrical conduit. 1,622,032;
Mar. 22.
Frederickson, Otto A., Wethersfield, assignor to The
American Wiremold Company, Hartford, Conn. Electric-bracket outlet. 1,624,547; Apr. 12.
Frederickson, Otto A., Wethersfield, assignor to The
American Wiremold Company, Hartford, Conn. Electric-bracket outlet. 1,624,547; Apr. 12.
Frederickson, Otto A., Wethersfield, assignor to The
Wiremold Company, Hartford, Conn. Protecting coating for covered conductors and applying the same.
Frederics, E., Inc. (See Brown, James C., assignor.)
Frederics, E., Inc. (See Frederics, Ernest O., assignor.)
Frederics, E., Inc. (See Frederics, Ernest O., assignor.)
Frederick, Frank B., Newark, N. J. Headlight antiglare
Frederick, Prank B., Newark, N. J. Headlight antiglare
Frederick, Onthe Device Market, Charles H., Springfield, Mo. Pulley-attaching
Induced Prank H., Newark, N. J. Headlight antiglare
Frederick, John P., Springfield, Mo. Pulley-attaching
Induced Prank H., Newark, N. J. Headlight antiglare
Frederick, John P., Springfield, Mo. Pulley-attaching
Induced Prank H., Newark, N. J. Headlight antiglare
Frederick, John P., Springfield, Mo. Pulley-attaching
Induced Prank H., Newark, N. J. Headlight antiglare
Frederick, John P., Brooklyn, assignor to The Kalb.
Fredirick, John P., Brooklyn, assignor t

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Jan. 4. Miss. Scientife yindring installer. 1,612,917; Jan. 4. [16]. S., New York, N. Y. Motor-vehicle body. Dev. 73,602; Oct. 11. [17]. Oct. 73,602; Oct. 11. [17]. Oct. 73,602; Oct. 11. [18]. Oct. 73,602; Oct. 11. [19]. Oct. 74,602; Oct. 11. [19]. Oct. 74,602; Oct. 11. [19]. Oct. 74,602; O

Feb. 1.

Freegard, William, St. Louis, Mo., assignor to The Barber Asphalt Company, Philadelphia, Fa. Flexible shingle. 1,625,308; Apr. 19.

Freel, Francis E., Niles, Ohio. Tank-car-cleaning device. 1,024,866; Apr. 12.

Freeland, Claude L., Bristow, Okla. Process of and apparatus for condensite, treating, and washing hydropartus for condensite, treating, and washing hydroparatus for condensite, treating, and washing hydroparatus for condensite, treating, and washing hydroparatus for condensite, and for the conveyer. 1,631,367; June 7.

Freeman, Bertrand B., Pontlac Mich. Collapsible packing case. 1,636,223; July 19.

Freeman, Charles F., et al., trustees. (See Freeman, Freeman, Charles M. (See Large, E. R., and Freeman, Preeman-Daughaday Co. (See Hallihan, John J., assignor.)

signor.)
Freeman, Deane M., Brookline, Mass. Coated confection, 1.627,641; May 10.
Freeman, Deane M., Brookline, Mass. Implement for making coated confections. 1.627.642; May 10.
Freeman, Eddrar H., assignor, by mesne assignments, to Circle F. Mfg. Co., Trenton, N. J. Push-switch socket, 1.645.130; Oct. 11.

Freeman, Henry, Tonica, Ill. Moisture-supplying attachment for carburetors, 1,615,320; Jan. 25. Freeman, Henry O., Eden, Idaho. Grain separator. 1,617,246; Feb. 8. Freeman, Hidden B., Crewe, Va. Display container. 1,622,194; Mar. 22. Freeman, Hidden B., Crewe, Va. Display container. 1,622,194; Mar. 22. Freeman, Horace, Vancouver, British Columbia, assignor of one-half to Canada Carbide Company, Limited, Montreal, Canada. Maunfacture of alkali-metal sulphides. 1,640,314; Aug. 23. Falls, Quebec, assignor of one-half to Canada Carbine Company, Limited, Montreal, Canada. Maunfacture of alkali-metal sulphides. 1,640,315; Aug. 23. Freeman, John R. (See Klivoshein, Gregory G., assignor.) Freeman, John R., Providence, R. L. Apparatus and

signor.)
Freeman, John R., Providence, R. I. Apparatus and method of constructing and sinking a calsson. 1,630,337; May 31.
Freeman, John R., Providence, R. I. Lantern silde, 1,633,376; June 21.
Freeman, Joseph. (See O'Brien, F. E., and Freeman, assignor.)

Freeman, Joseph. (See O'Brien, F. E., and Freeman, assignor.)
Freeman, Louis G., et al., trustees. (See Freeman, Louis G., assignor.)
G., cincinnati, Obio. Shank-beating and stitch-rubbing machine. 1,624,326; Apr. 12.
Freeman, Louis G., et al., trustees. (See Freeman, Louis G., assignor.)
G., Cincinnati, Obio. Shank-beating and stitch-rubbing machine. 1,624,326; Apr. 12.
Freeman, Louis G., assignor to L. G. and C. F. Freeman, trustees, Cincinnati, Obio. Shank-beating and stitch-rubbing machine. Rel6,710; Aug. 23.
Freeman, Lowell C., assignor to Hupp Motor Car Corporation, Detroit, Mich. Seat construction. 1,639,371; Freeman, Nat H., Holborn, London, England. Controlling the temperature in furnaces and other apparatus. 1,614,723; Jan. 18.
Freeman, Ralph F., assignor of one-half to R. D. Smith, Ashland, Kans. Thre carrier. 1,625,338; May 10.
Freeman, Walter A., South Faschen, Calif. Smokers' Freeman, Walter B., U. C. Haren, and F. P. Hartung, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Method and apparatus for making tire treads. 1,635,356; Dec. 20.
Freeman, William H. (See Gregory, Charles, assignor.)
Freer, Alten O., New York, N. Y. Package mold.

Freeman, William B. (See Devis, D. M. and Freeman.)
Freeman, William H. (See Haffey, Matthew J., assignor.)
Freer, Allen O., New York, N. Y. Package mold.
1.655.899; Dec. 27.
Freer, Phelps M., Detroit, Mich. Apparatus for removing water gasoline, and the like from lubricating oils.
Freer, Phelps M., Detroit, Mich. Piston. 1,622,579;
Mar. 29.
Freere, Walter E., Tulare, Calif. Switch. 1,622,906;
Mar. 29.
Freese, Walter E., Tulare, Calif. Switch. 1,622,906;
Mar. 29.
Freese, Walter E., Tulare, Calif. Switch. 1,622,906;
Mar. 29.
Freeze, Oils A., Joliet, Ill. Pressure-operated valve.
1,651,689; Dec. 6.
Freiberg-Simrall Company, The. (See Utz, Louis F., assignor.)
Freiberg, Theodors, Prescott, Ariz. Ore crusher.
1,633,124; June 14.
Freilino, Secondo, Leechburg, Pa. Household food cutter.
1,638,991; Aug. 16.
Freise, Albert M., Oakland, Calif. Well seat. 1,617,901;
Freb. 15.
Freise, Frederick W. (See Barsky, G., and Freise.)

Feb. 15.
Freise, Frederick W. (See Barsky, G., and Freise.)
Freise, Henry F.. Old Monroe, Mo. Corn-husking machine. 1,635,400; July 12.
Freivogel, Ernest, assignor of one-half to R. A. Jackson, Ridgefield, Conn. Tire rlm. 1,649,678; Nov. 15.
Freivogel, Ernest, assignor of one-half to R. A. Jackson, Ridgefield, Conn. Combined ther rack and workbench.
Freise, T. Company, Phenomena, Articulated car. 1,621,979; Mar. 20.

Company, Pittburgh, Pa. Articulated car. 1,621,979; Mar. 20.

Mar. 22.
Freman, John W., South Carlton, Australia. Furnace.
1.632.730; June 14.
Fremon, Julea A. and A. S. De Haven. Leeper, Mc. asFremon, Julea A. ansafer Pen Company, Fort Mc. asLowa. Fountain-pen rack. 1.641.846; Sent. 6.
House. Fountain-pen rack. 1.641.846; Sent. 6.
Fremont, Albert, Faris, France. Stapling machine.
1.648.727; Nov. 8.
French Baltred W., Plqua, Ohlo. Expressing apparatus.
1.645.477; Nov. 8.
French Battery & Carbon Company. (See Baird, Frank T.,

French Battery Company. (See Affholder, Clements S., Battery Company. (See Cirves, Frank H., as-

Freuen Battery Company. (See Meisekothen, Edwin E., assignor). assignor). Assignories A., Columbus, Ohlo. Steam-power plant. 1,617,686; Feb. 15.

French, Charles A., and L. E. Goit, assignors to International Harvester Company, Chicago, Ill. Boller regulator. 1,632,125; June 14.
French, Clara B. (See French, Sherman, assignor.)
French, Edwin F., Cleveland, Ohio. Combination house-bold article. 1,616,315; Feb. 1.
French, Frederick W., Oakland, Calif. Antproof shelf.
French, Brederick W., Oakland, Calif. Demountable rim. 1,638,991; Aug. 23.
French, G. Watson, et al. (See Einfeldt, Ernest E., assignor.)

signor.)

1,642,416; Sept. 1o. Frère, Maurice P. C. (See Jacquemin, J. E. T., and Frère.) Freichs, Frederick A., assignor to The Horn & Brannen Manufacturing Co. Inc., Philadelphia, Pa. Electric socket support and housing. 1,638,662; Aug. 9. Frese, Fredrick W., Spokane, Wash. Internal-combustion engine. 1,624,404; Apr. 12. Freshman Chas., Co. Inc. (See Franklin, Albert W., 48stinor.)

assignor. A., Sacramento, Calif. Trailer and power unit for soil pulverizers. 1,618,000; Feb. 15.
Fretz-Moon Tube Company. (See Moon, John W., as-

Pretters, Reary A., Sacramento, Calif. Trailer and power unit for soil pulveriers. 1,618,000; Feb. 15.

signor.) Thue Company. (See Moon, John W., assignor.) Preudenberg, Sarah, Brooklyn, N. Y. Pile textile fabric. 1,620,340; Mar. 8.

Freudenberger, Ercderick, Philadelphia, Pa. Garment services of the company. Chicago, Ill. Brooklyn, N. Y. Pile textile fabric. Dec. 27.

Freund, Cherl S., assignor to Federal Cement Tile Company. Chicago, Ill. Bullding tile or siab. 1,627,280; J. 1,627,280

Frew, George H., Jr., et al. (See Smith, Constructing signor.)
Frewen, Edmond J., London, England. Constructing walls. 1.652.305: Dec. 13.
Frey, Charles D., Charlotte, N. C. Combination guide.
1.630.120: May 24.
Frey. Charles M. (See Heaton, William H., assignen, Frey, Charles N. (See Hildebrandt, F. M., and Frey.)
Frey, Henry. (See Daugert, P., Frey, and Dunleavy.)

Frey, Karl, Ennetbaden, assignor to A. G. Brown, Boveri & Cle., Baden, Switzerland. Compressor apparatus. 1,635.318; July 12. Frey, Ralph E., Ambler, Pa., assignor to Ambler Asbestos Shingle, Siate and Sheathing Company. Fastener. 1,646.285; Oct. 18. Frey, Robert, Altoona, Pa. Trouser stretcher. 1,629,650; May 24. Frey, Stemud. Los Angeles, Calif. Canteen set.

May Jigmund, Los Angeles, Los Prey, Sigmund, Los Angeles, Los J. 651,880; Dec. 6. Freydberg, Aaron and J. Marcus, New York, N. Y. Binding strip. 1,688,254; Aug. 9. Freyn, Brassert & Company. (See Ebner, Alfred J., as-Freyn, Brassert & Company.)

Freyn Engineering Company. (See Eaton, W., and Crox-ton, assignors.)
Freyn Engineering Company. (See Fox, Gordon, as-

Freyn Engineering Company. (See McIntosh, R. L., Freyn Engineering Company. (See Willcox, Frederick Freyn Engineering Company. (See Willcox, Frederick

Free Parties of States of

1,623,916; Apr. 5.
Frick, Chester A., assignor to Glascock Brothers Mfg.
Company, Muncie, Ind. Bottle refrigerator. 1,623,947;
Apr. 5.
Frick, Chester A., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Guide for bottle refrigerators. 1,631,091; May 31.
Frick, Chester A., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Corrugated-sheep Company, Muncie, Ind. 2, 13.
Frick, Dec. 13.
Company, Muncie, Ind. Refrigerator drain. 1,652,665; Dec. 13.

Dec. 14.

Dec. 14.

Dec. 14.

Dec. 14.

Dec. 14.

Dec. 14.

Dec. 15.

Dec. 1

signors.)
Frick Company. (See Small, Norman M., assignor.)
Frick Company. (See Whitaker, C. L., and Middleton,

assignors.) assignors.)
Frick, Frederick F. (See Laist, F., and Frick, 16 Frick, Frederick F. (See Larison, E. L., Frick, and Caro.)
Frick, Frederick F. (See Larison, E. L., Frick, and Frick, 16 Frick, Less, Pa. Power-transmitting means.
Frick, Rudolph. (See Madison, John H., assignor.)
Fricke, Leslie W. (See Booty, Philip C. P., assignor.)
Fricker, Anthony, Lakewood, Ohio. Clasp. 1,621,008;
Mar. 15.

1,621,008;

Frickey, Royal E., San Francisco, and A. S. Kalenborn, Redwood City, Calif. Engine controller for welding systems. 1,643,550; Sept. 27. Frickey, Royal E., San Francisco, and W. R. Layne. Oakland, Calif. Pumping system. 1,651,581; Dec. 6. Friction Power Corporation Limited. (See McPherson.

Onkland, Calif. Pumping system, 1,651,881; Dec. 6. Friction Power Corporation Limited, (See McPherson, Charles, assignor.)
Friden, Carl M. F., Oakland, Calif. Motor vehicle and engine control. 1,618,586; Feb. 22.
Friden, Carl M. F., Oakland, Calif. Calculating machine. 1,643,531; Sept. 27.
Friden, Carl M. F., Oakland, Calif. Register dial. 1,643,531; Sept. 27.
Friden, Carl M. F., Oakland, Calif. Calculating machine. 1,651,882; Dec. 6.
Friden, Carl M. F., Pledmont, Calif. Calculating machine. 1,634,990; July 5.
Friden, Carl M. F., Pledmont, Calif. Calculating machine. 1,634,990; July 5.
Friden, Carl M. F., Pledmont, Calif. Calculating machine. 1,634,990; July 5.
Friden, Carl M. F., Pledmont, Calif. Calculating machine. 1,634,990; July 5.
Friden, Carl M. F., Pledmont, Calif. Calculating machine. 1,634,990; July 5.
Friden, Carl M. F., Childen, M. Nose tile. Des. 73,124; July 26.
Fridener, Alfred L., Gibson City, III. Cultivator blade. 1,632,958; June 21.
Fried, Edward B., et al. (See Morris, J. L., and Allen, assignors.)
Fried, Goseph A., Flushing, assignor to Dubilier Condenser (1,619,201; was allegated. (See Bartholdy Mar.)

Krupp Aktiengesellschaft. (See Bartholdy, Max.

assignor.)
ried. Krupp Aktiengesellschaft. (See Bessler, August. assignor.) Fried. Krupp Aktiengesellschaft. (See Brelting, Ernst.

Fried. Krupp Aktiengesellschaft. (See Fry, Adolf, as-Fried. Krupp Aktiengesellschaft.

Fried. Krupp Aktiengesellschaft. (See Himmelsbach, Karl, assignor.) Fried. Krupp Aktiengesellschaft. (See Jacob, Max, as-

Signor. Acupy Aktiengesellschaft. (See Klingelhoffer, Reinhard, assignor.) Fried, Krupp Aktiengesellschaft. (See Lauer, Karl, as-

Fried. Krupp Aktiengesellschaft. (See Lorenz, Rudolf, assignor.)
Fried. Krupp Aktiengesellschaft. (See Pfretzschner, Jakob, assignor.)

Krupp Germaniawerft Aktiengesellschaft. (See Ser, Heinrich, assignor.)
Krupp Germaniawerft Aktiengesellschaft. (See Bed. Krupp - Germaniawerft AktiengesensonFeeder, Heinrich, assignwaried. Krupp Germaniawerft AktiengesensonFeeder, Heinrich, assignor.)
Fied. Krupp Germaniawerft Aktiengesellschaft. (See
Herkt, Ernst, assignor.)
Fied. Krupp Germaniawerft Aktiengesellschaft. (See
Hopf, Wilhelm, assignor.)
Fied. Krupp Germaniawerft Aktiengesellschaft. (See

Horkf, Ernst, assignor.)

Fried. Krupp Germaniawerft Aktiengesellschaft, (See Hoof, Wilhelm, assignor.)

Fried. Krupp Germaniawertt Aktiengesellschaft. (See Weiz, Karl, assignor.)

Fried. Krupp Germaniawertt Aktiengesellschaft. (See Weiz, Karl, assignor.)

Fried. Krupp Aktiengesellschaft Germaniawerft. (See Rogenbogen, Conrad, assignor.)

Fried. Krupp Grusonwerk Aktiengesellschaft. (See Johannen, Friedrich, assignor.)

Fried. Krupp Grusonwerk Aktiengesellschaft. (See Ultrich, (Georg, assignor.)

Fried. Krupp Grusonwerk Aktiengesellschaft. (See Fried, Krupp Grusonwerk)

Fried, Richard H., et al. (See Morris, J. L., and Allen, See Halnes,

assignors.)

Fried, William F., et al. (See Morris, J. L., and Allen, assignors.)

Friedberger-Aaron Manutacturing Company. (See Haines, assignors.)

Friedel-Queral assignors.)

Friedel, Otto B., Obersachsenberg, Germany. Musical instrument. 1,623,175; Apr. 5.

Frieder, Loonard P., Wew York, N. Y., and P. S. Huntley and J. W. Hollas, assignors to National Spun Silk Co., Inc., 1614,465; Jan. 88. Drawing and spinning machine. 1,614,465; Jan. 88. Drawing and spinning machine. Friedl. Hugh J., Buffalo, N. Y. Transmission or brake band. 1,643,946; Oct. 4.

Friedlaender, Isador L., Detroit, Mich. Box for transferdender, Isador L., Detroit, Mich. Box for transferdender, Isador L., Detroit, Mich. Box for transferdender, Isador L., Detroit, Mich. Box for transfiskid freight-anchoring device for flat cars. 1,620,755; Mar. 15.

Friedland, Moshe, Brooklyn, assignor of one-third to S., Berlin, Brooklyn, and one-third to Tamen Brothers, Jan., 1,024, N. Y. Automobile signals. 1,614,427; Jan., 102, Arthur, New York, N. Y. Sanitary appliance.

New York, N. Y. Automobile Signals. Jan. 11.
Friedman, Arthur, New York, N. Y. Sanitary appliance. 1,616,616; Feb. S.
Friedman, Benjamin, New York, N. Y. Needle mounting for hypodermic syrings. 1,624,327; Apr. 12.
Friedman, Bernhardt, New Orleans, La. Novelty box. Des. 72,943; June 28.
Friedman, David, Rochester, N. Y. Station Indicator. 1,653,455; Dec. 20.
Friedman, Harry, et al. (See Castleton, Eldred O., as-

Friedman, Harry, et al. (See Castleton, Eldred O., assignor.)

Priedman, Harry, assignor to Architectural Iron Works, Los Angeles, Calif. Electric-lighting faxture. Des. T1.789: Jan. 4. Friedman, Harry, assignor to Architectural Iron Works, Los Angeles, Calif. Electric-lighting fixture. Des.

Friedman, Harry, assignor to Architectural Iron Works, Tristar, Jan. 18
Triedman, Harry, assignor to Architectural Iron Works, Los Angeles, Calif. Electric-lighting fixture. Des. 71.868; Jan. 18.
Friedman, Harry, assignor to Architectural Iron Works, Los Angeles, Calif. Electric lighting fixture. Des.

Friedman, Harry, has the Locality Electric ligning Los Angeles, Calif. Electric ligning 71,1869; Jan. 18.
Friedman, Harry, assignor to Architectural Iron Works, Los Angeles, Calif. Electric-lighting fixture. Des. Friedman, Harry,
Los Anceles, Calif. Electric-liganos,
71,304; Pob. 8.
Priedman, Harry, assignor to Architectural Iron Works,
Priedman, Harry, Calif. Electric-lighting fixture. Dos.
Los Angeles, Calif. Electric-lighting fixture.

Friedman, Hardy Calif. Electric Description of the Los Angeles, Calif. Electric lighting fixture. Description of Angeles, Calif. Electric lighting fixture. Description of the Los Angeles, Calif. Electric lighting fixture. Description of the Market Los Angeles, Calif.

Friedman, Harry Los Angeles, Calif. Electric nguardent of the Core Ti.986: Peb. 8. Ortelman, Harry, assignor to Architectural Iron Works, Ortelman, Harry, assignor to Architectural Iron Works, Price Angeles, Calif. Electric-lighting fixture. Dos

Los Angeles, Calif. Electric-lighting fixture. Des. 71,967; Feb. 8. Friedman, Harry, assignor to Architectural Iron Works, Los Angeles, Calif. Electric-lighting fixture. Des. 71,968; Feb. 8.

Friedman, Isaac W., New York, N. Y. Syringe, 1.652.163; Dec. 20.

1-632-143; Dec. 20. Frledman, Jacob. (See Scheinfeld, Morris, assignor.) Frledman, Jacob. E., New York, N. Y. Display stand. Dec 73.693; Oct. 25. Frledman, Louis, New York, N. Y. Bow tie. 1,639,767; Aug. 23.

Friedman, Philip B., Winnipeg, Manitoba, Canada. Adjustable chair. 1,640,494; Aug. 30.
Friedman, Samuel, Brooklyn, N. Y. Fur stretching and nailing device. 1,628,588; May 10.
Friedman, William, Princeville, Ill. Combined window stop and weather strip. 1,626,674; May 3.
Friedman, William, New York, N. Y. Toilet article.
Friedman, William, New York, N. Y. Toilet accessory. 1,630,566; May 31.
Friedman, William, New York, N. Y. Combination match packet and pad. 1,634,712; July S.
Friedman, William, New York, N. Y. Combination match packet and pad. 1,634,712; July S.
Friedman, William, New York, N. Y. Combination match packet 1,641,263; 8ept. 6.
Friedman, William, New York, N. Y. Match packet. 1,641,263; 8ept. 6.
Friedman, William, New York, N. Y. Match packet. 1,650,703; Nov. 29.
Friedman Brothers.
Friedman Brothers.
Friedman Brothers.
Friedman Louis, and H. Deutsch, Vienna, Austria. Exhaust-steam injector. 1,653,364; Dec. 27.
Friedmich Lowks and H. Deutsch, Vienna, Austria. Exhaust-steam injector. 1,653,364; Dec. 27.
Friedrich Deckel Fabrik für Präsisionsmechanik und Maschinenbau. (See Braren, Lorens K., assignor; July ches. Des. 7,253; Aug. 18.
Friedrich, Ernst, assignor to the Firm of Robert Bosch Aktiengeselsschaft, Stuttzart, German, Elegric Leichte lichter Langerick Leicher Langerick Leicher Lei

piny case. Des. 73,253; Aug. 16.
Friedrich, Ernest G., Cincinnati, Ohio. Toilet. 1,630,932; May 31.
Friedrich, Ernst, assignor to the Firm of Robert Bosch Addition. Ernst, assignor to the Firm of Robert Bosch Addition. Friedrich, Gustan, Pinkafeld, Austria, and E. Reich. Budapest, Hungary. Knotting and weaving loom. 1,651,812; Dec. 6.
Friedrich, Gustan, Pinkafeld, Austria, and E. Reich. Budapest, Hungary. Knotting and weaving loom. 1,651,812; Dec. 6.
Friedrich, Karl, Breslau, Germany. Production of a cold glaze upon building material, such as concrete, sand. Collagable Landern. 1,620,640; Mar. 15.
Friedrich, Kurt K., Annaberg im Ergebirge, Germany. Collagable lantern. 1,620,640; Mar. 15.
Friedrich, Kurt K., Annaberg, Germany. Foldable lantern. 1,632,265; Dec. 20.
Friedrich, Kurt K., Annaberg, Germany. Foldable lantern. 1,632,265; Dec. 20.
Friedrich, Kurt K., Annaberg, Germany. Foldable lantern. 1,632,265; Dec. 20.
Friedrich, Robert F., assignor to Weber & Friedrich, Inc., 100,000; Mar. 15.
General Electric Company. Lead-cadmium alloy. 1,645,098; Oct. 11.
Friedrich, Wilhelm, Berlin-Lankwitz, Germany. Dry freextinguisher. 1,632,729; Aug. 5.
Friedrichs, Wilhelm, Berlin, Germany. Mechanism for extinguisher. 1,632,729; Aug. 5.
Friedrichs, Gustav, Madison, N. J. Collagsible umbrella. 1,642,363; Sept. 13.
Friel, John J., Tulsa, Okla. Oll saver. 1,623,403; Apr. 5.
Friedrich, Harry, Newark, N. J., assignor to Vegue Brasier. 1,652,191; Jan. 25.
Friendy, Harry, Newark, N. J., assignor to rephone and Teleopraph Company. Automatic telephone system. 1,633,799; Aug. 23.
Friend, Roydon L., assignor to The P. H. & F. M. Roots Company, Company, Automatic telephone system. 1,632,799; Aug. 23.
Friend, Roydon L., assignor to The P. H. & F. M. Roots Company, Company, Automatic telephone system. 1,632,791; Aug. 25.
Friendly, Herbert M., Portland, Oreg. Telephone system.

Friendy, Herbert M., Portland, Oreg. Telephone system. 1,614,298; Jan. 11.
Friendy, Herbert M., Portland, Oreg. Automatic telephone system. 1,628,359; May 10.
Friendy, Herbert M., Chicago, Ill. Telephone system. 1,628,359; May 10.
Friendy, Herbert M., Chicago, Ill. Automatic telephone system. 1,627,844; May 10.
Friendy, Herbert M., Chicago, Ill. Automatic telephone system. 1,628,358; May 10.
Friendy, Herbert M., Chicago, Ill. Automatic telephone system. 1,628,368; May 10.
Frierson, Carrie B., Cleveland, Miss. Headlight attachment. 1,628,606; May 16.
Frierson, Carrie B., Cleveland, Miss. Headlight attachment. 1,628,606; Fort Wayne, Ind. Meter. 1,624,695; Apr. 12.
Fries, William P., Cynwyd, Pa. Dustpan. 1,645,806; Cleveland, Miss. Headlight attachments. 1,614,982; Jan. 18.
Friesner, Jacob A., Winkler, Manitoba, Canada. Governor mechanism. 1,614,982; Jan. 18.
Friesner, Jesse L., Lima, Ohlo. Bottle holder. 1,634,747; July 5.

July 5.

Friet, Fred L. and J., Parkers Prairie, Minn. Aluminum boat. 1,625,598; Apr. 19.

Friet, Joseph. (See Friet, Fred L. and J.)

Friez, William C. (See Bennett. Guy I., assignor.)

Friis, Haraid T., Red Bank. N. J., assignor to Western Electric Company. Incorporated, New York, N. Y. Radio Signaling apparatus. 1,647,349; Nov. 1.

1,635,210; July 25.

Frilick, James W. (See McDonald, F., in., and Frilick.)

Frilik, Junes W. (See McDonald, F., in., and Frilick.)

Frilik, Junes W. (See Pintacuda, C., and Frilik.)

Frink, George M., Camden, N. J. Artificial foot. 1,628,498; May 10. Frink, I. P., Inc. (See Spencer, William H., assignor.) Frink, Melvin L., Wellston, assignor of one-third to W. Kriz and two-thirds to F. D. Reynolds, St. Louis, Mo. Shock absorber and equalizer. 1,618,703; Feb. 22. Frible, Ray A., Detroit, Mich., assignor to Whie Products Company, Chicago, Ill. Hood latch. 1,647,128; Frisble, Russell A., Middletown, assignor to The J. & E. Stevens Company, Cromwell, Conn. Toy pistol. 1,652,666; Dec. 18.

Frisble, Russell A., Middletown, assignor to The J. & B. Stevens Company, Cromwell, Conn. Toy pistol. 1.682,606; Dec. 18. Frisble, William A., Minneapolls, Minn. Candy box. 1.653,456; Dec. 20. Frischmuth, Erust, Siemensstadt, near Berlin, Germany. Key for combination locks. 1.642.725; Sept. 20. Frisk, Frederick, San Francisco, Calif. Golf-bag carticle, 1628,771; May 17.
Fish. 1. 1628,771; May 17.
Fish. 3. New York, N. Y. Stepladder. 1,648,844;

Frist, Archie C. (See Frist, Robert P., assignor.)
Frist, Robert P., assignor of one-half to A. C. Frist, Long
Beach, Calif. Fruit stemmer and cleaner. 1,617,105;
Feb. 8.

Fristad, Carl G., Mandan, N. Dak, Sickle holder, 1,623,536; Apr. 5.
Fritch, James E. (See Fritch, Oscar G. and J. E.)
Fritch, Oscar G. and J. E., Ashland, Nebr. Greenhouse plant-suspension frame . 1,612,731; Mar. 1.
Fritchey, Franklin W., Walbrook, Md., assignor to Fritch appliance. The state of the

Rochester, N. Y. Motion-picture projector. 1,638,569; Aug. 9.

Pritts, George E., Harbor City, Calif. Ladder-climbling device. 1,630,484; May 31.

Pritts, George E., Tatt, Calif., assignor, by mesne assignments, to F. A. and D. Keefover. Sucker-rod hanger. 1,627,733 May 1 Richard, assignor.)

Pritz, Edward C. Cee See Richard, assignor.)

Pritz, Emil F. L., Chicago, Ill. Loading device. 1,619,610; Mar. 1.

Fritz, George, Cincinnati, Ohlo. Sectional bin. 1,627,084; May 3.

May 3. citz. George, Waterbury, Conn. Reamer. 1,645,696; Oct. 18.

Fritz, George, Waterbury, Conn. Reamer. 1,645,896; Oct. 18.
Fritz, Roy D. (See Hoover, W. C., Fritz, and Cahill.)
Fritz, Roy D., Akron, Ohio, assignor to The B. F. Goodrie, Company, New York, N. Y. Vutcanizing apparaFritz, Roy D., Barberton, Ohio, assignor to The B. F. Goodrieh Company, New York, N. Y. Apparatus for vulcanizing under fuild pressure. 1,622,438; Mar. 29.
Fritz, Roy D., Akron, Ohio, assignor to The B. F. Goodrieh Company, New York, N. Y. Vutcanizing appararich Company, New York, N. Y. Vutcanizing apparafritz, William A. Hong, C. C. Cooke, Columbus, Ohio, Repairing metal beams. 1,648,691; Nov. S.
Fritz, William E., Indianola, Nebr. Feed cutter and grinder. 1,634,026; June 28.
Fritzel, Hugo, Hamburg, Germany, action tofors. 1,640,891; Aug. 30.
Fritzsche, Carl E., Fort Fairfield, Me. Ice-cream-cone wrapper and carrier. 1,628,7118; May 17.
Fritzsche, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Intermediate product for Apr. 19.
Fritzsche, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Intermediate product for Pritzsche, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assignors to Seciety of Chemical Industry in Basle, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assignors to Seciety of Chemical Industry in Basle, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assignors of Seciety of Chemical Industry in Basle, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assignors of Seciety of Chemical Industry in Basle, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assign

Apr. 19.
Fritzsche, Hermann, E. Krummenacher, H. Gubler, and O. Kalser, assignors to Society of Chemical Industry in Basie, Basel, Switzerland. Intermediate product for the synthesis of azo dyes and making same. 1,625,531; Apr 19

Fritzsche, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Making intermediate products for the manufacture of azo dyes. 1,625,532;

Apr. 19.

Apr. 19.

Fritzsche, Hermann, E. Krummenacher, H. Gubler, and O. Kaiser, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Intermediate product for the synthesis of azo dyes and making same. 1,625,533. Apr. 19.

Apr. 19.

Friz, Clyde N., Baltimore, Md. Compacting earth. 1,650,827; Nov. 29. hus. Tex. Combined stock guard Friak, Frank, Co. 19. fast. Fr. Combined stock guard and passway. 1,653,357; Dec. 20.

Froblish, William E., Columbus, Kans, House-flue jacket. 1,639,558; Aug. 16.

Froelich, Clarence H. (See Van Essen, P. D., and Froelich.)

Froendt, George, Milford, Iowa. Watering device, 1,638,194; Aug. 9.
Froesch, Charles, assignor to International Motor Company, New York, N. Y. Brake mechanism. 1,614,835; Jan. 18.

Freesch, Charles, assignor to International Mot-pany, New York, N. Y. Drive for vehicles. 1,6 Feb. 3.

Freesch, Charles, assignor to International Motor Company, New York, N. Y. Flexible coupling. 1,631,196; June 7.

Froesch, Charles, assignor to International Motor Company, New York, N. Y. Flexible coupling, 1,631,196; June 7.

Froesch, Charles, assignor to International Motor Composed, Charles, assignor to International Motor Composed, New York, N. Y. Bearline, 1,633,505; June 23, Froesch, Charles, assignor to International Motor Company, New York, N. Y. Flexible vehicle body, 1,650,203; Nov. 22.

Frog Switch and Manufacturing Company. (See Whiteman, George W., assignor, assignor to the Firm of Commanditaire Vennouschap Froger's Electricietis Maatschappij, Arnheim, Netherlands. Apparatus for indicating variations of immersion depth of ships and the weight of ships' cargoes. 1,648,382; Nov. 8.

Fröllich, Fritz, Breslau, Germany. Buttonhole-sewing Fröllich, Fritz, Breslau, Germany. Buttonhole-sewing Fröllich, Walter, Berlin-Wilmersdorf, Germany. Water closet. 1,648,582; Nov. 8.

Frollich, Ernst, Essen-on-the-Ruhr, Germany, assignor, by Company, Chicopo, 1,635,989; July 19.

Frolking, Stanley A., Cleveland, assignor to Brilliant Glass Products, Inc., Brilliant, Ohio. Bathroom fixture. Des. 72,363; Apr. 5.

From, Owen C., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,616,182; Feb. 12.

From, Expense of the State of S

Front, Robert, assignor to J. T. Cosgrove, Kansas City, Mo. Telephone muffler and voice control. 1,618,375; Pronk, Lector H. Salt Lake City, Utah. Loud-speaker unit. 1,644,645; oct. 25.
Fronrath. Stephen, Detroit, Mich. Door-holding device. 1,634,070; June 28.
Frontz, Robert O., assignor of one-half to G. A. Melson, Juniata, Pa. Jarniskid chain for automobiles. Juniata, Pa. Jarniskid chain for automobiles. Prost. 1,634,071; pp. 1,624,605; Apr. 12.
Frossard. John A., Pepperell, and G. Lamoureux, Worcester, Mass. Doctor-operating mechanism for calendering machines. 1,644,917; Oct. 11.
Frost, C. Wallace, Great Fails, Mont. Motion-picture machine. 1,613,562; Jan. 4.
Frost, C. Wallace, Great Fails, Mont. Motion-picture machine. 1,613,562; Jan. 4.
Frost, John G. G., assignor to The National Smelting Company, Cleveland, Ohio. Treating aluminum dross and the like. 1,615,009; Jan. 18.
Frost, John G. G., assignor to The National Smelting Company, Cleveland, Ohio. Treating aluminum from Company, Cleveland, Ohio. Treating aluminum from Company, Cleveland, Ohio. Treating aluminum screenings, etc. 1,648,262; Nov. 8.
Frost, John G. G., assignor to The National Smelting Company, Cleveland, Ohio. Treating aluminum screenings, etc. 1,648,262; Nov. 8.
Frost, John G. G., assignor to The National Smelting Company, Cleveland, Ohio. Treating aluminum screenings, etc. 1,648,262; Nov. 8.
Frost, John G. G., assignor to The National Smelting Company, Cleveland, Ohio. Recovering aluminum from Palminum screenings and the like. 1,648,263; Nov. 8.
Frost, John G. G., assignor to The National Smelting Company, Cleveland, Ohio. Recovering aluminum screenings and the like. 1,648,263; Nov. 8.
Frost, Leelie E., Pittsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company, The. (See Frost, Walter J., assignor.)

J., assignor.)
Frost Manufacturing Company. (See Theleen, Oscar II.,

Frost, Sylvester P., Dallas, Tex. Scraper. 1,643,336;

Frost, Sylvester P., Dallas, Tex. Scraper. 1,643,336;

Prost. Sylvester F., Dallas, Tex. Scraper. 1,643,336; Sept. 27.
Frost, Thomas H., and P. Heymans, Brookline, Mass. Dynamometer gauge. 1,623,238; Apr. 5.
Frost. Walter E., assignor of one-cighth to M. E. Hunt and three-cighths to W. E. Thurlow, Auburn, Me. Po-lice signal system. 1,631,368; June 7.
Frost, Walter J., assignor to The Frost Manufacturing Company, Kroosha, Wis. Adjustable fange on over-frost William. It of the company for the company of the

Fruchtman, William. (See Roettges, Frederick W., assignor.)
Frue, Alexander C., Detroit, Mich. Device for operating
Frue, Alexander C., Detroit, Mich. Device for operating
switches, 1,622,439; Mar. 29.
Fruchauf, Harvey C. (See Schneider, C. L., and
Fruehauf.)
Fruehauf.

Trailer Company. (See Reid, Frederick M., as-Fruehauf Trailer Company. (See Schneider, C. L., and Fruehauf Trailer Company. (See Luff, Henry J., as-Fruehauf, assignors.)

Fruin & Waiker Company. (See Luit, Henry J., &ssignort.)
Fruitema.

Pry, John F. (See Fry, William H., assignor.)
Pry, John J., Logan City, Utah. Swivel. 1,645,747;
Oct. 18.
V. Struthers, Ohio. Multiple spring.
T. 1,643,840: Sept. 27.
Fry, Sarah E. (See Gildea, C. W., and Fry.)
Fry, Walter L. New York, N. Y. Brake-testing device.
1,619,714; Mar. 1.
Fry, William H. Searsdale, N. Y. Seat-back slip cover.
1,655,501; Dec. 20.
Fry, William H. Sea Gildea, C. W., and Fry.)
Fry, William H. Sea Gildea, C. W., and Fry.
Fry, William H. Sea Gildea, C. W., and Fry.
Fry, William H. Sea Gildea, C. W., and Fry.
Fry, William H. Sea Gildea, C. W., and Fry.
Fry, William H. Sea Gildea, C. W., and Fry.
Fry, William H. Sea Gildea, C. W., and Fry.
Fry, Ray F. C. Eveling apparatus for spindles in spinning frames. 1,616,686; Feb. 8.
Frye, Charles M., Amity, Oreg., and J. F. Copp. Hawthorne, Calif. Liquid heating and dispensing machanism. 1,646,614; Oct. 25.
Frye, Ray F., Cleveland, Ohio. Automatic lawn sprinkler.
Frye, Robert R., Marlboro, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for removing surplus material from boots and shoes. 1,633,355; June 28.
Frye. Robert R., Worcester, Mass. Automatic bottle cap. 1,637,362; Aug. S., Louis, Mo. Epring, 1,622,711; Mar. 29.
Fryer, Joseph M., St. Louis, Mo. Spring, 1,622,711; Mar. 29.
Fryer, Joseph W., St. Louis, Mo. Combination furniture. 1,632,790; June 21.
Fryem, Joseph M., Louis, Mo. Combination furniture. 1,632,730; June 21.
Fryem, No. 1,142, 20.
Fryem, Ray M., Louis, Mo. Fruit picker.
Frykman, Nyleor L. (See Lucarelle, J. M., and Frykman).
Fryman, No. 1,27, 20.

man.) Fryman, Nancy, Indianapolis, Ind. Frult picker. 1.626.402; Apr. 26. Fuchs, David G., Pittsburgh, Pa. Spark plug. 1,624.785; Apr. 12.

Apr. 12.

Puchs, Hugo, New York, N. Y., assignor of one-half to C. M. Sincerbeaux, Jackson Heights, N. J. Metalbending machine. 1,630,064; May 24.

1.613.319; Jan. 4. Proodlyn, N. Y. Window Cleaner. Puck, Frank A. Pittsburgh, Pa. Gear-shift-control apparatus. 1,638,802; Aug. 9. Fueglein, Bernard A., Louisville, Ky. Display card. 1,636,991; July 26.

1.636,991; July 26.

1.636,991; July 26.

Fuerborn Henry R., et al. (See Flort, Jules L., assignor.)
Fuerth. Sydney W., Newark, N. J., assignor to Underwood Typewriter Company, New York, N. Y., Stenelling, 1. (17.386; Feb. 15.
Fuetterer, Otto F., Huntington Beach, assignor, by mesne assignments, to M. E. Farlow, Van Nuys, and J. B. Coleman, San Francisco, Callf. Flue connection. Henricon, Rudolf. Francisco, Callf. Flue connection. Rudolf. Fremont, Nebr. Figure wheeled toy. 149,519; Nov. 15.
Fubrer, Frieda E., Richmond, Va. Ornamented fabric. 1.633,630; June 28.
Fujimoto, Niklehi, Tokyo, Japan. X-ray tube. 1,621,926; Mar. 22.
Fuitta, Nobuchika. (See Takamine, J., fr., and Fujifta.)

MR. 22.
Pulita, Nobuchka. (See Takamine, J., 1r., and Fulita.)
Fukuyana, Kelkich, Los Anceles, Calif. ElectroheraFukuyana, Keikich, Los Anceles. Calif.
cator and electrode. 1.618.526; Feb. 22.
Fulcher. Gerdon S., assignor to Corning Glass Works,
Corning, N. Y. Cast refractory article and making the
same. 1.018.750; Jan. 25.

Fulcher, Gordon S., assignor to Corning Glass Works, Corning, N. Y. Cast refractory product. 1,615,751; Jan. 25. Fulcher Pulp Bottle Company. (See Lundgren, Harry,

Fuld, Gebrüder. (See Fuld, Ludwig, assignor. Fuld, Ludwig, assignor to Gebrüder Fuld, Nuremberg, Bayaria, Germany. Shaying brush. Des. 73,782;

Fuld, William A., Baltimore, Md. Toy. 1,654,327; Dec.

Fulda, Edward, New York, N. Y. Pollshing device, 1.638,570; Aug. 9. Fulenwider, Harry, (See Fulenwider, Jesse and H., Robinson, and Norris, assignors.) Fulenwider, Harry and J., Savannah, Ga. Holding de-Pulenwider, Harry and J., Savannah, Ga. Holding de-Pulenwider, Harry and H., Pulenwider, Jesse and H., and E. W. Robinson and H. S. Norris Savannah, Ga., assignors to H. and J. Fulenwider, Jesse and H., E. W. Robinson, and H. Norris, Savannah, Ga., assignors to H. and J. Fulenwider, Jesse and H., E. W. Robinson, and H. Norris, assignors to H. and J. Fulenwider, Savannah, Ga. Fulenwider, Jesse and H., E. W. Robinson, and H. Norris, assignors to H. and J. Fulenwider, Savannah, Ga. H. Norris, Sasignors to H. and J. Fulenwider, Savannah, Ga. H. R. Sasignor, W. et al. (See Schumacher, Robert H., assignor.)

Fulgora, Fred, assignor of one-half to J. N. McGrath, Jr., Pittsburgh, Pa. High-frequency spark plug. 1,614,885;

Pittsburgh, Far. Englands.

Pittsburgh, Far. Englands.

(See Fulke, Frank L., asike, Dorothy H., et al. (See Fulke, Frank L., asike, Dorothy H., et al. (See Fulke, Frank L.)

Jan. 18.
Fulke, Dorothy H., et al. (See Fulke, Frank., signor.)
Fulke, Frank L., Terre Haute, Ind., assignor of one-half to H. C. Prox and one-half to D. H. Fulke. Mining-machine chain. 1,650.566; Nov. 22.
Fulkerson, James C., Kansas City, Mo. Vaporizer for explosive engines. 1,656.470; July 19.
Fulkerson, Nettie R., Fallon, Nev. Cake pan. 1,624,941; Apr. 19.
Fulkerson, William C., Buechel, Ky. Pedal attachment.

Apr. 19.
Fulkerson, William C., Buechel, Ky. Pedal attachment.
1.638.927; Aug. 16.
Fulks, Eldridge B., assignor to The American Creosoting
Company, Louisville, Ky. Preservatively treating
woods. 1.662.109; Dec. 6.
Fullarton, Gregg M., Cicero, III., assignor to Western
Electric Company, Incorporated, New York, N. Y.
Apparatus for assembling parts. 1.642.771; Sept. 20.
Fullenlove, McClellan C., assignor of one-half to P.
Jacob, Toledo, Ohlo. Lock mechanism. 1,633.087;
June 21.

Fullenlove, McCleinn C., assignor or observed to Jacob, Toledo, Ohio, Lock mechanism, 1,633,087; June 21.
Fuller, Bert F., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, Circuit-controlling apparatus, 1,640,542; Jug. 30.
Fuller Brush Company, The. (See Aris, Samuel W., assignor.)
Fuller Brush Company, The. (See Cave, Henry, assignor.)

Fuller Brush Company, The. (See Curran, John B., as-

Fuller Brush Company, The. (See Hickson, Charles A.,

ssignor.) ler Brush Company, The. (See Sargent, Edmund S., uller Brus assignor.)

Fuller Brush Company, The. (See Van Veen, Anton, assignor.)
uller Brush Company, The. (See Van Veen, A., and eson, assignors.)
Charles H., Portland, Oreg. Davit. 1,613,030;

Fuller, (Jan. 4.

Jan. 4.
Fuller, Cluad E., New York, N. Y. Storage conveyer,
1.642.992; Sept. 20.
Fuller, Cluad E., assignor to New York Brick Handling
Corporation, New York, N. Y. Portable scoving.

Fuller, Claud E., assignor to New York Brick Handling Corporation. New York, N. Y. Portable scoving. Rel6,634; May 24. Fuller, Claud E., assignor to New York Brick Handling Corporation. New York, N. Y. Scheider, 15 and Scheider, 15 and 15 a

Dec. 27.
Fuller, Frederic B. (See Smith, E. L., and Fuller.)
Fuller, Frederick L. Ilion, N. Y., assignor to Reminston
Arms Company, Inc. Cash register. 1,623,722, Apr. 5,
erison, Duyton, Ohio, assignors, by mesne assignments,
to National Cash Register Company, Dayton, Ohio,
Cash register, 1,619,664; Mar. 1.
Fuller, Gla R., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,640,186;
Aug. 23.

Fuller, Hary M., Salt Lake City, Utah. Spark-plug intensifier. 1,614,951; Jan. 18.
Fuller, Henry C., Washington, D. C. Medicinal product. 1,627,903; May 10.

Fuller, James H., Columbus, Ohio. Aiding the of documents. 1,643,841; Sept. 27. Fuller, James W. (See Kinyon, Alonzo G., assi Fuller-Lehigh Company. (See Collins, Harry Aiding the sorting

signor.)
Fuller Lehigh Company. (See McCrae, George, assignor.)
Fuller Lehigh Company. (See Wood, Walter D., as-

Fuller Lehigh Company. (See Wood, Walter D., as Buller Lehigh Company. (See Wood, Walter D., as Buller Lehigh Company.)

Fuller, Oliver B. (See Crocker, Elmer S., assignor.)

Fuller, Oliver B. (See Crocker, Elmer S., assignor.)

Fuller, Orlie E., Lamont, Iowa. Gambrel. 1,622,102;

Fuller, Perley H., Auburn, Me., assignor, by mesne assignments, to The Bassick Manufacturing Company, Chicago, III. Lubricant-expelling cop. 1,045,992; Oct. 18.

Fuller, Peter H., New York, N. Y. Sound-amplifying device. 1,614,983; Jan. 18.

Fuller, Richard B., Lawrence, N. Y., assignor to Stockade Building System, Inc. Mold for building blocks and process of molding. 1,634,900; July 5.

Fuller, Truman S., Schenctady, N. Y., assignor to General Fuller, Truman S., Schenctady, N. Y., assignor to General Fuller, Truman S., Schenctady, N. Y., assignor to General Electric Company. Resistance alloy. 1,645,099; Oct. 11. Electric Company, Next. 21, N. Y., assignor to General Electric Company. Resistance alloy. 1.645,099; Fuller, Truman S., and N. H. Adams, Schenectady, N. Y., assignors to General Electric Company. Thermoelectric generator. 1.618,755; Feb. 22, Endler, N. P., & Co. (See Kern, Eugene F., assignor.) Fullerton, Clarence A., New York, N. Y. Display sign. Clarence A., New York, N. Y. Display sign. State of the Company, New York, N. Y. Work holder. 1.619,340; Mar. 1. Pullgraft, Frank G., New York, N. Y. Work holder. 1.619,340; Mar. 1. Fullgraft, Frank G., New York, N. Y. Display device. 1.620,533; Mar. 8. Market Harborough, England. Matchine for casting boxes and other hollow metal articles. 1.633,088; June 21. Fullington, William H., Cleveland, Ohio. Rope-making machine. 1.652,111; Dec. 6. Pullington, William H., Cleveland, Ohio. Rope-making machine. 1.652,111; Dec. 6. Ind. Ohio. Crutes. 1.653,071 (one-half to G. W. Leitch, Millwaukee, Wis. Bottle-capping machine, 1.649,459; Nov. 15.

Milwanizee, Wis. Bottlevenya.
Nov. 15.
Fulper, John W., Annandale, N. J. Making and structure of gears. 1,641,967; Sept. 13.
Fulper, William H., Flemington, N. J.
Fulper, William H., Flemington, N. J.
Fulton Brick Works. (See Reams, Joseph A., assignor.)
Fulton Company, The. (See Glesler, Jeun V., assignor.)
Fulton Company, The. (See Kinnard, James A., assignor.) Fulton Iron Works Company. (See Hildebrand, Reinhard,

assignor:)
Fulton, James O., Toronto, Ontario, Canada, assignor to The John C. King Lumber Company, Cleveland, Ohio. Hardwood-block flooring, 1,622,103; Mar. 22.
Fulton, James O., Toronto, Ontario, Canada, assignor to The John C. King Lumber Company, Cleveland, Ohio. Block flooring and making the same, 1,622,104; Mar. 22.

Mar. 22.
Fulton, Loyd R., Los Angeles, Calif. Auto lock.
1,634,939; June 28.
Fulton, Lyle H., Nashville, Tenn. Switch-point protector.
1,643,934; Nov. 22.
Fulton, Nell, New York, N. Y. Spitless spit-curl hair curiers. 1,616,692; Jun. 25.
Fulton, Nell, New York, N. Y. Ironing spring. 1,647,790;

Nov. 1. Fulton Sylphon Company, The. (See Carson, William W., jr., assignor.)
Fulton Sylphon Company, The. (See Fulton, Weston

M., assi assignor.) Sylphon Company, The. (See Giesler, Jean V.,

assignor.)
Fulton Sylphon Company, The. (See Reeder, Frank C.,

assignor.)

Pulton Sylphon Company, The. (See Reeder, Frank C., assignor.)

Fulton Weton M., assignor, by mesne assignments, to The Newton Sylphon Company, Knoxville, Tenn. Pack-Iss valve. 1,644,775; Oct. 11.

Fulton, Weston M., assignor, by mesne assignments, to The Fulton Sylphon Company, Knoxville, Tenn. Pack-less valve. 1,644,825; Oct. 11.

Fulton, Weston M., assignor, by mesne assignments, to The Fulton Sylphon Company, Knoxville, Tenn. Repeated for discharging fulds. 1,647,219; Nov. Company, Knoxville, Tenn. Repeated for discharging fulds. 1,647,219; Nov. Company, Knoxville, Tenn. Tubular corrugated will and making the same. 1,648,946; Nov. 8.

Fulton, William H., Irvington, N. J., assignor, by mesne assignments, to Titeflex Metal Hose Co. Hose construction. 1,651,022; Nov. 29.

Fulweiler, John B., Moylan, Pa. Grate. 1,635,932; Fulweiler, Walter H., Wellingford, and C. W. Jordan, Norwood, assignors to The U. G. I. Contracting Company, Philadelphia, Pa. Purifying gas. 1,632,708; June 14.

pany, Philadelphia, Pa. Purifying gas. 1,632,738; June 14. Funcheon, Daniel C., Denver, Colo. Vehicle-operated gate. 1,617,680; Feb. 15.

Funderburk, Otis C., Boston, Mass. Valve for internalcombustion engines, 1,823,176; Apr. 5.
Funderburk, Otis C., Boston, Mass. Valve for internalcombustion engines, 1,623,177; Apr. 5.
Fundom. Earl H., assignor to The Fundom Hoist and
Shovel Company, Lima, Ohio. Combined clutch and
drum and mounting therefor. 1,652,240; Dec. 13.
Fundom Hoist and Shovel Company, The. (See Fundom,
Earl H., assignor).
Funk, Casimir, and H. E. Dubin, assignors, by mesne
assignments, to H. A. Metz Laboratories, Inc., New
York, N. Y. Obtaining from cod-liver oil a highly
concentrated substance rich in antirachitic and antixerophilic vitamines and the product thereof,
1,623,074; May 17, concentrated substance rich in antirachitic and anti-xerophilic vitamines and the product thereof. 1,629,074; May 17. D. Dubin, assignors, by mesne as-signments, to H. A. Metz Laboratories, Inc., New York, N. Y. Obtaining vitamins and product. 1,649,520; Nov. 15.

Nov. 15.

Funk, Charles C., Brooklyn, and A. Boehm, New York, Y. Mechanical radiator ornament for vehicles. 1,652,775; 10c. 13.

Funk, Charles J., assignor to The Wahl Company, Chicago, Ill. Pen. 1,613,811; Jan. 11.

Funk, George C., Brookline, Mass. Ice-skating vink. 1,634,938; July 5.

Funk, George C., Brookline, and M. J. Palson, Gloucester, Mass., by G. C. Funk, joint inventor and assignee of M. J. Palson. Skating-rink floor. Rei 6,543; Feb. 8.

Funk, John E., Stockton, Calif. Hoisting-frum mechanism. 1,671,760; Dec. 6.

Funk, John E., Stockton, Calif. Hoisting-frum mechanism. 1,671,760; Dec. 6.

Funk, John E., Stockton, Calif. Hoisting-frum mechanism. 1,671,760; Dec. 6.

Funk, John E., Stockton, Calif. Hoisting-frum mechanism. 1,671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Chiral Funke. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Funker. J. 671,760; Dec. 6.

Funk, John E., Stockton, Calif. Funker. J. 671,760; Dec. 6.

Funker. John E., Stockton, Calif. Funker. John E., Stockton, John

Guide Machine Corporation. (See Ross, Harry, as-

signor.) Furber, Frederick M., deceased; S. R. Cutler, administrator, Revere, Mass. Automobile lock. 1,617,840;

Prubush, Frank L., Westford, assignor to C. G. Sargent's Furbash, Frank L., Westford, assignor to C. G. Sargent's L. G. G. Sargent's Conveyer chain. L. G. G. Sargent's Sons Corporation, Graniteville, Mass. Press roll for wool washers and the like, 1,628,835; May 17. Furbush, Frank L., Westford, assignor to C. G. Sargent's Sons Corporation, Graniteville, Mass. 1,642,147; Sons Corporation, Graniteville, Mass. 1,642,147;

Furious, Frank L., Westford, assignor to C. G. Sargents Sons Corporation, Graniteville, Mass. 1,642,147; Sept. 14. Furely, Frank, New York, N. Y., assignor to Bushwick National Bank. Pencil. 1,638,026; Aug. 9. Furey, Irved M., assignor to Union Tank and Pipe Com-pany, Los Angeles, Calif. Street button. 1,647,861; Furious, George D., New Orleans, La. Chair. 1,619,503; Mar.

Mar. 1.

Furlong, Martin J., Houston, Tex. Liquid-dispensing apparatus. 1.647.565; Nov. Tex. Liquid-dispensing apparatus and the foliation of the foliation of

Furman Inventions Corporation. (See Furman, Charles

S., assignor.) (See Hosmer, C. C., and Furman, Simuel E. (See Hosmer, C. C., and Furman, Furman, William R., Troy Mills, Iowa. Aviator's suit. 1.610,270; Aug. 23; Turnace Engineering Company. (See Hirsch, Paul A.,

Furnement, Fernand J. J. (See Schelute, J., and Furne-

Furnement and the month of the month of the month of the furness, William H., National Park, N. J., assignor to Cellocilk Company, Philadeiphia, Pa. Apparatus for filtering. 1,643,299; Sept. 27.

Furness, William H., National Park, N. J., assignor to Cellodilk Company, Philadelphia, Pa. Pump. 1,646,615; Oct. 25. Oc

thread-maring apparatus. 1, 252-252.

Furr Automatic Signal Co. (See Furr, Harry L., assignor.)

Furr, Harry L., Harrisonburg, Va., assignor to Furr Purr, Harry L., Harrisonburg, Va., assignor to Furr Lorent Co., Wilmington, Del Attachment Co., Standard Co., Wilmington, Del Attachment Lorent Co., Lorent Loren

engine. 1,630,941; May 31. (See Green, J. Birchard, Pusion Welding Corporation. (See Green, J. Birchard, Pusion, Pediding Corporation.) (See Green, J. Birchard, Pusion, Pist, Long Beach, Calif. Sink structure. 1,635,631; July 12. Puss, Vincenz, assignor to Vereinigte Aluminium alternation. (See July 1997) (See July 1

Fyria Milliaterians
signor.) III Separator Corporation. (See Groves, H. T.,
G. and Chahman, assignors.)
G. E. S. Co., The. (See Gaine, Charles F., assignor.)
G. & G. Atlas Systems, Inc. (See Dinspel, William H.,

assignor.)

& G. Atlas Systems, Inc. (See Blasper, William II.,
& G. Atlas Systems, Inc. (See Stoetzel, Joseph J.,
assignor.) G. & H. Tire Chuck Gauge Co. (See Harris, William A.,

G. & H. Tire Chuck Gauge Co. (See Harris, William A., assignor.)
Gan, Victor H., Detroit, Mich. Vernier divider or callper. 1,650,704; Nov. 29.
Gabler, Johann, Ettlingen, Germany. Loom for weaving. 1,620,723; Mar. 15.
Gabriel, Adolph, New York, N. Y. Toe slipper. 1,619,665; Mar. 1.

Auton. East Chicago, Ind. Combination hot-dwarfer and hot-air turnee. 1,623,459; May 10, Gabriel, Charles R., assignor to E. W. Bliss Company, Brooklyn, N. Y. Press. 1,620,534; Mar. 8. Gabriel, Herbert D., New York, N. Y. Automatically-operated end gate for dump vehicles. 1,619,504;

operated end gate for dump.
Mar. 1.
Gabriel, John C., assignor to Western Electric Company,
Incorporated, New York, N. Y. Inductive coupling deGabriel, Joseph A., Cleveland, Ohio. Regulating valve for
liquids and gases. 1638,152; Aug. 9.
Gabriel, Raimund, Neustadt, Czechoslovakia. Tool handle
fastening device. 1644576; Oct. 4.
Gabriel Steel Company. (See Zabriskie, William F., asStephen).

Signor.)

Gabriel Tubular Furnace Co. Inc. (See Grunwaldt, Frank E., assignor.)

Gabrielson, Carl, assignor to L. C. Smith & Bros. Type-writer, Inc., Syracuse, N. Y. Playen clutch. 1,614,548;

Jan. 18.

Gaco Corporation. (See Walters. Philip N. assignor.)

Gadd, William E. (See Disbrow, C. A., and Gadd.)

Gaddis, Francis, Merrick, N. Y. Alrecaft. 1,625,646;

Apr. 19.

Apr. 19. Gade, Samuel, New York, N. Y. Escutcheon. 1,649,895;

Gadie, Samuel, New York, N. Y. ESCUCCEON. INVESSED 1809.

Son 22.

Gadsby, Frederick C., Sydney, New South Wales, Australia, Suitcase, attaché case, and the like. 1,642,851; Sept. 20.

Gadsby, Frederick C., Sydney, New South Wales, Austra-Gadsby, Frederick C., Sydney, New South Wales, Australia, 1,646,286; Oct. 18.

Gadsel, Arthur H., Larchmont, assignor to The Gadeel Corporation, New York, N. Y. All-metal telescopic box for cameras. 1,642,651; Sept. 13.

Gaebel Corporation, The. (See Gaebel, Arthur H., assignor).

Schwitz, Arthur, Danzie-Langfuhr, Free State of Danzig, Therapoulte instrument, 1.651.489; Nov. 29. Gaeriner, Fred J., Maplewood, N. J. Combination jewel mounting and gem. Des. 74.105; Dec. 20. Gaffers, Herman B., Watervliet, N. Y. Scaffold, 1,653,763; Dec. 27.

Gaffin, Benjamin B., Brooklyn, N. Y. Bubble pipe. 1646.398; Oct. 25. Gaffney, James A., and M. J. Hanson, North Redwood, Minn. Clamping tool for wire-fence staples. 1,621,631;

Mar. 22. Gaffney, John. (See Ryan, J. J., and Gaffney.) Gagarin, Andrew A., assignor to Gear Grinding Machine Company, Detroit, Mich. Trimming device. 1,626,232;

Company, Detroit, Mich. Trimming device. 1,b20,252, Apr. 26.

Gage, Charles H., Washington, D. C., Safety device. 1,620,077; Apr. 26.

Gage, Charles H., Washington, D. C., assignor of one-fourth to L. D. Soarles, Chevy Chase, Md. W. A. Falson, Lees, Mine-car coupler, 1,617,628; Feb. 15.

Gage, Charles H., assignor to L. W. Scarles, W. D. Riter, Washington, D. C., and W. D. Falson, Chester, Pa. Car coupler, 1,620,535; Mar. 8.

Gage, Charles H., assignor to L. W. Scarless and W. D. Riter, Washington, D. C., and W. A. Falson, Chester, Pa. Car coupler, 1,620,535; Mar. 8.

Gage, Charles H., assignor to L. W. Scarless and W. D. Riter, Washington, D. C., and W. A. Falson, Chester, Pa., trustees Railway safety appliance. 1,648,383; Nov. 8;

PA., trustees Railway safety appliance. 1,648,383; Nov. 8.

Sage, John S., Chicago, III., assignor to Tollurst Machine Works, Troy, N. Y. Centritugal drying machine. 1,636,177; July 19.

Gage, Vincent, Washington, D. C. Paper guide for type-writing machines. 1,619,858; Mar. 8.

Gage, Vincent, Washington, D. C. Paper guide for type-writers. 1,637,022; July 20.

Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Mill V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Will V. (See Dorman, L. L., and Gage.) Gage, Vincent, See Gage, Vincent

ignon, Southbridge, Mass. Dynamer to The Saco-Lowell sacon Samuel M., Lowell, assignor to The Saco-Lowell sacon, Samuel M., Lowell, Sasignor to The Saco-Lowell sacon, Samuel M., Lowell, Sasignor to The Saco-Lowell sacon, Mass. Locking device. 1,638,300; Shops, Boston, Mass.

pany, Southbridge, Mass. Ophthalmic lens. 1,619,341;
Gagnon. Sanuel M., Lowell, assignor to The Saco-Lowell
Gagnon. Southon, Mass. Locking device. 1,635,300;
Aug. 9.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Electrical connecter. 1,635,830; July 12.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Electrical connecter. 1,635,831; July 12.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Electrical connecter. 1,635,832; July 12.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Coupling 1,635,832; July 12.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Coupling 1,650,506; Nov. 22.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Coupling 1,650,506; Nov. 22.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Coupling 1,650,506; Nov. 22.
Gann, Albert T., Stockton, Calif. Container for fruit-canning apparatus. 1,633,856; June 28.
Galin, Habert T., Stockton, Calif. Container for fruit-canning apparatus. 1,633,856; June 28.
Galin, Gagnon, William J., assignor to The Gagnon, William J., assignor to The Galil, Galil, George E., Detroit, Mich., assignor to one-half to A. Seitz, Wayne County, Mich. Compound to solder Galil, John F., Evanston, Ill., assignor to Simons Company, Kenosha, Wis. Manufacture of Compound helical wire springs. 1,627,600; May 10.
Galil, John F., Evanston, Ill., assignor to Simons Company, Kenosha, Wis. Manufacture of Compound helical wire springs. 1,627,600; May 10.
Galil, John F., Evanston, Ill., assignor to Simons Company, Kenosha, Wis. Manufacture of Compound helical wire springs. 1,627,600; May 10.
Galil, John F., Evanston, Ill., assignor to Simons Company, Kenosha, Wis. Manufacture of Compound helical wire springs. 1,627,600; May 10.
Galil, John F., Evanston, Ill., assignor to Simons Company, Kenosha, Wis. Manufacture

Gaines, Noel, Frankfort, Ky. Automobile flag holder. 1.648,338; Nov. 8.
Gains, Chester R., Muscatine, Iowa. Reminder clock. 1.620,455; Mar. 8.
Gair, James, Acton, London, England. Wheel for vehicles and making the same. 1,617,152; Feb. 8.
Gair, Robert, Company. (See De Clercq, George E. W.,

Gair, Robert, Company. (See Tinsley, Edward O., as-gair, Robert, Company. (See Tinsley, Edward O., as-Gair, Roi

Gairing, Emil, assignor to Guiring Tool Company, Detroit, Mich. Interchangeable boring and counterboring tool. 1,620,536; Mar. 8. Gairing, Emil, assignor to Gairing Tool Company, Detroit, Mich. Device for exhibiting tools. 1,638,928; Aug. 16.

troit, Mich. Device for exhibiting tools. 1,638,228; Aug. 16.
Gairing, Emil, assignor to Gairing Tool Company, Detroit, Mich. Counterboring tool. 1,648,802; Nov. 8.
Gairing Tool Company, Gaiser, John Scholler, John Gaiser, John Gaisman, Henry J., New York, N. Y., Safety razor, 1,633,739; June 28.
Gaisman, Henry J., New York, N. Y., assignor to Autostrop Patents Corporation, Dover, Del. Razor-Stade holder, 1,629,863; May 24.
Gaisman, Henry J., New York, N. Y., assignor to Autostrop Patents Corporation, Dover, Del. Blade holder, 1,629,863; May 24.
Gaisman, Henry J., New York, and C. Schumacher, Lynnbrook, N. Y., assignors to Autan Corporation, Dover, Del. Blade holder, Light Gaisman, Henry J., New York, and C. Schumacher, Lynnbrook, N. Y., assignors to Autan Corporation, Dover, Del. Blade holder, Lynnbrook, N. Y., assignors to Autan Corporation, Dover, Del. Blade holder, Lynnbrook, N. Y., assignors to Autan Corporation, Dover, Del. Blade holder, June 14.
Gaisman, Henry J., New York, and C. Schumacher, Lynn-

June 14.

Gaisman, Henry J., New York, and C. Schumacher, Lynnbrook, N. Y., assignors to Autostrop Patents Corporation, Dover, Del. Edging machine. 1,637,074;

brook, N. Y., assignors to Autostrop Patents Corporation, Dover, Del. Edging machine. 1,637,014;
July 26.
Gaisman, Henry J., New York, and C. Schumacker, Lynnbrook, N. X., assignors to Autostrop Patents CorporaGaisman, Lucien, Audenshaw, near Manchester, and A. B.
Brown, Brentwood, assignors to Universal Rubber
Paviors (Manchester 1923) Limited, Audenshaw, near
Manchester, England. Apparatus for forming dovetall
or undercut recesses in clay or other plastic material.
1,629,660; May 24.
Gal, Gyula, Szeged, Hungary, assignor of one-half to B.
Gal, Gyula, Szeged, Hungary, assignor of one-half to B.
Mar., Lew Brunswick, N. J. Rail joint. 1,619,716;
Mar., Salamb, Lusch, assignor, to Ford Motor Company, Detroit

Mar. i.

Galamb, Joseph, assignor to Ford Motor Company, Detroit,
Mich. Lamp and bracket therefor. 1,637,375; Aug. 2.

Galanis, Emanuel N., New York, N. Y. Miner's cap.
1,652,776; Dec. 13.

Brooklyn, assignor of one-half to
Galbraith, Brooklyn, assignor of one-half to
1,649,301; Nov. 15.

Galbraith, Harry F., Philadelphia, Pa. Apparatus and
method for curing legumes. 1,647,863; Nov. 1.

Galbreath, Edwin B., Long Bench, Calif. Siding-sleeveGalbraith, Edwin B., Long Bench, Calif. Siding-sleeveGalbraith, Siding-sleeveGalbraith, Edwin B., Long Bench, Calif. Hydraulic pump
and system. 1,623,239; Apr. 5.

Galbreath, Lon A., et al., trustees. (See Rogers, Harry
R., assignor.)

Galbreath, Lon A., et al., trustees. (See Rogers, Harry R., assignor.)
Gale, Alexander. (See Mellor, Dennis, assignor.)
Gale, Gordon M., Maywood, Calif. Loose-leaf binder. 1,651,520; Dec. 6.
Gale, Henry F., Chicago, Ill. Painting apparatus. 1,622,2244; Mar. 22.
Gale, John E., Pittsburgh, Pa. Valise. 1,617,629;

Richards E., Pittsburga, A., Spectacles, J. Gale, John E., Pittsburga, A., Spectacles, J. Gale, Milan C., (See Kent, D. W., and Gale.) Galeski, Joseph S., Richmond, Va. Spectacles. 1.644,776; Oct. 11.

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Oct. 11.

Galieazzi, Joseph, San Francisco, Callf. Accordion plate, 1.636,299; July 19.

Galion Iron Works & Mfg. Co., The. (See Arndt. Frank-lin E., assignor.)

Galion Iron Works & Mfg. Co., The. (See Keeler, Raymond W. assignors.)

Smith and Outrik, assignors.)

Galion Metallic vault Company, Inc. (see Gay, J. C., Smith, and Quirk, assignors.)
Galion Metallic Vault Company, The. (See Smith, R. E., Arnold, and Gay, assignors, Odliagher, Arthur D., assignor to Oliver Chilled Plow Works, South Bend, Ind. Cultivator. 1,639,768; Aug.

23.
Gallagher, Bernard S., Oakland, Calif, Exhaust box.
1.649,896; Nov. 22.
Gallagher, Demis J., Brooklyn, N. Y. Cigar-box moistener.
1.637,814; Aug. 2.
Gallagher, George D. Flower, Ariz., assignor, by mesne
Gallagher, George D. Flower, Ariz., assignor, by mesne
Wallen, Baltimore, Md., C. F. Moore, Washington,
D. C., and J. M. Matthews, Baltimore County, Md.
Blade-stropping device. 1.624,592; Apr. 12.
Gallagher, George D., Washington, D. C., assignor, by
mesne assignments, of part interests to N. F. Hoose
and R. B. Valten, Baltimore County,
Md. Safety-razor-blade stropper. 1,624,593; Apr. 12.

Gallagher, Lillian K. (See Gallagher, Richard D., jr., assignor.)
Gallagher, Peter F., Coffeyville, Kans. Washout plug for locomotive boilers. 1,645,046; Oct. 11.
Gallagher, Philip J., Falibridge, assignor of one-fourth to N. N. Egan, Wishram, Wash., and one-eighth to W. F. Rogers, Portland, Oreg. Car-back-controlling device. 1,653,955; Dec. 27.
Gallagher, Richard D., jr., assignor to L. K. Gallagher, Propost N. Y. Kailway draft gear. 1,649,344; Galland, Alfred J. Paris France, Battle, 19.

1.653,955; Dec. 27.
Gallagher, Richard D., Jr., assignor to L. K. Gallagher, Freeport, N. Y. Railway draft gear. 1,649,344; Nov. 15.
Garatus. 1.634,416; July 5.
Gallant, Alfred J., Swannanoa, N. C. Automatic stop motion. 1,651,761; Dec. 6.
Gallant, Alfred J., Swannanoa, N. C. Automatic stop motion. 1,651,761; Dec. 6.
Gallaway, William O., (See Nye, Louis R., assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Chuck. 1,647,220; Nov. 1.
Gallin, Albert E. (See Beck, J., and Gallin)
Gallower, Keith F., Fond du Lac, Wis, assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Chuck. 1,647,220; Nov. 1.
Gallin, Albert E. (See Beck, J., and Gallin)
Gallower, Mell Supply, Pittsburgh, Pa. Spudding shoe. 1,634,939; July 5.
Gallopin, Gustavo, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Repairing torn fabric. 1,620,834; Mar. 15.
Galloway, Annes W., Waterloo, assignor of one-half to 1,637,693; Aug. 2.
Galloway, Robert M., assignor to The National Automatic Tool Company, Richmond, Ind. Mechanism reversible without backlash error. 1,627,236; May 3.
Galloway, Robert M., assignor to The National Automatic Tool Company, Richmond, Ind. Lost-motion coupling. 1,627,964; May 10-10.
Galloway, Robert M., assignor to The National Automatic Tool Company, Schomond, Ind. Lost-motion coupling. 1,627,964; May 10-10.
Galloway, Robert M., assignor to The National Automatic Tool Co., Richmond, Ind. Lost-motion coupling. 1,627,964; May 10-10.
Galloway, Robert M., assignor to Kny-Scheerer Cornassignors to The National Automatic Tool Co., Richmond, Ind. Lost-motion coupling. 1,627,964; May 10-10.
Galloway, Robert M., assignor to Kny-Scheerer Cornassignors to The National Fall Lost-motion coupling. 1,627,964; May 10-10.
Galloway, Robert M., Sperson, Iowa. Cultivator attachment. 1,613,092; Jan. 4.
Gallus, Joseph M., and J. J. Scheits, Wrightstown, N. J. Treffic-signal switch. 1,620,456; Mar. 8.
Gallus, Joseph M., and J. J. Scheits, Wrightstown, N. J. Treffic-sig

Galvin, Wade S., assignor to The Akron Standard Mold Company, Akron, Ohio. Tire. Des. 72,553; May 3, Galvin, Wade S., assignor to The Akron Standard Mold Company, Akron, Ohio. Vulcanizer. 1,652,473;

Company, Akron, Ohio. Vulcanizer. 1,652,473; Dec. 13.

Gambill, William M., Merkel, Tex. Articulator. 1,637,934; laug. 2.

Gamble, Charles B., assignor of one-half to J. T. Lucas. Minneapolis, Minn. Gas-meter attachment. 1,641,079; Aug. 30.

Gamble, David E., assignor to The Borg & Beck Company, Chicago. Ill. Friction clutch. 1,623,470; Apr. 5, Gamble, David E., assignor to The Borg & Beck Company, Chicago, Ill. Friction clutch. 1,628,877; May 17.

Gamble, David E., Detroit, Mich., assignor to The Borg & Beck Company, Chicago, III. Clutch plate. 1,652,005; Dec. 6.

Gamble, David E., Detroit, Mich., assignor to The Borg & Beck Company, Chicago, III. Clutch plate. 1,652,006; Dec. 6.

Gamble, David E., Detroit, Mich., assignor to The Bor Beck Company, Chicago, Ill. Clutch plate. 1,652,0 Dec. 6. 1,652,007

signor.)
Gamewell Company, The. (See Smith, Harry, assignor.)
Gamewell Company, The. (See Smith, Harry, assignor.)
Gamewell Company, The. (See Suren, Nathan H., assignor.)

Gamino, Bartolo, Pigeon, Mich. Knee-protecting device. 1,627,497; May 3. Gammell. Cliffon O., assignor of one-half to A. L. Nelson, Green Bay. Wis. Paper-converting machine. 1,641,423; Sept. 6.

Gammeter, Harry C., Cleveland Heights, Ohlo. Pyrotechnic signal. 1,640,892; Aug. 30.
Gammeter, John R. (See Haddield, John, assignor.)
Gammeter, John R. (See Perks, George W., assignor.)
Gammeter, John R. (See Perks, George W., assignor.)
Gammeter, John R. (See Perks, George W., assignor.)
Goodrich Company, New York, N. Y. Festooning
rack. 1,616,363; Feb. 1.
Gammeter, John R., Akron, Ohlo, assignor to The B. F.
Goodrich Company, New York, N. Y. Electric coupling.
1,616,565; Feb. 8.
Goodrich Company, New York, N. Y. Tire-building
method and apparatus. 1,619,019; Mar. 1.
Gammeter, John R., Akron, Ohlo, assignor to The B. F.
Goodrich Company, New York, N. Y. Apparatus for
vulcanizing strip material. 1,619,020; Mar. 1.
Gammeter, John R., Akron, Ohlo, assignor to The B. F.
Goodrich Company, New York, N. Y. Doorcheck strap.
1,619,067; Mar. 1.
Gammeter, John R., Akron, Ohlo, assignor to The B. F.
Goodrich Company, New York, N. Y. Method and apparatus for producing elastic strip material. 1,619,322;
Mar. 1.
Gammeter, John R., Akron, Ohlo, assignor to The B. F.
Goodrich Company, New York, N. Y. Method and apparatus for producing elastic strip material. 1,619,322;
Mar. 1.
Goodrich Company, New York, N. Y. Method and apparatus for producing elastic strip material. 1,619,322;
Goodrich Company, New York, N. Y. Wethod and apparatus for producing elastic strip material. 1,619,322;
Goodrich Company, New York, N. Y. Wethod and apparatus for producing leastic strip material. 1,619,322;
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Goodrich Company, New York, N. Y. Wethod and apparatus for producing leastic strip material. 1,619,322;

Mar. 1
Gammeter, John R., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Tire-trimming apparatus, 1,622,440; Mar. 29.
Gammeter, John R., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Packing and
making the same. 1,627,698; May 10.
Gammeter, John R., Akron, Ohio, assignor to B. F.
Goodrich Company, New York, N. Y. Apparatus for
forming and cutting plastic material. 1,628,836;
May 17.
Gammeter. John R., Akron, Ohio, assignor to The B. F.
Gammeter. John R., Akron, Ohio, assignor to The B. F.

Goodrich Company, New York, N. Y. Apparatus for forming and cutting plastic material. 1,628,836; May 17.

Gammeter, John R., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Fastening device for shoes and the like. 1,632,604; June 14.

Gameter, John R., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Molding and vulcantizing apparatus. 1,632,830; June 21.

Gammeter, John R., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Silent gear and making the same. 1,638,256; Aug. 9.

Gammeter, John R., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Silent gear and apparatus for making hollow rubber articles. 1,639,430; Aug. 16.

Gammeter, John R., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Precision adjustment device. 1,639,836; Aug. 23.

Goodrich Company, New York, N. Y. Thre-building apparatus. 1,640,072; Aug. 23.

Gammeter, John R., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Rubber-coated article and making the same. 1,645,748; Cbc. 18.

Gammous, Herman T., et al. (See Miller, Max C., asGamoty, Lucien J., Bondi, near Sydney, assignor to Secrophones Limited, Sydney, Australia. Telephone silencer. 1,642,543; Sept. 13.

Gamper, Robert, Broodyn, N. Y. Centrifugal separator. 1,614,357; Jan. 11.

Games, Alphons, and M. Girard, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of calcium salts of inositol-phosphoric acid. 1,644,246; Oct. 4.

Gams, Alphons, and M. Girard, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of calcium salts of inositol-phosphoric acid. 1,644,246; Oct. 4.

Gams, Alphons, and M. Girard, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Medebyde condensation product and making same. 1,654,215; Dec. 27.

Gamillon, Perre A., Parls, France. Sink. 1,614,358; (Gameter, Paul Esslinger, assignor to the Perre Perre A., Parls, France. Sink. 1,614,358;

Gandillon, Pierre A., Paris, France. Sink. 1,614,358; Jan. 11.

Gandillon, Plerre A., Paris, France. Sink. 1,614,358; Jan. 11.

Gangler, Paul, Esslingen, assignor to the Pirm Fr. Hesser Maschinenfabrik-Aktiengesellschaft, Suttgart-Cannstatt, Germany. Closing parcel. 1,625 720; Apr. 19.

Gangler, Paul, Esslingen, assignor to the Firm Fr. Hesser Maschinenfabrik-Aktiengesellschaft, Stuttgart-Cannstatt, Germany. Machine for manufacturing, Hilling, and closing packages. 1,627,109; May 3.

Gangloff, Georges, Geneva, Switzerland. Coach work oddernenfabrik-Aktiengesellschaft, Stuttgart-Canstatt, Germany. Closing bags. 1,640,316; Aug. 23.

Gangloff, Georges, Geneva, Switzerland. Coach work column of vehicles. 1,629,157; May 17.

Ganic, Ottavio, G. Avondoglio, and O. Grassis, New York, N. Y.

Artificial-flower-curling machine. 1,620,523; Gan, John A. assignor to The Dow Chemical Company, Middand, Mich. Magnesium alloy. 1,649,521; Nov. 15.

Gannaco, Maddalena. (See di Marzo, Francis, assignor). Gannaec, Maddalena. (See di Marzo, Francis, assignor). Gannaet, William J., Cleveland, Obio. Internal-combustion engine. 1,634,901; July 5.

Gannett, Danforth K., Arverne, N. Y., and M. Kirkwood, East Orange, N. J., assignors to American Telephone and Telegraph Company. Electrical network. 1,638,437; Gannett. Homer E. Berwyn. III. Lamp mounting.

and rengalmy and Aug. 9. Homer E. Berwyn, III. Lamp mounting, Gaussia, 336; Aug. 16.
Gans, Robert S., Detroit, Mich. Emergency control lever. 1,614,254; Jan. 11.

anssen, Robert, Grunewald, Germany, Extraction of ammonium-aluminum sulphate from aluminum-sulphate solutions containing ferric compounds, 1,619,666;

solutions containing.

Mar. 1.

Gametric State S

Garankin, Aucodore F., two No. 10.

coupling, 1612,863; Jan. 4.

Garbell, Max, Chicago, Ill. Frame for typewriting machines. Des. 74,052; Dec. 13.

Garbell, Max, Chicago, Ill. Frame for typewriting machines. Des. 74,052; Dec. 13.

Garbell, Max, Chicago, Ill. Frame for typewriting machines. Des. 74,052; Dec. 13.

Garbell, Charles N., Covington, Va. Anchor-bolt sleeve. 14,052,003; Oct. 18.

Garbell, Frank E., Los Angeles, Calif., assignor to Famous Players-Lasky Corporation, New York, N. Y.

Garbutt, Frank E., Los Angeles, Calif., assignor to Famous Players-Lasky Corporation, New York, N. Y.

Film-take-up device with brake. 1,629,029; May 17.

Garbutt, Frank E., Los Angeles, Calif., assignor to Famous Players-Lasky Corporation, New York, N. Y.

Film-take-up device with brake. 1,629,029; May 17.

Garbutt, Frank E., Los Angeles, Calif. Automatic film
tensioning mechanism. 1,636,944; July 26.

Garbutt, Frank E., and R. G. Fear, Los Angeles, Calif.,

assignors to Famous Players-Lasky Corporation. Proc
ess of and apparatus for climinating granular effects

Garcia, Emillo, New York, N. Y. Automobile brake

mechanism. 1,644,671; Oct. 11.

Garcia, Enrique G., Tampico, Mexico. Fire-preventing

cover for fuel tanks and the like. 1,637,298; July 26.

Gard, Earle W., Wilmington, Calif. Apparatus for sam
pling oils. 1,649,399; Nov. 15.

Gardels, John H., Hildreth, Nebr. Snow fence. 1,612,972;

Jan. 4.

Jan. 4.

Garden, Alexander T., Augusta, Kans. Oll regulator. 1.644.918; Oct. 1.1dland Junction, Western Australia, Australia, Shears. 1.632.284; June 14. Gardiner, Henry C., Anacondo, Mont. Timber preservation. 1.639.601; Aug. 16. Gardiner, John F. (See Drew, Henry J. and J. A. H. and Gardiner, John F. (See Drew, Henry J. and J. A. H. and Gardiner, John F. (See Drew, Henry J. and J. A. H. and Gardiner, J. H. Aufford, Conn. Ball-grinding, page 1.14. [1.14].

Gardiner, John F. (See Drew, Henry J. and J. A. H., and Gardiner.)
Gardiner, Walter B., Hartford, Conn. Ball-grinding machine. 1.629,864; May 24.
Gardiner, William B., assignor of forty-eight one-hundredths to S. Marchese, Quincy, Mass. Adjustable sick bed. 1,622,534; Apr. 19.
Gardiner, William B., assignor to Satin Finish Hardwood Flooring Company, Limited, Weston. Ontario, Canada. Treatment of lumber. 1,635,665; July 12.
Gardner, Daniel, Weybridge, England. Manufacture of paints. 1,617,754; Feb. 15.
Gardner, Edward B., J. Nielsen, and R. D. Gardner, Beloit, Wis. Grinding machine. 1,651,382; Dec. 6.
Gardner, Frederic E., Beloit, Wis. Work carrier. Tricker, Frederic E., Beloit, Wis. Grinding machine. 1,638,028; Aug. 9.
Gardner, Frederic E., Beloit, Wis. Grinding machine. 1,649,823; Nov. 22.
Gardner, George W., Flint, Mich. Spark plus. 1,620,341; Mar. 8.
Gardner, Grandison, Dayton, Ohlo. Recording accelerom-

Gardner, George W., Flint, Mich. Spark plug. 1,620,341; Mar. 8.

Gardner, Grandison, Dayton, Ohlo. Recording accelerometer, 1,634,992; July 5.

Gardner, Harian F., assignor to L. Gardner, St. Paul, Gardner, Henry, Detroit, assignor to Ford Motor Company, Highland Park, Mich. Plating and method of accomplishing the same. 1,642,238; Sept. 13.

Gardner, John E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telephone system. 1,621,503; Mar. 22.

Automatic Electric Inc., Chicago, III. Automatic telephone system. 1,624,329; Apr. 12.

Gardner, John E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telephone system. 1,626,034; Apr. 26.

Gardner, John E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telephone system. 1,626,034; Apr. 26.

Gardner, John E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Multi-office telephone system. 1,638,331; Aug. 9.

Gardner, John E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Multi-office telephone system. 1,638,331; Aug. 9.

Gardner, John E., Chicago, III. Multi-office telephone system. 1,638,331; Aug. 9.

Gardner, John E., Chicago, III. Bellamy, Brookfield, assignors, by mesne assignments, to Automatic Electric Inc., Chicago, III. Multi-office telephone system. 1,638,591; Chicago, III. Automatic Electric Inc., Chicago, III. Automatic Elec

1.646,399; Oct. 25.

Gardner, Joseph B. (See Gercich, F. A., and Gardner.) Gardner, Kenneth C., assignor to The Greenville Steel Car Company, Greenville, Pa. Car construction. 1,630,001; May 24.

Gardner, Kenneth C., assignor to The Greenville Steel Car Company, Greenville, Pa. Crosstie for railway cars. 1,622,181; June 14. Gardner, Kenneth C., assignor to The Greenville Steel Car Company, Greenville, Pa. Cross brace. 1,641,855;

Sept. 6.
Gardner, Leonard T., assignor of one-half to C. J. Jording,
Baltimore, Md. Device for raising sunken submarines.
1,622,866; Mar. 29.

Baltimore, Md. Device for raising sunken submarines, 1,622,863 (Mar. 29.)
Gardner, Lucile. (See Gardner, Harlan P., assignor.)
Gardner, Oscar E., Shreveport, La., assignor to Arkansas Osk Flooring Company, Inc., Alexandria, La. Sawyer's gauge. 1,649,955; Nov. 22.
Gardner, Percy, East Orange, N. J., assignor to H. M. Bunker & Company, Inc., New York, N. Y. Machine Gor forming tubular fabrics. Re16,517; Jan. 4.
Gardner, Phebe G., assignor of one-half to P. Kay, Chicago, Ill. Combination furniture. 1,618,922; Feb. 22.
Gardner, Ralph D. (See Gardner, E. B., Nielsen, and Gardner, Herford E., North Bennington, Vt. Coaster. 1,613,508; Jan. 4.
Gardner, William, Cleveland, Ohio. Apparatus for and reduction of finely-divided material. 1,619,295; Mar. 1.
Gardner, William R., assignor of one-tenth to D. G. Collins, Los Angeles, Calif. Vehicle spring hanger. 1,625,023; App. 11. tow and C. C. Post Los Angeles, Calif. Apr. 19.

Apr. 19.
Garey, Albert A., Altadena, Calit. Safety device,
1,645,131; Oct. 11.
Garey, Charles C., assignor of one-third to T. L. Smith,
Bremerton, Wash. Electrical heater. 1,620,537;
Mar. 8.

Bremerton, Wash. Electrons Mar. 8.

Garey, Edward M., New York, N. Y. Combined lamp and supporting bracket. Des. 73,126; July 26.

Garey, John P., Elmira Heights, and L. B. Hasbrouck, Elmira, N. Y. Stop-motion device for spinning frames. 1,634,614; July 5.

Garey, Raymond M. (See Henwood, Abrabam, assignor.) Gartonkel, Benjamin J., et al. (See Lanfranchi, Jenn T.,

Garfunkel, Harry I., et al. (See Lanfranchi, Jean T., assignor.)
Garfunkel, Nathan J., et al. (See Lanfranchi, Jean T.,

Garriantel, Nathan J., et al. (See Lanfranchi, Jean T., assignor.)
Gargan, John O., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Electrostatic condenser. 1,635,990; July 19.
Gargan, John O., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Variable Gargan, John O., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Electric coil. 1,647,615; Nov. 1.
Gariglio, Joseph E., Brooklyn, N. X. Safety attachment for washing machines. 1,641,680; Aug. 30.
Garlido, Theodore J., Allentown, Pa. Let-off device. Garland, Charles S. (See Hinchley, J. W., and Watson, assignors.)

Garland, Maries S. (See Hindhey, J. W., and Watson, desired, Charles S. (See Hindhey, J. W., and Watson, desired, Carland, Mamie M., assignor to Garland Ventilator Company, Chicago, Ill. Ventilator. 1,621,531; Mar. 22. Garland, Mamie M., assignor to Garland Ventilator Company, Chicago, Ill. Ventilator for busses and other vehicles. 1,634,665; Dec. 7. Garland, Chicago, Ill. Ventilating apparatus. 1,640,986; Aug. 30. Garland, Oscar A., Hot Springs, Ark. Talking doll. 1,622,441; Mar. 29. Garland, Raiph C., assignor to Skinner Antontive Description of the Chicago, Ill. (22,696). Divined the Company Chicago, Ill. (22,696). Divined the Chicago Carland, Richard, Junction City, Kans. Plugging knife. 1,630,429; May 24. Garland, Richard, Junction City, Kans. Plugging knife. 1,630,429; May 31. Garland Ventilator Company. (See Garland, Manie M., assignor).

Ventilator Company. (See Garland, Mather,

assignor.)
Garlick, Fred G., assignor to General American Tank
Car Corporation, Chicago, Ill. Tank car. 1,633,811;

Car Corporation, Sense Line 1, 2002 Carl Corporation, Sense D., Port Huron, Mich. Transmission gearing for motor-driven vehicles. 1,650,621; Nov. 29. Garlock Packing Company, The. (See Farrington, Winfeld C., assignor.)

Garlock Packing Company, The. (See Hubbard, Ceell R., Sense Parrington, and C.

Garlock Facking Company, The. (See Hubbard, Ceell R., assignor.)
Garman, Bertram C., West Hampstead, London, and C. Oliver, Chiseburst, assignors to Oliver Pell Control Limited, Woolwich, England. Step-by-step rotary electors, and Carner, Arthur L. (See Moore, E. S., and Garner, Garner, Arthur L. (See Moore, E. S., and Garner, Lisantin D., Tulsa, Okla. Telephone equipment. 1,633,892; June 28.
Garnett, Harnes M. (See Luks, J., and Garnett.)
Garnett, James M. (See Luks, J., and Garnett.)
Garnett, James M. (See Corlett, E. H., and Garnett.)

Garrard, Charles G., London, England. Change-speed gear. 1,613,749; Jan. 11.
Garrard, Charles G., London, England. Transmission of power. 1,625,062; Apr. 5.
Garretson, Harry D., assignor to H. F. Waite, New York, N. X. X-ray system. 1,629,338; May 17.
Garrett, Amos B., Tyler Woods, Pa. Hoe. 1,630,121; May 24.

May 2 Garrett, Dec. 2 Berkeley B., Roanoke, Va. Calipers. 1,654,459;

May 24.
Garrett, Berkeley B., Roanoke, Va. Calipers. 1,654,459;
Garrett, Berton A., Ballston Spa, N. Y., assignor to General Electric Company. Locomotive or car body. 1,631,677; June 7.
Garrett, Henry, Dallas, Tex. Traffic signal. 1,625,990;
Apr. 26.
Garrett, Henry, Dallas, Tex. Radio fire-alarm system.
Garrett, Henry, Dallas, Tex. Radio fire-alarm system.
Garrett, Near, Berkeley, Calif. Concrete wall construction. 1,618,421; Feb. 22.
Garrett, Richard M., Yonkers, assignor to Nestle's Food Company, New York, N. Y. Apparatus for condensing milk. 1,640,271; Aug. 23.
Garrett, Stuart G., Tulsa, Okla. Choke control for car-ment fastener. 1,618,421; Feb. 22.
Garrett, William, and G. Gaylets, Old Forge, Pa. Segment fastener. 1,618,422; Feb. 22.
Garrety, Frank J., Cincinnati, Ohio. Display-sample device. 1,627,281; May 3.
Garric, André, Layrac, France. Garden plow. 1,648,384;

Nov. 8.

Garrigues, William C., assignor to The Williams Foundry and Machine Company, Akron, Ohio. Tire. Des. 73,254; Aug. 16.

Garrigues, William C., assignor to The Williams Foundry and Machine Company, Toledo, Ohio. Tire. Des. 73,255; Aug. 16.

Garrison, John L. (See Harris, W. R., and Garrison.)

Garrison, John W., et al. (See Flanagan, William A., as-Galfo, Capunel, Naw British, Cor.

Garria, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Feeding development of Sullivan Machinery Company. Feeding development of Sullivan Machinery Company. Hole-cleansing mechanism. Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Hole-cleansing mechanism. Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Feeding mechanism. Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Feeding to Sullivan Machinery Company. Feeding to Sullivan Machinery Company. Fluid-pressure motor. 1,621,663; Mnr. 22.

Mar. Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock-drilling device. 1.626.277:

Apr. 26.
Gartin, Elmer G., Claremont, N. H., assignor to Sulliyan
Machinery Company. Braking mechanism. 1,631,369;
June 7.
Gartin, Elmer G., Claremont, N. H., assignor to Sulliyan
Elmer G., Claremont, N. H., assignor to Sulliyan

artin, Elmer G., Claremont, N. H., assignor to Machinery Company. Hole-cleansing device. 1 1,634,495;

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock drill. 1,648,877; Nov. 8. Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock drill. 1,648,877; Nov. 8. Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Braking device. 1,650,013; Van Machinery Company. Rock-drilling mechanism. 1,651,199; Nov. 29. Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock-drilling mechanism. 1,652,268; Dec. 20. Company. Drilling mechanism. 1,652,268; Dec. 20. Garting, George. Los Angeles, Calif. Rotary well-drilling bit. 1,634,809; July 5. Gartner, Gustav W., Maywood, Calif. Vehicle load scale. 1,640,530; Aug. 30. H., Hamburg, Germany. Removing tetraulitromethane from trinitrotoluene. 1,632,959; June 21.

June 21.

Garton, John T., Toronto, Ontario, Canada. Floor-finishing apparatus. 1,619,571; Mar. 1.

Garver, Robert H., Drummond, Idaho. Expansion pulley. 1,634,285; July 5.

Garver, Richard, Los Angeles, Calif. Rotary swing or captive aeropiane. 1,652,474; Dec. 13.

Garvin, Victor J., Chicago 11. Merchandising coupon.

caplive aeropiane. 1,652,474; Dec. 13.

Garvin, Victor J., Chicago III. Merchandising coupon.
1,613,881; Jan. 11.

Garwick, Ed. (See Karow, Emil. assignor.)

Gompany, Bufface Lander, assignor to Spencer Lens Company, Bufface N. Y. Binocular microscope. 1,637,563; Aug. 2.

Gary, Stephen J. (See Guarneri, Stephen J.)

Gary, Stephen J. (See Guarneri, Stephen J.)

Roy York, N. Y. Cross-jointed metal bar. 1,637,220; July 26.

arza. Daniel, New Orleans, La. Porous composition building material. 1,637,935; Aug. 2. arzaoni, Peter, et al. (See Thomas, George M., as-

Gas Appliance Manufacturing Co., The. (See Waddell, Homer J., assignor.)
Gas Refrigeration Corporation. (See Otto, S., and

Gas Research Company, The. (See Smith, Harry F., assignor)

Gaschier, Alois, Berlin, Germany. Artificially producing radioactive substances. 1.644,370; Oct. 4.

Gasc, Eugene, assignor to Buker Perkins Company, Inc., Saginaw, Mich. Dial scale and similar apparatus. 1.634,324; July 5.

1.634,324; July 5.
Gasifer Company, The. (See Reichhelm, George L., assignor).
Gaskell, Walter J., assignor of one-half to C. D. Hunter, Philadelphia, Pa. Lady bandeau and permanent wave. 1.652,835; Dec. 13.
Gasoline Products Company. (See Cross, Roy, assignor.) Gasoline Products Company. (See Cross, Walter M., assignor.)

signor.)
Gasoline Products Company. (See Snelling, Walter O., assignor Gasoline Recovery Corporation. (See Canter, Vernon C.,

assignor.)

Gasoline Recovery Corporation. (See Canter, Vernon C., assignor.)

Gasoline Recovery Corporation. (See Voress, C. L., and Turner, assignors.)

Gasoline Recovery Corporation. (See Voress, C. L., and Turner, assignors.)

Gasoline Recovery Corporation.

Gastoline R

Gates Corporation, The. (See Carpenter, Frank D., assignor.)
Gates, Earl. (See Christian, R. A., and Gates, Elmer.)
Gates, Earl. (See Christian, R. A., and Gates, Vila, San Diego, Calit. Automobile bumper. 1648,694; Nov. 8.
Gates, Ellisha A., assignor of one-half to F. G.
Gates, Ellisha A., assignor of one-half to F. G.
Gates, Ellisha A., assignor of one-half to F. G.
Gates, Ellisha A., assignor of one-half to F. G.
Gates, Ellisha A., assignor of one-half to F. G.
Gates, Ellisha A., assignor of One-half Massuring inGates, Gates, Gate

ter F. assignor.)
Gathmann, Emil, Baltimore, Md.
Gathmann, Emil, Baltimore, Md.
Shrink-head casing for
ingot molds. 1,630,612; May 31.
Gathmann, Emil, Baltimore, Md. Ingot mold. 1,636,224;
July 19.

July 19.
Gathmann, Emil, Baltimore, Md. Ingot mold and Ingot.
1.643.241; Sept. 20.
Gathmann, Emil, Baltimore, Md. Ingot mold. 1,649,522;
Nov. 15.

Gathmann, Emil, Baitimore, Md. Ingot moid. 1,633,622;
Gathmann, Emil, assignor to The Gathmann Engineering.
Company, Baitimore, Md. Ingot moid. 1,621,402;
Mar. 15.
Gathmann Engineering Company, The. (See Bornin, George A., assignor.)
Gathmann Engineering Company, The. (See Gathmann, Emil, assignor.)
Gathmann Engineering Company, The. (See Gathmann, Emil, assignor.)
Gathann Corporation. (See Madorsky, Samuel Lossignor.)
Gatial, George, assignor of one-half to S. Matiasko, Tarrentum, Pa. Cushion tire. 1,630,175; Aug. 16.
Gatke, Thomas L., Oak Park, III. Friction lining and forming some. 1,026,403; Apr. 26.
Gatte, Thomas L., Oak Park, III. Friction lining and forming some. 1,026,403; Apr. 26.
Gatti, Mario, Milan, Italy. Internal-combustion engine. 1,646,780; Oct. 25.
Gattiker-Tanner, Heinrich. (See Dam, Henry M. R., assignor.)

signor.) signor.) audard. Robert, Bern, Switzerland. Panel frame. 1,648,584; Nov. 8.

Gandet, Ernest, Hyde Park, Mass. Mat. 1,641,029;
Aug. 30.
Gaudian, William F., Dallas, Tex. Wall construction,
1,623,917; Apr. 5.
Gauger, Alfred W., and H. H. Storch, Westend, Calif.,
assignors to Burnham Chemical Company, Reno, Nev.
Drine, 1,621,927; Mar. 22.
Gauger, Frank A., assignor to Time-0-Stat Corporation,
Milwaukee, Wis. Thermostatic control for ovens,
1,619,506; Mar. 1.
Gauger, Frank A., and R. W. Johnson, assignors to TimeGauger, Frank A., and R. W. Johnson, Edward of Company,
1,625,524; Dec. 13,
Gaugh, Willford A., Erie, assignor to American Meter
Company, Philadelphia, Pa. Gas-meter mechanism.
1,622,631, May 17.
Gauger, Charles L. (See Davy, James A. and P. H., and
Gaugler.)
Gaugler, Charles L. (See Davy, James A. and P. H., and
Gaulard, Alfred, assignor to Atellers des Vosges, Paris.

Gaugler, Charles L. (See Davy, James A. and P. H., and Gaugler.)

Gaulard. Alfred., assignor to Ateliers des Vosges, Paris. France. Automatic brake for wearing looms. 1,664,264; Nov. 8.

Gaulard. Alfred. assignor, to Ateliers des Vosges, Paris. France. Subttle locking and releasing control. 1,654,302; Nov. 15.

Gauld. Harry W., Brandon, Manitoba, Canada. Starter Gaulard. Avaid. E. (See Pell. H. V. M., and Gaulke.)

Gault. Frank W., Ir., assignor of one-half to H. J. Greive. Louisville, Ky. Gas mixer. 1,613,388; Jan. 4.

Gauut. Floyd. M. B. Reynolds, and R. C. Hughes, assignors to Reynolds Gas Regulator Co., Anderson, Ind. Gaus. E. Gaulard. Co., Anderson, Ind. Gaus. E. Gaulard. Co., Anderson, Ind. Gaus. E. Gaulard. Co., Anderson, Ind. Gaus. Frederick T., Wilmington, Del. Tire chain. 1,627,555; May 10.

Gaus. Frederick T., Wilmington, Del. Tire chain. 1,627,555; May 10.

Gaus. Frederick T., Wilmington, Del. Tire chain. 1,627,555; May 10.

Gauthier, Ernest, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Press. 1,618,001; Feb. 15.

Gauthier, Ernest, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Diamond 1819, 1,623,463; Apr. 19.

Gauthier, Ernest, Chicago, Ill., assignor to Western Electric Company, New York, N. Y. Bearing. 1,639,692; Aug. 23.

Gauthier, Ernest, Chicago, Ill., assignor to Western Electric Company, New York, N. Y. Bearing. 1,639,692; Aug. 23.

Gauthier, Ernest, Chicago, Ill., assignor to Western Electric Company, New York, N. Y. Bearing. 1,639,692; Aug. 23.

Gauthier, Ernest, Chicago, Ill., assignor to Western Electric Company, New York, N. Y. Bearing. 1,639,692; Aug. 23.

Gauthier, Ernest, Chicago, Ill., assignor to Western Electric Company, New York, N. Y. Bearing. 1,639,692; Aug. 23.

Gauthier, Ernest, Chicago, Ill., assignor to Western Electric Company, New York, N. Y. Bearing. 1,639,692; Aug. 23.

Gauthier, Ernest, Chicago. Ill., assignor to Western Electric Company. Incorporated, New York, N. Y. Punch press. 1.642,773; Sept. 20.
Gautschy, Otto, et al. (See Schauman, Bror M., as-

Gavaza, George V., Quincy, Mass. Siphon holder. 1.627.734; May 10. Gaven, Mary E. (See Gaven, William J., assignor.) Gaven, Mary E., administratrix. (See Gaven, William

Gaven, Masy, administratrix. (See Gaven, William Gaven, Station, J., administratrix.)

Gaven, William J., deceased, assignor of one-half to M. E. Gaven, William J., deceased, assignor of one-half to M. E. Gaven, William J., deceased, assignor of one-half to M. Gaven, William J., deceased, assignor of one-half to M. tratrix of the sold William I., Gaven, Composition article and manufacture. 1,628,400; May 10.

Gavin, Percy, National Sanatorium, Tenn. Electron-discharge device. 1,643,904; Oct. 18. assignor to Dillon-walve internal-combustion engine. 1,650,120; Nov. 22.

Gawley, Joseph L., Los Angeles, Calif. Multiple-jet oil lift. 1,616,220; Feb. 1.

Gaw-O'Hara Envelope Company. (See Ablquist, Eugene F., assignor.)

Gaw-O'Hara Envelope Co. (See Olgay, Albert, assignor.) Gay, Frazer W., Newark, N. J. Electrical current-limit-ing system. 1,625,464; Apr. 19. Gay, Henry, Newark, N. J. Toy parachute. 1,639,602;

Gay, Henn Aug. 16.

Aug. 16.

Gay. Henry G., Mankins, Tex. Double adjustable drivechain idler. 1,631,258; June 7.

Gay, Horace C. (See Smith, R. E., Arnold, and Gay.)

Gay, John C. (See Smith, R. E., Arnold, and Gay.)

Gay, John C., R. E. Smith, and H. J. Quirk, Assignors to

Dump body. 1,615,267; Jan. 25.

Gay, Norman H., Los Angeles, Calif. Precooling fruits

and vegetables and other perishable commodities for
shipment. 1,617,630; Feb. 15.

Gay, Norman H., Los Angeles, Calif. Recenerative pursing system for refrigerating plants. 1,617,631; Feb. 16.

1,637,901; Aug. 28.

Gayle Norman W. Beech Grove assignor to C. N. Van.

Gayle Norman W. Beech Grove assignor to C. N. Van.

Gayle, Norman W., Beech Grove, assignor to C. N. Van Cleave, Indianapolis, Ind. Coin-controlled lock. 1,626,193; Apr. 26. Gaylets, George. (See Garrett, W., and Gaylets.) Gaylord, Bennie E. Lakewood. Ohio, assignor to Weyer-haeuser Forest Products, St. Paul, Minn. Crate or box 1,616,618; Feb. 2.

Gaylord, James A., assignor of one-third to L. Gaylord, Sharon, Tenn. See-genthering reed attachment for mowing machines. 1,650,705; Nov. 29, Gaylord, John F., Indianapolis, Ind. Variable-speed gearing, 1,620,724; Mar. 15.
Gaylord, John F., Indianapolis, Ind. Clutch. 1,642,107;

gearing. Gaylord, J Sept. 13 Gaylord, J

Sept. 12.

Sept. 12.

Gaylord, John F., Indianapolis, Ind. Clutch mechanism for transmission gearing. 1,646.646; Oct. 25.

Gaylord, Lillie. (See Gaylord, James A., assignor.). Gaynor, Arthur C., Stratford, Conn. Contact receptacle. 1,641.225; Sept. 6.

Gental Conn. Conn. Insulating inclosure. 1,641.265; Sept. 6.

Gaynor, Arthur C. and E. G., Stratford, Conn.; said E. G., Gaynor assignors to said A. C. Gaynor. Electric switch. 1,641.264; Sept. 6.

Gaynor, Edwin G. (See Gaynor, Arthur C. and E. G.) Gaynor, Electric switch. 1,641.264; Sept. 6.

Gaynor, Joseph E. See Cremo, A. L. N., and Gordon, assignors. 1

designors.)

Geake, William H. G., Killara, near Sydney, New South Wales, Australia, assignor to W. Rutherford, London, England, and J. Bain, Ottawa, Canada. Dispensing container for plastic substances. 1631,931; June 7. Geake, William H. G., Killara, Sydney, Australia, assignor 1631, 1641,671; Sept. 6.

Geake, William H. G., Killara, near Sydney, New South Wales, Australia, assignor to W. Rutherford, London, England, and J. Bain. Ottawa, Canada. Dispensing Geological Projection of the Control of

Geanopulos, George C., Evanston, Ill. Bumper. 1,633,782;

Gear Grinding Company, 1st., assignor, assignor, Gear Grinding Machine Company. (See Gagarin, Andrew Gear Grinding Machine Company.)

assignor.)

Gear Grinding Machine Company. (See Gagarin, Andrew A., assignor.)

Gear, Rando E. S., and R. M. Norstrom, assignors to Gear, Randonocring Company, Philadelphia, Pa. Low-level jet condenser. 1,622,945; Mar. 29.

Gearbart, Lewis E., Marietta, Ohio. Building-block mold. 1,623,178; Apr. 5.

Gearbart, Ralph W., assignor to Gearbart Sales Cabinet Co. Inc., Clearfield, Pa. Manufacturing, bardening, storing, and dispensing plant for ice cream and other frozening, and dispensing plant for ice cream and other frozen soldering device. 1,628,361; Aug. 9.

Gearbart, Roy E., Kanasa City, Mo. Electric welding or soldering device. 1,628,361; Aug. 9.

Gearbart Sales Cabinet Co. Inc. (See Gearbart, Ralph W., assignor.)

Gearon, Edward, et al. (See Gearon, John, assignor.)

Gearon, John, assignor of one-fourth to M. V. Gearon, 1,614,466; Jun. 9.

Gearon, Michael V., et al. (See Gearon, John, assignor.)

Gearon, Michael V., et al. (See Gearon, John, assignor.)

Geary, Robert O., Rockdale, Australia. Lever top can. 1,629,441; May 17.

Gesien, Richard L., Chicago, Ill. Water-heater apparatus. 1,651,692; Dec. 6.

Geatty, Charles A., Elkridge, Md. Brake band and lining.

Geatty, Charles A., Elkridge, Md. Brake band and lining.

Oct. 4.
Geatty, Charles A., Elkridge, Md. Brake band and llning. 1,647,221; Nov. 1.
Gebers, Friedrich, Vlenna, Austria. Propelling mechanism for ships. 1,628,637; May 17.
Gebert, Albert E. (See Antoine, A. D., and Gebert.) Gebert, Albert E. (See Richardson, M. H., and Gebert.) Gebbard, John B., and ft. Althaus, Dyersville, Jowa. 1,620,600; Mar. 8.
Gebhard, Brathers Company, The. (See Gebbardt, Edwin Assistance of the Company, The. (See Gebbardt, Edwin Assistance)

Gebhardt Brothe Gebhardt, Edwin, assignor to The Gebhardt Brothers Company, Cincinnati, Ohio. Bracelet. 1,649,108;

Company, Cincinnati, Ohio. Bracelet. 1,649,108; Nov. 15.
Gebhardt, William. San Antonio, Tex. Resilient disk wheel. 1,617,209; Feb. 8.
Gebhart, Edwin. Bellwood, Fa. Agricultural implement. 1,649,661 Folding Box Company, The. (See Gebhart, Louis H., assignor) Gebhart, George D. (See Kuhn, M. A., and Gebhart. George D. (See Kuhn, M. A., and Gebhart. Couis H., assignor to The Gebhart Folding Box Company, Dayton. Ohio. Box. 1,635,666; July 12.
Gebr. Baumann Maschinen und Motorfabrik G. m. b. H. assignor, Commandigesellschaft. (See Elemann, Karl, Settler, Himmelsbach Aktiengesellschaft. (See Himmelsbach, Joseph, assignor.)

Gebr. Himmelsbach Aktiengesellschaft. (See Himmelsbach, Joseph, assignor).
Gebrüder Bühler. (See Wüthrich, Christian, assignor).
Gebrüder Hardy Maschientabrik und Giesseri A. G.
(See Rihosek, J., and Leuchter, assignors.)
Gebrüder Hardy Maschientabrik und Giesseri Aktien
Gesellschaft. (See Rihosek, J., and Leuchter, assignors.)

Gebrüder Steimel. (See Kuchenmeister, Fritz, assignor.) Gebrüder Sulzer Aktiengesellschaft. (See Hefti, Wilhelm,

assignor.) Gedarovich, Ignatz, Brooklyn, N. Y. Roofing compound. 1,618,078; Feb. 15.

Geddes, David, Berkeley, Calif. Grain wash and conditioner. 1,622,580; Mar. 29. Geddes, David, Gundalajara, Jalisco, Mexico. G leg and drying machine. 1,624,581; Apr. 12 Gedge 20. Gedge 20. Gedge 20. Grain washer, stoner, Grain wash-1,643,158;

Geddis, George, Detroit, Mich. Engine. 1,643,185;
Sept. 20.
Gedien, Ful. Cologne-Braunsfeld, and K. Schwade,
Cologne-Lindenthal, Germany Cutting-off device parCologne-Lindenthal, Germany. Device for the electrical
welding for seamed tubes. 1,626,552; Apr. 26.
Ged. Afred, et al. (See Potts, Harold E., assignor.)
Gee, Mird, et al. (See Potts, Harold E., assignor.)
Geo, William J., London, England, Variable-speed gear.
1,652,824; Dec. 13.
Geer, William C., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y.
Goodrich Company, New York, N. Y.
Georgich Company, New York, N. Y.
Geer, William C., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y.
Godorich Company, New York, N. Y.
Godorich Company, New York, N. Y.
Gesessman, Delbert B. (See O'Brien, A. D., and Geeseman.)

Geeseman, Beredore, Ogden, Utah. Cooking utensil. Gen. 22,360; May 10, Gezenbeimer, Ralph E. (See MacMullin, R. B., and Gegenbeimer, Ralph E. (See MacMullin, R. B., and Gegenbeimer.)

Gegenheimer, Malpa E. Gee MacMulla, R. S., and Ge-Geenheimer, William, Baldwin, and E. E. Barney, Port Washington, N. Y. Apparatus for cleaning cylinders of offset and other presses. 1,623,723; Apr. 5. Gchauf, Bernard, and H. W. Walker, Edgewood, Md. Making silicofluorides and products thereof. 1,617,708;

Making silicofluorides and products thereof. 1,617,708; Feb. 15. Gebe & Co. A.-G. (See Erdmann, Gustav, assignor.) Gehersky, William W., assignor of one-half to W. G. Ruppencamp, Los Angeles, Calif. Adjustable spotlight. 1,612,806; Jan. 4. Gehiert, Richard S., Detroit, Mich. Coffee urn. 1,636,179; July 16. Ewritt A., Mount Vernon, Ohio. Cylinder and liner construction. 1,625,357; Apr. 19. Gehres, Hewitt A., Mount Vernon, Ohio. Engine-cylinder-scavenzing mechanism. 1,644,777; Oct. 11. Gehrig, Walter, Montreal, Quebec, Canada. Steering apparatus for vehicles. 1,647,404; Nov. 1, Gehrigh, Walter, Montreal, Quebec, Canada. Steering apparatus for vehicles. 1,647,404; Nov. 1,661,404; Nov. 1,661,404;

28.
Geipel, John F., assignor to Master Metal Products, Inc., Buffalo, N. Y. Sanitary waste can. 1.645,100; Oct. 11. Geler, P. A., Company, The. (See Schiltz, Bernard P., assignor.)
Geier, F. A., Company, The. (See Willis, Olo C., assignor.)
Geiger, E. A., Irvington, N. J. Garage. 1,636,600;

General Ernst, Irvington, N. J. Garage. 1,636,600;
July 19.
Gelger, Erwin A., Ridgewood, N. J., assignor to Rapid Addressing Machine Company. Selective card-handling apparatus. 1,621,716; Mar. 22.
Gelger, Erwin A., Ridgewood, N. J., assignor to Rapid Addressing Machine Company. Colored stencil card. 1,045,593; Oct. 18.
Gelger, Erwin A., Westfeld, N. J., assignor to Rapid Addressing Machine Company. Colored stencil card. 1,045,593; Oct. 18.
Gelger, Erwin A., Westfeld, N. J., assignor to Rapid Addressing Machine Company. Selective attachment for addressing machines. 1,625,538; Apr. 19.
Geiger, Erwin A., Ridgewood, N. J., A. F. Schraegle, Ridgewood, and H. T. Jennings, Glendale, N. Y., assignors to Rapid Addressing Machine Company. Selective attachment for addressing machines. 1,625,538; Apr. 19.
Geiger, Erwin A., Ridgewood, N. J., and A. F. Schraegle, Ridgewood, and H. T. Jennings, Glendale, N. Y., assignors to Rapid Addressing Machine Company. Extensible pedal connection for addressing machines. 1,648,452; Nov. 8.
Gelger, Erwin A., Wyoming, N. J., and A. F. Schraegle, Ridgewood, and H. T. Jennings, Glendale, N. Y., assignors to Rapid Addressing Machine Company. Levin A., Wyoming, N. J., and A. F. Schraegle, Ridgewood, and H. T. Jennings, Glendale, N. Y., assignors to Rapid Addressing Machine Company. Levin A., Wyoming, N. J., and A. F. Schraegle, Ridgewood, and H. T. Jennings, Glendale, N. Y., assignors to Rapid Addressing Machine Company. Company, Chryeland, Chief, Cheveland, and G. C. Swift, Cleveland, Cleyeland, Company, Chryeland, Ohio. Machine for forming flanges. 1,644,165; Jan. 11.
Gelger, Prederick, Cleveland, and G. C. Swift, Cleveland, Chief, Pan. 11.
Gelger, Prederick, Cleveland, and G. C. Swift, Cleveland, Chief, Pan. 11.
Gelger, Prederick, Cleveland, and G. C. Swift, Cleveland, Chief, Pan. 11.
Gelger, Pan. 11. Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway

Gelger, Inul H. Wilkinshurg, assignor to The Union Switch & Sienal Company, Swissyale, Pa. Railway signaling apparatus. 1,620,015; Mar. 8. Gelger, Paul H., assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway-traffic-controlling apparatus. 1,625,028; May 3.

Geiger, Paul H., Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Systewale, Pa. Railway train-control apparatus. 1643,337 vel. 27, Ceiger. Ulysses S., North English, Iowa. Starting device. 1,632,399; June 14.
Geiger, William A., Chicago, Ill., assignor, by mesne assignments. 6 v. W. H. Miner, Inc. Resilient shackle. Geiger, William A., Chicago, Ill., assignor, by mesne assignments. 6 v. W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,640,033; Aug. 23.
Geiger, William A., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,640,033; Aug. 23.
Geiger, William A., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Antifriction bearing. 1,648,265; Nov. 6.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,303; Nov. 8.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,303; Nov. 22.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,303; Nov. 22.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,303; Nov. 28.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,303; Nov. 8.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,302; Nov. 20.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,302; Nov. 20.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,302; Nov. 20.
Geiger, George E., Covington, Ky. Kassette. 1,622,371; Geiser, Henry F., Whites, Wash. Artificial hand. 1,648,400: Nov. 15.
Geiser, George E., Essignor to Gerger Brothers Company. Support for gutter-hanger circles. 1,630,935; May 31.
Geiser, George P., Chicago, Ill. Bowling pin. 1,635,472; July 12.

Philadelphia, Pa. Gutter-hanger circle. 1,630,935; May 31.
Geiser, George P., Chicago, Ill. Bowling pin. 1,635,472; July 12.
Geisinger, Joseph R., Grand Island, Nebr. Flying duck decoy. 1,629,442; May 17.
Geisler, Alois R., Spokane, Wash. Cigar. 1,616,851; Feb. S.

Feb. S. Geisler, August, Limburg-on-the-Lahn, Germany, assignor to Arranbes Doll Company. Sleeping eye for rubber dolls. 1,632,777; Dec. 13.
Geisler, Otto, Chicago, Ill. Rigid airship. 1,642,727; Sept. 20.

Geisser, Otto, Chicago, Ill. Rigid airship. 1,642,727; Geisserhainer, Frederick W. Freehold, N. J., and M. S. Geisserhainer, Frederick W. Treehold, N. J., and M. S. Geissingry, Inc., New York, N. Y. Bus-bar bender. 1,633,248; June 21. Geissinger, Harry G., Detroit, Mich. Temperature-controlling system. 1,650,622; Nov. 29. Geissinger, Harry G., Detroit, Mich. Control system. Geissinger, Harry G., Detroit, Mich. Control system. Geissinger, Harry G., Detroit, Mich. Control system. Geissinger, Willer, assignor to Acme Clutch Company, Milwaukee, Wis. Friction clutch. 1,625,201; Apr. 19. Geistert, Albert G., assignor to General Motors Corporation, Detroit, Mich. Vehicle spring. 1,613,700; Jan. 11. Geitner. Alexander L., Rochester, N. Y. Adjustable locking menns fol locking cutting tools into tool hold-college, Royal W., Greeley, Colo, Concrete pavement for reservoirs, dams, levees, and the like. 1,646,997; Oct. 25.

reservoirs, dams, levees, and the like. 1,630,897; Oct. 25.
Geldhof, Peter E., (See Nelson, J. C., and Geldhof.)
Geldhof, Peter E., assignor to Syracuse Washing Machine
Corporation, Syracuse, N. Y. Drainage valve for
clothes-washing machines. 1,614,117; Jan. 19.
Geldhof, Peter E., assignor by Syracuse Washing Machine
power-driven washing mechanism. 1,616,852; Peb. 8.
Geldhof, Peter E., Syracuse, assignor, by mesne assignments, to United States Hoffman Machinery Corporation, New York, N. Y. Garment press. 1,624,726;
Apr. 12.
Geldhof, Peter E. assignor to Syracuse Washing Machine
remover. 1,631,137; Ang. 30.
Geldhof, Peter E., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y. Ironing-machine steam
remover. 1,631,137; Ang. 30.
Geldhof, Peter E., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y. Ironing-machine
1,650,828; Nov. 29.
Gelfand, Simon, Baltimore, Md. Preparing a food product and the product resulting therefrom. 1,631,838;
Gellssen, Henri C. J. H., Rifswijk, Netherlands, assignor,
by mesne assignments, to Novadel Process Corporation,
Buffalo, N. Y. Improving milling products. 1,620,458;
Mar. 8.

Mar. 8.

Gell, Philip V. W., C. E. Gould, W. M. Hampton, and
H. S. Martin, assignors to Chance Brothers and Co.,
Limited. Smethwick, England. Coloriess Crookes glass.
1.634.182; June 28.

Gellen, Ballint. (See Gal, Gyula, assignor.)

Gollenbeck, Benjamin G. (See Gellenbeck, Henry F.,
E. J., and D. G.)

Gellenbeck, Edward J. (See Gellenbeck, Henry F., E. J.,

Gellenbeck, Henry F., E. J., and B. G., Tacoma, Wasb.
Intermittent absorption refrigerating system. 1,682,701;

June 14.

Gellette Schmidt Corporation. (See Schmidt, Benjamin Gellette Schmidt Corporation. (See Schmidt, Benjamin F., assignor.)
Gellhorn, George, St. Louis, Mo. Obstetrical bed. 1,622,313; Mar. 29.
Geloso, John, New York, assignor to Pilot Electric Manufacturing Company, Inc., Brooklyn, N. Y. Escutcheon plate for a vernier dial. Des. 73,170; Aug. 2.
Gelistharp, Frederick, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company. Glass-melting tank. 1,615,832; Feb. 1.
Gelistharp, Braderick, and J. C. Parkinson, Tarentum, Pa., assignors to Pittsburgh Plate Glass (1615,834; Feb. 1.
Gelistharp, Frederick, and J. C. Parkinson, Tarentum, Pa., assignors to Pittsburgh Plate Glass Company, Glass-grinding process and apparatus. 1,615,833; Feb. 1. Heb. 1.
Geltan Company. (See Tullis, John K., assignor.)
Gem City Sheet Metal Company, The. (See Elters, William S., assignor.)
Gem Crib & Cradle Company. (See Shuffleton, Wilford P., assignor.)

Gem Doughnut Machine Company. (See Wallace, David A., assignor.) A., assignor.)

Gemeinder, Emil. Philadelphia, Pa. Lock-up cover for reGemeintard, Waiter F., New York, assignor to The
Woodwind Company, New York, N. Y. Saxophone.
1,628,719; May 17.

Gem Hammock & Fly Net Company. (See Kootz, Arthur
C., assignor.) Gem Hammock a riy Net Company. (See Acoto, A. C., assignor.)
Gemmer, George A., and C. E. Campbell, Newark, N. J.
Time electric switch. 1,641,161; Sept. 6.
Gemmer Manufacturing Company. (See Marles, Henry, assignor.)
Genchy, Steven, New York, N. Y.
strument, 1,652,778; Dec. 13.
Gendron Wheel Company. (See Nauts, Frank A., asstrument, 1652,778; Dec. 18:
Gendron Wheel Company. (See Nauts, Frank A., assignor.)
General American Tank Car Corporation. (See Garlick, Fred G., assignor.)
General American Tank Car Corporation. (See Klemoff, Paul, assignor.)
General American Tank Car Corp. (See Parks, Ostrander J., assignor.)
General American Tank Car Corporation. (See Weaver, Robert R., assignor.)
General Chain Company. (Roebuck, Alfred L., assignor.)
General Chain Company. (See Eklund, Alexander, assignor.) signor.)
General Chemical Company. (See Derr, Ralph B., assignor.)
General Chemical Company. (See Gillett, Lowry, as-Chemical Company. (See Jones, Hugh H., assignor.) special Chemical Company. (See Lewers, George R., General Chemical Company. (See Lipfert, William J., assignor.)

General Chemical Company. (See Lohmann, William H., Chemical Company. (See Merriam, Henry E., General Chemical Company. (See Murray, William, aseral Chemical Company. (See Proctor, James W., asassignor.)
General Dry Batterles, Incorporated. (See Delbel, C. P.,
assignor.)
General Dry Batterles, Incorporated. (See Delbel, C. P.,
and Waitt, assignora)
General Dre Batterles, Incorporated. (See Delbel, C. P.,
and Waitt, assignora) signor.)
General Electric Company. (See Adams, Nathan H., as-General Electric Company. (See Alexander, Johann, as-Seneral Electric Company. (See Alexander, Johann, assignor.)
General Electric Company. (See Alexanderson, Ernst F. W. assignor.)
General Electric Company. (See Anderson, Arvid E., assignor.)
General Electric Company. (See Atkinson, William H., assignor.)
General Electric Company. (See Atwood, Windfield A., as-Signor.)

General Electric Company. (See Austin, Edward, assignor.)

General Electric Company. (See Axtell, Clinton J., as-General Electric Company. (See Bahr. Fritz, assignor.) General Electric Company. (See Bailey, Percy S., assignor.)
General Electric Company, (See Baker, Walter R. G. assignor.)
General Electric Company. (See Bany, Herman, assignor.)
General Electric Co. (See Barringer, L. E., and Peterson, assignors.)
General Electric Company. (See Barton, Frederick C., General Electric Company. (See Barton, Theophilus F., assignor.)

General Electric Company. (See Basch, David, assignor.) General Electric Company. (See Batchelder, Asa F., as-General Electric Company. (See Bateholts, Charles F., assignor.)
General Electric Company. (See Beckmann, Johannes, assignor.)
General Electric Company. (See Beechlyn, John T., as-Signor.)
General Electric Company. (See Benford, Frank A., assignor.)
General Electric Company. (See Bennett, Frank S., as-General Electric Company. (See Berglund, Herman, assignor.) General Electric Company. (See Bergman, Sven R., as-General Electric Company. (See Bergmans, Jan. assignor.)
General Electric Company. (See Berry, E. R., and Devers. assignors.)
General Electric Company. (See Berry, Edward R., assignor.)
General Electric Company. (See Biermanns, Josef, assignor.) General Electric Company. (See Bill, Earl M., assignor.) General Electric Company. (See Blake, H. D., and Geiger, assignors.) General Electric Company. (See Blanchard, Walter P., General Electric Company. (See Blume, Louis F., as-General Electric Company. (See Brand, Frederick F., assignor.) General Electric Company. (See Brandenburg, Wilson C., assignor.) General Electric Company. (See Briggs, William N., assignor.)
General Electric Company. (See Brophy, Gerald R., General Electric Company. (See Brown, Carrol G., assignor.)
eneral Electric Company. (See Brown, C. A., and Van General Electric Company.
Sickle, assignors.)
(See Brown, George R., asGeneral Electric Company.
(See Brown, Harold W., as-General Electric Company. (See Brown, William W., assignor.) General Electric Company. (See Brown, W. W., and Love, assignors.)
General Electric Company. (See Brückel, Waldemar, assignor.) General Electric Company. (See Bruynes, Johannes, assignor.) General Electric Company. (See Bullock, Charles F., assignor.) General Electric Company. (See Burgeson, Charles F., assignor.) General Electric Company. (See Burnap, Robert S., as-General Electric Company. (See Burnham, Locke H., assignor.)
General Electric Company. (See Butler, Henry E., as-General Electric Company. (See Byles, Frank A., assignor.) General Electric Company. (See Byrnes, Irving F., as-General Electric Company. (See Carlchoff, Eugene R., Signor.)
General Electric Company. (See Carlchoff, Eugene R., General Electric Company.) assignor.)
General Electric Company. (See Carter, Emmett F., assignor.) General Electric Company. (See Champlin, Franklin J., assignor.)
General Electric Company. (See Chapman, Charles H., assignor.) General Electric Company. (See Chapman, Verni J., assignor.)
General Electric Company. (See Charlton, Ernest E., assignor.) General Electric Company. (See Christensen, C., and Langley, assignors.)
General Electric Company. (See Church, Frederick P., assignor.) General Electric Company. (See Clarke, Edith, assignor.) General Electric Company. (See Collingham, Robert H., assignor.) General Electric Company. (See Collins, Edgar F., assignor.) General Electric Company. (See Conrad, Paul M., assignor.) General Electric Company. (See Coolidge, William D., assignor.) assignor.)
General Electric Company. (See Crocker, Clarence T., General Electric Company. (See Currier, Philip M., as-signor.) General Electric Company. (See Dalton, William, assignor.)
General Electric Company. (See De Boer, Jan H., assignor.)
General Electric Company. (See de Graaff, Antonius, assignor.)
General Electric Company. (See De Jong, Hendrik, assignor.)
General Electric Company. (See De Jong, H., and Koning, assignors.)
General Electric Company. (See De Reamer, Frank C .. assignor.) General Electric Company. (See Devaud, Albert J., assignor.) (See Devers, Philip K., assignor.)
General Electric Company. (See Doherty, Robert E., as-General Electric Company. (See Donovan, John F., assignor.) (See Doran, John H., as-Electric Company. (See Dreher, Gustave F., assignor. General Electric Company. (See Dushman, Saul, assignor.) General Electric Company. General Electric Company. (See Eaton, John, assignor.) (See Eby, Eugene D., assignor.) (See Ehlers, Walther, as-Signor.)
General Electric Company. (See Ellis, Alvarado L. R., assignor.)
General Electric Company. (See Emmet, William L. R., General Electric Company. (See Enders, Jacob M., assignor.) eneral Electric Company. (See Evans, Lewis W., assignor.) (See Ewald, Harry W., assignor. (See Fagan, J. T., and General Electric Company, Malloy, assignors.) General Electric Company. Electric Company. (See Falge, Robert N., as-General Electric Company. (See Flinterman, Rudolph F., assignor.)
eneral Electric Company. (See Fonda, Gorton, R., assignor.) eneral Electric Company. (See Forsberg, Peter W., assignor.) eneral Electric Company. (See Fortin, Paul R., assignor.)
operal Electric Company. (See Foulke, Ted E., as-General Electric Company. (See French, Henry G., assignor.) (See Friedrich, Walter, as-General Electric Company. (See Fuller, Truman S., assignor.)
General Electric Company. (See Fuller, T. S., and Adams, assignors.)
General Electric Company. (See Garrett, Berton A., assignor.)
General Electric Company. (See Gerstmayer, Johann, assignor.)
General Electric Company. (See Given, Ralph D., assignor. (See Goff, Robert W., as-General Electric Company. General Electric Company. (See Goodwin, Victor E., assignor.)
General Electric Company. (See Gosling, Joseph W., assignor.)
General Electric Company.
General Electric Company. (See Graf, Georg, assignor.) (See Graner, Ladislaus P., General Electric Company. (See Griffith, Morgan J., as-General Electric Company. (See Guay, E. J., and Mansur, assignors.) General Electric Company. (See Hall, Chester I., assignor.)
General Electric Company. (See Hall, Horton W., as-General Electric Company, signor.)
General Electric Company, assignor.)
General Electric Company, A. B., ir., assignor.)
General Electric Company, S. H., assignor.)
General Electric Company, S. H., assignor. (See Halliwell, Reginald F., (See Halvorson, Cromwell (See Hamilton, William (See Hastings, H. C., and Sarjeant, assignors.)
General Electric Company. (See Hepperlen, John A., assignor.) General Electric Company. (See Herald, Gardner T., assignor.)
General Electric Company. (See Herklotz, Max, assignor.)
General Electric Company.
assignor.)
General Electric Company.
Rankin, assignors.) (See Hewlett, Edward M., (See Hewlett, E. M. and

General Electric Company. (See Hewlett, E. M., and Willard, assignors.)
General Electric Company. (See Hilliard, John D., assignor.)
General Electric Company. (See Hobart, Henry M., assignor.)
General Electric Company. (See Hodges, William F., General Electric Company. (See Holmes, Charles E., General Electric Company. (See Hoof, Addison C., asignor.) eral Electric Company. (See Hort, Wilhelm, as-General Electric Company. (See Hösel, P., and Pagel, assignors.)
General Electric Company. (See Hoxie, Charles A., as-General Electric Company. (See Huber, Herman J. H., General Electric Company. (See Hull, Albert W., as-General Electric Company. General Electric Company. (See Hull, John I., assignor.) Electric Company, (See Hutt, Leonard P., as-General Electric Company. (See Ibele, Walter C., assignor.)
General Electric Company.
General Electric Company. (See Ihln, Alois, assignor.) (See Isaac, Archibald C. T., assignor.) General Electric Company. (See Jackson, James A., as-General Electric Company. (See Jacoby, Richard, assignor.)
General Electric Company. (See Jewitt, Dennis E., assignor.) General Electric Company. (See Johannesen, Svend E., General Electric Company. (See Johnson, Ernest E., assignor.)
General Electric Company. (See Jones, Benjamin W., assignor.)
General Electric Company. (See Jones, B. W., and Wolfe, assignors.) eneral Electric Company. General (See Jones, C. E., and Atuesta, assignors.)
General Electric Company (See Jordan, Hans, assignor.) (See Jump, George H., aseneral Electric Company. (See Junggren, Oscar, assignor.) General Electric Company. (See Junken, Lawrence H., assignor.) General Electric Company. (See Karapetoff, Vladimir, assignor.)
General Electric Company.
jr., assignor.)
General Electric Company. (See Kearsley, William K., (See Keenan, William J., assignor.)
General Electric Company.
signor.) (See Kelley, Floyd C., as-General Electric Company. (See Kellogg, Edward W., assignor.)
General Electric Company.
assignor.) (See Kelsey, Charles A., General Electric Company. (See King, Terry T., assignor.) General Electric Company. (See Kingdon, K. H. and uir, assignors.)
Electric Company. General (See Köchling, Wilhelm, General Electric Company. (See Koning, Willem, assignor.)
General Electric Company.
General Electric Company. (See Koref, Fritz, assignor.) (See Koref, F., and Al-Company. terthum, assignors.) General Electric Company. (See Koref, F., and Hoffman, assignors.)
General Electric Company. (See Koref, F., and Moers, General Electric Company. (See Kowallik, Siegfried, assignor.)
General Electric Company. (See Kowlton, Harry N., assignor.)
General Electric Company. (See Krämer, Christian, as-General Electric Company. (See Langley, Ralph H., assignor.)
General Electric Company. (See Langmuir, Irving, as-General Electric Company. (See Lasche, O., and Post, assignors.)
General Electric Company. (See Laurentius, Walter, as-General Electric Company. (See Lawler, Frank P., assignor.)
General Electric Company. (See Leddick, George S., General Electric Company. (See Ledig, W., and Asmussen, assignors.) General Electric Company. (See Lennox, Thomas C., as-

General Electric Company. General Electric Company. (See Lewinnek, Georg, as-(See Prince, David C., assignor.)
General Electric Company. signor.)
General Electric Company. (See Prindle, Raymond B., (See Libby, Sam H., assignor.)
neral Electric Company. (See Liebmann, Alfred J., asassignor.)
General Electric Company. (See Raus, A., and Isaac, assignor.)
General Electric Company. General Electric Company. (See Linn, Frank C., as-(See Rice, Chester W., as-General Electric Company, General Electric Company, Grossmann, assignors.)
General Electric Company, and Charlton, assignors.) Signor.)
General Electric Company. (See Rich. Theodore A., as-(See Loebe, W. W., and signor signor.) General Electric Company. (See Rodde, Paul, assignor.) General Electric Company. (See Rodde, Paul, assignor.) General Electric Company. (See Rosch, Arthur, as-(See Mackay, G. M. J., General Electric Company, and Charlton, assignors.) General Electric Company, assignor. General Electric Company, assignors. General Electric Company. Aldis, assignors.) General Electric Company. General Electric Company. (See Macloskie, George, signor.) eneral Electric Company. (See Macmillan, Campbell, General (See Ruder, William E., General Electric Company.
assignor.)
General Electric Company.
signor.)
General Electric Company.
Galdies, assignors.) (See Rüttenauer, Alfred, as-(See Mallett, C. S., and (See Martin, Carl, assignor.) (See Maurer, Louis A., as-(See Rüttenauer, A. and Gaidies, assignors.) General Electric Company. signor.)
General Electric Company.
assignor.) (See Sabbah, Camille A., assignor.)
General Electric Company.
General Electric Company. (See McDonald, Gordon R., (See Samson, Curt, assignor.) assignor.) General Electric Company. (See McFarland, Edward H., assignor.)
General Electric Company.
assignor.)
General Electric Company. General Electric Company. (See Schilling, Walter W., (See McGee, Richard R., assignor.)
General Electric Company. (See McMahon, Nicholas J., (See Schombourger, Lucien, assignor General E assignor.)
General Electric Company. Electric Company. (See McSheen, Edward W., (See Schrage, Hidde, assignor. assignor.) (See Merrick, Eldridge G., Electric Company. (See Schrage, Hidde K., assignor.) General Electric Company. assignor.) General Electric Company. signor.) (See Merrill, Frank W., as-(See Schwennker, Charles F., assignor.) General Electric Company. Electric Company. (See Merrill, Wilbur L., as-(See Sclater, Ivanhoe H., assignor.) General Electric Company. signor.) eneral Electric Company. General (See Mershon, Alfred V., as-(See Seede, John A., assignor.)
General Electric Company.
General Electric Company.
General Electric Company.
General Electric Company. (See Seiz, Walter, assignor.) (See Senzui, Nobuo, assignor.) (See Severin, Carl, assignor.) (See Shroyer, Jacob L., Electric Company. (See Mickey, Bruce D., as-Electric Company. (See Miller, Levi B., assignor. General General signor.)
General Electric Comp.
White, assignors.)
White, assignors.)
Company. assignor.) General Electric Company. (See Minorsky, Nicolas, as-(See Simonds, Dewey T., (See Mitchell, L. E., and assignor.) General Electric Company. (See Skaupy, Franz, assignor.)
General Electric Company.
Fehse, assignors.)
General Electric Company. (See Mole, Peter, jr., as-(See Skaupy, F., Pirani, and (See Montsinger, Vincent M., assignor.)
General Electric Company. (See Skoglund, Charles, as-(See Moody, Walter S., assignor.) General Electric Company. signor.)
General Electric Company. (See Smith, Arthur R., as-(See Moss, Sanford A., assignor. General Electric Company. signor.) (See Spease, John F., assignor.) General Electric Company. General Electric Company. (See Moss. S. A. and Robinson, assignors.)
General Electric Company. (See Sprenger, George W., as-(See Müller, Gustav W., as-General Electric Company. (See Sprenger, Richard, as signor.) General Electric Company. signor.) eneral Electric Company. (See Murphy, Edwin J., as-Gene (See Sprenger, R., and Conradt, assignors.)
General Electric Company. General Electric Company. Hutt. assignors.) General Electric Company. (See Murphy, E. J., and (See Sprong, Severn D., assignor.) (See Newton, Edward G., Gen (See Stack, George E., asassignor.)
General Electric Company. signor. (See Nolte, Henry J., as-General Electric Company. signor.) (See Standerwick, Reginald G., assignor.) General Electric Company. (See Norris, Marvin L., as-(See Steenstrup, Christian, gnor.) eral Electric Company. assignor) General (See O'Nell, James A., as-Electric Company. (See Stein, Theodor, assignor. signor.) General General Electric Company. (See Otis, Albert N., as-Electric Company. (See Steiner, Oscar, assignor.)
General Electric Company,
General Electric Company,
General Electric Company,
assignor.)
General Electric Company, (See Pacz, Aladar, assignor.) (See Pagel, Gustav, assignor.) (See Palueff, Konstantin K., signor.) General Electric Company. (See Steinmetz, Charles P., assignor.) General Electric Company. (See Temple, Elmer J., as-(See Paul, William E., as-Electric Company. (See Thompson, Louis W .. signor. assignor.)
General Electric Company. General Electric Company. (See Paxton, Earl B., as-(See Thomson, David P., assignor.) General Electric Company. General Electric Company. (See Penney, Frank H., as-(See Thomson, Elihu, assignor. signor.)
General Electric Company.
signor.) General Electric Company. (See Perkins, Lucius J., as-(See Tobey, Harry W., assignor.) eneral Electric Company. (See Perry, Charles L., as-General Electric Company. General Electric Company. (See Toewe, Fritz, assignor.) (See Tournier, Julius C., as General Electric Company. (See Peterson, Charles F., assignor. General Electric Company. assignor.) General Electric Company. (See Townsend, George R., General Electric Company. General Electric Company. signor.) (See Plke, Otis W., assignor.) (See Place, Claude W., as-(See Traver, Oliver C., as signor.) General Electric Company. General Electric Company. General Electric Company. (See Pohl, Robert, assignor.) (See Pollock, Alan A., as-(See Treanor, Edward D. assignor.)
General Electric Company.
signor.) signor.)
General Electric Company.
assignor.)
General Electric Company. (See Tschopp, Jacob T., as (See Potter, William B., General Electric Company. (See Tuttle, Robert L., as (See Pratt, William H., assignor.) General Electric Company. signor.) General Electric Company. (See Umansky, Leonid A. (See Prescott, Arthur C., assignor.) General Electric Company. General Electric Company. (See Umezawa, Tsutomu, as (See Price, D. R., and Bowsignor.) General Electric Company. (See Unger, Magnus, as man, assignors.)
General Electric Company. (See Price, Edgar, assignor,) 72535-P-15

General

Ge

signor.)

General

General M assignor

signor.

General Electric Company. (See Valentine, Irving R., assignor.)
General Electric Company. (See Van Amburg, Otto H., assignor.) General Electric Company. (See Vogt, Theodore B. H., assignor.) General Electric Company. (See Wagner, Edward A., General Electric Company. (See Walle, Ludvig S., assignor.) General Electric Company. (See Warner, Russell A., assignor.) General Electric Company. (See Warren, Glenn B., assignor.) General Electric Company. (See Warren, Henry E., asignor. General Electric Company, (See Watson, George O., assignor.) General (See Watson, Harold L., assignor. General Electric Company. General Electric Company. (See Way, Alva O., assignor.) (See Wayringer, Henry A., General Electric Company. (See Weed, James M., assignor.) General Electric Company. (See Weiler, Wilhelm, assignor General Electric Company. General Electric Company. (See Weiske, Paul, assignor.) (See Welch, Alfred F., assignor.)
General Electric Company. (See Weldon, John J., assignor.) General Electric Company. (See Weston, Frederick H .. assignor.) General Electric Company. (See Whitaker, Frank P., assignor.)
General Electric Company. (See White, William C., assignor.)
General Electric Company. (See Whiting, Max A., assignor.)
General Electric Company. (See Wilkinson, James, assignor.) General (See Willheim, Raoul, assignor.) General Electric Company. (See Williamson, James L., əssignor.) General Electric Company. (See Wilson, Robert M., assignor.) General Electric Company. (See Winter, Fred H., as-Electric Company. (See Witherow, Harry M., assignor.) General Electric Company. (See Wright, Daniel K., assignor.) eneral Electric Company, General (See Wright, Edward H., General Electric Company.
Bartlett, assignors.)
General Electric Company.
assignors.) (See Wright, J. G. E., and (See Young, A. P., and Hutt, Electric Company. (See Young, Arthur P., assignor. General Electric Company, (See Youtz, Jesse P., assignor. General Electric Company. (See Yuyama, Juzi, assignor.) General Electric Company. (See Zebrowski, Willy, assignor.) General Electric Company. (See Zelewski, Alexander, assignor.) neral Electric Company. General (See Zelt, Elmer J., as-General Electric Company Limited, The, (See Bartlett, A. C., and Le Rossignol, assignors.)
General Fire Extinguisher Company. (See Hoffman, Herbert E., assignor.)
General Fire Extinguisher Company. (See Knight, Ira W., assignor.)
General Fire Extinguisher Company. W., assignor.)
eneral Fire Extinguisher Company.
Albert J., assignor.)
eneral Fireproofing Company, The.
George C., assignor.)
eneral Fireproofing Company, The. (See Loepsinger, General (See Brainard. General (See Hoge, William, assignor.)
General Fuel Briquette Corporation, The.
Elisworth B. A., assignor.)
General Gas Light Company. (See Hui (See Zwoyer, (See Humphrey, Hubert R., assingor.)
General Industries Company, The. (See Bonslenr, Le. assignor.)
General Insulating and Manufacturing Company. (See Sabin, Clayton R., assignor.)
General Motors Corporation. (See Anderson, David E., General Motors Corporation. (See Anibal, Benjamin H., assignor.) General Mo Motors Corporation. (See Aseltine, Fred E., assignor signor.)
General Motors Corporation. (See
assignor.)
General Motors Corporation. (See
signor.)
General Motors Corporation. (Se
man, and Berlowitz, assignors.)
General Motors Corporation. (Se
signor.) Motors Corporation. (See Ayers, Joseph G., jr., (See Ayers, Joseph G., as-(See Ayers, J. G., Chap-(See Beringer, Roscoc, as-

General Motors Corporation. (See Blackmore, Lloyd, assignor.) General Motors Corporation. (See Bower, Ferdinand A., signor.) General Motors Corporation. (See Brittain, Richard J., jr., assignor.) General Motors Corporation, (See Calingaert, George, assignor.)
General Motors Corporation.
Stratman, assignors.)
General Motors Corporation. (See Carnowsky, R. R., and (See Chapman, William H., assignor.) (See Chase, Theron P., assignor.) General Motors Corporation. (See Church, Harold D., assignor.) General Motors Corporation. (See Cramer, Raymond H., General Motors Corporation. (See Davis, William N., assignor.)
eneral Motors Corporation. eneral Motors Corporation Kull, assignors.) eneral Motors Corporation. (See Denyes, H. M., and (See De Waters, Enos A., General Motors Corporation. (See Esterbrook, Edward T. eneral Motors Corporation.
signor.)
eneral Motors Corporation.
signor.)
eneral Motors Corporation. (See Fauser, George, as-(See Flint, R. N., and Blackmore, assignors.)
General Motors Corporation et al.
C., assignor.) (See Foster, Harry C., assignor.) General Motors Corporation. (See Geistert, Albert G., assignor.)
General Motors Corporation. (See Gibbons, Harold R., assignor.) General Motors Corporation. (See Griswold, F. C., and Chapman, assignors.) General Motors Corporation. (See Harris, Mark B., assignor.)
General Motors Corporation. (See Himes, Howard P., assignor.)
General Motors Corporation. (See Holden, Fenn M., assignor.)
General Motors Corporation. (See Hunt, Ormond E., assignor.)
General Motors Corporation. (See Jack, Robert K., assignor.) General Motors Corporation (See Jerome, Benjamin, assignor.) (See Kettering, C. F., and Midgley, assignors.) General Motors Corporation. (See Knudsen, William S., assignor.)
General Motors Corporation. (See Krotz, Alvaro S., assignor.)
General Motors Corporation.
Todd, assignors.)
General Motors Corporation. (See Lannon, J. D., and (See Lefére, Benonie G., signor.)
General Motors Corporation. (See Lewellen, Albert R., assignor.)
General Motors Corporation. (See Lovett, George A., assignor.) General Motors Corporation. (See Main, Frank L., assignor.)
General Motors Corporation.
ery W., assignor.)
General Motors Corporation. (See McConkey, Montgom-(See McConkey, M. W., and Jones, assignors.)
General Motors Corporation. (See Midgley, Thomas, jr., assignor.) General Motors Corporation. (See Minch, Walter B., assignor.) General Motors Corporation. (See Morrison, Joe W., as-General Motors Corporation. Stahlbuth, assignors.) General Motors Corporation. (See Parker, G. E., and (See Parker, Guy E., assignor.) eneral Motors Corporation. (See Rummins, John, assignor.)
General Motors Corporation. (See Ruppert, Albert A., assignor.) (See Schadt, Ewald K .. assigno.

General Motors Corporation.

General Motors Corporation. (See Schwarze, H., and (See Short, Charles R., General Motors Corporation. (See Smarr, Benjamin M., assignor.)
General Motors Corporation. (See Stoll, Herman, as-General Motors Corporation. General Motors Corporation. (See Taub, Alex, assignor.) (See Tetens, Raymond E., General Motors Corporation. (See Wells, Reginald E., assignor.)
General Motors Corporation. (See Whitacre, Clarence J., assignor.)
General Motors Corporation. (See White, John W., assignor.)
General Motors Corporation. (See Woodruff, Henry S.,

General Motors Corporation. (See Wyzalek, John F., assignor.) General Motors Corporation. (See Young, Otto W., as-General Motors Corporation. (See Aseitine, Fred E., assignor.)

General Motors Research Corporation. (See Boegehold. Afterd L., assignor.)

General Motors Research Corporation. (See Chase, Theron P., assignor.) design and one nessearch Corporation. (See Fitzsimmons, John T., assignor.)

General Motors Research Corporation. (See Fitzsimmons, John T., assignor.)

General Motors Research Corporation. (See Fitzsimmons, J. T., and Wallace, assignors.)

General Motors Research Corporation. (See Geyer, Hardenstein Corporation.) General motors research corporation. (see Gyel markey D., assignor sentence Corporation. (See Hallett, General Motors Research Corporation. (See Henry, Howard W., assignor.)

General Motors Research Corporation. (See Hunt, John General Motors Research Corporation. (See Hunt, John General Motors Research Corporation. (See Hunt, John H., assignor.)
General Motors Research Corporation. (See Hunt, J. II., and Flizsimmonia, assignors.)
General Motors Research Corporation. (See Kettering, C. F., and Hunt, assignors.)
General Motors Research Corporation. (See Kettering, C. F., and Hunt, assignors.)
General Motors Research Corporation. (See Kettering, C. F., and Short, assignors.)
General Motors Research Corporation. (See Kettering, C. F., and Short, assignor.)
General Motors Research Corporation. (See Pearson, Harry C., assignor.)
General Motors Research Corporation. (See Pearson, Frank C., assignor.)
General Motors Research Corporation. (See Short, Caleb E., assignor.)
General Motors Research Corporation. (See Wallace, Hugh, assignor.)
General Motors Research Corporation. (See Wallace, Hugh, assignor.)
General Motors Research Corporation. (See Wallace, Hugh, assignor.)
General Motors Research Corporation. (See Williams, Hurry M., assignor.)
General Motors Research Corporation. (See Williams, Hurry M., assignor.)
General Motors Research Corporation. (See Williams, Hurry M., assignor.)
General Optical Company. (See Clement, Hans, assignor.)
General Optical Company. (See Clement, Hans, assignor.)
General Optical Company. (See Clement, Hans, assignor.) General Optical Company. (See Dey, Gilbert S., as General Optical Company. (See Dey, Gibert S., actions, Silvaro, Silvaro, Silvaro, Silvaro, Silvaro, Silvaro, Silvaro, Seenal Petroleum Corporation of California. (See Dickey, S. J., and Wheeler, assignors.) General Petroleum Corporation of California. (See Dickey, Samuel J., assignor.)
General Phonograph Manufacturing Co. (See Bonsieur, General Phonograph Manufacturing Company, The. (See Miger, Fred N., assignor.)
General Railway Signal Company. (See Bushnell, Charles S., assignor.) S., assignor.)
General Railway Signal Company. (See Carter, Paul E., General Railway Signal Company. (See Carter, Paul E., assignor.)
General Railway Signal Company assignor.)
General Italiway Signal Company. (See Day, Salisbury M., assignor.) General Railway Signal Company. (See Dicke, Oscar H., General Railway Signal Company. (See Dudley, S. W., and Bushnell, assignors.) General Railway Signal Company. (See Estwick, Charles F., assignor.) General Railway Signal Company. (See Пailes, William D., assignor.)

General Railway Signal Company. (See Howe, W. K., and
Bushnell, assignors.)

(See Howe, Winthrop K., assignor, Signal Company. (See Howe, Winthrop General Ruilway Signal Company. (See Larry, Edwin C., assignor, General Railway, Signal Company. C., assignor.)
General Railway Signal Company. (See Peabody, James A., assignor.)
General Railway Signal Company. (See Reichard, Wade H., assimor.)
General Railway Signal Company. (See Salmon, Wilmer W., assignor.)
General Railway Signal Company. (See Salmon, Wilmer W., assignor.) General Railway Signal Company. (See Sindeband. Maurice I., assignor.)
General Railway Signal Company. (See Stephenson, James E., assignor.)
General Railway Signal Company. (See Wenholz, Wniter W., assignor.)
General Ruiber Company. (See Gibbons, W. A., and Shepard, assignors.)

General Rubber Company. (See Jury, A. E., and Smith, assignors.) merai Rubber Company. (See Mansfield, Daniel E., assignor.)
eneral Scafoods Corporation. (See Barry, James J., assignor.)
General Scafoods Corporation. (See Birdseye, Clarence, assignor.)
General Shoe Machinery Company. (See Ballard, Harrie General Shoe Machinery Company. (See Banard, Barrie A., assignort) Signal Corporation. (See Ruddick, John General Street and Rubber Company, The. (See Denmire, Harold A., assignor.) General Tire & Rubber Company, The. (See Iredell, Rübert, assignor.) J., assignor.)
General Zeolite Company. (See Behrman, Abraham S., General Zeolite Company. (See Green, W. H., and Behrman, man, assignors.)
General Zeolite Company. (See Green, Walter H., as-Gmin. Assignors.)

Gmin. Assignors.)

Gmin. Assignors.)

Gmin. General Zeolite Company. (See Schreier, Arthur, assignor).

Genest, Homer A., Hartford, Conn., assignor to United States Hat Machinery Corporation, New York, N. Y.

Genest, Homer A., Hartford, Conn., assignor to United States Hat Machinery Corporation, New York, N. Y.

Genis, Mary, et al. (See Herman, Henry, assignor.)

Gennis, Mary, et al. (See Herman, Henry, assignor.)

Gennis, Mary, et al. (See Herman, Henry, assignor.)

Genolor, Nicholas, et al. (See Sakkes, Joseph, assignor.)

Genolor, Nicholas, et al. (See Sakkes, Joseph, assignor.)

Genslor, Nicholas, et al. (See Sakkes, Joseph, assignor.)

Genslor, Nicholas, et al. (See Sakkes, Joseph, assignor to Automatic Herman, Andrew Changes, Prank J., Victor, Iowa. Washing machine.

1,631,630; June 7.

Gensmer, Theodore, Tortland, Orgr. assignor to Automatic Sakes, Joseph, assignor to Automatic Transmission apparatus. 1,628,493; Apr. 2.

Gensmer, Theodore, A. R. Z. Farmer, Portland, Orgr., assignors to Automatic Transmission Company. Automatic Sakes, Joseph, assignors to Automatic Transmission to Western matic yearless transmission. 1,638,689; Aug. 9.

Gent. Edigar W., Morristown, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Pneumatic relay. 1,631,568; June 14.

Gent. Edgar W., Morristown, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Switching device. 1,647,792; Nov. 1.

Gent. Edgar W., Morristown, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Gent, Edward W., Morristown, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Gent, Edward W., Morristown, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Gent, Edward W., Morristown, N. J., assignor, New York, N. Y. Genter, Albort L., and J. A. McCaskell, Salt Lake City, Utah. assignors to United Filters Corporation, New John J. A. McCaskell, Salt Lake City, Utah. assignors to United Filters Corporation, New John J. A. McC signor.)
General Zeolite Company. (See Schreier, Arthur, as-Genuing, Gineer, Chicago, assignment and the Berwyn, Ill. Earth boring machine. 1,641,926; Sept. 6. Got Company, The. (See Breitenstein, Albert F., assignor). Geometric Tool Co., The. (See Breitenstein, A. F., and Barteit, assignors.). Geometric Tool Company, The. (See Leonard, Wilbur A., assignors.) Geometric Tool Co., The. (See Strickland, Royce M., assignor.) assignor.) assignor.) corr. Otto. Dusseldorf, Germany. Ruptural safety menus. 1,652,352; Dec. 13. corge. Abram N., South Pasadena, and V. Bressl, Oceanside, Calif. Concrete-laying machine. 1,652,434; Ocean-ide, Culb.

Dec. 13.

George, Barnett L. Salt Lake City, Utah. Flotation agent and making the same. 1.647,793; Nov. 1.

George, David, Lyndal, Westcross, Wales. Packing of goods. 1.626,825; Apr. 26.

George, Ellwyn de L. Canon City, Colo. Multiple-arch elling. 1.628,842; Aug. 16.

George, Enoch, jr. (See McConway, W., jr., and George. fr.)
corge. Enoch. fr., assignor to The McConway & Torley
Company. Pittsburgh, Pa. Car-coupling mechanism.
1,641,424; Sept. 6.
corge, Enoch. fr., assignor to The McConway & Torley
Company. Pittsburgh, Pa. Car-coupler mounting.
1,644,577; Oct. 4.
corge. Enoch. fr., Pittsburgh, Pa. assignor to The
McConway & Torley Company. Draft yoke. 1,648,339;
Nov. 8.

George, Enoch, Jr., assignor to The McConway & Torley Company, Pittsburgh, Pa. Railway draft appliance. 1,048,240; Nov. 8.

George, Ernest A., Chelsea, England. Cigarette case. 1,050,068; Nov. 22.

George, Harry F., Chleago, Ill. Tumbler lock. 1,619,252; George, Harry F., Chleago, Ill. Tumbler lock. 1,619,252; George, Harry W., Buffalo, N. Y. Microscope attachment. 1,654,369; Dec. 27.

George, George, Harry W., Buffalo, N. Y. Microscope attachment. 1,654,369; Dec. 27.

George, George, Harry W., Buffalo, N. Y. Microscope attachment. 1,654,369; Dec. 27.

George, George, Harry W., Buffalo, N. Y. Microscope attachment. 1,644,578; Oct. Pa. Satety-rlug lock for gare cocks. 1,644,578; Oct. 11.

George, Thomas A., Fancy Firm, Ky. Mowing-machine-former comments of the party of the gare of the gare

Gereich, Frederick A., Oakland, Calif. Splasher back for Gereich, Frederick A., Oakland, Calif. Splasher back for Gereich, Frederick A., and J. B. Gardner, assignors to Hammer-Bray Company, Oakland, Calif. Oven door. 1,652,008; Dec. 6.
Gerdeman, Frank H., assignor to The National Conveyor Company, Findlay, Ohio. Building derick for bunkers. 1,652,408; Dec. Berlin, Germany. Magneto-electric machine. J. 618,926; Mar. 8.
Gerdien, Hans, Berlin-Grunewald, assignor to Slemens & Haiske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Device for determining a difference in length. 1,644,333; Oct. 4.
Gerdine, Hans, Berlin-Grune, Berlin-Germany. Device for measuring microscopically small distances. 1,648,895; Nov. 15.
Gerding, Edward A. (See Gerding, Herbert H., and B. A.)
Gerding, Fred A., Bedford, Ohio. Sprinkler. 1,615,010;

E. A.)

Gerding, Fred A., Bedford, Ohio. Sprinkler. Lordon-Lann, 18.

Gerding, Herbert H., Newport, and E. A. Gerding, Fort Thomas, Ky. Bottle crate. 1,625,359; Apr. 19.

Gerding, Grants F., Bremen, Germany. Determining critical temperature. 1,630,485; May 31.

temperature. 1,630,485; May 31.

temperature. 1,630,485; May 31.

temperature. 1,630,485; May 31.

Gerhard, Store May 4.

Gerhard, Store M., Sheridan, Wyo. Candy-dispensing box. 1,629,661; May 24.

Gerhard, Karl F., Hatton, Wash. Duplex pump. 1,840,402; Aug. 30.

**Saleyor to Lebanon Steel Foundry, Aug. 30.

**Saleyor to Lebanon Steel Foundry, crossings.

box. 1,629,661; May 24.
Gerhard Karl F., Hatton, Wash. Duplex pump. 1,640,402;
Aug. 30.
Gerhard, Paul E., assignor to Lebanon Steel Foundry,
Lebanon, Pa. Flange-way guard for highway crossings.
1,645,279; Oct. 11;
Gerhardt, Adelbert P., Chicago, Ill., assignor to Western
Electric Company, Incorporated, New York, N. Y.
Mechanism for working pulpous material. 1,615,374;
Jan. 25.

Jan. 20.
Gerhardt, William F., Dayton, Ohlo. True-air-speed indicator. 1,653,700; Dec. 27.
Geringer Lighting Fixture Mig. Co. (See Peinlich, Max.)
Geringer, Moris.
(See Peinlich, Max. assignor.)
Gerke, Frederic L., Troy, N. Y. Windshield wher operatlng mechanism. 1,641,753; Sept. 6.
Gerke, Herman H. (See Schuster, D. O., and Gerke,
J. Gerken, Fred W., Mitchell, S. Dak. Headlight shield.
1,651,763; Dec. 6.

Gerken, John, Jamaica, N. Y. Automobile washing device. 1.012,913 / Jan. 4. Gerker, Bernard H., Detroit, Mich. Spare-tire and fender protector. 1,614/25; Jan. 18. Geriach, Fred, et al., trustees. (See Graham, William S., assignor.)

derick. Fred, et al., trustees. (See Graham, William S., assignor; Assignor;

German, Howard M., Crafton, Pa. Hardness-testing ma-chine and method of testing hardness. 1,046,195; Oct. 18. Germer, Edward G., Erie, Pa. Stove. Des. 72,206; Mar. 15. Germond, Henry S., jr. (See Eidmann, Frank L., as-signor.)

signor.) signor.)
Germond, Henry S., Jr., Bayonne, N. J., and H. Green,
Yonkers, N. Y., assignors to said Germond. Elevating
apparatus. 1,628,239; May 10.
Germond, Henry S., Jr., Bayonne, and F. L. Eldmann,
North Bergen, N. J., assignors to said Henry S. Germond, Fr. Elevating truck. 1,646,729; Oct. 25.
Germand; Motor Corporation. (See Hay, John D., as-

mond. jr. Elevating truck. 1,646,729; Oct. 25.
Gernandt Motor Corporation. (See Hay, John D., assignor.)
Gernell-Danloy, Joseph E., Rouen, France. Grinding, crushing, and mixing machine or mill. 1,636,360; Gernell-Otto G., San Francisco, Calif. Office indicator. 1,616,687; Feb. 8.
Gerner, Otto G., San Francisco, Calif. Office indicator. 1,616,687; Feb. 8.
Gerngross, Otto, Grunewald, near Berlin, assignor to the Firm Continentale Aktiengesellschaft für Chemie, Berlin, Germany. Production of ammonium chloride and alkali-metal sulphate. 1,634,870; July 6.
Gerns, William H. (See Dietrich, F., and Gerns.)
Gerns, William H. (See Dietrich, F., and Gerns.)
Gerns, William H. (See Dietrich, F., and Gerns.)
Gerns, William H. (See Rowe, C. R., and Gerns.)
Gerns, William H. (See Dietrich, F., and Gerns.)
Gerns, William H. (See Dietrich, F., and Gerns.)
Gerns, William H., Bast Orange, assignor to Brandes
Laboratorles, Inc., Newark, N. J. Conc type loud speaker. Hes. 72,388; Apr. 5.
Gernaback, Hugo, New York, N. Y. Mounting inductions of the Carlotter of Carlotter, Mar. 8.
Gero, William B., and G. W. Hallock, Bloomfield, N. J.,
assignors to Westinghouse Lamp Company. Manutacture of oxide-conted cathodes. 1,648,541; Nov. 15.
Gerlagole deen and Cathodes. 1,648,541; Nov. 15.
Gerrard, Alec J., and P. Wright, Chicago, Ill.; said Wight assignor to said Gerrard. Portable wire tensioning and twisting machine. 1,626,644; Dec. 20.
Gerrard, Alec J., and P. Wright, Chicago, Ill.; said Wright assignor to said Gerrard. Wire-tvisting machine. 1,626,644; Dec. 20.
Gerrard, Alec J., and P. Wright, Chicago, Ill.; said Wright assignor to said Gerrard. Wire-tvising machine. 1,638,647; Long. Q.
Gerrard, Alec J., and P. Wright, Chicago, Ill.; said Wright assignor to said Gerrard. Wire-tvising machine. 1,638,647; Dec. 20.
Gerrard, Alec J., and P. Wright, Chicago, Ill.; said Wright assignor to said Gerrard. Wire-tving machine. 1,638,647; Dec. 20.
Gerrard, Alec J., and P. Wright, Chicago, Ill.; said Wright assignor to said Gerrard. Wire-tving machine.

Gershenow, Robert K., Chicago, Ill. Bloomers. 1,616,688;

Feb. 8.
Gershon, Victor P. (See Grosvenor, W. M., and Gershon.)
Gershovitz, Barnett, Canton, Ohio. Combined mop and
wringer. 4,682,470; June 14.
Gersman, Harvey M., Chicago, Ill. Expanded metal.
1,615,678; Jan. 25.
Gersman, Harvey M., Chicago, Ill. Expanded sheet metal.
1,621,644; Mar. 22; Gersman, Wes. Lamp. Des. 72,996.

Gersmehl, Vern R., Cheyenne, Wyo. Lamp. Des. 72,996; July 5.

Gerson, Meyer I., assignor to Union Taxi Owners Association, New York, N. Y. Badge. Des. 73,403; Sept. 6. Gerson Stewart Corporation Company, The. (See Goldrick, Albert R., assignor.)

Gerstmay, Johann, Berlin, Germany, assignor to General B. 1640,445; Aug. 30. Internal-combustion engine. Gerstmay, Johann, Berlin, Germany, assignor to General J. 1640,445; Aug. 30. Internal-combustion engine. Gerstmer, August, Richmond Hill, N. Y. Nursing bottle and envelope therefor. 1,617,944; Feb. 15. Gerth, Felix, Berlin-Tempelhof, Germany, High-frequency furnace circuit. 1,642,198; Sept. 13. Gerth, Elix, and W. Fischer, assignors to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. High-frequency furnace circuit. 1,642,198; Sept. 13. Gerth, Lewis W. (See Dulley, J. A., and Gerth.) Germany, Kuhrengesellschaft, Berlin-Tempelhof, Germany. High-frequency furnace circuit. 1,642,198; Sept. 13. Gerth, Lewis W. (See Dulley, J. A., and Gerth.) Gervals, Kuhrufile, and W. Uston, and Gerth.) Gervals, Kuhrufile, and W. Uston, and Gerth. Pipette. 1,634,183; June 25. Gervals, Wallwright B., assignor to Variety Fire Door Company, Chicago, Ili. Folding closure and operating same. 1,618,816; Mar. 8. Gervals, Wallwright B., assignor to Variety Fire Door Company, Chicago, Ili. Folding closure and operating same. 1,624,330; Apr. 12. Gerwig, Frederick H. N., North Braddock, Pa. Bosh-cooling plate. 1,644,041; Oct. 25. Gesellschaft für Drahtlose Telegraphie m. b. H., Hallesches. Gese Kumruff, William, assignor.) Gesellschaft für Drahtlose Telegraphie m. b. H., Hallesches. (See Schaffer, Walter, assignor.)
Gesellschaft für Drahtlose Telegraphie m. b. H., Hallesches. Ufer 12/13. (See Von Arco, Griff G., assignor.) Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.) Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.) Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.) Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assig

Jan. 4. Gestetner, D., Limited. (See Gestetner, David, assignor.) Gestetner, D., Limited. (See Gestetner, Sigmund, as-

Jan. 4.
Gestetner, D., Limited. (See Gestetner, David, assignor.)
Gestetner, D., Limited. (See Gestetner, Sigmund, assignor to David, Tottenham Hale, London, assignor to Gestetner, Limited, London, England. Duplicating, 1,615,221; Jan. 25.
Gestetner, David, Tottenham Hale, London, assignor to D. Gestetner, Limited, London, England. Duplicating, 1,615,221; Jan. 25.
Gestetner, David, Tottenham Hale, London, assignor to D. Gestetner Limited, London, England. Duplicating, 1,614,659; Jan. 18.
London, England. Stenedi sheet and stenedi adapted for use in duplicating. Stenedi sheet and stenedi adapted for use in duplicating. Health London, England. Stenedi sheet and stenedi adapted for use in duplicating. Buda, Ill. Card-drying stand. I., 1,652,114; Dec. 6.
Gestrine, Carl L., Buda, Ill. Card-drying stand. I., 1,625,214; Dec. 6.
Getchell, Benjamin E., Plainville, Conn., assignor to The Conn. Electric Manufacturing Company, Plainville, Conn. Electric Manufacturing Company, Plainville, Conn. Electric Manufacturing Company, Plainville, Conn. Multiple-circuit switch. 1,622,937; Mar. 29.
Getchell, Benjamin E., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Spring means for electric switches. 1,629,911; May 24.
Getchell, Benjamin E., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Spring means for electric switches. 1,629,911; May 24.
Getchell, Benjamin E., assignor to The Trumbull Electric Switch. 1,648,385; Nov. 28.
Getchell, Robert M., Dayton, Ohlo. Airship mooring drum. 1,622,139; Mar. 22.
Getchell, Robert M., Dayton, Ohlo. Mooring masthead. 1,622,240; Mar. 22.
Getchell, Robert M., Dayton, Ohlo. Mooring masthead. 1,622,240; Mar. 22.
Getchell, Renjamin E., Morton, Ill. Washing machine. Gett., Englamin E., Morton, Ill. Electric motor. 1,646,400; Cct. 25.
Getz. Benjamin E., Morton, Ill. Fuel-burning system. 1,650,790; Nov. 29.

Getz, Pimres E., Neosho, Mo. Well bucket. 1,629,912; May 23: Gender Passchke & Frey Company. (See Kempter, Philip, assignor:) Genlen, Klara, née Schreiber, executrix. (See Geulen, Wilhelm.)

Wilhelm.)

Geulen, Wilhelm, deceased; K. Geulen, née Schreiber, executrix, assignor to C. Herzog, Freiburg, Germany. Aseptic lighting torch, 1,025,356; Apr. 19.

Geurink, Bernard A., East Cleveland, Ohio. Gas burner and making same. 1,639,693; Aug. 23.

Gewalt, Otto, Gottenborg, Sweden, Improving the qualities of coffee. 1,638,300; July 191.

Geyer, Harvey D., assignor to General Motors Research Corporation Dayton, Ohio. Automobile theftproof defeyer, Harvey D., assignor, by meane assignments, to The Iniand Manufacturing Company, Dayton, Ohio. Handwheel. 1,629,075; May 17.

Geyer, Harvey D., assignor to Dayton, Wright Company, Dayton, Ohio. Liquid level indicator. 1,641,380; Sept. 6.

Dayton, Ohio. Liquid level indicator, 1,641,380; Sept. 6.

Geyer, Harvey D., and A. W. Scott, assignors to The Inland Manufacturing Company, Dayton, Ohio. Lock-link and Manufacturing Company, Dayton, Ohio. Lock-geyer, John W., Pittsburgh, Pa. Christmas-tree holder. 1,614,952; Jan. 18.

Geyser, Frank R., New York, N. Y. Vacuum tube. 1,624,331; Apr. 12.

Gleler, Frederick, Alhambra, Calif. Water-shut-off valve. Gfeller, Frederick, Alhambra, assignor to Joshua Hendy Iron Works, Sunnyvale, Calif. Water-discharge valve. 1,631,482; June 7.

Glengan, John J., East Orange, N. J. Variable grid leak. Gherassimot, Nicolas, Le Vesinet, France. Wheel tire. 1,632,731; June 14.

Glambra, Gandolfo, Paterson, N. J. Coin controlled mechanism. 1,629,211; May 17.

Glancola, Nicolas, assignor of one-thrid to J. Reece and Glancola, Nicolas, Philadelphia, Pa. Boit-cutting device. 1,633,483; Aug. 9.

Glannats, Attilio, Richmond, Va. Control apparatus. 1,013,093; Jan. 26.

Glannats, Edwore F., New York, N. Y. Driving mech-

Glannattasio, Ettore F., New York, N. Y. Driving mechanism. 1,613,991; Jan. 11.
Glardino, Joachim, West New York, N. J. Tension device for the harness of looms. 1,623,105; Apr. 5.
Glardino, Joseph F. (See Glardino, Liborio G. and

J. F.) Giardino, Liborio G. and J. F., Brockton, Mass. Flushing mechanism. 1,639,288; Aug. 16. Giauque, Oscar C. (See Wood, J. W., and Giauque.) Gibb Instrument Company. (See Brueckner, Julius R.,

Gibb Instrument Company. (See Brueckner, Julius R., assignor.),
Gibb, John M., and G. M. Jobe, Providence, R. I. Tirerepair tool. 1,645,101; Oct. 11.
Gibbons, Eugene V., Boulder, Colo. Electric welding apdibons, Frank J., Worcester, Mass. Detachable arch support. 1,641,886; Sept. 6.
Gibbons, Harold R., Chatham, N. J., assignor to General Motors Corporation, Detroit, Mich. Antifriction bearing. 1,651,818; Dec. Bradley, C. E., and Gibbons.)
Gibbons, Willis A. (See Brodley, C. E., and Gibbons.)
Gibbons, Willis A., Little Neck, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Vulcanizing rubber. 1,654,167; Dec. 27.
Gibbons, Willis A., Little Neck, N. Y., assignor to The real Rubber Company, New York, N. Y., Process and apparatus for concentrating fluids. 1,651,764; Dec. 6.
Gibbs, Burton D., Westfield, Mass. Stabilizer for automobiles. 1,618,651; Feb. 22.
Gibbs, Edward F. G., Washington, D. C. Cutting-off tool. 1,647,988; Nov. 8.
Gibbs, Frederick H., Trustee. (See Purdy, Waiter S., assignor).

Gibbs, Fred assignor.)

assignor.)

Gibbs, Federick H., Brooklyn, assignor to American Car and Foundry Company, New York, N. Y. Antifriction bearing application. 1,633,338; June 7 E. L. Frederick, Catonsville, Md. assignova, N. J. Du Pont de Nemours & Company, Wilmington, Del. Making aryl-peri acids. 1,617,313; Feb. 8.

Gibbs, John H. (See Flood, C. A., and Gibbs.)

Gibbs, John W., Charleston, Ill. Weeder. 1,641,032; Aug. 30.

Gibbs Utilities Company. (See Gibbs, William E., as-

Signor.)
Gibbs, Walter A., Holly Oak, Del. Device and method for anchoring live decoys. 1,617,153; Feb. 8.

Thillies Company, Menge. A. assignor to Gibbs Utilities Company, Writ. N. Y. Oil burner. 1.624,943; Apr. 19.

Giblin, Marc A. (See Rodgers, T. T., Giblin, and Moore.) Gibney, James J., Minneapolis, Minn. Dishwashing machine. 1,637,376; Aug. 2.

Adelbert R., Los Angeles, Calif., and H. E. r, New York, N. Y. Headlight lens. 1,627,498;

Gibson, New York, N. Y. Heading, Schort, New York, N. Y. May S. Gibson, Arthur A., Bloomfield, N. J., assignor to Westings Gibson, Arthur A., Bloomfield, N. J., assignor to Westings Gibson, Arthur A., Bloomfield, N. J., assignor to Westings Gibson, A. C. Lingon, A. C.

Schort, New York, N. I. Headinght lens. 1,024,286; Schort, New York, N. I. Headinght lens. 1,020,496; Mar. 8.

Gibson, Charles, New Kensington, assignor to Union Spring & Manufacturing Company, Pittsburgh, Pa. Journal box. 1,629,865; May 24.

Gibson, Charles, J., assignor to Gibnan, Service Company, Greens M. M. Greens, M. M. Greens, M. Gr

water. 1,618,424; Feb. 22.

Gibson, George H., Montclair, N. J., assignor to Cochrane Corporation. Philadelphia, Pa. Deaerating water. Gleon, George H., Montclair, N. J., and J. D. Yoder, assignors to Cochrane Corporation, Philadelphia, Pa. Water treatment. 1,638,803; Aug. D. Gibson, Harry, Los Angeles, Calif. Garment hanger. 1,638,84; Aug. 16.

Gibson, Harry, Los Angeles, Calif. Garment hanger. 1,638,84; Aug. 16.

Gibson, Harry, L. S. Chicago, Ill. Wax-applying tool. 1,628,867; Mar. 29.

Gibson, Horoce N., San Antonio, Tex. Veneer construction and making the same. 1,642,066; Sept. 13. 1,622,867; Mar. 29.

Gibson, James H., Brooklyn, N. Y. Hat holder. 1,645,478; Oct. 11.

Gibson, John H., Bruin, Pa. Blade sharpener. 1,644,778; Oct. 11.

Gibson, Randolph H., Chicago, Ill. Cigar-lighter cabinet. Des. 75,616; Sept. 2.

Gibson, Retrigerator Company. (See Gibson, Charles J., assignor).

assignor.) Gibson, Symon 1,617,682; Fel assignor.)

Gibson, Symon Z., Seattle, Wash. Hair (Ppper. 1,617,682; Feb. 15.
Ghson, William A., Charleston, W. Va., assignor to The Gibson, William A., Charleston, Company, Toledo, Ohio.

Constant temperature heater for sheet glass drawing machines. 1,641,807; Sept. 6.

Gibson, William J. (See Pike, W. J., and Gibson.)
Gibson, William R., Forest Hills, N. Y. Chimney. 1,626,808; May 3.

Glasson, William R., Forest Hills, N. Y. Chimney. 1,626,808; May 3.

Mar. 22.
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Mar. 23.
Machine Tool Company. (See Kempton,
Herbert E., assignor).
Gles, Frank G., assignor to Our Sales and Service Company, Debroth, Mich.
Washing machine. 1,652,273:

Gies, Frank G. Meh. Washing macnine.
pany, Detroit, Mich. Washing macnine.
Dec. 13.
Glese, Barney J., Oconto, Wis. Headlight. 1,618,425;
Glese, Henry, assignor to Iowa State College of Agriculture and Mechanic Arts, Ames. Iowa. Ventilator.
1,028,965; May 17.
Glese, Otto E., Brooklyn, N. Y. Filter. 1,632,960;
Juna 21.

1.028.965; May 17.
Glese, Otto E., Brooklyn, N. Y. Filter. 1,632,960;
June 21.
Glese, Chermann. (See Glesecke Julius and H.)
Glesecke, Julius and H. G. Leiptig Leutzsch. Germany.
Glesecke, Henry J., Elizabeth, N. J., assignor to Mrs. K.
Goodyen, New York, N. Y. Hydrocarbon burner.
1.638.175; June 21.
Glesen, Paul, Solingen, Germany, Pocket knife. 1,647,405;
Nov. 1.
Glester, Jean V., assignor to The Fulton Company, Knoxville, Tenn. Regulating device. 1,628,137; May 10.
Glester, Jean V., assignor to The Fulton Company, Knoxville, Tenn. Steam engine. 1,628,138; May 10.
Glester, Jean V., assignor to The Fulton Company, Knoxville. Tenn. Thermostatically-regulated incubator.
1,628,139; May 10.
Glester, Jean V., assignor to The Fulton Company, Knoxville. Tenn. Damper regulator. 1,628,140; May 10.
Glester, Jean V., assignor to The Fulton Company, Knoxville. Tenn. Damper regulator. 1,628,140; May 10.
Glester, Jean V., assignor to The Fulton Company, Knoxville, Tenn. Damper regulator. 1,628,140; May 10.
Glester, Jean V., assignor, by mesne assignments, to The
Fulton Skiphion Company, Knoxville, Tean. Combined
float and thermostat. 1,648,047; Nov. 8.

Giesler, Jean V., assignor, by mesne assignments, to The Fulton Sylphon Company, Knoxville, Tenn. Packless valve. 1,648,884; Nov. 8. Giessel, Henry, Company. (See Hansen, Harold N., as-

Giggal, William C., Denver, Colo. 1,627,085; May 3. Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)

assignor.)
Gilbert, Alfred C., assignor to The A. C. Gilbert Company,
New Haven, Conn. Toy construction element. Des.
73.604; Oct. 11.
Gilbert & Barker Manufacturing Company. (See Neal,

Gilbert & Barker Manufacturing Company. (See Neal, Franklin G, assignor.) Gilbert, Clarence E, Aberdeen, S. Dak. Scariffer, 1,629,784; May 24. Gilbert, Clarence E, Aberdeen, S. Dak. Scraper shoe. 1,629,785; May 24. Gilbert, Clarence E, Aberdeen, S. Dak. Scraper shoe. 1,629,785; May 24. New York, N. Y. Protector. 1,622,639; Gilbert, Evangeline I, Rochester, N. Y. Appliance for

Appliance for

Mar. 29.
Gilbert, Evangeline I., Rochester, N. Y. Appllance producing dimples. 1,648,221; Nov. 8.
Gilbert, Frank N. (See Allen, Durward M., assignor. Gilbert, Harry E., Bridgeport, Conn. Still. 1,621.2;
Mar. 18, 1977, E. & Son. (See Gilbert, Harry E.

Gilbert, signor. Harry E., & Son. (See Gilbert, Harry E., as-Gilbert, Harry E., & Son. (See Gilbert, Horace L., as-

Gilbert, Harry E., & Son. (See Gilbert, Harry E., assignor).
Gilbert, Harry E., & Son. (See Gilbert, Horace L., assignor).
Gilbert, Harry E., assignor to Harry E. Gilbert & Son.
Gilgor).
Grand Galvanizing furnace. 1,649,824;
Nov. 22.
Gilbert, Henry J., Saginaw, Mich. Folding table.
1,628,773; May 17.
Gilbert, Henry J., Saginaw, Mich. Folding table.
1,628,773; May 17.
Gilbert, Henry J., Saginaw, Mich. Folding table.
1,629,498; May 24.
Gilbert, Henry J., Saginaw, Mich. Folding table.
1,629,498; May 24.
Gilbert, Horace L., Devon, assignor to Harry E. Gilbert
& Son, Bridgeport, Conn. Heater. 1,649,218; Nov. 15.
Gilbert, Jonn J., Doughaston, assignor to Western Electric Company, Incorporated, New York, N. Y. Submarine signaling. 1,654,328; Dec. 27.
Gilbert, Joseph N., Grand Island, Nebr. Apparatus for
imparting oscillating motions to rotating fans.
Gilbert, Lewis W., Seneca Falls, N. Y. Automatic switch.
1,635,078; July 5.
Gilbert, Joseph N., Grand Island, Nebr. Apparatus for
imparting oscillating motions to rotating fans.
Gilbert, Lewis W., Seneca Falls, N. Y. Automatic switch.
1,635,078; July 5.
Gilbert, Mawwell F., Philadelphia, Pa., assignor to Richardson & Boyaton Company, New York, N. Y.
Gilbert, Walter Y., Westmister, London, assignor to
Gilbert, Walter Y., Westmister, London, assignor to
Gilbert, Joseph M., Grand Island, Detachable-wheel mechanism. 1,627,499; May 3.
Gilbert, Walter Y., Westmister, London, assignor to
Gilbert, Joseph M., Grand F. H.,
Nichola, J., Aller Selecting the relative movement of two elements.
1,631,110; May 31.
Gilbert, Walter Y., Westmister, London, Darland, Detachable-wheel mechanism. 1,627,499; May 3.
Gilbert, William N., Hudson Helghts, N. J., assignor to
Dayton, Seale Company, Dayton, Ohlo. Pendolum scale.

Gilbert, William E., et al. (See Boutin, Stanley, assignor.)
Gilbert, William N., Hudson Heights, N. J., assignor to
Dayton Scale Company, Dayton, Obio. Pendulum scale.
1,614,726; Jan. 18.
Gilbert, William N., assignor to International Scale Company, Dayton, Obio. Scale. 1,650,204; Nov. 22.
Gilbert's Patents Limited. (See Gilbert's Walter V.,

assignor. Gibertson, Ansel P., Wausau, Wis. Coin-controlling mechanism for vending machines. 1,613,882; Jan. 11,611,645,749; Oct. 18.

Gilbough, Benjamin G., Los Angeles, Calif. Automatic oil cup. 1638,484; Aug. 9. Gil-Camporro, Enrique. (See Schwartz, Federico, as-

oil cup. 1,638,484; Aug. 9.

Gil:Camporro, Enrique. (See Schwartz, Federico, asGil:Camporro, Enrique. (See Schwartz, Federico, asGilchrist, Clarence F., assignor, by meane assignments,
to The Electric Auto-Lite Company, Toledo, Onlo. Engine starter. 1,622,877; Mar. 29.

Gilchrist Company, The. (See Gilchrist, Raymond B.,
assignor, James M., assignor to Federal Electric Company, Inc., Chicago, Ill. Electrically-illuminated sign.
1,651,383; Dec. 6.

Gilchrist, Raymond B., assignor to The Gilchrist Company, Newark, N. J. Drink mixer. 1,618,655; Feb. 8.

Gilchrist, Raymond B., Drink mixer. 1,618,655; Feb. 8.

Gilchrist, William L., Jorink mixer. 1,618,655; Feb. 8.

Gilchrist, William L., Albany, Oreg. Automatic hydraulic
buil cock. 1,618,331; Feb. 22.

Gilchrist, William L., Albany, Oreg. Automatic hydraulic
buil cock. 1,618,331; Feb. 22.

Gilchrist, William L., Albany, Oreg. Automatic hydraulic
signal system. 1,627,380; May 3.

Gildoa, Christopher W., and W. H. Fry, deceased, Kansas City, Mo.; S. E. Fry, widow of and by decree of
curt owner of the property of said W. H. Fry,

Gildemeister, Carl J., San Antonio, assignor of one-half
to W. D. McFarlane, Young County, Tex. Key holder.

1,649,402; Nov. 15.

Gildersieeve, John H., corona, N. Y. Demountable interlocking rim for vehicle tires. 1,623,582; July 1,633,783;

Giles, David J., assignor to Latrobe Electric Steel

Company, Latrobe, Fa. Steel alloy. 1,650,707; Nov. 29.

pany ... Latrobe, Pa. Cuttery article. 1,653,783; June 29.

Inne 2

Glies, Walter D., Leesville, Lu. Vel. Oss. and remover, Mar. 15. Glies, William, Chicago, Ill. Pan lifter and remover, Glies, William, Chicago, Ill. Pan lifter and remover, Glies, Paul E., Dearborn, Mich. Toy. 1,652,934; Dec. 13.

Dec. 13.

Glidwicz, Michael K., New York, N. Y. Shoe lace.
1,635,884; July 12.

Glig, Henry F. (See Dodds, Ethan I., assignor.)

Glig, Henry F. (See Heinle, Albert W., assignor.)

Glil, Alexander F., Johannesburg, Transvan, South

Glil, Clarence D., Trenton, N. J., Loading and hauling
automobiles. 1,643,855; Sept. 27.

Glil, Frank, Shortlands, Kent, England, assignor to Western Electric Company, Incorporated, New York, N. Y.,
Producing coated cores. 1,615,375; Jan. 25.

Glil, Frank P., Jr., Bast Cieveland, assignor to The Ferro
1,646,998; Oct. 20.

Glill, Janser F., and J. N. Chaviara, Liverpool, England. Electrodynamic power-transmitting mechanism.
1,625,319; July 12.

land. Electrodynamic power-transmitting mechanism. 1.635.319; July 12. Gill, Joseph A. (See Gibbs, A. L., and Gill.) Gill, Samuel A. Nevada, Iowa. Advertising sign. Des. T.148; Mar. S. Lake Geneva, Wis. Battery connectification of the Computation of the Comput

lilam, Manly M., deceased, Flushing, N. Y.; A. L. Gli-lam, administrator. Device for vaporizing and burning liquid fuel, 1619.859; Mar. 8. llam, Wallace R., Talimadge, assignor to Lambert Tire & Rubber Co., Barberton, Ohlo. Tire. Des. 72,826; Gillam, Manly Gillam

& Rubber June 14. Juliam, Wallace R., Tallmans Juliam, Wallace R., Barberton, Tallmadge, assignor to Lambert Tire Barberton, Ohio. Tire. Des. 72,826;

lan, Gowan C., assignor to The Ontario Knife Co Franklinville, N. Y. Display casel and tray. 1.62 Gillan, Gowan C

Apr. 19.

Gillaspy, Lemuel G. (See Hungate Fred, assignor Gilleland, Edgar B., Kansas City, Mo., assignor of fourth to J. McSweeney, Council Bluffs, Iowa. mutator brush. 1,643,842; Sept. 27. assignor.)

Gillen, Charles J., Carbondale, Pa. Guard for electric meters. 1,647,566; Nov. 1.
Gillen, George A., Jersey City, N. J., assignor to Gillen Laboratories Corporation, Elinburst, N. Y. Sound-reproducer mounting. 1,623,785; Apr. 5.
Gillen, George A., Jersey City, N. J., assignor to Gillen, Kimmey, Baker Syndicate Inc., Elimburst, N. Y. Con-Gillen, George A., assignor especially of the Corporation of Corporation

assignor.)

assignor.)

Gillen, William H., Milwaukee, Wis. Water barrier.

1,632,546; June 14.

Gilles, Richard L., Fargo, N. Dak. Evaporation meter.

1,025,310; Apr. 19.

Gillespie, Bee K.

Gee Wilde, L. J., and Gillespie, Objective of the Company of the C

Gillett, Alexis F., assignor to Jubilee Manufacturing Com-pany, Omaha, Nebr. Windshield wiper. 1,613,883; Gillett, Benjamin B., Kansas City, Mo. Open-end wrench. 1,626,869; May 3. Gillett, Frank E. (See Williams, A. D., and Gillett.) Gillett, Lowry, Syossett, assignor to General Chemical Company, New York, N. Y. Sulphur burner. 1,638,992; Aug. 16.

Aug. 19.
Gillette, Charles E., Hornell, N. Y. Key-ring holder.
1.613.390; Jan 4.
1.613.390; Jan 4.
1.618.600; Calif. Coin-wrapping madiliner.
1.624.604.
1.624.600; Calif. Clip and retainer.
1.637.564; Aug. 2.
Gillette, King C., et al. (See Schmidt, Benjamin F., assignor.)

Signor, Lucy M., Milford, Conn. Mattress. 1,647,222; Nov. 1. Gillette, Maude M., New York, N. Y. Frame. 1,631,807; June 7. Gillette Rubber Co. (See Hutchens, H. O., and Kessler,

Glilette Rubber Company. (See Hutchens, H. O., and Krause, assignors.)
Gillette Rubber Company. (See Hutchens, Ralph W., as-

signor.) Gillette Safety Razor Company. (See Fairweather, Nelson H., assignor.)
Gillette Safety Razor Company. (See Nickerson, William E., assignor.)

liam E., assignor.)
Gillette-Schmidt Gear Shift Company. (See Schmidt,

Gillett-Schmidt Gear Shift Company. (See Schmidt, Benjamin F.)
Gillotte, Walter H., Long Beach, Calif. Sash fastener.
1,681,370; June 7.
Gilliam, Belden D., Chicago, Ill. Button-applying included in 1,666,652; July 19.
Mar. 15.
Gilliam, Herman, Columbus, Ohio. Glove. 1,620,643;
Mar. 15.
Gillian, Herman, Columbus, Ohio. Work glove.
1,637,181; July 26.
Gillick, Laurence H., assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Flexible Joint. 1,614,667;
Jan. 18.

Gillick, Lawrence H., St. Paul, Mina, assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Flexible joint. 1,620,094; Mar. 8.

Gillick, Lawrence H., St. Paul, Mina, assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Flexible joint. 1,629,800; Aug. 23.

Heating Company, Inc., Chicago, Ill. Flexible joint. 1,639,800; Aug. 23.

Headlight, 1,619,068; Mar. 1.

Gillica, William R., assignor to Equipment Specialties Co., Chicago, Ill. Sealing wall and floor joints, etc. 1,648,984; Oct. 4.

Gillican, Frank H., Worcester, Mass. Bridge-warping de-Gillican, Frank H., Worcester, Mass., assignor to U. S. Ring Traveler Company. Traveler for twister rings. 1,636,992; July 26.

Gillilian, Grank H., New Bedford, Mass., assignor to U. S. Ring Traveler Company. Traveler for twister rings. 1,636,992; July 26.

Gilliliand, Tora L. assignor of one-fifth to E. L. M. lin. Minneapolis, Minn. Trend chain for tractors. Gilliling and Akroyd.)

Gilling, Preston E., East Orange, N. J. Electrical confiling. Preston E., East Orange, N. J. Electrical coffiling.

Aktoyd.)

Gilling, Preston E., East Orange, N. J. Electrical condenser. 1,624,332; Apr. 12.

Gilling, Preston E., East Orange, N. J. Electrical condenser. 1,624,333; Apr. 12.

Gilling, Freston E., East Orange, N. J. Electrical condenser. 1,624,333; Apr. 12.

Gilling, J. W., Co. (See Ford, Fred A., assignor.)

Gillis, J. W., Co. (See Ford, Fred A., assignor.)

Gillis, J. Willis H., Elizabeth, N. J., assignor, by mesne assignments, to Anaconda Sales Company. Roofing element and making the same. 1,625,887; Apr. 26.

Gillis, Lyle N., Rosecrest, Va. Degumming. 1,619,111; Mar. I.

Gillis, Lyle N., Rose Crest, Va., assignor of one-half to The Floorola Corporation, and one-half to E. J. New-comer, Baltimore, Md. Floor-polishing machine.

The Floorola Corporation, and one-half to E. J. New-comer, Baltimore, Md. Floor-polishing machine. 1,635,474; July 12. Gillman, John J., Muskegon, assignor to Solar-Polar Storm Sash and Screen Co., Muskegon Heights, Mich. Window construction. 1,628,879; May 17. Gillmor, Horatio G., Washington, D. C. Anticreeper. 1,635,696; July 19. Gillmor, Horatio G., Washington, D. C. Anticreeper. 1,647,630; Nov. 1. Gillmor, Horatio G., Washington, D. C. Rail anchor. 1,647,690; Nov. 1.

1.647,909; Nov. 1.

Gillot, Henri F., Lyon, France. Weaving loom.

Gillot, Chenri F., Lyon, France. Weaving loom.

Gillson, Charles B. (See Stolp, Samuel S., assignor.)

Gillson, Louis K., Wilmette, Ill. Fuel-throwing vane or shovel. 1,627,381; May 3.

Gilman, A. S. (See Burdell, Arthur, assignor.)

Gilman, A. Bheet E. assignor to King & Hamilton Company, Ottawa, Ill. Corn sheller. 1,614,921; Jan, 18.

Gilman, Arthur S. (See Strawn, Ervin E., assignor.)

Gilman, Charles D., Oakland, Callf. Apparatus for supporting tree limbs and the like. 1,621,766; Mar. 22.

Gilman, Charles D., Oakland, Callf. Clamping band for tree limbs. 1,633,090; June 21.

Gilman Fanfold Company. (See Bonnar, Henry O., assignor.)

signor.)

Gilman Fanfold Corporation, Ltd. (See Mannhardt, R.
T., and Hitzel, assignors.)

Gilman, George H., Boston, Mass. Material-handling applications of the state of the

Glinan, George H., Belmont, Mass. Drilling machine.
1,616,489; Feb. 8.
Gliman, George H., Belmont, Mass. Drilling machine.
1,636,490; Feb. 8.
Gliman, George H., Belmont, Mass. Drilling machine.
1,632,467; July 12.
Gliman, George H., Belmont, Mass. Drilling machine.
1,635,475; July 12.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,949; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,949; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,949; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Glimer, Loeorge H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,644,120; Oct. 4.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, Mass. Drilling machine.
1,642,948; Sept. 20.
Gliman, George H., Belmont, M

Gilmont Products Corporation. (See Hopkins, Nevil M.,

Gilmont Frouncts Corporations assignor.

Gilmore, Benjamin V., Gauley Bridge, W. Va. Inner-tube boot. 1.640.403; Aug. 30.

Gilmore, Forrest E., assignor of one-sixth to F. Ahlburg, Los Angeles, and one-sixth to W. K. White, San Francisco, Calif. Method of and apparatus for making gasoline. 1.6483.45; Nov. 15.

Gilmore, John M., Chicago, Ill. Motor. 1.613.884;

ilmore, Lou S., assignor, by mesne assignments, to Tourist Supply Company, Los Angeles, Calif. Tourist's kitchenette or cabinet. Rel6,664; June 28. llmore. Thomas S., La Grande, Oreg. Pneumatic sander. 1,637,669; Aug. 2. Gilmore.

Gilmore, William L., Port Washington, assignor, by mesne assignments, to Curtiss Aeropiane and Motor Company, Inc. Garden City, N. Y. Variable litt—variable resistance aerofoil. 1,631,259; June 7. Gilmore, William L., Mineola, assignor to Curtiss Aeropiane & Motor Company, Incorporated, Garden City, N. Y. Aeropiane. 1,639,029; Jung. 16. Gilmony. Benjamin R., Yonkers, N. Y. Game. 1,638,094; Gilmony. Jahn P. Tesser, W. Y. Game. 1,638,094; Gilmony. Jahn P. Tesser, W. Y. S. Game.

Gilmour, John P., Terre Haute, Ind. Lock nut. 1,651,268; Nov. 29.

Nov. 29.

Gilowitz, Benjamin, Bronx, New York, assignor of onethird to A. Fishbain, New York, N. Y. Fire escape.
1,615.753: Jan. 25.

Gilpin, Francis. (See van Diest, E. C., and Gilpin.)
Gilpin, Garth G., Riverside, Ill., assignor to P. H. Murphy Company, New Kensington. Pa. Metal roof for
Gilpin, Garth G., Riverside, assignor to Union Metal
Products Company, Chicago, Ill. Positioning device
for railway car couplers. 1,636,180; July 19.

Gilpin, Garth G., Riverside, assignor to Union Metal
Products Company, Chicago, Ill. Corrugated metallic
plate for railway cars. 1,638,153; Aug. 9.

Products Company, Chicago, Ill. Corrugated structure
for railway cars. 1,638,154; Aug. 9.

Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Reenforcing hopper Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated metallic plate for railway cars. 1,638,165; Aug. 9.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Hopper door for railway cars. 1,635,180; Oct. 11.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated structure for railway cars. 1,645,180; Oct. 11.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. End structure for Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated structure for railway cars. 1,649,462; Nov. 15.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated structure for railway cars. 1,649,462; Nov. 15.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated car part. 1,649,464; Nov. 15.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated car part. 1,649,464; Nov. 15.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated car part. 1,649,464; Nov. 15.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Corrugated Company, Chicago, Ill. Corrugated Company, Chicago, Ill. Corrugated Company, Chicago, Ill. Car-coupler-positioning device. 1,649,466; Nov. 15.
Gilpin, Garth G., Riverside, B., assignor, by mesne assignments, to Railway Metal Products Company, Rrephrear documents, Company, Chicago, Ill. Car-coupler-positioning device. 1,649,466; Nov. 15.
Gilpin, Garth G., Riverside, B., Baltimore, Md.; sald Wells assignor to said Gilpin. Automobile lock. 1,635,079; July 5.
Gilpin, Victor L., and C. R. Wells, Baltimore, Md.; sald Wells assignor to Said Gilpin. Automobile lock. 1,635,079; July 5.
Gilpin, Victor L., and C. R. Wells, Baltimore, Md.; sald Wells ass

Dec. 21. Glson, Lorenzo H., Brockton, Mass. Shoe-bottom con-struction. 1,639,769; Aug. 23. Glson, Lorenzo H., Brockton, Mass. Innersole-channel filler, 1,639,770; Aug. 23. Glson Manufacturing Company. (See Donald, Forrest V.,

assignor.)

Gilson Manufacturing Company. (See Travers, Charles

assignor.)

Gilson Manufacturing Company. (See Travers, Charles J., assignor.)

Gilson, Michael, assignor to Kwik-Mix Company, Port Washington, Wis. Concrete mixer. 1,648,646; Nov. 8.

Gilson, Robert M. (See Benil, C. R., and Gilson, Nobert M. (See Benil, C. R., and Gilson, Company, Wissyale, Pa. Electrical Switch & Signal Company, Swissyale, Pa. Electrical Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Electrical relay. 1,627,322; May 3.

Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Rallway-traffice-controlling apparentus. 1,628,313; May 10.

Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Rallway-traffic-controlling apparentus. 1,628,313; May 10.

Gilson, Robert M., Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissyale, Pa. Rallway-signaling. 1,646,401; Oct. 25.

Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Rallway-signaling. 1,646,401; Oct. 25.

Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Rallway-signaling. 1,645,401; Oct. 25.

Gimbel, Herbert E. (See Kofsky, H. M., and Gimbel.)

Gimpel, Julius H., Decatur, Ill. Brake-beam safety hanger. 1,634,902; July 5.

Glindick, Raymond H., Waukegan, Ill. Toothbrush cabinet. 1,625,022; Apr. 19.

Glinges, Edward F., Buffalo, N. Y. Belt fastener. 1,653,024; Dec. 27.

Glingras, Louis J., and A. St. Onge, Websterville, Vt. Door holder, 1,626,810; May. 3.

1.603.624; Dec. 21.
Glingras, Louis J., and A. St. Onge, Websterville, Vt. Door holder. 1.62-8.610; May 3.
Door holder. 1.62-8.610; May 3.
Glinsburg, Henry, Ver York, N. Y., nesslenor to Roneh-Appleton Manufacturing Company, Chicago, Ill. Outlet-box support. 1.639.496; Aug.; Gl. Glinsburg, Marcus O., Corona, assignor of one-third to J. E. Sloe and one-third to H. I. Garfunkel. New York. N. Eig-shipping box. 1.620.541; Mar. S.
Gl. Y. Eig-shipping box. 1.620.541; Mar. S.

signor.)
Glometti, John, San Francisco, Culif. Marble grinding
and pollshing machine. 1,653,166; Dec. 20.
Glometti, John, San Francisco, Ili, Brake for motor vehicles. 1,614,119; Jan. 11.
Glraidi, Armando, Enst Braintree, Mass. Muscle exerciser.
1,623,699; Apr. 5.
Glrard, Frank L. Siltcos, Oreg. Convertible sent for
vehicles. 1,652,124; Dec. 6.

Girard, Fritz, Hanau-on-the-Maine, Germany. Reflector for quartz lamps. 1.633,525; June 21.

Girard, Fritz, assignor to the Firm: Quartzannen-Gesell-marker of the Firm: Quartzannen-Gesell-mary. Irradiation device for therapeutical and other purposes. 1,622,142; Mar. 2.2.

Girard, Henry A., Hartford, Conn. Automotive tool. 1,623,786; Apr. 5.

Girard, Louis J., Thionville at Suresnes, France. Relay. 1,636,933; July 26.

Girard, Mar. 1666 (Ems. A., and Girard.)

Girard Mar. 1666 (Ems. A., and Girard.)

Girardier, Wilton A., and B. B. Hibbard, St. Clair, Mo. Governor for gas engines. 1,632,471; June 144.

Girardin, Augusta F., Dampierre, France. Acetylene generator. 1,649,682; Nov. 15.

Girde Modellackett, Rotfore B., Santo Domingo, Dominican Republic. Car or wason. 1,651,693; Dec. 6.

Girl, Christian, assignor to The C. G. Spring & Bumper Company. Detroit, Mich. Automobile bumper. Girling, Abert H. G., Harlow, England. Braking mechanism. 1,619,713; Mar. 1.

Giroux, Pleire E., Johnstown, N. Y. Slipper. 1,613,321; Jan. 4.

Girten, Charles E., Houston, Tex. Belt clamp. 1,637,694;

Girten, Charles E., Houston, Tex. Belt clamp. 1,637.694;

Girten, Charles E., Houston, Tex. Belt clamp. 1,637,694; Aug. 2.
Girton, Charles E. (See Woodall, W. T. and Girton.)
Girton, Thomas C., and F. J. P. Kublmann. assignors to H. M. Goldberg Co., San Francisco, Calif. Awning frame. 1,620,955; Mar. 15.
Gisler, Julia, Stuten Island, N. Y. Shield for nursing bottles. 1,649,560; Nov. 15.
Gisske, Walter P., Chicago, Ill. Electrical connecter. 1,636,431; July 10.
Gist, Sabe C., Stockton, Calif. Awning construction.
Gistage, C., Philadelphia, Pa. Umbrella runner. 1,644,579; Oct. 4.
Gittins, George E. (See Contes, W. A., Gittins, and Davies.)

Given, Guy C. (See Shipley, S. D., and Given.)
Given, Ralph D., Leamington, England, assignor to General Electric Company. Electric-notor control for feed mechanisms. 1,645,680. Nov. 8.
Givens, Alex. St. Petersburg. Pla. Combined curtain, shade, and drapery support. 1,636,601; July 19.
Givens, Maurice H. (See Hill, C. B., and Givens, Maurice H. (See Hill, C. B., and Givens, Maurice H. (See Hill, C. B., and Givens, Maurice H. (See Hill, C. B.) and Givens, Maurice H. (See Hill, C. B.)

Apr. 5.

Glankovich, Stanko, New York, N. Y. Spinning device.

1.639.844; Aug. 23.

Glabau, Charles A. (See Wagner, T. B., and Glabau,)

Glabau, Charles A. (See Wagner, T. B., and Glabau,)

Glaberman, Harry, assignor to National Form & Fixture

Co., Brooklyn, N. Y. Base for display fixtures or

similar articles. Des. 75,908; Nov. 22.

Glacken, Edward F., Brooklyn, N. Y. Bottle. 1,650.440;

Glader W. Machine Works. (See, Nanhargen, Alex.

Nov. 22.
Glader, Wm., Machine Works. (See Neuhengen, Alexander J., assignor.)
Gladstone, William D., New York, N. Y. Key holder.
1.621,777; Mar. 22.
Gladstone, William D., New York, N. Y. Drum-supporting device.
1.630,701; May 31.
Gladstone, William D., New York, N. Y. Operating device for cymbols.
1.645,552; Sept. 27.
Gladstone, William D., New York, N. Y. Operating deformables.
1.647,856; N. Y. Operating device for cymbols.
1.647,756; N. Y. Operating device for cymbols.
1.674,756; N. Y. Operating device for cymbols.
1.680,567; Nov. 22.
Gladwill, Rudolph H., Ada, and G. M. Ramsey, Altus.
Okla. Check-endorsing attachment for adding machines.
1.620,542; Mar. 8.
Glaenzer, Harry, Philadelphia, Pa. Driving wheel for

Glacencer, Harry, Philadelphia, Pc. Driving wheel for Glacencer, Harry, Philadelphia, Pc. Driving wheel for Glacencer, Fred. Castleford, Idaho. Agricultural implement. 1,026,811; May. Glacesr, Walter, Brooklyn, N. Y. Producing mercury, 1,637,481; Aug. 2.

Glaize, Frederick L. and O. C. Cooper, Winchester, Va. Fruit grader. 1,650,441; Nov. 22. Glans, Jose E. (See Glans, Karl J. and J. E.) Glans, Karl J. and J. E., Stockholm, Sweden. Firearm. 1,632,892; June 21.

Glascock Brothers Manufacturing Company. (See Frick, Chester A., assignor.)
Glascock Brothers Manufacturing Company. (See Frick, C. A., and Dwight, assignors.)
Glasby, Jonathan P., Jr., Verona, N. J. Cooling system for

for crank cases 1,645,134; Oct. 11. Glasel, Charles J., New York, N. Y. Tanning apparatus. 1,628,966; May 17.
Glaser, Frank S., et al. (See Anschutz, Edward C., as-

Glaser, Julius M., et al. (See Anschutz, Edward C., assignor.)
Glaser, née Plettl. Creszenia, Paris, France. Protecting the gelatin coating of photographic plates and films. See Manufacture and State of the State

Glasshoffer, Daniel, Roselle, N. J. Animal trap. 1,624,548;

Glasshoff, Daniel, Roselle, N. J. Animal trap. 1,624,548; dasshoff, Daniel, Roselle, N. J. Animal trap. 1,624,548; Classmobile Company. (See Loud, William C., assignor.) Glasspell, Herbert, assignor of one-half to H. J. Balkema, Grand Rapids, Mich., and one-half to C. Dregge. Lugagge carrier, 1,654,529; Dec. 6.
Glattes, William, New York, N. Y. Variable-stroke pump. 1,645,429; published Oct. 11.
Glauber, Myron J., Los Angeles, Calif. Combination spout and spray fature. 1,653,956; Dec. 27.
Glaublet, Arthur. (See Regelein, W., and Glaubtz.)
Glaudel, George, Los Angeles, assignor of fifteen per cent to H. Miller. South Pasadena, Calif. Glass-grinding machine. 1,617,106; Feb. 8.
Glaus, Marle, Union City, N. J. Door alarm. 1,632,893; June 21.

June 21.
Glaze, Herbert L., South Pasadena, assignor of one-half to A. R. Maas Chemical Co., Los Angeles, Calif. Dispersing matter into finely-divided form. 1,625.208; Apr. 19.

signors.)

Gleason Works. Gleason Works. (See Gleason, James E., assignor.) (See Gleason, J. E., and Head, as-

Gleason Works.

Signors.)

Gleason Works.

Gleason Works.

(See Finesen. Evytnd, assignor.)

Gleason Works.

(See Head, Ernest C., assignor.)

Gleason Works.

(See Johanson, Magnus H., assignor.)

Gleason Works.

(See Johanson, Magnus H., assignor.)

Gleason Works.

Gle

alay 11 Globder, Edward C., Gallon, Obio. Steering gear for road Globder, L. 429,873 and 24. Globilli. Edward C., Gallon, Obio. Vehicle guard. 1.643,555 Sept. 27. Gleeson, William H., San Francisco, Calif. Copyholder. 1,540,121; Aug. 23.

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Gleichmann, Hans, Berlin-Siemensstadt, assignor to Sie-meus-Schuckertwecke Gesellschaft mit beschränkter Haftung, Siemensstadt, Germany. System or arrange-ment for tapping or bleeding steam. 1.653.560; Dec. 20. Dec. 20. Gleichrichter-Akteingesellschaft, The Firm. (See Seitz,

Gleichrichter-Atteingeseilschaft, The Firm. (See Seitz, Oskur, assignor.)
Gleim, Ferdinand, assignor to the Firm Wales Adding Machine Company, Schaffhausen, Switzerland. Carriagemoving mechanism for typewriters and adding machines. 1,640,764; Aug. 30.
Glein, Lauchlau M., assignor of one-half to C. R. Mac-Gillivray, Johannesburg, Transvana, South Africa. Pipercoupling means for making steam and other fluid-tight Joints. 1,642,728; Sept. 22,642,640. Sept. 22,640.
Glein, Howard A., and L. S. Dromgold, Chicago, Ill. Hopper for refrigerating cars. 1,639,176; Aug. 16.
Glenn, Howard A., and L. S. Dromgold, Chicago, Ill. Hopper for refrigerating cars. 1,639,176; Aug. 16.
Glenn, Hos., et al. (See Williams, Arthur J., assignor.)
Glenn, William F., jr., et al. (See Williams, Arthur J., assignor.)

assignor.)
Glennan, William S., Norfolk, Va. Freezing process.
1,641,139; Aug. 30.
Glennan, James, Rochester, Minn. Dirigible headlight.
1,644,427; Oct. 4.
Glennan, Michael F., Glen Ridge, N. J. Lead pencil.
1,619,927; Mar. 8.
Glennan, Michael J., Summit, and H. G. Higham, Murray,
Hill, N. J. Instructing golf strokes. 1,637,339; Aug. 2.
Glenny, Andrew M. (See Webster, Milton W., assignor.)
Glenshaw Glass Company. (See Meyer, J. J., jr., and
Lepper, assignors.) Lepper, assignors.)
Glenwood Range Company. (See Wilde, Samuel A., as-

signor.)
Glessner, Charles E., Portland, Oreg. Optical instrument.
1,049,303; Nov. 15.
Glezen, Lee L. (See Shackleton, S. P., and Glezen,)
Glezen, Lee L., (See Shackleton, S. P., and Glezen,)
Glezen, Lee L., Milburn, and S. P. Shackleton, Wyoming,
N. J., and E. Vroom, Ossining; said vroom assignor to Western Electric Company, Incorporated,
New York, N. Y.; said Glezen and said Shackleton,
pany, Telephone system, 1,647,706; Nov T.,
Glick, Benjamin, et al. (See Weiss, Max M., assignor.)
Glick, Herman H., et al. (See Stowell, Francis H., assignor.)

signor.) M., Boston, Mass. Antitheft device.

Glick Kaac M., Bostoh, Mass. Abutture.

Glickerman, Abraham (See Kirsch, J., and Glicherman.)

Glictenberr, Eugen, Leverkusen, Germany, assignor to

Grasself Dyeatuff Corporation, New York, N. X. Azo

dyestuff from aminodiphenylenoxide. 1.624,944;

Auc. 10.

Apr. 19.

Glitzke, Ewald C., Kansas City, Mo. Control for electric furnaces. 1.650 624; Nov. 29.

Globe Automatic Sprinkler Company. (See Rowley, Atthur C., assignor.)

Globe Lighting Fixture Manufacturing Co. (See Petersen, Thoradd J.)

Globe Lighting Fixture Mfg. Co. (See Petersen, Thoradd J.)

Globe Lighting Fixture Mfg. Co. (See Rosenblatt, Isidor, assignor.)

Globe Lighting Fixture Mfg. Co. (See Rosenblatt, Isidor, assignor.)

Globe Lighting Fixture Mfg. Co. (See Villaret, Gustave E., assignor.)

Globe Machinery & Supply Company. (See Bristol, Cyrus

Globe Machinery & Supply Company. (See Bristo, Cyrus J., assignor.)
Globe Machinery and Supply Company. (See Harsh barger, Franz S., assignor.)
Globe Match Corporation. (See Christianson, A. W., and Millian, assignors.)
Globe Register Company, The. (See Konerman, II. II., and Inluis, assignors.) (See Christianson, A. W.,

Globe-Wernicke Company. (See Ringler, William A., as-

Globe-Wernicke Company, Green Stagnor, June 1988, Globs, Henry, Cleveland, Ohio, Perforated Huminated Globs, Henry, Cleveland, Ohio, 1984, 1900; Oct. 28, 1988, 19

signor.)

Gloekler, John E., Plitsburgh, Pa. Sheet-metal sink construction. 1,642,853; Sept. 20.

Gloekler, John E., Plitsburgh, Pa. Supporting means for horizontally-disposed surfaces. 1,645,621; Oct. 11.

Glorient, Inc. (See Matthews, Joseph M., assignorths to G. J. Devoto and twenty-six of one-hundredths to C. B. Hierbet, St. Louis, Mo. Internal-combustion motor. 1,614,608; Jan. 18.

Gloss, Samuel D., and W. Wright, assignors, by mesne and the support of the suppo

Glover, Hubert, Boyles, Ala. Slip-on repair top for auto-mobiles. 1,613 270; Jan. 4. Glover, John, Chiengo, Hl. Mop. 1,617,329; Feb. 15. Glover, Smith, Jr., and A. L. Glover, Lonoke, assignors to Glover Tool Company, Little Rock, Ark. Bushing re-mover. 1641,734; Sept. Glover Tool Company, (See Glover, Smith, Jr., and A. L.,

assignors.)

Glover, Walter H., Bedford, and E. Van Weyenbergh, Coventry, assignors to Courtaulds Limited, London. England. Making acylated cellulose ethers. 1,613,451; Jan. 4

Clover, William C., Kansas City, Mo. Gasoline filter. 1,624,832; Apr. 12.
Glover, William C., Kansas City, Mo. Apparatus for redaining used gasoline. 1,639,273; Aug. 10.
Glowacki, Charles, Philadelphia, Pa. Garter. 1,631,261; June 7.

June 7.

Glowacki, John B., Chicago, Ill. Fuse plug, screw type, with indicator. 1,636,182; July 19.

Glowacki, Michael, Shenandonh, Pa. Adjustable propeller for aeroplanes. 1,649,296; Nov. 15.

Gluck, Julius, New York, N. Y., assignor, by mesne assignor, blue, Taximeter. 1,612,864; Jan. 400,000; Taximeter. 1,612,864; Jan. 400,000; Taximeter. 1,612,864; Jan. 400,000; Taximeter. 1,612,620; Cluck, William S. (See Bernstein, Alexander, assignor, Gluck, William S., New York, N. Y., assignor to The John Scall Corporation. Pile-wire cutter. 1,613,316; Clund William S., New York, N. Y., assignor to The John Scall Corporation. Pile-wire cutter. 1,613,316; Clund William S., New York, N. Y., assignor to The John Scall Corporation. Pile-wire cutter. 1,618,316; Clund William Dertraugh-Fring Garmany. Manufacture.

Feb. 1.

Glund, Wilhelm, Dortmund-Eving, Germany. Manufacture of hydrocyanic acid. 1.622.372; Mar. 29.

Glund, Wilhelm, Dortmund, Germany, assignor to The Koppers Company, Pittsburgh, Pa. Removing sulphureted hydrogen from gases. Rel.6.631; May 24.

Gluyas, Edwin L., Maricopa, Calif. Sucker rod and plunger rotator. 1.633,013; June 21.

Glyun, Joseph C., Minneapolis, Minn. Poultry roost. 1.618,186; Feb. 22.

Glyun, Joseph C., Minneapolis, Minn. Foultry roost. 1.618,186; Feb. 22.

Glyun, Joseph C., Minneapolis, Minn. Foultry roost. 1.618,186; Feb. 22.

Glyun, Joseph C., Minneapolis, Minn. Foultry roost. 1.618,186; Feb. 22.

Glyun, Joseph C., Minneapolis, Minn. Foultry roost. 1.618,186; Feb. 22.

Glyun, Joseph C., Minneapolis, Minn. Foultry roost. 1.618,186; Feb. 22.

Glyun, Joseph C., Lima, Ohio, Liner for pipe openings and producing the sime. 1.651,269; Nov. 29.

Goates, John E. (See Conant, M. A., and Goates.) Gobbato, Vittorio, Milan, Italy. Mechanism for reproducing all the movements of the steps of quadrupeds. 1683,332; Aug. 3.

Gobbaro, Vittorio, Milan, Italy. Mechanism for reproducing all the movements of the steps of quadrupeds. 1438,332; Aug. 9
Gobbet, Alfred, Karwin, Czechoelovakia. Screen or sleve Gobbet, Alfred, Karwin, Czechoelovakia. Screen or sleve Gobbet, Lawrence E., Columbia City, 194.
Gobbet, Lawrence E., Columbia City, 194.
Gobbet, Lawrence E., Columbia City, 194.
Gobbet, Milham E., Orosi, Calif. Brush shredding and cutting machine. 1,648,341; Nov. 8
cutting machine. 1,648,341; Nov. 8
city of the columbia City, 194.
Gocke, James B. (See Wilson, C. A., Gocke, and De Corse.)

signal lights to flicker. 1.620,959; Mar. 15.
Gocke, James B. (See Wilson, C. A., Gocke, and De
Corse.)
Gocke, James B., and C. F. De Corse, Los Angeles, Callf.;
said De Corse, assignor to said Gocke. Pipe straightGoddard, George E., Detroit, Mich., assignor, by mean eassignments, to Dodge Brothers, Inc. Separable auto
body construction. 1.644.826; Oct. 11.
Goddard, George E., Detroit, Mich., assignor, by mean assignments, to Dodge Brothers, Inc. Separable auto
body construction. 1.644.826; Oct. 11.
Goddard, Walter T., Hamilton, Ontario, Canada, assignor
to Locke Insulator Corporation, Baltimore, Md.
Insulator. 1.621,246; Mar. 15.
Goddard, Walter T., Hamilton, Ontario, Canada, assignor
to Locke Insulator Corporation, Baltimore, Md. Insulator. 1.628,624; May 10.
Goddell, Frank R. (See Kenyon, F. C., Jr., and Goddell,
Goddu, George, Winchester, Mass., assignor to United
Shoe Machinery Corporation, Parterson, N. J. Fastening-inserting machine. 1.642,729; Sept. 20.
Goddu, George, Winchester, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. Fastening-inserting machine. 1.642,729; Sept. 20.
Goddu, George, Winchester, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. Fastening-inserting machine. 1.642,729; Sept. 20.
Goddu, William, Winchester, Ass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. Controlling mechanism, 1.651,452; Dec. 6.
Goddu, George, Winchester, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. Controlling mechanism, 1.651,452; Dec. 6.
Goddu, George, Winchester, Mass., assignor to United
Shoe Machinery Corporation Paterson, N. J. Fasteninserting machine (553,000; Dec. 200,000; Mar. 8.
Goddu, George, Winchester, Mass., assignor to United
Shoe Machinery Corporation Paterson, N. J. Fasteninserting machine (553,000; Dec. 200,000; Mar. 8.
Goddu, George, Winchester, Mass., assignor to United
Shoe Machinery Corporation (163,000; Mar. 8.
Goddu, George, Winchester, Mass., assignor to United
Shoe Machinery Corpor

Goifrey, Edward R., Anderson, Ind., assignor, by mesne assignments, to Deleo-Remy Corporation, Dayton, Ohio. Rebound check. 1.64.1381; Sept. 6.
Godfrey, Alfred A., assignor to Linoleum Manufacture of Innoleum, 1.653.270; Dec. 20.
Godfrey, Edward J., Naugatuck, Conn., assignor to The Godfrey Edward J., Naugatuck, Conn., assignor to The Godfrey Edward J., Naugatuck, Conn., assignor to The Godfrey, William F., Kearney, Nebr. Endless-chain pump. 1.626,812; May 3.
Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Hook for lamp doors. 1.614.728; Jan. 18.
Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Focusing lamp. 1.614.729; Jan. 18.
Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Circuit connecter for compartmental lamps. 1.614.730; Jan. 18.

Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company, Circuit connecter for compartmental lamps. 1,614,730; Godley, Charles E., assignor to Edmunds & Jones Corporation, Detroit, Mich. Lamp. 1,621,585; Mar. 22. Godley, Charles E., assignor to Edmunds & Jones Corporation, Detroit, Mich. Lamp. 1,621,586; Mar. 22. Godley, Charles E., Detroit, Mich. assignor, by unsanguate the construction. 1,625,648; Apr. 19. Godley, Charles E., Detroit, Mich., assignor, by unsanguate for the construction. 1,625,648; Apr. 19. Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Lamp-door fastening. 1,624,605; Apr. 26. Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Fluted lamp lens. 1,624,640; Apr. 26. Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Focusing device. 1,626,407; Apr. 26. Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Headlight Control of the Company. Electric fitting; 1,630,936; May 10. Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, by C. M. Hall Lamp Company. Combination rear light for vehicles. 1,631,678; June 7. Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Combination rear light for vehicles. 1,631,678; June 7. Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Combination rear light for vehicles. 1,631,678; June 7. Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Combination rear light for vehicles. 1,631,678; June 7. Godley, Charles E., Vpsilanti, Mich., assignor, by mesne assignments, to C. M. Hall Lamp Company. Combination rear light for vehicles. 1,631,678; June 7. Godley, Charles E., Vpsilanti, Mich., assignor, by mesne assign for lamps. 1,614,731; Jan. 18. Godley, Charles E., Vpsilanti, Mich., assignor, by mesne for lamp

ley.) Godłowsky, Leopold, jr. (See Mannes, L. D., and Godowsky.) Godoy, Humbert. (See Feeney, T. L., and Godoy.) Godsey, H. Mitchell, Shreveport, La., assignor to Godsey-Murphy Company, Inc. Gas burner. 1,622,992; Apr. 26. Godsey-Murphy Company. (See Godsey, H. Mitchell, as-

signor.)

Godshalk, Clarence A., Philadelphia, Pa. Locked-nut apparatus. 1,637,995; Aug. 2.

Godshalk, Clarence A., Ardmore, assignor to A. H. Fox Gun Company. Philadelphia, Pa. Vehicle signaling device. 1,640,700; Aug. 30.

Goebel, Clayton J. (See Bartels, C. and Goebel,) Goebel, Clayton J. (See Bartels, C. and Goebel, Goebel, Groge, assignor to The Crown Cork and Sent Company of Baltimore City. Baltimore. Md. Annaratus for compacting granulum material. 1,627,601; May 10.

Goebel, George, and W. V. Dorby, assignors to The Crown Cork and Seal Company of Baltimore City. Baltimore Lity. Baltimore. 11,641,672; Sent. 6 or arranging and feeding articles. 1641,672; Sent. 6 or arranging and feeding articles. 1641,672; Sent. 6 or arranging and feeding articles. 25.

Goebels, Paul, Dessau, Germany. Drum mill. 1,646,532; Oct. 25.

Oct. 25.

Goebels, Paul, assignor to the Firm G. Polysius, Dessau, Germany. Compound mill. 1,550,508; Nov. 22.

Gebert. Conrad, and O. Kuzler, sr., Philadelphia, Pa., assignors to Otis Elevator Company, Jersey City, N. J.

Elevator-controlling device. 1,642,674; Sept. 20. J.

Goebert, Elmer C. U. S. Army, Philadelphia, Pa. Fastening device for shields, 1,636,128; July 19.

Goeller, Edward P., New York, N. Y. Battery-terminal connecter, 1,633,178; June 21.

Goeller, Lawrence E., Circleville, Ohio, Combination Tull 1,750 com holder and shoe polisher. 1,635,885;

July 12

Goeller, Vernon R., Booton, N. J. Goeller, Vernon R., Booton, N. J. Goeller, Vernon R., Booton, N. J. 1827,500; May 31,000, N. J. Brief Tire spreader. Tire spreader.

Gork, Jacob, Irvington, N. J. Brief bag. 1.646.730; Oct. 25. Goertz, August, & Co. (See Bellingrath, August, as-

Goertz, August, & Co. (See Goertz, Frederick, assignor.) Goertz, August, and Co. (See Goertz, F., and Wacker, assignors.)

Goertz, August, and Co. (See Goertz, F., and Wacker, assignors to August Goertz, Frederick, Newark, N. J., assignor to August Goertz, Frederick, Mulewood, N. J., 4ssignor to August Goertz, Frederick, Mulewood, N. J., 4ssignor to August Goertz, Frederick, Mulewood, N. J., 4ssignor to August Goertz, Frederick, Malpewood, and W. E. Wacker, Newark, N. J. Receptade, 1,636,184; July 19.
Goerz, C. P., Optische Austati Aktiengesellschaft, Akciova Spolecnost, K. P. Goerz, Optickyustav. (See Maurer, M., 5polecnost, K. P. Goerz, Optickyustav. (See Maurer, M., Goerz, C. P., Optische Austati Aktiengesellschaft, Akciova Spolecnost, K. P. Goerz Optickyustav. (See Petschenig, Karl, assignor.)
Goeser, Edwin W., assignor, by mesne assignments, to Emsco Derrick & Equipment Company, Los Angeles, Calif. Edvin W., assignor, Calif. Schary Machine. 1,612,314; Jan. 4. Angeles, Calif. Schary Machine. 1,612,314; Jan. 4. Goeser, Edwin W., and W. D. Davidson, assignors, by mesne assignments, to Emsco Derrick Equipment Company, Torrance, Calif. Borli-stem roller driving bushing. 1,639,337; Aug. 18.
Goeser, Edwin W., and W. D. Davidson, assignors, by mesne assignments, to Emsco Derrick Equipment Company, Los Angeles, Calif. Rotary table. 1,627,323; May 3.

May 3. Goetschius, Dalton M., Dumont, N. J., assignor to Radium Dial Company, Long Island City, N. Y. Sign. 1.654.370; Dec. 27. Goettert, Lula B., Aberdeen, Wash. Puzzle. 1,652,115; Dec. 6.

Dec. 6
Goetting, Arthur, Buckley, Ill. Nut-applying device, 1.620,960; Mar, 15.
Gotting, Henry C., New York, N. Y. Collar. 1,613,653;
Goetta, Charles, New York, N. Y.
Tamping device for tobacco pipes. 1,648,454; Nov. 8,
Goetz, Julius F., Hartford, Wis.
Jan. 4.
Goetz, Oscar H., Springfield, Mass. assignor to America Goetz, Company, Inc. Automobile bumper. 1,623,471;
App. 5.

Goetz, Oscar H., Spina, Chain Company, Inc.

Dec. 21.

Goff, Henry J., assignor to Stockton Box Company, Stockton, Calif. Method of and apparatus for making box lids. 1,627.894 'May 1.06 Goff, Jess, assignor of one-half to L. M. Adams, Los Angeles, Calif. Pipe rip and cut-off. 1,629,696; May 24.

Goff, Robert W., Schenettady, N. X., assignor to General Electric Company. Push-button switch. 1,526,461;

Apr. 26.
Goff. Robert W., Schenectady, N. Y., assignor to General Electric Company. Electromagnetic operating means and motor controller employing the same. 1,633,812;

and motor controller employing the same. 1,633,812; June 28.
Goffin, John, assignor to Chisholm-Ryder Co. Inc., Nizagrar Falls, N. Y. Hulling green peas. 1,620,644; Mar. 15.
Goggin, David E., New York, N. Y. Disposal of gases and vapors resulting from the boiling of oils, gums, resins, and the like. 1,612,915; Jan. 4.
Gogein, David E., New York, N. Y. Varnish fire. 1,638,465; Aug. 16.
Golke, J. B., et al. (See McCulloch, Stewart B., assignor.)

Golke, J. B., et al. (See McCulloch, Stewart B., assignor: Jong, George G., Middletown, Conn., assignor to Remington-Noiseless Typewriter Corporation, New York, N. Y. Typewriting machine. 1.615.540; Jan. 25. Going, George G., Middletown, Conn., assignor to Remington-Noiseless Typewriter Corporation, New York, N. Y. Typewriting machine. 1.615.635; Pab. 10. Going, George G., Middletown, Conn., assignor to Remington-Noiseless Typewriter Corporation, New York, N. Y. Typewriting machine. 1.615.635; Pab. 10. Going, George G., Middletown, Conn., assignor to Remington-Noiseless Typewriter Corporation, New York, N. Y. Typewriting machine. 1.622.640; Mar. 29. Going, George G., Middletown, Conn., assignor to Remington-Noiseless Typewriter Corporation, New York, N. Y. Typewriting machine. 1.631.197; June 7. Going, George G., Middletown, Conn., assignor to Remington-Noiseless Typewriter Corporation, New York, N. Y. Typewriting machine. 1.631.197; June 7. Going, George G., Middletown, Conn., assignor to Remington-Noiseless Typewriter Corporation, New York, N. Y. Typewriting machine. 1.647.827; Nov. 1. Goit, Laurance E. (See French, C. A., and Goit.) Gold Car Heaving & Lighting Company. (See Gold, Edward E., assignor.)

Gold, Charles. (See Burns, William A., assignor.) Gold, Charles. (See Dickson, Charles F., assignor.) Gold Dust Corporation. (See Bardach, Lloyd H., as-

Dust Corporation. (See Van Sant, Robert H., as-

Gold Dust Corporation. (See Van Sant, Robert H., assignor.)
Gold Dust Corporation. (See Vickery, Frank E., assignor.)
Gold Dust Corporation. (See Vickery, Frank E., assignor.)
Gold, Edward E., New York, assignor to Gold Car Heating & Lighting Company, Brooklyn, N. Y. Pipe Joint.
Gold. Egbert H., Chicago, Ill. Flexible pipe connection.
1,912,973; Jan. 4.
Gold, Egbert H., Chicago, Ill. Car-heating system.
1,620,238; Apr. 26.
Gold. Egbert H., Chicago, Ill. Car-heating system.
1,620,238; Apr. 26.
Gold. Egbert H., Evanston, Ill. Car-heating system.
1,620,338; Apr. 26.
Gold. Egbert H., Evanston, Ill. Train-pipe and valve.
1,643,300; Sept. 27.
Gold, Egbert H., and B. A. Russell; said Russell assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Evanston, and E. A. Russeli; said Russell bend-train-pipe valve., 1,618,765; Feb. 22.
Gold, Egbert H., Evanston, and E. A. Russeli; said Russell rus., Chicago, Ill. Fiexible joint. 1,639,771; Aug. 23.
Gold, Egbert H., Evanston, and E. A. Russell; said Russell rus., Chicago, Ill. Fiexible joint. 1,639,771; Aug. 23.
Gold, Egbert H., Evanston, and E. A. Russell; said Russell rus., Chicago, Ill. Suspension device for fiexible joints. 1,639,772; Aug. 23.
Gold, Louis, Chicago, Ill. Lamp shade. Des. 73,171;
Gold. Louis, Chicago, Ill. Lamp shade. Des. 73,171;

1.639.712; Aug. 23.
Gold, Louis, Chicago, Ill. Lamp shade. Des. 73,171;
Aug. 2.
Gold, Louis, Chicago, Ill. Lamp shade. Des. 73,172;
Gold, Louis, Chicago, Ill. Lamp shade, Des. 73,172;
Gold, Samuel, Los Angeles, Calif. Spring surface bolt.
1.632.332; June 21.
Gold, Samuel B., Independence, assignor to Weber Engine Company, Kansas Citty, Mo. Internal-combustion engine.
1.627,532; May 3.
Goldberg, Abraham, Bronx, assignor to Texto* Metal Art Products Co., Inc., New York, N. Y. Lamp stem. Des.
Goldberg, Abraham, Bronx, assignor to Electric Controller Company, Indianapolis, Ind. Thermostatic switch for incubators. 1,639.374; Aug. 16.
Goldberg, Carl M., assignor to Schaffer & Goldberg, New York, N. Y. Sport visor cap. 1,624,727; Apr. 12.
Goldberg, David D. (See Gordon, C. J., and Goldberg, Joidberg, Jacob M. (See Goldberg, Louis B., N., W., and

Goldberg, Jacob M. (See Goldberg, Louis B., N., W., and Goldberg, Jacob M. (See Goldberg, Louis B., N., W., and Goldberg, John, Hopkins, Minn. Furnace regulator. 1.636,906; July 26. Goldberg, Leon. assignor to Vincent Horwitz Co., Inc., New York, N. Y. Bedroom slipper. Des. 71,968;

Feb. 8.
Goldberg, Louis B., N., W., and J. M., Denver, Colo. Gasoline camp stove. 1,620,095; Mar. 8.
Goldberg, Louis B., N., W., and J. M., Denver, Colo. Umbrella tent clamp. 1,649,219; Nov. 15.
Goldberg, Maximilian M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Card-assorting machine. 1,627,028; May 3.
Goldberg, Nathan. (See Goldberg, L. B., N., W., and J. M.)
Goldberg, Nathan. (See Goldberg, Louis B., N., W., and

Goldberg, Nathan. (See Goldberg, Mass. Hair curler. 1, M.)
Goldberg, Otto. (See Wild, M., and Goldberg.)
Goldberg, Samuel, Norchestr, Mass. Hair curler. 1,820,543; Mar. 8.
Goldberg, Samuel, New York, N. Y. Horn. 1,623,106; Apr. 5.
Goldberg, Solomon H., and W. H. Hermsdorf, Chicago, H.; said Hermansdorf assignor to said Goldberg. Magnetic Company of the Control of

Goldberg, Wi William. (See Goldberg, Louis B., N., W., Goldberger, Eugene, Brooklyn, N. Y. Doll. Des. 73,404; Sept. 6.

Sept. 6.
Goldberger, Morris, assignor to Cresco Creamery Supply
Co., Chicago, Ill. Cap delivery and applying mechanism. 1,614,467; Jan. 18.
Goldberger, Richard, New York, N. X. Stormproof umbrella. 1,646,144; Oct. 18.
Goldblatt, Henry, Kansas City, Mo. Cutting tool.
Goldblatt, Branch E. 2.
Goldblatt, Branch E. 2.
Goldblatt, Branch E. 2.
Goldblatt, Granch Granc

Golden, Billott, Mobile, Ala. Planes Golden, Billott, Mobile, Ala. Planes Oct. 11 John O. Portland, Oreg. Sterilizing apparatus. 11 651 348; Nov. 29. Golden, Joseph A. (See Whiteman, Charles E., assignor.) Golden Lighting Fixture Co. (See Lipsky, Norman, as-Golden Lighting Fixture Co. (See Lipsky, Norman, as-

Golden Lighting Fixture Co. (See Engage 1) Signor:)
Goldenberg, Benjamin, assignor to E. I. Horsman Co. Inc., Action of the Co. (1988) See C

Goldfield, Harry, Brooklyn, N. Y. Teacup. 1,652,935; Dec. 13.
Golding, John F., Philadelphia, Pa. Making nut blanks. 1,658,955; July 26.
1,658,955; July 26.
Golding, John F., Philadelphia, Pa. Making nut blanks. 1,632,956; July 26.
Golding, John F., Philadelphia, Pa. Making castle nuts. 1,642,854; Sept. 20.
Golding, William H., Merrick, N. Y. Railway-crossing guart. 1,612,0 (f); Mar. 1.
Muphy, Chicago, Ill. Uncoupling lever. 1,626,929; May 3.

anty o. Goldman, Abraham W., Los Angeles, Calif. Window sash and screen. 1,626,336; Apr. 26. Goldman, Abraham W., Los Angeles, Calif. Pulley for balanced window sashes. 1,646,908; Oct. 25. Goldman, Barney, New York, N.Y. Skylight. 1,642,675;

Goldman, Sept. 20 Goldman, Bronislaw, Berlin-Grunewald, Germany. Baffle to be set automatically. 1,651,816; Dec. 6. Goldman, Clarence F. (See Mitchell, S. W., Naud, and Goldman, Cl Goldman.)

Goldman, Matthew S., and E. W. Huttlg, assignors to McCallum Decorative Corporation, Pittsburgh, Pa. Display background. 1,619,719; Mar. 1.
Goldman, Max and R. Karaban, Brooklyn, N. Y. Signaling device. 1,629,880; May 17.
Goldman, McIvin, Los Angeles, Calif. Dispensing machine. 1,644,371; Oct. 4.
Goldman, Signaud L., assignor to Red Sun Products Co., Cale 207, Ill. Bottle-capping machine. 1,643,557; Cale 207.

Sept. 24.
oldman, Sigmund L., assignor to Red Sun Products Co.,
Chicago, Ill. Decanting and filtering float device.
1,644,248; Oct. 4.
oldner, Louis, Brooklyn, N. Y. Spattee. 1,650,509; Goldner, I Nov. 22.

Nov. 22.
Goldrick, Albert R., Cleveland, Ohio. Electrical swivel counceter 1,650,014; Nov. 20.
Goldrick, Albert R., Cleveland, Ohio. Electrical swivel carpin Company, Cleveland, Ohio. Composite printing sing. 1,613,094; Jan. 4.
Goldrick, Albert R., assignor to The Gerson Stewart Corporation Company, Cleveland, Ohio. Liquid-soap dispenser. 1,624,221; Apr. 12.
Goldring, Ida. (See Hell. R. Wacob assignor.)
Goldring, Ida. (See Hell. R. Wacob assignor.)
Holo, Pittisburgh, Pa., assignor to Westingbouse Electric and Manufacturing Company. Photo-electric cell. 1,645,280; Oct. 11.

Goldsborough, Washington L., assignor, by mesne assignments, to Dictaphone Corporation, New York, N. Y. Correction device for phonographic machines.

ments, to Dictaphone Corporation, New York, N. Y. Correction device for phonographic machines. 1.651,036; Nov. 29.
Goldsbrugh, Robert E., Consett, England. Burner for hydrocarbon and similar fuel. 1.637,695; Aug. 2.
Goldschmidt, Rudoff, Berlin, Germany, assignor to Det Tekniske Forsgaaktiesskab, Ordrup, Charlottenlund, Denmark, Percussive hand tool. 1.620,201; Mar. 8.
Goldscholl, Abraham, New York, N. Y. Belt fastener. 1.648,393; Nov. 8.

Abraham, New York, N. Y. Belt fastener, 1.648.395; Nov. 8. and J. Weinberger, New York, N. Y. assignors to Radio Corporation of America. Radiotelephony. 1,622.033; Mar. 22. Goldsmith, Bertram J., See Koeb, Emil, and Goldsmith, Gertam J., New York, assignors, by mesne assignments, to Ferfect Window Regulator Corporation, June 21. June 21. Goldsmith, Physics of the Conference of the Confer

Goldsmith, Bertram J., and E. Koeb, New York, as-signors to Perfect Window Regulator Corporation, Long Island City, N. Y. Window regulator, 1,624,098; Apr. 12.

Löng Island City, N. Y. Window regulator, 1,624,098; Apr. 12.
Goldsmith, Bertram J., and E. Koeb, New York, assignors to Perfect Window Regulator Corporation, Long Island City, N. Y. Window And operating means therefor. 1638,455; Aug. 16.
Goldsmith, Bertram J., and E. Koeb, New York, assignors to The City, N. Y. Window regulator Corporation, Long Island Goldsmith, Bertram J., and E. Koeb, New York, assignors to Perfect Window Regulator Corporation, Long Island Goldsmith, Bertram J., New York, and E. Koeb, Tuckahoe, assignors, by mesne assignments, to Perfect Window Regulator Corporation, Long Island City, N. Y. Bolt. 1,652,621; Dec. 13.
Goldsmith, Byron B., New York, N. Y. Mechanical pencil. 1,627,602; May 10.
Goldsmith, Byron B., New York, N. Y. assignor to Miller K. M. Work, N. Y. Novelty handkerchief holder. 1,636,301; July 19.
Goldsmith, Gustave M., and C. Bartels, assignors to The Mosler Safe Company, Hamilton, Ohio. Construction of vault or safe doors and the like. 1,622,625; Mar. 29.
Goldsmith, Harlan C. (See Cook, J. T., Jr., Murphy, Brusnick), and Goldsmith).

Goldsmith, Hugo, assignor to The P. Goldsmith Sons Company Cincinnati, Ohio. Valve for playing balls.
124,1325. Sept. 6.
Goldsmith, Hugo, and W. A. Sonnett, assignors to The P.
Goldsmith, Hugo, and W. A. Sonnett, assignors to The P.
Goldsmith, Joseph, Seattle, Wash. Jee-cream cabinet.
1,619,611; Mar. 1.
Goldsmith, Mary L. Denver, Colo. Cuspidor or similar
article. Des. 71,911; Jan. 25.
Goldsmith, Meral Lath Company, The. (See Goldsmith,
Hugo, assignor.)
Goldsmith, P., Sons Company, The. (See Goldsmith,
Hugo, assignor.)
Goldsmith, P., Sons Company, The. (See Goldsmith,
H. Sons Company, The. (See Joseph, Leslie
B. assignor.)

and Sonnett, assignors.)
Goldemith, P., Sons Company, The. (See Joseph, Leslie B., assignor.)
B., assignor.)
B., assignor.)
B., assignor.
B., assignor.
Fleisch, and Goldsmith, assignors.)
Goldsmith, Walter A., Company, The. (See Williams, Edward L., assignor.)
Goldsmith, William H. Brootline assignor to Ablagton Textile Machineren, 1625,534; July 12.
Goldsmith, William H., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, Tie and spacing means for plastic construction. 1623,338; Apr. 5.
Goldsmith, Wolf T., Newark, N. J. Hand-bag frame. Des. 73,564; Oct. 4.
Goldstein, Aaron A., Buffalo, N. Y. Buckle. 1,644,720; Oct. 11.
Goldstein, Aaron A., Buffalo, N. Y. Fastener for watch straps. 1,053,357; Dec. 20.

Oct. 11. Aaron A. Buffalo, N. Y. Fastener for watch Goldstein, 163,457; Dec. 20.
Goldstein, Albion M., St. Louis, Mo. Pipe-bowl reamer, 1,631,535; Dec. 6.
Goldstein, Alfred D., New York, N. Y. Soluble strip for local medication of the oral cavity. 1,642,655;

Sept. 13. Goldstein, Benjamin E. (See Jones, M., and Goldstein.) Goldstein, Charles, Chicago, Ill. Binder. 1,623,339;

Goldstein, Charles, Chicago, Ill. Binder. 1,623,339; Apr. 5.
Goldstein, Herman, Philadelphia, Pa. Portable power attachment for alleing machines. 1,650,442; Nov. 22.
Goldstein, Isidore M. Brooklyn, assignor to N. Nestler. New York, N. Y. Skipping rope. 1,651,067; Nov. 20.
Goldstein, Samuel. Bronx, N. Y. Necktie fastener. 1,619,667; Mar. 1.
Goldstein, Samuel. Bronx, N. Y. Necktie fastener. 1,619,667; Mar. 1.
Goldstein, William, Philadelphia, Pa., Motion-picture screen. 1,650,341; Nov. 22.
Goldstein, Land, R. C. F. Entwistle, New York, N. Y. Artificial lighting. 1,614,637; Jan. 18.
Goldsteorthy, William J., San Francisco. Calif. Golf practicing and training device. 1,640,765; Aug. 30.
Goldhorpe, Jack J., Albany, N. Y. Game. 1,627,501; May 3.

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May 3.

Goldworm, Jack, Brooklyn, N. Y. Window safety latch,
1,615,754; Jan, 25.

Golembiewski, Boleslaw, Utica, N. Y. Theft-preventing
device for automobiles, 1,644,334; Oct. 4.

Golfinopulos, Paul, Reading, Pa. Artificial marble,
1,612,808; Jan. 4.

Glikth Rubber Company, The. (See Fischer, Charles L.,

assignor.)
Golinski, Mieczyslaw. (Sce Dziuba, W., and Golinski.)
Golladay, Lawrence R. (See Breisch, E. W., and Golla-

day.)
olinday, Lawrence R., Wilkinsburg, Pa., assignor to dilinday, Lawrence R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, Indicating arrest for lightning arresters. 1,622,239; Sept. 13.

Sept. 13.

Goppy J. Lawrence R., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective device. 1.642.241; Sept. 13.

Golladay, Lawrence R., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Casing for lightning arresters. 1.652.900; Dec. 13.

Golladay, Lawrence R., East Pittsburgh, and I. R. Smith, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company. Lightning arrester, Company. Lightning arrester, Gollet. 240 Sept. East Nicolaus, Calif. Machine for treating grain with copper carbonate, 1.623.001; Mar. 29.

Gollett, Reinhold, Charlottenburg, Germany. Manufacturing Company.

Mar. 29.

Gollert, Reinhold, Charlottenburg, Germany. Manufacture of Semisold Rubber Tires. 1,625,117; Apr. 19.

Gollnick, Paul A., assignor to Spiegel, May, Stern Co., Chicago, Ill. Listing attachment for addressing machines. 1,639,31; Apr. 19.

Gollard, Stern Co., Chicago, Ill. Punching machine for cards and stencils. 1,613,271; Jana. 4.

Gollnick, Paul A., and J. J. Toolan, assignors to Spiegel, May, Stern Company, Chicago, Ill. Making inking pads. 1,642,199; Spit. 13.

Gollo Slipper Co. (See Véran, Eugène, assignors)

Gologan, Dumitru, Newark, N. J. Protector means or guard for cigarette holders. 1,689,993; Aug. 23 Golomb, Morris, assignor to Everlast Sporting Goods Mfg. Co., New York, N. Y. Protective device for boxers. 1,627,382; May 3, Golub, Abe. St. Louis, Mo. Rubber heel. 1,636,772; July 26.

Gomez, Eticne F., New Orleans, La. Boll-weevil exter-minator. 1,637,254; July 26. C. Atkins & Company, Gommel, Dewey E., assignor to E. C. Atkins & Company, Indianapolis, Ind. Hack saw. 1,646,369; joct. 18. Gousnels, John P., Monmouth, Il. Road sign. Des.

Indianapolis, Ind. Hack saw. 1,646,369; Oct. 18.
Gommeis, 164; Oct. 25.
Gomeis, 164; Oct. 25.
Gomey, Abert E., Anderson, Ind., assignor, by mesue assignments, to Delco-Remy Corporation, Dayton, Ohio.
Armsture-core insulation. 1,619,415; Mar. 1.
Gonard, John L., Englewood Cliffs, N. J., assignor, by mesne assignments, to Kant-Back Corporation. Device for preventing retrograde movement of motor vehicles. 1,651,270; Nov. 29.
Gonder, Earl, Detroit, Mich. Vehicle signal. 1,640,490; Aux. 30. Gonder, E Aug. 30.

Gondoff, Nicholas J., New Orleans, La. Flushing tank. 1,625,311; Apr. 19.
Gonsalves, Vincente. (See Antunes, Alberto, assignor.)
Gonyk, Ignatz, Ljubljana, Yugoslavia. Lamp. 1,622,373;
Mar. 29.

Gonyk, Ignatz, Ljubljana, Yugoslavia. Scythe. 1,628,589; May 10.

May 16.

Gonzalez, Daniel, Gallup, N. Mex. Animal and bird trap. 1,633,857; June 28.

Gonzalez, Daniel, Gallup, N. Mex. Animal and bird trap. 1,633,857; June 28.

Gonzalez, Junnita, New York, N. Y. Cocktail shaker. Des. 7,656; Oct. 18.

God, Frederick C. G. Honolulu, Hawaii. Statuette. Des. 7,695; Oct. 26.

Good, Frederick C. (See Good, George C. and F. C.)

Good, George C. and F. C., Philadelphia, Pa. Portable elevator. 1,641,847; Sept. 6.

Good Inventions Co. (See Stone, Lester V., 1881gnor.)

Good, John, Brooklyn, assignor to Good Inventions Co., New York, N. Y. Engine-cooling system. 1,616,966; Feb. 8.

Good, John, Brooklyn, assignor to Good Inventions Co., New York, N. Y. Starting combustion entines. ood, John, Brooklyn, assignor to Good Inventions New York, N. Y. Starting combustion eng 1,617,107; Feb. 8.

Good, John, Brooklyn, assignor to Good Inventions Co., New York, N. Y. Engine fuel system. 1,629,500; May 24.

Good, John, Brooklyn, assignor to Good Inventions Co., New York, N. Y. Inclosed liquid-fuel burner. 1,650,342; Nov. 22.

Good, John, assignor to Good Inventions Co., Brooklyn, N. Y. Fuel-supply means for combustion engines. 1,620,645; Mar. 15.

Good, John, Garden City, assignor to Good Inventions Co., Brooklyn, N. Y. Vaporizing apparatus for lo-Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Combustion apparatus. 1,625,913; Apr. 19.

Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Liquid-fuel-combustion apparatus. 1,626,813; May 3.

Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Liquid-fuel-combustion apparatus. 1,626,813; May 3.

Good, John, Garden City, assignor to Good Inventions Co., 1,625,0342; Nov. 22.

Good Road Equipment Corporation. (See Daly, J. F., Coots, and Lutz, assignors.)

Good Rubber Company, The. (See Good, William D., akssignor).

ussignor.)
Good, William D., Akron, assignor to The Good Rubber
Company, Kenmore, Ohio Tig. 1,635,835, July 12.
The Company Representation of the Company Representation of the Control of the Company Representation of the Control of the Company Representation of the Company Re

July 12.

Goodall, Samuel W., Phoenix, Ariz. Carburetor.
1.613.947; Jan. 11.

Gee Lamm, Anthony assignor.)

Goodard, Alvin C. (See Lamm, Anthony assignor.)

Goodard, Alvin C. (See Lamm, Anthony assignor.)

Goodard, Alvin C. (See Lamm, Anthony assignor.)

Goode, Gilbert C., Buffallo, N. Y., assignor to The White Alvin Code.

Globert C., Buffallo, N. Y., assignor to The White Alvin Code.

Goode, William, Koxville, Tenn. Cut-off valve.
1.613.164; Jan. 4.

Goodell, George H. (See Endicott, G. F., and Goodell.)

Goodell Mannfacturing Company. (See Cary, George W., assignor.)

W., assignor.)
Goodel-Pratt Company. (See Hapgood, Oscar D., as-

signor.)
Gooder, Seth M. (See Noe, F. P., and Gooder.)
Gooderham, John W., Yonkers, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,650,708; Nov. 29.
Goodfellow, Arthur N., trustee, (See Nice, Budd G.,
assignor.)
Goodfellow, Joseph. (See Chapman, Charles E., as-

signor.)

238 INDEX OF PATENTS, 1927 Goodfellow, Sampson J., assignor to Western Implements Limited, Regina, Saskatchewan, Canada. Stubble burner. 1,618,332; Feb. 22. Goodfellow, Summer, Bloomington, Ill. Tie-press applibuffer. 1,618,362; Feb. 22.
Goodfellow, Summer, Bloomington, Ill. Tie-press appliance. 1,651,884; Dec. 6.
Goodfellow, Walter V., Los Angeles, Calif. Producing an anesthetic. 1,648,547; Nov. 8.
Goodgame, Allen, Rexford, Mont. Fishhook. 1,623,870; Apr. 5.
Goodhue, Julian G., Evanston, and H. J. Sauvage, Chicago, assignors to Electric Thermostatic Control Company, Chicago, III. Alarm-clock switch. 1,843,848;
Sept. 27.
Gooding, George E., assignor to John T. Robinson Com
puny, Boston, Mass. Box-covering machine. 1,642,067;
Sept. 13. pany, Boston, Mass. Box-covering machine. 1,642,007; Stpl. 13.

G. Gompany, Hyde Park, Mass. Box-covering machine. 1,649,523; Nov. 15.

Goodhaecht, Louis G., Kankakee, Ill. Animal trap. 1,614,523; Nov. 15.

Goodhaedt, John, I. (See Revin, G. F., and Goodhand, John, I. (See Goodhand, Waiter H. and J. H.)

Goodhand, Waiter H. and J. H., Butte, Mont. Rock-drill holder. 1,636,934; July 28.

Goodhett, M. Nicholas, assignor to Arkell Safety Eag Company, New York, N. Y. Process and mechanism for making crinkled appear. 1,623,627; Apr. 26.

Goodhett, M. Nicholas, assignor to Arkell Safety Eag Company, New York, N. Y. Process and mechanism for making crinkled appear. 1,623,627; Apr. 26.

Goodhett, M. Nicholas, assignor to Arkell Safety Eag Company, New York, N. Y. Apparatus for operating on paper and other fabrics. 1,627,966; May 10.

Goodline, George, Pawtucket, R. I. Motion-transmitting mechanism. 1,622,780; Mar. 29.

Goodloe, Alfred M. Assignor to Midwest Steel & Supply Co. Inc., New York, N. Y. Dust separator. 1,649,220; Nov. 15.

Goodloe, Elmore L., and G. E. Peniston, Kansas City, Goodloe, Elmore L., and G. E. Peniston, Kansas City, Mo. Illuminated advertising device. 1,629,697; Mo. May 24. Maron, May 24.

May

assignor.)
Goodman Manufacturing Company. (See Davis, Charles E. assignor.)
Goodman Manufacturing Company. (See Doberstein, Edward J., assignor.) Goodman Manufacturing Company. (See Esseltine, Alfred B., assignor.)
Goodman Manufacturing Company. (See Farnham, Sidney W., assignor.) Goodman Manufacturing Company. (See Gray, Walter S., Goodman Manufacturing Company. (See Housman, John S., assignor.)
John S., assignor.)
John Manufacturing Company. (See McCullough,
William T., assignor.) William T., assignor.)
Goodman Manufacturing Company. (See Packer. Glenn
W., assignor.)
Goodman Manufacturing Company. (See Pearce, James
W., assignor.)
Goodman Manufacturing Company. (See Poole, Clarence

F. assignor.;
Goodman Manufacturing Company.
E. assignor.)
Goodman Manufacturing Company.
(See Sloane, William W., assignor.)
Goodman Manufacturing Company.
(See Vodoz, Frederick W., assignor.)
Goodman Manufacturing Company.
(See Wood, Robert Godman Patrick Brooklyn, N. Y. Gas-main stopper. 1627,502, May 3. Goodman, Patrick, Brooklyn, N. Y. Fitting for gas-pressure gauges. 1,043,886; Sept. 27. Goodman, Samuel. (See Greenberg, J., and Goodman, Goodman, Samuel, Chicago, Ill. Window. 1,613,500; Jan. 4.

assignor.) man Manufacturing Company. (See Pray, Thomas

Goodnow, Harry L., Pavenport, Iowa, Danger signal, 1.615.621; Jan. 25.
Goodnow, Wallace F., Greenwich, Conn., and G. H.
Vicker, Eastwood, N. Y., assignors to Picree, Butler &
Pierce Manufacturing, Corp., Syracuse, N. Y. HotGoodrich, E. F., Company, The. (See Ambler, Robert R.,

assignor.) oodrich, B. F., Company, The. (See Bauman, Harry A., Goodrich,

Goodrich, B. F., Company, The. (See Bauman, II. A., and Pietson, assignors.)
Goodrich, B. F., Company, The. (See Bedford, Chayton W., assignor.)
Goodrich, B. F., Company, The. (See Bodle, V. H., and Goodrich, B. F., Company, The. (See Cadden, C. C., Slusher, and Evans, assignors.)
Goodrich, B. F., Company, The. (See Callahan, J. J., and Rogers, assignors.)
Goodrich, B. F., Company, The. (See Eakin, Willard D., assignors.)
Goodrich, B. F., Company, The. (See Evans, Benjamin Goodrich, B. F., Company, The. (See Falor, Abram E.

A., ansignor.)
Goodrich, B. F., Company, The.
Martin, assignors.)
Goodrich, B. F., Company, The.
Martin, assignors.)
Goodrich, B. F., Company, The.
(See Fisher, Harry L.,

Goodrich, B. F., Company, The. (See Freeman, W. B., Haren, and Hartung, assignors.)
Goodrich, B. F., Company, The. (See Fritz, Roy D., assignor.) Goodrich, B. F., Company, The. (See Gammeter, John R.,

assignor.) Goodrich, B. F., Company, The. (See Geer, William C., Goodrich, B. F., Company, The. (See Geer, William C., assignor.)
Goodrich, B. F., Company. (See Hoover, W. C., Fritz, and Cahill, assignors.)
Goodrich, B. F., Company, The. (See James, James V.,

Goodrich, B. F., Company, The. (See Jaquith, W. E., Evans, and Foerstner, assignors.)
Goodrich, B. F., Company, The. (See Kmentt, Waldemar D., assignor.)
Goodrich, B. F., Company, The. (See Leguillon, Charles W., assignor.)

Goodrich, B. F., Company, The. (See MatDonald, Frank J., assignor.)
Goodrich, B. F., Company, The. (See Manderbach, Charles B., assignor.)
Goodrich, B. F., Company, The. (See Martin, Frederick Goodrich, B. F., Company, The. (See Matthias, G. L., and Kmentt, assignor.)
Goodrich, B. F., Company, The. (See Mell, Tod J., assignor.)
Goodrich, B. F., Company, The. (See Mill, Tod J., assignor.)

Goodrich, B. F., Company, The. (See Nied, Fred A., as-

Goodrich, B. F., Company, The.

Goodrich, B. F., Company, The.

God Sargisson, assignors,
Goodrich, B. F., Company, The.

Goodrich, B. F., Company, The.

Goodrich, B. F., Company, The.

Glass, assignors,
Goodrich, B. F., Company, The.

Glass, assignors,
Goodrich, B. F., Company, The.

Glass, Goodrich, G. F., Company, The.

Ges Scrote, Merle C., as-Glass, assignors.) Goodrich, B. F., Company, The. (See Scrote, Merie C., assignor.)
Goodrich, B. F. Company, The. (See Sears, Edward M.,

assignor.)
Goodrich, B. F., Company, The. (See Shook, Florain J., assignor.)
Goodrich, B. F., Company, The. (See Tew, James D., as-

Goodrich, B. F., Company, The. (See Wilson, G. F., and Leguillon, assignors.)
Goodrich, B. F., Company, The. (See Work, B. G., and Slade, assignors.)
Goodrich, B. F., Company, The. (See Young, Harvey L.,

Godrich, S. F., Company, The. (See Young, Harvey L. assignor.)

Godorich, B. F., Company, The. (See Young, Harvey L. assignor.)

Godorich, Chauncey M., Windsor, Ontario, Canada. Godorich, Chauncer M., Windsor, Ontario, Canada. M., Windsor, Ontario, Canada. Godorich, Charence L., Hartford, Com., assignor to Pratter Company. Com., 1,632,435; Dec. 13.

Goodrich, Coy C., Charlotte, Mich. Spring equalizer. 1,635,76; Jan. 25.

Goodrich, Coy C., San Francisco, Calif. Lubricating system. 1,623,240; Apr. 5.

Goodrich, Coy C., San Francisco, Calif. Lubricating system. 1,623,240; Apr. 5.

Goodrich, Green, M. Compton. Calif. Automatic bearing olier. 1,649,467; Nov. 15.

Goodrich, Norris E., assignor to Sanitarium and Hospital Equipment Company. Battle Creek, Mich. Therapeutic lamp. 1,641,629; Sept. 6.

Goodrich, Norris E., assignor to Sanitarium and Hospital Equipment Company. Battle Creek, Mich. Excressing Goodrich, Norris E., assignor to Sanitarium and Hospital Equipment Company. Battle Creek, Mich. Excressing Goodrich, Norris E., assignor to Sanitarium and Hospital Equipment Company. Battle Creek, Mich. Excressing Goodrich, Norris E., assignor to Sanitarium and Hospital Equipment Company. Battle Creek, Mich. Portable therapeutic lamp. 1,651,885; Dec. 6.

Goodrich, Robert J. (See Ulich, L. H., and Goodrich, Hoodridge, George E., Reading, assignor to Ballard Service Corporation. Roston, Mass. Liquid-fuel-burning apparatus. 1,631,859; June 7.

Goodridge. Gilbert W., assignor to The Bryant Electric Company, Bridgeport, Conn. Attachment plug and receptacle. 1621,364; Mar. 15.
Goodridge, Gilbert W., assignor to The Bead Chain Manufacturing Co., Bridgeport, Conn. Chaln ornament. 1.646,999; Oct. 25.
Goodroe, James W., Experiment, Ga. Machine for openlog and preparing cotton. 1.632,372; June 14.
Goodrow, William. (See Kretschmer, Henry A., as-

signor.

Goodrum, Charles L., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone-exchange system. 1,644,990; Nov. S. Combination for tain and aquarium. 1,649,683; Nov. 15.

Goodsman, Charles W., Linnton, Oreg. Combination found and the company of the company of

specd.)
oodspeed, Charles A., assignor to Wm. W. Blakely,
Detroit, Mich. Wheel block. 1,621,504; Mar. 22.
oodspeed, Charles A., Detroit, assignor to W. W. Blakely, Dexter, Mich. Vehicle anchorage device. 1,628,660;

May 17. Goodspeed Machine Company. (See Witt, John J., as-

signor.)
Goodstein, Charles B., Brooklyn, assignor of one-half to E. G. Oppenheim, New York, N. Y. Staple. 1,654,371;

Signor.)

Goodstein, Charles B., Brooklyn, assignor of one-half to E. G. Oppenheim, New York, N. Y. Staple. 1,634,371; Dec. 21.

Goodstein, William L., Waynesburg, Pa. Motor-vehicle lamp. 1,622,127; June 14.

1,645,047; Oct. 11.

Goodwill, John E., Brooklyn, N. Y., assignor to Ingersoil-Rand Company, Jersey City, N. J. Surface condenser. 1,622,374; Mar. 29.

Goodwill, John E., Brooklyn, N. Y., assignor to The Mathieson Alkali Works, New York, N. Y. Synthesizing oxides of nitrogen. 1,652,781; Dec. 13.

Goodwin, Camilio J., London, Ensland, assignor to The Mathieson Alkali Works, New York, N. Y. Synthesizing oxides of nitrogen. 1,652,781; Dec. 13.

Goodwin, Ernest G., Brooklyn, assignor to Standard Coupler, New York, N. Y. Friction draft gear.

Goodwin, Ernest G., New York, N. Y., assignor, by meane assignments, to Goodwin Side Bearing Co., Inc., Wilmington, Del. Side bearing. 1,627,442; May 3.

Goodwin, Ernest G., Pelham, assignor to Standard Coupler Company Str. W. Ork, N. Y. Draft gear and installing Goodwin Street G., Pelham, assignor to Standard Coupler Company Str. W. Ork, N. Y. Draft gear and installing Goodwin, Harry, Waterville, Me. Plate and brace for railroad guard rails. 1,636,802; July 19.

Goodwin, John E., Stoke-on-Trent, England, assignor to Josiah Wedgwood & Sons, Inc., of America, New York, N. Y. Plate or similar article. Des. 74,009; Dec. 6.

Goodwin, Percy E., assignor to The Steel Scaffolding Company, Evansville, Ind.

Goodwin, Nathan R., Trenton, N. J. Attachment for Goodwin, Percy E., assignor to The Steel Scaffolding Company, Evansville, Ind.

Goodwin, Percy E., assignor to The Steel Scaffolding Company, Evansville, Ind.

Goodwin, Percy E., assignor to The Steel Scaffolding Company, Evansville, Ind.

Goodwin, Nathan R., Company, The, (See Goodwin, Ernest G., assignor.)

Goodwin, Walter C., Pittsburgh, Pa., assignor to Westinghouse Electric &

Goodyear Tire & Rubber Company. (See Bedford, Clayton W., assignor.)
Goodyear Tire & Rubber Company, The. (See Beebe, Paul, assignor.)
Goodyear Tire & Rubber Company, The. (See Bruson, Herman A., assignor.)
Goodyear Tire & Rubber Company. (See Brudette, Richard S., assignor.)
Goodyear Tire & Rubber Company, The. (See Clark, Ru-Goodyear Tire & Rubber Company, The. (See Colley, Fred, assignor.)
Goodyear Tire & Rubber Company, The. (See Cooper, James F., assignor.)

Goodyear Tire & Rubber Company, The. (See Endres, Herbert A., assignor.) Goodyear Tire & Rubber Company, The. (See Hamilton.

Charles E., assignor.)

bodyear Tire & Rubber Company, The. (See Kelly,

Goodyear B. Raber Company, The. (See Kelly, William J., assignor.)
Goodyear Tire & Rubber Company, (See Kimmich, Elmer G., assignor.)
Goodyear Tire & Rubber Company, The. (See Kraft, Herman T., assignor.)
Goodyear Tire & Rubber Company, The. (See Lind, Frederick A., assignor.)
Goodyear Tire & Rubber Company, The. (See Marietta, Alphonso H., assignor.)
Goodyear Tire & Rubber Company, The. (See McGovern, Bernard F., assignor.)
Goodyear Tire & Rubber Company, The. (See Milligan, Robert J., assignor.)
Goodyear Tire & Rubber Company, The. (See O'Brien, William G., assignor.)

Goodyear Tire & Rubber Company, The. (See O'Brien. William G., assignor.)
Goodyear Tire & Rubber Company, The. (See Oyler, Kim-Goodyear Tire & Rubber Company, The. (See Pappano, Philip, assignor.)
Goodyear Tire & Rubber Company, The. (See Schrock. Charles I., assignor.)
Goodyear Tire & Rubber Company, The. (See Schrock. Charles I., assignor.)

Charles I., assignor.)
Goodyear Tire & Rubber Company, The. (See Sebrell, Lorin B., assignor.)
Jess A., assignor.)
Goodyear Tire & Rubber Company, The. (See Shively, Jess A., assignor.)
Goodyear Tire & Rubber Company, The. (See Shively, Walter E., assignor.)
Goodyear Tire & Rubber Company, The. (See Sterer, Samuel A., assignor.)
Goodyear Tire & Rubber Company, The. (See Stephens, William, assignor.)
Goodyear Tire & Rubber Company, The. (See Stephens, William, assignor.)
Goodyear Tire & Rubber Company, The. (See Stephens, Tire & Rubber Company, The. (See Templetton, Edwin G., assignor.)
Goodyear Tire & Rubber Company, The. (See Templetton, Edwin G., assignor.)
Goodyear Tire & Rubber Company, The. (See Templetton, Edwin G., assignor.)
Goodyear Tire & Rubber Company, The. (See Templetton, Tire & Rubber Company, The. (See Templetton, Jan, assignor.)
Goodyear Tire & Rubber Company, The. (See Van Orman, Wart T., assignor.)
Goodyear Tire & Rubber Company, The. (See Williams, Dayton L., assignor.)
Goodyear Tire & Rubber Company, The. (See Williams, Dayton L., assignor.)
Goodyear Tire & Rubber Company, The. (See Young, C., W., and Diggett, assignors, The. (See Young, C., W., and Diggett, assignors)
Goodyear-Zeppelin Corporation. (See Klemperer, Wolf-Goodyear-Zeppelin Corporation. (See Klemperer, Wolf-

man, Chries II., assignor.)
Goodyear-Zeppelin Corporation. (See Klemperer, Wolfgang R., assignor.)
Goodyear-Zeppelin Corporation. (See Klemperer, Wolfgang R., assignor.)
Goodyear-Zeppelin Corporation. (See Liebert, H. R., and Fischer, assignors.)
Goodyear-Zeppelin Corporation. (See Liebert, R., and Goodyear-Zeppelin Corporation.)
Goodyear-Zeppelin Corporation. (See Liebert, R., and Goodyear-Zeppelin Corporation.)
Goodyear-Zeppelin Corporation. (See Liebert, R., and Goodyear-Zeppelin Corporation.)
Goodyear-Zeppelin Corporation. (See Company, The. (See Goodyear-Xeppelin Carporation.)
Reference of Company, The. (See Randall, C. J., and Wurtenberg, assignors.)
Goodyear-Xeppelin Corporation.
Goodyear-Zeppelin Corporation.
History Company, The. (See Randall, C. J., and Wurtenberg, assignors.)
Goognam, Aaron C., Rochester, N. Y. Garment pattern.
1,618,574; Feb. 22.
Goodyear-Zeppelin Corporation.
History C., Company, The. (See Stewart, Frank II. assignor.)

signor.) (forden, Albert A., assignor to Crompton & Knowles Loon, Works, Worcester, Mass, Weft-detecting mechanism. 1.647,728: Nov. 1. Gorden, William, Union, N. J. Pipe wrench. 1.618.820:

1.647,728: Nov. 1.
Gorden, William, Union, N. J. Pipe wrench. 1.618.820:
Feb. 22
Godjin, Cornelius, jr., Amsterdam, assignor to Naamlooze Vennootschap Kopergieterij, Appendage. en Fom
pen-Fabriek van G. Dikkers & Co., Hingelo (O). Netherlands. Apparatus for operating fire engines. 1.613,105;
Jan. 4.

Jan

Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass, Weff-detecting mechalogordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Chain for loom pattern mechanism. 1,651,564; Dec. 6.
Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom dobby. 1,653,207;

Works, Dec. 20.

Gordon, Albert A., assignor to Crompton & Knowles Loom Works. Worcester, Mass. Loom dobby. 1,653,207; Dec. 20. Look Works. Worcester, Mass. Weft-replenishing mechanism for multishuttle looms. 1,654,121; Dec. 27. Gordon. Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft-replenishing the Loom Works, Worcester, Mass. Tube-frame bracket. 1,654,122; Dec. 27. Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube-frame bracket. 1,654,122; Dec. 27. Gordon, Albert A., assignor to A. H. Opperman and T. Allebrandi, Indianapolis, Ind. Electrical balar curler. 1,638,302; Aug. 9. Gordon, Albert J. (See Cremo, A. L. N., and Gordon, Gordon, Bertland D., and W. H. E. Fearen, Medora, Manitoba, Canada. Automobile rim. 1,639,886; Aug. 23. Gordon, Charles E., Detroit, Mich., assignor of one-half and weighing machine. 1,646,817; Oct. 26. Gordon, Chester S., New York, N. Y., and J. T. Lowe. Newark, N. J., assignors to American Telephone and Telegraph Company. Carbon-monoxide detector. 1,644,014; Oct. 4. Gordon, Charles E., Detroit N. Y., and J. T. Lowe. Newark, N. J., assignors to American Telephone and Telegraph Company. Carbon-monoxide detector. 1,644,014; Oct. 4. Gordon, Daniel E., Fort Worth. Tex. Tackle-spreading block for splicing wires, 1,648,803; Nov. 8. Gordon, Daniel E., Fort Worth. Tex. Tackle-spreading block for splicing wires, 1,648,803; Nov. 8. Gordon, Daniel E., Fort Worth. Tex. Tackle-spreading block for splicing wires, 1,648,803; Nov. 8. Gordon, David D., assignor to Economy Fuse and Manufacturing Company, Chicago, Ill. Electric switch. 1634,418; July 5. Gordon, David D., and M. Lindsay, Chicago, Ill., assignor to Economy Fuse and Manufacturing Company, Chicago, Ill. Adjustable light-holding means. 1,645,527; Oct. 18. Gordon, Doc. E., Berkeley, Calif. Walle iron. 1,615,122; Jan. 18. Gordon, Doc. E., Berkeley, Calif. Walle iron. 1,615,122; Jan. 18. Gordon, Doc. E., Berkeley, Calif. Walle iron. 1,615,122; Jan. 18. Gordon, Doc. E., Berkeley, Calif. Walle iron. 1,61

Gordon, D Jan. 18.

Jan. 18.

(Sordon, Fred M. (See Rhodes, John J., assignor.)

(Gordon, George G. Dollis Hill, London, England. Dis
infectant composition. 1,619,861; Mar. 8.

Gordon, Harry L., New York, N. Y. Antiglare attachment

for headlights. 1,619,720; Mar. 1.

Gordon, Henry F., Chicago, III. Toy navigator.

1,619,668; Mar. 1.

Gordon, Jarael. (See Miller, W. R., and Gordon.)

Gordon, Jocob, Brocklyn, N. Y. Toy balloon. Des.

74,106; Dec. 20.

Detroic Mich. Arch. 1,640,923; Auz. 30.

Gordon, John. Chicago, III. Thermostatic controlled

valve. 1,651,817; Dec. 6.

Gordon. Manuel. Chicago, III. Electric lump. Des.

72,997; July 5.

Gordon, Manuel, Chicago, III. Electric lump. Des. 72,997; July 5. Gordon, Max, Paterson, N. J. Weigher for coal and similar material. 1,632,595; June 14. Gordon Pagel Company. (See Gordon, James C., as-Weigher for coal and

signor.)

ordon, Robert R. (See Jones, C. W., and Gordon,) Gordon, William A., Shelton, Conn. Force-feed lubricator, 1.649,026; Nov. 15. Gordon, William R., Toledo, Ohio. Motor vehicle, 1.634,828; July 5. Gorham, Joseph, et al. (See Moore, S., and Sheets, as-signor.)

Gorham Mfg. Co. (See Magnussen, Erik, assignor.) Gorham Mfg. Company. (See Staf, Axel H., assignor.) Gorham, Sidney S., trustee. (See Baur, Hugo J., assignor.)

Gorham, Sidney S., trustee. (See Tanner, Arnold J.,

Gorham, Sidney S., trustee. (See Tanner, Arnold J., assignor.)
Goria, Frederick P., Seattle, Wash. Index. 1,614,838; Jan. 18.
Gorin. Frederick P., Seattle, assignor of one-half to H. S. Emorson, King County, Wash. Thumb index. 1,617,446; Feb. 15.
Gorin, Frederick P., Seattle, assignor of one-half to H. S. E. S. S. S. Seattle, assignor of one-half to H. S. E. S. S. S. Seattle, assignor of one-half to H. S. Gorina, Frank D., New York, N. Y. Ironing board. 1,633,403; June 21.
Gorman, Frank D., New York, N. Y. Ironing board. 1,633,403; June 21.
Gorman, Max E., Newark, N. J. Tool holder. 1,647,441; Nov. 1.

Nov. 1.

Gormley, Frank L., Brookline, Mass. Lifting jack.
1.615,268; Jan. 25.

Gormley, Frank L., Brookline, Mass., assignor to The
Buda Company, Harvey, Ill. Operating mechanism for
lifting jacks. 1,623,108; Apr. 5.

Gorr, John A. (See Huff, William D., assignor.)

Gorrell, John B., Phoenix, Ariz. Loading machine.
1.661,9 William R., Alhambra, assignor of one-balf to
II. Barkschaf, Los Angeles, Calif. Collapsible incinerntor. 1,651,818; Dec. 6.

Gorsuch, George J., Rochester, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. J. Cement-Gorsuch, Robert A., Gambier, Ohio. Shipping box for chicks. Rel6,518; Jan. 4. Gorton, Arthur F., Berwyn, Ill., assignor to Western Elec-tric Company, Incorporated, New York, N. Y. Ceramic articles and method of producing them. 1,512,916;

articles and method of producing them. 1,612,916; articles and method of producing them. 1,612,916; articles and method son 1,618,280; Feb. 22. Gorton, Walter T., U. S. Army, Springfield, Mass. Mount for machine guns. 1,619,113; Mar. 1. Gorton, Walter T., U. S. Army, Springfield, Mass. Machine gun. 1,625,993; Apr. 26. Gorton, William S. East Orange, Springfield, Mass. Machine gun. 1,625,994; Army, Springfield, Mass. Mass. Control, Springfield, Mass. Machine gun. 1,625,994; Army, Springfield, Mass. Mass. Machine gun. 1,625,994; Army, Springfield, Mass. Mass.

General Electric Company. Jones J. Jones J. July 12.
Gosling, Joseph W., Schenectady, N. Y., assignor to General Electric Company. Lantern. 1,640,446; Aug. 39.
Gosling, William J., assignor to James Corporation Limited. Montreal, Quebec, Canada. Razor-blade-stropper. 1,653,271; Der. 20.
Gosper, Amos, Brighton Le Sands, New South Wales, Australia. Expansible boring machine. 1,637,745;

Aug. 2.

Goss and De Leeuw Machine Company, The. (See De Leeuw, Adolph L. assignor.)

Goss, Harold J., Nashua, N. H., assignor to The Lake Erle Trust Company, Cleveland, Ohlo. Machine for makine set-up bores. 1.651.200; Nev. 29.

Goss Printing Press Company, Description of the Company, Waterbury, Com. Pin-lings suap fastener. 1.649.768; Nov. 15.

Goss, Josephine A. (See Fraser, C. C., and Goss.)

Goss Printing Press Company, The. (See Andersen, Niels C., assignor.)

Goss Printing Press Company. (See Brueshaber, Martin Goss Printing Press Company. (See Evensen, William, assignor.)

assignor.)
oss Printing Press Company. (See Henzi, Albert A...

Goss Printing Press Company. (See Henzi, Albert A., assignor.)
Goss, William C., Minneapolis, Minn. Disappearing step for vehicles. 1.616.793; Feb. 8.
Gossage, James E., Dverett, Wash. Vise. 1,616.039; Feb. 1.

Feb. 1.

Gossard, H. W., Co., The. (See Cunningham, Katherine E., assignor.)

Gosse, Henry, sr., Wahasha, Minn. Adjustable safety deGosse, Henry, sr., and the like. 1.613.272; Jan. 4.

Gossett, John N., Sherman Mont. Lamp-supporting collar. 1.623.002; Mar. 29.

Gosslar, Paul. Notraigue. Switzerland. Short-circuiting

rod. 1.652.116; Dec. Witzerland. Short-circuiting

rod. 1.652.116; Dec. Witzerland. Short-circuiting

rod. 1.652.116; Dec. 4.

Gossling. Walter E. New York, N. Y., assignor, by mesne

assignments, to Prest-O-Lite Storage Eaftery Corpo
Gotham Silk Hoslery Company. (See Wagner, Alfred.

assignor, See Wagner, Alfred.

Gotham Slik Hosiery Company. (See Wagner, Alfred. assignor.)
Gotham. Walter E. Elizabeth. N. J. Evaporable device. 1,640,272; Aug. 23.
Gotliberg. Arthur W. Newark, N. J. Cable support. Gothberg. Herman E., Wyoming, N. Y. Mop wringer. 1,627,383; May 3.
Gotliber, Theodore H., South Orange, N. J. Travellng bag. 1,618,955; Feb. 22.
Gotsche, Frank. (See Wolke, Herman. assignor.)
Gotsche, Frank. (See Wolke, Herman. assignor.)
Gotten, Montro, Memphis. Tenn. Sacking, packing, and mixing machine. 1,635,936; July 12.
Gotten, Montro, Memphis. Tenn. Sacking, packing, and mixing machine. 1,635,936; July 12.
Gotten, Johnson, M. and I. Rosenfeld, New York, N. Y. assignors to Harvey Instrument Co., Inc. Thermometer attachment. 1,615,266; Jan. 25.
Gottfield, Charles, New York, N. Y. Uenna-roll-form-Gottleb, Abraham assignor to A. D. Levi and P. Hannuer, Eric Pa. Knicker cuff. 1,648,642; Nov. 8.
Gottlob, Harry R., Maplewood, Mo. Advertising billboard. Des. 72,895; June 21.
Gottlob, Harry R., Maplewood, Mo. Advertising billboard. Des. 72,895; June 21.
Gottlob, Harry R., Maplewood, Mo. Advertising billboard. Des. 72,805; June 21.
Gottlob, Harry R., Maplewood, Mo. Advertising double Gottmanns. Karl, Hilden, Germany. Machining double Gottmanns. Karl, Hilden, Germany.

Dec. 6.
Gottmanns, Karl, Hilden, Germany. Machining double conical work pieces. 1,625,650; Apr. 19.
Gottschalk, Frederick P., Plaintield, N. J. Tool for the use of electricians. 1,638,438; Aug. 9.
6,638,634; Aug. 9.
Gottschalk, Otto, Buenos Aires, Argentina. Attachment for measuring instruments. 1,622,105; Mar. 22.
Gottschalk, Prosper L., Wauwatosa, Wis. Form for building construction. 1,627,171; May 8.
Gots, Konrad, Furth, Germany. Toy for playing with sand. 1,449,221; Nov. 15.

Goudard, Félix, Neuilly-sur-Seine, France. Closure for vessels. 1,650,510; Nov. 22.
Goude, Charles T., Washington, D. C., and O. Kelley, Bluemont, Va. Form clamp. 1,648,342; Nov. 8.
Goudy, Carl F., Flessing, assignor to Pacent Electric Company, Incorporated, New York, N. X. Variable condenser. 1,613,032; Jan. 4
Goulge, Frank H., Carlisle, Pa. Can or receptacle. 1,643,000; Sept. 20.
Gouge, Arthur. (See Short, Albert E. and H. O., and Gouge, Arthur. (See Short, Albert E. and H. O., and Gouge, J. Gouge, J. Seiner, J. Seiner, J. Gough, James J., assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Electric cigar lighter. Des. 72,418; Apr. 12.
Gough, James J., assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Electric cigar lighter. 1,641,803; Sept. 6.
Gough, Joseph, Newark, N. J. assignor to Gough Stemming Machine Corporation. Leaf separator. 1,631,198; June 7.
Gough, Ned E., Seattle, Wash. Valve lifter. 1,619,609; Mair. 1.
Gough Stemming Machine Corporation. (See Gough, Joseph, Saignor).
Gougler, Clyde J., Talsa, Okla. Corner brace for tubular derrick girts. 1,643,887; Sept. 27.

Gough S. Armanis, M. Achine Corporation. (See Gough, Joseph, assignor.)

Gougler, Clyde J., Tulsa, Okla. Corner brace for tubular derrick girts. 1,643,885 (; sept. 27.

Gougler, Clyde J., Tulsa, Okla. Girt brace for derricks 1,643,885 (sept. 27.

Gouglard, Henri C., Lassignor to Societe Belge des Gouglard, Henri C. L., assignor to Societe Belge des Coupland, Henri C. L., assignor to Societe Belge des Coupland, René, and A. Pache, deceased, New York, N. Y.; J. Pache, administratrix. Clamp. 1,627,172 [May 3.

Goulas, Henry, assignor of one-third to O. O. Mobley, Quantico, Va. Pipe wrench. 1,629,016; Mars. Gould, Allen A. (See Wellman, S. K., and Gould.)

Gould Allen A. (See Wellman, S. K., and Gould.)

Gould Car Lighting Corporation. (See Bouche, W. F., and Bolke, assignors)

assignor.)

Gould Car Lighting Corporation. (See Bouche, W. F., and Blake, assignors.)

Gould, Charlee E. (See Gell, P. V. W., Gould, Hampton, and Martin.)

Gould, Charlee T. E., Detroit, Mich. Window. 1,620,646;

Mar. 19.
Gould, Charles T. E., Detrolt, Mich. Shoe lace.
1,625,204; Apr. 19.
Gould, Charles T. E., Toronto, Ontario, Canada. Bathtub.
1,633,532; June 28.
Gould Coupler Company. (See Sauvage, William H., as-

Signot.)

Gould & Eberhardt. (See Zimmermann, William F., assignor.)

Gould, George. Olney, Ill. Mop. 1,623,672; Apr. 5.

Gould, Harold G., and K. D. Obenshain, McKinney, Tex.

Surgical applian (See Ackermann, Frand Gould.)

Gould, Jan. Toronto, Oniario, Canada. Comparating for unevenness in printer's type. 1,624,594;

pensating for uneveniess in printer's type. 1,024,098; Apr. 12.
G. 161,7590; Feb. 15.
Gould, Robert. (See Gould, Leslie J. and R.)
Gould, Roy F., assignor, by meane assignments, to Automatic Electric Inc., Chicago, Ill., Automatic telephone system. 1,640,568; Aug. 30.
Gould Storage Battery Company. (See Snyder, Almond

matter bleechte inc., Chicago, Ili. Automatic telephone System I. 640,568; Ang. 30.

Gold, William G., Montreal, Quebec, Canada, Animated advertising device. 1,644,580; Oct. 4.

Gould, William G., Montreal, Quebec, Canada, Animated advertising device. 1,644,580; Oct. 4.

Gouldbourn, Joseph, Land W. T. Minett, Leleester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Splitting machine. 1,638,929; Aug. 16.

Gouldbourn, Joseph, and W. T. Minett, Leleester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Splitting machine. 1,638,929; Aug. 16.

Goulden, Albert, Los Angeles, Calif. Combination lingerle and dress clasp. 1,661,595; Dec. 1,638,929; Aug. 16.

Goulden, Benjamin J. J., Altrincham, assignor to Linotype and Machinery Limited, London, England. Relative web offset printing press. 1,616,083; Feb. Goulding, Benjamin J. J., Altrincham, assignor to Linotype and Machinery Limited, London, England. Relative web offset printing surfaces. 1,627,774; May 10.

Goulding, Benjamin J. J., assignor to Linotype and Machinery Limited, London, England. Washing lithographic printing surfaces. 1,642,735; Aug. 23.

Gourdon, Charles E. P., St., Mande, Pragal, 282; June 7.

Gourley, William J., Philadelphia, Fa. Knitting device. 1,635,547; July 12.

Gourley, William F., Good Pine, La. Wrench. 1,639,177; Aug. 16.

Gould Coulding, England. (See Hennebutte, H., and Goutal.)

Goutal, Edouard. (See Hennebutte, H., and Goutal.)

Gonverneur, Minor F. H., Victor, N. Y., assignor to Locke Insultator Corporation, Baltimore, Md. Insulator. 1,651,201; Nov. 29.
Gouvion, Franz. Brussels, Belgium. Liquid-distributing apparatus. 1,642,202; Sept. 13.
Government and the People of the United States, The. (See Webb, Byron II., assignor).
Government and the People of the United States, The. (See Webb, Byron II., assignor).
Government and the people of the United States of America, The. (See Howard, B. J., and Stephenson, Government and the people of the United States of America, The. (See Eleghton, Alan, assignor.)
Government and the People of the United States of America. (See Sale, J. W., and Wilson, assignors.)
Government and the People of the United States of America. (See Sale, J. W., and Wilson, assignors.)
Government of the United States. (See Fraser, Charles E., assignor.)

E., assignor.) Gow, James, Romford, England. Treatment of amosite asbestos, 1,017,803; Feb. 15. Gowan, Lee L., assignor of one-half to J. M. Davis, New-berry, S. C. Tension regulator for slashers. 1,653,397; Dec. 20.

Dec. 20.
Gowans, James, Leonia, N. J., assignor to Sidney Blumenthal & Co. Inc., New York, N. Y. Pile fabric. Des. 74,035; Dec. 13.
Gowans, John M., Hartford, Conn. Cake support 1,619,818; Mar. 8.
Gowen, Robert F., assignor to De Forest Radio Telephone & Telegraph Company, New York, N. Y. Radio panel to the Control of t

Feb. 8.
Gowland, Fred W., assignor of one-half to F. C. Croyle,
Philipsburg, Pa. Spark-plug-testing device. 1,639,603;
Aug. 16.
Aug. 16.
Gozzo, Michnel, et al. (See Donnelson, Blanche, assignor.)
Gozzo, Michnel, et al. (See Lindsey, George C., assignor.)

signor.)

signor.)

Signor.)

Grab. Carl, Ludwigshafen-on-the-Rhine, Germany. Air moistener. 1,643,844. Sopt. 27.

Grab, Eugene G. Nashville, Tenn. Retort for treatment of fruit. 1,613,452; Jan. 4.

Grabill, John D., Woodstock, Va. Sizing machine for fruits and vegetables. 1,636,227; July 19.

Grabler, Peter, Rocky River, assignor of one-half to C. E. Day, Lakewood, Ohio. Copyholding apparatus. 1,620,961; Mar. 15.

Grabler, Feter, Rocky River, assignor of one-half to C. E. Day, Lakewood, Ohio. Copyholder. C. Grabler, Feter, Rocky River, assignor of one-half to C. E. Charles, C. Grabler, Feter, Rocky River, assignor of one-half to C. Grabler, Feter, Focky River, assignor of one-half to C. Grabler, Feb. 8.

Grace, George G., assignor of one-half to R. E. Kline, Los Angeles, Callf. Belt connecter. 1,638,993; June 28.

Grace, John F., Arlington, N. J., assignor to Worthington

June 28.

Grace, John F., Arlington, N. J., assignor to Worthington Fump and Machinery Corporation, New York, N. Y. Condenser, 1,650,268; Nov. 22.

Grace, John F., Kearny, N. J., assignor to Worthington Pump & Machinery Corporation. Surface condenser. 1,616,656; Feb. 8.

Grace, John F., Kearny, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Expansion Joint for turbine and condenser connections. 1,639,225; Aug. 16.

Grace, John F., Kearney, N. J., assignor to Worthington Pump and Archinery Corporation, New York, N. Y. Trank, Charles, C. Ochia. Bottle. Des. 73,497; Sept. 20.

Sept. 20.

Graddick, Fletcher C., et al. (See Griffin, James T., assignor.)

Gradolph, William F., and G. Mueller, assignors to The De Vilbiss Manufacturing Company, Toledo, Ohio. Air brush. 1,613,583; Jan. 4.

Grady, James T., Wanomassa, N. J., assignor of one-third to H. Stemme, New York, N. Y. Automatic cooking Graemiger, Benjamin. Zurich, Switzerland. Fluid-flow meter. 1,619,416; Mar. 1.

Graesser Monsanto Chemical Works Limited, The. (See Maxwell-Lefroy, Harold, assignor.) Steam-heated iron. 1,623,533; Pr. 10.

Graf. Adolph, Chicago, Ill. Steam-heated iron. 1,623,533; Pr. Graf. Georg, Berlin-Pankow, Germany, assignor to General Electric Company. Protective device. 1,624,728; Apr. 12.

Graf. Henry G., Toledo, Ohio, assignor to American Can

Graf. Henry G., Toledo, Ohio, assignor to American Can Company, New York, N. Y. Örchard-heater lighter. 1,649,222; Nov. 15. Graf, Raymond I., assignor to Keeler Brass Company, Grand Rapids, Mich. Hood fastener. 1,652,275; Dec. 13.

Bec. 13.
Graf. Richard, South Bend, Ind., assignor to Graf-Lite
Corporation, Chicago, Ill. Lamp. Des. 73,830; Nov. 15.
Graf. Richard, South Bend, Ind. Lamp. 1,614,027;
Jan. 11.

Graf, Rudolf, and W. Lapp, Nuremberg, Germany. Glass ampul serving as packing receptacle for surgical sewing material. 1,643,490; Sept. 27.
Graff, Charles, assignor to Graff, Washbourne & Dunn, Des. 72,091; Mor. Combined cigar lighter and ash tray. Des. 72,091; Mar. 1.
Graff, Charles, assignor to Graff, Washbourne & Dunn, New York, N. Y. Combined cigar lighter and ash tray. Des. 72,092; Mar. 1.
Graff Furnace Company. (See Bennett, Wilbur, assignor.) Graff, George, assignor to The Dura Company, Toledo, Graff, George, assignor to The Dura Company, Toledo, Olio. Wehicle lamp or similar article. Des. 73,078; July 19.

Graff, Georgian Ohio.

Ohio. Vehicle lamp or summar according to the Dura Company, Toledo, Ohio. Dome light. Des. 73,405; Sept. 6.
Graff, George, assignor to The Dura Company, Toledo, Ohio. Handle for door latches or the like. Des. 73,429; Sept. 13.
Graff, George, assignor to The Dura Company, Toledo, Ohio. Window-regulator handle. Des. 73,783; Nov. 8.
Graff, George, assignor to The Dura Company, Toledo, Ohio. Handle for door latches or the like. Des. 73,909; Nov. 22.
Graff, Washbourne & Dunn. (See Graff, Charles, as-Menor).

Grain, Washoourne & Dunn. (See Graft, Charles, assignor.)
Graffinberger, Gust, Portland, Oreg. Trimmer-saw mechanism. 1,645,750; Oct. 18.
Grachberger, Gust, Portland, Oreg. Valve. 1,645,751; Oct. 18.
Graftlin, Lewis, Ocean View, assignor to Two-Season Process, Incorporated, Norfolk, Va. Heating system. 1,640,766; Aug. 30.
Grafham, Beatrice L., Catford, England. Lifeguard or obstruction remover for motor-propelled and similar vehicles. 1,622,868; Mar. 29.
Graf-Lite Corporation. See Stepling, Luke S., assignor.)
Graf-Lite Corporation. See Stepling, Luke S., assignor.)
Graham, Adoniram J., and L. O. Tekell, Whittler, assignors to Gra-Kell Line-Spooler Company, Los Angeles, Calif. Line spooler. 1,624,232; Apr. 12.
Graham, Alfred, et al., executors. (See Graham, Edward A.)

assignors.)
Graham Glass Company, The. (See Miller, Frank R., assignor.)

Signor.)

Graham, Guy G. (See Jensen, H., Salsbery, and Graham.)

Graham, James H., Wilkinsburg, Pa., assignor, by mesne
assignments, to Johns-Manville, Incorporated, New
York, N. Y. Shingle covering, 1,637,622; Aug. 2.

Graham, Louis A., Evanston, and C. L. Low, Chicago, Ill.

Sign-composing device. 1,626,815; May 3.

Graham, Maria, et al., executors. (See Graham, EdGraham, Marthew P., Detroit, Mich., assignor to Thompson Products Inc., Cleveland, Ohlo. Tie-rod construction. 1,646,288; Oct. 18.

Graham, Ota T., Richmond, Va. Gasoline-dispensing sysGraham, Ota T., Richmond, Va. Gasoline-dispensing sysGraham, Ota T., Richmond, Va. Gasoline-dispensing sysGraham, Paul C., assignor of one-balf to H. O. Childreth,
Long Bench. Calif. Trip gate for chutes or the like.
1,635,403; Dec. 27.

Graham, Percy, Chicago, Ill. Pneumatic-tire tread.
Des. 73,173; Aug. 2.

1.004.043; Dec. 21. Graham, Percy, Chicago, Ill. Pneumatic-tire tread. Des. 73,173; Aug. 2. Graham, Stephen J. (See Donathan, William F., assignor.)

Graham, Tom C., assignor to The Embossing Company, Albany, N. X. Plant and flower modeling outfit. 1,630,082; May 24. Graham, William A., Brooklyn, N. X., assignor to Radio Corporation of America. Wireless apparatus. 1,044,524; Jan. 18. Graham, William R., Bronx, N. X. Box. 1,637,299;

1.014.024; Jan. 18.
Graham, William R., Bronx, N. Y. Box. 1.637.299;
July 26.
Graham, William S. Canton, assignor, by mesne assignments, to F. Gerlach and A. B. Keller, trustees, Chicago, Ill. Depth adjuster for plows, 1.632,128; June 14.
Graham, Willie, Houston, Tex. Concrete-molding macropic for the control of the con

June 14.
Grahame, Dallas F., Toronto, Ontario, Canada, assignor, by mesne assignments, to Riley Stoker Corporation, Worcester, Mass. Drive for stokers. 1,639,087;

Wortesster, Amss. Aug 16. Grabonia, Joe, et al. (See Thomas, George M., assignor.) Gra-Kell Line-Spooler Company. (See Graham, A. J., and

Tekell, assignors.) Grames, Grames, (See Cornwell, A. L., and

Granmas, Grande, Chicago, Ill. Receptance.

May 3.

Granade, Fred C., assignor of one-half to Mueller Brass
Foundry Company, St. Louis, Mo. Apparatus for making castings 1,614,360; Jan. 11.

Granat, Elle, Paris, France. Electric differential control system. 1,616,794; Feb. 8.

Granat, Elle, Paris, France. Polyphase distant control system for differential transmission. 1,616,795;

system for differential transmission. 1,610,793; Feb. 8.
Granat, Elie, Paris, France. Electric transmission system. 1,642,438; Sept. 13.
Granata, Joseph D., Chicago, III. Internal-combustion engrants, Chicago, III. Internal-combustion engrants, Albert J., Berkeley, Calif. Fluid meter. 1,651,885; Dec. 6.
Grandbois, Urse G., Kalamazoo, Mich. Coin-controlled vending machine. 1,643,088; Sept. 20.
Grand Central Mining Company. (See Hendrickson. Illarry H., assignor).
Grand Council of the Order of De Molay. (See Stange, Christopher L., assignor, Vork, N. X. Telephone casing. Des. 73,910; Nov. 22.
Grandolph, William F., and G. Mueller, assignors to The De Vilbiss Manufacturing Company. Toledo, Ohio. Spruy gum. 1,613,823; Jan. 11.
Grand Rapids Bookcase & Chair Company. (See Clark. Frank J., assignor.)
Grand Rapids Brass Company. (See Osbeck. Elmer C., assignor).

Grand Rapids Brass company, test oscillations assignor.)
Grand Rapids Metalcraft Corporation. (See De Boer. Rudolph, assignor.)
Rudolph, assignor.)
Grand Rapids Trust Company, executor. (See Burns, David E.)

Grand Rapids Trust Company, executor. (See Burns, David E.)

Grandstaff, Albert L., Akron, Ohio. Steam trap. 1.618,081; Feb. 15. L., Akron, Ohio. Steam trap. 1.618,081; Feb. 15. L., Akron, Ohio. Steam trap. 1.618,081; Grandt, Edward S. (See Greenfield, Sigmund.) Grandt, Edward S. (See Greenfield, Sigmund.) Grandt, Edward S. (See Greenfield, Sigmund.) Graner, Ladislaus P., Eindhoven, Netherlands, assignor to General Electric Company, Electric-light equipment. 1.652,981; Dcc. 13. General Electric Company, Incorporated, New York, N. Y., assignor, by mesne assignments, to General Electric Company and 1ts manufacture. 1,623,336; Apr. 5.

Grange, John D., Brockfield, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Marked article and process of making articles. 1,642,774; Sept. 20.

Grange, John D., Brokhfield, and E. F. Vosyka, Chicago, Granger, Wallace H., San Francisco, Cailf. Ink fountain for printing presses. 1,642,809; Sept. 20.

Gransten, Wallace H., San Francisco, Cailf. Ink fountain for printing presses. 1,642,809; Sept. 20.

Gransden, Williact L., Manufacturer, Company Com

P., assignor.)
Gransden, William H., Tulsa, Okla, assignor to Westinghouse Electric & Manufacturing Company. Control device. 1,617,841; Feb. 15.
Granstedt, Erik. (See Nordenfelt, P., and Granstedt, Granstedt, Erik, assignor to Aktiebolaget Formator, Stockholm, Sweden. Machine for handling tobaccon, 1,619,507; Mar. 1.
Grant, Albert E., New York, N. Y., assignor to Calcorol Burner Corporation. Oil burner. 1,632,402; June 14.
Grant, Charles W., Lynn, Mass. Game. 1,627,087; May 3.
Grant, Efward, Manbattan, Kans. Sash-welght molt.
Grant, F. F., et al. (See Nesmith, Samuel D., assignor)
Grant, F. Frederick C., Chicago, Ill. Accelerator pedal. 1,618,652; Feb. 22.

Grant, George E., Derry, N. H. Jar opener. 1,624,833

Apr. 12

Apr. 12

Apr. 12

Apr. 12

Apr. 12

Co., Boston, Mass. Box. 1,646,807; Oct. 18.

Grant, Harry L., Tamaqua, Pa., assignor to Lovell & Covel Company, Wilmington, Del. Protecting device for electric detonators. Rel.6344; Feb. 2

Grant, Jim A., Carago, Ili. una G. A. Lowry, New York, Grant, Jim A., and G. A. Lowry, New York, N. Y. Brick bandling and cleaning machine. 1,622,869; Mar. 29.

Grant, John, Los Angeles, Calif. Tongs or wrench. 1,614,610; Jan. 18.

Grant, John, Los Angeles, Calif. Tongs or wrench. 1,655,095; Dec. 20.

Grant, Grodan W., Portsmouth, Va. Nozzle stand. 1,650,829; Nov. 28

Crant, Kriping Ario. Canada; easid Hulliday and said Cameron assignors to said Grant. Imitation tree. 1,641,163; Sept. 6.

Grant, Lewis C. (See Gregory, R. W., and Grant.) Grant, Electric Canada; easid Hulliday, and said Cameron assignors to said Grant. Imitation tree. 1,641,163; Sept. 6.

Grant, Lewis C. (See Gregory, R. W., and Grant. Grant, Richard F., et al. (See Wetherbee, Herbert E., Grant, Grant F., et al. (See Wetherbee, H. E. and

Grant, Lewis C. (See Gregory, R. W., and Grant.)
Grant, R. S., Co. (See Grant, Robert S., assignor.)
Grant, Richard F., et al. (See Wetherbee, Herbert E.,
assignor.)
Grant, Richard F., et al. (See Wetherbee, Herbert E.,
assignor.)
Grant, Robert S., assignor to R. S. Grant Co., Inc.,
Providence, R. I. Flexible chain, bracelet, or the like.
1,632,699; July 12.
Grant, Simon P., New Westminster, British Columbia,
Canada. Lienman's lifting and hoisting device.
1,623,113; Apr. 19.
Grant, Walter S., St. Louis, Mo. Container. 1,649,223;
Nov. 15.
Grant, Walter S., St. Louis, Mo. Container. 1,649,223;
Nov. 15.
Grant, William C., E. J. Thomas, and G. W., Drew, assignors to Acme Partition Company, Oakhand, Calif.
Golling door. 1,621,171; Mar. 22.
Grant, William M., San Francisco, Calif., assignor to
Westingbouse Electric & Manufacturing Company,
Switch mechanism. 1,652,569; Dec. 13.
Granter, Jacob, and J. Davis, Oakhand, Calif. Automobile
Signal device. 1,638,628; Aug. 3.
Granter, Jacob, and J. Davis, Oakhand, Calif. Automobile
Signal device. 1,638,628; Aug. 3.
Granter, Jacob, and J. Agor-Cooling system. 1,632,596;
June 14.
Grantland, John W., assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio. Gauge cock.
1,632,403; June 14.
Grantland, John W., assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio. Gauge cock.
1,632,403; June 14.
Grantland, John W., assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio. Gauge cock.
1,632,339; June 14.
Grantland, John W., See Mueller, J. G., and Granzow.)
Granzow, Henry M. (See Mueller, J. G., and Granzow.)
Granzow, Henry M. (See Mueller, J. G., and Granzow.)
Granzow, Henry M. (See Mueller, J. G., and Granzow.)
Granse, Gloverge W., Beaver Falls, assignor to Koppel In1,630,339; Aug. 16.
Grass, George W., Beaver Falls, assignor to Moppel In1,630,339; Aug. 16.
Grass, George W., Device, W., 222
Grass, George W., Device, W., 222
Grass, George W., Device, W., 222
Grass, George W., Beaver Falls, Assignor, Paracolum, Paracolum, Paracolum, Paracolum, Pa

Grasselli Chemical Company, The. (See Corson, Harry P., assignor.)
Grasselli Chemical Company, The. (See Corson, Harry P., assignor.)

C., assignor.)
Grasselli Chemical Company, The. (See Graves, Walter

G., assignor.) Grasselli Chemical Company, The. (See Howald, Arthur M., assignor.)
rasselli Chemical Company, The. (See Howard, Henry,

assignor.)
assignor.)
casselli Chemical Company. (See Kline, Emil, as-

Grasseill Chemical Company, The. (See McQuaid, Howard S., assignor.)
Grassell chemical Company, The. (See McQuaid, Howard S., assignor.)
GWIlliam K., assignor.)
Grasseill Chemical Company, The. (See Schweitzer.
Grasseill Chemical Company, The. (See Tanner, Wellington L., assignor.)
Grasseill Operation. (See Berliner, R., Stein, and Trautner, assignors.)
GWILLIAM (See Cotton, William, assignor.)

Grassell Dyestuff Corporation. (See Daimler, K., Marschall, and Balle, assignors,)
Grassell Dyestuff Corporation.
Fich, and Zeh, assignors,)
Grassell Dyestuff Corporation.
Fich, Zeh, and Huismann, assignors.)
Grassell Dyestuff Corporation.
Gee Duisberg, W., HentFich, Zeh, and Huismann, assignors.)
Gee Glietenberg, Eugen,

Grassell Dyestuff Corporation. (See Hartmann Erich. assignor.)
Grasselli Dyestuff Corporation. (See Hartmann Erich. assignor.)
Grasselli Dyestuff Corporation. (See Hentrich, W., and Hardtmann, assignors.)
Grasselli Dyestuff Corporation. (See Herz. Richard assignor.)

Grasselli Dyestuff Corporation. (See Herz, R., and Mül-

or assignors.)

Grasselli Dyestuff Corporation. (See Herz, R., and Schulte, assignors.)

Grasselli Dyestuff Corporation. (See Holl, Alfred, as

Grasselli Dyestuff Corporation. (See Kahn, M., and Mayer, assignors.)
Grasselli Dyestuff Corporation. (See Kränzlein, G., and Voss, assignors.)
Grasselli Dyestuff Corporation. (See Krauhs, Carl, assignor).
Grasselli Dyestuff Corporation. (See Kugel, Max, assignor).

Signor.)
Grasselli Dyestuff Corporation. (See Kugel, Max, asGrasselli Dyestuff Corporation, (See Nawaisky, P.,
Braunsdorf, and Holzapfel, assignorf, and Glozapfel, assignorf, assig

assignor, Grasselli Dyestuff Corporation. (See Neelmeler, W., and Nocken, assignors.)
Grasselli Dyestuff Corporation. (See Neelmeler, W., And Nocken, and Rebner, assignors.)
Grasselli Dyestuff Corporation. (See Rabe, Paul, assignor.)
Grasselli Dyestuff Corporation. (See Rabe, P., and Rabeller, assignor.)
Grasselli Dyestuff Corporation. (See Schirmacher, K., Zahn, Wilke, and Ochwat, assignors.)
Grasselli Dyestuff Corporation. (See Schirmacher, K., Zahn, Wilke, and Ochwat, assignors.)
Grasselli Dyestuff Corporation. (See Schmidt, Maximillian F., assignor.)

P., assignor.)
Grasselli Dyestuff Corporation. (See Schmidt, M. P., and Neugebauer, assignors.)
Grasselli Dyestuff Corporation. (See Schmidt, Robert E.,

assignor.)
Grasselli Dyestuff Corporation. (See Stein, Berthold, assignor.) Grasselli Dyestuff Corporation. (See Tesche, H., and Job,

Grasselli Dyestuff Corporation. (See Thicss, K. Müller. Runne, and Schaeffer, assignors.)
Grasselli Dyestuff Corporation. (See Wagner, Hermann,

assignor.)
Grasselli Dyestuff Corporation. (See Wagner, H., and

Grasselli Dyestuff. Corporation. (See Wagner, H., and Funke, assignors.)
Grassell Dyestuff Corporation. (See Wagner, H., Langbein, Beek, and Thiess, assignors.)
Grassell Chemical Company, The. (See Wood, Charles D., assignor.)
Grassis, Onorato. (See Ganio, O., Avondoglio, and Grassis.)

Grassian, Peter, Berlin, Germany, Loud speaker for Grassmann, Peter, Berlin, Germany, Loud speaker for wireless telephony and other purposes. 1,632,287; June 14, Grating Company of America, The. (See Nagin, Harry,

June 14,
Grating Company of America, The. (See Nagin, Harry, assignor), when G. Long Beach, Calif. Hydraulic control device: 1,613,636; Jan. 4.
Grattan, Joseph G., Long Beach, Calif., assignor, by mesme assignments, to Texas Iron Works Sales Corporation, Houston, Tex. Joint-breaking apparatus. 1,615,696; Jan. 25.
Gratton, Edward, Detroit, Mich. Commutator. 1,635,886; Graut, Horbort E. (See Watson, G. D., and Grau.)
Graue, Frederick, Washington, D. C., assignor of one-half to G. T. Kemp, Baltimore, Md. Loop antenna. 1,615,755; Jan. 25.
Grauel, Edwin L., assignor to The Graulock Company, Clacinnati, Ohio. Locking-device control. 1,630,263; Amer Allan H., assignor of one-half to C. T. Comstock, Syracuse, N. Y. Washing machine. 1,641,481; Sept. 6.
Grauul, William F., Northampton, Mass. Wood filler for inequers. 1,652,535; Dec. 13.
Graulock Company, The. (See Grauel, Edwin L., assignor).

incquers. 1.552.253; Dec. 13.

Graulock Company, The. (See Grauel, Edwin L., assignor.)

Graulock Company, The. (See Kentrup, Clemens T., assignor.)

Graulock Company, The. (See Kentrup, Clemens T., assignor.)

Paul L., Dresden, Germany, assignor to "Universelle". Cigarettenmaschinen-Fabrik, J. C. Mueler & Co. Rod-cigarette machine. 1.622,378; Mar. 29.

Gravell, James H., Elkins Park, Pa. Metal pickling. 1.632,833; June 21.

Gravelland, William H., Kenilworth, N. J., assignor to Karley Marking shingles and similar building articles. 1.650,709; Nov. 29.

Graver Corporation. (See Cobb, Lonle, assignor.)

Graves, Arnold, Frinton-on-Sea, England. Vehicle lamp. 1.620,202; Mar. 8.

Graves Hardle, Frinton, R. L., assignor to Brown and Sharpe Manufacturing Company. Overarm for milling machines. 1.653,486; Dec. 27.

Graves, Benjamin P., Providence, R. L. assignor to Brown and Sharpe Manufacturing Company. Milling machine. 1.654,496; Dec. 27.

Graves, Harry S., assignor to Spiral Piston Ring Company, Detroit, Mich. Apparatus for electrically forming spiral piston rings. 1.619,296; Mar. 1.

Graves, Harry S., assignor to Spiral Piston Ring Company, Detroit, Mich. Apparatus for electrically forming spiral piston rings. 1.619,296; Mar. 1.

Graves, Harry S., assignor to Spiral Piston Ring Company, Detroit, Mich. Apparatus for electrically forming spiral piston rings. 1.619,296; Mar. 1.

Graves, Harry S., assignor to Spiral Piston Ring Company, Detroit, Mich., Method and apparatus for testing piston rings. 1.619,296; Mar. 1.

Graves. Rebecca, Spokane, Wash. Bathtub appliance. 1,650,067; Nov. 22.

Graves, Roy M., and E. R. D'Olive, assignors to Associated Engineers Company, Chicago, Ill. Lighting fix-Graves, 1636,414; July 19.
Graves, Walter L., Ban Diego, Calif. Pressure cooker. 1,635,476; July 12.
Graves, Walter G., assignor to The Grasselli Chemical Company, Cleveland, Ohlo. Drying and calcining litho-pone. 1,639,613; May 31.
Graves, Walter L., Hatheld, Mass. Steam-fitter's appli-ance. 1,622,506; Mar. 29.
Grave-ure, Louis, New York, N. Y. Golf club. 1,652,404; Dec. 13.
Gray, Albert W., Eldora, Java. Potetro. 1111.

Gray, Athert W., Eldora, Iowa. Potato agitator. 1.653,957; Dec. 27. Gray, Arthur W., Milford, Del. Centrifugal casting or coating system. 1,636,228; July 19. Gray, Bartlett S., trustee. (See Anderson, John A., as-

signor.)

Gray, Bertram, and R. Curtis, Johannesburg, Transvaal, South Africa. Liquid rheostat. 1.630,176; May 24.

Gray, Charles B., Philadelphia, Pa., Machine for cutting sheet-form material. 1,646,145; Oct. 18.

Gray, Charles B., Philadelphia, Pa., Machine for cutting sheet-form material. 1,646,145; Oct. 18.

Gray, Christian H., London, England. Manufacture of hollow articles of rubber. 1,640,987; Aug. 30; Gray, Thilhs H., Armona, Calif. Fruit-tray cleaner.

1,611,740; reb. 15.

Gray, Daniel M., E. Haub, and J. J. Williams, assignors to Hazel-Atlas Glass Company, Wheeling, W. Va. Closure for food containers. 1,629,698; May 24.

Gray, David. (See Rider, Herbert B., assignor.)

Gray, David G., Vancouver, British Columbia. Canada.

Cambination sanare and level. 1,633 561; Dec. 20.

Gray David David Dertsburgh, Pa. Pocketbook-fastening decrease of the container of the

Gray, Earl C., St. Charles, Mo. Antiglare device. 1,653,208; Dec. 20.
Gray, Elmer E., Lynn. Mass., assignor, by mesne assignments, to Elliott Addressing Machine Company. Envelope-scaling device. 1,632,648; June 14.
Gray, Emmet F., Detroit, Mich. Muffler. 1,619,115;

Gray, Emmet P., Detroit, Mich. Automobile heater. 1,619,116; Mar. 1.

Gray, Emmet P., Detroit, Mich. Valve control. Gray, Emmet P., Detroit, Mich. Automobile heater cover. 1,640,187; Aug. 23.

Gray, Emmet A., Augusta, Me. Legging. 1,613,885; Jan. 11.

oray, Frederick O., Dayton, Ohlo. Speed-controlling device for motor-driven vehicles. 1.640,149; Aug. 23. Gray, Frederick O., assignor to Ohmer Fare Register Company, Dayton, Ohlo. Taximeter-fare-counter control. 1.615-541; Jan. 25. Gray, G. A., Company, The. (See Cardullo, Forrest E., assignor).

Gray, Geoffrey A., Cincinnati, Ohio, and M. B. Nev Covington, Ky. Treating butter cream. 1,6 Sept. 27. 1.643,301

Covington, Ky. Treating butter cream. 1,643,301; Sept. 27.
Gray, George C. G., Philadelphia, Pa., assignor to Automatic Fuel Saving Company. Automatic combustion control for steam bollers. 1,617,591; Feb. 15.
Gray, Hiram L., Searsdale, assignor to Oakite Products. Inc., New York, N. Y. Cleaning device. 1,628,141; May 10.

Gray James A., assignor to American Can Company, Sta Friedrich Calif. Fish eviscerator, 1,282,968; May 17, Gray, James A. San Francisco, Calif., assignor to Ameri-can Can Company, New York, N. X. Creased flange, 1,636,957; July 26, Gray, James A., assignor to American Can Company,

Gray, James A., assignor to American Can Company. San Francisco, Calif. Fish-feeding means. 1,649,304; Nov. 15.

Nov. 15.

Gray, James H., New York, N. Y. Burner for liquid fuel.

1.644.372; Oct. 4.

Grav, James W., Keithsburg, Ill. Closure means for filling openings, 1.613.886; Jan. 11.

Gray, Jane, Coupany, (See Stokes, Jane G., assignor.)

Grav, Jane, Coupany, (See Stokes, Jane G., assignor.)

Grav, Joseph H., St. Joseph, Mo. Device for aligning whe els. 1.639.604; Jang, 16.

Grav, Gravette, T., Portage, Pa. Surfacing machine.

Gray, Owen H., and C. E. Murdock, Salt Lake City, Utah.

Gray, Peter, & Sons Inc. (See Kelsea, Clarence H., assignor.)

Grav, Products, Inc. (See Kelsea, Clarence H., assignor.)

Gray Products, Inc. (See Field, Crosby, assignor.) Gray, Ralph B., Chicago, Ill. Windshield wiper, 1.634.460; July 5. Gray, Tom F., Manchester, England. Valve. 1,642.242; Sept. 13.

Gray, Tom F., Stockport, England, Valve, 1,648,986; Nov. 15, Gray, W. D. (See Sullins, H. J., and Mustain, as-signors.)

Gray, Walter S., assignor to Goodman Manufacturing Company, Chicago, Ill. Locomotive. 1,619,572;

Company, Chicago, III. Deconvers.

Mar. 1.

Gray, Wilburn D. (See Sullins, Harold L., assignor.)

Gray, William B., Chicago, III. Windshield wiper.

1,645,646; Oct. 18.

Gray, William E., Chicago, III. Electrical vibrator.

1,635,405; July 12.

Gran, Alexandre M., New York, N. Y. Scarf. 1,652,982;

Dec. 13.

Greasen, Edmund W., New York, N. Y. Artist's composing frame and color chart, 1,645,102; Oct. 11. Greasometer Corporation, The. (See Brinton, William C.,

Greasometer Corporation, The. (See Brinton, William C., jr., assigniam), Detroit, Mich. Oil cup. 1,646,196; Oct. 18.
Greathouse, Lucien H., Jamnica, assignor of one-third C., H. Keel, New York, N. Y. Catalyst for ammonia synthesis. 1,618,004; Feb. 15.
Great Lakes Auto Products Company. (See Johnson, Great Lakes Golf Corporation. (See Sleith, Samuel W., assigniam).

assignor.)
Great Northern Paper Company. (See Allen, Carlton II.,
assignor.)

Great Northern Paper Company. (See Cram, Hervey G.,

Great Northern Paper Company. (See Whitcomb, Wil-

Great Northern Paper Company. (See Whitcomb, William A., assignor.)
Great Western Electric Chemical Co. (See Farnsworth. William H., assignor.)
Great Western Electro Chemical Company. (See Hirschkind, Wilhelm, assignor.)
Greaves, Abilio M. de S., Cambridge, Mass. Portable fire alarm. 1,624.866; Apr. 12.
Grebe, Alfred H., Hollis, N. Y. Radio receiving apparatus. 1,624.867; Apr. 5.
Greed Greec, H. Hollis, N. Y. Illuminating dial. Grebe, Alfred H., Hollis, N. Y. Illuminating dial. 1,642.677; Sept. 20.
Grebowier, Ixydor, Homestead, Pa. Pontoon. 1,630,003; May 24.

May 24.

Greco, Joseph, New York, N. Y. Stocking. Des. 71,790;

Jan. 4.

Greegor, Ralph H. (See Rush, A., and Greegor.)

Greegor, Ralph H., assignor to The Kinnear Manufacturing Company, Columbus, Ohio. Fire-resisting curtain.

1.644,646; Oct. 4.

Green, Albert M., exceutor. (See Green, Walter R.)

Green, Albert M., et al. (See Walston, Joseph A., assignor).

Green, Albert N., et al. (See Walston, Joseph A., assignor.)
Green, Andrew, assignor to American Gas Machine Company, Inc. Albert Lea, Minn. Adjusting valve and making the same. Rel6,617; May 10.
Green, Andrew, assignor to American Gas Machine Company, Inc. Albert Lea, Minn. Adjusting valve. Green, Archibald H., London County, England, assignor to The International Silencer Company (1926) Limited. county of London. England. Silencer for gaseous currents. 1,627,324; May 3.
Green, Arthur, Coventry. England. Refrigerating apparational Covernian Covernia

Green Engineering Company. (See Marsh, Thomas A ..

Green Engineering Company. (See Marsh, Thomas A., assignor.)
Green. Preed C., assignor to Illinois Refrigerator Company, Morrison, Ill. Water cooler for refrigerators. 1.621.162: Mar. 15.
Green, Frederick M. (See Wylie, H. N., and Green.)
Green, Frederick M. (See Wylie, H. N., and Green.)
Green, Englerick M. (See Wylie, H. N., and Green.)
Green, George C. To Ghamesburg, Transval. South Africa.
Green, George C. To Ghamesburg, Transval. South Africa.
Green, Harold K., and J. W., Jeunings, Providence, R. I.
Vase. Des. 73.373; Aug. 30.
Green, Henry, Union Hill. N. J., assignor to II. Fischer.
New York, N. Y. Radio loud speaker. 1.658.036;
Aug. 10.
Green, Henry M., deceased, Los Angeles, Calif.; Pacific

Green, Henry M., deceased, Los Angeles, Calif.; Pacific Southwest Trust & Savings Bank, administrator, as-signor to P. H. Bray. One-piece plunger body-1,636,935; July 26.

Green, Irving W., Cranford, N. J., assignor to American.
Telephone and Telegraph Company. Headband for telephone receivers. 1,616,491; Feb. 8.
Green, J. Birchard, assignor to Fusion Welding Corporation, Chicago, Ill. Welding rod. 1,622,546; June 14.
Green, Jack, Norfolk, Va. Lawn-edge trimmer. 1,632,129;
June 13.

Green, Jack, Norfolk, Va. Clamp for containers. 1,622,732; June 14.
Green, Jack, Norfolk, Va. Cleaning apparatus. 1,651,766; Dec. 6.
Green, Jacob M. (See Mapou, Harry B., assignor.)

Green, Jack, Norfolk, Va. Cleaning apparatus. 1,651,768; Dec. 6.
Green, Jacob M. (See Mapou, Harry B., assignor.)
Green, Jerny B., A., Bayard, Va. Apparatus for teaching by ear the rendition of musical compositions. 1,655,458; Dec. 20.
Green, Jery S., Le Claire, Iowa. Self-locking clothesline receiver. 1,626,728; May 3.
Green, Lee B., Lakewood, assignor of one-third to E. L. Jones, Cleveland, one-third to C. L. Finney, Canton, and one-third to C. B. Krouse, Cleveland, Ohio. Pump. Green, Lee B., Lakewood, assignor of one-third to E. L. Jones, Cleveland, one-third to C. L. Finney, Canton, and one-third to C. B. Krause, Cleveland, Ohio. Refrigerating apparatus. 1,642,922; Sept. 20.
Green, Lee B., Lakewood, assignor of one-half to C. B. Krause, Cleveland, Ohio. Repeating Tuse switch. Krause, Cleveland, Ohio. Repeating Tuse switch. Green, Matthew, Detroit, and H. H. Willard, Ann Arbor, assignors to Parker Rust-Proof Company, Detroit, Mich. Rustproofing and articles produced thereby. 1,638,694; Aug. 23.
Green, Michael A., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Cap for bottles or similar

Aug. 23.
Green, Michael A., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Cap for bottles or similar articles. Des. 73,599; Oct. 25.
Green, Newton B., assignor to Eastman Kodak Company, Rochester, N. X. Light control for photographic printers. 1651,167; Dec. 6.
Green, Robert G., Minneapolis, Minn. Gauge. 1,653,168;

Green, Robert G., Minneapolis, Minn. Gauge. 1,003,004, Dec. 20.
Green, Royal L., Greenville, S. C. Safety cranking device. 1,651,695; Dec. 6.
Green, Samuel G. (See Jervey, T. M., and Green.)
Green, Samuel G. (See Jervey, T. M., and Green.)
Green, Samuel G., Gray, Ga. Rear sight for guns. 1,021,476; Mar. 14.
Green, Samuel G., Gray, Ga. Tripod mount. 1,639,846; Aug. 23.
Green, Samuel G., Gray, Ga. Mount for guns. 1,643,491; Sept. 27.
Green, Samuel G., Camp Benning, Ga., and J. S. Hatcher, Annapolis, Md., assignors to United States Machine Gundary 15.
Green, Samuel W., Philadelphia, Pa. Woodworking machine. 1,616,745; Fcb. 8.
Green, Thomas L. (See Williams, Charles H., assignor, Green, Thomas L., W. P. Morton, and C. H., Williams, Indianapolis, Ind., said Williams and said Morton assignors to said Green. Lubricating system. 1,638,173; Nov. 8.

Nov. 8.

Green, Thomas W., Westmont, N. J., assignor to Thomas Wilbraham Green Engineering Co., Philadephia, Pa. Suction cleaner. 1,635,807; June 21.

Green, Thomas W., Westmont, N. J., assignor to Thomas Wilbraham Green Engineering Co., Philadephia, Pa. Electric suction sweeper. 1,646,085; Oct. 18.

Green, Thomas Wilbraham, Engineering Co. (See Green, Chem. Wilbraham, Engineering Co. (See Green, Green, Walter H. Green, Green, Green, Walter H. Green, Green, Walter H. Green, Green, Walter H. Green, Green, Green, Walter, H. Green, Gr

Mär. 15.

Green, Walter H., assignor to General Zeolite Company, Chicago, Ill. Chemical mixing and feeding apparatus. 1,638,119; Aug. 9.

Green, Walter H., assignor, by mesne assignments, to General Zeolite Company, Chicago, Ill. Process and apparatus for utilizing zeolites. 1,644,469; Oct. 4.

Green, Walter H., and A. S. Behrman, assignors, by mesne assignments, to General Zeolite Company, Chicago, Ill. Furifying water. 1,633,272; Dec. 20.

Green, William Messer, 1,637,472; Dec. 20.

Green, William A. (See Luxton, W. J., and Green.)

Green, William M. (See Chuxton, W. J., and Green.)

Green, William M. (See Schmidt, F. W., and Green.)

Green, William M. (See Schmidt, F. W., and Green.)

Greenabaum, Alexander L. (See Ford, R. H., Richardson, Greenabaum, and Priest.)
Greenan, Frank D., assignor to Fostoria Glass Co.,
Moundsville, W. Va. Goblet. Des. 72,827; June 14.
Greenan, James E., Ashton, R. I. Votive stand.
G. 636,994; July 26.
G. 636,994; John E. (See Alexovits, Thomas M., assignorial, John E. (See Alexovits, Thomas M., assignorial)

signor.)
Greenawalt, Lewis J., Mansfield, Ohio, assignor to West-Inghouse Electric & Manufacturing Company. The Greenawalt, Ralph D., assignor of one-half to W. T. Jane, Chicago, Ill. Animated display device. 1,636,415; July 19.
Greenawalt, William E. Denver, Colo. Copper-extraction process. 1,614,668; Jan. 18.

Greenawalt, William E., Denver, Colo. Copper-extraction process. 1,614,669; Jan. 18.
Greenawalt, William E., Denver, Colo. Copper-extraction process. 1,614,670; Jan. 18.
Greenawalt, William E., Denver, Colo. Metallurgical process. 1,633,091; June 21.
Greenawalt, Samuuel, New York, N. Y. Window cleaner, Greenawalt, Samuuel, New York, N. Y. Child's overcoat, 1,643,159; Sept. 20.
Greenawalt, Albert La, Greenawalt, Albert La, Booklyn, N. Y. Window cleaner, Greenawalt, New York, N. Y. Child's overcoat, 1,643,159; Sept. 20.

signor.)

Greene, Albert E., Scattle, Wash. Electric furnace. 1,616,796; Feb. 8.

Greene, Albert E., Scattle, Wash. Combination induction furnace. 1,639,340; Aug. 16.

Greene, Albert E., Medina, Wash. Electrode mechanism for electric furnaces. 1,616,797; Feb. 8.

Greene, Albert E., Medina, near Seattle, Wash. Electrode mechanism for electric furnaces. 1,616,798; Feb. 8.

Greene, Albert E., Medina, Wash. Electric furnace. Creene, Albert E., Medina, Wash. Electric furnace. Creene, Albert E., Berkeley, Calif. Screen. 1,644,121; Greene, Ambrose E., Berkeley, Calif. Screen. 1,644,121; Greene, David W.

Oct. 4.

Greene, David W., assignoi to Max E. Bernhardt, New York, N. Y. Cigarette case. 1,625,590; May 10.

Greene, Delle, Pittsburgh, Pa. Washboard. 1,643,845; Greene, Ellmer G., Cleveland, Obio. Cleaning and polishing machine. 1,615,622; Jan. 25.

Greene, Frederick E. (See Hluman. G. L., and Greene.) Ureene, Frederick E., assignor to The Greist Manufacturing Company, New Haven, Conn. Outside door handle. Des. 73,256; Aug. 16.

Greene, Frederick J., assignor to Christensen Machine Chem. 1,641,482; Sept. 1,641,682; Sept. 1,641

Greene, Freue. Racine,

Sept. 6.
Greene, Harry A., jr. (See Wood, S. J., and Greene.)
Greene, Haskell M., Whittier, Calif. Cutting oil-well casings and drill pipe. 1,641,483; Sept. 6.
Greene, Irving H., New York, N. Y. Nutcracker.
1,649,468; Nov. 15.
Greene, Oscar V., Cleveland, Ohlo. Air filter. 1,639,132;
Aug. 10.

Aug. 16.

Greene, Oscar V., Cleveland, Ohlo. Filter element.
1,639,133; Aug. 16.

Greene, Otto W., Amherst Township, Lorain County,
Ohio, assignor, by mesne assignments, to The Pfaudler
Company, Rochester, N. Y. Liquid-agitating mechanism. 1,613,391; Jan. 4.

Greene, Robert F., Waban, Mass. Wall construction and
building block. 1,618,281; Feb. 22.

Greene, Tweed & Co. (See McGuirk, Edward J., assignor.)

wall construction. 1,618,426; Feb. 22.
Greene, Tweed & Co. (See McGuirk, Edward J., assignor.)
Greene, Tweed & Co. (See McGuirk, Edward J., assignor.)
Greene, Joseph. New York, June 21.
Greener, Joseph. New York, N. Y. Butter mold. 1,039,937; Aug. 23.
Greenewald. Eugene L., Washington, D. C. Closure. 1,652,668; Dec. 13.
Greenewald. Eugene L., Washington, D. C. Closure. 1,652,668; Dec. 13.
Greenewalt, Mary H., Philadelphia, Pa. Associating light and music the second control of the c

Greenheld Tap and Die Corporation. (See Morgan, Raiph L., assignor.) Greenhalgh, Charles G. (See Gagnon, Archle, assignor.) Greenhalgh, George H. (See Sweetland, E. J., and Green-halgh.) Pink E., Charlotte, N. C., assignor to Abington Textile Machinery, Trustees, Boston, Mass. Pneumatic stripper for carding engines. 1,616,896; Feb. 8.

Greenhouse, Samuel, Akron, Ohio. Pressure-operable valve. 1,631,263; June 7. Greenig, Merlin D., La Harpe. Ill. Self-adjusting connecting rod bearing. 1,634,993; July 5. Greenight of the property of the control of th

Oct. 18.

Greeniee Bros. & Co. (See Edward, D. W., and Mansfield issignors.)

Greeniee, Fred, Gallia, Ohio. Dirigible headlight construction for nutomobiles. 1,631,412; June 7.

1.639,847; Aug. 23.

Greenspoon, Hower, Los Angeles, Calif. Window awn ing. 1,646,910; Oct. 25.

Greenstein, Philip D., assignor to The Raybestos Company, Bridgeport, Conn. Friction element and making Bridgeport, Conn. Friction element and making Greenstreet, Charles J., Chicago, Ill. Powdered soluble fruit, vegetable, or other edible matural or manufactured substances and making a powdered fruit, vegetable, or other edible substance or composition. 1,619,202; Mar. 1.

1.619,202; Mar. 1.

1.623,241; Apr. 5.

Greenstreet, Oliver F., Owensyllie, Mo. Ridge cap. 1,053,847; Dec. 27.

Greenstreet, Oliver P., Owensyllie, Mo. Ridge cap. 1,053,847; Dec. 27.

Greenstreet, Oliver P., Owensyllie, assignor of one-fourth Covensylle, Mo. Clothes vasher. 1,68,730; Aug. 9.

Greenwille, Mo. Clothes vasher. 1,68,730; Aug. 9.

Greenwille, Steel Car Company. (See Gardner, Kennett C., assignor.)

Greenway, Richard J., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Stonington. Com. Antiofiset mechanism for printing presses. 1,638,572; Aug. 9.

Greenwald, Hendeld, A., String, A., Chiego, III. Vanity case. 1,613,588; June 7.

J. 631,588; June 7.

Greenwald, Sidney, and S. Cascio, Brooklyn, N. Y. Tool for applying shoe buttons. 1,647,042; Oct. 25.

Greenwalk, William E., Denver, Colo. Metallurgical process. 1,618,187; Feb. 22.

Greenway, Milton E., and R. W. Chambers, Whitewright. Greenway, Milton E., and R. W. Chambers, Whitewright. Greenway, Richard J., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Stonington, Conn. Antioffset mechanism for printing presses. 1,638,572; Aug. 9.

Greenway, Richard J., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Stonington, Conn. Antioffset mechanism for printing presses. 1,638,573; Aug. 9.

Greenway, Richard J., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Stonington, Conn. Antioffset mechanism for printing presses. 1,638,574; Aug. 9.

Greenway, Richard J., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Stonington, Conn. Antioffset mechanism for printing presses. 1,638,576; Greenway, Richard J., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Stonington, Conn. Antioffset mechanism for printing presses. 1,638,576; Greenway, Richard J., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Stonington, Conn. Antioffset mechanism for printing presses. 1,638,576; Greenway, Richard J., Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Stonington, Conn. Antioffset mechanism for printing presses. 1,638,576; Greenway, Richard J., Westerly, R. I., R. I., assignor to C. B. Cottrell & Sons Company, Stonington, Conn. Antioffset mechanism for printing presses. 1,638,576; Greenway, Richard J., Westerly, R. I., R. offset 9.

Genvay, Richard J., Westerly, R. L. assignor to C. B. Grenvay, Richard J., Westerly, Stonington, Conn. Anti-offset mechanism for printing presses. 1,638.576; Aug. 9

Grenwell, Nevil, Bethlehem, Pa., assignor to Bethlehem Steel Company, Detonating fuse, 1,651 696; Dec. 6 Greenwich, Anna J., assignor of one-half to W. M. Roewer, Chicago, Ill. Marcel water waver, 1,637,816; Aug. 2.

Greer, The signor.)

Green, William E., assignor to The Akron Standard Mode Company Akron, Oho, The, be 72,666; May 10 Greer, William E., assignor to The Akron Standard Mod Company, Akron, Oho, Tire, Des. 72,367; Way 10, Greer, William E., assignor to The Akron Standard Mod Company, Akron, Oho, Tire, Des. 72,568; May 10,

oreer, William E., assignor to The Akron Standard Mold. Company, Akron, Olio. Tire. Des. 72:609; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:610; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:611; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:613; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:613; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:614; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:615; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:616; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:618; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:618; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:618; May 10. Greer, William E., assignor to The Akron Standard Mold. Company, Akron, Ohio. Tire. Des. 72:618; May 10. Greegel, Fred F., Fort Lupton, Colo. Shingling gauge. 1.045,808; Oct. 18. Greeger, Henrik, assignor to The Hooven, Owens, Rentschier Company, Hamilton, Ohio. Valve gear. 1.045,808; Oct. 18. Greeger, Henrik, assignor to The Gregg Company, The. (See Greege, Louis D., assignor. Gregg, Louis D., Hackensack, N. J., assignor to The Gregg Company, Limited, New York, N. Y. Cane care Greege, Louis D., Hackensack, N. J., assignor to The Gregg Company, Limited, New York, N. Y. Cane care

transportation of sugar cane and the like. 1,634.778; July 5.

Gregg, Louis D., Hackensack, N. J., assignor to The Gregg Company, Limited, New York, N. Y. Cane car and the like. 1,634.779; July 5.

Gregg, Louis D., Hackensack, N. J., assignor to The Gregg Company, Limited, New York, N. Y. Cane car and the like. 1,634.479; July 5.

Gregg, Maillon H. Sche Prennek, T. E., and Gregg.)

Gregg, Maillon H. Sche Prennek, T. E., and Gregg.)

Gregg, Mark H., Oakland, Calif. Thre vulcanizer. 1,643.493; Sept. 27.

Gregg, Robert D. (See Shidder, F. L., and Gregg.)

Gregorius, Joseph J., Hollywood, Calif. Internal-combustion engine. 1,637,746; Aug. 2.

Gregorius, Joseph S., Hollywood, Calif. Internal-combustion engine. 1,637,746; Aug. 2.

Gregorius, Joseph S., See Koupa. W. G. and Gregorius, Orgorius, Joseph S., See Koupa. W. G. and Gregorius, Orgorius, Joseph S., See Koupa. W. G. and Gregorius, Orgorius, Joseph S., Gregorius, Orgorius, Joseph S., Gregorius, Gregory, Graffes, nasignor of one-half to W. Freeman, May 31.

Gregory Funiture Mfg. Co. (See Wall, Thomas, assignor.)

Gregory, George, P., assignor to The Boston Auto Gage

Gregory Furniture Mfg. co.

signor.)

George P., assignor to The Boston Auto Garge

tregory. George P., assignor to The Boston Auto Garge

Company, Pittsfield, Mass. Strainer. 1.613,1667.

Company, Pittsheid, Mass. Strainer. 1.613,166; Jan. 4.
Gregory, George P., assignor to The Boston Auto Gage Company, Pittsheid, Mass. Strainer. 1.617,048; Feb. 8.
Gregory, George P., assignor to The Boston Auto Gage Company, Pittsheid, Mass. Float gauge. 1.633,322; June 21.

June 21.

Gregory, Oscar T., Chicago, Ill., assignor to Gregory Auto Awning Corporation, Oll City, Pa. Awning. 1,645,697; Oct. 18.

Gregory & Read Company. (See Gulliford, Nicholas L., assignor).

Gregory, Richard W., Hexbam-on-Tyne, assignor to Electrical Improvements Limited. Newcastle-upon-Tyne, England. Electric circuit breaker. 1,626,528; Apr. 26.

Gregory, Richard W., Hexbam-on-Tyne, and L. C. Grant, Henton, England, assignors to Electrical Improvements 1,645,905 oct. 18.

Gregory, William S., Cincinnati, Ohio. Safety buffer apparatus for automobiles and other vehicles. 1,652,170; Dec. 13.

Greif Brothers Cooperage Company, The. (See Raible,

Greit Brahners Coperage Company, Magneto-electric John R., assignor.) Greiner, Max, Charlottenburg, Germany, Magneto-electric automatic interrupter, 1,043,270; Sept. 29. Greiner, Richard, Berlin, Germany, Artificial eye. 1,633,965, June 28. Greiner, William P. (See Wigglesworth, H. H., and

Griner, William P. (See Trass.) Griner, J. Greist Mannfacturing Company, The. (See Carmichael, Andrew J., assignor.)

Greist Manufacturing Company, The. (See Carmichael, A. J. and Thurber, assignors.)
Greist Manufacturing Company, The. (See Greene, Frederick E., assignor.)
Greist Manufacturing Company, The. (See Greene, Greist Manufacturing Company, The. (See Thurber, Harry F., assignor.)
Greive, Greene, assignor.)
Greive, Greene, G

Grenier, Henry J., assignor of one-half to B. Jacobs, Bridgepott, Conn. Cue tip. 1,648,613; Nov. S. Steffan, Greseth, Melvin I. (See Oxerboe, E. C., and Greseth, Greseth, Melvin I. (See Oxerboe, E. C., and Greseth, Gress, Karl. (See Edeleanu, L., Pfeiffer, Gress, and Jodeck.)
Gressec, Greter, Detroit, Mich. Lubricating system. Grestech, Carl. Todtnau, Germany. Brush. 1,626,816; May 3.
Gretsech, Frederick, Brooklyn, N. Y. Reed holder, 1,625,651; Apr. 19.
Gretsech, Prederick, Brooklyn, N. Y. Reed holder, 1,625,651; Apr. 19.
Gretsech, Vallent Greter, Gretsech, Carl. Todtnau, Germany. Brush. 1,626,816; May 3.
Gretsech, Prederick, Brooklyn, N. Y. Reed holder, 1,631,371; June 7.
Grevileh, Gerald G. Cleveland, Ohio. Reenforcing frame for concrete structures. 1,613,392; Jan. 4.
Grevuloch, Emil. (See Riegel, Jacob, assignor.)
Greve, Edgar, E., Bellevue, Pa. Crank for drilling rigs. 1,621,665; Mar. 22.
Greve, Edgar, E., Bellevue, Pa. Crank for drilling rigs. 1,631,494; July 5.
Greve, Edgar, E., Bellevue, Pa. Flexible shaft coupling. 1,634,6470; July 5.
Greve, Edgar, E., Bellevue, Pa. Valve-seat puller. Greve, Greman L., Brooklyn, N. Y. Carton, Des. 7,3127; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,773; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,773; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,773; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,773; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,773; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,773; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,773; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,773; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,774; July 26.
Greve, Greman L., Brooklyn, N. Y. Mailing package. 1,636,774; July 26.
Greve, Greman L., Grewe, Greman L.,

assignor.)
Grey, Robert B., London, England. Machinery foundation. 1.633.940; June 28.
Grey, William G., Baltimore, Md. Duplex umbrella.
1.628,539; May 10.
Gribbie, Arthur. (See Williams, William G., assignor)
Gribbie, Elmer T., assignor of one-half to R. E. Richard,
Coallings, Calif. Sucker-rod turner. 1.633.092;

Grid-Iron-Grip Company. (See Slauson, Louis E., as-

Signor, Louis E., as-signor, Richard. (See Westphal, C., and Grieger.) Grieger, Richard. (See Westphal, C., and Grieger.) Grien, Joseph, Chicago, Ill., assignor to Hamilton-Ross Factories, Inc. Bracket for electric lamps. Des. 73,498; Sept. 20.

Factories, Inc. Bracket for electric lamps. Des. 73.498; Sept. 20.
Gries. Frank X., assignor to C. J. Reitz, Sunbury, Pa. Stoveple lock. 1.631.027; May 31.
Gries. Lester M., assignor of one-half to Master Woodworker Manufacturing Co. and one-half to Master Woodworker bine. 1.640.933; Aug. 30.
Griesbaum, Maurice W., Cincinnati, Ohio. Lunudry marking machine. 1.650.068; Nov. 22.
Griesbaum, Maurice W., Cincinnati, Ohio. Lunudry marking machine. 1.650.068; Nov. 22.
Griese, Elmer G., Toledo, Ohio. Detachable power unit Company, Toledo, Ohio. Radiator construction. 1.648.964; Nov. 8.
Griesedieck. Robert J., St., Louis, Mo. Shank reenforcement. 1.628.960; May 17.
Griesdiege, John. Los Angeles, Calif. Identification de-Grieve, Medford A. (See Burr, H. B., and Grieve.)
Griewank, Arthur C., Oakland, Calif. Concrete rallway Griewank, Arthur C., Oakland, Calif. Concrete rallway Griffes, Arthur R. Wwoming, Ohio, assignor, by mesne assignments, to The Flintchet Company, Boston. Mass. Display device. 1.648.987; Nov. 15.
Griffey, Dinney F., assignor of one-half to R. N. Cox, Red Jacket, W. Va. Rallway-switch locking and operating means. 1.627.503; May 2.
Griffin, Charles. Ypsilanti, Mich. Combined coffee and tea pot. 1,631,932; June 7.

Griffin, David G., Chattanooga, Tenn. Chemical container. 1,617,155; Feb. 8.
Griffin, Frank W., Galesburg, Ill. Clothesline reel. tamer. 1,617,155; Feb. 8.

Griffin, George B., Pittsburgh, Pa. Container for artificial bait and the like. 1,624,233; Apr. 12.

Griffin, George B., Pittsburgh, Pa. Container for artificial bait and the like. 1,624,233; Apr. 12.

Griffin, Harry. West Branch, Mich. Animal trap. 1,048,765; Nov. 8.

Griffin, James B., Waterbury, Conn. Vanity box. 1,631,133; Ju. 26.

H. Waterbury, Conn. Vanity box. 1,631,133; Ju. 26.

Griffin, James B., Waterbury, Conn. Vanity box. 1,631,133; Ju. 26.

Griffin, James T., assignor of forty per cent to F. C. Graddick and thirty-five per cent to H. C. Hargrove, Winder, Ga. Belt. 1,636,602; July 1,9 and Griffin, Joseph E., Savannah, Ga. Airplane wing construction. 1,630,938; May 31.

Griffin, Joseph E., Brooklyn, assignor to The Superheater Company, New York, N. Y. Pressure gauge. 1,621,320; Mar. 15.

Griffin, Samuel P., Sulphur Springs, Fla. House-moving truck. 1,641,848; Sept. 6.
Griffin, Wayne M., Mönchester, N. H. Musical instru-ment. 1,633,199; Dec. 20.
Griffin Wheel Company. (See Vial, F. K., and Evans,

Griffin, John N. Scottchild, Gr. Fastening device for Griffith, John N. Scottchild, N. Y. Aspining Company.

Griffin, William A., Buffalo, N. Y. Aspparatus for charging cupolas and the like. 1643,208; Sept. 283gnor.) Griffith, Charles G. (See Meyer, Julius A., assignor.) Griffith, Charles G. (See Griffith, George W., assignor.) Griffith, Laurel, Griffith, Laurel, Griffith, Isaac E., Lowell, Ind. Portable swing. 1.646,089; Oct. 18.

Griffith, James, New Toronto, Onfario, Canada, assignor to The Brunswick-Balke-Collender Company. Wilmington, Del. Bowling siley. 1.635,784; July 12.

Griffith, John N., Scottchild, Gr. Fastening device for Griffith, John N., Scottchild, Gr. Fastening device for Griffith, John N., Scottchild, Gr. Fastening device for Griffith, Morgan J., Schenectady, N. Y., assignor to General Electric Company. Suspension of trolley wires. 1.643,209; Sept. 20.

Griffith, Nick. (See Casselman, E. J., Griffith, and Johnson.)

1.643.209; Sept. 20.

Griffith, Nick. (See Casselman, E. J., Griffith, and Johnson).

Griffith. Palmer W. (See Buchanan, G. H., and Griffith).

Griffith. Palmer W. (See Buchanan, G. H., and Griffith).

Griffith. Forter M., assignor to Gruenbagen's, San Fran
Griffith. Rorter M., assignor to Gruenbagen's, San Fran
Griffith. Richard H., Richmond, Ind., assignor to TheOhio Cultivator Company, Bellevue, Ohio. Cultivator.

1.619.862: Mar. 8.

Griffith. Richard H., Richmond, Ind., assignor to TheOhio Cultivator Company, Bellevue, Ohio. Cultivator.

1.649.825: Nov. 22.

Griffith. Richard H., Richmond, Ind., assignor to TheOhio Cultivator Company, Bellevue, Ohio. Cultivator.

1.649.825: Nov. 22.

Griffith. Thomas R., Dover, N. J., assignor to Western

Electric Company, Incorporated New York, N. Y.

Griffith. Thomas R., Dover, N. J., assignor to Rell Tele
phone Laboratories, Incorporated, New York, N. Y.

Flectron-discharge device. 1.647.617; Nov. 1.

Griffith, William B., Philadelphia, Pa., assignor to Star
Sprinkler Corporation, Valve, 1.636.131; July 10.

1.646.4076: Dec. 27.

Griffiths, George F., Mount Vermon, N. Y. Paper clip.

Griffiths, George F., Mount Vermon, N. Y. Machine for

and making paper clips. 1.654.077; Dec. 27.

Griffiths, Harry A., Edzbaston, England. Sheet-feeding.

Griffiths, Harry A., Edzbaston, England. Sheet-feeding.

Griffiths, Hichard T., (See Steele, C. W., and Griffiths,

Griffiths, Richard T., (See Griffiths, Harry A. and R. H.)

Griffiths, Richard T., (See Steele, C. W., and Griffiths,

Griffiths, Richard T., (See Steele, C. W., and Griffiths,

Griffiths, Richard T., Toronto, Ontario, Canada. Con
Trame. 1.618.227; Feb. 22.

Griffiths, William D., Philadelphia, Pa., Valve operating.

Griffiths, William L., Philadelphia, Pa., Lave operating.

Griffiths, William L., Philadelphia, Pa., Lave operating.

Griffiths, William L., Philadelphia, Pa., Lave operating.

May 31.

Griffiths, William U., Philadelphia, Pa. Valve operating means for flush tanks. 1.220.647; Mar. 15.

Griffiths. William U., Philadelphia, Pa. Actuating flush tank valves. 1.620.648; Mar. 15.

Griggs, Froncis G., Rosetown. Saskatchewan, Canada. Cultivator. 1.636.936; July 26.

Griggs, Frod D., Springheld Mass. Signboard or article-of-similar nature. Des. 71.791; Jan. 4. F., assignor.)

Grigsby, Rettram J., (See Ginow, William C., assignor.)

Grigsby, Bertram J., Park Ridge, Ill. Drink mixer. 1.615.875; Feb. 1.

Grigsby-Grunow-Ilinds Co. (See Grigsby, Owen E., assignor.)

Grigsby-Grunow-Hinds Co. (See Grunow, W. C., as-

signor.)

Grigsby-Grunow-Hinds Co. (See Johnson, Bernard G.,

Grigsby-Grunow-Hinds Co. (See Johnson, Bernard G., assignor.)
Grischy, wen E., Park Ridge, assignor to Grigsby-Grunow-Grischy, wen E., Park Ridge, assignor to Grigsby-Grunow-Grigsby-Grunow-Hinds Co., Chicago, III. Weather shield and glare Grigsby-Owen E. Park Ridge, assignor to Grigsby-Grunow-Hinds Co., Chicago, III. Visor for automobiles. Grigsby, Owen E. Park Ridge, assignor to Grigsby-Grunow-Hinds Co., Chicago, III. Automobile wind-griunow-Hinds Co., Chicago, III. Automobile wind-grikscheit, William, Detroit, Mich. Carburetor. 1,627,845; May 10.

Grikscheft, William, Detroit, Mich. Carburetor.
1,634,461; July 6.
1611,617,633; Feb. 25. Francisco, Calif. Automatic gun.
1,618,528; Feb. 25.
1,618,528; Feb. 25.

IJO15,528; Feb. 22.
Grill, Eugen. (See Pfisterer, Karl, assignor.)
Grillo, Stanley, and J. Guerra, Tuckahoe, N. Y. Animated wind-operated ornament. I,635,937; July 12.
Grimalid, Ignatius B., Brooklyn, N. Y. Automatie light indicator for planos. I,642,810; Sept. 20.
Grimble, Frank, M. N. Chird, and E. Combs, London, England. Centrifugal separating apparatus. I,649,846;

Grimditch, William H. (See Holland, W. E., and Grim-

Grimditch, William H., assignor to Philadelphia Storage Grimditch, William H., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Wood separator and preparing same. I,638,765; Aug. 9. Grimes, Archie E., Decatur, Ohio. Incubator. 1,654,372; Dec. 27.

Dec. 27.

Grimes, David, Tompkinsville, N. Y., assignor to American Telephone and Telegraph Company. Alternating-current relay. 1,621,533; Mar. 22.

Grimes, Frank M., Eldorado, assignor of one-half to II. P. Hanson, Wichita. Kans. Internal-combustion engine. 1,612,917; Jan. 4.

Grimes, Robert B. (See Founds, Edison A., assignor.)

Grimes, William F., Washington, D. C. Insulator. 1,649,111; Nov. 15.

Grimley, William, Smethwick, England. Syringe or sprayer. 1,653,562; Dec. 20.

Grimm, Frank V. (See Rogers, F. M., Grimm, and Wendt.)

Wendt.)
Grimm, Gerhardt D., Springfield, assignor to Westüeld
River Paper Company, Russell, Mass. Paper and coating the same. 1,614-611. Jan. 18.
Grimm, Gerhardt E., Springfield, assignor to Westfield
River Paper Company, Russell, Mass. Coated paper
and making the same. 1,617.945; Feb. 15.
Grimm, Gerhardt E., Springfield, assignor twestfield
River Paper Company, Russell, Mass. Coated paper
and making the same. 1,617.945; Feb. 15.
Grimme, Natalis & Co., Aktiengesellschaft. (See Hoffmeister, Hermann, assignor,
Grimme, Natalis & Co., Aktiengesellschaft. (See Schilter, Willi, assignor.)
Grimme, Natalis & Co., Aktiengesellschaft. Braunschweig.
Grimme, Natalis & Co., Aktiengesellschaft. Braunschweig.
Grimme, Natalis & Co., Aktiengesellschaft. Braunschweig.

ctr., Willi, Assignor.; Grimme, Natalis & Co. Aktiengesellschaft, Braunschweig, Germany. (See Wernecke, Otto, assignor.) Grimshaw, William, Glen Ellyn, III. Fusible link. 1.613,453; Jan. 4.6 (Frank.) Grings, Frank. (See Travnicek, Frank.) Grings, Casper II., assignor to Waterloo Saddlery Company, Waterloo, Iowa. Shaping and stapling machine. 1.647,443; Nov. 1.

1.647.443; Nov. 1.

Grinoch, Jacob B. (See Vogel, M. J. and Grinoch, Jacob B. and S., Bronx, N. Y., Continuously-Grinoch, Jacob B. and S., Bronx, N. Y., Continuously-Grinoch, Simou., (See Grinoch, Jacob B. and S.) Griplock, Inc. (See Grinoch, Jacob B. and S.) Griplock, Inc. (See Grinoch, Jacob B. and S.) Griplock, Inc. (See Lurcott, Winfred N., assignor.) Grip Nut Company. (See Sharp, William E., assignor.) Griscom, Alfred C., assignor to King Sanitary Pipe Cleaner Company, Sandy Hook, Conn. Cutter for milk-bottle seal rings. 1,625,603; Apr. 19.

Griscom-Russell Company, The. (See Bogardus, Arthur G., assignor.)

G., assignor.)
Griscom-Russell Company, The. (See Dewald, Edward A., assignor.) Griscom-Russell Company, The. (See Jones, Russell C.,

assignor Griscom Russell Company, The. (See Pabodic, Robert J.,

assignor.) Griscom-Russell Company, The. (See Price, Joseph, assignor.) Griscom-Russell Company, The. (See Sebald, Leslie E.,

Griscom-fussell Company, The. (See Schald, Leslie E., assignor; Grisdale, George W., assignor to The Brown Instrument Company, Philadelphia, Pa. Multiple switch. 1.615,450; Jan. 25. (See Hoard, Milo C., assignor.) Grisco W. endocod, Burido, N. Y. Sound-vibration-translating device. 1.628,242; May 10. Griswold, Andrew E., Scattle, Wash. Safety switch. 1.629,158; May 17. Griswold, Fred C., Newark, and W. H. Chapman, Montchir, N. J., assignors to General Motors Corporation, Christoft, Mich. Gauging machine. 1.627,639, May 10. Griswold, Fuch. Guideng machine. 1.627,639, May 10. Griswold Fuch. 1.644,015; Oct. 4.

Griswold, John W., Warren, Pa., assignor to Henry L., Doberty & Company, New York, N. Y. Method of and apparatus for controlling the combustion of fuel in furnaces. 1,644,123; Oct. 4.
Griswold, Leater E., Columbus, Ohlo. Thong cutter. 1,621,718; Mar. 22.
Griswold Manufacturing Company. (See Massing, Charles Griswold Manufacturing Company.

Griswold, Lester E., Columbus, Ohlo. Thong cutter.

1,621,718; Mar. 22.

Griswold, Robert G., Westfield, N. J., assignor to Doherty Research Company, New York, N. Y. Distilling coal.

Griswold, Robert G., Westfield, N. J., assignor to Doherty Research Company, New York, N. Y. Distilling coal.

Griswold, Robert G., Westfield, N. J., assignor to Doherty Research Company, New York, N. Y.

Griswold, Robert G., Westfield, N. J., assignor to Doherty Research Company, New York, N. Y.

Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,645,623; Oct. 11.

Griswold, Walter R., assignor to Forty & Dudley Company, Inc., Nashville, Froot warmer for furnaces. 1,047,828; Nov. 1.

Gritman, Abel D., Philadelphia, Pa. Dental apparatus. 1,645,649; Oct. 25.

Gritman, Add D. and C., Spokane, Wash. Storage battery, 1,645,668; Oct.

Gritton, Alpheus J., Fairmont, Minn. Timepiece. 1,950,123; Nov. 22.

Griveau, Pierre B. J., Paris, France. Dental forceps. 1,455,0123; Nov. 22.

Griveau, Pierre B. J., Paris, France. Dental forceps. 1,636,661; July 26.

Grizzard, George D., Nerth Emporia, Va. Peanut digger. Groak, Irwin D., Groek Chen, Irving H., assignor: Offorbe, Julius J., Chicago, Ill. X-ray operating table. 1,625,043; May 10.

Groeh, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Petroit, Mich. Fire-pot construction. 1,618,981; Mar. 1.

Groehn, Otto J., and W. Blaskewitz, assignors to Clayton & Lambert Manufacturing Company, Detroit, Mich. Fire-pot construction. 1,639,983; Aug. 23.

Groen, William F., assignor to The R. K. Leblond Machine Tool Company, Cincinnati, Ohlo. Crank-shaft lattle. 1,633,083; June 28.

Groen, Groun, William C., and J. C. Cromwell, Columbus, Ohlo, assignors, by messe assignments, to Testite Commany, assignor to the Firm Naamlooze Vennootschap Financiele Mantschappi) "Drivebergen," Scheveningen, Netherlands, Record cylinder carrier of speech-record. Groenesteit, Phillp, Cleveland, Ohlo. Combined clare ashield and a supporting bracket therefor. Des. 7,

Groff, James O. (See Seymour, W., Jr., Groff, and Schaaf.)
Groff, Sutten H., Long Beach, Calif. Diathermy knife 1,639,996; Aug. 23.
Groff, William A., Philadelphia, Pa. Permanent-hair waving device. 1,624,336; Apr. 12.
Groff, Groff, Groff, Groff, Groff, Jacob B., Los Angeles, assignor of one-half to J. H. Groh, Jacob B., Los Angeles, assignor of one-half to J. H. Groh, Ocean Park, Calif. Sign. 1,642,022; Sept. 13.
Groh, Melvin S., Toronto, Ontario, Canada, and J. Halls, assignors, by meen eassignments, to Truscon Steel Company. The Section of the Company of the Company

L., assignor.)
Grolan Manufacturing Company, The. (See Cole, C. M., and Adams, assignors.)
Grolan Manufacturing Company, The. (See Frank, Walter N., assignor.)
Grolan Manufacturing Company, The. (See Groves, Frank A. and J. F., assignors.)
Grolan Manufacturing Company, The. (See Hill, Reuben, The Company)

Groian Manufacturing Company, The. (See Illi, Reducing assignof.)
Groian Manufacturing Company, The. (See Riphingillie, Edward V., assignor)
Gromecko, John. (See Trootneff, M., and Gromecko,)
Gromberg, Clarence O., assignor of one-third to A. M.
Price, Eighn, Ill. Lead penell. 1,613,608; Mar. 1.
Grondahl, Lars O. (See Lee, F. W., and Grondahl.)

Grondahl, Lars O. (See Nettleton, L. L., and Grondahl,) Grondahl, Lars O. Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway signaling. Rel6,744; Sept. 27. Grondahl, Lars O., Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway signaling. Rel6,744; Nov. Swissyale, Pa. Railway signaling. Rel6,745; Nov. Swissyale, Pa. Railway signaling. Rel6,745; Nov. Swissyale, Pa. Railway signaling. 1,619,928; Mar. S. Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway-Rondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway-traffic-controlling apparatus. 1,629,617; May 24. Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Electrical Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway-Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Unioffectional current-carrying device, 1,640,335; Aug. 23. Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway-Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway-traffic-controlling apparatus. 1,653,652; Dec. 27. Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway-traffic-controlling apparatus, 1,653,655; Dec. 27. Grondahl, Lars O., Pittsburgh, and H. M. Ryder, Forest H. Signal Company, Swissyale, Pa. Electrical apparatus. 1,653,666; Grondehl, Lars O., Pittsburgh, and H. M. Ryder, Forest H. Signal Company, Swissyale, Pa. Electrical apparatus. 1,653,661; July S. Grondehl, Lars O., Pittsburgh, and H. M. Ryder, Forest M. Signal Company, Swissyale, Pa. Electrical apparatus. 1,653,661; July S. Grondehl, Lars O., Pittsburgh, and H. M. Ryder, Forest M. Signal Company, Swissyale, Pa. Electrical apparatus. 1,659,666; Grondehl, Lars O., Pittsburgh, and H. M. Ryder, Forest M.

Gronniger, Holmes B., Port Royal, Pa. Welding furnace, 1,617,804; Feb. 15.
Gronke, Barney, Chicago, Ill., assignor to International Harvester Company. Stone shield for conveyer supports. 1,646,452; Oct. 25.
Gronkwist, Oscar R., Stockholm, Sweden. Method of and apparatus for atomizing liquid fuel. 1,625,997;

apparatus Apr. 26.

appratus for atomizing inquie fuel. 1,625,997; Apr. 26.
Gronner, George, Davenport, Iowa. Swivel plpe joint. 1,625,536; Ap. 149.
Grönningsaeter, Stard. Brooklyn, assignor of one-half to French and the Stard. Inc., New York, N. Y. Transferring vitamines. 1,629,618; May 24.
Grönross, Jakob, Fairport Harbor, Ohio. Stair rods. 1,628,662; May 17.
Gronski, Charles, Sheridan, Wyo. Cramping device. 1,618,634; Feb. 22.
Groote, Australia, Desadfort, Germany. Combination barrating machines of the monotype typesetting-machine system. 1,635,748; July 12.
Groove-Lock Co. (See Zeindihofer, Anton, sr., assignor.) Gross, Edward P., Canajoharle, N. Y. Coffee percolator. 1,615,542 Jan. 25.
Gross. Frank E. Johns, Victoria, Australia. Jig-saw Gross. Oran W., Vermilion, Ill., and H. Fisher, Terre Haute, Ind. Multirheostat. 1,613,994; Jan. 11.
Grossien, James E., Lima, Ohlo. Shoe sole. Des. 72,201: Feb. 15.

Grosjean, James E., Lima, Ohio. Shoe sole. Des. 72,201; Mar. 15.

Grossean, James E., Lima, Ohio. Snoe soic. Des. 12,205; Mar. 15.
Grossean, James E., Lima Ohio. Heel for boots and shoes. 1,650,511. Nov. 22.
1,635,738; July 12, Illiadelphia, Pa. Button fastener. 1,635,738; July 12, Illiadelphia, Pa. Button fastener. 1,635,738; July 12, Illiadelphia, Pa. Button fastener. 1,670,88; July 12, Illiadelphia, Pa. Gross Co. Inc., New York, N. Y. Finger ring or article of similar nature. Des. 72,477; Apr. 19.
Gross, Benjamin, assignor to Benjamin & Edward J. Gross Co. Inc., New York, N. Y. Finger ring or article of similar nature. Des. 72,596; June 21.
Gross, Chinc, New York, N. Y. Finger ring or article of similar nature. Des. 72,596; June 21.
Gross, Ceell, Elkins, W. Va. Combined log-deck block and kicker structure. 1,617,757; Feb. 15.
Gross Chandeller Co. (See Bakula, Frank A., assignor.) Gross, Christian, Paris, France. Money holder. 1,637,386; Apr. 18.
Gross, Calvard H., Stamford, Conn. Temperature control of the air constituent of fuel for explosive engines. 1,639,382; Aug. 16.
Gross, Emil, Wauwatosa, and E. J. Brikner, assignors to Allis-Chalmers Manufacturing Company, Milwauke. Wis. Hydraulic turbine. 1,641,755; Sept. 6.

Gross, Ernest A., La Moille, Minn. Armament. 1,642,855; Sept. 20.
Gross, Frederick J., Auburn, Me. Heeled shoe. 1,645,191; Oct. 11.61 m. V. Uniopols, Ohio. Checkrow corn planter. 652,714; Dec. 13.
Gross, Moris, New York, N. Y. Tire rim. 1,629,913; May 24.
Gross, Moses, Fort Worth, Tex. Transportation container. 1,611.030; Aug. 30.
Gross, Faul M., and R. B. Arnold, Durham, N. C., assigned the container. 1,621.031; Aug. 30.
Gross, Faul M., and R. B. Arnold, Durham, N. C., assigned Chemical. Corporation. Fundating apparatus. 1,634.354; July 5.
Gross, Ralph, Buffalo, N. Y. Automatic railway signal. 1,628,663; May 17.
Grossbard, Barnet, San Francisco, Calif. Motor attachment for sewing machines. 1,638,259; Aug. 9.
Grossen, Faul M., and Grossen, Calif. Arc attachment for sewing machines. 1,648,267; Nov. 8.
Grossenbacher, Henry E., Overland, Mo. Cooking utensil. 1,046,858; Oct. 25.
Grosser, Hans, Buenos-Aires, Argentina, assignor to the Firm United States Import House Emanuel Van 10. printing india-rubber balloons in an indiated condition. 1,646,021; Oct. 18.
Grossinger, Anton, Milwaukee, Wis. Building construction. 1,644,996; Oct. 11.
Grossman, Herman P., Boonville, Ind. Corn shredder and husker. 1,628,461; May 10.
Grossman, Samuel, assignor to David Klebanoff and Samuel Grossman, Cooparters trading under the firm

signor.)
Grossman, Samuel, assignor to David Klebanoff and Samuel Grossman, copartners trading under the firm name of Klebanoff and Grossman, New York, N. Y.
Finger ring. Des. 72,150; Mar. 8.
Grossman, Samuel, assignor to D. Klebanoff and S. Grossman, copartners trading under the firm name of Klebanoff and Grossman, New York, N. Y.
Finger ring.
Des. 72,766 and Grossman, New York, N. Y.
Finger ring. Des. 72,795;
June 7.
Grossman, Samuel, assignor to K. Klebanoff and Grossman, New York, N. Y.
Finger ring. Des. 72,796;
June 7.

Grossman, Sa man, New June 7.

June 7.

Grossmann, Max. (See Loebe, W., and Grossmann.)

Grossmann, Max. (See Loebe, W., and Grossmann.)

Grossmon, Graham B., Chicago, III., assignor to Otis

Elevator Company, Jersey City, N. J. Electric elevator

grossmon, Graham B., Chicago, III., assignor to Otis

Elevator Company, Jersey City, N. J. Electric elevator

system. 1,632,226; June 14.

Grossmon, John E., Chaddesley Corbett, and W. T.

Pleking, Kidderminster, England. Shedding and shut
tle-actuating mechanism for looms. 1,617,388;

Feb. 16.

Grosvenor, John E., Hagley, and W. T. Picking, Kidderminster, assignors to Woodward Grosvenor and Company Limited, Worcester Cross, Kidderminster, Engiand. Shuttle-actuating mechanism for looms.
1,648,897: Nov. 15.
Grosvenor, William M., and V. P. Gerskon, New York,
N. Y.; said Gershon assignor to said Grosvenor.
Anthraquinone paste and making the same. 1,631,589;
June 7.

June 7.

Grosvold, Fred E., Eau Claire, Wis. Flexible waste-pipecleaner, 1.638.766; Aug. 9.

Grotendorst, Willem F., Helder, Netherlands. Apparatus
for indirectly laying antialreraft guns. 1.615.509;
Jan. 25.

Grotendorst, Willem F., Helder, Netherlands. Tabular
calculating apparatus particularly for use in the laying
ordinance. 1.615.510; Jan. 25.

Grotendorst, Terminance of fire of ordinance.
1.615.511; Jan. 25.

Grotendorst, James T., Orange City, Iowa. Oil burner.
1.635.836; July 12.

Grotche Honry, Le Sueur Center, Minn. Auger for postGrotche Honry, Le Sueur Center, Minn.

1,035,836; July 12.

Grothe, Henry, Le Sueur Center, Minn. Auger for postholes and wells. 1,639,939; Aug. 23.

Grotta, 1,639,939; Aug. 24.

Grotta, Sidney S., assignor to Haritord-Empire Company, Haritord, Conn. Method and apparatus for making glass tubing. 1,653,848; Dec. 27.

Ground Coal Engineering Corporation. (See Arrowood, Milton W., assignor.)

Grott, Martin B., assignor to Kellogg Switchboard and Apr. 1, Company, Chicago, Ill. Coil. 1,625,466; Grott Martin B.

Apr. 19.

Grout, Martin B., assignor to Kellogg Switchboard and Supply Company. Chicago, Ill. Tension device. 1,637,438; June. 2

Grout, Ransom A., San Bruno, Calif. Telegraph-receiving instrument. 1,627,630; May 3.

Grove, Charles O. (See Blair, M. and Grove.)

Grove, Charles O. (See Blair, M. and Grove.)

Grove, Thomas E. (See Binkley, R. S., Stutsman, and Grove.)

Grove, Albert D., Long Island City, N. Y. Banjo con-struction. 1,636,001; July 19.

Grover, Albert D. New York, and L. H. Bertram, Long Land City, N. Y. Armrest for banjos. 1,642,611, Sept. 20.
Grover, Frederick, assignor to The Forgrove Machinery Company Limited, Leeds, England. Controlling the Red of continuous strip material, 1,617,947; Feb. 15.
Grover, Frederick, assignor to The Forgrove Machinery Company Limited Leeds, England. Apparatus for dividing plastic material into England. Apparatus for dividing plastic material into England. Apparatus for dividing plastic material into England. 1,653,607; July 12.
Grover, Ray, Milwaukee, Wis. Piston ring. 1,653,607; July 12.
Grover, Ray, Milwaukee, Wis. Piston ring. 1,653,607; July 12.
Grover, St. Nov. S.
Grover, July 12.
Groves, Frank A. and J. F., assignors to The Grolan Manufacturing Company, Dayton, Obio. Gasoline gauge. 1,639,541; Aug. 46.
Groves, Lucian S., assignor, by mesue assignments, to Stewart Manufacturing Company, Boston, Mass. Bottle Groves, Million S., assignor, by mesue assignments, to Stewart Manufacturing Company, Boston, Mass. Bottle Groves, Milliam B., Marysville, Califf. Hund truck. 1,615,942; Feb. 1.
Groves, George, East Chicago, Ind. Engine manifold. 1,613,995; Jan. 11.
Growe, George, East Chicago, Ind. Engine manifold. 1,613,995; Jan. 11.
Grove, George, East Chicago, Ind. Engine manifold. 1,613,995; Jan. 11.
Gruph, William B., Marysville, S. C. Arbor for drafting Gruph, William B., Marysville, S. C. Arbor for drafting Gruph, William B., Marysville, S. C. Arbor for drafting Gruph, William B., Marysville, S. C. Arbor for drafting Gruph, William B., Marysville, Califf. Hund truck. 1,615,942; Feb. 1.
Groves, Lucian S. Santa Ana, Califf. Miter box. 1,638,011; Aug. 9.

Grubbs, Clark, Santa Ana, Calif. Miter box. 1,638,011; Aug. 9.

Gruber, George S., Scotia, N. Y. Oilstone box. 1,642,654;

Gruber, George S., Scotia, N. Y. Ollstone box. 1,642,654; Sept. 13.
Gruber, Joseph, Sloux Falls, S. Dak. Heater and purifier. 1,623,242; Apr. 5.
Graber, Morris M., East Orange, N. J., assignor, by mesne assignments, to Sonora Paonograph Company, Inc., New York, N. Y. Tone arm for phonographs. 1,619,467; Mar. 1.
Gruber, Morris M., East Orange, N. J., assignor, by mesne assignments to Sonora Phonograph Company, mesne assignments to Sonora Phonograph Company, Gruber, Marine M., East Orange, N. J., assignor, by Gruber, Samuel A., assignor of one-bulf to H. N. Cribbs, Verona, Pa. Gripping tool. 1,618,121; Feb. 1.
Gruber, Sidney, St. Paul, Minn. Watchmaker's pliers, 1,637,108; July 26.
Grubert, Emil H., Los Angeles, Calif. Valve mechanism for internal-combustion engines. 1,617,710; Feb. 15.

Grubman, Anton L. Belle Harbor, N. Y., assignor to device, 1,631,9203; Mar. T. Grubman, Anton L., Belle Harbor, N. Y., assignor to device, 1,631,9203; Mar. T. Volces, Incorporated, Newark, N. J. Sound-producing device, 1,634,499; Dec. 27.
Grubman, Anton L., Belle Harbor, N. Y., assignor to Volces, Incorporated, Newark, N. J. Sound-producing device, 1,654,499; Dec. 27.
Grubman, Leo J., (See Godley, B. A., and Grubman, Leo J., Belle Harbor, Long Island, assignor to Volces, Locyporated, Newark, N. J. Sound-producing device, 1,627,384; May 3.
Grubman, Leo J., Belle Harbor, N. Y., assignor to Volces, Locyporated, Newark, N. J. Sound-producing device, 1,627,384; May 3.
Grubman, Leo J., Belle Harbor, N. Y., assignor to Volces, Incorporated, Newark, N. J. Sound-producing device, 1,664,497; Dec. 27.
Grubman, Leo J., Belle Harbor, N. Y., assignor to Volces, Incorporated, Newark, N. J. Sound-producing device, 1,664,498; Dec. 27.
Grubman, Leo J., New York, N. Y., assignor to Volces, Incorporated, Newark, N. J. Sound-producing device, 1,664,496; Dec. 27.
Grubman, Leo J., New York, N. Y., assignor to Volces, Incorporated, Newark, N. J. Sound-producing device, 1,664,496; Dec. 27.
Grubman, Leo J., New York, N. Y., assignor to Volces, Incorporated, Newark, N. J. Sound-producing device, 1,664,496; Dec. 27.
Grubman, Leo J., New York, N. Y., assignor to Volces, Incorporated, Newark, N. J. Sound-producing device, 1,664,496; Dec. 27.
Grubman, Leo J., Belle Harbor, and E. A. Godley, New York, N. Y., assignor to Volces, Incorporated, Newark, N. J. Sound-producing device, 1,664,496; Dec. 27.
Grubman, Leo J., Belle Harbor, N. Y., assignor to Volces, Incorporated, Newark, N.

Grubs, Frank, Larchmount, N. Y., assignor of one-half to B. E. Weber, San Antonio, Tex. Shoe. 1,652,354;

B. E. Weber, San Antonio, Tex. Shoe. 1,652,354; Dec. 31.
Grudzinski, Alexander, Cambridge Springs, Pa. Thermostatic gasoline valve. 1,619,612; Mar. 1.
Gruen, Frederick G., assignor to The Gruen National Watch Case Company, Cincinnatt, Ohio. Watchease, Des. 73,517; Sept. 27.
Gruen, Frederick G., assignor to The Gruen Watch Company, Cincinnatt, Ohio. Watchease. Des. 73,606; Oct. 11.

Gruen National Watch Case Company, The. (See Gruen, Frederick G assignor.) Gruen Watch Company, The. (See Gruen, Frederick G.,

Gruen National Watch Case Company, The. (See Gruen, Frederick G assignor, The. (See Gruen, Frederick G assignor). The Company, The Company, The Company, The Company, The Company of the C

Grunderg, George, New York, N. Y. Perfume bottle.
Des. 72,096; Mar. 1.
Grunderg, George, New York, N. Y. Perfume bottle.
Des. 72,554; May 3.
Grunderg, George, New York, N. Y. Perfume bottle.
Des. 72,554; May 3.
Grunderg, George, New York, N. Y. Perfume bottle.
Des. 72,620; May 10.
Grunderg, George, New York, N. Y. Perfume bottle.
Des. 72,622; May 10.
Grunderg, George, New York, N. Y. Perfume bottle.
Des. 72,622; May 10.
Grunderg, George, New York, N. Y. Perfume bottle.
1,647,843; Feb. 15.
Grunderg, George, New York, N. Y. Perfume bottle.
1,647,173; Nov. 1.
Grunderg, George, New York, N. Y. Perfume bottle.
1,647,175; Nov. 1.
Grunderg, George, New York, N. Y. Perfume bottle.
1,647,175; Nov. 1.
Grunderg, George, New York, N. Y. Perfume bottle.
1,647,175; Nov. 1.
Grunderg, George, New York, N. Y. Perfume bottle.
1,647,175; Nov. 1.
Grunderg, George, New York, N. Y. Perfume bottle.
1,647,175; Nov. 1.
Grunderg, George, New York, N. Y. Perfume bottle.
1,647,176; App. 10.
Grunderg, George, New York, N. Y. Life-saving boat.
1,649,403; Nov. 15.
Grunderg, George, New York, N. Y. Life-saving boat.
1,649,403; Nov. 15.
Grunderg, George, New York, N. Y. Life-saving boat.
1,649,403; Nov. 15.
Grunderg, George, New York, N. Y. Life-saving boat.
1,649,70; Crunderg, Grunderg, Grunderg,

Jan. 11.

Grunert, Arthur E., and A. D. Bailey, Chicago, III. Furnace construction. 1.614.295; Jan. 11.

Grünewälder, Karl. (See Kämpf, A., and Grünewälder.)

Grunow, Wm. C. assignor to Grisby-Grunow-Hinds Co. Chicago, III. Weather shield and glare visor for vehicles. 1.415.080; Jan. 18.

Grunow, William C., assignor of one-half to B. J. Grigsby, Clucago, III. Sound reproducer. 1.630.742; May 31.

Gülcago, III. Sound reproducer. 1.630.742; May 31.

Gülcago, III. Sound reproducer. 1.630.742; May 31.

signor.)
Grunwald, Albert C., River Forest, assignor to Precision
Metal Workers, Chicago, Ill. Sheave. 1,627,558;

Grinwald, Albert C. Meyer Forest, assignor to Precision Metal Workers, Chicago, III. Sheave. 1,627,558; Grinwald, Albert C. River Forest, assignor to Precision Metal Workers, Chicago, III. Receptacle cover. 1,640,934; Aug. 30. Grunwaldt, Frank E. Seatle, assignor to Gabriel Tubular Furnace Co. Inc., Tacoma, Wash, Furnace. 1,621,066; Grupe, William F. Lyndhurst, N. J. Transfer medium for metallizing purposes. 1,627,058; May. 3 Grupe, William F. Lyndhurst, N. J., assignor to H. H. Sitaus, New York, N. Y. Cork facing. 1,618,704; Grupe, William F. Lyndhurst, N. J., assignor to En Iless Relt Corporation, Inc. Delivery-control device for eigerette making machines. 1,633,377; June 21. Grupha, Walter, Detroit, Mich. Toy pistol. 1,644,397; Oct. 11. bol the Grupka Walter, Detroit, Mich. Grupka, Walter, Detroit, Mich. Grupka, W. F., and Gruse, Oruce, William A. (See Marley, S. P., and Gruse.)

Grutter, Otto C., Creston, Ill. Water-heating apparatus. 1,628,664; May 17.
Gruver, Perry F., Amarillo, Tex. Bearing for grain separators. 1,631,3610; June 7.
Gscwind. Herman A. E. Apr. 12.
Gscwind. Herman A. E. Apr. 12.
Gscwind. Leon, Youngstown, Ohlo. Manhole, valve box, and the like. 1,635,626; Dec. 27.
Gstalder, Paul A., Pittsburgh, Pa., assignor to Blaw-Knox Company. Tie rod and bridging for joists. 1,649,226; Nov. 15.
Guarvantee Liquid Meaure Company. (See Townsend, Guarneri, Stephen J., now by judicial change of name Stephen J. Gary, assignor of one-half to J. E. Lewis, New York, N. Y. Cross-jointed metal bar. 1,622,235; Mar. 22.
Guay, Joseph A., Lynn, Mass. Friction device. 1,052,117; Dec. 6.
Guay, Joseph E., Whitehall, N. X. Identification device. 1,052,117; Dec. 6.
Guay, Joseph A., Lynn, Mass. Friction clutch. 1,637,154; July 26.
Gliba, John, assignor of one-fourth to A. Andrekovics, Lethbridge, Alberta, Canada, Adjustable pitman for Gubelmann, Ivan. Socuth Milwaukee, assignor, to The Newmann.)

rbelmann, Ivan, South Milwaukee, assignor to The New-port Company, Carrollville, Wis. Para'-amino-ortho-benzoyl-benzoic acid and making the same. 1,654,290;

1,654,290;

port Company, Carrollville, Wis. Fara'-amino-orthobenzoyl-benzoic acid and making the same. 1,654,290; Dec. 27.

Gluelman, Iyan, H. J. Welland, and O. Stallman, South Milwaukee, Wis., assignors to The Newport Company. Making gualacol. 1,622,949; Apr. 5.

Gubelmann, Iyan, H. J. Welland, and O. Stallmann, South Milwaukee, assignors to The Newport Company. Carrollville, Wis. 3'-intro-d'-hydroxy-ortho-benzoyl benzoic acid and making the same. 1,654,287; Dec. 27.

Gloed and making the same. 1,654,287; Dec. 27.

Gubelmann, Iyan, H. J. Welland, and O. Stallmann, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. 3'-amino-d'-hydroxy-ortho-benzoyl benzoic acid and making the same. 1,654,288; Dec. 27.

Gubelmann, Iyan, H. J. Welland, and O. Stallmann, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. 3'-amino-d'-hydroxy-ortho-benzoyl benzoic acid. 1,654,289; Dec. 27.

Gubticsi, Sabino, Brocklyn, N. Y. Shoe-hel-attaching apparatus. 1,645,809; Oct. 18.

Gubler, Hans. (See Fritzsche, H., Krummenacher, Gubler, and Kaiser.).

Guber, Stahel, and F. Straub, assignors to the Firm Society of Chemical Industry in Basie, Basel, Switzerland. Azo dyestuffs containing chromium and making same. 1,625,005; Mar. 29.

Gudge, Benjamin J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bushing and forming the same. 1464,349; Aug. 30.

Guote Decks on round means. 1,641,809; Sept. 6.

Guenther, Bernard B., assignor of one-third to C. E. Ovenshire and one-third to G. F. Dickson, Minneapolis, Minn. Label feeding and cutting machine. 1,621,666; Guenther, Henry L. Los Angeles, Calif. Can-capping machine. 1,633,250; June 21.

Guenther, Henry L. Los Angeles, Calif. Can-capping machine. 1,633,250; June 21.

Guenther, West Canada, A. H. H. Holyoke, Mass. Bumper Guenther, Walter A. and T. H. Holyoke, Mass. Bumper

T. H.)

Guenther, Walter A. and T. H., Holyoke, Mass. Bumper for motor vehicles. 1,622,442; Mar. 29.

Guenthner, John G. (See Kopp. J. A., Guenthner, WellKamp, and Meyer.)

Guérard, Henri, le Havre-Graville, France. Producing luminous showers. 1,653,701; Dec. 27.

Jaminous showers. 1,653,701; Dec. 27.

Guerin-Pouyat-Elite, Ltd. (See Witte, Henry, assignor.)

Guerin-Pouyat-Elite, Ltd. (See Witte, Henry, assignor.)

Guerin-Pouyat-Elite, Ltd. (See Witte, Henry, assignor.)

Guerin-Pouyat-Elite, Ltd. (See Grillo, S., and Guerra.)

Guerra, Joseph. (See Grillo, S., and Guerra.)

Guerra, Torlibo A. San Diego, Tex. Feeder gear.

Guerra Torlibo A. San Diego, Tex. Feeder gear.

France. Traction device for venice.

Mar. 8.
Guerris. Alfonso O., Barcelona, Spain. Bottle opener.
Des. 73,406; Sept. 6.
Guertler, William. Charlottenburg, and W. Sander, Essen,
assignor to the Firm: Th. Goldschmidt A.-G., Essen,
Germany. Improving aluminum alloys. 1,629,699;
May 24.
Guest. Hurry. Billerica. assignor of one-half to 6. T.
Clark. Lowell, Mass. Locomotive crosshend. 1,648,118:
Nov. 8.

Nov. 8.

Guest, Wesley T. (See Ferriter, J. P., and Guest.)

Guest, Wesley T. (See Ferriter, J. P., and Guest.)

Guett, Monroe, assignor to Hart & Hegeman Manufacturing Company, Hartford, Conn. Twister Manufacturing Company, Hartford, Conn. Switch. 1,633,405;

June 21.

tiuett, Monroe, assignor to Hart & Hegeman Manufacturing Company, Hartford, Conn. Double-throw switch. 1,034,185 June 28.

Guett, Monroe, assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Electric switch. 1,648,210; Sept. 20.

Guett, Monroe, assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Receptacle. 1,648,305; Nov. 8.

Guett, Monroe, assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Electrical connector device. 1,650,876; Nov. 29.

Guett, Monroe, assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Flush wall switch. 1,650,871; Nov. 29.

Guett, Monroe, assignor to Hart & Hegeman Manufacturing Company, Hartford, Conn. Radiocondenser. 1,652,118; Dec. 6.

Guett, Monroe, assignor to Hart & Hegeman Manufactur-ling Company, Hartford, Conn. Radiocondenser. 1.052.118; Dec 6. Guggenheim Brothers. (See Smith, Elias A. C., as-Gubman, Walter A., New York, N. Y. Portable lighter. 1,621,534; Mar. 22. Guiard, Wilhelm, Vienna, Austria. Seal fastening. 1.618,282; Feb. 22. Gubertson Corporation. (See Bell. Ivan C., assignor.) Gubertson Corporation, The. (See Crowell, Erd V., as-signor.)

signor.) Guiberson Corporation, The. (See Traves, Webster F.,

assignor.) Corporation. (See Turner, Russell J., as-Guiberson signor.) Guide Motor Lamp Mauricaring Company, The. (See Milson, Robert A., assignor.)

Guiderson Corporation, The. (See Wilson, Robert A., assignor.)

Guider Walter, Detroit, Mich. Annealing or heat reating steel or other metals. 1,644.828; Oct. 11.

Guidendrol Jean J. R., Buenos Aires, Argentina. Educational appliance. 1,630,939; May 31.

Guide Motor Lamp Manufacturing Company, The. (See Michael, Clarence A., assignor.)

Guide Motor Lamp Manufacturing Company, The. (See Mineson, Hugh J., assignor.)

Guide Motor Lamp Manufacturing Company, The. (See Guide Manufacturing Company, The. (See Manufacturing Company, The. (See Mineson), The Manufacturing Company, The Manufacturing Com

Dec. 20.

Guilbert, Nicholas R., Jr., Melrose Park, Pa., assignor to Elevator Safety Appliance Co. Door. 1.653.170; Diec. 20.

Guild, Heold S., Jamaica Plain, Mass. Elastic webbing. Guild, Heold S., Jamaica Plain, Mass. Elastic webbing. Guild, Heold S., Jamaica Plain, Mass. Elastic webbing. Guild, Heold S., Jamaica Plain, Mass. Clastic webbing. Guildernood, Jules J., New York, N. Y. Dial for watches or clocks. Des. 73,227; Aug. 9.

Guillemet, Louis A., Flushing, N. Y. Radiator cover. 1,628,714; May 17.

Guillemin-Tarayre, Jean, Villemomble, France, assignor to the Westinghouse Air Brake Company, Wilmerding, Pa. Guillet, Albert M., Charlotte, N. C. Leveling and lining spinning frames. 1,616,084; Feb. 1.

Guillet, Albert M., Charlotte, N. C. Leveling and lining spinning frames. 1,616,084; Feb. 1.

Guillet, Albert M., Charlotte, N. C. Leveling and lining spinning frames. 1,616,084; Feb. 1.

Guillet, Albert M., Charlotte, N. C. Leveling and lining spinning frames. 1,616,084; Feb. 1.

Guillord, Nicholas L., Peahody, assignor to Gregory & 1,614,085; Sept. 13.

Guillou, Henri, Montrouge, France. Belt-driving device for railway-carriage dynamos. 1,622,315; Mar. 29.

Guinan, Joseph L., Omaba, Nebr. Grain conditioner. 1,618,417; Mar. 1.

Guinburg, Edwin A. (See Henry, Boulah L., assignor, 1,619,417; Mar. 1.

Guinburg, Sewin A. (See Henry, Boulah L., assignor to T., B. Kleinert Rubber Company, New York, N. Y. Clasp. 1,617,948; Feb. 15.

Guinzburg, Victor, assignor to I. B. Kleinert Rubber Company, New York, N. Y. Clasp. 1,617,948; Peb. 15.

Guinzburg, Victor, assignor to I. B. Kleinert Rubber Company, New York, N. Y. Clasp. 1,617,948; Peb. 15.

Guinzburg, Jan. 4,777; Nov. 15.

Guinzburg, H., Chicago, Ill., assignor to Guibransen. Christian, assignor to Guibransen Company, Chicago, Ill. Player grand piano. 1,638,629; Aug. 9.

Guibransen, Christian, Assignor to Guibransen Company, Chicago, Ill. Player grand piano. 1,638,629; Aug. 9.

Guibransen Company, (See Mortis, William L., assignor)

Gulbransen Company. (See Morris, William L., assignor) Gulf Oil Burner Company. (See Buerger, Charles B., assignor.) Gulf Refining Company. (See Buerger, Charles B., assignor.)

Gulf Refining Company. (See Faragher, W. F., and Gruse, assignors.) Gulf Refining Company. (See Marley, S. P., and Gruse,

assignors.)
Gulf Refining Company. (See McAfee, Almer M., as-

signor.]
Guif Reining Company. (See McAree, Amer M., assignor.]
Guif Reining Company. (See Prichard, G. L., and
Henderson, assignors.)
Gulick, David E., Chicago, Ill. Lavatory. 1,627,504;
May 3.

Gulick, Edward J., Elkhart, Ind. Tampion pad. 1.638 808; Aug. 9. Gulick, Harold M. (See Spotswood, J. B., and Gulick.) Gulick, Lee N. (See Morris, J. J., and Gulick.) Gulick, Russell A., and H. H. Reed, Winthrop, Mass. Refrigerator. 1,645,103; Oct. 11. Guliborg, Arthur V., Chicago, Ill., assignor, by mesne assignments, to The Bassick Manufacturing Company. Lubricating device. 1,648,223; Nov. 8. Grider Sp. 10 Nov. 8

Gullhorg, John S. assignor, by meane assignments, to Alemite Die-Casting, Mfg. Co., Chicago, Ill. Press. 1,633,559; June 21,600, Chicago, Ill. Gullborg, John S., assignor to Alemite Die-Casting & Mfg. Co., Chicago, Ill. Die-casting machine. 1,637,566; Aug. 2.

Aug. 2.
Gullickson, Francis L., West Salem, Wis. Toothbrush.
1.625,537; Apr. 10.
Gulliver, William H., Napier, New Zealand. Metal hand
tool for boot making. 1.616,040; Feb. 1.
Gunderman, Lester S., Pittsburgh, Pa. Spring motor.
1.649,826; Nov. 22.
Gundersen, Sven. Brooklyn, N. Y. Steel-wool holder.
Gunderson, Sven. Brooklyn, N. Y. Steel-wool holder.
Gunderson, Becgamin J., Spring Grove, Minn. Measuring canlster. 1.631,023; May 31.
Gundlach. Beno J., Belleville, Ill. Cutting machine.
1.653,563; Dec. 20.
Gunkel, Hermann, Newell, Pa. Nut lock. 1,622,581;
Mar. 29.

1.653.563; Piec. 20. Gunkel, Hermann, Newell, Pa. Nut lock. 1,622,581; Mar. 29. Gunkel, Hermann, Newell, Pa. Nut lock. 1,622,581; Mar. 29. Gunkel, W. H., and Piek, assignors). Gunlocke, William H., Wayland, N. Y., and G. J. Pike, Grand Rapids, Mich., assignors to The W. H. Gunlocke Chair Company, Wayland, N. Y. Chair. 1,644,336;

Grand Rapids, Wayland, N. Y. Unair. 1,022,000.
Chair Company, Wayland, N. Y. Unair. 1,022,000.
Oct. 4
Gunn, Charles H., San Francisco, Calif. Ball cock.
1,043,055; Sept. 27
1,043,555; Sept. 27
1,043,555; Sept. 27
1,043,555; Sept. 27
1,043,160,107
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Gunn. John W., Riverdale, Md. Slip joint. 1,613,887;
Jan. 11.
Gunn, Robert W., and W. A. S. Thompson, Los Angeles,
Calif. Standing-valve connection. 1,644,998; Oct. 11.
Gunnell, Charles O., et al. (See Gunnell, F. I., and
Miller, assignors.)
Gunnell, Frank I. and R. Miller; said Miller assignor to
Gunnell, Frank I. and R. Miller; said Miller assignor to
mixer for soda-dispensing faucets. 1,641,164; Sept. 6.
Gunnell, Harold H. (See Miller, Ralph, assignor.)
Gunnell, Katherine, et al. (See Gunnell, F. I., and
Miller, assignors.)
Gunning, William A., assignor to American Optical Company, Southbridge, Mass. Edging machine. 1,630,264;
May 31.

May 31.

Gunning, William A., and M. J. Shlelds, assignors to
American Optical Company, Southbridge, Mass. Caselettering press. 1,614.064; Jan. 11.

Gunnison, John H., Madison, Wis. Mixer. 1,625,296.

Apr. 5.

Gunter, Frank E. (See Brooks, Edward A., assignor.)

Gunter, James E., Baltimore, Md., assignor to The James

E. Gunter Corporation. Easy open container.

1,622,236; Mar. 22.

Gunter, James E., Corporation, The. (See Gunter, James

E., assignor.) K. Geffner S. C. Bedgaveed or similar.

Gunter, James E., Corporation, The. (see Gunter, James E., assignor, K. Gaffney, S. C. Bedspread or similar Gunter, William K., Gaffney, S. C., Bedspread or similar Gunter, William K., Gaffney, S. C., assignor to Derry Damask Mills. Device for Imparting crinkle to warp threads. 1,628,142; May 10.

Glinther, Albert, and R. Gertloff, Schmiedefeld in Thurlingen, Germany. Heat-insulating bottle. 1,631,413;

ingen. Germany. Heart-insulating bottle. 1,634,143; June 7.
Günther, Cill Mired, Schmiederdd, Germany. Glass syringer Control of the Control of the Control of Contro

Gurnee, Isaac Q., Butler, and A. A. Smith, Riverdale, N. J., assignors to Superior Hard Rubber Company, Butler, N. J. Thermometer case, Des. 72,315; Mar. 29, O. J. J. State Company, J. J. Assignors to Superior Hard Rubber Company, Butler, N. J. Thermometer case, Des. 72,555; May 3, Gurney Elevator Company, (See Misner, Lawrence, assignor.)

Gurney Elevator Company. (See Misner, Lawrence, assignor.)

Rugo, M., Baltimore, Md. Corner construction for cabinets. 1,644-619. Cot. 4.

Gurley, John W., assignor of one-half to H. Taylor, Indianapolis, Ind. Fluid pump or motor. 1,650-830; Nov. 29.

Gurney, Erving R. (See Drumm, C. F., and Gurney.) Gurney, Erving R., assignor to International Motor Company. (See Masury, A. F., and Gurney.) Gurney, Erving R., assignor to International Motor Company. New York, N. Y. Frontwheel construction. 1,641-284; Sept. 6.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Spring bracket. 1,613.750; Jan. 11

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Spring bracket. 1,623.472; Apr. 5.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Indicating device. 1,623.472; Apr. 5.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Ushion support for radiators. 1,623.473; Apr. 5.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Ushion support for radiators. 1,623.473; Apr. 5.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Ushion support for radiators. 1,623.473; Apr. 5.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Ushion support for radiators. 1,623.473; Apr. 5.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Ushion support for radiators. 1,623.473; Apr. 5.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Ushion support for radiators. 1,623.473; Apr. 5.

Gurney, Erving R., Beechhurst, assignor to International Motor Company, New York, N. Y. Ushion support for radiators. 1,623.473; Apr. 5.

Gursky, Max, Brooklyn, N. Y. Chair bed. 1,617,108; Feb. 8.

Feb. 8.

Gush, Arthur S. and M. C., Hove, England. Electrolytic system for protection of condensers, tanks, and such like vessels against corrosion. 1,616,448; Feb. 3.

Gush, Marie C. (See Gush, Arthur S. and M. C.)

Gustafson, Adolph P., Chicago, Ill. Pneumatic valvecontrolling mechanism for musical instruments and the like. 1,638,465; Aug. 9.

Gustafson, Charles J. (See Mock, F. C., Gustafson, and Chandler).

Gustafson, Charles J., assignor to Stromberg Motor Charles Company, Chicago, Ill. Carburctor. 1,623,180; Apr. 5.

Apr. 5. Gustafson, Edwin, assignor to A. C. Spark Plug Company, Plint, Mich. Speedometer transmission drive. 1.650.125; Nov. 22. Gustafson, Eric B., et al. (See Madsen, Gustav N., assignor.)

Gustafson, Bric B., et al. (See Madsen, Gustaf N., assignor.)
Gustafson, Eric B., et al. (See Madsen, Gustaf N., assignor.)
Gustafson, Hjalmer C., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo. Tool retainer. Re16,587; Apr. 5.
Gustaveson, Palmer, Los Angeles, Callf. Ground-strlp nailing block. 1,648,387; Nov. 8.
Gustavson, Carl. (See Ryden, J., and Gustavson.)
Gustavson, Carl. (See, Ryden, J., and Gustavson.)
Gustavson, Garl. (See, Ryden, J., and Gustavson.)
Gustavson, Charles, Brooklyn, assignor to Lion Match.
Co. Inc., No. 1008, Co., Co., 1008, Co., 100

Guth, Edwin F., Company, The. (See Owen, Raymond V.,

Guth, Edwin F., Company, The. (see Owen, Raymond v., assignor.)
Guth, Edwin F., St. Louis, Mo. Lighting fixture. Des. 73,518; Sept. 27.
Guth, Edwin F., St. Louis, Mo. Lighting fixture. 1,620,933; Mar. 15.

Guth, Edwin F., St. Louis, Mo. Bracket back for lighting fixtures. Des. 73,831; Nov. 15.
Guth, Edwin F., St. Louis, Mo. Lighting fixture. Des. 73,975; Nov. 26
Guth, Edwin F., St. Louis, Mo. Bowl-supporting means for lighting fixtures. 1,630,004; May 24.
Guth, Edory L., Allentown, Pa. Table. Des. 72,151; Bracket back for light-Mar. 8.
Guth, Herbert Q., Eligin, assignor to Postl, Inc., Chicago,
Ill. Exerciser. 1,638,196; Aug. 9.
Guth, William T., Brooklyn, N. Y. Embedded inkstand.
1,615,377; Jan. 25.
Guthrie, Robert C., Chicago, Ill. Polishing machine.
Guthrie, Mobert C., Chicago, Ill. Polishing machine.
Suiterrez, Alphonso J. D. Petroit, Mich. Moyable-sign 1,615,377; Jan. 25.
Guthrie, Agnes F. (See Buckner, William T., assignor.)
Guthrie, Robert G., Chicago, Ill. Polishing machine.
1,630,567; Julo 3. Detroit, Mich. Movable-sign
exhibitor. 1,623,837; Apr. 5.
Gutierrez, Emilio, Piedras Negras, Coabulla, Mexico.
Casting machine. 1,615,696; Jan. 25.
Gutierrez y Lado, Francisco M., Habana, Cuba. Manufacturing ice. 1,615,692; Feb. 8.
Gutierrez y Lado, Francisco M., Habana, Cuba. Manufacturing ice. 1,616,492; Feb. 8.
Gutman, Irwin, Pittsburgh, Pa. Septic tank. 1,649,028; Nov. 15.
Gutman, Irwin, Pittsburgh, Pa. Septic tank. 1,649,028; Nov. 15.
Gutman, Sylvester A., Flint, Mich. Carburetion means.
1,614,288; Jan. 11.
G. (16,746; Feb. 8.
Gutmann, Eugen, Berlin-Charlottenburg, Germany. Vagnation of the Computer of the Septic Computer of the Computer

Sayon & Cumier Mg. Co. (See Cumier, Barry A., as algnor; Alward W. Lorain, Ohio. Pen and blotter. Gwinn, George W. Hewlett. N. Y., assignor to American Machine & Foundry Company. Paper-feed mechanism. 1,622,409; Apr. 26.

Gwinn, George W., Hewlett. N. Y., assignor to American Machine & Foundry Company. Paper-feed mechanism. 1,622,409; Apr. 27.

Gwinn, George W., Hewlett, N. Y., assignor to American Machine. The Condense of Company and Company. Wrapping pies. The Company of Company. Wrapping pies. Gwing 25.

Gwynnes Engineering Company Limited. et al. (See Rath. Albert J., assignor.) Gwynnes Limited, et al. (See Rath. Albert J., assignor.) Gwynnes Limited, et al. (See Rath. Albert J., assignor.) Gwynnes Limited, et al. (See Rath. Albert J., assignor.) Gwynnes Limited, et al. (See Rath. Albert J., assignor.) Gyynnesis, Nicolas, Santa Barbara, Calif. Watercooling and filtering apparatus. 1,621,198: Mar. 15.

Gyynnes Engineering & Manufacturing Co. (See Payne, Gyrorector Gesellschaft mit beschränkter Haftung. (See Rosenbaum, Theodor, assignor.)

H. & H. Lamp Co., The. (See Deery, Daniel II., as signor.)

"H H" Manufacturers Inc. (See Hawkins, Roe C., assignor.)

II-R Manufacturing Company. (See Hill, G. S., and

H.R. Manufacturing Company. (See Hill, G. S., and Saxton, assignors.) Unack, Frank P. W. (See Pepln, A. D., and Hanck, Haacke, William F., Chicago, Ill., assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing machine. 1,635,5616; July 12.
Hang, Albert R., Peoria, Ill. Washing machine. Re16 746: Sept. 27.

Sept. 27.

Haag, Alfred H., Baltimore, Md. Combination phonograph and radio cabinet. 1,635,837; July 12.

Haag, Alfred H., Baltimore, Md., assignor of one-half to E. H. Fairbanks, Merchantville, N. J. Combined phonograph and radio and coordinating unit therefor 155,123; Jan. 13.

Hadis Prothers Company. (See Beatty, William G., as

Haag, Gustavus, assignor to International Motor Com-pany, New York, N. Y. Brake mechanism. 1,632,961; June 21.

June 21.

Hannen, Carl A., assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, German,
1,630,424, of Insulting paper containing pienol resins.
1,630,424, discussion paper containing paper

Mar. 29.

Haarberg, Cato, Kent, Wash. Door latch. 1,642,612; Sept. 13.

Haas, Charles. (See Willenbacher, August, assignor.)

Haas, Clarence H. and J. M. Michell, Warren, Ohlo. Haas, Clarence H. and J. M. Michell, Warren, Ohlo. 1,642,950; Sept. 20.

Haas, Elarence C., Wray, Colo. Medical-powder applicator. 1,642,950; Sept. 20.

Haas, Edward. (See Ferguson, Milford B., assignor.)

Haas, H. C., administrator, (See Wedekind, Edwin H.)

Haas, H. C., administrator, (See Wedekind, Edwin H.)

Haas, Nelson R., assignor to The Dayton Engineering

Latboratories Company, Dayton, Ohio. Molded composi
tion and making the same. Jolis.876; Feb. 2020; Liou.

Haas, Nelson R., assignor, by mesne assignments, to

Delco-Remy Corporation, Dayton, Ohio. Dynamo brush.

1,033,740; June 28.

Haas, Nelson R., assignor, by mesne assignments, to

Delco-Remy Corporation, Dayton, Ohio. Battery
Charging apparatus. 1,038,305; Aug. 9.

Hass, Philip, Dayton, Ohio. Flushing-valve mechanism.

1,620,964; Mar. 15.

Haas, Philip, Dayton, Ohio. Inlet-valve mechanism.

1,023,096; Aug. 9.

Haas, Philip, Dayton, Ohio. Inlet-valve mechanism.

1,038,395; Aug. 9.

Haas, Philip, Dayton, Ohio. Inlet-valve mechanism.

1,038,395; Aug. 9.

Haas, Philip, Dayton, Ohio. Inlet-valve mechanism.

1,025,091; Apr. 5.

Haas, Richard E., East Orange, N. J., assignor to Elevator Supply Company, Inc., Hoboken, N. J. Elevator indicator. 1,645,949; Oct. 18.

Haas, Ernst R., New London, Conn. Graphophone needle. 1,619,863; Mar. 8.

Hauss, Richard E., Last Trange, N. J., assignor to Electron indicator. 145,949 (See Munaw, J. H., Schnieders, and Haas.)

Hasse, Brist R., New London, Conn. Graphophone needle. 1,619,863; Mar. S.

Hasse, Frank. (See Morehouse F. B., and Hasse.)

Hasse, Carrie, administratrix. (See Haaz, Ignatius.)

Hazz, Ignatius, deceased; C. Haaz, administratrix, Philadelphia, Pa. Toy game board. 1,627,173; May 3.

Habart, Grarles, Cleveland, Ohio. Making hinges.

Credit System Company, Cleveland, Ohio. Coin bank. 1,635,664; July 12.

Habault, Sylvain R., Neullly-sur-Seine, assignor to Societe d'Hygiene Fratique, Paris, France. Ventilation of water-closed pans. 1,532,791; June 21.

Haber, Eugen, Berlin-Charlottenburg, Germany. Heatexchanger, Re16,807; Dec. 6.

Haber, Eugen, Berlin-Charlottenburg, Germany. Heatexchanging element. 1,635,838; July 12.

Haber, Henry J., assignor to The Chamberlain-Haber Chemical Company, Cleveland, Ohio. Composition for opening stopped pipes. 1,618,876; Feb. 22.

Haberfamp, Jessie M., assignor to The Chamberlain-Haber Chemical Company, Cleveland, Ohio. Composition for opening stopped pipes. 1,618,876; Feb. 22.

Haberfamp, Jessie M., assignor to The Charles H. Scott Company, Chicago, Ill. Nursing brassler. 1,632,894; Company, Chicago, Ill. Nursing

Device for producing an optical illusion. 1,627,603; May 10, Jessie M., assignor to The Charles H. Scott Company, Chicago, Ill. Nursing brassiere. 1,632,894; June 21.

Haberl, Paul A., Denver, Colo. Line guide for fishing rods. 1,627,643; May 5. Art M. and Hilzerie.)

Hilberle, Friedrich. (See Sarfert, W., and Hilzerie.)

H. S22,335; June 21.

Haberman, Frank D., Des Moines River Township, Minn. Stub-shoe attachment for runners of corn planters or the like. 1,619,670; Mar. 1, Mar. 8.

Haberman, Frank D., Des Moines River Township, Minn. Brown, J. (200, 100), Mar. 1, M

Hachita, Maximilian S., Wilkes-Barre, Pa. Pulsating gig. 1,634,101; June 28. Hack; Charles W., Topeka, Kans. Cooling-medium container. 1,619,864; Mar. 8. Hacker, Horace W., Chicago, II. Method of and apparatus for making objects. 1,620,343; Mar. 8. Hacker, Horace W., assignor to Hacker Manufacturing 1,630,635 May 31. Implement for marking objects. 1,630,635 May 31. Implement for marking objects. 1,630,635 May 31. Hacker Manufacturing Co. (See Hacker, Horace W., assignor.)

signor.)

Inackett, Allen S., New Orleans, La. Bridge approach.

1.629,787; May 24.

Inackett, Bdward D. (See Jackson, M. K., and Hackett.)

Inackley, Roy C., San Francisco, Calif. Concrete gun.

1.619,297; Mar. 1.

Itackmann, Frederick, assignor to I. R. Hackmann, Chl.

cago, Ill. Rail anchor. 1.613,698; Jan. 11.

Ilackmann, Ida R. (See Hackmann, Frederick, assignor.)

signor.; Hadam, Max, Chemnitz, Germany, assignor to Firma Maschinentabrik Kappel, Chemnitz-Kappel. Embroidery machine. 1,618,529; Feb. 22.

Maschinentabrik Kappel, Chemnitz-Kappel. Embroidery machine. 1,618.529; Feb. 22.
adam, Max, Chemnitz, assignor to Maschinenfabrik Kappel A.G., Chemnitz-Kappel, Germany. Jacquard mechanism for embroidering machines. 1,643,449;

Hallub, and, Chemnitz-Kappel, Germany, Jacquard mechanish of embroidering machines. 1,644,440; Sept. 27.

Hadaway, John B., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Cushion heel. 1,613,096; Jun. 4.

Hadaway, John B., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Method of and mechanism for heel attaching. 1,615,270; Jan. 25.

Hadaway, John B., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Attaching rubber heels. 1,617,640; Feb. 8.

Hadaway, John B., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Rubber heel. 1,640,354; Aug. 30.

Hadaway, John B., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Mailing mechanism. 1,640,402; Oct. 26.

Hadaway, John B., Swampscott, Mass., Assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel. 1,641,44; Nov. 1.

Hadaway, John B., Swampscott, Mass. Photographic-printing apparatus. 1,632,732; Dec. 20.

Hadaway, William S., Ir., New Rochelle, N. Y. Method and apparatus for generating and controlling heat. Hadday, William S., Ir., New Rochelle, Assignor to The Texas Company, New York, N. Y. Treating hydrocarbons. 1,628,143; May 10.

Haddad, Rosie. (See Haddad, Abraham F., Assignor.) Hadden, Gavin, New York, N. Y. Grandstand. Des. 73,499; Sept. 20.

Hadden, William J., assignor to Donaldson Manufacturing Company Limited, Glasgow, Scotland. Golf cluthing Company Limited, Glasgow, Scotland.

Haddad, Iosae. Issee Haudad Absendad. Des. 13:499; Sept. 20. Hadden, William J., assignor to Donaldson Manufacturing Company Limited, Glasgow, Scotland. Golf club. 14:48; William J., assignor to Donaldson Manufacturing Company Limited, Glasgow, Scotland. Draft, dust, and weather excluder for sliding windows and doors. 1,651,697; Dec. 6.

1.651.697; Dec. 6.

Haddock, Arthur, (See Adams, W. J., and Haddock.)

Haddock, Arthur, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Attachment to electric insulation. 1.624.695; Apr. 12.

Haddock, Arthur, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Condenser. 1.632, 130; June 14.

Haddock, Arthur, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Haddock, Western Electric Company, Incorporated, New York, N. Y. Antenna switching relay. 1.647.290; Nov. 1.

Haddock, William J., Baxter Sorings, Kans. Fuel burner. 1.643,889; Sept. 27.

Haddook, Walter, London, England. Electric accumulator casing. Electric accumulator casing. 1.633.094; June 21.

casing. June 21

June 21.

Haddow, Laurence, Colmor, N. Mex. Electric burglar alarm for motor vehicles. 1,640,603; Aux. 30.

Haddied, Frederick H., Auckland, New Zealand. Automatic roll-film camera, 1,637,414; Aug. 2.

Hadfield, John, assignor to J. R. Gammeter, Aron, Ohio. Haddled, John, assignor to J. R. Gammeter, Aron, Ohio. Haddley, Art, assignor to The Haddley Company, Providence, R. I. Securing rows of pearls or the like, 1,646,289; Oct. 18.

Hadley, Arth, assignor to The Haddley Company, Providence, R. I. Wrist-watch bracelet, 1,647,108; Oct. 25.

Hence, R. I. Wrist-watch bracelet, 1,647,108; Oct. 25.

Hadley Company, The. (See Hadley, Art, assignor.)
Hadley, Harlan A., assignor to E. and T. Fairbanks and
Company, St. Johnsbury, Vt. Scale casing. Des.
74.146: Dec. 27.
Hadley, June W., et al. (See Nicoll, Russell C., assignor.)

Hadley, Raymond, Fairfield, Conn. Smoking pipe. 14,1349; Sept. 6. Sept. 6. Sept. 7. Sept. 7.

Apr. 5. Hadrich, George, Detroit, Mich. Spark plug. 1.626 081; Apr. 26. Haederer, Gustave A., assignor of one-half to L. Edelson, Philadelphia, Pa. Dratting instrument. 1,650,269;

Philiadelpina, Th. Dracting matching for tighten-nov. 22.

Haefely, Emil, Basel, Switzerland. Machine for tighten-ing the insulation applied on winding bars of electric ing the insulation applied on winding bars of electric St. Haeger, Milton O., assignor to Abell-Howe Co., Chicago, Ill. Conveyer-roller feed. 1.625.653; Apr. 19.

Haegler, Henry W., Lyon, France. Nail and like straight-ening device. 1,639.289; Aug. 16.

Hachnel, Wolfram. (See Herrmann, W. O., Deutsch, and Hachnel).

ening device. 1,639,289; Aug. 16.
Hachnel, Wolfram. (See Hermann, W. O., Deutsch, and Hachnel, Wolfram. (See Hermann, W. O., Deutsch, and Hachnel, William. West Bend, Wis. Novelty device.
Hachnel, William. West Bend, Wis. Novelty device.
Hachnel, Aug. 16.
Hachnel, Aug. 16.
Hachnel, Hachnel, Hachnel, Hachnel, Hachnel, Hachnel, Hachnel, Hachnel, Hachnel, N. A. Spiral casing for hydraulic turbines and the like.
N. Spiral casing for hydraulic turbines and the like.
N. Spiral casing for hydraulic turbines and the like.
N. Spiral casing for hydraulic turbines and the like.
N. Hachnel, Wolf, W. Detroit, Mich. Pall holder.
1.628,722; May 17.
Haeseler, Charles H., Philadelphia, Pa. Air-cooled pneumatic hammer. 1,634,780; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and stemings instrument. 1,65,901; Dec. 27.
Heasely, Loo J., Cleveland, Ohio. Theraneutical heating and stemings instrument. 1,65,901; Dec. 27.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and stemings instrument. 1,638,901; Dec. 27.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and stemings instrument. 1,638,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and stemings instrument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and stemings instrument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and stemings in strument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and the strument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and the strument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and the strument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and the strument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and the strument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating and the strument. 1,632,901; July 5.
Haesely, Loo J., Cleveland, Ohio. Theraneutical heating

Hagan, George J., Company. (See Talley, Randal E., assignor.).
Hagherg, Edward A., St. Paul, Minn. Clothes-basket cart.
Hage, Boloff A., St. Paul, Minn. Company.
Hage. Boloff A., 5.
Hagedorn, William, Sutherland, Iowa. Draft appliance.
1.628,721; May 17.
Hagel, Albert, assignor to Consolidated Safety Pin Company. Eloomfield, N. J. Safety-plin holder. 1,636,568;
Hagel, Albert W., New Orleans, La. Percolator.
Hagel, Robert W., New Orleans, La.

Jan. 25.

Haglund, Axel. assignor of one-half to O. B. Linder.
Oakland, Calif. Caliper. 1,621,778; Mar. 22.
Hagmann, Ulrich. New York, N. Y., assignor to The
Quaker Oats Company, Chicago, Ill. Plate or similar
article. Des. 73,174; Aug. 2.
Hagmann, Ulrich. St. George. N. Y., assignor to The
Quaker Oats Company, Chicago, Ill. Cup or similar
Quaker Oats Company, Chicago, Ill. Cup or similar
Application, William Columbus, Ohio. Cast-iron steam
hosting furnace. 1,633,406; June 21.
Hague, Alfred E., Brooklyn, assignor to Western Electric Company, Incorporated. New York, N. Y. Telephone system. 1,632,066; June 14.

Ilague, Alfred E., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Automatic electric circult, 1,638,804; Dec. Westingstein Company, Incorporated, New York, N. Y. Automatic electric circult, 1,638,804; Dec. Westingstein Company, Control of commutating-pole strength on nonbooster rotary converters. 1,646,281; Oct. 11.

Hague, Frank L., assignor to Feagles Construction Company, Ltd. Minneapolis, Minn. Weighing scale air largue, Joseph T., executor. (See Lamy, Edward J.) dagy, George L., San Antonio, Tex. Building form for concrete structures. 1,631,029; May 31.

Hahl, Hans, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc. Pharmaceutical product. 1,616,366; Feb. 1.

Hahl, Hans, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc. Pharmaceutical product. 1,616,366; Feb. 1.

Hahl, Hans, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., Nemacoutical product. 1,616,366; Feb. 1.

Hahl, Hans, Elberfeld, Bernany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Complex antimony compound and making same. 1,622,838; May 17.

Hähle, Herbert. (See Folikler, H., and Hähle,) Hahl, Arbert W., and C. M. Rokes, Salt Lake City, Utah. Hahn, Arbert V., (See Macartney, J., and Hahn.) Hahn, Archie V., (See Macartney, J., and Hahn.) Hahn, Archie V., Gee Macartney, J., and Hahn.) Hahn, Edward J., Gridley, Kans. Tank cleaner. 1,622,721; Apr. 19.

Hahn, Harry L., Lancaster, Pa. Combined mirror or picture and loud-speaker frame. Des. 73,742; Nov. 1.

Habn, Harry L., Lancaster, Pa. Combined mirror or picture and loud-speaker frame. Des. 73,742; Nov. 1.

Habnemann, Walter, Kitzeberg, near Kiel, and H. Heeht, assignors to Signal Gesellschaft mit beschränkter Haftung, Kiel, Germany.

Halight, Miram H., Milwaukee, Wis.

1.024.099; Apr. 12.

Haight. Theodore, Brooklyn, N. Y. Steam trap.

1.642.023; Sept. 13.

Halles, William D., assignor to General Railway Signal

Company, Rochester, N. X. Relay, 1.617,247; Feb. 8.

Halnes, William D., assignor of one-half to G. Bauer, Milwaukee, Wis. Belt shifter. 1.616,657; Feb. 8.

Haines, August W., assignor of one-half to G. Bauer, Milwaukee, Wis. Belt shifter. 1.616,657; Feb. 8.

Haines, Charles B., Indianapolis, Ind. Boiler water
feeder. 1.636,559; July 19.

Haines, Erank E. excutor. (See Eates, Solomon W.)

Haines, Frank E. H. excutor. (See Eates, Solomon W.)

Haines, Frank E. excutor. (See Eates, Solomon W.)

Haines, Frank E. excutor. (See Eates, Solomon W.)

Haines, Jouley and one-half to C. Q. Hildebrant, Wilmill, 1.653,459; Dec. 20.

Haines, Jones & Cadbury Company. (See Muend,
Charles J., assignor, by mesne assignments, to
Priechberger-Aaron Maunfacturing Company, PhiladelMan, Connecter for garment bands. 1,639,226;
Aug. 16.

Haines Manufacturing Corporation. (See Velepec, Rudolph J., assignor.)
Haines, William T. (See Dunham, B. G., and Haines.)
Hainke, Edward. (See Hughes, Hugh T., assignor.)

Hainline Motors Corporation. (See Hainline, Theodore

Hainline Motors Corporation. (See Hainline, Theodore W. assignor.)
Hainline, Russell C., Clinton, Iowa, assignor to Fairchild Deflector Corporation, Clinton, Iowa. Headlight-glare-protecting device. 1,642,993; Sept. 20.
Hainline, Theodore W., assignor to Hainline Motors Corporation, Fortland, Oreg. Internal-combustion engine Policy of the Corporation of the Corporation Fortland, Internal-combustion engine Hainzignains, James P., New York, N. Y. Toothbrush holder. 1,613,655; Jan. 11.
Haire, Frank. (See Gallman, C. E., and Haire.)
Haiss, Alfred W., assignor to George Haiss Manufacturing Co. Linc., New York, N. Y. Turction driving and Haiss, George, Manufacturing Co. Inc. (See Haiss, Alfred W., assignor).
Haist, Charles A., Fresno, Calif. Fountain pen. 1,620,343; Mar. 8.
Hake, Charles Y., York, Pa. Insect catcher. 1,638,690; A. C. Markes M., Fort, Atkinson, Wis. Picture hanger.

Hake, 19.

Hake, Elisabeth S., Fort Atkinson, Wis. Picture hanger.

1,615,903; Feb. 1.

Hake, Flank W., Philadelphia, Pa. Derrick crane.

1,632,329; June 14.

Haker Manufacturing Co. (See Christopherson, Alfred-

Haled, S. J. June 14.

Haker Manufacturing Co. (See Christopherson, Auto-Haker Manufacturing Co. (See Christopherson, Auto-Haidey, Camile E., assignor to Yankee Lock Corporation, New York, N. Y. Tank lock. 1.649.587; Nov. 15.

Halais, Jean A., Paris, France. Seat with folding back. 1.640.273; Aug. 23.

Halbach, Howard L., Clarksburg, W. Va., and J. A. Sweet, Pittsburgh, Pa., assignors to Pittsburgh Plate Glass Company. Flattening window glass shawls. 1.6.02.017; Mar. 8.

Halcolite Company. (See Pretenthalet, Vinzenz, assignor.) Haldeman, Harry M., Los Angeles, Calif. Orifice-meter connection. 1.631.264; June 7.

Hale, Alfred, Rubber Company. (See Cutler, David A., assignor.) assignor.)

Hale, Alfred, Rubber Company.

Signory E., assignor to The Firestone Tire and Rubber Company, Akton, Ohio. Tire construction. 1,618,523;

Company, Akton, Ohio.

Hale. James E., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tire construction. 1,618,823; Feb. 22.
Hale, James S., Barnesville, Ga. Spraying attachment for pilows. 1,648,846; Sept. 27.
Hale, James S., Barnesville, Ga. Spraying attachment for pilows. 1,648,846; Sept. 27.
Hale, Samuel O., Whittier, Calif. Well derrick. 1,648,268; Nov. 8.
Hale, Samuel O., Whittier, Calif. Well derrick. 1,648,268; Nov. 8.
Hale, William E., Walpole, assignor to Bird & Son, Inc. East Walpole, Mass. Roofing. 1,623,474; Apr. 5.
Hale, William E., Fort Washington, assignor to R. H. J. (228,314; May 10.
Hale, William H., assignor of one-fourth to C. G. Britton and one-fourth to S. Randall, Pittsburgh, Pa. Paperhanging device. 1,639,134; Aug. 16.
Haley, Grover C. Cynthiana, Ky. Harrow tooth. Haley, Grover C. Cynthiana, Ky. Harrow tooth. 1,643,483; Oct. 11.
Haley, Reuben, Beaver, Pa., assignor to Indiana Glass Company, Dunkirk, Ind. Service dish. Des. 73,519; Sept. 27.
Halierty, William R., Ollie, Iowa, Railway tie. 1,626,082; Halietty, William R., Ollie, Iowa, Railway tie. 1,626,082; Halietty, William R., Woyork, N. Y. Antisplash device for storage batteries. 1,633,407; June 21.
Halikman, Abraham, New York, N. Y. Antisplash device for storage batteries. 1,633,407; June 21.
Halikman, Harris K. (See Devine, William P., assignor.)

signor.) signor.)

Halikman, Harris K., Revere, Mass. Antiglare goggles.

1.616,967; Feb. 8.

Halikman, Harris K., Beachmont, Mass. Antiglare goggle.

1.624,337; Apr. 12.

Halin, Andrew L., San Gabriel, Calif. Dash and trouble light. 1.650,843; May 31.

Halket, William, Holyoke, Mass. Pen and pencil clip.

Halket, William, Holyoke, Mass. Pen and pencil clip.

Halket, William, and W. L. Van Valkenburg, Holyoke, Mass. Magazine clip. 1,640,497; Aug. 30.

Hall Airways Corporation. (See Hall, Charles S., assignor.)

signor.)

signor.)

Hall, Akos J., Cleveland, Ohio. Floor or platform structure. 1,614,296; Jan. 11.

Hall, Albert L., Los Angeles, assignor, by mesne assignments, to A. J. Hartfield, Huntington Park, Calif. Water heater. 1,636,907; July 26.

Hall, Alexander G., Highland Mills, N. Y. Reel lock for fish rods. 1,644,429; Jot. 4.

Hall, Bernard E., assignor to The Davis Lumber Co., Martinsville, Ind. Faper cutter. 1,624,235; Apr. 12.

Hall-Brown, Archibaid. Surrey, England. Supercharging Company. (See Bamford, Frank L., assignor.)

Hall, C. M., Lamp Company. (See Godley, Charles E ... Hall, C. M., Lamp Company. (See Godley, Charles E., assignor.)
Hall, C. M., Lamp Co. (See Seitz, Ernest O., assignor.)
Hall, Charles D., Detroit, Ill. Polishing compound.
1,615,756; Jan. 25.

Hall, Charles G., Portland, Oreg., assignor to Novelty Food Corporation, Boise, Idaho. Confection-filling ma-chine. 1,621,010; Mar. 15.
Hall, Charles G., assignor to Novelty Food Corporation, Boise, Idaho. Dispensing apparatus. 1,642,200; Sept.

13.

Hall, Charles R., Congleton, England. Siphon. 1,635,477; July 12.

Hall, Charles S., Oakland, Calif., assignor to Hall Airways Corporation, Dover, Del. Thermal circulation system for aircraft. 1,653,849 : Dec. 27.

Hall, Charles S., Oakland, Calif., assignor to Hall Airways Corporation, Dover, Del. Thermal circulation by the control of the cont

Hall, Chries W., Larchmont, N. Y. Muffler for gas en-lial, Chries W., Larchmont, N. Y. Muffler for gas en-lial, Chester I, Fort Wayne, Ind., assignor to General Electric Company. Electric cut-out. 1,626,462;

Electric Company. Electric cut-out. 1,626,402;
Apr. 26.
Hall, Chester I., Fort Wayne, Ind., assignor to General Electric Company. Thermal relay. 1,631,679; June 7.
Hall, Chester I., Fort Wayne, Ind., assignor to General Electric Company. Thermal-responsive switch mechanisms of the same. 1,640,447; Aug. 30.
Hall, Chester I., Fort Wayne, Ind., assignor to General Electric Company. Measuring the viscosity of fuids. 1,641,673; Sept. 6.
Hall & Connolly, Inc. (See Hall, Theodore, assignor). Hall, Elbert J., Ercerson, N. J., and W. Lloyd, Hazleton, P. L., assignors to Domestic Stoker Company, New York, N. Y. Fuel-stoking device. 1,638,396; Aug. 9.
Hall, Edward L. (See Rider, Herbert E., assignor). Hall, Elbert J., Gee Winslow, C. A., and Hall.) Hall, Elbert J., Berkeley, Calif. Lubricating and cooling system for internal-combustion engines. 1,617,845; 190.

system for internal-compus-tens Feb. 15, 15, 16, Berkeley, Calif. Piston. 1,625,119; all, Elbert J., Berkeley, Calif. Piston. 1,625,120; Hall. Apr. 19. all, Elbert J., Berkeley, Calif. Piston. 1,625,120;

Hall, Elbert J., Berkeley, Calif. Fan drive for engines.
Apr. 19.
Hall, Elbert J., Berkeley, Calif. Fan drive for engines.
1.643.622; Sept. 27.
Hall, Ernest A., Toledo, Ohio. Portable grinding tool.
1.1636.960: 1119 13. G. R. Sanders, Joplin, Mo., as1.1636.960: 1119 13. G. R. Sanders, Joplin, Mo., assignors to Southwestern Engineering Corporation, Los
Signors to Southwestern Engineering Corporation, Los
Angeles, Calif. Flotation separating process.

signors to Southwestern Engineering Corporation, Los Angeles, Calif. Flotation separating process. 1,634,615. July S. Flotation separating process. 1,634,615. July S. Flotation separating process. 1,631,698; Dec. 6. Lall, Frank W., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Manufacture of aluminum chloride. 1,619,022; Mar. 1, all, Frank W., Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. New York, N. Y. Wet 1,6 of the West Manufacture of the Texas Company, New York, N. Y. New 1,6 of the West Manufacture of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. New 1,6 of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New York, N. Y. Nanufacture of the Texas Company, New

Nov. 1. Hall, Fred P., et al. (See Corlew, C. M., and Blohm, as-

Hall, Fred P., et al. (See Corlew, C. M., and Blohm, assignors.)
Hall, Frederick Plainfield, N. J., assignor to Berggree Engineering Corporation, Brooklyn, N. Y. Duplex St. Control of the Corporation of

Indl. Henry C., et al. (See Boyden, Thomas L., as-ignor), on W., Lyan, Mass, assignor to General Electric Company, Combined voltmeter and phase-rotation indicator. 1,641,767; Sept. 6.
Hall, J. E. (See Smith, Noble Z., assignor.)
Itall, J. Everett, assignor to American Sterilizer Company, Eric, Ph. Valve, 1,034,781; July 5.
Itall, J. E. (See Smith, Noble Z., assignor.)
Itall, John G. S., Chicago, Ill. Weather strip. 1,628,665; Mar. 8.
Itall, John G. S., Chicago, Ill. Weather strip. 1,628,665; May 17.
Itall, John A. Jr., and O. M. Tishlarich, assignors to A. M. Byers Company, Pittsburgh, Pa. Method and apparatus for marking articles. 1,631,869; June 7.
Itall, Joseph E. (See Canott, M. L., and Itall.)
Itall, Lee, assignor to Federal Electric Company, Inc., Chicago, Ill. Sign. 1,652,476; Dec. 18.
Itall, Leeslie S., Brantford Ontarlo, Canada, assignor to Williams Tool Corporation. Eric, Pa. Pipe-threading machine. 1,638,030; Aug. 9.

Hall, Leslie S., assignor to Williams Tool Corporation, Erie, Pa. Steadying block for threading machines and the like. 1,638,031; Aug. 9.
Hall, Lewis C., Wheatland, Wyo. Beet and cotton thinner. 1,648,242; Sept. 20.
Hall, Lymn D., New York, N. Y. Vanity hand bag. 1,630,344; May 31.
Hall Mrg. Company, The. (See Davis, Claud A., as-Hall, Merkon C., New York, N. Y., assignor to American Telephone and Telegraph Company. System for transmitting and reproducing pictures. 1,627,701; May 10.
Hall, Merton C., New York, N. Y., assignor to American Telephone and Telegraph Company. Telegraph system. 1,630,349; May 31.
Hall, Mrg. Company. Telegraph system. 1,630,349; May 31.
Hall, Milan W., New Rochelle, N. Y. Anchor. 1,638,092; July 19.
Hall, Newton L., La Salle, Ill. Corrugated roofing or siding sheet. 1,616,968; Feb. 8.
Hall, Kalph E., Pittsburgh, assignor to J. M. Hopwood, 1,618,656; Jan. 11.
Hall, Kalph E., Pittsburgh, assignor to J. M. Hopwood. Dormont Borough, Pa. Treating steam-boiler water. 1,618,701; Jan. 11.
Hall, Ralph E., assignor to The Koppers Company, Pittsburgh, Pa. Recovery of sodium thiocynate. 1,648,224; Hall, Ralph R., assignor of one-half to W. A. Trout, Long Eeach, Calif. Coring device. 1,648,225; Nov. 8.
Hall, Randolph F., Ithean, N. Y., Assignor of one-half to T. P. Hall, Wallingford, Conn., and one-sixth to P. Wilson, Ithaca, N. Y., Asiplane. 1,650,345; Pan. 11. Corrugated on the Connection of the

Nov. 228

Nov. 2

Nov. I.
Hall, Ray E., Wilmette, Ill., assignor to Hall
Corporation. Selective relay and the like,
Dec. 13. Hall Research

Hall, Ray E., Williams, Williams, Williams, Williams, Selective relay and the like, 1,652,199; Corporation. Geettive relay and the like, 1,852,199; Ilail Research Corporation, (See Hall, Ray E., assignor.) Hall, Richard E., assignor to Seaman Container Manufacturing Corporation, Olean, N. Y. Pulp-pressing head, 1,623,111; Apr. S. Y., assignor, by mesne assets, 1,623,101; Apr. S. Y., assignor, by mesne assets, 200, Del. Apparatus for producing seamless fibrous containers. 1,653,007; Dec. 20. Hall, Richard L., administrator. (See Boals, Polk.) Hall, Roy D., East Orange, N. J., assignor to Westing-Hall, Roy D., East Orange, N. J., assignor to Westing-Levi Corporation of the Charles of the C

signor.)
Hall, Selden H., Poughkeepsle, assignor to The De Laval
Separator Company, New York, N. Y. Process and apparatus for removing wax from oil. 1,616,041; Feb. 1.
Hall, Theodore, Brooklyn, assignor to Hall & Connolly,
1623,852; May, S. Y. Feeding means for are lamps.
1633,852; May, S. Y. Feeding means for are lamps.
Hall, Theodore, assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Series-operated studio are lamps.
1,617,314; Feb. 8.
Hall, Theodore, assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Searchlight.
Hall, Theodore, assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Searchlight. 1,632,131;
June 14.

all, Theodore, pany, Brooklyn, N. Y. Searconny, June 14. all, Theodore, assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Searchlight, 1.634,663; July 5. all, Theodore P., et al. (See Hall, Randolph F., assign, Theodore P., et al., Theodore, Theod

signor.)
Hall, Thomas, Middlesbrough, England. Ralsing and traversing gear. 1,635,617; July 12.
Hall, Thomas, and R. L. Houtz, Harrisburg, Pa. Method and mechanism for testing gelathous substances. 1,651,596; Dec. 6.
Hall, Thomas F., Omaha, Nebr. Berry harvester. 1,632,597; June 14.
Hall, Thomas H., Nyack, N. Y., assignor to The Barried Conjugation of New Jorsey. Coke rest Conjugation and Computing States 1,630,128; Nov. 22.
Hall, W. F., Frinting Co. (See Schultz, Herman J., assignor.)

Hall, William, assignor of one-third to J. E. Murphy Hall, William, assignor of one-third to J. E. Murphy and one-third to G. H. Wheldon, Minneapolis, Minn. Conveyer for segmental stereotype plates. 1,552,989: Dec. 13.

Conveyer for segmental stereotype plates. 1,552,989: Dec, 13.

Hall, Wesley F., Matawan, assignor to The Hanson & Van Winkle Company, Newark, N. J. Conveyer. 1,631,124; June 7.

Hall, Wesley F., Matawan, assignor to The Hanson & Van Winkle Company, Newark, N. J. Electroplating machine. 1,631,189; June 7.

Hall, Wesley F., Matawan, assignor to The Hanson & Van Winkle Company, Newark, N. J. Sprocket chain and links therefor. 1, 641,536; Sept. 6.
Hall, William A., Chicago, III. Combined casket, skid, and dolly, 539,363; Aug. 10.
Company, Chicago, III. Supporting means for dropbrake shafts, 1,625,266; Apr. 19.
Hall, William G., Honolulu, Hawail. Julce-straining system for sugar-cane mills. 1,627,283; May. 3.
Hall, William G., Honolulu, Hawail. Julce-straining system for sugar-cane mills. 1,627,224; May. 3.
Hall, William G., Honolulu, Hawail. Julce-straining system for sugar-cane mills. 1,647,516; Nov. 1.
Hall, William H., assignor to The Pediar People Limited. Oshawa, Canada. Corrugated pipe or culvert. 1,623,112; Apr. 5.

Oshawa, Canada. Corrugated pipe or culvert. 1,623,112, Apr. 5.
Hall Zachariah A. Hespeler, Ontario, Canada. Hockey
Hall Zachariah A. Bespler, Ontario, Canada. Hockey
Halladay, Lewis P. Decatur, Ill. Polishing machine.
1,632,436; Dec. 13.
Hallauer, Erest, Blairstown, Mo., and B. C. Long, Topeka,
Kans. License-plate holder. 1,652,126; Dec. 6.
Hallauer, Edward B. (See Norwood, J. C., and Hallauer,
Hallauer, Frank J., Madison, Wis. Composition board
and making the same. 1,634,462; July 5.
Hallauer, Nelson A., trustee. (See Dons, Henry N., assignor.) (Car E. (See Duller, F. M. and Hallborn).

signor.)
Haliberg, Clay. F. (See Dilley, F. M., and Haliberg.)
Halle, Hiram J., New York, N. X., assignor to Universal
Oil Products Company, Chicago, Ill. Apparatus for
treating petroleum oil. 1,619,929; Mar. 8.
Halleck, Frank A., Chicago, Ill., assignor to Sulivan
Halleck, Frank A., Michigan City, Ind., assignor to Sulivan Machinery Company. Drilling apparatus.
1,627,539; May 3.
Halleck, Frank A., Michigan City, Ind., assignor to Sulilivan Machinery Company. Compressor or pumping
Halleck, Frank A., Michigan City, Ind., assignor to Sulivan Machinery Company. Forging machine. 1,642,201;
Sept. 13.

van Alachmer, Cond.
Sept. 13.
Halieck, Frank A., Oak Park, Ill., assignor to Sullivan
Machinery Company. Forging machine. 1,638,258;
Aug. 9.
Hachinery Company. Forging mechanism. 1,638,259;
Aug. 9.
Hachinery Company. Tammisuo,

Aug. 9.
Hallenberg, Harry D., and A. F. Hynninen, Tammisuo,
Finland. Elastic trailer for motor cars. 1,645,484;

Hallensleben, Julius. (See Streitwolf, K., and Hallensle-

ben.)

Hallenseben, Junus. (See Streitwolf, K., Rad Hallenseben.)

Haller, Elwood C., East Rutherford, N. J. Printer's chase for storage 1,616,509; Feb. 8.

for storage 1,616,509; Feb. 8.

1.614,469; Jan. 18.

Hallett, George E. A., assignor to General Motors Research Corporation, Dayton, Ohio. Valve-operating mechanism. 1,619,74; Mar. 8.

Hallett, George E. A., assignor to General Motors Research Corporation, Dayton, Ohio. Driving connection settimen protating shaft and reciprocating piston. 1,627,775; May 10.

Hallett, George E. A., assignor to General Motors Research Corporation, Dayton, Ohio. Air-cooled engine. 1,644,722; Oct. 11.

Hallett, Manuel L., Oak Park, Ill. Garbage incinerator. Halliburton, Erle P., Los Angeles, Calif. Mixer and proportioner. 1,646,582; Oct. 25.

Halliburton, Erle P., Los Angeles, Calif. Apparatus for mixing and proportioning materials. 1,649,062; Nov. 15.

mixing and proportioning Nov. 15.

Hallburton, Orlando. (See Worden, Erle D. assignor.) Hellburton, Orville G., Chicago, Ill. Shock absorber, 1,641,263; Sept. 6. Halliday, Ernest F., Bishop, Calif. Hay-bunching rake, 1,628,971; May 17. Halliday, Francis R. (See Grant, K. A., Halliday, and

Halliday, Francis R. (See Grant, K. A., Halliday, and Cameron.)
Halliday, James F. (See Thomas, J. C., Halliday, and

Hallwell, John J., Tuckahoe, assignor, by mesne assignments, to R. Hoe and Co., Inc., New York, N. Y. Weguiding mechanism for printing machines. 1,640,355; Aug. 30.
Hallwell, John J., Tuckahoe, assignor to R. Hoe & Co., Inc., New York, N. Y. Inking mechanism. 1,644,723; Oct. 11.

Halliwell, John J., Tuckahoe, assignor to R. Hoe & Co., Inc., New York, N. Y. Muitiple-plate clamping, 1.650,206; Nov. 22.

High State of Company, Shaft packing, 1.614,120; Jan. 11.

Halliwell, Reginald F., Leamington Spa, England, assignor to General Electric Company. Shaft packing, 1.614,120; Jan. 11.

Halliwell, Reginald F., Leamington Spa, England, assignor to General Electric Company. Elastic-fuld turbine, 1.615,691; Jan. 25.

Halliwell, Retnald F., deceased; Signe E. Halliwell, executive, Leanington Spa, England, assignor to General Nov. 8.

Nov. 8. Company. Elastic-fuld turbine, 1.625,691; Nov. 8.

Nov. 8.

Halliwell-Shelton Electric Corporation. (See Jancke, Benno F., assignor.)

Halliwell-Shelton Electric Corporation. (See Shelton, William G., assignor.)

Halliwell-Shelton Electric Corporation. (See Shelton, William G., assignor.)

Hallor G., George W. (See Gero, W. B., and Hallock, Pallock, George W. (See Morton, A. K., and Hallock, Halloran, John A. (See Morton, A. K., and Hallock, Halloran, John A. (See Morton, A. K., and Hallock, Halloran, Edward D. (See Hallowell, Hobart A. and Eallowell, Edward D. (See Hallowell, Hobart A. and Eallowell, Hobart A., Woodlynne, and E. D. Hallowell, Andubon, N. J. Vented electric socket. 1,644,056; Hallouist, Einar G. Edwardson.

Adubbon, N. J. Vented electric socket. 1,011,000, Oct. 4.
Hallquist, Einar G., Edwardsville, Ill., assignor to Commonwealth Steel Company, St. Louis, Mo. Car platform. 1,636,816; July 26; July

signor.)

Hallstream, Henning, Brockton, assignor to Cross Paper Feeder Company, Boston, Mass. Paper-feeding machine, 1,624,787; Apr. 12.

Hallstrom, Warren A. (See Busey, H. S., and Hallstrom.)

Hallum, Otto F., and A. Sletten, Minneapolis, Minn. Dental amalgamator. 1,643,847; Sept. 27.

Hallwood, Sathan A., Columbus, Ohio. Scale casing, Hallwood, Nathan A., Columbus, Ohio. Scale casing, Des. 73,686; July 19.

Hallwood, Nathan A., assignor to McKenna-Horix Manufacturing Company, Pittsburgh, Pa. Scales. 1,622,106; Mar. 22.

Mar. 222.

Halpin, Steve, Yonkers, N. Y. Music-sheet turner.
1.633,408; June 21.

Halperin, Philip, Los Angeles, Calif. Garment.
1.634,829; July 5.

Halperin, Samuel J., Brooklyn, N. Y. Check book.
1.642,438 Sept. 13.

1.642,438 Sept. 13.

Halpin, Samuel J., Brooklyn, N. Y. Door latch.
1.641,537; Sept. 6.

Halpin, Louis B., Opelousas, La. Gauge for axles.
1.647,864; Nov. 1.

Halpin, Abraham, New York, N. Y. Instrument attachHalpin, James F., Derby, assignor to Seymour Mg. Co.,
Seymour, Comn. Apparatus for rolling metal.
1.634,256; July 5.

Halpin, John J., et al. (See Smith, Charles F., assignor, John J., et al. (See Smith, Charles F., assignor).

Halpin, John J., et al. (See Smith, Charles F., assignor.)

Halpin, Michael K., assignor of one-third to C. J. Warrick, and one-third to H. J. Boerth, Detroit, Mich. Machine for slicing rolls. 1,615,836; Feb. 1.

1,621,366; A. C. A. S. See Hals, Jorgen M. assignor.)

1,631,507; A. C. A. S. See Hals, Jorgen M. assignor.)

1,621,366; Mar. 16.

1,621,366; Mar. 16.

1,621,366; Mar. 16.

1,632,97; Peb. 2.

1,621,366; Mar. 16.

1,632,97; Peb. 2.

1,632

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Halstead, Stanley M., and A. I. Wickland, San Jose, Calif. Elevator. 1,614,790; Jan. 18. Halstead, Stanley M., and A. I. Wickland, San Jose. Calif. Elevator. 1,653,960; Dec. 27. Haltenberger, Jules, Incorporated. (See Haltenberger,

Haltenberger, Jules, Incorporated. (See Haltenberger, Jules, assignor:)
Haltenberger, Jules, Incorporated. (See Haltenberger, Incorporated, Incorporated, Incorporated, Indianapolis, Ind. Internal-combustion engine, 1630,445; Mappel, 180,445; Mar. 29.
Haltersen, Hans N., Vineland, N. J., assignor to Kimble Glass Company, Chicago, Ill., Multiple graduating machine, 1,624,649; Apr. 12.
Halversen, Hans N., assignor to Kimble Glass Company, Vineland, N. J., Multiple graduating machine, Vineland, N. J., Multiple graduating machine, M. J., Multiple graduating machine, M. J., Multiple graduating machine, Company, Lightly Mappel, M. J., 1640,448; Aug. 30, Henry J., and W. H. Youngstrom, assignors to General Electric Company. Lighting unit. 1,640,448; Aug. 30, Halverson, Henry J., and W. H. Youngstrom.

General Electric Company, Lighting unit. 1,640,448: Aug. 30.
Halverson, Henry J., and W. H. Youngstrom, assignors to New Business Corporation, Chicago, Ill. Savings bank. 1,640,569; Aug. 30.
1,640,569; Aug.

Machinery Company.

Nov. 22.

Halvorsen, Halbert B., Chicago, Ill., assignor to Sullivan
Machinery Company. Plant-controlling system.

1,649,898: Nov. 22.

Halvorsen, Ole G., Chicago, Ill. Combined packing and
thrust bearing for revolving shafts. 1,618,665; Feb. 22.

Halvorson, Cromwell A. B. Jr., Lynn. Mass., assignor to
General Electric Company. Illuminating unit. alvorson, Cromwell A. B., Ir., Lynn. Mass., assignor to General Electric Company. Illuminating unit. 1,614,121; Jan. 11. alvorson. Cromwell A. B., Jr., Lynn, Mass., assignor to General Electric Company. Flood-lighting unit.

1.614.121; Jan. 11. Halvorson. Cromwell A. B., jr., Lynn, Mass., assignor to General Electric Company. Flood-lighting unit. Balvorson, Cromwell A. B., jr., Lynn, Mass., assignor of one-half to C. H. Wills, Detroit, Mich. Illuminating device. 1.616.042; Feb. 1. Lynn. Mass., assignor to General Electric Company. Lighting unit. 1.631.632;

Halvorson, Cromwell A. B., jr., Lynn, Mass., assignor to General Electric Company, Lens. 1.641,674; Sept. 6. Halvorson, Gilbert, Northwood, N. Dak. Machine for Juling and raking thistles. 1.618,656; Feb. 22. Ham Boller Corporation. (See Adelmann, Hnns, as-

signor.)

Ham, Clayton S., San Francisco, assignor to A. Turner,
Oakland, Calif. Electric self-winding clock. 1,637,997;

Aug. 2.

Oakland, Calif. Electric self-winding clock. 1,637,997; Aug. 2.

Ham. Robert L., Boston, Mass., assignor to Summit Thread Company, East Hampton, Conn. Thread cop. 1,646,188 Get. 18.

Local Company, East Hampton, Conn. Thread cop. 1,646,188 Get. 18.

Hamachek, Erank, assignor to Frank Hamachek Machine Company, Kewaunee, Wis. Separating apron for green-pea-wine hullers. 1,645,324; Oct. 11.

Hamaker, G. E. (See Chilbin, Loren A., assignor.) Hamaker, Rev G. (See OBoyle, T., and Hamaker, 1,620,966; Mar. 16.

Lamann, Kurt W. E., Trumbull, Conn. Combined motormeter, vapor trap, and filler can for radiators of internal-combustion engines. 1,615,757; Jan. 25.

Hamblen, William J., Lidcombe, near Sydney, New South Wales, Australia. Lathe. 1,649,588; Nov. 15.

Hamblin, Edd., Jr., Woodward, Okh. Pocket-iron leather Hamblen, Martham Company, St. Louis, Mo. Scale. 1,638,998; July 26.

Hamblin, Fred B., assignor to The Weightograph Company, St. Louis, Mo. Operating handle for lever switches. 1,653,043; Dec. 20.

Hambly, Erd B., assignor to The Weightograph Company, St. Louis, Mo. Operating handle for lever switches. 1,653,043; Dec. 20.

pany, St. Louis, Mo. Scale. 1,05-3,943; Dec. 20.
Hamborg, Edward, Linden, and V. T. Lobdell, Elizabeth,
N. J. Fly catcher. 1,623,006; Mar. 29.
Hambuechen, Carl, St. Louis, Mo., assignor to Electro
Metallurcical Company. Electrodeposition of chromium.
Rel 5,698; Apr. 19.
Hamel, Charles W., and L. J. Hamel, St. Louis, Mo. Protector for golf clubs. 1,648,175; Nov. 8.

Hamel, Joseph P., Ayer, Mass. Window screen. 1.615,580; Jan. 25.
Hamel, Louis J. (See Hamel, Charles W. and L. J.)
Hamel, Joseph P., Lawergan, Hi. Dumping car. 1,620,759;
Hamel, Peter, Berlin, N. H. Smoke cleaner. 1,639,179;
Aug. 16.
Hamel, William W., New York, N. Y., assignor to Ad-

Aug. 18.

Hamel, William W., New York, N. Y., assignor to Advertising Samplers, Inc., Wilmington, Del. Advertising device. 1,651,597; Dec. 6.

Hamer, Howard T., Narherth, Pa. Combination carpener's gauge. 1,649,686; Nov. 15.

Hamer, Sylvester G., assignor of one-third to J. W. Eckley, West Decatur, Pa. Brick-sizing machine. 1,650,632; Nov. 29.

Hamer, William D., Indianapolis, Ind. Metal pole. 1,617,331; Feb. 15.

Hamersley, Garvin, assignor of one-half to O. W. Teaby, Geyserville, Calif. Cultivator attachment. 1,616,417; Physical Company, The (See Smith)

Fb. 1.

Hamersley Manufacturing Company, The. (See Smith.

Hamersley A. assiston's Albert Sydney, New South Wales,

Australia. Crushing and grinding machine. 1,627,506;

May 3.

Hamiel, Dorman E., Columbus, Ohio. Lamp socket.

1,040,189; Aug. 23.

Hamill, Fred B., et al., executors. (See Heinz, Julius

Hamili, Fred B., et al., Executors. Grand Hamilton, Hamilton, Albert G., assignor to J. T. and A. Hamilton, Company, Pittsburgh, Fa. Glass bottle. Des. 72.420; Apr. 12.

Hamilton, Baxter P., River Edge, N. J., assignor to American Telephone and Telegraph Company. Carrier-telegraph repeater circuits. L638.053; July 19.

Hamilton Beach Mgs. Co. (See Albrecht, Robert, as-

Hamilton Beach Mfg. Co. signor.) (See Driver, William, as-(See Ernst, William, as-Beach Mfg. Co.

Hamilton Beach Mfg. Co. (See Mross, Edward, assigner.) Hamilton Beach Mfg. Co. (See Mross, E., and Ernst,

assignors.) Hamilton-Beach Mfg. Co. (See Osius, Frederick J., as-

signor.)
Hamilton, Furton C., Brookline, Mass. Garden-hose supporter. 1,637,528; Aug. 2.
Hamilton, Charles E., Van Nuis, Calif. Ironing pad.
1,630,894; May 31.
Hamilton, Charles E., assignor to The Goodyear Tire &
Rubber Company, Akron, Ohio. Cutting tool. 1,628,315;
May 10.

May 10.

Amilton, Charles H., Los Angeles, Calif. Garbage truck. 1,651,709; Dec. 6.

Iamilton, Charles S., Harrison, assignor to New York Mills Corporation, New York Mills, N. Y. Pile fabric. Des. 73,658; Oct. 18.

Hamilton, Earl R., Nitro, W. Va. Distillation apparatus. 1,614,791; Jan. 18.

Hamilton, Earl R., Pekin, Ind. Collapsible-tube holding and compressing device. 1,618,877; Feb. 22.

Hamilton, Edward H., and L. W. Kirk, Midvale. Utah, assignors to United States Smelling, Refining & Mining Company, Boston, Mass. Teeding apparatus for pul-Hamilton, Elmer W., Madison, Wis, assignor to C. C.

Bogle, Mason City, Iowa. Automatically-adjustable neckband. 1,616,258; Feb. 1.

Hamilton, Ernest, Manchester, England. Split pulley and the like. 1,646,692; Oct. 25.

Hamilton, Estate of H. G., deceased. (See Contes, Ray G., assignor.)

and the like 1.646.092; Oct. 20.
Hamilton, Estate of H. G., deceased. (See Coates, Ray
Hamilton, Francis F., Indianapolis, Ind. Box. Des.
73.287; Jug. 23.
Hamilton, Francis F., Indianapolis, Ind. Box. Des.
73.500; Sept. 20.
Hamilton, George H., assignor to American Sesting Company, Grand Rapids, Mich. Lighting means. 1,613,793;

pany, Gr

Hamilton, George H., assignor to American Seatin pany, Grand Rapids, Mich. Aisle light. 1,6 pany, G Nov. 22.

Nov. 22.

Hamilton, Gertrude M., and A. C. Webb, assignors to Mercator, Parls, France. Textile fabric or similar article. Des. 71.871; Jan. 18.

Hamilton, Harold S., New York, N. Y., assignor to American Telephone and Teleproperation. 1.639.773; Aug. 23.

Hamilton, Harry D., Winthrop, Mass, assignor to United Shoe Machinery Corporation, Paterson, N. J. Manufacture of aboes. 1.620,013; Mars. 6.

G., assignor.)

G., assignor.)

G., assignor.)

Hamilton, James, Detroit, Mich. Flower holder and stand.

1,624,407; Apr. 12.

Hamilton, James T., Berkeley, assignor to Pacific National Co., Inc., San Francisco, Calif. Vehicle top.

1,613,273; Jan. 4.

Hamilton, James W. (See Pitney, Earl H., assignor.)

Hamilton, Karl M., assignor. by mesne assignments, to Chicago-Cieveland Car Roofing Company, Chicago. Ill.

Car-roof construction. 1,631,860; June 7.

Hamilton, Louis W., assignor of one-half to J. M. Bleicher, Kenosha, Wis. Washing machine. 1,639,180;

Bleicher, Kenosha, Wis. Washing machine. 1,639,180; Aug. 16.

Hamilton, Lynford, Philadelphia, Pa. Furnace arch. 1,636,603; July 19.

Hamilton, Maurice E. La Fayette, and R. R. Hopkins, West Lafayette, Ind., assignors to Automatic Straight Air Brake Company, Wilmington, Del. Air-brake apparatus. 1,640,499; Aug. 30.

Hamilton Faul H., assignor to The Sands Manufacturing Chapter Chapter (Deviand, Ohio. Heater. Des. 73,175; Aug. 20.

Aug. 2.

Hamilton, Ronald M., Malvern, England. Appliance for washing or cleaning table forks or forked articles. 1.653.703; Dec. 27.

Hamilton-Ross Factories, Inc. (See Grien, Joseph, as-

washing or cleaning table forks or forked articles. 1,635,703; Dec. 27.

Banilton-Ross Factories, Inc. (See Grien, Joseph, assignor.)

Hamilton-Ross Factories, Inc. (See Levinson, Irwin E. Hamilton, Thomas G., Bishop, Tex. Air-tempering device. 1,617,050; Feb. 8.

Hamilton, Thomas G., Bishop, Tex. Air-tempering device. 1,617,050; Feb. 8.

Hamilton, Thomas S., Los Angeles, Calif. Attachment for vehicle springs. 1,618,706; Feb. 22.

Hamilton, Thomas S., Los Angeles, Calif. Attachment for vehicle springs. 1,618,706; Feb. 22.

Hamilton, William E., 1,618,706; Feb. 22.

Hamilton, William E., and E. J. Bagnall, deceased. Columbus, Ohio; A. M. Bagnall executirs of said E. J. Bagnall, Tunnel drier. 1,644,719; Oct. 11.

Hamilton, William R., Dewey, Okla. Automatic cutout for engines. 1,614,361; Jan. 11.

Hamilton, William S., Dewey, Okla. Automatic cutout for engines. 1,614,361; Jan. 11.

Hamilton, William S. H., Schenectady, N. Y., assignor to General Electric Company. Braking system. 1,621,403; Mar. 15.

Hamilton, William S. H., Schenectady, N. Y., assignor to General Electric Company. Automatic reclosing circuit-breaker system. 1,641,758; Sept. 1.

Hamilton, William S. H., Schenectady, N. Y., assignor to General Electric Company. Automatic reclosing circuit-breaker system. 1,641,758; Sept. 6.

Hamilton, Charles R., Chleago, Ill. Display stand. 1,651,223; Dec. 6.

Hamm, William S., Hubbard Woods, Ill., assignor to The Addiak Company. Sash latch. 1,627,846; May 10.

Hammar, Sigard A. S., Bethelehm, Pa. Gear tooth. Hammar, Marchie W., Philadelphia, Pa. Wagon chute. 1,641,521; Oct. 43, Sh. Bethelehm, Pa. Gear tooth. Hammar, Sigard A. S., Bethelehm, Pa. Gear tooth. Hammar, Sigard A. S., Bethelehm, Pa. Gear tooth. Hammar, Marchie W., Philadelphia, Company, The. (See Scott, Beverly R. assignors.)

signor.)
Hammer-Bray Company. (See Gercich, F. A., and Gardner, assignors.)
Hammer-Bray Company. (See Hammer, George, assignor.)
Hummer-Charles, Hollis, assignor to American Metal.
1,618,667; Feb. 22.
Hammer, Charles, Holliscourt Boulevard, assignor to
American Metal Cap Company, Brooklyn, N. Y. Lugformed cap. 1,647,617; Nov. 1.

Hammer, F. Holliscourt Boulevard, assignor to
American Metal Cap Company, Brooklyn, N. Y. Lugformed cap. 1,647,617; Nov. 1.

Hammer, F. W., Corporation, (See Hammer, Fritz W.,
assignor.)

harvester, tynogeneration the Hammer, F. W., Corporation the Assignor, assignor, Industry, Indus

Hammer, George, assignor to Hammer-Bray Company, Oakland, Calif. Cooking top for stoves. 1,647,692;

Hammer, Julius. (See Stroop, H. T., Hauser, and Ham-

Hammer, Julius. (See Stroop, H. T., Hauser, and Hammer). Peter, assignor of one-half to T. Collins, Compton, Calif. Wrench. 1,652,355. Dec. 13.

Hammer, Samuel. Brooklyn. assignor to United Metal Box Co. Inc., Long Island City, N. Y. Lock-attaching means. 1,629,270; May 17.

Hammer, Samuel. Brooklyn. assignor to United Metal Republic of the Prooklyn. Assignor to United Metal Republic. 1,832,702; June 14.

Hammer, Samuel. Brooklyn. assignor to United Metal Box Co. Inc., Long Island City, N. Y. Metal receptacle. 1,632,733; June 14.

Hammer, Samuel, Brooklyn. assignor to United Metal Box Co. Inc., New York, N. Y. Metal receptacle. 1,632,733; June 14.

Hammer, Samuel. Brooklyn. Assignor to United Metal Box Co. Inc., New York, N. Y. Metal receptacle. Hammer, Samuel. Brooklyn. N. Y. assignor to United Metal Box Co., Inc., Long Island City, N. Y. Metal receptacle. 1,632,762; June 14.

Hammer, Willibald, assignor to Firm Zellweger A.-G., Uster, Switzerland. Warp-heddling machine. 1,645,988; Oct. 18.

Hammerl, Jacob, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,645,325; pany, 1 Oct. 11.

Hammerly, Susan B., Marshall, Ill. Hair waving and curling device, 1,652,356; Dec. 13.
Hammersley, Waiter M., Dayton, Ohio. Vehicle signal. 1,624,236; Apr. 12.
Hammerstrom, Karl R. (See Vold, L. H., and Hammer-Hammerstrom, Karl R.

Hammes, John C., Des Moines, Iowa. Display rack. 1,621,465; Mar. 15. Hammes, Paul, Trier, Germany. Boot block. 1,649,783;

Hammes, P. Nov. 15.

Nov. 15.

Hammett, Elbert A., Kansas City, Mo. Electrically-operated valve mechanism. 1,626,817; May 3.

Hammock, Floyd. (See Skaggs, M. C., and Hammock.)

Hammood, Albert, Ben Lomond, Calif. Lamp shade.

Hammond, Alfred, Botley, England. Distributor for internat-combustion engines. 1,642,876; Sept. 20.

Hammond, Elimer C., Crawfordsville, Ind. Article of manufacture for mending radiators. 1,617,949; Feb. 15.

Feb. 15.

Hammond, Ernest D., Salt Lake City, Utah. Tongue-spatula attachment for mouth specula. 1,613,996; Jan. 11.

Hammond, Frederick, Houston, Tex., assignor to H. F. Cohen. Mask for printing machines. 1,635,618; Cohen. July 12. Hammond, H. H., et al.

(See Dobbins, George R., as-

signor.)
Hammond, John A. S., Woodlawn, Md., assignor to U. S.
Industrial Alcohol Co. Producing chlorocarbonates.
1,618,824; Feb. 22.
Hammond, John H., jr. (See Chaffee, Emory L., as-

Hammond, John H., jr. (See Dorsey, Herbert G., assignor.) Hammond, John H., jr. (See Murray, Albert F., as-

Hammond, John H., jr. (See Trenor, Albert D., as-

Hammond, John H., jr. (See Trenor, Albert D., assignor.)

Hammond, John H., jr., Gloucester, Mass. Automatic antenna system. 1,614,671; Jan. 18.

Hammond, John H., jr., Gloucester, Mass. Angle-indicating device for moving bodies. 1,619,205; Mar. 1.

Hammond, John H., jr., Gloucester, Mass. System of guide lights. 1,621,2578; Mar. 22.

Hammond, John H., jr., Gloucester, Mass. Pipe orsan. 1,621,879; Mar. 22.

Hammond, John H., jr., Gloucester, Mass. Solv control for automatic player instruments. 1,621,880; Mar. 22.

Hammond, John H., jr., Gloucester, Mass. Control accounts of the control mechanism. 1,620,3475; Mar. 20.

Hammond, John H., jr., Gloucester, Mass. Control system for aircraft. 1,625,252; Apr. 19.

Hammond, John H., jr., Gloucester, Mass. Salvo firing. 1,627,174; May 3.

Hammond, John H., jr., Gloucester, Mass. Pedal lock. 1,633,178; June 21,

Hammond, John H., jr., Gloucester, Mass. Modifying

1.633,178; June 21.

Hammond, John H., jr., Gloucester, Mass. Modifying device for modulation control. 1,635,993; July 19.

Hammond, John H., jr., Gloucester, Mass. Piano-modulation controls of the control of the con

Hammond, John H., Jr., Gloucester, Mass. Pedal control of stop actions. 1.641,166; Sept. 6. Hammond, John H., Jr., Gloucester, Mass. Tone control operable successively in a predetermined manner. 1.645,048; Oct. 11.

1.645.048; Oct. 11.

Hammond, John H. Jr., Gloucester, Mass. Varying-frequency system of radio signaling. 1.648,682; Nov. 8.

Hammond, John H. Jir., Gloucester, Mass. Radiocontrol of engine speed. 1,653.172; Dec. 20.

Hammond, John H. Jr., Gloucester, and E. L. Chaffee, Belmont, Mass.; said Chaffee assignor to said Hammond. Changing the intensity of signals in radio dynamic receiving systems. 1,649.778; Nov. 15.

Hymanic receiving systems. 1,649.778; Nov. 15.

Hymanod, Melissa A., Hopkinsville, Ky. Match folder. 1,641.850; Sept. 6.

1.641.850; Sept. 6.

Ammond, Milton B., assignor to Wolverine Bumper & Specialty Company, Grand Rapida, Mich. Support for Hammond, Myron B., assignor to Thomas P. Taylor Co., Bridgeport, Comp. Sanitary helt. 1.614.239; Jan. 11.

Hammond, Robert O., assignor of one-half to C. H. Ogden and one-half to H. H. Simms, Rochester, N. Y. Lighter for clgars and the like. 1,620.548; Mar. 8.

Hammond, Robert O., assignor to S. S. Jenkin, Buffalo, N. Z. Apparatus for toasting food articles. 1,634,142; Hammond, William B. (Ga. Paul Villen)

Hammond, William P. (See Buel, Hillhouse, assignor.)

Hammond, William P. (See Moses, E. Q., Terwillinger, and Hammond.)
Hammond, William P., East Orange, N. J. Apparatus for renewing surfaces of golf balls. 1,630,244; May 24. Hammond, William P., East Orange, N. J. Wind defiector. 1,633,368; June 21.
Hammond, William P., Scarsdale, N. Y. Tire cover. 1,651,768; Duce 6.
Hammons, Frederick D., Seattle, Wash., assignor to W. A. Sheaffer Pen Co., Fort Madison, Iowa. Frontain-pen desk set. 1,641,949; Sept. 6.
Hammer, William T. (See Zimmerman. C., and Hammer.)
Hammer, William T. (See Zimmerman. C., and Hammer.)
Hammer Main T. (See Zimmerman. C., and Hammer.)
Hammer Matto Top & Metal Company. (See Laven. Louis, assignor.)
Hampden Glazed Paper & Card Company. (See Marwede, Richard L., assignor.) Hammond, William P. (See Moses, E. Q., Terwillinger,

Richard L., assignor.) Hampden Glazed Paper and Card Company. (See Stone.

stampden Glazed Paper and Card Company. (See Stone, Thomas L. assignor), England. Agricultural implement. 1,629,915; May 24.

Hampton, William H., Watertown, Mass. Handhold for vehicles. 1,646,647; Oct. 25.

Hampton, Abijah E., Pittstown, and C. S. Marshall, Baptistown, N. J. Mudler. 1,618,876; Feb. 22.

Hampton, C. & J., Limited. (See Hampton, Charles W., Hampton, Charles W.,

Hampton, C. & J., Limited. (See Hampton, Charles W., assignor.)
 Hampton, Charles W., assignor of one-half to C. & J. Hampton Limited, Sheffield, England. Vise. 1,653,173; Dec. 20.

Hampton Limited, Sheffield, England. Vise. 1,653,173; Dec. 20.
Hampton, Francis H., Spokane, Wash. Funnel. 1,618,531; Feb. 22.
Hampton, Loon N., assignor to Western Electric Company, 1,623,004; June 4.
Hampton, Leon N., assignor to Western Electric Company, Incorporated, New York, N. Y. Cutting device, 1,632,004; June 14.
Hampton, Leon N., assignor to Western Electric Company, Incorporated, New York, N. Y. Clearance gauge, 1,632,067; June 14.
Hampton, Mona M., Kansas City, Mo. Sliding bed. 1,621,163 Mar. 15.
Hander, Jarwin, La Grange, assignor to Kinney-Rome Company, Chicago, Ill. Bed-spring support, 1,621,111; Mar. 15.
Hanauer, Darwin, La Grange, assignor to Kinney-Rome Company, Chicago, Ill. Bed-spring, 1,628,462; May 10; Hanauer, Darwin, La Grange, Ill., assignor to Kinney-Rome Company, Spring structure, 1,633,544; June 21, Hanauer, Darwin, La Grange, Ill., assignor to Kinney-Rome Company, Spring-structure, 1,633,545; June 21, Hanauer, Darwin, La Grange, Ill., assignor to Kinney-Rome Company, Spring-structure, 1,633,545; June 21, Hanauer, Darwin, La Grange, Ill., assignor to Kinney-Rome Company, Spring-snehoring means, 1,649,227; Hanauer, Darwin, La (See Gottlieb, Abrabam, assignor, Panauer, Pullin, et al., (See Gottlieb, Abrabam, assignor, Panauer, Pullin, et al., (See Gottlieb, Abrabam, assignor, Panauer, Pullin, et al., (See Gottlieb, Abrabam, assignor).

Rome C Nov. 15

Nov. 15.

Hanauer, Philip, et al. (See Gottlieb, Abraham, assignor.)

Hanbidge, Charles W. W. (See Rankin, Ernest L., assignor.)

Hanch, Warence W., Philadelphia, Pa. Locomotive
Hance, Lawrence W., assignor to The Baldwin Locomo
tive Works, Philadelphia, Pa. Locomotive-cylinder

structure. 1,649,687: Nov. 15.

Hancock, Horse G. (See Bunce, Robert M., assignor)

Hancock, Harry F. (See Richards, D. W., and Hancock,

Hancock, Horae G. (See Cripmill, J. F., and Hancock,

Hancock, Toman Hancock, Harry F. (See Shinker, Victor R.,

assignor.)

Hancock Manufacturing Company. Are welding generator, 1,632,526; Dec. 13.

Hancock William L., assignor to The Murray Company, Dallas, Tex. Huller and opener, 1,623,181;

Hancock, Winn.

Apr. 6. H. New Britain, Conn. Height-measuring Hand, Cone. 1,623,406; Apr. 8. Hand, Erle H. New Britain, Conn. Automatically recolling height-measuring device. 1,643,985; Oct. 4. Hand, Jay A., and C. R. Pelton, assignors to The Pelton & Crane Company, Detroit, Mich. Dental light. 1,642,367; Sept. 13. Hand, John B., & Sons Company. (See Hand, John H. Company, Philadelphia, Pa. Nautical instrument. 1,614,240; Jan. 11. Handiel-Manischappil H. Albert De Bary & Co. (See Sauveur, H., and Kollinek, assignors.) Airmoistealing apparatus for hot-sit furnaces. 1,632,836; June 21. Handelan, Daniel, Minneapolis, Minn. Airmoistealing apparatus for hot-sit furnaces. 1,632,836; June 21. Handelan, Daniel, Minneapolis, Minn. Vapor-bath artachment for bathrubs. 1,652,437; Dec. 13. Handian, Daniel, Minneapolis, Minn. Vapor-bath artachment for bathrubs. 1,652,437; Dec. 13. Handian, Alexander H., r., St. Louis, Mo. Hose coupling. 1,626,729; May 3.

Handlan, Alexander H., St. Louis, Mo. Signal lantern and lens therefor, 1,627,895; May 10. Handley, Edgar G. (See Handley, George B., and E. G.) Handley, George F. (See Myers, L. C., and Handley, George F. (Gendale, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine, 1,614,297; Jan. 11.

Handley, George F., Glendale, assignor to Royal Type-writer Company, Inc., New York, N. Y. Typewriting machine. 1,635,408; July 12.
Handley, George B. and E. G., Bradford, England. Endless cone belt. 1,635,683; July 12.
Handoll, Percy G., Catford, London, England. Apparatus for cleaning boiler tubes and the like. 1,647,291;

Nov. 1. Hands, Howard A., assignor to Hood Rubber Company, Watertown, Mass. Multiple heater control. 1,619,510;

Watertown, Mass. Multiple heater control. 1,619,510; Mar. I. Mar. I. Marda A., assignor to Hood Rubber Company, Hands Hown, Mass. Method relating to the manufacture of rubber water bottles. 1,644,829; Oct. I anaudacture of rubber water bottles. 1,644,829; Oct. I and the like. 1,621,532; Mar. 22. Handy Governor Corporation. (See Bull, Arthur A., assignor.)

Handy Governor Corporation.

Signor.)

Signor.)

Handy, James O., Pittsburgh, Pa., assignor to Primos Company. Lead product and producing the same. 1.651,886; Dec. 6.

Handy, I. Gessford, New York, N. Y. Track for toy electric trains. 1.636,416; July 19.

Handy, Raph H., Berkeley, Calif. Wood preservative. 1.663,095; June 21.

1.663,095; June 21.

1.616,043; Peb. H. P., Pomeroy, Iowa. Ice tray. 1.616,043; Peb. H.

Hanel, Franz, Berlin, assignor to Fritz König & Co. Gesellschaft mit beschränkter Haftung, Magdeburg, Germany. Buffer for motor vehicles. 1,640,320; Aug. 23.

Gesellschaft mit beschränkter Haftung, Magdeburg, Germany. Buffer for motor vehicles. 1,640,320; 1,640,320; 1,640,320; 2,640,320; 3,640,320; 3,640,320; 3,640,320; 4,620,529; 4,620,520; 4,620,529; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,620,520; 4,

Columbus, Onio. Glass-torming apparatus. 1,632,908; June 21. June 21. Grin A. assignor to The Federal Glass Company, Columbus, Onio. Glass-forming machine and process. 1,638,634; June 28. Haniford, Louis, Hanna, Alberta, Canada. Automatte gate opening and closing device. 1,654,401; Dec. 27. Hankins, Cyrus, Baltimore, Md., assignor to The Symington Company, New York, N. X. Side frame. 1,622,249;

Hankins, Cyrus, Baltimore, Md., assignor to The Symington Company, New York, N. Y. Side frame. 1,637,696;

Ang. 2.

Hankinson, Wesley, and J. J. Knebel, Kansas City, Mo. Wrist-watch strap. 1,629,339; May 17.

Hanks, Clifford C., Pearl, Ill. Vegetable and fruit sileer. 1,651,202; Nov. 29.

Hanle, Benjamin W., Elizabeth, N. J., assignor to Eagle Pencil Company, New York, N. Y. Clip for pencils, penholders, and like articles. 1,622,316; Mar. 29.

Hanle, Benjamin W., Elizabeth, N. J., assignor o Eagle Panle, Benjamin W., Elizabeth, N. J., assignor o Eagle May 24.

May 24.

May 24.

Hanley, Frank H., Detroit, Mich. Electric-iron switch. 1.646.911; Oct. 25.

Hanley, Michael. (See Miller, J. T., and Hanley,)

Hanley, William L., jr., Bradford, Pa. Tunnel klin. 1.614.470; Jan. 18.

Hanley, William L., jr., Bradford, Pa. Ckay tempering and expressing apparatus. 1.626.675; May 8.

Hanley, William L., jr., Bradford, Pa. Firing ceramic products. 1.641.582; Sept. 6.

Hanley, William L., jr., Bradford, Pa. Plant for manufacturing ceramic products. 1.641.582; Sept. 6.

Hanley, William L., jr., Bradford, Pa. Plant for manufacturing ceramic products. 1.641.583; Sept. 6.

Hanley, William L., jr., Bradford, Pa. Bratkmaking plant. 1.641.585; Sept. 6.

1.641.885 : Sept. 6.

Hanley, William L., Jr., Bradford, Pa. Dry-pan grinding apparatus. 1.648.175; Nov. Bradford, Pa. Tunnel kiln. 1632.750; Dec. 13.

Hanley, William L., Jr., Bradford, Pa. Tunnel kiln. 1633.174; Dec. 20.

Hanlon & Goodman Co. (See Jacob, George N., assignor).

Hanly, Charles E. (See Strubble, L. O., and Hanly.)

Hann, William H., Hackettstown, N. J. Tennis-court marker. 1,651,271; Nov. 29.

Hanna, Clinton R. (See Slepian, J., and Hanna.)

Hanna, Clinton R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Telephone receiver. 1,624,338; Apr. 12.

Hanna, Clinton R., Wilkinsburg, Pa., assignor to Westinghouse and the state of the state o

signor.)
Hanna, Howard M., et al. (See Wetherbee, Herbert E.,

Hanna, Howard M., et al. (See Wetnerbee, H. E., and Jacobus, assignors.)

Hanna, Howard M., et al. (See Wetherbee, H. E., and Jacobus, assignors.)

Hanna, John N., Ordway, Colo. Pressure-operated circuit breaker. 1,616,317; Feb. 1.

1,651,023; Nov. 20.

Hanna, Richard J. (See Hanna, Richard W, and R. J.)

Hanna, Richard J. (See Hanna, Richard W, and R. J.)

Hanna, Richard W., Piedmont, and R. J. Hanna, Burlingame, assignors, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif. Distillation of petroleum oils. 1,633,431; Dec. 20.

Hanna, William G., et al. (See Murphy, Danlel R., as
315001.)

signor.) Cleon M., assignor to Car Devices Company, Richmond, Va. Front draft lug. 1,613,167; Jan. 4. annaford. Cleon M., assignor to Car Devices Company, Richmond, Va. Front draft lug. 1,613,168; Jan. 4. annah, Thomas. (See Smily, W. E., Hannah, and

Richmond Va. Front draft lug. 1,613,168; Jan. 4. Hichmond Va. See Smily, W. E., Hannah, and Winans. (See Smily, W. E., Hannah, and Hannam, George C., Freport, and J. W. Schede, Mount Vernon, assignors to Rubberstone Corporation, New York, N. Y. Flooring tile. 1,637,301; July 26.

Hannam, George C., Freeport, and J. W. Schede, Mount Vernon, assignors to Rubberstone Corporation, New Yernon, assignors to Rubberstone Corporation, New Yernon, assignors, to Rubberstone Corporation, New 1,649,956; Nov. 22.

Hannauer Car Retarder Company, The. (See Frölich, Ernst, assignor.).

Hannauer Car Retarder Company. (See Hannauer, G., and Wilcox, assignors.) Hannauer Car Retarder Company, to the Hannauer Car Retarder Company, Carlotte Mannauer, G., and Wilcox, assignors.).

tarder Company, Chicago, Ill. Track brake. 1,612 865: Jan. 4.

Hannauer, George, and E. M. Wilcox, Calumet City, assignors to Hannauer Car Retarder Company, Chicago, Ill. Control mechanism for brakes. 1,638,630; Aug. 9.

Hannauer, George, Calumet City, Ill., and B. M. Wilcox, Hammond, Ind., assignors to Hannauer Car Retarder Company, Chicago, Ill. Track-brake mechanism and control means therefor. 1,638,631; Aug. 9.

Hannedohn, Cur. W. A., assignor to A. Keller, Berlin-Lord Carlon, Carlon,

Theretoe Houritoff, sept. 6.

Grand Lake, Colo. Grate. Assign. William A., Grand Lake, Colo. Grate. 1,640,771; Aug. 30.

Hannya, William A., Grand Lake, Colo. Grate. 1,640,771; Aug. 30.

Hanny, Charles E., Unionville, Conn. assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric safety device. 1,640,701; Aug. 30.

Electric Manufacturing Company, Plainville, Conn. Electric-switch-operating means. 1,650,348; Nov. 22.

Hanschen, Lidliam E., assignor of forty per cent to M. Kilkman, Portland, Orec. Selective summed-tape-dissancelle Mayler. Brooklyn, N. Y. Musical instrument. 1,631,862; June 7.

Hanscon, Walter. Brooklyn, N. Y. Musical instrument. 1,631,862; June 7.

Hanscon, A. L., Mfg. Co. (See Hansen, Augle L., assignor.).

Hansen, Abel, Perth Amboy, N. J. Kiln. 1.649.029; Nov. 15.

Hansen, Abel, Perth Amboy, N. J. Küln. 1.649.029; Nov. 15.

Hansen, Albert E., Chicago, Ill. Loop aerial frame. Des. 74.147; Dec. 27.

Hansen, Alfred J., Storm Lake, Iowa. Teething device. Hansen, Lagree L., Evanston, Ill. Acetylene lamp. 1.644.780; Oct. 11.

Hansen, Augie L., Evanston, Ill. Acetylene lamp. 1.644.780; Oct. 11.

Hansen, Augie L., assignor to A. L. Hansen Mfg. Co., Chicago, Ill. Display stand. Des. 71.940; Feb. 1.

Hansen, Augie L., assignor to A. L., Hansen Mfg. Co., Chicago, Ill. Display stand. Des. 72.672; May 17.

Hansen, Augie L., assignor to A. L. Hansen Mfg. Co., Chicago, Ill. Display stand. Des. 72.672; May 17.

Lock and method of manufacture. 1,624,051; Apr. 12.

Hansen Canning Machinery Corporation. (See Hansen, Oswald H., assignor.)
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Drill-steel central-Rand Company, Jersey City, N. J. Drill-steel central-Rand Company, Jersey City, N. J. Gas-compressor valve. 1,614,124; Jan. 11.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Rock drill. Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Rock drill. 1,621,250; Mar. 15.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Rock Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Engine. 1,625,654; Apr. 19.

1,621,250; Mar. 15.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Engine. 1,625,634; Apr. 19.

Hand Company, Jersey City, N. J. Engine. 1,625,634; Apr. 19.

Hand Company, Jersey City, N. J. Broaching attachment. 1,627,737; May 10.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer. 1,632,378; June 4.

H. 1,632,378; June 4.

H. 1,632,378; June 21.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer. 1,632,837; June 21.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Rotation mechanism Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Hoist. 1,635,887; July 12.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Channeler steel.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Channeler steel.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Walve for rock drills. 1,636,635; July 19.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,636,635; July 20.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Walve for rock drills. 1,637,186; July 26.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Walve for rock drills. 1,637,186; July 28.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Walve for rock drills. 1,637,186; July 28.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer, 1,645,089; Oct. 18.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer, 1,645,089; Oct. 18.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer, 1,645,089; Oct. 18.

Hanse

Rand Company, Jersey City, N. J. Steel retainer. 1,646,691; Oct. 18.

Hansen, Charles S., Easton, Pa., assignor to Ingersoil-Rand Company, Jersey City, N. J. Broaching attachment. 1,646,090; Oct. 18.

Hansen, Conrad T., Detroit, Mich., assignor to The American Motor Body Corporation, Philadelphia, Pa. Hansen, Conrad T., Detroit, Mich., assignor to The American Motor Body Corporation, Philadelphia, Pa. Window stop. 1,632,132; June 14.

Hansen, Dewey C., Kansas City, Mo. Soldering flux and cement applying device for can-making machines. 1,622,781; Mar. 29.

1,622,781; Mar. 29.

1,622,781; Mar. 29.

1,638,847; Aug. 16.

Hansen, Ernais F., assignor to The Star Shutter Company, Chicago, Ill. Shutter cover for radiators. 1,635,847; Aug. 16.

Hansen, Fred E. (See Reimer, J. A., and Hansen, Hansen, Hansel, Highwood, assignor to The March of March of March 1,645,283; Oct. 11.

Hansen, Henry J., assignor to J. M. Johnson, Chicago, Ill. Corner-post spotlight. Des. 71,970; Feb. S.

Hansen, Henry A., Sturgeon Bay, Wis. Stand for supporting washtubs, table tops, and he like. 1,643,271; Mar. 20.

Ansen, Henry J., assignor to The Dill Manufacturing Company, Cleveland, Ohio. Dust cap. 1,620,887; Mar. 15.

Hansen, Herman, Kansas City, Mo. Automobile signaling apparatus. 1,616,221; Feb. 1.

Hansen, Hermanus A., San Francisco, Calif. Sereen door. 1,658,274; Dec. 20.

Hansen, Jo Dec. 20.

Hanon John Bettendorf, assignor of four twenty-fifths as W. H. Martin ten twenty-fifths O T. S. Cunningham, and one twenty-fifth to T. M. Churrie, Davenort fown. Mechanical golf instructor and exerciser. 1,633,527; June 21.

Hansen, John, Bettendorf, assignor of four twenty-fifths to W. H. Martin, ten twenty-fifths fo T. S. Cunningham, ham, and one twenty-fifth to T. McQuarrie, Davenport, Iowa. Mechanical golf instructor and exerciser. 1,634,102; June 28.

Hansen, John, Bettendorf, assignor of four twenty-fifths to W. H. Martin, ten twenty-fifths to T. S. Cunningham, and one twenty-fifth to T. McQuarrie, Davenport, Iowa. Mechanical gold instructor and execiser. 1,634,103; June 28.

Hansen, John, Milltown, Mount. Fishing and hunting ofter. 1,645,962; Sept. 13.

Getter, 1645,962; Sept. 13.

Hansen, John, Greenwich, Con., assignor to Davenport Manufug Foress. 1,645,966; Oct. 18.

Hansen, John, Greenwich, Con., assignor to Abendroth Brothers, Fort Chester, N. Y. Gas range. Des. 73,687; Innsen, John, Greenwich, Con., assignor to Abendroth Brothers, Fort Chester, N. Y. Gas range. Des. 73,687; Innsen, Lorentz E., Bergen, Norway. Rotatable block housing, 1,628,972; May 17.

Hansen Manufacturing Company, The.

W. and Hansen, assignors.)

1,638,260; Aug. 9.

1,638,260; Aug. 9.

Ansen, Martin. (See Sherburne, Rufus B, and L. G., and Hansen, Marrita (See Sherburne, Rufus B, and L. G., and Hansen, Marrita (See Stertzbach, H. W., and Hansen,

Hansen, Merritt R. (See Stertzbach, H. W., and Hansen.)

Hansen, Merritt R. (See Stertzbach, H. W., and Hansen, Norman A., Lake Bluff, assignor to Abbott Laboratories, North Chicago, Ill. Amesthetic compound. 1,652,783; Dec. 18.

Hansen, Oswaid H., Port Washington, Wis., assignor to Hansen Ca. 612,811; Jan. 4 Corporation. Can-filling manner. Ca. 612,811; Jan. 4 Corporation. Can-filling manner. Canning Machinery Corporation, occupant of Hansen, Canning Machinery Corporation, Cedarburg, Wis. Preserving fruit. 1,625,207; Apr. 19.

Hansen, Raymond, Cudahy, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Vulcanizing apparatus, 1,640,800; Aug. 30.

1,617,805; Feb. 15.

Hansen, Royal J., Milwaukee, Wis. Boat seat. 1,620,906; Mar. 15.

Hansen, Sinius M., assignor, by mesne assignments, to Victor Shoe Machinery Company, Lynn, Mass. Priming and vacuum tank. 1,640,404; Aug. 30.

Hansen, Theodore N., Seattle, Wash. Reproducing device. Nahut, Mass. Rotor. 1,651,820; Dec. 6.

Hansen, Valdemar B., Chicago, Ill. Picture-frame construction. 1,637,168; July 26.

Hanshew, George O. (See Jupp. W. B., and Hanshew.) Hansman, John P. and M. F., Des Moines, Lows. Nov. 22.

Hansman, John P. and M. F., Des Moines, Lows. Nov. 22.

Hansman, Marcus F. (See Hansman, John P. and M. F.)

NOV. 22. Hansman, Marcus F. (See Hansman, John P. and M. F.) Hansmann, Paul, and Herman Strack, Long Prairie, Minn., assignors, by mesne assignments, to the said Hansmann. Anti-side-draft plow hitch. 1,621,633;

Mar. 22.

Hansmann, Paul, and H. Strack, Long Proirie, Minn, assignors, by mesne assignments, to the said Hansmann. Antiside draft-plow hitch. 1,626,676; May 3.

Hanson, Albert J., Arlington, assignor to American Metallurgical Corporation, Boston, Mass. Electric resistance furnace. 1,652,200; Dec. 13.

Hartford, Conn.; E. A. Hartford, Conn.; E. A. Hasson, Bengt M. W., deceased, Hartford, Conn.; E. A. Hanson and C. E. Whitney, executors. Gauge. 1,613,937; Jan. 11.

Hanson, Bengt M. W., deceased, Hartford, Conn.; E. A. Hanson, Bengt M. W., deceased, Hartford, Conn.; E. A. Hanson and C. E. Whitney, executors. Apparatus Apr. 5.

Hanson, Bengt M. W., deceased, Hartford, Conn.; E. A. Hanson and C. E. Whitney, executors. Apparatus Apr. 5.

for and method of truing abrasive screws. 1,622,113; Apr. 5.

Apr. 6.

Apr. 6.

Apr. 6.

Apr. 6.

Apr. 6.

Apr. 6.

Bengt M. W., deceased, Hartford, Conn.; E. A.

Hanson, Bengt M. W., deceased, Hartford, Conn.; E. A.

Hanson and C. E. Whitney, executors. Metal-working machine. 1,627,690; May 3.

Hanson, Bengt M. W., deceased, Hartford, Conn.; E. A.

Hanson and C. E. Whitney, executors. Grinding wheel.

Hanson and C. E. Whitney, executors. Grinding wheel.

Hanson and C. E. Whitney, executors. Method of and apparatus for grinding threaded members and the like. 1,040,992; Aug. 30.

Hanson and C. E. Whitney, executors. Method of and apparatus for grinding threaded members and the like. 1,040,992; Aug. 30.

Hanson Bengt M. W., deceased, Hartford, Conn.; E. A.

Hanson and C. E. Whitney, executors. Metal-working Hanson, Bengt M. W., deceased, Hartford, Conn., by E. A.

Hanson and C. E. Whitney, executors. Metal-working hanson, Bengt M. W., deceased, Hartford, Conn., by E. A.

Hanson Brothers Scale Company. (See Hansson, Stan L. assignor.)

H., Company, The. (See Borresen, Helge A.,

Hanson, C. H., Company, Inc., Received assignor to Advance Farcholite Corporation, Chicago, Ill., Cluster conference of the Corporation, Chicago, Ill. Cluster conference of the Company of the Corporation, Chicago, Ill. Actualing player pianos. 1,622,827; Mar. 29.

Hanson, Edward, Cleveland, Ohio. Tool. 1,645,753;

Hanson, Edward, Cleveland, Ohio. Tool. 1,645,753;
Oct. 18.
Hanson, Edwin. (See Stendahl, L., and Hanson.)
Hanson, Elmar A., et al., executors. (See Hanson, Bengt
Hanson, Elmar B., New Rochelle, N. Y. Wardrobe-trunk
construction. 1,621,321; Mar. 15.
Hanson, Hans C., assignor to American Gas Machine
Company, Albert Lea, Minn. Heating stove using liquid
vaporizing fuel. Rel6,525; May 17.
Hanson, Hans C., assignor to American Gas Machine
Company, Albert Lea, Minn. Support for folding camp
vaporizing fuel. 1,615,378; Han-25 stove using liquid
vaporizing fuel. 1,615,378; Han-25 stove using liquid
vaporizing fuel. 1,615,378; Han-16 stove using liquid
Hanson, Hans C., assignor to American Gas Machine
Company, Albert Lea, Minn. Support for folding camp
stoves and ovens. 1,617,806; Feb. 15.
Hanson, Hans C., assignor to American Gas Machine Com1,626,035; Apr. 22.
Hanson, Hans C., assignor to American Gas Machine Com1,639,941; Mun. Plaster board. 1,651,951; Dec. 6.
Hanson, Hans E., assignor of One-half to A. E. Carlsen,
Minncapolis, Minn. Plaster board. 1,651,951; Dec. 6.
Hanson, Hans F., Cambridge, Minn. Heat distributor for
automobiles. 1,642,826; Nov. 8.
Hanson, Hans P., assignor to White Products Company,
Jan. 19, assignor, Minn. Heat distributor for
automobiles. 1,642,826; Nov. 8.
Hanson, Hans P., assignor to White Products Company,
Jan. 19, assignor, Jan. 20, assignor, Jan. 19, assignor, Jan. 20, assignor, Jan. 19, assignor, Jan. 19, assignor, Jan. 20, a

Hanson, Henry, et al. (See Carlson, Gustave O., as-signor.) Hanson, Henry E., Nevis, Minn. Well screen. 1,638,731; Hanson, Aug. 9

signor.)
Henry B., Nevis, Minn. Well screen. 1,638,731;
Aug. 9
Henry P. (See Grimes. Frank M., assignor.)
Hanson, Herman, Minneapolis, Minn. Heater for automobiles. 1,621,199; Mar. 15.
Hanson, Hugo H., assignor to Tarratine Manufacturing
Co. Inc., Bangor, Me. Soap compound and making
the same 1,623,491, Apr. 12.
Hanson, John, Grafton, N. Dak. Weed eradicator.
1,613,997; Jan. 11,
Hanson, John R., Alexandria, Minn. Driving mechanism
for sewing-machine batteries. 1,636,985; July 26.
Hanson, Mis K. F., Stockholm, Sweden. Boiling fibrous
matters. 1,634,143; June 28.
Hanson, Robert. (See Edwards, E., Jones, and Hanson,)
Hanson, Robert. (See Edwards, E., Jones, and Hanson,)
Hanson, Roy E., Loe Angeles, Calif. No-flow alarmHanson Roy E., Loe Angeles, Calif. No-flow alarmHanson, Roy E., assignor of one-half to B. Jones, Los
Angeles, and one-half to J. B. Morey, Culver City,
Calif. Flow indicator. 1,639,342; Aug. 16.
Hanson, Sanuel L., Albert Lea, Minn. Trip had and
Hanson, Sanuel L., Albert Lea, Minn. Adjustable cattle
stall. 1,653,275; Dec. 20.
Hanson & Van Winkle Company, The. (See Hall, Wesley
Hanson & Van Winkle Company, The. (See Fowell,
Everton B., assignor.)

Hanson e 1-3.

R., assignor.)

Have the company of the the forest of the company of the company

Hansson, Soren, assignor of one-hair to H. Y. Addreson, Butler, Pa. Truck lever connection. 1,625,805; Apr. 26.

Apr. 26.

Reson Fraction of the Market State of the M

Hapgood, Clarence H., assignor to Toledo Scale Company, Toledo, Ohio. Weighing scale. 1,640,073; Aug. 23. Hapgood, Clarence H., assignor to Toledo Scale Company, Toledo, Ohio. Platter-retaining device. 1,640,074;

Totelo, Onio. Platter-retaining device. 1,031,014; Aug. 23.

Holedo, Chic. Balancing device. 1,651,272; Nov. 29.
Happood, Cyrus H., Nutley, N. J., assignor to The De Layal Separator Company New York, N. Y. Vacuum pump. 1,635,271; July 12.
Happood, Cyrus H., Nutley, N. J., assignor to The De Layal Separator Company, New York, N. Y. Vacuum pump. 1,635,271; July 12.
Happood, Cyrus H., Nutley, N. J., assignor to The De Layal Separator Company, New York, N. Y. Vacuum pump. 1,635,271; Mulley, N. J., assignor to The De Layal Separator Company, New York, N. Y. Buttermaking apparatus. 1,650,625; Nov. 29.
Happood, Oscar D., Montague, Mass., assignor to Goodell-Pratt Company, Greenfield, Mass. Level. 1,624,339; Apr. 12.
Happood, Whiteley, Whittier, Calif. Telegraph machine. Happel, Albert W., Toledo, Ohio, assignor, by mesne assignments, to The Uline Ice-Scoring Machine Company, Wilmington, Del. Reciprocating feeder, 1,631,125; June 7.

pany, Wilmington, Del. Reciprocating feeder. 1,631,120; June 7.

Rappel, Wilhelm, Oppenheim, Germany. Manufacturing clothes pegs of wire. 1,635,619; July 12.

Bergan, L. 13,456; Jan. 4.

Harbaugh, Orpha, et al. (See Clark, Dolph M., assignor.)

Harbeek, Martin, Grossfiottbeck, near Hamburg, assignor to Heidenreich & Harbeck, Hamburg, Germany. Bevel-wheel-shaping device operating by rolling movements. 1,622,722; Apr. 19.

Harber, Edward N. (See Krick, Homer, assignor.)

Harber, Laurence S., assignor, by mesne assignments, to filling machine. 1,635,014 June 21.

Harber Marie E., Richmond, Ky. Cleaning Implement. 1,641,034; Aug. 30.

Harbert, Lictor H., Springfield, assignor to E. P. Smith, Chicago, Ill. Bracket for retaining valves. 1,652,127; Dec. 6.

Dec. 6.
Harbhson-Walker Refractories Company. (See Schlotterer, G. K., and Youngman, assignors.)
Harbottle, Henry R. (See Tellford, Henry R., assignor.)
Harcourt, Bernard W. (See Hewitt, J. H., and Har-

Harcourt, Bernard W. (See Hewitt, J. H., and Harcourt, Martha D., administratrix. (See Harcourt, Stillwell R.)
Harcourt, Stillwell R., deceased, Chicago, Ill.; M. D. Harcourt, Stillwell R., deceased, Chicago, Ill.; M. D. Harcourt, administratrix. Player-plano mechanism. 1,625,253; Apr. 19.
Hard. Maicolm. Flushing, assignor to The Superheatre, Jectors. 1,651,701; Dec. 5.
Hardacker, William E., assignor to American Plumbing and Heating Co., Minneapolis, Minn. Truck. 1,643,485; Oct. 11.
Hardcastle, John H., Goodlettsville, Tenn. Combined hip and 11.
Hardcastle, John H., Goodlettsville, Tenn. Current motor. 1,645,486; Oct. 11.
Hardcastle, John H., Goodlettsville, Tenn. Current mother. 1,651,702; Dec. 8.
H. (161,125; Jan. 11.
Hardcastle, John H., Goodlettsville, Tenn. Current mother. 1,651,702; Dec. 8.
Hardesty, J. E., et al. (See Donnelson, Blanche, assignor.)

signor.)

Hardesty, Shortridge. (See Brown, T. E., jr., Williams, and Hardesty.)

Hardesty, Shortridge, Larchmont, and W. G. Williams, Flushing, N. Y., assignors to Waddell & Hardesty, New York, N. Y. Lift bridge. 1,644,043; Oct. 25.5.

Hardie, Jessle, Albany, N. Y. Cooking kettle. 1,625,655; Apr. 19.

Hardie, John C., Helena, Mont. Pea sheller. 1,615,081; Jan. 18.

Hardin, 1986.

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Hardin, 1986.

Harding, 1986.

Hardin, 1986.

Harding, 1988.

Harding, Dana E., Arlington, Mass., assignor to Harding Engineering Company, East Boston, Mass. Chain drive glazing machine. 1,635,081; July 5.

Harding, Dana E., Arlington, assignor to Harding Engineering Company, Boston, Mass. Cheeking machine. 1,648,845; Nov. 8. Thington, assignor to Harding Engineering Longon, Language Language, Language Language, Languag

May 3. Hardinge Brothers, Inc. (See Hardinge, Franklin, as

ttardinge Brothers, Inc. (See Hardinge, Franklin, as-signor.)
Hardinge Brothers, Inc. (See Porst, Frederic, assignor.)
Hardinge, Franklin, assignor to Hardinge Brothers, In-corporated, Chicago, Ill. Oliburning mechanism.
1,619,470; Mar. 1.
Hardinge, Franklin, assignor to Hardinge Brothers, In-corporated, Chicago, Ill.
Oli burner. 1,621,537;
Mar. 22.

Mar. 22.

Hardinge, Franklin, assignor to Hardinge Brothers, Inc. Chicago, Ill. Oil burner. 1,621,537; Mar. 22.

Hardinge, Franklin, assignor to Hardinge Brothers, Inc. Chicago, Ill. Oil burner. 1,626,116; Apr. 26.

Hardison, Edwin A., Los Angeles, assignor to First National Bank & Trust Co., Santa Paula, Calif. Underreamer for well drilling. 1,615,879; Jan. 28.

Hardinan, Bank & Trust Co., Santa Paula, Calif. High-pressure steam boiler. 1,633,668; June 28.

Hardman, Frederick J., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Enginestarting apparatus. 1,641,383; Sept. 6.

Hardman, Frederick J., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Enginestarting apparatus. 1,641,242; Sept. 6.

Hardt, Arthur, Godesberg, Germany. Pump. 1,649,347; Nov. 15.

Hardt, Arthur, Godesberg, Germany. Pump. 1,494,347; Nov. 15.

Hardtmann, Max. (See Hentrich, W., and Hardtmann.)

NOV. 15.
Hardtmann, Max. (See Hentrich, W., and Hardtmann.)
Hardtmann, Roy R., Bartlesville, Okla. Automatic gas cutoff. 1617,156; Feb.
Hardwicke-Etter Company. (See Streun, John A., as-(See Streun, John A., as-

off. 1,617,156; Feb. 8.
Hardwicke-Etter Company. (See Streun, John A., assignor). The Hardwicke-Etter Company. Signor). Heaville, the Hardwicke-Etter Company. Pike, N. H. Abrasive tool. 1,617,592; Feb. 15.
Hardy, Charles, G. See Rappeport, W. A., and Hardy.). Hardy, Charles, assignor to Amso Products, Inc., New York, N. Y. Fastening means. 1,612,918; Jan. 4.
Hardy, Charles, assignor to Amso Products Inc., New York, N. Y. Variable condenser. 1,620,020; Mar. 8.
Hardy, Charles H., Mount Vernou, assignor to The Smoke-box arrangement. 1,615,625; Jan. 25.
Hardy, Clara B., Los Angeles, Calif. Mechanical manipulating mechanism. 1,617,593; Feb. 15.
Hardy, John, Brooklyn, N. Y. Tea-dispensing machine. 1,636,910; July 26.
Hardy, John, Brooklyn, N. Y. Tea-dispensing machine. 1,636,910; July 26.
Hardy, Sirrine, Savannah, Ga. Lath-cutting machine. 1,636,910; July 26.
Hardy, William J. Jauburn, near Sydney, New South Wales, Australia. Accelerator pedal. 1,616,367; Feb. 15.
Hare, Charles N., Lima, Ohlo. Ocean compressed-air power. 1,623,341; Apr. 5.
Hare, Franklin C., assignor to J. W. Miller, Co., Rockford, Ill. Incubator. 1,618,005; Feb. 15.
Hare, Jacob, Chicago, Ill. Cold-air grate. 1,652,128; Haren, Jacob, Chicago

Dec. 6. Dec. Urban C. (See Freeman W. B., Haran, and

Hitter, Section Dec. (See Freeman W. B., Haran, and Dec. 6.

Hartung.)
Hartord, Albert K., Oakland, assignor to New Metal Products Company, Emeryville, Calif. Arc-welding system. 1,45,049. Oct. 11.
Harget, Frederick, Toledo, Ohio. Treating marble. Hargety, Clarence M., assignor to The Formica Insulation Company, Cincinnati, Ohio. Manufacturing laminated products. 1,634,380; July 5.
Hargrave, Fred M., Cedar Rapids, Jowa. Road-building machine. 1,619,614. Mar 1.
Harging, Georgian Company, Compan

nism. 1,644,583; Oct. 4.
Hargrave, John M., Clicinnati, Obio. Clamp. 1,638,848;
Aug. 16.
Hargrave, John M., Cincinnati, Obio. Clamp. 1,639,561;
Hargraves, Herbert, Philadelphia, Pa. Automobile brake.
1,643,800; Sept. 27.
Hargrove, Henry C., et al. (See Griffin, James T., assignor.)

signor.) Hargroves, Linwood W., and H. L. Herman, Augusta, Ga. Envelope. 1,629,788; May 24. Harker, Oliver A., jr. (See Moore, Dorsey E., assignor.) Harker, Percy, et al. (See Wright, Fred W., assignor.)

Harkin, Harry E., Ridgefield Park, N. J. Automatic culinary unchine. 1,518,190; Feb. 22
Harkin, Waiter J., Seattle, Wash. Electrically-controlled fuel-inel device. 1,615,012; Jan. 25.
Harkins, James S., Pitsourgh, assignor of one-fifth to for picting mills. 1,647,693; Nov. 1.
Harkins, L. W. (See Guiss, Join D., assignor.) Harkness, Etta J., Seattle, Wash. Combination comb holder, 1,645,138; Oct. 11.
Harkins, L. W. (Exe Guiss, Join D., assignor.) Harley-Davidson Motor Co. (See Strauch, Eugene, assignor.)

Harley-Davidson Motor Co. (See Straus, Signor.)
Harley, John F. (See Tooker, J. N., and Harley.)
Harley, Lee M. (See Wade, H. R., and Harley.)
Harley, William R., Los Angeles, Calif. Double swivel banger and support for punching bugs and the like.
1,622-9.73, May 17.
Harlow, John B., Upper Montelair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Control and supervisory system. 1,610,186; Feb. 1.
Harlow, Walter F., Lynchburg, Va. Laundry assorting rack. 1,625,316; Apr. 19.
Harman, Montie M., Frederic, Mich. Wrench. 1,641,484; Sept. 6.

Harlow, Walter F., Lynchburg, Va. Laundry assorting rack. 1,625,316; Apr. 19.

Harman, Montie M., Frederic, Mich. Wrench. 1,641,484; Sept. 6.

Harmon, Charles N., and J. P. Dames, Ann Arbor, Mich. Harmon, George A., assignor to The American Reflex-Lite Company, Columbus, Ohio. Automatic connecter. 1,613,825; Jan. 11.

Harmon, James A. (See Nelson, F. L., and Harmon, Harmon, Jane, Zoledo, Ohio. Clothes-protecting device. Harmon, Katrlna T. (See Harmon, Lawrence E., assignor).

Harmon, Lawrence E., assignor to K. T. Harmon, Buffalo, N. Y. Trolley wheel. 1,620,203; Mar. 8.

Harmon, Nellie L., Bowerston, Ohio. Automatic feeder. 1,617,248; Feb. 8.

Harmon, Sellie L., Bowerston, Ohio. Supporting the contents in freight cars. 1,637,748; Aug. 2.

Harmon, William I., Langley, Wash. Animal trap. Harmony, Milnie M., Canton, Ohio. Mail-box station. 1,029,620; May 24.

Harnett, Aubrey D., Racine, Wis. Picture-projecting device. 1,616,747; Feb. 8.

Harnott, Lewis D., assignor to the Buckeye Blower Company assignor).

assignor.) Harnischfeger Corporation. (See Ljungkull, Rolf, as-

Harnischteger Corporation. (See Huber, Johannes S., assignor.)

Harnischfeger Corporation. (See Ljunghul, Rolf, assignor.)

Harnisch John D. (See Weigarver, C. E., and Harnisch, John D. (See Weigarver, C. E., and Harnisch, Harnisch, John D. (See Weigarver, C. E., and Harnisch, Jernstein, C. E., Flushing, N. Y. Adjustable head the John D. (See Flushing, N. Y. Adjustable head Learning of the John D. (See Flushing, N. Y. Adjustable head Learning, J. (See Flushing, J. (See Kelleher, James, Assignor.)

Harper, Jener E. (See Kally, James E., assignor.)

Harper, Joe S. (See Kally, James E., assignor.)

Harper, John L., assignor to American Soda Fountain Company, Boston, Mass. Drinking-glass washer. 1,623,627; Dec. 27.

Harper, John L., assignor to American Soda Fountain Company, Boston, Mass. Drinking-glass washer. 1,623,624; Mar. 2.

Harper, John L., assignor to American Soda Fountain Company, Boston, Mass. Drinking-glass washer. 1,623,624; Mar. 8.

Harper, Philip S., Chicago, Ill. Valve. 1,641,675; Sept. 6.

Harper, Klewart A. (See Harper, Alexander and S. A.)

Harper, William D., Waltham, Mass. Vehicle body support. 1,622,347; Dec. 13, Lann. V. G. and Harpster. 1,623,637; Dec. 13, Lann. V. G. and Harpster. 1,623,637; Dec. 13, Lann. V. G. and Harpster. 1,646,480; Oct. 25.

Harpitan, Herman R., Couth Hadder, assignor to American James H., San Franchsco, Callf. Tire cushion. 1,650,271; Nov. 22.

Harriman, James H., San Franchsco, Callf. Locking means for rotary members. 1,637,524; Aug. 2.

Harriman, Louis H., trustee. (See Brittain, George E., assignor.)

Harrington, Alfred L., Rosslyn Farms, Pa., assignor to Pittsburgh Plate Glass Company. Plate-glass surfacing car. 1.631,126; June 7.

Harrington, Clinton O., assignor to Aldobilt Company, Chicago, Ill. Relay. 1,617,594; Feb. 18.

Harrington, Clinton O., assignor to Aldobilt Company, Chicago, Ill. Lantern. 1,617,595; Feb. 18.

Harrington, Clinton O., assignor to Aldobilt Company, Chicago, Ill. Lantern. 1,617,695; Feb. 18.

Controlling the distribution of electric discharge. 1,616,444; Feb. 1.

Harrington, Jesse F., Memphis, Tenn. Switch. 1,626,463; Apr. 26.

Apr. 20. Harrington, John C., Manchester Depot, Vt. Brake mechanism. 1,630,178; May 24. Harrington, John H., Baie D'Urfe, Quebec, assignor of one-third to G. W. Robb, Montreal, Quebec, Canada, Treatment of water. 1,623,342; Apr. 5. Harrington, John P., et al. (See Newton, Noel D., and

Harrington, Joseph, Riverside, Ill., assignor, by mesne assignments, to Riley Stoker Company, Worcester, Mass.
Stoker. 1,613,324; Jan. 4.
Harrington, William S., and G. E. Off. Keokuk, Iowa.
Right-of-way Indicator. Des. 71,941; Feb. 1.
wire fabrics. 1,632,964; June 21.
Harris, Alex, Chicopee Falls, assignor to Draper Corporation, Hopedale, Mass. Rocker-shaft bearing for looms.
1,618,125; Feb. 15.
Harris, Andrew. H. Seatherton, Ohlo, assignor, by mesne
assignments, to The Fafnir Bearing Company, New
Britain, Conn. Shackle for vehicle springs. Re16,519;
Jan. 4.

Britain, Conn. Shackle for vehicle springs. Re16,519; Jan. 4. Harris, Arthur W., assignor to The Amplion Corporation of America, New York, N. Y. Sound-reproducing instrument. 1.648,226; Nov. 8. Harris, Bialane H., assignor to Brown & Bigelow, St. Paul, Minn. Shoe-display stand. 1,639,290; Aug. 16. Harris, Bialne H., assignor to Brown and Bigelow, St. Faul, Minn. Making bottle-cap lifters. 1,652,201; Dec. 13.

Harris Calorific Company, The, et al. (See Bucknam, James H., assignor.) Harris Calorific Company, The. (See Campbell, Lorn, Francis Calorific Company, The. (See Harris, John, as-

ignor.

Signor.)

Harris, Carl C. (See Riggs, H. C., and Harris.)

Harris, Carlton G., assignor of one-third to J. R. Rathburn, Denver, Colo. Lifting iack. 1,658,276; Dec. 20.

Harris, Charles J., assignor of one-half to C. M. Duncombe, Hartford, Mich. Pipe werench. 1,644,522;

Harris, Charles J., assignor of one-hair to U. ha. Den-combe, Hartford, Mich. Pipe wrench. 1,644,522; Oct. 4. Harris, De Witt C., Pineland, Fla., assignor to Eurgess Battery Company, Madison, Wis. Flash-light case. 1,644,125; Oct. 4. Harris, De Witt C., Pineland, Fla., assignor to Burgess Battery Company, Madison, Wis. Flash-light case. 1,644,126; Oct. 4. Harris, Edward N. (See Umsted, B. T., and Harris.) Harris, Ernest O. (See Dickens, J. R., Harris, and War-ner.)

Carris, Ford W., Los Angeles, Calif. Gas and oil separator. 1,620,096; Mar. 8.

Harris, Ford W., assignor to Magnetic Signal Co., Los Angeles, Calif. Rail spreader. 1,634,664; July 5.

Harris, Frank A. (See Hirsch. II. M., and Harris.)

Harris, Frank A. (See Hirsch. II. M., and Harris.)

Harris, Frank C., Brighton, Mass., assignor to The Justable hanger clamp. 1,613,394; Jan. 4.

Harris, Frank C., Brighton, Mass., assignor to The American Monorall Company, Cleveland, Onio. Electrified monorall system. 1,623,920; Apr. 5.

Harris, Frank C., Brighton, Mass., assignor to The American Monorall Company, Cleveland, Onio. Electrified monorall system. 1,623,920; Apr. 5.

Harris, George E., Swissvale, Pa. Reversible towel rack. 1,634,746; July 5.

Harris, George G. (See Dart, L. M., and Harris, Harris, George H. (See Adamson, Alian A., assignor.)

Harris, George H., Swotton, Calif. Diving mechanism Harris, George H., Swotton, Calif. Diving mechanism Harris, Henry E., Portland, Oreg. Rine-unit-type refrigerating machine. 1,626,083; Apr. 26.

Harris, Howard B. (See Butcher, J. E., and Harris.)

Apr. 26.

Harris, Howard B. (See Butcher, J. E., and Harris.)

Harris, Howard C., Akron, Ohlo. Pivotal connection.

1,624,239; Apr. 12.

Harris, Howard C., Akron, Ohlo, assignor to The Fafult First, Howard C., Akron, Ohlo, assignor to Lucey fiction sorting bearing. 1,635,639; July 12.

Harris, Hu M., assignor to Lucey Manufacturing Corporation of Tennessee, Chattanooga, Tenn. Engine. 1,622,225; Mar. 22.

Harris, Hu M., and O. H. Afridge, assignors to Lucey drilling machine. 1,628,363; May 10.

Garris, Jason E., Howard, Kans. Intake valve. 1,626,279; Apr. 26.

Harris, Jason E., Howard, Kans. Bearing for engines, Harris, Jason D., Howard, Kans. Bearing for engines.

Apr. 26.

Harris, Jason E., Howard, Kans. Bearing for engines, air compressors, and the like. 1,627,031; May 3.

Harris, Jason E., Howard, Kans, Intake valve. 1,627,032; May 3.

Harris, Jesse, assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Induction electricity meter. 1,639,728; Aug. 23.

Harris, Jesse, assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Commutator electricity meter. 1,648,898; Nov. 15.

Harris, John, Cleveland, Ohio, Harris Calorific Company, Cleveland, Ohio, Velve for tanks. 1,631,372; June 7.

Harris, John, Assignor to The Harris Calorific Company, Cleveland, Ohio, Resous fuel. 1,637,187; July 26.

Harris, John, assignor to The Harris Calorific Company, Cleveland, Ohio, Repulator. 1,648,304; Nov. S.

Harris, John E., G. (See Wylam, B., Harris, and Thomass, 1,648,346; Nov. S.

Harris, John E., G. (See Wylam, B., Harris, and Thomass, John E., G. (See Wylam, B., Harris, and Thomass) M. S. (Shannon, Miss, Chuck for holding bits. Harris, John J., Chicago, Ill. Adhesive. 1,631,265; June 7.

Harris, Joseph. (See Duke, Harrid H., assignor.)

June 7.
Harris, Joseph. (See Duke, Harold H., assignor.)
Harris, Joseph, Wheaton, assignor to W. H. Miner Chicago, III. Draft-rigging key retainer. 1,64: Aug. 23. liner, Inc., 1,640,075;

Harris, Joseph D., assignor, by mesne assignments, to McCord Radiator & Mfg. Co. Detroit, Mich. Fluxing and cleaning apparatus. 1,638,015; June 21.

Harris, Lawrence E., Superior, Wyo. Safety hanger for brake beams. 1,618,706; Feb. 22.

Harris, Mark B., Detroit, Mich. Reserve-fuel-supply device. 1,618,703; Jan. 11.

Harris, Mark B., assignor to General Motors Corporation, Detroit, Mich. Vehicle side curtain. 1,638,334; Aug. 9.

Harris, Noah E., Dickinson, N. Dak. Easel. 1,637,255; Barris, Parley F. Washington, D. C. Composition and

Harris, Farley F., Weshington, D. C. Composition and preparing roach tableis, 1,636,688; July 26.
Harris, Percival, New York, N. Y. Wig for dolls.
1,628,561; May 10.
Harrls, Raymond J., Houston, Tex. Flytrap. 1,620,461;
Mar. 8.

1.622.591; May 10.

1.622.591; May 10.

1.621.630; Apr. 26.

1.621.631; Apr. 26.

1.621.631;

Nov. 15.

Harrison, Arthur W., assignor of one-half to J. E. Osborne, Los Angeles, Calif. Vehicle. 1,632,405;
June 14.

Self-clearing, dredging, and excavating bucket. 1,633,905; Dec. 27.

Harrison, Charles F., Levenshulme, Manchester, England, Automatic safety shuter and modor control for picture projecting machines. 1,637,749; Aug. 2.

Harrison, Charles W. (See Harrison, Waiter L. and C. W.)

Automatic satety subter and move that the projecting machines. 1.637,749; Aug. L. and Harrison, Charles W. (See Harrison, Walter L. and Harrison, Daisy D. (See Brunk, M. V., and Harrison, Harrison, Frank A., Chicago, Ill. Sample book. 1,630,487; May 31. Harrison, Gordon L., Shelby, Mich. Toy or similar article. Des. 78,407; Sept. 6.

Harrison, Gordon L., Shelby, Mich. Toy or similar article. Des. 76,407; Sept. 6.

Harrison, Harry C., Taplow, assignor to St. Helens Cable and Rubber Company, Limited, Slough, Bucks, England. Rubber footwear. 1,632,464; July 5.

Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic device. 1,628,666; May 17.

Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic device. 1,628,666; May 17.

Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Phonie diaphragm. 1,632,068; June 14.

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Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic device. 1,632,134; June 14. Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Mechanical vibratory system. 1,645,139; Oct. 11. Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Vibration-responsive device. 1,643,120; Nov. 8. Harrison, Hulen M., Chicago, Ill. Advertising machine. Harrison, James F., assignor to Chattanooga Bottle & Glass Manufacturing Company, Chattanooga, Tenn. Bottle. Des. 73,288; Aug. 23.
Harrison, James F., assignor of one-half to H. P. McCann, Cleveland, Ohio. Heating system. 1,621,881; Mar. 22.
Harrison, Jeff, Atlanta, Ga. Automatic knock-off and

Mor. 22.

Harrison, Jeff, Atlanta, Ga. Automatic knock-off and hook stop for looms. 1,615,082; Jan. 18.

Harrison, John A. (See Wylle, G. R., and Harrison.)

Harrison, John A., Parnassus, and G. R. Wylle, Washington, Pa. Dducational game. 1,617,389; Feb. 19.

Harrison, John E. (See Mahou T. C., and Harrison.)

Harrison, John H., Stockton, Calif. Combined hinge and doorcheck. 1,644,249; Oct. 4.

Harrison, John P., Jr., Newport News, Va. Truck cab. 1,651,453; Dec. 6.

Harrison, Joseph, Tunstall, Stoke-on-Trent, England. Plate or similar article. Des. 71,872; Jan. 18.

Harrison, Joseph, Tunstall, Stoke-on-Trent, England. Vegetable for similar article. Des. 72,244; Jun. 28.

Harrison, Leigh C. (See Holloway, F. W., and Har-Harrison). Leigh C. (See Holloway, F. W., and Har-Harrison, Leigh C. (See Holloway, F. W., and Har-Harrison, Leigh C. (See Holloway, F. W., and Har-Harrison, Leigh C. (See Holloway, F. W., and Har-

Harrison, Leigh C. (See Holloway, F. W., and Har-Harrison, Leigh C. (See Holloway, F. W., and Harrison.) Louis J., Derby, Conn. Rubber heel.
Harrison, Robert E., Philadelphia, Pa. Buff section for
buffing wheels. 1,627,969; May 10.
Harrison, Thomas R. assignor to Tue Brown Instrument
Company, Philadelphia, Pa. Thermocouple. 1,615,451;
Jan. 25.

Jan. 25, Fhiladelphia, Fa. Thermocoupic. 1,615,431

Jan. 25, Fhiladelphia, Fa. Thermocoupic. 1,615,431

Jan. 25, Fhiladelphia, Fa. Thermocoupic. 1,615,431

Harrison, W. L., et al. (See Ransdell, Clarence C., assignor).

Harrison, Walter L. and C. W., Shelbina, assignors of one-third to J. C. Deloney, Moaroe City, Mo. Furnace grate. 1,642,812: Seep. 20.

Harrison, Walter L. and C. W., Shelbina, assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,648,030: Nov. 15.

Harrison, William P., Richmond, Va. Closure for containers. 1,618,926; Feb. 22.

Harrod, James N., Palo Aito, Calif. Bobbin rack. 1,622,107; Mar. 22.

Harrod, James N., Palo Aito, Calif. Bobbin rack. 1,622,107; Apr. 5.

Harry, Earl L., Pontiac, assignor to E. S. Evans, Detroit, Mich. Motor-vehicle transmission mechanism in mechanism. 1,623,724; Apr. 5.

Harry, Rotert A. (See Springer, J. E., and Harry, Harsh, George M., Baltimore Md. Pyjama trousers. Rel,6,641; May 31.

Harsh, Melvin A. (See Edwards, Charles M., assignor, Harshbarger, Franz S., assignor to Globe Machinery and Supply Company, Des Moines, Iowa. Combination truck and wagon dump. 1,621,779; Mar. 22. Shingle. 1,613,099; Jan. 40.

Harshberger, Norman P., Chicago, Ill. Shingle. Harshberger, Norman P., Chicago, II. Harshberger, Norman P., Chicago, III. Harshberger, Sept. 6. (See Jones, Gestgnor). T11. Shingle.

Roof covering.

III. Shingle. Shingle. TII.

TII. Shingle. (See Jones, George A. E., as-

signor.) e. al. (see Jones, George A. E., assignor.)

Bignor.

Bradiation H., Greenwich, Conn., assignor to Rome
Radiation Company, Incorporated, Rome, N. Y. Streamline high-pressure radiator. 1,641.586; Sept. 6.

Hart, Bertram, Manchester, England. Manufacture of
ferric sulphate. 1,644.250; Oct. 4.

Hart Brothers. (See Willcox, George B., assignor.)

Hart, Carl D., La Grange, Ill., assignor to Western
Electric Company, Incorporated, New York, N. Y.

Little Carl D., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method
of and apparatus for serving a core. 1,651.024;

Nov. 29.

tric Company, Incorporated, New York, N. Y. Method of and apparatus for serving a core. 1,651,024; Nov. 1.

HOT. Wiles S., Warrick, R. I. Boller-tube stopper. 1,647,223; Nov. 1.

Hart, Clarence S., New York, N. Y. Toilet article for hairdressing. 1,630,710; Nov. 29.

Hart, Clyde, Humble, assignor of one-half to J. G. Carr, Harris County, Fax. Spear. 1,619,254; Mar. 1.

Hart & Cooley Manufacturing Company. (See Wessel, Howard H., assignor).

Hart, David, et al. (See Nathan, Samuel, assignor.)
Hart, David M., New York, N. Y. Hat protector.
1,622,588; June 44.
Lomb Optical Company, Rochester, N. Y. Measuring instrument. 1,648,643; Nov. 8.
Hart, Edwin, and G. B. Gallasch, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Measuring instrument. 1,648,643; Nov. 8.
Hart, Elmer J., Vancouver, Wash. Two-cycle engine.
Hart, Frank, Los Angeles, Calif. Producing and affixing signs to materials. 1,634,617; July 5.
Hart, Frank J., and D. W. McGee, Fort Worth, Tex.; said McGee assignor to said Hart. Sash fastener.
1,637,937; Aug. 2.
Hart, Frederick A., New Britain, Conn. Lamp. 1,651,090; Nov. 29.
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Illion, N. Y. Typewriting machine. 1,650,351; Nov. 22.
Hart, George H., West Hartford, Conn. Switch mounting Hart, Gerald W., Ues Angeles, Calif. Automatic gas feed.
1,619,931; Mar. 8.
Hart, Harry S., (See Blake, I. J., and Hart.)
Jart, Harry S., (See Hilgerink, Frank M., assignor.)

Hart, Harry S. (See Hindahl, David, assignor.)
Hart, Harry S. (See Hosceit, William J., assignor.)
Hart, Harry S., Chicago, Ill. Car construction. 1,623,591; Apr. 5. Hart, Harry S., Chicago, Ill. Car construction, 1.623,592;

Hart, then't So, outcomes, Apr. 5.

Hart & Hegeman Manufacturing Company. (See Guett, Monroe, assignor.)

Hart & Hegeman Manufacturing Company, The. (See Nell, Charles, assignor.)

Hart, Henry R. (See Fitzpatrick, K., and Mullins, as

art, Henry R., Montclair, N. J. Helmet. 1,616,187; Feb. 1. Henry R., Montclair, N. J. Flying suit. 1,626,136;

Hart, Henry R., montchar, R. J. Frying St. Abr. 26.
Hart, Herbert S., San Antonio, Tex. Automobile brake mechanism. 1,653,277; Dec. 20.
Hard Grand Gra

Hart Manufacturing Company, The. (See Hart, Gerald W., assignor.)
Hart, Maxwell S., and L. E. Page, New Britain, Conn., assignors to The Hart & Hutchinson Company, Toilet inclosure. 1,687,145; July 26.
Hart, Brasen C., See Aldrich, Loyd I., assignor.)
Hart, Brusell, Los Angeles, Calif. Tobacco-bag holder. 1,640,236; Aug. 23.
Hart, Russell, Los Angeles, Calif. Telephotographic recording apparatus. 1,615,979; Feb. 1.
Hart, Russell, Los Angeles, Calif. Photographically recording sound. 1,627,887; May 3.
Hart, Russell, Los Angeles, Calif. Photo-electric means Hart, Russell, Los Angeles, Calif. photo-electric means 1,647,355; Nov. sound from graphical records. 1,647,355; Nov. sound From graphical records. 1,647,355; Nov. 1,000 Restraining device for last Thomas A. Danbury Conn. Restraining device for

1.647,352; Nov. 1.

Hart, Thomas A., Danbury, Conn. Restraining device for dental chairs. 1.614.126; Jan. 11.

Hart, William C., Adelaide, South Australia, Australia. Formation of labels, symbols, and the like on glass containers. 1.640.076; Aug. 23.

Hart, William C., Kew Gardens, N. Y. Printing roller. 1.642.068; Sept. 18.

Hart, William E., San Jose, Calif. Vacuum tank. Hart, William E., near San Jose, Calif. Vacuum fuelfeed tank. 1.639.131; Aug. 16.

Hart, William F., assignor to The Verona Tool Works, Pittsburgh, Pa. Rail-fastening means. 1,644,373; Oct. 4.

Oct. 4.

Hartenstein, Max, New York, N. Y. Collapsible baby carriage. 1,636,093; July 19.

Harter, Augustus F., assignor to Cribben & Sexton Company, Chicago, Ill. Stove or range. 1,624,550; Apr. 12.

Harter, Augustus F., Oak Park, assignor to Cribben & Sexton Company, Chicago, Ill. Gas range. 1,646,859; Oct. 25.

Harter, Charles, St. Louis, Mo. Brake-beam support. All Collaborations of the Collaboration of the Collaboration

Harter, Isaac, Dongan Hills, N. Y., assignor to The Bab-cock & Wilcox Company, Bayonne, N. J. Steam-power system. 1,635,410; July 12.

Harter, William A. (See Stassart, Joseph D., assignor.) Hartfield, August J. (See Hall, Albert L., assignor.)

Hartford-Empire Company. (See Barker, William T., jr., Hartford-Empire Company. (See Budd. Clinton S., as-

signor.) Hartford-Empire Company. (See Bunge, Julius H. O., assignor.) Hartford-Empire Company. (See Canfield, Robert W ..

assignor.)
Hartford-Empire Company.
Hartford-Empire Company. (See Davis, John, assignor.) (See Grotta, Sidney S., assignor.)
Hartford-Empire Company. (See Howard, George E., as-

signor.) Hartford-Empire Company. (See Kuhrt, Otto C., assignor.)
Hartford-Empire Company. (See Lorenz, Edward H.,

assignor.) Hartford-Empire Company. (See Miller, William J., assignor.) Hartford-Empire Company. (See Mulholland, Vergil, as-

signor.)
Hartford-Empire Company. (See Nelson, Ernest G., jr., assignor.)

(See Peller, Karl E., as-

signor.) Hartford-Empire Company. (See Shackelford, Orie, assignor.) Hartford-Empire Company. (See Weaver, David P., as-

signor.) Hartford-Empire Company. (See Willetts, Paul G., as

signor.)

Hartford Rubber Works Company, The. (See Hopkinson, E., and Steinle, assignors)

Hartford Rubber Works Company, The. (See Steinle, William J., assignor.)

Hartford Special Machinery Company, The. (See Steimer, Theodore C., assignor.)

Hirtl, Karl. Chicago, II. Device for correcting respirations. (See Steimer, Hartford). (See Wichman, F. M., and Hartfarm).

Hartliapp, Alfred P. (See Wichman, F. M., and Hartlapp.)
Hartley, Arthur J., Peoria, Ill. Grain-feeding device.
1,626,608; May 3.
Hartley, Arthur J., Peoria, Ill. Power-driven conveyer.
Hartley, Bulls, assignor to Whitin Machine Works,
Whitinsville, Mass. Apparatus for spinning yarn.
1,639,406; Aug. 16.
Hartley, Henry J., New York, N. X., E. J. Fowler, Redwood City, and D. Baird, Berkeley, Calif., assignors to
Nichols Copper Company, New York, N. X. Roasting
Hartley, Pan 19, 626,88 Aug. 30; Nesmith, Samuel D.,
assignor.)
Hartley, Raiph V. L., South Orange, N. J., assignor to

Hurley, Paul J., et al. (See Nesmith, Samuel D., assignor.)

Hartley, Paul J., et al. (See Nesmith, Samuel D., assignor.)

Hartley, Ralph V. L., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron tube. [4,613,484; Jan. 11.

Hartley, Ralph V. L., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Transmission system. [4,629,100; May 17.

Hartley, Ralph V. L., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Transmission system. [4,629,100; May 17.

Hartley, Ralph V. L., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric-wave-modulating system. [4,633,016; June 21.

Hartley, Ralph V. L., South Orange, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y. Frequency Seeding (1,633,016; June 21.

Hartley, Ralph V. L., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Frequency selective transmission system. 1,654,123; Dec. 27.

Hartley, Ralph V. L., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Frequency selective transmission system. 1,648,121; Nov. 8.

Hartley, Ralph V. L., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus and system for detecting vibrations. 1,648,121; Nov. 8.

Hartley, Saward W., New York, N. Y. Timer. Hartley, Slidney, (See Boonzaier, G. J., and Hartley). Hartley, June John K., Albuquerque, N. Mex. Tester. 1,640,996; Aug. 30.

Hartlman, Abraham L., Wapinitla, Oreg. Ironing table. 1,638,733; Aug. 9.

Hartman, Abraham L., Wapinitla, Oreg. Ironing table. 1,647,657; June 20.

Lattman, Electrical Manufacturing Company. (See Hartmann). Electrical Manufacturing Company. (See Hartmann). 1,646,655; Aug.,

Hartman, Emanuel W., assignor to Hartman Interests, Inc., Los Angeles, Calif. Cracking apparatus. 1,618,427; Feb. 22.

Hartman, Frank O., Mansfield, Ohlo. Variable condenser. 1,614,428; Jan. 11.

Hartman, Frank O., assignor to Hartman Electrical condenser. 1,632,640; June 14.

Hartman, Frank O., assignor to Hartman Electrical Manufacturing Company, Mansfield, Ohlo. Variable condenser. 1,632,650; June 14.

Hartman, Frank O., assignor to The Hartman Electrical Marufacturing Company, Mansfield, Ohlo. Variable condenser. 1,632,650; June 14.

Hartman, Frank O., assignor to The Hartman Electrical device. 1,651,703; Dec. 6.

Hartman, Harry B., assignor to Electric Water Sterilizer and Ozone Company, Scottdale, Pa. Water-purifying apparatus. 1,618,998; Jan. 11.

Hartman Interests, Inc. (See Hartman, Emanuel W., assignor).

Happhratus, 1,015,095; Jan 11.

Happhratus, 1,015,095; Jan 11.

Hastman, John H., assignor to The Hubley Manufacturing Co., Lancaster, Pa. Toy stove 1,619,723; Mar. I. Hartman, Louis H., assignor to The Valve Bag Company of America, Toledo, Ohio. Affixing reenforcing tape. 1,683,006; June 14.

Hartman, Thomas J., Chicago, Ill. Ball cover. Hartman, William H., assignor to The Bonnet Company, Canton, Ohio. Rotary pulverizer. 1,647,730; Nov. 1.

Hartman, William W., Los Angeles, Calif. Molding cutter. 1,634,119; Sept. 20.

Hartman, William W., Los Angeles, Calif. Packer. 1,643,119; Sept. 20.

Hartmann, Carl, assignor of one-half to J. E. Anderson, San Francisco, Calif. Automatic valve. 1,644,127; Oct. 4.

Hartmann, Emilius C. F. (See Sidnell, A. E., and Hartmann, E

Hartmann, Emilius C. F. (See Sidnell, A. E., and Hart-

Hartman, Emilius C. F., et al. (See Taylor, Charles W., assignor, Hartman, Erich, Wiesdorf, near Cologne, Germany, assignor, by mesne assignments, to Grasselli Dyestuff Corporation, New York, N. Y. Lake. 1,658,851;

Boiler for movable steam-juwe. L. Aug. 16.

Aug. 16.

Hartmann, Otto H., assignor to Schmidt'sche Helssdampf
Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany.
Regulating steam power and heating plants. 1,648,345;
Hartmann, Otto H., assignor to Schmidt'sche Helssdampf
Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany.
Locomotive boiler. 1,648,396; Nov. 8.

Hartmann, Otto H., and A. Hermanuz, assignors to
Schmidt'sche Heissdampf-Gesellschaft m. b. H., CasselWilhelmshohe, Germany. Steam generator. 1,621,505;
Nat. 248.

Mar, zz,

Hartmann, Otto H., and F. Wempe, assignors to Schmidt'sche Heissdampf G. m. b. H., Cassel-Wilhelmshohe,
Germany. Portable power plant utilizing steam at
different pressures. 1,635,548; July 12.

Hartmann, Paul, Brocklyn, assignor of one-half to C. L.
Eidlitz, New York, N. Y., and one-half to Metropolita.
Electric MRg. Co. Receptacle. 1,615,502; Jan. 25.

Company, Inc. New York, N. Y. Electric connection
device. 1,649,305; Nov. 15.

Hartmann Trunk Company. (See Chesnut, William C.,
assignor).

assignor.)
Hartmann Trunk Company. (See Langmuir, Frank H.,

Hartmann Trunk Company. (See Rasmussen, Martin, assignor.)
Hartmann Trunk Company. (See Rismussen, Martin, assignor.)

Hartmann Trunk Company. (See Ritter, J., jr., and Ras-

mussen, assignors.)

Hartmann Trunk Company.

(See Ritter, J., Jr., and Wisby, assignors.)

Hartmann Trunk Company.

(See Schobert, George A., assignor.)

assignor. Hartmann, Werner, Mount Vernon, N. Y. Motor vehicle, 1,650,272; Nov. 22.
Hartnett, George J., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Fastening tubular bodies in holes of other bodies. 1,647,447; Nov. 1.
Hartog, Faul D., St. Louis, Mo. Piston. 1,618,658; Feb. 22.

Hartsell Motor Company. (See Hutsell, Thomas A., assignor.)

Feb. 22.

Hartsell Motor Company. (See Hutsell, Thomas A., assignor.)

Hartshorn, Stewart, Company. (See Hartshorn, Stewart H., assignor.)

Hartshorn, Stewart, Company. (See Hartshorn, Stewart H., assignor.)

Hartshorn, Stewart, Company. (See Hartshorn, Stewart H., assignor.)

Hartshord, Soompany. East Newerk, N. J. Apparatus for winding springs. 1,636,689; July 26.

Hartsoff-Metall Aktiengesellschaft (Hametag). (See Podszus, Emil, assignor.)

Hartsuff Manufacturing Company. (See Chappell, Elbert M., assignor.)

Hartswift Manufacturing Company. (See Chappell, Elbert M., assignor.)

Hender Manufacturing Company. (See Chappell, Elbert M., assignor.)

Hartung, Adalberto G., Buenos Aires, Argentina. Tension fastening for antiship chains. 1,619,471; Mar. 1.

Hartung, Adalberto G., Buenos Aires, Argentina. Tensor system. 1,636,363; July 19. W. B., Haren, and Hartung, Honard F., Los Angeles, Calif. Detachable Hartung, John A., Chicago, and A. McLaurin, Forest Park, Ill. Hair curler. 1,640,893; Aug. 30.

Hartivis, John A., Chicago, and A. A. McLaurin, Forest Park, Ill. Hair curler. 1,640,893; Aug. 30.

Hartwell, Benjamin F., Winchester, Mass. Boot or shoe additional manufacturing same. 1,618,283; Feb. 22.

Hartwell, Benjamin F., Winchester, Mass. Boot or shoe composite sole therefor, and manufacturing same. 1,619,023; Mar. 1.

Hartwell, Benjamin F., Winchester, Mass. Boot and shoe and prepared limeol therefor. 1,642,877; Sept. 20.

Hartwick, Ernest F., assignor to Detroit Trailer Company. Detroit, Mich. Trailer. 1,630,425; May 31.

Harty, Thomas F., Rosebank, N. Y. Boller structure. 1,622,947; Mar. 39.

Hartzell, Holl, Minn. Decalcomania transfer sheet. Des. 72,152; Mar. 8.

Hartzell, Hart F., Cuyahoga Falls, Ohlo. Spring cover, spring sleeve, and Inbricator. 1,639,942; Aug. 23.

Hartyel, Meller L., and M. K. Andersen, Wilkinsburg, Pa., Hartyel, Meller L., & Rosenson, Wilkinsburg, Pa., Hartyel, Meller L., & Mars.

1.615.698; Jan. 25.

Hartzell, Walter L., Evanston, Ill. Internal-combustion engline. 1.642.494; Sept. 13.

Harvey, Albett L., and N. K. Andersen, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, Motor-control system. 1,621.011; Mar. 15.

Harvey, Motor-control system. 1,621.011; Mar. 15.

termining modsture percentage in a web, and roll construction therefor. 1,623.675; Apv. 6, and roll construction therefor. 1,623.675; Apv. 6, and roll construction therefor. 1,623.675; Apv. 6, and roll construction therefor. 1,623.675; Apv. 10.

Harvey, Corbon L. (See Hermann, Otto L., assignor.)

Harvey, Froyce H., assignor to The Enterprise Machine Company, Middletown, Ohio. Roll plug. 1,650.209; Nov. 22.

Nov. 25.

Nov. 25.

Nov. 25.

Harvey, Harold C., and H. L. Becher, Trenton, assignors to The Agasete Miliboard Company, Ewing Township, N. J. Wood substitute. 1,651.388; Dec. 6.

Harvey, Harry D. (See Chenowith, W. H., and Schimpf, assignors.)

Harvey, Harry D. (See Schimpf, George C., assignor.)

Harvey Instrument Co. (See Gottesman, O. M., and Rosenfeld, assignors.)

Harvey John W., Denver, Colo. False roof for motor vehicles. 1,621,641; Mar. 15.

Harvey, Millard L., Savannah, Ga. Anticreeper and brace for railway rails. 1,641,176; Nov. 1.

Harvey, Mercy P. (See Hidod, Hastings J., assignor.)

Harvey, Recy P., (See Hidod, Hastings J., assignor.)

Harvey, Vernon L., San Francisco, Cailf. Fastening device. 1,623,589; June 28.

Harvey, Walter J., (See Filmer, George B., assignor.)

Harvey, Walter J., Toronto, Ontario, Canada. Diurnal relarvey, William A., Scranton, Pa. Anchoring means for lighting faxtures. 1,613,169; Jan. 4.

Harvey, William A., Scranton, Pa. Portable regulatable lamp. 1,639,774; Aug. 23.

Harwick, Henry K. (See Marls, J. C., and Harwick.)

Harwick, Henry K., Philadelphia, Pa. Joint for articulated locomotives. 1,625,636; Apr. 19.

Harwood, George. (See Harwood, William V. and G.)

Harwood, Robert C. (See Harwood, Lyle S. and R. C.)

Harwood, Robert C. (See Harwood, Lyle S. and R. C.)

Harwood, Robert C. (See Harwood, Lyle S. and R. C.)

Harwood, Robert C. (See Harwood, Lyle S. and R. C.)

Hashon, Tex. Insect destroyer. 1,624,240; Apr. 12.

Hashat, Max. Dresden, Germany, assignor to Aktiebolager

Ars., Stockholm, Sweden. Representing in pital laker, 1,640,285; Apr. 1,640,285; Apr. 1,640,285; Apr. 1,640,285; Apr. 1,640,285; Apr. 1,640,285; Apr. 1,640,285; Jan. 1,1

Hasbrouck, Louis B., Elmira, N. Y. Spinning frame. 1,641,285; Jan. 1,1

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, 110,283; Jan. 1,1

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, 110,287; Apr. 1,650,381; May 31.

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, 110,281; May 31.

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, 110,281; May 31.

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, 110,281; May 31.

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, 110,281; May 31.

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, 110,281; May 31.

Hasbrouck, Louis B., assignor to Eclipse Textile Devices, 110,281; May 31.

Hasbrouck, Louis B., assignor to Namlooze vennotabap Finanziele Maatscuappii "Driebergen." Amsterdam, Netherland. Electric-circuit making and breaking relay 1, 162,907; Mar. 16.

Hasekine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Resillent shackle. 1,016,639; Feb. 8.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Chicago, Ill. Friction shock-absorbling mechanism. 1,016,692; Feb. 8.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Chicago, Ill., friction shock-absorbling mechanism. 1,016,692; Feb. 8.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, In

Chicago, Ill. Friction shock-absorbing mechanism. 1,616,692; Feb. 8.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Shock-absorbing mechanism. 1,620,609 Mar. 15.

Haseltine, 1,630,609 Mar. 15.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,620,661; Mar. 15.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,620,662; Mar. 15.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Door-operating mechanism. 1,620,654; Mar. 15.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Door-operating mechanism. 1,631,127; June 7.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Resilient shackle. Haseltine, Stacy B., Chicago, Ill., Epiction shock-absorbing mechanism. 1,637,139; July 26.

Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,637,159; July 26.

Haseltine, Stacy B., assignor to W. H. Miner, Inc., cago, Ill. Friction shock-absorbing mechanism. 1,637,159; July 26.

1.637.150; July 26.

Hasettine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Counterbalanced side bearing, 1,640.034; Aug. 23.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments of the counterbalanced side bearing, 1,640.035; Aug. 23.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Anti-friction bearing, 1,648.271; Nov. 8.

Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Anti-friction bearing, 18 and 19 and 19

1.648.702.

Haseltine, Stacy B., assignor cago, Ill. Refrigerator-door-operating cago, Ill. Refrigerator-door-operating 1.648.305; Nov. 8.

Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chl-haseltine, Stacy B., assignor to W. H. Miner, Inc., Chl-man, Chl-haseltine, Stacy B., assignor, by mesne assignor, Ill. Assignor, by mesne a

1.648,305; Nov. 8.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chlcago. III. Friction shock-absorbing mechanism.
1.648,300 Nov. 8.
G. Chicago. III. assignor, by mesne asstreaments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1.650,352; Nov. 22.
Haseltine, William C. (See Bowman, John G., assignor,)
Haselton, Page S., Bayside, assignor to Caldwell Lawn
Mower Company, Newburgh, N. Y. Electric lawn
Hasemann, Edward C. Orlando, Fla. Refeeting level.
1.653,398; Dec. 20.
Hasia, William C., Long Beach, Calif. Washing machine.
1.631,266; June 7.

1.631,266; June 7.

Hashagen, August, New York, N. Y., assignor to The Alliance Vitrified China Company, Alliance, Ohio. Plate or similar article. Des. 72,209; Mar. 15.

Hashagen, August, New York, Des. 72,209; Mar. 16.

Plate or similar article. Des. 72,2045; June 28.

Haskelite Manufacturing Corporation. (See Drusbel, William A., assignor.)

Haskelite Manufacturing Corporation. (See Elmendorf, Armin, assignor.)

Haskelite Manufacturing Corporation. (See Meyercord, George R., assignor.)
Haskelite Manufacturing Corporation. (See Norris, Charles B., assignor.)
Haskell, Broderick, Franklin, Pa. Truck bolster. 1,022,339; May 17.
1,022,339; May 17.
1,022,339; May 17.
1,022,339; May 18.
1,022,339; May 19.
1,022,

June 14.

Braintree, Mass. Dishwashing machine. 1,632,182; June 14.

Hasler A.-G. vormals Telegraphenwerkstitte von G. Hasler. (See Kohler, Ulrich, assignor.)

Haslett, Elmer, Sausslito, Calif. Jar or similar conHass, Carl J. (See Thornbrugh, Alvin, assignor.)

Hass, Carl J. (See Thornbrugh, Alvin, assignor.)

Hass, Carl J. (See Thornbrugh, Alvin, assignor.)

Hass, Carl J., Chester, S. Dak. Adjustable bracket.

1,614,550; Jan. 18.

Hass, John P., International Falls, Minn. White-water self-cleaning settling tank. 1,629,701; May 24.

Hassa, Robert, New York, N. Y. Wardrobe rack, Hassall, John K., Rotherwood, near Asbby-de-la-Zouch, and A. Harris, Woodville, England. Nozzle for ladles used in pouring molten metal. 1,635,839; July 12.

Hasse, Fred A., Benton Harbor, Mich. Printing attachment for scales. 1,648,728; Nov. 8.

Hasselberg, John F., Cheviot, Ohio, Vehicle signal lamp. 1,617,051; Feb. 8.

Hasselbart, Paul A., Brooklyn, N. Y. Heat retainer. 1,624,241; Apr. 12.

Hasselkart, Paul A., Brooklyn, N. Y. Windshield. 1,510,619; Feb. 8.

Hasselbart, Paul A., Brooklyn, N. Y. Windshield. 1,510,619; Feb. 8.

Hasselbart, Paul A., Brooklyn, N. Y. Windshield. 1,510,619; Feb. 8.

Hasselman, Otto, Wiesbaden, Germany, Separable Hasselmann, Otto, Wiesbaden, Germany, Separable Hasselmann, Otto, Wiesbaden, Germany, Separable

signor.)
Hasselman, Otto, Wiesbaden, Germany. Separable syringe. 1,648,548; Nov. 8.
Hassensail, Louis W., Toledo, Ohlo. Beverage-dispensing apparatus. 1,645,000; Oct. 11.
Hassett, Robert, Maywood, Ill. Badge. Des. 74,054;

Dec. 13.

Hannum Manufacturing Company, Milwaukee, Wis. Steering-gear mechanism.

Lassinger, Egon, Barcelona, Spain. Propelling pencil. 1,636,882; July 26.

Hassier, Einer E. Chapman, Kans. Home gasoline station. 1,645,584; Oct. 18.

Hassler Manufacturing Co. (See Hassler, Robert H.,

Hassier, Danul M., assignor to The Louden Machinery Company, Fairfield, lowa, Connection for track hang-ers. 1.646,224; Oct. 18. Hassier, Robert H. (See Hittle, James A., assignor.) Hassler, Robert H., Inc. (See Hassler, Robert H., as-signor.)

Hassler, Robert H., assignor to Robert H. Hassler, Inc., Indianapolis, Ind. Belt fastener. 1.613.888; Jan. 11. Hassler, Robert H., assignor, by mesae assignments, to Hassler Manufacturing Co., Inc., Indianapolis, Ind. Re-bound check with lubricating system. 1,646,588;

bound cheek With Marketter by mesne assignments, to Ct. 25.

Hassier, Robert H., assignor, by mesne assignments, to Hassier Manufacturing Co., Inc., Indianapolis, Ind. Rebound check. 1,646,584; Oct. 25.

Hast, Charles R., assignor to F. G., Villaret, San Antonio, Tex. Accounting device. 1,622,642; Mar. 29.

Hasted, William H. (See Payson, A. E., and Hastedt.)

Hastings, Albert D. (See McIntyre, R. A., and Hastedt.)

Hastings, Hammond C., and C. J. Sarjeant, Rugby, England, assignors to General Electric Company. Protective device for dynamo-electric machines. 1,631.726; June 7.

June 7.

Hastings, Horace H., Quebec, Quebec, Canada, Manufacture of inner tubes. 1.619.119; Mar. 1.

Hastings, Horace H., Quebec, Quebec, Canada, Apparatus for finishing tire tubes. 1.640.077; Aug. 23.

Hastings, William A., assignor to Aluminum Products Company, La Grange, Ill. Padd et al. 1.645.831; Oct. 13.

Company La Grange Ill. Handle 1.645.831; Oct. 13.

73.99; Oct. 25.

Hastings, William A., assignor to Aluminum Products Company, La Grange, Ili. Handle. 1.646,381; Oct. 11.

Hasty, Writer, Rockingham, N. C. Old-dispensing tank. Cold-dispensing tank. Haswell, Arthur B. (See Ryding, H. C., and Haswell, Haswell, Arthur B., (See Ryding, H. C., and Haswell, Haswell, Arthur B., (See Ryding, H. C., and Haswell, Stathur, C., Farmington, assignor, by messe assignments, to The Sesamec Company, Hartford, Conn. Keyless lock, Re16,833; Dec. 27.

Hatch, Alexander G., Farmington, 28.

Sesamec Company Hartford, Conn. Lock. 1,640,935;
Hatch, B. (See Neufang, Henry J., assignor, brais W., et al. (See Neufang, Henry J., assignor).

Hatch, Charles T., assignor to Union Steel Products Company, Albion, Mich. Vending rack or stand. 1.634,573;

pany, Albion, Mich. Vending rack or stand. 1.634,573; July 5. Hatch. Charles T., assignor to Union Steel Products Company, Albion, Mich. Display receptacle. 1,640,405;

Aug. 30.

Hatch, Charles T., assignor to Union Steel Products Company, Albion, Mich. Poultry coop or crate. 1,644,472.

Hatch, Harvey G. (See White, W. O., and Hatch.) Hatch, Hyatt C., et al. (See Neufang, Henry J., as-

(See Dorman, N. W., and Hatch bany, N. Y. Garment. 1,649 1,649,690;

Haten, Signor, Signor, Hatch, Meredith R. (See Diblines, Hatch, Mathan, Albany, N. Y. Hatch, Nathan, M., et al. (See Nov. 15. ttch, William M., et al. (See Nelson, Lewis D., as-

Havon. William M., et al. (See Nelson, Lewis D., assignor).

Batcher, Claud A., Columbus, Ga. Bottle or similararticle of manufacture adapted for use as an ornament, paper weight, or the like. Des. 72,063; Feb. 22

Hatcher, Claud A., assignor to Nehi, Inc., Columbus, Ga.
Article of manufacture. 1,648.344; Nov. 8.

Hatcher, Enest C., Finchley, London, England. Power
transmitting gearing. 1,618.927; Feb. 22.

Hatcher, Jensey L., Brobley, London, England. Variable
speed mechanism. 1,624.835; Apr. 12.

Hatcher, Junius S., (See Green, S. G., and Hatcher.)

Hatcher, Julius S., (See Green, S. G., and Hatcher.)

Hatcher, Muniu E., Tyler, Ala. Dish drainer. 1,622,900;

Mar. 29.

Mar. 29.

Hatcher, William A., assignor to Crescent Pump Com-

Mar. 29.

Hatcher, William A., assignor to Crescent Pump Company, Detroit, Mich. Vacuum clamping fixture for wheel rims. 1.616,188; Feb. 1.

Hatcher, William A., assignor to Crescent Pump Company, Detroit, Mich. Vacuum chuck for bearing cones. 1.618,378; Feb. 22.

Hatfield, Heien S. (See Rindsberg, Harry D., assignor.) Hatfield, Heien S. (See Hatfield, Roy A., assignor.) Hatfield, Heien S. (See Hatfield, Roy A., assignor.) Hatfield, Herry G., assignor to thom. 1.643,243; Sept. 20.

Hatfield, Fercy W., assignor to Winship, Bott & Co., Wakefield, Mass. Label-sewing machine. 1,621,837; Mar. 22.

Hathaway, Chester W., assignor to Adolph Mueller, trustee, Decatur, Ill. Receptacle-actuated faucet. 1,637,221; Hathaway, Clyde N., Detroit, Mich. Curtain-rod-threading device. 1,628,667; May 17.
Hathaway, Edgar F., Wellesley, Mass. Making laminated belts. 1,634,145; June 28.
Hathaway, Edgar F., Wellesley, assignor to Shawmut Busines-interpolated belts. 1,624,104; May 13.
Hathaway, Edgar F., Wellesley, assignor to Shawmut Engineering Company, Boston, Mass. Tube frame for tuft weaving. 1,631,094; May 33.
Hathaway, Edgar F., Wellesley, assignor to Shawmut Engineering Company, Boston, Mass. Spool-supporting Hathaway, Edgar F., Wellesley, assignor to Shawmut Engineering Company, Boston, Mass. Nipper for tuft weaving. 1,635,670; July 12.
Hathaway, Edgar F., Wellesley, assignor to Shawmut Engineering Company, Boston, Mass. Nipper for tuft weaving. 1,635,670; July 12.
Hathaway, Edgar F., Wellesley, assignor to Shawmut Engineering Company, Boston, Mass. Tuft tube for Hathaway, Edgar F., Wellesley, and C. Lea, Milton, assignors to Shawmut Engineering Company, Boston, Mass. Tuft tube for Mass. Tube frame, 1,631,092; May 31.
Hathaway, Edgar F., Wellesley, and C. Lea, Milton, assignors to Shawmut Engineering Company, Boston, Mass. Tube frame, 1,631,092; May 31.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Trust pool for tube frames, 1,631,993; May 31.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Yarn spool for tube frames, 1,631,993; May 31.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Yarn spool for tube frames, 1,631,993; May 31.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Yarn spool for tube frames, 1,631,993; May 31.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Yarn spool for tube frames, 1,631,993; May 31.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Yarn spool for tube frames, 1,631,993; May 31.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Yarn spool for tube frames, 1,631,993; May 31.
Hathaway, Edgar F., Wellesley, and

Haite, P.
Hatmaker, James R., Paris, France. Condensed milk and making same. 1,626,818; May 3.
Hatmaker, William T., and E. E. Elekmeyer, assignors to The Mational Recording Fump Company, Dayston Obline Hatmaker, William T., and B. E. Elekmeyer, assignors to The National Recording Fump Company, Dayton, Ohio. Liquid-dispensing apparatus. 1,637,146; July 26.
Hatot. Léon, Paris, France. Electromagnetic clock. 1,631,461; Nov. 29.
Hatton. Hugh B., Fr., Glendale, Calif. Gas-control cock. 1,639,461; Aug. 16.

closer for jars and the like. 1,637,638 Aug. 2.

Haub, Edwin. (See Gray, D. M., Haub, and Willams.)

Haub, Edwin. (See Gray, D. M., Haub, and Willams.)

Haubert, Leo, assignor of one-third to J. C. Bennett and one-third to J. A. Wolfe, Tulsa, Okla. Power-delivering attachment for automobile trucks or tractors.

1,632,083, June 21.

Hauboid, C. G., A. G. (See Tandel, Fritz, assignor.)

Hauboid, C. G., A. G. (See Tandel, Fritz, assignor.)

Haug, Anton J., Nashau, N. H. Method of and apparatus for working paper stock. 1,623,676; Apr. 5.

Haug, Thaddeus L. E., Berkeley, Calif. Culting sacrew Thaddeus L. E., Berkeley, Calif. Wedge.

1,637,71; Aug. 2.

Haugen, John, Everett, Wash. Mop. 1,650,211; Nov. 22.

1,652,766; Dec. 27.

Haught, Austin M., Reader, W. Va. Wire fence.

1,617,249; Feb. 8.

Haughton Elevator & Machine Co., The. (See Thurston, Ernest B., assignor.)

Haugland, Richard C., Jackson, Minn. Harrow.

Haughton, Roy H., Shreveport, La. Game. 1,617,250; Feb. 8.

Haugland, Richard C., Jackson, Minn. Harrow. 1,623,114; Apr. 5.

Haul, Robert J., St. Louis, Mo. Garment hanger. 1,627,598; May 10. T., Toronto, Ontario, Canada. Application for determining the specific gravity of ore pulp and the like. 1,621,355; Mar. 22.

Hauman, Earl L., Hamburg, assignor to Electro Refractories Corporation, Buffalo, N. Y. Producing a carbon-bonded refractory. 1,653,850; Dec. 27.

Haumerson, Clifford C., Fort Atkinson, Wis. Chain coupling. 1,627,776; May 10.

Haunz, Charles F., Buffalo, N. Y. Cabinet for displaying and dispensing merchandise. Des. 72,257; Mar. 22.

1,013,922; Jan. 18.

Haupt, Ferdinand, Borna, near Leipzig, Germany. Dumpling car. 1,642,813; Sept. 20.

Haupt, Frank, assignor of one-half to L. Shoor, Milwaukee, Wis. Illiuminated license plate. 1,614,955; Jan. 18.

Hauser, August F. (See Stroop, H. T., Hauser, and Ham-

Hauser, August F. (See Stroop, H. T., Hauser, and Hammer.)
Hauser, Jayust F. (See Stroop, H. T., Hauser, and Hammer.)
Hauser, Jacob, Feldkirch, Austria. Folding ladder.
1,615,759; Jan. 25.
Hausman, Harris. Brooklyn, N. Y. Textile fabric. Des.
1,750; Jan. 25.
Hausman, Harris. Brooklyn, N. Y. Textile fabric. Des.
1,750; Jan. 25.
Hausman, Warler J., St. Louis, Mo. Foldable checking
table. 1,628,860; Aug. 9.
Hausman, Ward B., Philadelphia, Pa. Egg-candiling device. 1,652,983; Dec. 13.
Hausner, Oscar G., Webster Groves, Mo. Order card.
1,019,511; Mar.
1,019,511; Mar.
1,019,511; Mar.
1,019,511; Mar.
1,019,511; Mar.
1,019,611; Mar.
1,0

Hallssky, car, assignor to the Firm of C. H. Boehringer & Sohn, Chemische Fabrik, Nieder-Ingelheim-on-the-Rhine, Germany, Manufacture of esters of oxyacids. L. 1.614.195; Jan. 11.

Haussler, Alfred, assignor to C. H. Boehringer & Sohn, Chemische Niederingelheim-on-the-Rhine, Germany, Manufacture of esters of oxyacids. L. 1.614.195; Jan. 11.

Haussler, Alfred, assignor to C. H. Boehringer Sohn and Sold and Aldo aliphatic carboxylic acids. 1.627.091; May 3.

Haussmann, John F., asignor of one-fourth to C. A. Rusch and one-fourth to D. W. Hoan, Milwaukee, Wis. Plying machine. 1.633,342; July 12.

Haussmann, John F., asignor of one-fourth to C. A. Rusch and one-fourth to D. W. Hoan, Milwaukee, Wis. Plying machine. 1.633,342; June 21.

Hausmann, John F., asignor of one-fourth to C. A. Rusch and one-fourth to W. Hoan, Milwaukee, Wis. Plying machine. 1.633,342; June 21.

Hauton, Paul S., Atlanta, Ga., assignor to The Parker Pen Company, Janesville, Wis. Clip for pens, pencils, and the like. 1.647.093; Oct. 25.

Havener, Arthur R., Wayland, assignor to Judson L. Thomson Manufacturing Co., Waltham, Mass. Riveting machine. 1.628,044; May 10.

Havener, Arthur R., Wayland, assignor to Judson L. Thomson Manufacturing Co., Waltham, Mass. Riveting machine. 1.628,044; May 10.

Havener, Arthur R., Wayland, assignor to Judson L. Thomson Manufacturing Co., Waltham, Mass. Riveting machine. 1.628,044; May 10.

Havener, Arthur R., Wayland, assignor to Judson L. Thomson Manufacturing Co., Waltham, Mass. Riveting machine. 1.628,044; June 21.

Haverbusch, Herman F. (262.244). B. C., and Haverbusch, June 21.

busch.)

Haverstick, Earl J., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Coating materials. 1619,343; Mar. 1.

Haverstick, Earl J., Oakmont, Pa., assignor to Westing-16,303,33; May 31.

Haverstick, Earl J., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Making resistor elements. 1,636,849; Aug. 16.

Havighorst, Russel K., Los Angeles, Celif. Structure for facilitating sorting and delivering of packages. 1,636,6393; Feb. 5.

Havir, Andrew H., assignor to Progressive Shoe Machinery Company, Minneapolis, Minn. Welt-rolling machine. 1,622,221; Mar. 29.

Havir, Andrew H., and H. V. Fletcher, assignors, by messe assignments, to E. J. Rohne, Minneapolis, Minn. The stripping machine. 1,638,306; Aug. 9.

Hire-stripping machine. 1,638,306; Aug. 9.

Hawe, Jakob, Friedenau, near Berlin, Garmany. Metal propeller. 1,635,306; July 12.

Haward, Brnest W., Old Trafford, England. Antisplash device for the wheels of motor road vehicles. 1,607,031; Mag. 8.

Lordon, R. W. Horton, Edgeware, and F. C. C. Mayo, High Barnet, England. Expanding suitcase. 1,646,092; Oct. 18.

Hawes, Amos, Ogden, Utah. Agricultural implement. 1,646,023; Oct. 18.

Hawes, Amos, Ogden, Utah. Agricultural implement. 1,646,023; Oct. 18.

Hawes, Amos, Ogden, Utah. Agricultural implement. 1,646,023; Oct. 18.

Hawes, Herbert E., Milwaukee, Wis. Parachute. 1,631,230; June 14.

Hawes, Herbert E., Milwaukee, Wis. Parachute. 1,644,251; Oct. 4.

Hawes, William L., Burbank, Calif. Sprinkler. 1,651,287; Dec. 6.

Hawk, Betty M., Florence, Colo. Gravity toy. Rei6,791; Hawke, Eetty M., Washington, D. C. Gravity toy. 1,617,846; Feb. 15.

Hawkes, Arthur G., Detroit, Mich., assignor to American Car and Foundry Motors Company. New York, N. Y. Combined bumper and spare wheel and thre currier. Hawkes, Arthur G., and E. W. Test, Michigan City, Ind., assignors to The Pullman Company, Chicago, Ill. Brate-gear yoke and making same. 1,636,690; July 26.

Hawkes, Berna-supporting means. 1,644,880; Oct. 11.

Hawkins, Bert H., Royal Oak, and E. R. Hansen, assignors to McCord Radiator & Mig. Co., Detroit, Mich. Machine for stripping neats from radiator cores. 1,615,272; Jan. 25.

Hawkins, California making same. 1,636,690; July 26.

Hawkins, California making same. 1,636,690; July 26.

Hawkins, California making same. 1,636,690; July 26.

Hawkins, California making same. 1,636,6

Hawkins, Charles F. (see Asmore, F. S., and Crum, assignors).
Hawkins, Charlotte B., Parkdale, Ark. Grater, 1,633,700; June 28.
Hawkins, Delphene H., Spokane, Wash. Baby jumper, 1,613,607; Jan. 11.
Hawkins, Edgar M., assignor to M. D. Knowiton Company, Rochester, N. Y. Tube-cutting machine, 1,619,975;

Mar. 8.

Hawkins, Edgar M., assignor to M. D. Knowlton Company, Rochester, N. Y. Receiving bank. 1,626,933;

May 3.

Hawkins, Floyd C., Los Angeles, Calif. Combined oil filter and cooler. 1,613,889; Jan. 11.

Hawkins, Hubert C., Winston-Salem, N. C. Thermal switch. 1,615,582; Jan. 25.

Hawkins, James B., Slater, Mo. Drinking fountain for livestock. 1,646,245; Oct. 18.

Hawkins, Jepson M., and S. Losey, Covington, Okla. Ollwell pump. 1,620,647; Mar. 8.

Hawkins, Lon A. (See Barger, W. R., Hawkins, and

well pump. 1,620,847; Mar. 8.

Hawkins, Lon A. (See Barger, W. R., Hawkins, and Bawkins, Lon A. (See Barger, W. R., Hawkins, Comr. 1,628,975; May 17.

Hawkins, Omar. Leesburg, Ind. Milling attachment. 1,622,975; May 17.

Hawkins, Orin. Waukegan, Ill. Collapsible chair and swing. 1,621,367; Mar. 15.

Hawkins, Orin. Augulegan, Ill. Collapsible chair and relations of the A. Laman, Colo. Manufacture of brooms. Hawkins, Robert D., Wilmington, N. C. Bnd structure for railway cars. 1,631,812; June 7.

Hawkins, Robert D., Wilmington, N. C. Bnd structure for railway cars. 1,631,812; June 7.

Hawkins, Roe C., Long Beach, Calif. Standing-valve pulled. 1,640,406; Aug. 30.

Hawkins, Roe C., assignor to "H H" Manufacturers, Inc., Long Beach, Calif. Drawbar attachment for tractors. 1,632,070; June 14.

Hawkins, Wilford J., Montclair, N. J. Thermostatic switch. 1,659,883; Aug. 25.

Hawkins, Wilford J., Montclair, N. J., assignor to American Machine & Foundry Company. Electric capstan. 1,637,832 Aug. 2.

Hawkins, Wilford J., Montclair, N. J., assignor to American Machine & Foundry Company. Automatic heater. 1,637,832 Aug. 2.

Hawkins, William W., Brooklyn, N. Y., assignor to American Machine and Foundry Company. Automatic heater. 1,640,694; Nov. 1.

Hawkins, William W., Brooklyn, N. Y., assignor to Webster Electric Company, Racine, Wis. Breaker mechanism for ignition magnetos. 1,619,932; Mar. 8.

tawkins, William W., Brocklyn, N. Y., assignor to Webster Electric Company, Racine, Wis. Interrupter mechanism. 1,624,100; Apr. 12.
Hawkins, William W., Brocklyn, N. Y., assignor to Webster Electric Company, Racine, Wis. Ignition magneto. 1,629,675; May 24.
Hawkins, William W., Brocklyn, N. Y., assignor to Webster Electric Company, Racine, Wis. Ignition magneto. 1,634,674; July 5.
Hawkins, William W., Brocklyn, N. Y., assignor to Webster Electric Company, Racine, Wis. Ignition magneto. 1,634,675; July 5.
Hawkins, William W., Brocklyn, N. Y., assignor to Medster Electric Company, Racine, Wis. Ignition magneto. 1,640,936; Ang. 32.
Hawkins, William W., Brocklyn, N. Y., assignor to Mayahington, Pa. Baby walker. 1,622,108; Mar. 22.
Hawkinson, Azel W., assignor to Sidway Topling Company, Washington, Pa. Baby walker. 1,622,108; Mar. 22.
Hawkinson, Paul E., Minneapolis, Minn, assignor to Kee Haw Ke Manufacturing Company, Tire patch with application indicator. 1,648,729; Nov. 8.
Engine Company, St. Louis, Mo. Internal-combustion engine. 1,624,101; Japr. 12.
Hawks, Arthur S., assignor to Busch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo. Internal-combustion engine control gear. 1,648,606; Nov. 18.
Hawkisworth, David W., assignor, by mesne assignments. to Hutchins Car Roofing Company, Detroit, Mich. Car Toof. 1,622,509; Mar. 29.
Hawksworth, David W., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Car Hawley, Charles A., assignor to The Automatik Chest Company, Oakland, Calif. Odorizer Holder. Des. Corporation, Cleveland, Ohio. Gas purifier, 1,612,812; Corporation, Cleveland, Ohio. Gas purifier, 1,612,812; Corporation, Cleveland, Ohio. Gas purifier, 1,612,812; Corporation, Cleveland, Ohio. Gas garifier, 1,612,812; Corporation, Cleveland, Ohio. Gas purifier, 1,612,812; Corporation, Cleveland, Ohio. Gas garifier, 1,612,812; Corporation, Cleveland,

I.639.637; Aug. 16.
Hawley, Charles A., assignor to The Automatik Chest
Company, Oakland, Calif. Odorizer Holder. Des.
71.912; Jan. 25.
Hawley, Charles G., Chicago, Ill., assignor to Centrifax
Corporation, Cleveland, Ohlo. Gas purifier. 1,612,812;
Hawley, Charles G., Chicago, Ill., assignor to Centrifax
Corporation, Cleveland, Ohlo. Jan. 41 intake for ships.
1,612,813; Jan. 4.
Hawley, Charles G., Chicago, Ill., assignor to Centrifax
Corporation, Cleveland, Ohlo. Separator. 1,612,814;
Jan. 4.

Corporation, Cleveland, Omo. separator. 1,012,014; Jan. 4.
Hawley, Harles G., Chicago, Ill., assignor to Centrifix Corporation. Cleveland, Ohio. Centrifugal fixture. 11,012,034; Mar. 22.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Centrifugal dust catcher. 1,622,034; Mar. 22.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Centrifugal dust separator. 1,622,636; Mar. 29.
H. Corporation, Cleveland, Ohio. Centrifugal fixture. 1,639,562; Aug. 16.
Hawley, Charles G., assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive Firebox Company, Chicago, Ill. Safety Mar. 24.
Hawley, Charles H., Tube connection, 1,644,188; Oct. 4.
Hawley, Charles G., assignor to Locomotive Firebox Company, Chicago, Ill. Safety method of installing fire-box arch tubes. 1,648,307; Nov. 8.
Hawley, Edgar R., and C. W. Scott, Sait Lake City, Utah. Automatically-governed condensing device. 1,629,159; May 17.
May 18.
May 1

Automatically-governed condensing device. 1,629,109; May 17.
Hawley, George M. B., Geneva, N. Y. Automatic railway control. 1,621,838; Mar. 22.
Hawley Inventions, Incorporated. (See Hawley, John B., jr., assignor.) Hawley Inventions, Inc.

(See Hawley, John B., jr., assignor.)

Hawley Inventions, Inc. (See Hawley, John B., Jr., assignor, 1.6.24,242; Apr 12. Wilmette, Ill. Sound amplifying horn. 1.6.24,242; Apr 12. Wilmette, Ill. Sound amplifier. Hawley, Jesse B. 12. Wilmette, Ill. Sound amplifier. Hawley, John B., Jr., assignor to Hawley Inventions, Incorporated, Minnengolis, Minn. Form the for concrete structures. 1,619,933; Mar. 8.

Hawley, John B., Jr., assignor to Hawley Inventions, Incorporated, Minnengolis, Minn. Well-pumping apparatus. 1,641,329; Sept. 6.

Hawley, John B., Jr., Assignor to Hawley Inventions, Inc. Shock absorber and the like for vehicles. 1,647,518; Nov. 1.

Hawley, John B., Jr., Minneapolis, Minn., assignor to Hawley, John B., Jr., Fort Worth, Tex., assignor to Hawley, John B., Jr., Fort Worth, Tex., assignor to Hawley, Hawley, Kent A., Victor, N. Y., assignor to Locke Insulators. 1,647,695; Nov. 1.

Hawley, Corporation, Baltimore, Md. Assembling insulators. 1,647,695; Nov. 1.

Hawley, Golyer H., Birmingham, England. Wheelbarrow or like wheel. 1,615,760; Jan. 25.

Hawley, Thomas W., assignor of one-half to H. Dent, Savannah, Ga. Truck center bearing. 1,653,564; Dec.

Hawley, Thomas W., assignor of one-half to H., Dent, Savannah, Ga. Truck center bearing. 1,653,564; Dec. Haviey, William G., assignor to Merrell-Soule Company, Syracuse, N. Y. Treating mith powder and product produced thereby. 1,637,311; July 26.

Hawn, Harold A., Grand Rapids, Mich. Refrigerator. 1,621,322; Mar. 15.

Haworth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,622,110; Mar. 22.

Haworth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,622,110; Mar. 22.

Haworth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,624,375; Oct. 4.

Haworth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,644,375; Oct. 4.

Haworth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,644,375; Oct. 4.

Hawhorth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,644,375; Oct. 4.

Hawhorth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,644,375; Oct. 4.

Hawhorth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,644,375; Oct. 4.

Hawhorth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,644,375; Oct. 4.

Hawhorth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,644,375; Oct. 4.

Hawhorth, Jehu F., Edgeworth, Pa. Cable or wire clamp. 1,644,764; Oct. 2.

Hawhorth, Jehu F., Edgeworth, Pa. Saylor, Jehu P., Lawalla, Jehu P., Lawalla

John J., South Bent, Inc., assignor to dermant Moreor orporation, Chicago, Ill. Engine. 1,639,848; Alv. 23.

Hay, William J. (See Fleming, Charles T., assignor.) Hayashi, Andrew T., Ventnor, N. J. Japanese peanut ping-pong game. 1,614,471; Jan. 18.

Hayde, Stephen J., assignor to American Aggregate Company, Kansas City, Mo. Preparing a material suitable for use in the manufacture of molded articles. 1640,760; Sept. 27.

Hetlo, 750, Sept. 27.

Hetlo, 750, Sept. 27.

Hayden, Arthur C., Brockton, Mass. Apparatus for making heels. 1,651,952; Dec. 6.

Hayden, Arthur C., Brockton, Mass. Support for radio apparatus. 1,651,952; Dec. 6.

Hayden, George W., Oak Park, Ill. Varlable condenser. 1,621,722; Mar. 22.

Hayden, George W., Oak Park, Ill. Electrostatic condenser. 1,621,722; Mar. 22.

Hayden, Joseph L. R., executor. (See Steinmetz, Charles Payden, Robert P., assignor to Johnson & Johnson, New

Hayden, Robert P., assignor to Johnson & Johnson, New Brunswick, N. J. System of rolling surgical adhesive plaster. 1,646.093; Oct. 18.

Hayes, Clifford B., Needham, Mass. Fabric. 1,645.858; Hayes, Clifford B., Needham, Mass. Fabric 1,645.858; Hayes, Frank, El Monte, assignor to California Walnut Growers Association, Los Angeles, Calif. Branding machine. 1,639,291; Jug. 16.

Hayes, Frank A., New York, N. Y. Variable-speed power-transmission mechanism. 1,620,709; Mar. 15.

Hayes, Frank A., Keyport, N. J., assignor to Healey-1,621,667; Mar. 22.

L621,667; Mar. 22.

Hayes, Hammond V., trustee. (See Fay, R. D., and Wolf, assignors.)

Hayes, Hammond V., trustee. (See Wolf, Ezekiel, as-assignors.) Hayes, Hammond V., trustee. (See Wolf, Ezekiel, as-

assignors.)

Hayes, Hammond V., trustee. (See Wolf, Ezekiel, assignor.)

Hayes, Harvey C., Annapolls, Md. Microphone.

1.024,946; Apr. 19.

Washington, D. C. Submarine sound receiver, 1.632,331; June 14.

Hayes, Harvey C., Washington, D. C. Electromagnetic sound reproducer. 1.632,332; June 14.

Hayes, Harvey C., Washington, D. C. Submarine sound Bayes, Harvey C., Washington, D. C. Submarine sound Hayes, Harvey C., and M. Mason, New London, Conn., assignor to Submarine Signal Company, Portland, Me. Directive sound transmission. 1.636,510; July 19.

Hayes-Ionia Company, (See Anderson, Roy F., assignor)

signor.)
Hayes, James D., Dallas, Tex., assignor of one-third to B. White, Chicago, Ill., and one-third to P. Hunter, San Antonio, Tex. Photographic bath tank. 1,651,454; Dec. 6.
Hayes, Joseph P., Chicago, Ill. Pneumatic-tire appliance, 1,646,693; Oct. 25.
Hayes, Margaret, Brooklyn, N. Y. Window-cleaning de-Hayes, Margaret, Brooklyn, N. Y. Window-cleaning de-Hayes-Mesorole Manufacturing Co., The. (See Meserole, Milton D., assignor.)
Hayes Meserole Mfg. Co., The. (See Sykes, Cecil M., assignor.)

Hayes, Nora P., Porterwood, W. Va. Culinary implement. 1,638,486; Aug. 9.
Hayes, Oscar, Akron, Obio. Instrument for treating Hayes, Oscar, Akron, Obio. Instrument for treating Graph Charles, C

May 5.

Hayes, Thomas R., Monrovia, Calif. Chair. 1,627,388;
May 3.

Hayes Track Appliance Company. (See Hayes, Stanley

Hayes Wheel Company. (See Feterson, Emil J., assignor.)
Hayes, Walter A., Denver, Colo. Burglarproof booth.
1,643,494, Sept. 27.
Hayes, Walter C. (See Bennett, Edward O., assignor.)
Hayes Wheel Company. (See Higgins, Eugenc, assignor.)
Hayes Wheel Company. (See Jacob), Emil R., assignor.)
Hayes Wheel Company. (See Jacob), Emil R., assignor.)
Hayes Wheel Company.

Hayes Wheel Company. (See Higgins, Eugene, assignor.) Hayes Wheel Company. (See Jacobi, Emil R., assignor, Hayes Wheel Company. (See Peterson, Emil J., assignor, Hayes Wheel Company. (See Peterson, Emil J., assignor, Hayman, George R., Bay Shore, N. Y., assignor to D. D. Bayman, George R., Bay Shore, N. Y. Applicator for chirometers. 1048,991, Nov. 16.

Hayman, George R., Bay Shore, N. Y. Applicator for chirometers. 1048,942; Nov. 15.

Haynes, Gessie B., Washington, D. C. Hair waver. 1,023,233; Apr. 5.

Haynes, Charles V., Ardmore, Pa., assignor to Hoffman bayman, Lega. 243; Apr. 5.

Haynes, Charles V., Waterbury, Conn. Steam-impelled motive apparatus. 1,223,243; Apr. 5.

Haynes, Elbert J., Cleveland, Ohio. Sounding line. 1,633,701; June 28.

Haynes, George P., assignor to Todd Dry Dock, Engineering & Repair Corporation, New York, N. Y., System of Hquid-Ruel-supply control. 1,629,433; May 17.

1,619,255; Mar. 1.

Haynes, Hobart F., Syracuse, N. Y. Socket wrench. 1,626,750; May 3.

Haynes, Ralph S. (See Fennow, W. A., and Haynes, Haynes, Haynes, William J., Kansas City, assignor of one-half to J. H. Swathmey, Harrisonville, Mo. Float. 1,642,149; Sept. 13.

Hays, B. D. Fort Worth, Tex. Tilting carrier. 1,639,563; Hays, B. D. Fort Worth, Tex. Tilting package carrier. 1,632,865; June 14.

Hays, Harvey G., Meck, J. B., and Hayse.)

Hayward, John M. (See Moore, Charles R., and Hayward, 1,632,965; June 14.

Hayward, John M. (See Moore, Charles R., and Hayward), Haywood, Clara L., Brooklyn, N. Y. Ventilated wall receptacle for food. 1,688,120; Ang. 5.

Hayward, John M. (See Moore, Charles R., and Hayward,)
Haywood, Clara L., Brooklyn, N. Y. Ventilated wall receptacle for food, 1.638,120; Aug. 9.
Haywood, George B. (See Provost, F. W., and Haywood,
Hazard, George E., assignor to Kellogg Manufacturing
Co., Rochester, N. Y. Unloader assembly, 1,631,031;
May 31.

May 31.

Hazard, George D., assignor to Kellogg Manufacturing
Co., Rochester, N. Y.

1,638,661; July 19.

Hazard, George D., assignor to Empire Milking Machine
Hazard, George D., et al., N. Y.

1,646,246; Oct. 18.

Hazard, Merlin C., assignor to Marvel Oil Tool Company,
Huntingdon Beach, Calif. Rotary underreamer.

1,645,208; Apr. 16 company.

(See Gray, D. M., Haub,
and Williams, assignors.)

Hazel-Atlas Glass Company. (See Green, Michael A.,
assignor.)

assignor.)

assignor.)

Hazelett, Clarence W., Lakewood, assignor, by mesne assignments, to Cleveland Trust Company, trustee, Cleveland, Ohto. Making storage batteries. 1,646,524; Oct. 11.

Hot. 11.

Hazeli, Rupert A., Melbourne, Victoria, Australia, Musical instrument of the stringed type. 1,625,538; Apr. 10.

Hazelig, Rupert A., Melbourne, Victoria, Australia, Musical instrument of the stringed type. 1,625,538; Apr. 10.

Hazeling, Jackson R., Exter, Calif. Wall construction. 1,629,702; May 24.

Hazeltine Corporation. (See Hazeltine, Louis A., assignar.)

signor.)
Hazeltine Corporation. (See Miller, Henry, assignor.)
Hazeltine, Louis A., Hoboken, N. J., assignor to Hazeltine
Corporation. Wave signaling system. 1,648,808; Corporation.

Hazeltine, Louis A., Hoboken, N. J., assignor to Hazeltine Corporation. Wave signaling system. 1,649,589; Nov. 15.

Hazeltine, Louis A., Hoboken, N. J., assignor to Hazeltine Corporation. Wave signaling system. 1,650,353;

Nov. 22.
Hazelton, Carl J. (See Mills, E. R., and Hazelton.)
Hazelton, Carl J., Worcester, Mass., assignor to American
Narrow Fabric Company. Detachable connecter for hose
supporters. 1617.481; Feb. 15.
Hazelton, Carl J., assignor to American Narrow Fabric
L631.813; June Teer, Mass. Hose-supporter structure.
1.631.813; June Teer, Mass. Hose-supporter structure.
L631.813; June Teer, Mass. Hose-supporter structure.
Company, Cincinnati, Ohio. Press brake. 1,618,825; Feb. 22.

Hazelton, Robert T., assignor to The Cincinnati Shaper Company, Cincinnati, Ohio. Press brake, 1,618,2825, Feb. 22.
Hazelton, Robert T., assignor to The Cincinnati Shaper Company, Cincinnati, Ohio. Shaper, 1,632,376; Hazen, Levi P., Cincinnati, Ohio. Metallie lathing, 1,948,345; Nov. 8.
Haziett, Merritt W., Franklin, N. Y. Retracting caster, 1,628,819; May 3.
Head, Ceeli A., Royal Oak, Mich. Electric radiator, 1,619,865; Mar. 8.
Licil, Shaper, C., Licil, Shaper, Li

nean. Francis, New York, N. Y. Drying apparatus. 1.631.488; June 7.

Head, Ronald, and W. E. Prescott, London, England, assignors to Baker Perkins Company, Incorporated, White Plains, N. Y. Apparatus for cutting sweet-meats. 1.621.012; Mar. 15.

Headley, Frederick H., Northfield, near Birmingham, Engladd, Sept. 6.

Headley, Frederick H., Northfield, near Birmingham, England. Perambulator. 1.644.473; Oct. 4.

Headley, John W., ir. (See Salvucci, Natale, assignor.) Headley, R. C. (See Wolter, Antone E., assignor.) Headley, William T., Philadelphia, Pa. Soapy emulsion 1.644.674; Aug. 30.

Heady, Frank. (See Frye, W. A., and Heady, Henti, John, Springfield, Mass. Concert horn. 1,634,355; July 5.

Heald Machine Company, The. (See Gallimore, Keith F., assignor.)
Heald Machine Company, The. (See Turner, A., and Burns, assignors.)
Heales, John D., Edwards, Ill.
Circuits, 1,650,446; Nov. 22.
Circuits, 1,650,446; Nov. 22.
(See Chilton, Roland,

Healey-Aeromarine Bus Company. (See Douglas, William H., assignor.)
Healey-Aeromarine Bus Company. (See Hayes, Frank A.,

Assignor.)
Healey-Aeromarine Bus Company. (See Zimmermann, F. G., and Korvin-Kroukovsky, assignors.)
Healey-Residual Company. (See Douglas, William C. G., assignors.)
Health Products Corporation. (See Berg, W. H., Whitman, and Aab, assignors.)
Healy, Cornelius D., Newark, N. J. Extension comb for laying underground electric conduits. 1,650,833;

Nov. 29.

Nov. 29.

Healy, Edward C., Muscatine, Iowa. Window structure.

1.632,333; June 14.

Heames, Richard M., Grosse Pointe Village, and B. W.
Lindquist, Detroit, Mich. Apparatus for trimming
blanks. 1.636,691; July 26.

Heaney Mfg. Co. (See Marchione, Lewis, assignor.)

Heany, John A., New Haven, Conn. Incandescent electric
lamp. 1,635,320; July 12.

Henny, John A., New Haven, Conn. Incandescent electric
lamp. 1,640,529 Aug.

New Haven, Conn. Multiple-unit electric transmission.

1,616,638; Feb. 8.

Heany, John A., assignor to Heany Laboratories, Inc.,
New Haven, Conn. Friction brake. 1,616,659; Feb. 8.

Heany, John A., assignor to Heany Laboratories, Inc.,
New Haven, Conn. Electricare lamp. 1,617,635;
Feb. 15. New 1 Feb. 18

eany, John A., assig New Haven, Conn. Feb. 15. Heany. assignor to Heany Laboratori conn. Electric-arc lamp. 1,6 1,617,636;

Feb. 15.

Heany, John A., assignor to Heany Laboratories. Inc., New Haven, Conn. Electric-are lamp. 1,617,637; Feb. 15.

Henny, John A., New Haven, Conn., assignor to World Bestos Corporation, Paterson, N. J. Winding machine. 1,621,723; Mar. 22.

Heany, John A., New Haven, Conn., assignor to World Bestos Corporation, Paterson, N. J. Making paper., 1,642,495; Sept. 13.

Heany, John A., New York, N. Y., assignor to Heany Lab-oratories, Inc., New Haven, Conn. Electric-arc lamp, 1,617,635, Feb. 15. Heany, John A., New York, N. Y., assignor to Heany Lab-oratories, Inc., New Haven, Conn. Electric-arc lamp, 1617,634; Feb. 15. Heany Laboratories, Inc. (See Heany, John A., as-

1.617.034; Feb. 15.

Heany Laboratories, Inc. (See Heany, John A., asHeany Laboratories, Inc. (See Heany, John A., asHean, William D., Two Rivers, Wis. Cigarette case.
1.619.418; Mar. 1.

Heard, Edmund F. (See Furman, Eugene C., assignor.)

Heard, Edmund F., Elizabeth City County, and M. M.

Fitz Hugh, assignors to Newport News, Va. Tool carfeer for Laboratory, Newport News, Va. Tool carter for Laboratory, Newport News, Va. Tool carHeard, Company, Newport News, Va. Tool carHeard, William A., Jacksonville, Fla. Vanity case. Des.
74.108; Dec. 20.

Heard, William A., Jacksonville, Fla. Vanity case. Des.
74.108; Dec. 20.

Hearn, George G., Petersburg, Fla. Protective deHearn, G., Hearn, G., Hearn, G., Hearn, G., Hearn, G., Hearn, Moral K., Yates Center, Kuns. Radius-rod support. 1,649.691; Nov. 15.

Hearn, Noval K., Yates Center, Kuns. Radius-rod support. 1,649.691; Nov. 15.

Hearn, G., H

Heath, Frank E., Sherman Mills, Me. Oven grate. 1,637,303; July 26. Heath, George B., St. Louis, Mo. Reflector. 1,644,128;

Heath Acorge B., St. Louis, Mo. Reflector. 1,644,128; Heath Acorge B., St. Louis, Mo. Reflector. 1,644,128; Heath, Kenneth L., and L. Schoel, Edmonds, Wash.; said Schoel assignor to said Heath. Hair snap. 1,623,034; Mar. 29. Heath, Milbourn W., Jestersville, Md. Refrigerator. 1,616,085; Feb. 1. Heath, Reginald C. (See Goodridge, George E., assignor.) Heath, Samuel, Philadelphia, Pa. Combination vise for hook bars. 1,614,299; Jan. 11. Heath, Spencer, Elkrimore, Md. Propeller-blade mount-Heath, Spencer, Elkridge, Md. Aircraft-engine control. 1,651,821; Dec. 6. Heath, Wilfrid F., Chicago, Ill. Tuning radiorecelvers. 1,633,734; Aug. 9. Heathcote, Henry L., assignor to Rudge-Whitworth Limited, Coventry, England. Manufacturing ball-rolling disks. 1,624,597; Apr. 12. Heather-Mathews Co., The. (See Mathews, Robert F., assignor) mark. George Markey, Robert F., assignory mark.

assignor. Heaton, Herman C., Berwyn, Ill. Brake. 1640,545; Aug. 30.

Heather-Ratuews Co., assignor, assignor, assignor, assignor, the aton, Herman C., Berwyn, Ill. Brake. 1640,545; Heaton, William H., San Luis Obispo, assignor of one-half to C. M. Frey, San Francisco, Calif. Automobile power-transmission attachment. 1.617,638; Feb. 15. Heaton, William H., Oakland, Calif. Fire extinguisher. 1.619,101; Mar. 1. Wood, Ph. Mine-car braking mechalobard Manufacturing Company. (See Shackelford, Edward H., jr., assignor).) Hebden, Frank, assignor to Merrick Scale Mfg. Company, Passaic, N. J. Automatic weigher. Reif-666; July 5. Hebenstreit, Emil H., Milwaukee, Wis. Upholstered box spring structure. 1,628,977; May 17. Heberling, John, Rochester, N. Y. Pinwheel, 1,639,943; Aug. 23. Hebenstreit, Emil H., Milwaukee, Wis. Upholstered box spring structure. 1,628,977; May 17. Heberling, John, Rochester, N. Y. Pinwheel, 1,639,943; Aug. 23. Hebert, Homer P., (See Hebert, Joseph P., and H. P.) Hebert, Joseph P., and H. P., Chippewa Falls, Wis. Tool-head fastening. 1,642,814; Sept. 20. Hebera, Milliam F., Highland, Ill, assignor to Pet Milk Company, St. Louis, Mo. Can-printing machine. 1,638,850; Aug. 18, Light, assignor to Pet Milk Company, St. Louis, Mo. Can-printing machine. 1,638,850; Aug. 18, Light, assignor to Pet Milk Company, St. Louis, Mo. Can-printing machine. 1,638,850; Aug. 18, Light, assignor to Westinghouse Electric and Manufacturing Company, Reactor 1,635,042; July 5. Hebes, William F., Jand J. Hultgreen, Chicago, Ill. Musical instrument. 1,846,050; Oct. 18. Heben, Manufacturing Company, Reactor 1,635,042; July 5. Heben, Milliam J., and J. Hultgreen, Chicago, Ill. Musical instrument. 1,846,050; Oct. 18. Heben, Manufacturing Company, Reactor 1,635,042; July 5. Heben, Milliam J., and J. Hultgreen, Chicago, Ill. Musical instrument. 1,846,050; Oct. 18. Heben, Manufacturing Company, Reactor 1,635,042; July 5. Heben, Milliam J., and J. Hultgreen, Chicago, Ill. Musical instrument. 1,846,050; Oct. 18. Heben, Manufacturing Company, Reactor 1,635,042; July 5. Heben, William J., and J. Hultgree

instrument. 1.546.099; Oct. 48.
Hechinger, Herbert A., Dorchester, Mass. Electric-lamp-display device, 1.652.825; Dec. 13.
Hecht, Else, née Helmann, administratrix. (See Helmann, Georg.)
Hecht, Heinrich. (See Hahnemann, W., and Hecht.)

Hecht, Heinrich. (See Hahnemann, W., Hecht, Lichte, and Adeimann.)
Hecht, Joseph L., et al. (See Einfeldt, Ernest E., asHecht, Lee. New York, N. Y., assignor to Sun Rise Lamp
Mfg. Co. Inc. Lamp base or analogous article. Des.
74.110; Dec. 20.
Heckel, Charles F., Newport, Ky., and B. Messer, Pittsburgh, Pa.; said Heckel assignor to said Messer.
Air-blast gas burner. 1.627.772; Aug. 2.
Heckman, Bruce C., Eureka, Calif. Fishing apparatus.
Heckman, Heckman, L., Sanda, M., Sanda, M., Sanda, Sanda

Hedeman, Walter R. (See Whitsitt, W. B., and Hedeman, Walter R. (See Whitsitt, W. B., and Hedemark, Edward L., assignor to Stewart-Warner Speedometer Corporation, Chicago, III. Radiocabinet. Des. 73.501; Sept. 20.

Hedén, Gustaf, New York, N. Y. Buoying and driving mechanism for flying machines. 1.615.452; Jan. 25.

Hedenburg, Oscar F., Pittsburgh, Pa., assignor to Rex Research Corporation, Toldedo, Ohio. Poison composit-Hedenburg, Oscar F., 1964, Pa., 1964,

Hedley, Frank, Yonkers, and J. S. Doyle, Mount Vernon, N. Y. One-man-car control equipment, 1,652,622; Dec. 13.

Hedley, Frank, Yonkers, and J. S. Doyle, Mount Vernon, N. Y. Emergency door-operating apparatus. 1,652,623;

N. Y. Bmergency door-operating apparatus. 1,625,623;
Redlind. Welter, Portland, Oreg. Vending machine. 1,645,236; Oct. 11.
Hedrick. Abe T., High Island, Tex. Safety attachment for bollers. 1,650,212; Nov. 22.
Hedrick. Arnold. Latham. Kans. Sod-line market. 1,634,421; July 5.
Hedrick. Joseph G. (See Gordon, Charles E., assignor.)
Hedrick. Joseph G. at al. (See Carlson, Gustave O., assignor.)

Hedström, Carl U., et al. (one carson, assignor.)
Heegner, Kurt, assignor to Geselbanft für Drahtlose
Telegraphle m. b. H., Berlin, Germany. Arrangement
Telegraphle m. b. H., Berlin, Germany. In frequency
changers. 1,639 695; Aur. 23
Heenan, Daniel, Strentor, Ill. Combined reading lamp
and electric fan. Des. 74,011; Dec. 6.
Heenan, & Froude Limited. (See Buigin, William J.,
assignor.)
Tempan, and Froude Limited. (See Walker, George H..

assignor.)

Heenan and Froude Limited. (See Walker, George H.,

Heenan and Froude Limited. (See Walker, George H.,

Heenan, John N. D., Aldwych. London, England, assignor to Power Specialty Company, New York, N. Y.,

Superheating arrangement for water-tube boilers.

1,621,112; Mar. 13.

Heener, Liz Mar. 13.

Heener, George W., Cleveland, Ohio. Lock mechanism.

Heenery, Joseph P., and J. G. Mitchell, Chicago, III.

Bubbler head for fountains. 1,621,724; Mar. 22.

Heer, Gustave. (See Plehn, T. A., and Heer).

Heermance. Bernard I., Montrose, N. Y. Snow-melting

Heesch, Henry W., assignor to Taylor Instrument Com
panies. Rochester. N. Y. Recorder-pen-arm release.

1,630,296; May 31.

Heesch, Henry W., assignor to Taylor Instrument Com
panies. Rochester. N. Y. Pen for recording instru
Heesch, Henry W., and J. Schoffeld, assignors to Taylor

Instrument Companies. Rochester. N. Y. Pen support

for recording instruments. 1,648,227; Nov. 8.

Heess, Henry, Jersey City, N. J. Lightning-arrester sys-tem. 1633,098; June 21.
Heet, John B., deceased, Trenton, Ill.; A. E. Heet, John B., deceased, Trenton, Ill.; A. E. Heet, administratrix. Socket for scaffold treaties. 1,642,069; Ksptl. 13.

administratrix. Socket for scaffold trestles. 1,642,069; Sept. 13.

Berter, Charles M., Butler, Pa. Spudding wheel. 1,640,237; Aug. 23.

Ing. Survey of the source of the

thur. Compressed-air installation for internal-combustion engines on board ships. 1.618.335; Feb. 22.

Hon engines on board ships. 1.618.335; Feb. 22.

Hother and the state of the state o

Hellow Company, Rock Island, Ill. Tractor. 1,652,358; Dec. 13.

Heldt, Gullelmus V., Atlanta, Ga. Control for electrical systems. 1,646,860; Oct. 25.

Heldt, Gullelmus V., Atlanta, Ga. Lubricating grease cup. 1,648,228; Nov. 8.

Heldt, Gullelmus V., Atlanta, Gal. Lubricating grease cup. 1,648,228; Nov. 8.

Heldt, Germany, Tramway-switch construction. 1,637,304; July 26.

Heldt, Julius P., assignor to The Hell Co., Milwaukee, Wis. Hell, Julius P., assignor to The Hell Co., Milwaukee, Wis. Safety vent valve. 1,637,076; July 26.

Hellt, Julius P., and A., Borcharott, Milwaukee, Wis. Safety vent valve. 1,637,076; July 26.

Hellton, Jacob, assignor, by mesne assignments, to I. Goldring, Providence, R. I. Powder container, 1,644,377; Oct. 4.

Hellbronner, Herbert E. (See Evans, H., and Hellbronner, Herbert E. (See Evans, H., and Hellbronner, Herbert E. Costello and

Heilbronner, Ralph L. (See Carlson, E. E., Costello, and

bronner.)

Hellbronner. Ralph L. (See Carlson, E. E., Costello, and Hellbronner.)

Hellman. Mand, Lest Hills, Calif. Infant's stocking Hellman. Mand, Carl. Seekkor, Denmark. Machine adapted to catch and destroy bugs and similar noxious vermin on plants and bushess. 1,632,909; June 21.

Hellm. Lewis R., Danbury, Conn., assignor, by mean easternation of the mander of the mander

Heimbach, William II. (See Switzer, Henry W., assignor.)
Heimburge, Herman F., Troy, N. Y. Bait. 1,618,083;
Feb. 15.

Feb. 15.

Helmer, Granville A., Nazareth, Pa. Game apparatus.
1.632,792; June 21.

Helmerl, Frank, St. Nazianz, Wis. Oil heater for crank
cases. 1,629,101; May 17.

Collar-button guard. 1,629,137; Apr. 25.

Helm, George N., San Francisco, F. L. Platt, Berkeley,
and R. R. Impey, San Francisco, Calif. Dispensing
faucet. 1,636,817; July 26.

Helm, George N., San Francisco, Calif. Hypodermic needle.
Hin, George N., San Francisco, Calif. Hypodermic needle.
1,644,667; Apr. 20.

1,614,612; Jan. 18.

Helma Radio Corporation. (See Helna, William M., assignor).

signor Heina, William M., Bronx, N. Y., assignor to Heina Radio Corporation. Portable radio apparatus. 1,626,464;

Heinbockel, John F., and A. V. Sullivan, San Francisco, Calif. Automatic feed for fish-cleaning machines. 1,653,906; Dec. 27. Ieline Bolier Company. Ieline Bolier Company. (See Egsicker, Albert H., as-Heinbockel,

Heine Boiler Company. (See Hinman, John H., as-Heine Boiler Company. (See Hinman, J. H., and Burke, assignors.) Heine Boiler Company. (See Pahmeyer, Frederick O.,

assignor.)

assignor.)
Heine Boiler Company. (See Siegerist. Walter, assignor.)
Heineke, Martin L., assignor to The Weaver Manufacturing Company, Springlield, Ill. Tire-removing attachment for tire changers. 1,651,389; Dec. 6.
Heineman, Warren F., Shorewood, assignor to A. O.
Smith Corporation, Milwaukee, Wis. Buft welding by
means of an electric arc. 1,653,565; Dec. 20.
Heiney, John W., Allentown, Fa, assignor to Internamount. 1,631,961; June 14.
Heinicke, Hermann, Seehof, near Teltow, assignor to
P. Jung, Neukolin, Germany. Apparatus for ascertaining the compositions of gaseous mixtures. 1,646,247;
Oct. 18.

Oct. 18.

ing the compositions of gaseous mixtures. 1,646,247; Oct. 18.
Heinish, Hubert G., Huntington, W. Va. Fireplace. 1,640,937; Aug. 30.
Heinke, Alfred J., 30.
Heinke, Alfred J., 20.
Heinke, Alfred J., 10.
Heinke, Alfred J., 10.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co., Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 72,316; Mar. 29.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co., Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 72,321; Mar. 29.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 72,422; Apr. 12.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 72,422; Apr. 12.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 72,422; Apr. 12.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 72,422; Apr. 12.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 72,425; Apr. 12.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 72,477; May 31.
Heinle, Albret W., Crafton, assignor of one-half to H. F. (1,223,401, Apr. 12.
Heinle, Albret W., Crafton, assignor of one-half to B. J. (1,223,401, Apr. 12.

1,623,340; Apr. 12.

Heinle, Abert W., Crafton, assignor of one-half to S. E.

Duff. Ben Avon, Pa. Rolling structural units.
1,652,860; Dec. 18.

Heinle, Henry C., Ir.

Huntington Park, Calif. War air

Heinrich, Tone Control Control Control

Heinrich, Jules. (See Vandergaw, E. B., and Heinrich.)

Heinrich, Robert, and P., Kramer, assignors to National

Machine Tool Co., Racine, Wis. Metal shears.
1,647,622; Nov. 1.

Heinrich, Walter Assignor to W. N. Matthews Corporate

Heinrich, Berg, assignor to Midwest Box Company,

Chicago, Ill. Wrapper-making machine. 1,619,615;

Mar, 1.

Mar. 1. Heinrichs, Jos., Corporation. (See Scavullo, Angelo C., assignor.)

nessignor.)
Heinson, Eruest T., Mountain Iron, Minn. Open-air sleeping room. 1,648,070; Sept. 20.
Heinson, Ernest T., Mountain Iron, assignor of ten per
cent to T. H. Strizich, Hibbing, Minn. Waterless
cooker. 1,649,130; Aug. 25. Iron, assignor of ten per
cent to T. H. Mountain Iron, assignor of ten per
cent to T. H. Mountain Iron, assignor of ten per
cent to T. H. Mountain Iron, Minn. Waterless
cocker. 1,640,181-1840, 23
Hellitz, Ernest E. (See Archer, T. P., and Heintz.)

Heintz, Ernest E., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Window regulator. 1,688,197; Aug. 9. Heintz, Ernest E., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Remote control latch.

1,638,197; Aug. 9.

Heintz, Ernest E., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Remote control latch, 1,638,198; Aug. 9.

tus. 1,632,198; Aug. 9.

Heintz, Leo I., assignor to Heintz Manufacturing Company, Philadelphia, Pa. Post connection for vehicle bodies, 1,629,271; May 17.

Heintz, Leo I., assignor to Deintz Manufacturing Company, London, 1,629,271; May 17.

Heintz, Leo I., assignor to Deintz Manufacturing Company. Heintz, Leo I., assignor to Heintz, Manufacturing Company. (See Fiechter, John J., assignor).

Heintz Manufacturing Company. (See Heintz, Leo I., assignor.) Heintz Manufacturing Company. (See Lambert, Albert L., assignor.)

Heinz, Elizabeth S., administratrix. (See Heinz, Nicholas

Heinz, Elizabeth S., administratux. teee nome, account, assignor.)
Heinz, John L. C., Chicago, Ill. Hinge with automatic lifting and locking means. 1,631,527: June 7.
Heinz, Julius A., deceased, Pesotum, Ill.; K. K. Heinz and F. B. Hamill, executors. Floral rack. 1,652,936; Dec. 13.
Heinz, Julius A., deceased, Pesotum, Ill.; K. K. Helnz and F. B. Hamill, executors. Floral rack. 1,652,937; Dec. 13.
Heinz, Kathryn K., et al., executors. (See Heinz, Julius A.)

Julius A.)

Julius A.)

Heinz, Nicholas L., deceased, Walworth, Wis., E. S.

Heinz, administratrix. Internal combustion engine.

1,633,251; June 21.

Heinze, Carl, Maschinenfabrik A. G. (See Kraney, Karl F., assignor.)

Heinze, Fritz, Ludwigshafen-on-the-Rhine, assignor to

1. G. Farbenindustrie Aktiengesellschaft, Frankforton-the-Main, Germany, Manufacture of diaminodiary-lurea. 1,617,847; Feb. 15.

Heinze, Fruil, Detroit, Mich. Lettering device. 1,632,968;

June 21.

Heinzelman, Edmund G., Belleville, Ill. Steering-wheel brake. 1,624,598; Apr. 12. Heise, August, Milwaukee, Wis. Submarine. 1,653,175; Dec. 20.

Heise, Angust, aniwanke, wis. Southerine. 1,003,113, Dec. 20.

Heise, George W., Bayside, and E. A. Schumacher, Brooker, George W., Bayside, N. T., Aniver, M. G. Heise, George W., Bayside, N. Y., H. H. Thompson, Cleveland, Ohio, and N. K. Chaney, Kew Gardens, N. Y., assignors to National Carbon Company, Inc. Dry cell and electrode therefor. 1,000 to Company, Inc. Dry cell and electrode therefore, 1,000 to Company, Inc. Dry cell and electrode therefore, 1,000 to Company, Inc. Dry cell and electrode therefore, 1,000 to Company, Inc. Dry cell and electrode therefore, 1,000 to Company, Inc. Dry cell and electrode therefore, 1,000 to Company, Inc. Dry cell and electrode therefore, 1,000 to Company, Inc. Dry cell and electrode therefore, 1,000 to Company, Inc. Legister, 1,000 to Company, 1000 to The Mead Pulp & Paper Company, Dayton, Ohio. Paper-making apparatus, 1,643,657; Sept. 27.

Heisel, Raiph E., Chillicothe, assignor to The Mead Pulp & Paper Company, Dayton, Ohio. Paper-making apparatus, 1,643,229; Nov. 8.

Heisel, Raiph E., Chillicothe, assignor to The Mead Pulp & Paper Company, Dayton, Ohio. Paper-making apparatus, 1,643,229; Nov. 8.

Heisel, Raiph E., Chillicothe, Chillicothe, Scheley, M. C., assignor.

Heisey, A. signor.) Heisey, A. H., & Company. (See Heisey, Edgar W., assignor.)

signor.) Heisey, A. H., & Company. (See Heisey, Thomas C., as-signor.) Heisey, Edgar W., assignor to A. H. Heisey & Company, Newark, Ohio. Saucer or similar article. Des. 72,064; Heisey, Edgar W Newark, Ohio.

Feb. 22.
Heisey, Thomas C., assignor to A. H. Heisey & Company,
Newark, Ohio. Tumbler. Des. 73,931; July 12.
Heisey, Thomas C., assignor to A. H. Heisey & Company,
The Company,
Des. 73,032; July 12.
Heisey, Thomas C., assignor to A. H. Heisey & Company,
Newark, Ohio. Combination salt and pepper shaker.
Des. 73,377; Aug. 30.

The Heisey & Company,
Newark, Ohio.
The Company of the

Letsey, Thomas C., assignor to A. H. Helsey & Company, Newark, Ohlo. Combination salt and pepper simulations of the company of

Des. 73.431; Sept. 13.

Helsey, Thomas C., assignor to A. H. Helsey & Company, Newark, Ohio. Candlestick. Des. 74.012; Dec. 6.

Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, incorporated, New York, N. Y. Electric Company, Incorporated, New York, N. Y. Frequency indication and control. 1,620,204; Mar. 8.

Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Frequency indication and control. 1,620,304; Mar. 8.

Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Carrier-wave signaling system. 1,620,607 Mar. 9.

Carrier-wave signaling system. 1,620,607 Mar. 9.

Carrier signaling system. 1,620,607 Western Electric Company, Incorporated, New York, N. Y. Carrier signaling system. 1,654,080; Dec. 27.

Heising, Raymond A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Directive radio receiving system. 1,620,655; Mar. 15.

N. Y. Directive radio receiving system. 1,020,000; Mar. 15.

Helman, Saymond A. East Orange, N. J., assignor to the state of the state

Held, Georges, assignor to A. L. Legrand, Paris, France. Two-cycle internal-combustion engine. 1,613,226; Jan. 4. Held, Paul, St. Cloud, Minn. Slide. 1,627,970; May 10. Held man, Max I. (See Minuth, Gustave W., assignor.) Heldrich, Andrew. (See Watson, H. L., and Heldrich, Heldrich, Andrew. (See Watson, H. L., and Heldrich, Heldrich, Andrew. (See Watson, H. L., and Heldrich, Heldrich, State, St. Treth-cutting Helgre, Gustav, assignor of one-half to G. W. Nuneman, Brooklyn, N. Y. Window latch and draft plate. 1,639,849; Aug. 23. Hellos Corporation. (See Proksa, John, assignor.) Helland, Sigurd H., assignor to Whitin Machine Works, Mellows, Hellry H., Fair Lawn, and F. Radhuber, assignors to The Schwarzenbach-Huber Company, Union City, N. J. Cushion for creels or jacks. 1,653,566; Dec. 20.

City, N. J. Cushion for creels or jacks. 1,653,566; Dec. 20.
Geller, B., & Company. (See Alsberg, Julius, assignor.) Heller, David, and A. C. Parlini, New York, N. Y. Fruit peeier. 1,640,656; Aug. 30.
Heller, Bari R., Wapwallopen, Pa. Combination foot Heller, Bari R., Wapwallopen, Pa. Combination foot Heller, Bari R., Wapwallopen, Pa. Combination foot Heller, Hans E. Stockton, Callf. Jumbo for tunnel forms. 1,621,538; Mar. 22.
Heller, Hans E. Stockton, Callf. Jumbo for tunnel forms. 1,621,538; Mar. 22.
Heller, Israel E. (See Sackerman, M. G. and Heller.) Heller, John W., Arlington, Kans. Headilpht-door remover and replacer. 1,633,528; June 21.
Heller, Faul E., Newark, N. J. Golf club. Rei6,808; Dec. 6.
Heller, William M. (See Stein, C., and Heller.) Heller, William M. (See Hupfel, A. G., Ir., and Rechung, Long, Julian, J. (See Hupfel, A. G., Ir., and Rechung, Rudolf E., Swissyale, Pa., assignor to West-Hellmunh, Rudolf E., Swissyale, Pa., assignor to West-Hellmunh, Rudolf E., Swissyale, Pa., assignor to West-Hellmunh, Geward L., Guldford, England, Motor vehicle, 1,651,888; Dec. 6.
Hellstrom, John A., Wheeling, W. Va. Manipulator for Hellstrom, John A., Wheeling, W. Va. Manipulator for Hellstrom, John A., Wheeling, W. Va. Manipulator for Hellstrom, John A., Wheeling, W. Va. Manipulator for

signor.)

Ellistrom, John A., Wheeling, W. Va. Manipulator for rolling mills. 1,618,707; Feb. 22.

Hellström, Sinon. (See Tillberg, Brik W., assignor.)

Hellthaler, Theodor, Granschutz, assignor to the Firm: Hugo Stinnes Riebeck Montan and Olwerke Akt. Ges. Halls-on-the-Saale, Germany. Refining mineral oils. Hellthaler, Theodor, Granschutz, assignor to the Firm: Hugo Stinnes Riebeck Montan und Olwerke Akt. Ges. Halls-on-the-Saale, Germany. Refining mineral oils. 1645.530; Oct. 18.

Hellthaler, Theodor, Granschutz, assignor to the Firm: Hugo Stinnes Riebeck Montan und Olwerke Akt. Ges. Halls-on-the-Saale, Germany. Refining mineral oils. 1.645.530; Oct. 18.

Hellweg, Henry, assignor to Helzen Corporation, Milwaukee, Wis. Car heater. 1,627,630; May 10.

Hellwig, Emil C., Denver, Colo. System of motor control. 1,622,112; Mar. 22.

1644,899 nov. 22.

Helm, Arthur C., McCook, Nebr. Well casing. 1,613,105; Jan. 4.

Helm, Henry C. (See Helm, John and H. C.)

Jan. 4. Helm, Henry C. (See Helm, John and H. C.) Helm, John and H. C., St. Louis, Mo. Mail box. 1,628,831; May 17. Helma, Paul, assignor to Goodyear-Zeppelln Corporation, Helman, Leading 1,164,024; Sept. 13. Helman, Leading 1,164,024; Sept. 13. Helman, Leading 1,164,024; Sept. 13. Helman, Leading 1,164,024; Sept. 14. Helman, Leading 1,164,04,04; Sept. 14. Helman, Leading 1,164,040; Sept. 16. Helman Leading 1,164,040; Jan. 16. Helman Leading 1,164,040; May 1,164,164,164; Nov. 16.

Helming, Leon W., Baltimore, Md. Vehicle attachment. 1,636,597; July 36. Helmond, William F., Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,630,384; May 31. Helmquest, William J., assignor to California Card Manufacturing Company, San Francisco, Calif. Picture mounting. Des. 72,211; Mar. 15. Helmquest, William J., assignor to California Card Manufacturing Company, San Francisco, Calif. Picture Milliam J., assignor to California Card Manufacturing Company, San Francisco, Calif. Picture-east nount. Des. 73,832; Nov. 15. Helmquest, William J., assignor to California Card Manufacturing Company, San Francisco, Calif. Picture-east nount. Des. 73,832; Nov. 15. Helmquest, Moliph C. (See Graham, G., and Helmuts.) Helmuth, Frank J., Oakland, Calif. Lock. 1,647,354; Nov. 1.

Nov. 1.
Heloian, Ernest, Highland Park, Mich. Dish stand.
1.643,450; Sept. 27.
Heltzel, John N., Warren, Ohio. Expansion pedestal.
Heltzel, John N., Warren, Ohio. Concrete form.
1,028,316; May 10.
Heltzel, John N., Warren, Ohio. Curb and gutter form.
1,637,398; Aug. 2.
Heltzel, John N., Warren, Ohio. Concrete form. 1,644,584;
Oct. 4.

Helizel, John N., Warren, Ohio. Concrete form. 1,644,585; Oct. 4. Warren, Ohio. Concrete form. 1,644,585; Oct. 4. Warren, Ohio. Concrete form. 1,644,586; Oct. 4. Warren, Ohio. Concrete form. 1,644,587; Oct. 4. Warren, Ohio. Concrete form. 1,644,587; Oct. 4. Warren, Ohio. Concrete form. 1,644,587; Oct. 4. Warren, Ohio. Concrete form. 1,644,588; Oct. 4. Warren, Ohio. Concrete form. 1,644,588; Oct. 4. Warren, Ohio. Concrete form. 1,644,588; Oct. 4. Warren, Ohio. Concrete form. 1,645,588; Oct. 4. Warren, Ohio. Concrete form. 1,644,588; Oct. 4. Warren, Ohio. Concrete form. 1,642,588; Oct. 4. Warren, Ohio. Concrete form. 1,642,588; Oct. 4. Warren, Ohio. Computing scale. 1,619,121; Mar. 1. Warren, Ohio. Testing device. 1,619,122; Mar. 1. Toledo. Ohio. Testing device. 1,619,122; Mar. 1. Warren, Malvor O., assignor to Toledo Scale Company. Toledo. Ohio. Interpretating scale. 1,619,123; Mar. 1. Warren, Malvor O., assignor to Toledo Scale Company. Toledo. Ohio. Patrior Marchael Scale Company. Toledo. Ohio. Recording weighing scale. 1,640,678; Mar. 1

Light Tipe Company, 100 Toledo Scale Company, Toledo Ohio. Recording weighing scale. 1,640,078; Aug. 23.

Hern, Halvor O., assignor to Toledo Scale Company, 100 Company, 100

Toledo, Olio. Beautrocom, Aug. 23.
Hemberger, Peter, Jersey City, N. J. Perforating attachment for printing presses. 1,618,191; Feb. 22.
Hemenway, Walter G. Los Angeles, Calif. Carbureting apparatus. 1,634,762; July 5.
Hemingray Glass Company. (See Holmes, Minot K.,

assignor.)

Ilemingway, Marcus B., New Haven, Conn. Scuttle ladder. 1,621,639; Mar. 22.

Ilemingway, Wilson. Jr., Melrose, Pa., assignor to The Electrolock Manufacturing Company. Vicksburg, Miss. Heningway, Wilson. Jr., assignor to The Electrolock Manufacturing Company, Vicksburg, Miss. Ignition system Hemingway, Wilson, Jr., assignor to The Electrolock Manufacturing Company, Vicksburg, Miss. Lock or locking device. 1,647.567; Nov. 1.

Hemleb, Martin, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Shaft bearing. 1,631,962; June 14.

June 14.

Hemminger, Charles E., Princeton, N. J. Package.
1.649,692; Nov. 15.

Hempen, Fred J., and O. Lipameier, Aviston, Ill. ReHempen, Fred J., and O. Lipameier, Aviston, Ill. ReHemphill Company, (See Bosworth, George P., assignor.)

Hemphill Company, (See Gagné, Augustin, assignor.)

Hemphill Company, (See Jones, Frank E., assignor.)

Hemphill Company, (See Jones, Frank E., assignor.)

Hemphill Company, (See Landry, Aldel, assignor.)

Hemphill Company, (See Landry, Aldel, assignor.)

signor.)

Hemphill, Edward A., Jersey City, N. J. Index and system of Indexing. 1,643,161; Sept. 20.

Hemphill, Grover H., Cinchnati, Ohio. Combination headlight-dimming and spotlight-controlling means. 1,627,645; May 10.

Hemphillan, Lynn H., Twin Falls, Idaho. Calculating device. 1,637,222; July 26.

Hempy, Wilbur J., Kansas City, Mo. Babbitting jg. 1,518,430; Feb. 22.

Hender H., Brooklyn, N. Y. Conveyer. 1,615,453; Jan. 28.

Hendee, Lem E., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Line insulator. 1,651,704; Dec. 6.

Hendel, Richard, New London, Conn., assignor to E. W.
Sutton Carpet Lining Corporation, Brooklyn, N. Y.
Rug pad. 1622,035; Mar. 22.
Henderson, A. E., Toronto, Ontario, Canada. Valve base
for pneumatic tires. 1,639,998; Aug. 23.
Henderson, Ada, Wampsville, N. Y. Rubber protector for
stockings. 1,619,934; Mar. 8.
Henderson, Albert, assignor, by mesne assignments, to
Henderson Structural Units Company, Pitisburgh, Pa.
Building construction. 1,642,962; Sept. 20.
Henderson, Albert E., Toronto, Ontario, Canada. ConHenderson, Albert E., Toronto, Ontario, Canada. Airship. 1,645,237; Oct. 11.
Henderson, Albert E., Toronto, Ontario, Canada. Aeroplane projectile. 1,646,146; Oct. 18.
Henderson, Fred, et al. (See Edwards, George A., assignor.)

signor.) Henderson

signor.)
Henderson, George C., Detroit, assignor to Whitehead & Kales Company, River Rouge, Mich. Fifth-wheel assembly, 1627,176; May 3.

trix. Sewickley, Pa. Wire-shaping apparatus. 1,013,170; Jan. 4.
Henderson, George K., Indianapolis, Ind. Box. 1,641,969; Sept. 13.

Henderson, George K., Indianapolis, Ind. Sealing machine. 1,641,070; Sept. 13.
Henderson, George K., Indianapolis, Ind. Sealing machine. 1,633,460; Dec. 20.
Henderson, Herbert. (See Prichard, G. L., and Henderson, Herbert.)

Henderson, James B., Lee, England. G. L., and Henderson, James B., Lee, England. Sighting telescope. 1,616,600; Feb. 8. P., Lee, England. Gyrocompass. Henderson, James B., Lee, England. Sighting device. 1,628,776; May 17. Henderson, James B., Lee, England. Sighting device. 1,628,777; May 17. England. Telescopic apparatus. 1,628,777; May 17. England. Gyroscopic instrudences of the state of the

Nov. 15.

Henderson, Mary P., executrix. (See Henderson, George G.)

Henderson, Nelson H., assignor to Syracuse Industrial Gas Co., Syracuse, N. Y. Dishwashing machine. 1.625.194; Apr. 26.

Henderson, Paul S., Charttanoga, Tenn. Candy-crystalliz-Henderson, Raiph S., Charleston, W. Va., Fishing tool. 1.635.622; July 12.

Henderson, Robert H., East Orange, N. J. Bender for light-gauge conduits or pipes. 1.627.034; May 3.

Henderson, Robert H., East Orange, N. J. Overhead-boring machine. 1.644.831; Oct. 11.

Lenderson Structural Units Company. (See Henderson, Albert, assignor.)

chuck for boring tools. 1,644,832; Oct. 11.
Henderson Structural Units Company. (See Henderson,
Albert, assignor, H., El Paso, Tex. Internal-combustenderson, William, H., El Paso, Tex. Internal-combustenderson, William, New York, N. Y. Came machine. 1,631,741; June 7.
Henderson, William, New York, N. Y. Came machine. 1,632,793; June 21.
Henderson, William, F., Pittsburgh, Pa., assignor, by mesne assignments, to Visking Corporation, Chicago, H. Menderson, William F., Pittsburgh, Pa., assignor, by mesne assignments, to Visking Corporation, Chicago, Ill. Method of and apparatus for making sausage casings. 1,654,253; Dec. 27.
Henderson, William F., assignor to The Visking Corporation, Chicago, Ill. Preparation of sausage casings for the Chicago, Ill. Preparation of sausage casings for Henderson, William F., assignor to The Visking Corporation, Chicago, Ill. Stuffer born. 1,647,484; Feb. 15.
Henderson, William W., Bath, N. Y. Power transmission. 1,644,482; Sept. 6.
Henderson, Wylle E., Lanett, Ala. Top clearer for roving frames. 1,631,271; June 7.
Hendly Machine Company, The. (See Knight, George H., Hendlin, 18rnel.) (See Pukt, A. J., and Hendlin,)

assignor.) Hendlin, Israel. (See Pukt, A. J., and Hendlin.) Hendrick, Victor P., et al. (See Lindsey, George C., as-

Hendricks, Albert E., assignor to King Pneumatic Tool Compuny, Chicago, Ill. Throttle valve for pneumatic tools, 1,644,523; Oct. 11, Throttle valve for pneumatic Hendricks, 11, Hollday, Tex. Traveling valve Hendricks, John A., assignor of one-half to W. Maple, Long Beach, Calif. Pumping device. 1,615,761; Jan. 25.

Hendricks, Royal E., San Francisco, Calif. Electric scrubbling machine. 1,644.159; Oct. 4.

Indiricks. Walter. Pendicton, Oreg. Hand truck. 1.637.640; Aug. 2.

Hendrickson, Dan C., Wichita Falls, Tex., assignor of one-half to W. K. Campbell and one-half to L. D. Baird, Candrickson, Pred. K. Essignor, 10.

Endurickson, Fred. K. Essignor, 10.

Hendrickson, Fred. K. Essignor, 10.

Hendrickson, Harry H., Aravalpa, assignor to Grand Central Mining Company, Phoenix, Ariz. Preparing ores for floution. 1.620,761; Mar. 15.

Hendrickson, Harry H., Aravalpa, assignor to forty ores for floution. 1.620,761; Mar. 15.

Hendrickson, Henry H., Santa Mil. 15.

Hendrickson, Henry H., Aravalpa, assignor to forty ores for floution. 1.620,761; Mar. 15.

Hendrickson, Henry H., Aravalpa, assignor to forty ores for floution. 1.620,761; Mar. 15.

Hendrickson, Henry H., Aravalpa, assignor to forty ores for floution. 1.620,761; Mar. 15.

Hendrickson, Henry H., Aravalpa, assignor to forty ores for floution. 1.620,761; Mar. 15.

Hendrickson, Henry H., Aravalpa, assignor to floution. 1.620,761; Mar. 15.

Hendrickson, Henry H., Aravalpa, assignor to floution. 1.620,761; Mar. 15.

Hendrickson, Henry H., Aravalpa, assignor to floution. 1.620,761; Mar. 15.

Hendrickson, Henry H., Aravalpa, Assignor to floution. 1.620,761; Mar. 15.

June 21.

Hendrickson, James G., Bayonne, N. J. Writing and drawing apparatus. 1,642,369; Sept. 13.

Hendrickson, John W. (See Rich. David. assignor.) Hendrickson, John W. (See Rich. David. assignor.) All Hendrickson, Norton T., and C. Roholt, Hoople, N. Dak. Hendrickson, Norton T., and C. Roholt, Hoople, N. Dak. Fly swatter. 1,639,292; Aug. 16.

Hendrickson, Treelway J., Portland, Oreg. Flash light for doors. 1,647,001; Oct. 25.

Hendrick, George A. (See Pevere, E. F., and Hendric.) Hendrick, Mathew, Ogenat. Saskatchevan, Canada, Hendrick, William R., William R., 1,622,130; Dec. Hendry, William F., Ossibing, N. Y., assignor to Man-Hendry, William F., Ossibing, N. Y., assignor to Man-Hendry, William F., Ossibing, N. Y., assignor to Man-

Hendrix, William R., Wilmington, Calif. Disk brake.

He. 1825.180 Dec. 6.

Hendry, William F., Ossining, assignor, by mesne assignments to National Carbon Company, Inc. New York, N. V. Dry cell. 1.631.200 June 7.

Hendry, William F., Ossining, assignor, by mesne assignments, to National Carbon Company, Inc., New Signments, to National Carbon Company, Inc., New York, N. V. Electric Hell. 1.633.583; June 28.

Hendry, William F., Ossining, assignor to Manhattan Electrical Supply Company, Inc. opporated, New York, N. V. Electric Hell. 1.633.583; June 28.

Hendry, William F., Ossining, assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. W. Dr. Cell. 1.637.44 Aug. 2.

Hendry, William F., Ossining, assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. V. Dr. Cell. 1.644.017; Oct. 4.

Hendry, William F., Ossining, assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. V. Dry cell. 1.644.017; Oct. 4.

Hendry, William F., Ossining, assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. V. Connecting device, 1.647.355; Nov. 1.

Hendry, William F., Ossining, assignor, to Manhattan Electrical Supply Company, Inc., New York, N. V. Machine for handling articles. 1.647.355; Nov. 1.

Hendry, William F., Ossining, assignor, to Manhattan Electrical Supply Company, Inc. opporated, New York, N. V. Connecter for electrical conductors, 1.654.254; Dec. 27.

Hendry, William F., Ossining, N. Y., assignor to Manhattan Electrical Supply Company, Inc. Proporated, New York, N. V. Connecter for electrical conductors, 1.654.254; Dec. 27.

Hendry, William F., Ossining, N. Y., assignor to Manhattan Electrical Supply Company Inc. Proporated, New York, N. Y. Connecter for electrical conductors, 1.654.254; Dec. 27.

Hendry, William F., Ossining, N. Y., assignor to Manhattan Electrical Supply Company, Incorporated, Advertising-sign system, 1.654.255; Dec. 27.
Hendryx, Andrew B., Company, The. (See Hendryx,

vertising-sign sysfem. 1.634.255; Dec. 27.
Hendryx, Andrew B., Company, The. (See Hendryx, Hendryx, Company, The. (See Hendryx, Northan W. assignor to The Andrew B. Hendryx, Northan W. assignor to The Andrew B. Hendryx, Northan W. Haven, Conn. Bird cage. Des. 73.784; Nov. 8.
Hendsch. Henry H., Bakersfield, Calif. Displaying device. 1.637.305; July 26.
Hendy, Joshua, Iron Works. (See Gfeller, Frederick, as-

signor.)

Hengstenberg, Paul M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Mannfacturing Company. Short-circuiting device. 1.642.070; Sept. 13.

Heniken, Harold A. (See Shrum, P. J., and Henigen.) Henke, Frederick, assignor, by mesne assignments, to A. H. Fox Gim Company, Philadelphia, Pa. Toy gun. Company, Philadelphia, Pa. Toy gun. Andromotive Products Corporation. Electric swiftch. 1.649.590; Nov. 15.

Henke, Frederick W., Jr., assignor to Fox Automotive Products Corporation, Philadelphia, Pa. Lock for spare wheels of automobiles. 1.625.637; Apr. 13.

Henkel, Frederick N., Essignor to Fox Automotive Products Corporation, Philadelphia, Pa. Lock for spare wheels of automobiles. 1.625.637; Apr. 13.

Henkel, Frederick, Norwalk, Calif. Aquatic carrousel. 1.647.623; Nov. 1.

Honker, Otto, assignor to the Firm Carl Zelss, Jena, Germany. Apparatus for the objective measurement of the refractive value of the principal point of the eye. 1.613.658; Jan. 11.

1.00.1-00.1; Januaria to the Firm Carl Zoles, Jena, Germany. Refractometer. 1.649.064; Nov. 18. Henker, Otto, resignor to The Firm of Carl Zoles, Jena, Germany. Refractometer. 1.649.14; Nov. 15. Hennehöhle, Frank. Chicago, Ill. Combined relief and vacuum valve. 1.617,711; Feb. 16.

Hennebutte, Henri, and E. Goutal, Paris, France. Apparatus for effecting chemical reactions. 1,650,713; Nov. 22.

Nov. 22.

Nov. 23.

Nov. 24.

Nov. 24.

Nov. 25.

Nov. 25.

Nov. 26.

No

sey.)

Hennesy, Daniel E., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Branding. 1,621,587; Mar. 22.

Hennesy, Daniel E., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Yulcanigation. 1,623,183; Apr. 5.

Hennesy, Daniel E., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Stitching. 1,633,326; June 21.

Milwaukee, Wis., assignor to The Hennessy, Daniel E., Milwaukee, Wis., assignor to The Company Chicopee Falls, Mass. Impregnating and vulcanizing process. 1,642,546; Sept. 13.

Files Rubber Company, Chicopee Falls, Mass. Impregnating and vulcanizing process. 1,642,546; Sept. 13.

Bept. 13.

Bept. 13.

Bennessy, James J., New York, N. Y. Lubricator. 1,630,743; May 31.

Hennessy, James J., New York, N. Y. Lubricator. 1,652,279; Dec. 20.

Hennicke, James J., New York, N. Y. Lubricator. 1,652,279; Dec. 20.

Hennicke, Charles A., Buffalo, N. Y., assignor to The Eberhard Manufacturing Company, Cleveland, Ohio. Door control. 1,640,889; Aug. 30.

Hennig, Albert B., Berlin, Germany. Thread tightener. 1,624,898; Apr. 12.

Henninger, Albert B., Berlin, Germany. Steering gear for automobile vehicles. 1,632,209; June 21.

Hennings, Charles H., assignor to F. and H. Mig. Co., Chicago. III. Bird-cage stand. Des. 73,174; Aug. 20.

Henrikson Carl G. (See Jones, L. S., Fisher, and Henrikson) Carl G. (See Jones, L. S., Fisher, and Henrikson) Henriot, Louis, Paris, France. Carburetor. 1,626,085; Apr. 26.

Henriques, Chapman D., Larchmont, N. Y. Dispensing-container-sealing device. 1,635,122; July 5.

Henry, Albert C. (See Henry, Ralph L., assignort.) Henry, Allen. (See Dickson, Frank H., assignort.) Henry, Augustus M., Brooklyn, assignor to W. W. Weitling, trustee, College Point, N. Y. Rotary casting. 1,634,146; June 28.

Henry, Beulah L., assignor of one-half to E. A. Guinzburg, New York, N. Y. Poodledgo doll. 1,634,189; June 28.

Henry, Beulah L., assignor of one-half to E. A. Guinz-Henry, Beulah L., assignor of one

Henry, Beulah L., assignor of one-half to E. A. Guinz-burg, New York, N. Y. Water-sport apparatus, 1,639,607; Aug. 16. Henry, Beulah L., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Foot covering, 1,635,705;

Hebry, Beniah L., assignor to 1. B. Kleinert Rudoev Company, New York, N. Y. Foot everling, 1,653,705: Dec. The Company, New York, N. Y., assignor to Fair-child Aerial Camera Corporation. Control of gyroscope-erecting systems. 1,627,178; May 3. Henry, George J. (See Wassel, Albert, assignor) Henry Guy P., Detroit, Mich., assignor to The Stude-baker Corporation, South Bend, Ind. The carrier, 1,626,934; May 3. Henry, Howard W., assignor to General Motors Research Corporation, Dayton, Obio. Bearing. 1,618,877; Henry, Howard W., Newark, N. J., assignor to General Motors Research Corporation, Dayton, Ohio. Magnet. 1,641,844, Sant. 8
Henry, James N., Providence, R. I. Curtain-rod bracket, 1,632,071; June 14.

Nov. I.

1.639.182; Aug. 18.

1.639.183; Feb. 22.

1.639.183; Feb. 23.

Henry Thomas J., Scranton, Pa. Railroad tte.
14 505, 104; Oct. 11
15 505, 104; Oct. 11
16 505, 104; Oct. 1

Mar. 22.
Hensel, Fred, Sac City, Iowa. Door closer. 1,650,834;
Nov. 29.
Henry, Milwaukee, Wls. Sausage casing and Mar. 22.
Hensel, Fred, Sac City, Iowa. Door closer. 1,650,834;
Nov. 29.
Hensel, Henry, Milwaukee, Wis. Sausage casing and
making the same. 1,645,425; Oct. 11.
Hensel, Henry, Milwaukee, Wis. Sausage casing and
making the same. 1,645,425; Oct. 11.
Hensel, Grassignori, Grassignori, Grassignori, Grassignori, Grassignori, Grassignori, Hensel, Winfield L., assignor to The Miller Rubber Company, Akron, Ohio. Display device for water bottles.
1,647,044; Oct. 25.
Henshall, Percival P., assignor to John J. Nesbitt, Inc.,
Atlantic City, N. J. Motor-board suspension.
Henshaw, Daniel M. (See Cooper C., and Henshaw.)
Henshaw, Daniel M. (See Cooper C., and Henshaw.)
Henshaw, Sanv. 15.
Hensley, Kellis S., Wanego, W. Va. Electrically-controlled cut-out. 1,623,115; Ahr. J.
Hensley, William T., Marion County, Ind. Pulley.
1,633,493; Aug. 16.
Hensley, William T., Indianapolis, Ind. Split pulley.
1,633,503; Aug. 16.
Hensley, William T., Indianapolis, Ind. Split pulley.
1,633,503; Aug. 16.
Hensley, William T., Indianapolis, Ind. Split pulley.
1,633,503; Aug. 16.
Hensley, William T., Indianapolis, Ind. Pulley.
1,633,503; Aug. 16.
Hensley, William T., Indianapolis, Ind. Pulley.
1,633,503; Aug. 16.
Hensley, William T., Indianapolis, Ind. Pulley.
1,633,503; Aug. 16.
Hensley, William T., Indianapolis, Ind. Pulley.

Hensley, William 1, 1,639,503; Aug. 16.
Hensley, William T., Indianapolis,

1,639,503; Aug. 16.
Hensley, William T., Indianapolis, Ind. Pulley.
1,639,504; Aug. 16.
Hensley, William T., Indianapolis, Ind. Pulley.
1,639,505; Aug. 16.
Henson, Ernest S., Syracuse, N. Y. Dispenser. 1,653,096;
Dec. 20.
Henson, William P., Sacramento, Calif. Tire mold.
Henson, Carlot, William P., Sacramento, Calif. Tire mold.

Hentrich, Winfrid. (See Duisberg, W., Hentrich, and Zeh.)

Hentrich, Winfrid. (See Duisberg, W., Hentrich, Zeh, and Huismann.)

Hentrich, Winfrid. (See Duisberg, W., Hentrich, Zeh, and Huismann.)

Hentrich, Winfrid. and M. Hardtmann. Wiesdorf, near Cologne-on-the-Rhine, Germany, assistnors to Grasselli Dyestuff Corporation, New York, N. 7. Actic sulphuric 1,644,524; Oct. 4.

Hentsch, Eugen, Frauenfeld, Switzerland. Eye protector. 1,643,851; Aug. 16.

Henwood, Abraham, Cynwyd, assignor, by masse assignments, the Company of the Company of the Company of the Company of the Company. Henzi, Albert A., Chicago, Ill., assignor to Goss Printing Fress Company. Stereotype-plate mechanism. Hepper, Andrew L., Mathews, Va. Septic tank. 1,633,871; July 5.

Hepper, Andrew L., Mathews, Va. Septic tank. 1,634,190; June 28.

Hepper, William, Los Angeles, Calif. Hair structure. 1,634,190; June 28.

Hepper, William, Los Angeles, Calif. Hair structure. 1,634,190; June 28.

Lepper, John A., East Orange, N. J., assignor to General Electric Company. Motor-control system. 1,616,418; Feb. 1.

Hepperle, John A., East Orange, N. J., assignor to General Electric Company. Motor-control system. 1,651,889; Dec. 6.

Heppers, George F., Chicago Heights, Ill., assignor to Flexble State Products Co. Floor covering. 1,614,127; Jan. 11.

Feb. 22. Heppes, Otto A., La Grange, Ill., assignor to Flexible Slate Products Co. Floor covering, 1,614,127; Jan. 11. Hepworth, S. S., Company. (See Olcott, Charles A., assignor.)

Herald Electric Company, The. (See Kurman, Nathan

Herald Electric Company, The. (See Kurmān, Nathan A., assignor.)

Herald, Gardner T., Westfield, N. J., assignor to General Electric Company. Are welding. 1,648,683; Nov. 8.

Heräus, W. C., Gesellschaft mit beschränkter Haftung. (See Mayer, Robert F., assignor.)

Herbers, Hermann H. W., East Orange, N. J. Time-limit relay. 1,644,430; Oct. 4. (See Blyth, Charles E., as-Herbert, Alfred, Limited. (See Blyth, Charles E., as-Herbert, Donald H., Spokane, Wash. Ore separator. 1,648,473; Nov. 8.

Herbert, Frederick D., Upper Montclair, N. J., assignor to Metal Edge Filter Corporation. Filter. 1,646,404; Oct. 25.

Oct. 25.

Herbir, H. Cahe Company, New York, N. Y. Method of merical chale Company, New York, N. Y. Method of a company of the company o

Herbline, Célestin, Paris, France. Fire extinguisher of liquid type. 1,617,251; Feb. 8. Her-Born Engineering and Manufacturing Company, The. (See Bornhauser, O. E., and Herman, assignor.) Herbrand Company, The. (See Tibbels, Myron E., as-

Herbruck, Ralph A., Dayton, Ohio. Apparatus for use with hot-air heating systems. 1,645,140; Oct. 11.
Herbst, Charles B., et al. (See Gloss, Alois A., assignor.)
Herbst, George F., Underhili, Wis. Automatic lubricating
Chem. 1,640,407; Aug. 30.
Herbst, George F., Underhili, Wis. Automatic lubricating
Chem. 1,640,407; Aug. 30.
Herbst, Chem. 1,647,177; Nov.

Herbst, William K., Hillside, N. J., assignor, by mesne, assignments, to Titeflex Metal Hose Co. Hose coupling. 1,630,895; May 31. Hercules Motor Corporation. (See Nelson, O., and Lig-

Hercules Motor Corporation. (See Nelson, U., and Lig-nell, assignors.)
Hercules Powder Company. (See Butts, Durain C., as-signor.)
Hercules Powder Company. (See Champney, Hubert H.,

assignor.)
Hercules Powder Company. (See Humphrey, Irvin W.,

assignor.) Hercules Powder Company. (See Norman, George M.,

assignor.)
ercules Powder Company. (See Shapleigh, J. H., and

assignor, owner Company. tsee Speicher, John K., Brigglow, assignora.)
Brigglow, assignora.)
Brigglow, assignora.
Brigglow, assignora.
See Symmes, Ernest M., assignora. signor.)

signor.)
Herdan, John. (See Bondersky, Paul M., assignor.)
Herdman, William J., Toronto, Ontario, Canada. Apparatus for translating electrical energy into sound
waves. 1,616,620; Feb. 8.
Herdman, William J., Toronto, Ontario, Canada. ElectroHerdman, William J., 1617,167; Feb. 8.
Herdman, William, New York, N. X. Motor vehicle. 1,623,726;
Adv. 5.

Hergershusen, Katharina, Berlin, assignor to the Firm Mittelland Gummiwerke Aktiengesellschaft, Hanover-Linden, Germany, Figure of animate objects. 1,626,533; Apr. 26. Hering, Carl, Filindelinia, Pa. Fibrous material and Hering, Carl, Filindelinia, Pa. Fibrous material and Hering, Paul, Mcthuen, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Clutch for loom pattern mechanisms. 1,631,120; Nov. 29. Herkenrath, Frank, Santiago, Chie. Automatic feeder. 1,651,022; Nov. 29. Herklotz, Max, Berlin, Germany, assignor to General Herklotz, Max, Berlin, Germany, assignor to General June 28. Herkletz, Brist, Klel, assignor of distribution. 1,633,860; June 28. Herkletz, Brist, Klel, assignor to Fried, Krupp Germandy.

June 26.

Herkt, Ernst, Kiel, assignor to Fried, Krupp Germaniawertt Aktiengesellschaft, Kiel Gaarden, Germany, Internal-combustion engine 1,645,955; Oct. 18.

Herman, Albert, Oakland, Calif. Garden tool. 1,652,478;

Dec. 18.

Herman, Claude A., Bridgeport, assignor to Reliable Mfg.

Chapter 27, New Haven, Conn. Lamp shade, 1,654,482;

Dec. 27,

Herman, Ethel, ct al. (See Herman, Henry, assignor.) Herman, Fred W. (See Laddon, I. M., Ring, and Herman.) Herman, Frederick J., Sacramento, Calif. Faucet. 1,635,123, July 5.

1.635,123; July 5.

Herman, Henry, assignor of one-third to E. Herman, one-third to M. Gennis, and one-third to H. Pordy, New York, N. Y. Button. 1,644,475; Oct. 4.

Herman, Henry F., Chappaqua, assignor to Straitline Radio Corporation, New York, N. Y. Electrical condenser. 1.629,867; May 24.

Herman, Herbert L. (See Hargroves, L. W., and Herman, Herbert L. (See Hargroves, L. W., and Herman, Herbert L. (See Hargroves, L. W.).

man.

Herman, Herbert L. (See Hargroves, L. W., and Herman). John Los Angeles, A. W. Allen, Berkeley, and Herman, Newitt. Co. Angeles, Calif. Ore-flotation process. 1,628,046; May Deley, Calif. Ore-flotation process. 1,628,046; May Deley, Chien May Deley, Nov. 8. Herman, John E., Sandusky, Ohio. Antillare attachment for motor vehicles. 1,648,230; Nov. 8. Herman, John H., and G. W. Jones, New Castle, Pa. Button. 1,643,010; Sept. 20. 1,648,230; Nov. 8. Herman, Joseph, New York, N. Y., assignor to American Telephone and Telegraph Company. Intermediate televants, May Deley, New York, N. Y., assignor to American Telephone and Telegraph Company. Intermediate teleterman, Joseph, New York, N. Y., assignor to American Telephone and Telegraph Company. Telegraph system. 1,613,704; Jan. 11. Herman, Joseph, New York, N. Y., assignor to American Telephone and Telegraph Company. Telegraph system. 1,626,731; May 3. Herman, Joseph, New York, N. Y., assignor to American Telephone and Telegraph Company. Method of and apparatus for synchronization in picture transmission. 1,626,731; May 3. Herman, Joseph, New York, N. Y., assignor to American Telephone and Telegraph Company. Telegraph circuits. 1,634,286; July 6.

Herman, Joseph. New York, N. Y., assignor to American Telephone and Telegraph Company. Voltage regulator for vacuum tubes. 1,638,930; Aug. 16.

Herman, Joseph, New York, N. Y., assignor to American Telephone and Telegraph Company. Telegraph repeater, 1,652,242; Dec. 13.

Herman, Karl, Chester, Pa. Windshield cleaner and drier. 1,652,176; Dec. 20.

Herman Samuel J., assignor to The Men. Assignments, to Boller-cleaner construction. 1,659,997; July 19.

Hermani, Henry, assignor to The Tin Decorating Company of Baltimore, Baltimore, Md. Duplex closure for display containers. 1,620,166; Mar. 8.

Permani, Henry, assignor to The Tin Decorating Company of Baltimore, Baltimore, Md. Sheet-metal assembling and working machine. 1,620,205; Mar. 8.

Hermani, Henry, assignor to The Tin Decorating Company of Baltimore, Baltimore, Md. Rip-strip can. 1,627,646 May 10.

Hermani, Charles Company of Baltimore, Baltimore, Md. Machine for feeding and coating metal sheets. 1,638,308; Aug. 9.

Hermann, Clarence C. (See Litchfield, E. C., Speer, and Hermann).

Hermann, Clarence C. (See Intentions, International)
Hermann, Franz J., Singen a/Hohentwiel, Germany.
Hermann, Franz J., Singen a/Hohentwiel, Germany.
Thrashing machine. 1,647,696; Nov. 1.
Hermann, Frederick, Cleveland, Ohio. Fire extinguisher.
1,648,397; Nov. 8.
Hermann, Otto, assignor to Thermo Electric Battery.
Company, Chicago, Ill. Thermocouple. 1,637,822;

Company, Aug. 3. Otto, assignor to Thermo Electric Hattery Aug. 3. Otto, assignor to Thermo Electric Hattery Co., Chicago, Ill. Thermocouple. 1,648,231; Nov. 8. Hermann, Otto L., St. Louis, Mo., assignor to C. L. Harvey, Detroit. Mich. Ledger rack. 1,649,471;

manuz.)
Hermes, Maryanne, Fairmount, N. Dak. Nonrefiliable
bottle. 1,638,199; Aug. 9.
Hermessneyer, Anthony J., assignor to H. M. Sheer Company, Quincy, Ill. Tandem wafer regulator. 1,635,083;
July 6.
Hermsdorf, Walter H. (See Goldberg, S. H., and Hermsdorf.)

Hernandez, Mejia, A Margaret N., administratrix. (See Herandez-Mejia, Arturo.) Hernandez-Mejia,

Mejiā, Arturo, Hernandez-Mejiā, Arturo, deceased, New Rochelle; M. N. Hernandez, administratrix, assignor to Colorgraph Laboratory, Inc., New York, N. Y. Motion-picture photography and projection. 1,624,947; Apr. 19. Hernandez y Perez, Francisco, Habana, Cuba. Clamp. 1,637,654; Aug. 2. Herndon, O. K. (See D'Yarmett, Edward C., assignor.) Herndon, Plato D., et al. (See Wilson, Charles C., assignor.)

assignor.)
Hernlund, John W. (See Blount, H., and Hernlund, Hernlund, John W. (See Blount, H., and Hernlund, Hernlund, Pete, Hulbert, Ark. Cattle guard. 1,620,3 Mar. 8.

Mar. 5.

Hero, George A., New Orleans, La. Method of and apparatus for setting pipe or casing and preventing seepage and leakage in wells. 1,641.035; Aug. 30.

Herold, Arthur, Pittsburgh, Pa. Method of and apparatus for spraying liquids. 1,613.795; Jan. 11.

Herold, James L. (See Dawson, J. W., and Herold.) Herold, James L., assignor to Barry-Wehmiller Machinery Co., St. Louis, Mo. Traveling conveyer. 1,652,277; Dec. 13.

Co., St. Louis, Mo. Traveling conveyer. 1,652,277; Dec. 18.

Herold, Lawrence C., Rocky River, Ohio. Brush. 1616, White P. Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Caster. 1,620,657; Mar. 15.

Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Caster. 110,60,612, Mar. 110,612, Mar. 110

Heron, Robert P., deceased, Utica, N. Y.; J. Pickell, administrator. Liquid-measuring device. 1,644,589; Oct. 4.
Heron, Sam D. (See Wade, V. M., Zimmerman, and Heron.)

Heron. Sam D. (See Wade, V. M., Zimmerman, and Heron.)

Heron. Sam D. (See Wade, V. M., Zimmerman, and Heron.)

Heron. He

netring-tall-Marvin Safe Company. (See Breen, George T., assignor.)
Herring-Hall-Marvin Safe Company. (See Millice, Paul S., assignor.)
Herring, Janob F., assignor of one-half to W. Spector, Staunton. Va. Device for applying the chains. 1,630,006; May 24.
Herring, John H. (See Schmeiser, Theodore G., as-Herring, John H. (See Schmeiser, Theodore G., as-Herrington-Arthur W. Pallimare M. W. W.

Herring. John H. (See Schmeiser, Theodore G., assignor.)

Herrington, Arthur W., Baltimore, Md. Wheel mount for motor vehicles. 1,618,431; Feb. 22.

Herris, Frederick S., Los Angeles, Calif. Wind deflector for motor vehicles. 1,616,122; Feb. 1.

Herriy, Chrence J. K., 1616,122; Feb. 1.

Herriy, Chrence J. Fittioner, Feb. 1.

Herring, Friedrich, Lincoln, Nebr. Shoe. 1,623,007; Mar. 29.

Herrmann, Friedrich, Lincoln, Nebr. Shoe. 1,623,007; Mar. 29.

Herrmann, Josef, and M. Stauber, Cologne, Germany.

Filter, 1,649,405; Nov. 15.

Mich. assignor to The Studenaker Corporation, South Bend, Ind., and Detroit, Mich. Internal-combustion engine. 1,618,919; Feb. 22.

Herrmann, Karl L., assignor to The Studenaker Corporation, South Bend, Ind. Testing apparatus, 1,618,965; Feb. 22.

Herrmann, Karl L., Detroit, Mich., assignor to The Studenaker Corporation, South Bend, Ind. Testing apparatus, 1,618,965; Feb. 22.

Herrmann, Karl L., Detroit, Mich., assignor to The Studenaker Corporation, Hobbing machine. 1,645,596; Oct. 18.

Herrmann, Karl L., Detroit, Mich., assignor to The Studenaker Corporation, Hobbing machine. 1,645,596; Oct. 18.

Oct 18.

Herrman, Karl L., Detrolt, Mich., assigner to The Studebaker Corporation, South Bend, Ind.

Hobbing machine, 1,645,597; Oct, 18.

Herrmann, William, Chicago, III. Screw driver. 1,628,144; May 10.

May 10.

Herrmann, Willy O., and H. Deutsch, assignors to Consortium für Elecktrochemische Industrie, Munich, Germany, Manufacture of linoxin ilke substances. 1,625.852; Apr. 26.

Herrmann, Willy O., and W. Haehnel, assignors to Consortium Fuer Elektrochemische Industrie, Munich, Germany, Stabilizing colloidal systems. 1,629,161; May 17.

Herrod, Jessie O., Meridian, Miss. Fence stay. 1,647,913;

Hetrod, Jessie O., Meridian, Miss. Fence stay. 1,647,913; Nov. 1. Herroid. Albert E. (See Frazier, G. H., and Herroid.) Herroid. Joseph D., assignor to Fitz Gibbon & Crisp, Iac., Trenton, N. J. Hoisting truck. 1,641,971; Sept. 13. Herron, Ollie L. (See Alexander, Verne P., assignor.) Herron, Ollie L. (See Zimmers, J. B., and Herron.) Herschede Hall Clock Company. (See Herschede, Walter J., assignor.)

Herschede Hall Clock Company, The. (Sec Nelson, Nels

Herschede Hall Clock Company, The. (See Nelson, Nels J., assignor.)

Herschede, Wanny, Clucinnati, Ohio. Hall clock. Des. Terschede Hall Code. Many, Clucinnati, Ohio. Hall clock. Des. Terschede Hall Code. Hall Code. Herschede Hall Code. Herschede Hall Code. Hall Code. Herschede Hall Code. Hall

May 3.

Hershey, Orville S., assignor to Hershey Manufacturing
Company, Chicago, Ill. Automobile lock. 1,641,811;

Company, Chicago, Ill. Automobile lock. Re16.612; May 3.

Ilershey. Orville S., assignor to Hershey Manufacturing Company, Chicago, Ill. Automobile lock. 1,641.811; Chicago, Ill. Automobile lock. 1,641.811; Oct. 11.

Hershey, Orville S., assignor to Hershey Manufacturing Company, Chicago, Ill. Automobile lock. 1,644.922; Oct. 11.

Hershey, Orville S., assignor to Hershey Manufacturing Company, Chicago, Ill. Automobile lock. 1,645.382; Oct. 11.

Hershey, Orville S., assignor to Hershey Manufacturing Company, Chicago, Ill. Automobile lock. 1,653.567; Dec. 20.

Hersheld, Lewils H., San Francisco, Calif. Traction-whicle brake. 1,651.524; Dec. 6.

Herskovitz, Max. deceased, Chicago, Ill.; W. Herskovitz and C. Weinfeld, executors; said W. Herskovitz now by judicial change of name William Herst. Illuminated ornamental device. 1,625.359; Apr. 19.

Herskovitz, Max. deceased, Chicago, Ill.; W. Herskovitz and C. Weinfeld, executors. Electric-socket structure. 1,627.238; May 3.

Herskovitz, William, et al., executors. (See Herskovitz, Max.) deceased, Chicago, Ill.; W. Herskovitz, Max.] Hershey, Max. deceased, Chicago, Ill.; W. Hershovitz, Max.] Hershey, Max. deceased, Chicago, Ill.; W. Hershovitz, Max.] Hershey, Max. deceased, Chicago, Ill.; W. Hershovitz, Max.] Hershey, Max. deceased, Chicago, Ill.; Deceased, Chicago, Ill., Max.] Hershey, Max. deceased, Chicago, Ill., Saignor, Max.] Hershey, Max. deceased, Chicago, Ill., Chicago, Ill., Saignor, Max.] Hershey, Max. deceased,

Hertzberg, William, Brooklyn, N. Y. Wet mop. 1,633.584: June 28.

June 28.

June 28.

Hervé, André. (See Hervé, Fabrice R., M., and A.)

Hervé, Fabrice R., M., and A., Levallois-Perret, France
Sizing composition for coating purposes. 1,615.584

Jan. 25.
Hervé, Maxime. (See Hervé, Fabrice R., M., and A.)
Herwig, Conrad, jr. and H. E. Mills, assignors to The
Favorite Stove & Range Company, Piqua, Ohio. Stovedoor mounting. 1.653,380; Dec. 20.
Herz, Alexander. (See Counti, Eugene, assignor.)
Herz. Alfred. Chicago, Ill.
1.614,672; Jan. 18.
Photographic photometer.
1.614,672; Jan. 18.

Herz, Alfred, Chicago, Ill. Current-interrupting device.
 1.637,610; Aug. 2.
 Herz, Alfred, Chicago, Ill. Flow indicator.
 1,653,177; Dec. 20.
 Herz Bed Company. (See Layezzi, Samuel J., assignor.)

Dec. 20.

Herz Bed Company. (See Lavezzi, Samuel J., assignor).

Herz, Richard, Frankfort-on-the-Main, Germany, assignor to Grasselli Dyestuff Corporation, New York, N. Y. Violet vat dyestuff of the 2-thionaphthene-2-indolindigo series. 1.631,865; June 7.

Herz, Richard, Frankfort-on-the-Main, Germany, assignor to Grasselli Dyestuff Corporation, New York, N. Y. Reaction produce of sulphur dichloride and primary Herz, Richard, Frankfort-on-the-Main, and J. Müller, Hanau-on-the-Main, Germany, assignors to Grasselli Dyestuff Corporation, New York, N. Y. Vat dyestuff of the 2-thionaphthene-2-indolindigo series. 1,613,275; Jan. 4.

the 2-thonaphtene-2-indoiningo series. I,613,270; Jan. 4. Charlet, Frankfort-on-the-Main, and J. Miller, Hann-on-the-Main, Germany, assignors to Gressell Dyestuff Corporation, New York, N. Y. Green blue to green vat dyestuffs of the thiolindigo series. 1,623,410; Apr. 5;

Apr. 5. Herz. Richard.

Apr. 5.

dr. Richard, and F. Schulte, Frankfort-on-the-Main, Germany, assignors to Grasselli Dyestufi Corporation, New York, N. Y. Producing 1.8-bydroxynaphthole acid. 1,623 678; Apr. 5.

erz, Richard, and F. Schulte, Frankfort-on-the-Main, Germany, assignors to Grasselli Dyestufi Corporation, New York, N. Y. Manufacturing 1-aminonaphthalene-8-carboxylic acid. 1,646,290; Oct. 18.

erzberg, Otto W. (See Skirow, F. W., and Herzerberg, Otto W. Herzberg,

berg.)

Herzberg. Wilhelm, Berlin-Wilmersdorf, and H. Ohlendorf, Berlin-Friedenau, assignors to I. G. Farbenindus-I. 1640.657; Friedenau, assignors to I. G. Farbenindus-I. 1640.657; Asug. 30.

Herzig, Harold L., Toledo, Ohio, assignor, by mesne assignments, to Combustion Utilities Corporation, New York, N. Y. Valve-reversing mechanism. 1,652,624; Dec. 13.

York, N. Y. Valve-reversing meccanama.

Joc. 13.

Herzik, William, Schulenburg, Tex, Tractor plow.

1,618,084; Feb, 15.

Herzmark, Micola, Saris, France. Starting internalHerzon, Carl. (See Geulen, Wilhelm, assignor.)

Herzog, Garl. (See Geulen, Wilhelm, assignor.)

Herzog, John L., Saginaw, Mich. Rapid production of wooden panels from mill clippings and the like.

1,638,262; Aug. 9.

Herzog, Robert, Berlin, assignor to C. Lorenz AktiengeHerzog, Robert, Berlin, assignor to C. Lorenz AktiengeHerzog, Robert, Berlin, assignor to C. Lorenz AktiengeHeszoh, Ellwood F., Newport, Ky. Coaster vehicle.

1,638,487; Aug. 9.

Hess. Helwood F., Newport, Ky. Coaster vehicle.

1,638,487; Aug. 9.

Hess. Helmood F., Newport, Ky. Coaster vehicle.

1,638,487; Aug. 9.

Hess. Berlich, Dahlem, near Berlin, Germany, Sanding device for power vehicles. 1,625,362; Apr. 19.

Hess. Bright Manufacturing Company, The. (See Bruner, Harold E., assignor.)

Hess. Bright Manufacturing Company, The. (See Linde, Andrew H., assignor.)

Hess. Bright Manufacturing Company, The. (See Styrl, Hardron, assignor.)

Hass-Fight Manufacturing Company, The. (See Styri, Hat Run Manufacturing Company, The. (See Styri, Hat Run Manufacturing Company, The. (See Styri, Hat Run Manufacturing Company, Inc., New York, N. Y. Typewriting Company, Inc., New York, N. Y. Typewriting Machine. 1,635,411; July 12.

Hess, Edward B., Orlando. Fla., assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,635,412; July 12.

Hess, Edward B., assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,633,327; June 21.

Hess, Edward T. Irondequoit, N. Y. Automatic gasoline vending machine. 1,633,327; June 21.

Hess, Edwin A., & Kron, Pa. Manufacturing shoes. 1,647,914; Nov. 1.

Hess, Elam G., Manheim, Pa. Food product. 1,635,273; July 12.

July 12.

Hess, Francis M., Whiting, Ind. Apparatus for distilling hydrocarbons under pressure and a catalyzing agent. 1,625.467; Apr. 19.

Hess, Francis M., Whiting, Ind. Method of and apparatus for cracking oil. 1,638.335; Aug. 9.

Hess, Herbert L., Utuado, P. R. Washing and stirring apparatus. 1,658.281; Dec. 20.

Hess, Henry K., Syracuse, N. X.

Canada. Refuse furnace. 1,653.282; Dec. 20.

Hess, Philip J., Kokomo, Ind., assignor to Pittsburgh Plate Glass Company. Polishing plate glass. 1,618.085; Feb. 15.

Hess, Philip J., sr., Kokomo, Ind., assignor to Pittsburgh Plate Glass Company. Making rouge. 1,618,085;

ess. Philip J., sr., Kokomo, Ind., assignor burgh Plate Glass Company. Making rouge, Feb. 15. assignor to Pice

Hess, Thomas F., Westville, Okla. Well-fishing tool. 1.649.693; Nov. 15. Hess, W. B., et al. (See Donnelson, Blanche, assignor.) Hess, Wilhelm, Gera-Reuss, Germany. Band-saw machine. 1.617.712; Feb. 15. Hesse, E. G. m. b. H. (See Heldtkamp, P., and Müller, assignors.)

Hesse, Paul F., Valley Falls, R. I. Curved corded-edge tape for shoes. 1,639,376; Aug. 16. Hesse, Paul F., Pawtucket, R. I. Apparel collar. 1,643,497; Sept. 27. Hessel, W. F., Company. (See Hessel, William F., as-

Hessel, W. F., Company. (See Hessel, William F., aslessel, William F., assignor to W. F. Hessel Company,
Incorporated, New York, N. Y. Llectrical connecter,
1.647.697; Nov. 1.
Hesselhab, Henry, New York, N. Y., assignor to J. H.
Hesselhab, Henry, New York, N. Y., assignor to J. H.
1.618,007; Feb. 15.
Hesser, Fr., Maschinenfabrik-Akthengesellschaft. (See
Gangler, Paul, assignor.)
Hesselink, William, Ashland, assignor to L. F. Fuller,
Springfield, Mass. Spring suspension for vehicles.
Hessen, Frederick W., Jersey City, N. J., Apparatus
for producing threaded pins. 1,630,793; May 31.
Hester, Edgar A., Brooklyn, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Arcestinguishing device. 1,617,390; Feb. 15.
Hesper, Revi C., Williston, Fla. Plow. 1,614,673;
Jan. 18.

Hester, Levi C., Williston, Fla. Jan. 18. Plow. 1.614,674;

Jan. 18.
Hester, Levi C., Jacksonville, Fla. Plow. 1,620,969;
Mar. 15.
Hester, Stephen J., Raymond, Miss., assignor of one-half
to J. I. Carter, Mayfield, Ky. Adjustable framing,
drafting, and bevel square. 1,638,200; Aug. 9.
Hesterly, William P., Lufkin, Tex. Combined rall anchor
and tie plate. 1,634,994; July 5.
Hetherington, Carl F., Indianapolis, Ind. Fluid-pressureoperated gate. 1,615,273; Jan. 25.
Hetherington, Edwin. (See Henry, L. L., and Hetherington.)

Hetherington, Edwin. (See Henry, L. L., and Hetherington.)
Betrick, Chester, Gilbertsville, Pa. Tongue for wagons, binders, and the like. 1,617,349; Feb. 15.
Hetrick, Frank S., Banks, Miss. Car-door fastener. 1,615,944; Feb. 1.6.
Hettinger, Jennie S., Camden, N. J., assignor to United July 19.
Hetzelberger, Franz, Ulm-on-the-Donau, assignor to C. D. Magirus, Aktiengesellschaft, Donau, Germany. Safety device for portable power-operated fire escapes. 1,637,190; July 28.
Hetzelberger, Jennie S., Derender, Jennie S., Leistengesellschaft, Donau, Germany. Automatic control for vehicle superstructures. 1,637,191; July 26.
Heublein, Charles M., Chicago, Ill. Window attachment.

July 26.

Heublein, Charles M., Chicago, Ill. Window attachment.
1.619.256; Mar. 1.

Heublein, Charles M., Chicago, Ill. Window attachment.
1.650.015; Nov. 22.

Heublein, Wilhelm O., Frankfort-on-the-Main, Germany.
Ampulla for injection liquids comprising separated compartments. 1.614.067; Jan. 11.

Heublein, Wilhelm O., Frankfort-on-the-Main, Germany.
Ampulla composed of several compartments adapted for the purpose of radiotherapeutics. 1,626.388;
Appulla Arnold H. Teutonelis Ill. Liquid-disponsing.

Apr. 26.

Heuermann, Arnold H., Teutopolis, Ill. Liquid-dispensing apparatus. 1,028,404; May 10.

Heuring, Fred H., Niagara, Wis. Grinder shaft. 1,023,116; Apr. Minich, Germany. Apparatus for producing and projecting cinematographic pictures. 1,631,866; June 7,162,162,162,163,166; June 1,1631,938; Aug. 2.

Hevea Corporation, The. (See Loomis, C. C., and Banks, Glevea Corporation, The. (See Loomis, C. C., and Stump. assignors.)

Hevea Corporation, The. (See Loomis, C. C., and Banks, assignors.)

Heven Corporation, The. (See Loomis, C. C., and Stump. assignors.)

Heaven Corporation, The. (See Loomis, C. C., and Stump. assignors.)

Heaven Corporation of the Corporatio

Hewitt, Thomas J. (See McLeod, G. D., Pokorski, and

Hewitt, Thomas J. (See McLeod, G. D., Pokorski, and Hewitt, Walter B., Richmond, Ind., assignor to Richmond Fireproof Door Company. Machine for covering wood with sheet metal. 1.646.333; Oct. 25. Hewlett, Edward M., Schnectady, N. Y., assignor to Gen-eral Electric Company. Resistance line welding. 1,640.449; Aug. 30.

ewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company, Inductance coil. 1,652,938;

General Electric Company, Inductante Company, Electric Company, Electric Sassignors to General Electric Company, Electric switch. 1,648,684; Nov. 8.

Rewlett, Edward M., and W. W. Willard, Schenectady, N. Y., assignors to General Electric Company, Reproducing position. Rel6.607; July 56. Schenectady, N. Y., assignors to General Electric Company, System May 3.

Hewlett, Edward M., and W. W. Willard, Schenectady. N. Y., assignors to General Electric Company. System of and apparatus for gun-fire control. 1,626,524 May 8.

Hewett, Edward M., and W. W. Willard, Schenectady. N. Y., assignors to General Electric Company. Reproducing relative angular motion. 1,628,463 May 10.

Hewlett, Edward M., and W. W. Willard, Schenectady. N. Y., assignors to General Electric Company. Signaling system. 1,634,941; July 5.

Hewlett, Edward M., and W. W. Willard, Schenectady. N. Y., assignors to General Electric Company. System for transmission of angular motion. 1,637,039; July 26.

Hewlett, Edward M., and W. W. Willard, Schenectady. N. Y., assignors to General Electric Company. System. N. Y., assignors to General Electric Company. System. N. Y., assignors, M. Y. Partition will. Hewlett, James M., Lawrence, N. Y., E., assignor.) Hewlett, James M., Lawrence, N. Y., Partition will. 1,633,373; June 7.

Hewlett, James M., and R. B. Fuller, Lawrence, N. Y., assignors to Stockade Building System, Inc. Building Structure. 1,635,702; June 28.

Hey, Harry, Dewsbury, England. Removing suspended matters from oils and organic solvents. 1,633,421; June 28.

Hey, Harry, Dewsbury, England. Removing suspended matters from oils and organic solvents. 1,633,421; June 28.

Heyd, James C., Pittsfield Wis. Transmission mechanism. 1,631,590; June 71.

Heyer, Arthur, Bad Laulsick, Germany. Collapsible copying apparatus for photographic purposes. 1,651,954; Dec. 6.

Heyer Duplicator Company, The. (See Heyer, T. A., and

Heyer Duplicator Company, The. (See Heyer, T. A., and Vance, assignors.) Heyer Duplicator Co. Inc., The. (See Kurth, William

Yane, assignors.)

Heyer Duplicator Co. Inc., The. (See Kurth, Wilham H., assignor.)

Heyer, Fred G., and F. M. Smith, Detroit, Mich. Die for box-making machines. 1,620,725; Mar. 15.

Heyer, Joseph L., Perth Amboy, N. J. Bag holder. 1,650,447; Nov. 22.

Light Market M. L. Vance, assignors to The Heyer Duplicator Company, Inc., Chicago, Ill. Duplicator, Ill., Chicago, Ill. Duplicator, Ill., Chicago, Ill. Duplicator, Ill., Chicago, Ill. Duplicator, Ill., Chicago, Ill., Chicago, Ill. Duplicator, Inc., Chicago, Ill., Chicag

Heywood, Charles F., Detroit, Mich. Starting internal-combustion engines. Rel6,685; Aug. 9.
Heywood, Charles F., Detroit, Mich. Starting internal-Heywood, James H., Radeliffe, assignor to Cylinder Top Ollers Limited, Leeds, England. Lubricating means for internal-combustion engines. 1,633,378; June 21.
Heywood, Jennette, Denver, Colo. Vehicle cover 1,615,513; Jan. 25.
Heywood-Wakefield Company. (See Lloyd, Marshall B.,

Heywood-Wakefield Company. (See Lloyd, Marshall B., assignor.)
Heywood-Wakefield Company. (See Riley, Francis B., assignor.)
Heywood-Wakefield Company. (See Stinson, George, as-

signor.)
Hiatt, Walter B., Los Angeles, Calif. Collapsible shipping crate. 1,651,121; Nov. 29.
Hiatt, William R., et al. (See Haines, George H., as-

signor.) Benjamin B. (See Girardier, W. A., and Hibbard.)

ping crate. 1,651,121, Nov. 29.
Hiatt, William R., et al. (See Haines, George H., assignor.)
Hibbard, Benjamin B. (See Girardier, W. A., and Hibbard, Charles T., assignor to Electric Machinery Mfg. Company, Minneapolis, Minn. Starting system for synchronous motors. 1,640,321; Aug. 29.
Hibbard, Charles T., assignor to mean sasignments, to Electric Machinery Mfg. Company, Minneapolis, Minn. Hibbard, Charles T., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Bleaturing Company, Minneapolis, Minn. Starting system for synchronous motors. 1,640,323; Aug. 23.
Hibbard, Charles T., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Electric Machinery Manufacturing Sance. 1,643,848; Sept. 27.
Hibbets, Charles M., Claude, Tex. Clutch-protecting devices of the Minneapolis of Santa Minneapolis, Minn. Electric Machinery Minneapolis, Minn

Mix., assignors.)
Hickok Manufacturing Company. (See Eichner, Robert F., assignor.)

Hickok Manufacturing Company. (See Mabon, Merril, assignor.) Hickok Manufacturing Company. (See Mix, Edwin S.,

assignor.) Hickok Manufacturing Company. (See Shields, Lowell W.,

Hickok Manufacturing Company. (See Vaisey, Harold C., assignor.)

How Wayer, Albert, assignor.)

Hicks, Alie H., Omaha, Nebr. Hair clipper, 1643,559;

Sept. 27.

Hicks, Any. (See Campbell, William E., assignor.)

Hicks, Catherine C., et al., executrices. (See Cabezola, Eusebie G.)

Micks, Ernset. (See Matham, Mass. Accelerator for automobile engines. 1,653,568; Dec. 20.

Hicks, Harold A. (See Smith, C. J., and Hicks.)

Hicks, Harold A. (See Smith, C. J., and Hicks.)

Hicks, Harold A. (See Smith, C. J., and Hicks.)

Hicks, Harold A. (See Smith, C. J., and Hicks.)

Hicks, Harold A. (See Smith, C. J., and Hicks.)

Hicks, James A., assignor to Automatic Car Lock Company, Atlanta, Ga. Railway-car-door lock. 1,647,226; Nov. 1.

Hicks, James A., assignor to Automatic Car Lock Company, Atlanta, Ga. Halway-car-door-fastening device. 1,647,225; Nov. 1.

Hicks, Lucy L. (See Robinson, Robert R., assignor.)

Hicks, William W. San Francisco, Calif. Electric air heater. Des. 73,432; Sept. 13.

Hicks, William W., San Francisco, Calif. Electric air heater. Des. 73,433; Sept. 13.

Hicks, William W., San Francisco, Calif. Electric air heater. Des. 73,432; Nov. 1.

Hicks, William W., San Francisco, Calif. Convection heater. 1,651,809; Dec. 6.

Hicks, William W., San Francisco, Calif. Convection heater. 1,651,809; Dec. 6.

Hicks, William W., San Francisco, Calif. Convection heater. 1,651,809; Dec. 6.

Hicks, William W., San Francisco, Calif. Convection heater. 1,651,809; Dec. 6.

Hicks, William W., San Francisco, Calif. Convection heater. 1,651,809; Dec. 6.

Hicks, William C., assignor to J. E. Mergott Co., New ark, N. J. George, assignor to The Concrete Surfacing Machine. 1,651,809; Dec. 6.

Hicks, William C., assignor to J. E. Mergott Co., New ark,

Ark 1. June 14.

Hiering, William C., assignor to J. E. Mergott Co., Newark, N. J. Purse and like receptacle.

1.632,000 June 14.

Hong, William C., assignor to J. E. Mergott Co., Newark, N. J. Desk-pad holder, 1.687,485; Aug. 2.

Hiering, William C., assignor to J. E. Mergott Co., Newark, N. J. Bag foak, 1.684,079; Dec. 27.

Hiering, William C., Newark, assignor to J. E. Mergott Co., Newark, N. J. Bag lock, 1.654,079; Dec. 27.

Hiering, William C., Newark, N. J., and E. J. Walter, New York, N. Y., assignors to J. E. Mergott Co., Newark, N. J. Bag-frame fastener, 1.625,605; Apr. 19.

New York, N. Y., assignors to J. E. Mergott Co., Newark, N. J. Bag-frame fastener, 1.625,605; Apr. 19.

Granville, Mass. Drum-snare-dusting means 1.615,699; Jan. 25.

W. Houton, Mo. Goal and god Indicator, 1.615,699; Jan. 25. 14.
14.
15. Care description of the control of the

Hiers, Herbert A., assignor to Noble & Cooley Company Granville, Mass. Drum-snar-adjusting means Hier Egan W., Houton, Mo. Goal and goal indicator. 1,628,364; May 10. Hifner, Ernest J., Lexington, Ky. Automatic choke actuator. 1,620,614; May 21. Highe, James F., assignor of one-half to S. A. Griggs, Detroit, Mich. Trailer. 1,626,209; Apr. 19.

Higby, Roy C. (See Vieau, H. F., Higby, and O'Nelll.) Higginbotum, Paul R., Philadelphia, Pa. Rail lock 1,615,274; Jan. 24 Higgin Manufacturing Company, The. (See Pendery, Edward W., assignor.) Higgins, A. W., trustee. (See Brosi, Frederick T., as-

signor.)
Higgins, Albert L., Bar Harbor, Me. Drag toy.
1,617,639; Feb. 15.
Higgins, Albert L., Bar Harbor, Me. Figure wheeled toy.
1,630,615; May 31.
Higgins, Daniel J., Adams, Mass. Loom picker.

1,630,000 June J., Adams, Mass. Higgins, Daniel J., Adams, Higgins, Drinest Grant Land Collar and like Higgins, Briest, Gapparel 1,652,131; Dec. 6. Higgins, Eugene, assignor to Hayes Wheel Company, Jackson, Mich. Rim-rolling machine. 1,629,703; Jackson, Mich. Rim-rolling machine. 1,629,703; Jackson, Mich. Rim-rolling machine.

May 24.

Higgins, George F., Melrose, Mass. Coin-controlled apparatus. 1,632,838; June 21.

Higgins, George H., assignor to Burd High Compression Ring Company, Rockford, Ill. Ring-grooving machine. 1,651,598; Dec. 6.

King Company, Rockford, Ill. Ring-grooving machine. 1,651,598; Dec. 6.
Higgins, George H., assignor to Burd High Compression Ring Company, Rockford, Ill. Apparatus for grooving piston rings and the like. 1,649,695; Nov. 15.
Higgins, John J., East Madden, H. D., and Higgins.)
Higgins, John J., East Orange, N. J., assignor to Westinghouse Lamp Company. Hook forming and clamping device. 1,612,816; Jan. 4.
Higgins, John J., East Orange, N. J., assignor to Westinghouse Lamp Company. Maunfacture of incandescent electric lamps. 1617,142; Feb. assignor to Westinghouse Lamp Company. Stem for incandescent lamps and method of making. 1,626,677; May 3.
Higgins, John J., East Orange, N. J., assignor to Westinghouse Lamp Company. Combination inserting and welding machine. 1,626,678; May 3.
Westinghouse Lamp Company. Sessing-in machine. 1,645,991; Oct. 18.
Higgins, John J., East Orange, N. J., assignor to Westinghouse Lamp Company. Sessing-in machine. 1,645,991; Oct. 18.

Oct. 18, Higgins, John J., East Orange, N. J., assignor to West-lightouse Lump Company. Machine for and method of mounting filaments. 1,647,624; Nov. 1. Burns, Bloom-light of the company of the company and the company Automatic bulb-printing device. 1,847,625; Nov. 1. Higgins, John S., Jr., Chicago, Ill. Mop. 1,626,036; Apr. 26.

neid, F. W., and Taylor, assignors.)
Highfield, Frank W., and H. E. Taylor, assignors to The
Highfield Electrical Company Limited, Coventry, England. Electrical testing apparatus for fluid-pressure
engines. 1,635,980; July 12.
Highfield, George A., Scrunton, Pa. Smoking pipe.
1,632,572; Dec. 13.
High Frequency Laboratories. (See Dunke, Willy, as-

High Frequency Laboratories. (See Jumze, Willy, assignor.)
Highland Body Manufacturing Company, The. (See Morrison, James, assignor.)
Hight, Engene S., Peorla, Ill., assignor to Power Specialty Company, New York, N. Y. Economiser bolier. 1632,291; June 14.
Highway Maintainer Company. (See Johnson, Carl O.,

gnway mannean. assignor.) ghway Trailer Company. (See Clement, Charles G.,

Highway Trailer Company. Highway Trailer Company. Highway Trailer Company. Highey, Theodore S. Escondido, Calif. Raisin-drying tray. 1,617,488; Feb. 15.

tray 1,617,482; Feb. 15.

(Riker Manufacturing Company, The. (See Connolly, Thomas J., assignor.)

(Rikor Manufacturing Company, (See Dieterich, William, assignor.)

(Ribert, Henry, Clucinnati, Ohio. Equalizing device for rewinding web paper. 1,643,479; Nov. 8.

(Riblert, Henry, Clucinnati, Ohio. Equalizing device for rewinding web paper. 1,643,479; Nov. 8.

(Riblert, Henry, Clucinnati, Ohio. Equalizing device for rewinding web paper. 1,643,479; Nov. 8.

(Riblert, Loyal T., assignor to Clay-Adams Co., Inc., New York, N. Y. Package. 1,652,625; Dec. 18.

(Riblert, M. N. Y. Package. 1,653,624; Mar. 29.

(Riblert, M. N. Y. Package. 1,650,614; Nov. 22.

(Riblert, M. M. Package. 1,650,614; Dehydrating oll. 1,650,516; Nov. 22.

Hildebrand, Joel H. (See Yant, W. P., Sayers, and Hildebrand.) Hildebrand,

brand.)

Hildebrand, Reinhard, Webster Groves, Mo. Two-cycle internal-combustion engine. 1,622,717; Mar. 29.

Hildebrand, Reinhard, Webster Groves, Mo., assignor to Fulton from Works Company, St. Louis, Mo. Fuel inspection of the state of the state of the state of Fuel inspection. The state of the state

brandt, brank F., Altoona, Pa. Fastener. 1,650,715; Nov. 29.

Hildebrandt, Frank M., and C. N. Frey, Pittsburgh, Pa., assignors, by mesne assignments, to 'the Fielschmann Company, Treating and preparing yeast and the prod-uct thereof. 1,625,121; Apr. 19. Hildebrant, Charles Q., et al. (See Haines, George H., assignor.)

assignor.)
Hilder, Stuart. (See Anderson, G. M., and Hilder.)
Hildermann, John H., Los Angeles, Caiif. Vise for tennisracket heads. 1,618.552; Feb. 2Pumber's acid can.
1,621.549; Mar. 22.
Hile, Harlan E., Latrobe, Pa. Plumber's acid can.
1,621.549; Mar. 22.
Hile, Harlan E., Latrobe, Pa. Plumber's acid can.
1,621.549; Mar. 22.
Hile, Alfred, Bickmansworth, England. Construction of concrete piles or columns. 1,634.231; June 28.
Hiley, Alfred, Rickmansworth, England. Construction of concrete piles or columns. 1,634.231; June 28.
Hiley, Alfred, Rickmansworth, assignor of one-half to E. Le Bas, London, England. Construction of concrete piles or columns. 1,628.622 (Apr. 24.
Hiley, Alfred, Rickmansworth, Baya 24.
Hilder, Harry, (See Villaret, Gustave E., assignor.)
Hilger, Adam, Limited. (See Smith, T., and Dowell, assignors.)

assignors.)

assignors.)

Hilger, George, Chicago, Ill. Automatic refrigeration system. 1,619,072; Mar. 1.

Hilger, George, Chicago, Ill. Refrigeration system. 1,627,328; May 3.

Hilger, George, Chicago, Ill. Removing foreign gas from condensers. 1,636,512; July 19.

Hilger, Melliam B., Rivetton, Iowa. Cylinder for gaso-line engines. 1,638,852; Aug. 16.

Higerink, Frank M., assignor to C. F. Fitts and H. S. Hart, Chicago, Ill. Nozzle handle. 1,653,907; Dec. 27.

Hilgers, Marie A., Pawtucket, R. I. Culinary utensil. 1,637,859; Aug. 2. Hilgert, John, Chicago, Ill. Typewriter. 1,633,665; June 28.

Hilgert, Mathew, New York, N. Y. Shoe. 1,637,447; Aug. 2. Hill. Addie, jr. (See Thomas, J. C., Halliday, and

Hill

Hill.)
Hill. Albert E., Feoria, Ill. Folding table and bench.
1.643,947; Oct. 4.
Hill. Charles A. (See Mueller, P., and Hill.)
Hill. Charles B., Glencoe, and M. H. Givens, Evanston.
assignors to Northwestern Yeast Company, Chicago, Ill.
thereof. 1.636,668; Julv 19.
Hill. Charles B., Glencoe, and M. H. Givens, Evanston,
assignors to Northwestern Yeast Company, Chicago,
Ill. Dry yeast and producing the same. 1.641.676;
Hill. Charles B., Glencofe, and M. H. Givens, Evanston,
assignors to Northwestern Yeast Company, Chicago,
Ill. Dry yeast and producing the same. 1.641.677;
Sept. 6.

Sept. 6.

Hill, Charles B., Glencoe, and G. L. Tintner, assignors to Northwestern Yeast Company, Chicago, Ill. Making bread. 1,643,011; Sept. 20.

Hill, Charles B., Glencoe, and G. L. Tintner, assignors to Northwestern Yeast Company, Chicago, Ill. Making bread. 1,643,012; Sept. 20.

Hill, Chester L., assignor to Union Asbestos & Rubber Company, Chicago, Ill. Heat-insulating tape. 1,642,204; Sept. 13.

Hill, Clement V., Tentnon, N. J. Hinge for doors. 1,627,329; May 3.

Hill Clument V., Trenton, N. J. Hinge for doors. 1,1827,329; May 3.

Hill Clument V., Tenton, N. J. Hinge for doors. 1,1827,329; May 3.

Hill Clument V., Tenton, N. J. Hinge for doors. 1,1827,329; May 3.

assignors.)

Hill Compressor & Pump Company, The. (See Hill, Ebenezer, assignor, Hill, Daniel, Porterville, Calif. Scroll-displaying device.

1.621,407; Mar. 15.

Hill, Daniel A., Towanda, Kans. Combined force-feed Hill, Donald A., Towanda, Kans. Combined force-feed Hill, Donald A., Towanda, Kans. Combined force-feed Hill, Earl M., assignor to Consolidated Water Power & Paper Company, Wisconsin Rapids, Wis. Core tip.

1.648,399; Nov. 8.

Hill, Earl M., assignor to Consolidated Water Power & Paper Company, Wisconsin Rapids, Wis. Core tip.

1.651,703; Dec. 6.

Hill, Earl V., Chicago, Ill. Thermometer scale. 1,630,341; May 31.

Hill, Ebenezer, South Norwalk, Conn., assignor to The Hill Compressor & Pump Company, New York, N. Y. Combined liquid and air pump. 1,631,591; June 7.

Hill, Ebenezer, North Stamford, Conn., assignor to The Hill Compressor & Pump Company, New York, N. Y. Rotary pumping machine. 1,631,592; June 7.

Hill, Ebenezer, North Stamford, Conn., assignor to The Horary pumping machine. 1,631,592; June 7.

Hill, Ebenezer, North Stamford, Conn., assignor to The Horary pumping machine. 1,643,759. No. Y. Hill, Ebenezer, North Stamford, Conn., assignor to The Horary pumping machine. 1,643,759. No. Y. Y. Hill, Ebenez L., Jacksouville, Flae, and W. J. Webber, assignors to Automatic Lock and Closer Company, St. Louis, Mo. Door fastener. 1,654,256; Dec. 27.

Hill, Frank A., assignor of one-half to E. C. Fritz, Dixon, Hill, Frank A., assignor of one-half to E. C. Fritz, Dixon, Hill, George N., assignor to L. C. Flaherty, Hamilton, Ontario, Canada. Motor-vehicle steering apparatus. 1,654,217; Dec. 27.

Hill, George S., and A. C. Saxton, assignor to H-B.

1,654,217; Dec. 27.

Hill, George S., and A. C. Saxton, assignor to H-R Manufacturing Company, Chicago, III. Lock. 1,632,073; June 14.

Hill, Guy. (See Mauborgne, J. O., and Hill.) Hill, Guy. (See Mauborgne, L., and Hill.) Hill, Guy, Gee Steinberger, L., and Hill.) Hill, Guy, Brooklyn, N. Y., and George H. Clark, Washington, D. C., assignors, by mesne assignments, to Radio Corporation of America. Changing wave lengths. Hill, Harry E., assignor of One-half to A. D Hickel, Memphis, Tenn. Push button. 1,614,887; Jan. 18.

Hill, Harry W., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,613,276; Jan. 4.

Jan. 4.

Jan. 4.

Hill, Harry W., assignor to American Optical Company, Southbridge. Mass. Abrasive-supplying means. 1,619,344; Mar. 1.

Hill, Herbert, Durban, Natal, South Africa. Spring wheel for automobiles and other vehicles. 1,628,594; Mar. 1.

Hill, Hermann, Fredonia, N. Y. Flexible coupling. 11,636,692; July 26.

Hill, Hermann, Fredonia, N. Y., assignor, by mesne assignments, to Economy Baler Company, Ann Arbor, Mich. Baling press. 1,646,355 Oct. 18.

Hill, Hugh, Anderson, 14, 524, 535 Co. 18.

Nov. 1.

Hill, Hugh, Anderson, Ind. Suction sweeper. 1,647,292; Nov. 1.

Nov. I.

filli, J. Lawrence. (See White, Robert, assignor.)

filli, J. Lawrence. (See Baddley, James, Shepherdson, Swann, Ilill, and Lawrie.)

fill, James. (See Baddley, James, Shepherdson, Swann, Ilill, and Lawrie.)

fill, John B., St. Louis, Mo. Automobile top. 1,652,359; Dec. 18.

fill, John H., Houston, Tex. Pump, 1,654,400; Nov. 8.

filli, Joseph H. (See Roberts, Charles W., assignor.)

filli, Joseph H. (See Roberts, Charles W., assignor.)

filli, Joseph H., Oklahoma City, Okla. Automatic recording target. 1,650,940; Nov. 29.

fill, Louis, Atron, Ohio. Safety apparatus for gas Illuminating devices. 1,616,493; Feb. 8.

fill, Louis, Akron, Ohio. Safety device for gas-combustion apparatus. 1,616,495; Feb. 8.

fill, Louis, Akron, Ohio. Winding-mechanism indicator. 1,616,496; Feb. 8.

1.616.496; Feb. 8.

Hill, Louis, Akron, Ohio. Compensating gos cut-off.

1.628.690; May 3.

Hill, Louis, J., Madison, Ind. Priming system for internal-combustion engines. 1,653.853; Dec. 27.

Hill, Lurher, Los Angeles, Calif. Antirattle window lock.

1.623.343; Apr. 5.

Hill, Lynn E., assignor to Cross Bros. Co., Northfield, Vt.

Monument die. Des. 71,831; Jan. 11.

Hill, Myron F., assignor to Western Electric Company,
Incorporated 18.

Hill, All A. (See Hill, Rolo D., assignor).

Hill, Nikolai, Iron Belt, Wis. Mop holder. 1,635,973;

July 12.

Hill, Oris C., Pawtucket, R. I. Snap link. 1,637,860;

Aug. 2.

Hill, Original Aug. 2

Aug. 2.

Illil, Reginald, Kelowna, British Columbia, Canada. Furrowing machine. 1,627,973; May 10.

Illil Reginald, Kelowna, British Columbia, Canada. Furrowing machine. 1,627,973; May 10.

Illil Regunald Columbia, Canada Sanada, Canada. Furperature indicator. 1,630,007; May 24.

Illil, Reuben, West Hartford, Conn., assignor of one-half
to M. A. Possons, Cleveland, Ohio. Signaling system.
1,634,287; July 5.

Illil, Richard D., and W. W. Foster, Wichita Falls, Tex.
Jerk-line break-out pulley. 1,629,662; May 24.

Illil, Robert, Aylmer, Quebec, Canada. Rail anticreeper.
1,014,365; Jan. 1,630,616; May 31.

Illil, Roger M., Washington, D. C. Illuminating device
for projection apparatus. 1,630,616; May 31.

Illil, Roger M., Washington, D. C. Illuminating device
for projection purposes. 1,631,529; June 7.

Illil, Rolo D., assignor of one-half to N. H. Hill, Los
Angeles, Calif. Container. 1,619,727; Mar. 1,

Illil, Samuel H., Arcadia, Ind. Brace. 1,653,767;
Dec. 27.

Hill, Walter J., Birmingham, England. Extensible hinge or fastening. 1.650,793; Nov. 29.
Hill, William B., Fouke, Ark. Railway-tle plate. 1,618,928; Feb. 22.
1,618,928; Feb. 22.
1,618,928; Feb. 22.
1,618,928; Feb. 22.
1,618,928; May 17.
Hill, William R., Verdi, Minn. Spur or prod for horses. 1,652,688; May 17.
Hill, William R., Verdi, Minn. Spur or prod for horses. 1,652,687; Dec. 13.
Hill, William R., Sasignor to Sargent & Greenleaf, Inc., Rochester, N. Y. Cover and operating means for dials of permutation locks. 1,652,897; Dec. 13.
Hillow, Herbert J., assignor to Evinrude Motor Company, Milwaukee, Wis. Outboard-motor drive. 1,634,942; July 5.
Hillen, Johannes A. V. M., Amsterdam, Netherlands. Machine Company, Milwaukee, Wis. Outboard-motor drive. 1,634,942; July 5.
Hiller, Joseph L., Mattapolsett, Mass. Shank and cutter tips for pulverizers. 1,618,826; Feb. 22.
Hiller, Joseph L., Mattapolsett, Mass. Shank and cutter tips for pulverizers. 1,618,826; Feb. 22.
Hiller, Moloil H., Carbondale, Pa. Cooling apparatus. 1,622,531; Mar. 29.
Hiller, Moloil H., adomany, Carbondale, Pa. Heat interchanger. 1,634,714; July 5.
Hiller, Moloil H., adomany, Carbondale, Pa. Heat interchanger. 1,634,714; July 5.
Hiller, W.G. (See Moushon, Richard S., assignor.)
Hiller, W.G. (See Moushon, Richard S., assignor.)
Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,621,869; Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,621,869; Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,621,869; Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,621,869; Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,623,681; Mnr. 15.
Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,628,405; Mnr. 10.

May 10.

May 10.

Hillard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,63,681, Hunter, John J., assignor to Baker Ice Machine Company of Texas, Fort Worth, Tex. Condenser. 1,638,806; Aug. 9.

Hilliard, Perley A., Wollaston, Mass. Machine for preparing chocolate for confection coatings. Rei0,813; Blec. 6.

Herold. (See Econos, Ernest E., assignor.)

Hillier; Robert E. (See Emons, Ernest E., assignor.)

Hiller; Robert S. (See Emons, Ernest E., assignor.)

Hillerich, John A., assignor, to Hillerich, John A., assignor.

signor.) States of the second of the second

Brothers Company. (See De Forest, Lester C.,

assignor.)
Hills, Burton U., Chicago, Ill. Timing device and manufacturing the same. 1.617.905; Feb. 15.
Hills, Burton U., Chicago, Ill. Timer. 1,625,806;
Apr. 26.

Apr. 26.
Hills, Edward R. (See Borresen, Helge A., assignor.)
Hills, Harry B., assignor to Steward Davit & Equipment
Corporation, New York, N. Y. Drain device for lifeboats. 1.623.727. Apr. 5.
Hills, Harry R., Emerald, Idaho. Bark peeler. 1,627,901;

Hills, Harry R., Emerald, Jones. May 10.

Hills, Heary A., Grand Rapids, Mich. Filtering material and preparation thereof. 1,621.725; Mar. 22.

Hills, Heary A., Grand Rapids, Mich. Liquid trap and Hills. Hearty A., Grand Rapids, Mich. Continuous battery oil filter. 1,628.201; Aug. 9.

Hills, Bacan A., Grand Rapids, Mich. Book end. Des. 73.785; Nov. 8.

Hills. McCanna Co. (See Noyes, Albert H., assigner.)

Hills. Olive, Windsor, England. Hatband. 1,640,895;

Hillside Cotton Mills. (See Carruth, Nat, assignor.)
Hillsion, William W. W. (See Johnson, L., and Hillson, Hillston, Afred, Chicago, Ill. Pitcher's practice target.
Hillston, Barton, S., St. Joseph, Mo. Container.
Hillston, Newton S., St. Joseph, Mo. Dust mop.
1648,809; Nov. 8.
Hillyard, Newton S., St. Joseph, Mo. Device for dispensing liquid soap. 1,648,811; Nov. 8.
Hillyard, Newton S., St. Joseph, Mo. Device for dispensing liquid soap. 1,648,811; Nov. 8.
Hillyard, Newton S., St. Joseph, Mo. Device for dispensing liquid soap. 1,648,811; Nov. 8.
Hillsee, Charles M., Philadelphia, Pa., assignor to Underwood Typewriter Company, New York, N. Y. Invoice sheet. 1,616,259; Peb. E., N. J., assignor to Henry anism. 1,623,310; Apr. 5.
Hilson, Harry A., Boston, Mass. Egg-turning rack.
Hilton, Charles M., Philon, See Hilton, Robert W., Hilton, Larry A., Boston, Mass. Egg-turning rack.
Hilton, Robert W., deceased; D. M. Hilton, executrix, Cincinnati, Ohio, assignor to The Kemper-Thomas Company, Norwood, Ohio, Manufacture of fiber board.
Hilton, Annowed, Chilf. Friction binge. 1,637,642; Aug. 2.
Hilton, Annowed, Calif. Friction binge. 1,637,642; Aug. 2.
Hilton, Charles Systems. 1,641,587; Sept. 6.
Himel, Curtis J., New Orleans, La. Signal-light switch.
H,013,81; Jin. 11.
Corporation, Detroit, Mich. Electric arc-welding. Apparatus. 1,023,344; Apr. 5.
Himes, Howard P., assignor of one-half to General Motors Corporation, Detroit, Mich.
House, Howard P., assignor of one-half to General Motors Corporation, Detroit, Mich.
House, Howard P., assignor of one-half to General Motors Corporation, Detroit, Mich.
House, Howard P., assignor of one-half to General Motors Corporation, Detroit, Mich.
House, Howard P., assignor to Maniton, Canada. Game Himmelright, Raleigh J., Englewood, N. J., assignor to American Arch. Company. Refractory block. 1,634,587; Hilmelbashet

July 5.

Himmingsch, Joseph, assignor to Gebr. Himmelsbach, Immingschighaft, Freiburg, Germany. Treating wood. 1,613,459; Jan. 4.

Himmelsbach, Karl, assignor to Fried, Krupp Aktiengellschaft, Essen-on-the-Rubr, Germany. Fuel-injection device for internal-combustion engines. 1,628,032;

Himmelwright, Wallace G., assignor to McDougall Com-pany, Frankfort, Ind. Kitchen cabinet. 1,618,126; Feb. 15. Himmerich, Max. New York, N. Y. Stopcock. 1,627,974;

Feb. 15.

Himmerich, Max, New York, N. Y. Stopcock. 1,627,974;
May 10.

Hinchiey, John W., and C. S. Watson, Westminster, assigners of one-third to C. S. Graland, London, England.

Hinchild, Raiph, assignor to Burson Kaitting Company,
Rockford, Ill. Knitted fabric. 1,616,530; Feb. 8.

Hinchild, Raiph, assignor to Burson Kaitting Company,
Rockford, Ill. Knitted stocking. 1,646,199; Oct. 18.

Hinchild, Raiph, assignor to Burson Knitting Company,
Rockford, Ill. Knitted stocking. 1,646,199; Oct. 18.

Hinchild, Raiph, assignor to Burson Knitting Company,
Rockford, Ill. Knitted stocking. 1,646,199; Oct. 18.

Hinckley, Frank C., Stratford, assignor to Dictaphone
Corporation, Bridgeport, Conn. Casing for a dictating
machine or similar stricke, Des. 74,111; Dec. 20.

Hinckley-Myers Company, Inc., Bridgeport, Conn. Sound
record. 1,625,705; Apr. 19.

Hind, George. (See Blair, K. F., and Hind.)

Hind, George. (See Blair, K. F., and Hind.)

Hind, William M., assignor to M. P. Smith, Mobile, Ala.

Filing card. 1,652,716; Dec. 13.

Hindahl, David, assignor to M. S. Hart, Chicago, Ill.

Hindahl, David, assignor to M. S. Hart, Chicago, Ill.

Hindahl, David, assignor to M. S. Hart, Chicago, Ill.

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Hindahl, David, Assignor to M. S. Hart, Chicago, Ill.

Hindahl, David, Assignor to M. S. Hart, Chicago, Ill.

Hindahl, David, assignor to H. S. Hart, Chicago, Ill. Cur construction. 1618,008: Peb. 15. Hindahl, David, assignor to H. S. Hart, Chicago, Ill. Dump-door mechanism. 1,620,097: Mar. 8. Hindahl, David, assignor to Rodger Ballast Car Company, Chicago, Ill. Latching device for car doors. 1,922,718; Mar. 29

Mar, 29.

Hindahl, David, assignor to Rodger Ballast Car Company, Chicago, Ill. Dump-car construction, 1,625,998;
Apr. 26.

Hindahl, David, assignor to Rodger Ballast Car Company, Chicago, Ill. Railway dump car. 1,626,825; Max 3.

Hindahl, David, assignor to Rodger Ballast Car Company, Chicago, Ill. Selective dump car. 1,648,013; Sept. 20.

Hinde Charles, Los Angeles, Calif. Portable container. 1,645,992 · Oct. 18.
Hinde, James J., Sandusky, Ohio. Manufacturing insulating and plaster board from cornstalks. 1,923,184;
Apr. 5.
Hinde, James J., Sandusky, Ohio. Railway tle. 1,623,185;

Apr. 5.

Hnde, James J., Sandusky, Ohio. Railway tie. 1,623,185;

Apr. 5.

Apr. 6.

Holde, James J., Tulsa, Okla. Swivel bailer top. 1,624,948; Apr. 19.

Hindes, Joseph F., Relay, Md., assignor to Emerson Drug Company, Baltimore, Md. Commercial vehicle float. Des. 72,427; Apr. 12.

Hindle, John H. and T., Heslingden, England. Take-up motion for looms for wearing. 1,630,428; May 31.

Hindle, Thomas. (See Hindle, John H. and 200 to The Hindle, Thomas. (See Hindle, John H. and 200 to The Hindle, Thomas. (See Hindle, John H. and 200 to The Hindle, Thomas. (See Hindle, John H. and 200 to The Hindle, Hubert, Springfield, III. Circuit breaker. 1,639,730; Aug. 23.

Hindle, Hubert, Springfield, III. Circuit breaker. 1,639,730; Aug. 23.

Hindle, Raymond, Waymarth, Pa. Combination introducing device for queen bets. 1,613,752; Jan. 11.

Louis Pump & Equipment Company, St. Louis, Mo. Mechanical apparatus. 1,621,292; Mar. 15.

Hindshaw Engineering & Development Company. (See Hindshaw, Henry H., assignor).

Hindshaw, Henry H., assignor to Hindshaw Engineering & Development Company, Minn. Appara & Minn. Appara & Development Company, Minn. Appara & Development Company & Comp

Hindshaw, Henry H., assignor to Hindshaw Engineering & Development Company, Minneapolis, Minn. Apparatus for utilizing low-grade iron ore. 1,633,839; Hiner, Harris D., Akron, Ohlo, assignor to Westinghouse Electric & Manufacturing Company. Variable-speed squirrel-cage motor. 1,627,330; May 3. Hiner, Connell C. (See Frasier, L., and Hinter.) Hines, Francis J., Brooklyn, N. Y., Electrical receptacle Hines, James H., Hobart, Okla. Hair clipper. 1,632,183; June 14. Hines, John B., Guelph, Okla. Hair clipper. 1,632,183; June 14. Hines, John B., Guelph, Okla. Hair clipper. 1,632,183; Hiner, Ordell Burnsville, Miss. Spring wheel. Hinser, William L., assignor to The White Company, Cleveland, Ohlo, Winch. 1,615,543; Jan. 25. Hinkley, Septiam H., Erle, Pa. Crank-case heater. 1,656,823; May 3. Hinkley, George F., Brookings, S. Dak. Wet-feed mixer. 1,655,32; July 12. Hinman, George L., and F. E. Greene, assignors to The Greist Manufacturing Company, New Haven, Comp. Combination robe rail and handle. Des. 73,177; Hinman, John H., assignor to Heine Boller Company, St.

Combination robe fall and handle. Des. 73,177; Aug. 2.
Himma, John H., assignor to Heine Boller Company, X.
Himma, John H., St. Louis, Mo., and R. F. Burke, Phoenixville, Pa., assignors to Heine Boller Company, St. Louis, Mo. Soot-blowing apparatus for water-tube bollers, 1,620,762; Mar. 15.
Himman, Scott. (See Taylor, Arthur E., assignor,) Himmekeas, Florent, Paterson, N. J. Fabric-spreading apparatus 1,642,496; Sept. 13.
Himpekeas, Plorent, Paterson, N. J. Fabric-spreading apparatus for the patents. 1,642,496; Sept. 13.
Feb. 15.
Himpekeas, Florent, Paterson, Forthelm Purse. 1,618,088; Feb. 15.

Hinrichen, Edward E., New York, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated. Semiautomatic telephone system. 1.624.341; Apr. 12.
Hinrichsen, Edward E., assignor to Western Electric Company, Incorporated. New York, N. Y. Telephone system. 1.644.341; Apr. 12.
Hinschaft, Edward E., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone-exchange system. 1.648.122; Nov. 8.
Hinsdale Manufacturing Company. (See McDonough, John W., assignor.) Hinsky, Anthony P., Brooklyn, N. Y. Radio transformer, Hinson, Winslow T., Fort Smith, Ark. Cabinet, 1.631.202; June 7.
Hinson, Gwislow T., Fort Smith, Ark. Cabinet, 1.631.202; June 7.
Hinton, George H., and T. W. Marsh, Reedville, Va. Re-

1.631.20; June 7.

Hinton. George H., dat T. W. Marsh, Reedville, Va. Re-Hinton. George H., diding the scales of fish at traps. 1.640.90; Aug. 30.

Hinton. Norman P., Bolders Green, England, assignor to Metropolitan-Vickers Electrical Company, Limited. Telephonic receiving apparatus. 1,645.284; Oct. 11.

Hinton. William. San Bernardino, Calif. Mold for plastic materials. 1,633.328; June 21.

Hintz, Leroy F., Chicago, H., Tool Zor tensioning and Hintz, Leroy F., Chicago, H., assignor to A. J. Gerrard, Menlo Park, Calif. Method of and apparatus for bracing and securing merchandise packages for transit. 1,629.494; Apr. 19.

Hintz, William L., et al. (See Soland, Emerson L., assignor).

Hipps, Marvin F., Electra, Tex. Automatic cut-off. 1.632,968; June 21. Hird, John B., assignor to Ideal Brake Reliner Company, Seattle, Wash. Machine for lining brakes and clutches. 1,633,018; June 21. Robertson, H., and Hirdler.) Hire, Thomas F., in trust. (See Geale, Frederick M., assignol.)

Hirdler, Harold. (See Robertson, H., and Hirdler.)

Hire, Thomas F., in trust. (See Geale, Frederick M.,
assignon)

1,635,712; July 12.

Hirsch, Anna E. (See Torme, William D., assignor.)

Hirsch, Harry M., and F. A. Harris, Parsons, Kans.

Automatic gate. 1,629,730; May 24.

Hirsch, Harry M., and F. A. Harris, Parsons, Kans.

Automatic gate. 1,629,730; May 24.

Hirsch, Jacob, Rossignor of May 24.

Hirsch, Isidore, New York, N. Y. Renovating printer's type. 1,631,275; Now 2021.

Hirsch, Jacob, assignor to Royal Lamp Shade Co., Inc.,
New York, N. Y. Arm for a bridge lamp or the like.

New York, N. Y. Arm for a bridge lamp or the like.

Hirsch, Louis, Cincinnati, Ohio. Railway-crossing gate.

1,617,054; Feb. 8.

Hirsch, Paul A., assignor to Furnace Engineering Company, Inc., New York, N. Y. Pulverizing machine.

Hirschberg, Wulf (See Hersen, K., and Hirschfield.)

Hirschfield, Armond J. (See Wisroth, E., and Hirschfield.)
Hirschfield.) Withelm, Antioch, assignor to Great Western
Hirsch, Withelm, Antioch, assignor to Great Western
Manufacture of alkali metal xanthates. 1,636,229;
July 19.
Hirschl, Harry, Washington, Mo. Tobacco-smooking pipe.
1,617,113; Feb. 8.
Hirschl, Horney, San Francisco, Calif. Brake-opHirschler, Hornesten, 1,644,373; Oct. 4.
Hirschmüller, Albert, Miesbach, Germany. Spinning machine. 1,622,008; Mar. 29.
Hirsh, Joseph E., Brooklyn, and A. D. Robson, assignors
to Standard Varnish Works, New York, N. X. Method
and composition for polishing surfaces composed of
Hirshfeld, Harry A., and A. G. Stern, Philadelphia, Pa.
Electric toaster. 1,645,527; Oct. 11.
Hirshfeld, Maurice W., New York, N. Y. Cushloned heel.
1,629,310; May 24.
Hirst, Arthur, assignor of one-half to G. H. Oxley, Sheffield, England, Cutlery-grinding machine. 1,664,000;
Dec. 27.
Hirst, Charles E., assignor to Beckett, Laycock & Watkin-

June 7.

Hiser, Charles H., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Handle for a burial casket. Des 71,913; Jan. 25, pringfield Metallic Casket Company, Springfield, Ohio. Handle for a burial casket. Des. 71,914; Jan. 25.

Horrid Casket. See Ritz, Emil. assignoria.

Hiser, Wolff Rev. Dec. 11, 1917, Jan. 20.

Hiser, Wolff Rev. Dec. 11, 1917, Jan. 20.

Histop, Robert S., assignor to Racine Confectioners Machinery Company, Racine, Wis. Candy-making machine, 1, 635, 7181; July 12.

Hitch, A. Hurrer, R. (See Calcott, W. S., Hitch, and Mahr.)

Hitch, A. Hurrer, L. Hitch, R. W. York, N. X.

Strand gauge. 1, 614, 655; Jan. 18.

Hitchcock Experiment Company. (See Hitchcock, Halbert K., assignor), 18.

Hitchcock, George E., assignor of one-third to A. Alford, 1911, Mich. Automobile siznal. 1, 640, 275; Aug. 23.

Hitch, Automobile siznal. 1, 640, 275; Aug. 23.

Hitch Company, Houston, Tex. Lantern. 1, 620, 970; Mitchcock, Guy F., Houston, Tex. Lantern. 1, 644, 923; Mitchcock, Guy F., Mitchcock, Guy F., Mitchcock, Guy F., Mitchcock, Guy F., Mit

Hitchcock, Guy F., Houston, Tex. Lantern. 1,644,923;

Oct. 11.

Mitcheock, Halbert K., Pittsburgh, Pa. Apparatus for grading abrasive and applying same to continuous grinding systems. 1,629,521; May 24.

Hitcheock, Halbert K., Pittsburgh, Pa., assignor to Hitcheock Experiment Company. Apparatus for making sheet glass, 1,615,840; Feb. 11.

Hitcheock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh, Pa., assignor

Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Plate-glass transfer and Haying apparatus. 1,631,203; June 7.

Haying apparatus. 1,631,203; June 7.

Haying apparatus. 1,631,203; June 7.

Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Process and apparatus. 1,635,706; Aug. 9.

Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass-surfacing apparatus. 1,635,706; Aug. 9.

Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass-polishing apparatus. 1,035,706; Aug. 9.

Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass-polishing apparatus. 1,051,200; Nov. 29.

Hitchcock, Holbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass-transfer apparatus. 1,051,200; Nov. 29.

Hitchcock, James B., Fullerton, Calif. Casing head. 1,020,888; Mar. 15.

Hitchcock, Lawrence, Cleveland, Ohio, and A. R. Pangborn, Watkins, N. Y., Lighting switch for motor vehicles. 1,647,520; Nov. 1.

Hitchcock, Hav B., Gloscher Falls, N. Y., assignor to Hitchcock, Ray B., Hoosick Falls, N. Y., assignor to 1,641,683; Oct. 25.

Hitchcock, Ray B., Hoosick Falls, N. Y., assignor to Hitchcock, Ray B., Hoosick Falls, N. Y., assignor to Hitchcock, Ray B., Hoosick Falls, N. Y., assignor to Hitchcock, Ray B., Hoosick Falls, N. Tre tool. 1,644,683; Oct. 25.

1,646.453; Oct. 25. Hite, Frank D., Minneapolis, Minn. Tire tool. 1,641,083; Aug. 30.

Aug. 30.

Hitner, Harry F., Pittsburgh, Pa., assignor to Pittsburgh
Plate Glass Company. Process and apparatus for
drawing sheet glass. 1,615,841; Feb. 1.

Hitner, Harry F., Pittsburgh, Pa., assignor to Pittsburgh
Plate Glass Company. Apparatus for making sheet
glass. 1,615,842; Feb.
plate Glass Company. Apparatus for cutting
glass. 1,618,089; Feo. 15.

Hitt, Ivan B., Stockton, Calif. Apparatus for cutting
fingerprints. 1,618,432; Feb. 22.

Hitt, Osar, Weebawken, N. J. Toy automobile. Des.
1,624,600; Apr. 12.

1,624,600; Apr. 12.

Hitt, Thomas G., Seattle, Wash. Firecracker. 1,638,994;
Aug. 16.

Laugh Glass Company. Colored vapor signal.
1,624,600; Apr. 12.

Hitt, Thomas G., Seattle, Wash. Firecracker. 1,638,994;
Aug. 16.

Aug. 16.
Hitt, Thomas G., Seattle, Wash. Rotary-balanced rocket, 1.645.427; Oct. 11.
Hitt, Thomas G., Seattle, Wash. Rocket. 1,653,178;

Dec. 20.

Dec. 20.

Hittenberger, Carl H., San Francisco, Calif. Abdominal support. 1,619,513; Mar. 1.

Hittle, James A., assignor to R. H. Hassler, Indianapolis, Ind. Spring-winding machine. 1,627,604; May 10.

Hitzel, Aldro B. (See Mannhardt, R. T., and Hitzel.)

Hitzenann, Herman W., Roselle, Ill. Valve for oil burners. 1,631,109; May 31.

Hixson, Arthur W., Leonia, N. J., and A. K. Balls, Philadelphia, Pa., assignors to The Fleischmann Company, New York, N. Y. Increasing the activity of yeast and Mixson, Estable, Wilder M., Nampa, Idaho. Tool box. 1,652,984: Disc. 13.

Hjert. Andrew G., Seattle, Wash. Window latch. 1,616,189; Feb. 1.
Hjorth, Oscar B., assignor of one-half to W. H. Skillen, Janesville, Wis. Fountain pen. 1,634,618; July 5.
Hlavacek, Charles, Brooklyn, N. Y. Spring stabilizer. 1,615,874; Feb. 1, Schultz, Ciccro, Ill. Microscopic-skille staining and drying apparatus. 1,620,351; Mar. 8.
Boag, Charles L., Chicago, Ill. Oll burner. 1,613,660; Jan. 11.

Jan. 11.

Hoag, Charles I., Oak Park, assignor to Standard Oil Friction Burner Company, Chicago, III. Oil-burning furnace. 1,622,828 Mar. 29.

Hoag, Philip O., assignor to The Whitehead & Hoag Company, Newark. N. J. Nonrefillable coin bank. 1,637,312; July 26.

Hoagland, Frank O., Bridgeport, Conn., assignor, by mesue assignments, to Pratt & Whitney Company, New York, 4, Y. Internal-grinding machine. 1,632,600; York, N. June 14.

Hoagland, Will G., Independence, Kans. Boiler, 1.637.939; Aug. 2.
Hoague-Sprague Corporation. (See Smith, Harry B.,

assignor. gnor.) Daniel W., et al. (See Haussmann, John F., as-Honn, Da Hoar, Charles, Wilkes-Barre, Pa. Lubricant. 1,618,708; Feb. 22.

Feb. 22.

Hoard, Milo C., assignor to W. P. Grisler, Stryker, Ohio.

Combined undertaker's slumber bed, cooling board, and

casket support. 1,624,565; Apr. 19.

Horre, Cyril G., Hounslow, England. Joint for elbows and

knees of artificial Himba. 1,644,833; Oct. 11.

Hoban, Fairfield W., assignor, by mesme assignments, to

Holdaphone, Incorporated, New York, N. Y. Telephone

Holdaphone, Incorporated, New York, N. Y. Telephone

Holdaphone, Incorporated, New York, N. Y. Telephone attachment. Re16,645; May 31.

Hoban, Fairfield W., assignor to Holdaphone, Incorporated New York, N. Y. Telephone attachment, 1.634.325 July 5

Hobart, Henry M., Schenectady, N. Y., assignor to General Electric Company. Induction machine. 1,628,464; eral Electric Company. Induction
May 10.

obart, Henry M., Schenectady, N. Y., assignor to General Electric Company. Induction motor. 1,632,601;

Hobart Manufacturing Company. (See Akers, Milton K.,

Hobart Manufacturing Company, (See Akers, Milton K., assignor.)
Hobart Manufacturing Company, The. (See Johnston, Herbert L., assignor.)
Hobart Manufacturing Company, (See Zademach, Erich R., assignor.)
Hobart, Victor. (See Berg, Charles, assignor.)
Hobbisfeken, Gerd, Burlington, Iowa. Device for facilitating the fitting and hanging of doors. 1,620,971;
Mar. 15.

tating the fitting and hanging of doors. 1,520,612, Mar. 15.

Hobbisicfken, Gerd, Burlington, Iowa. Device for facilitating the marking or doors and door jambs for hinges. 1,630,429; May 31.

Hobbisicfken, Gerd, Burlington, Iowa. Device for use in applying locks to doors, etc. 1,634,667; July 5.

Hobbis, Charles W., ir., Redlands, Calif. Skirt-length gauge. 1,616,046; Feb. 1.

Hobbs, Clarence. (See Hobbs, Frank D., and C.)

Hobbs, Frank D., and C., Los Angeles, Calif. Roller screen. 1,626,086; Apr. 26.

Hobbs, Frank III, W., Bangor, Me. Fish lure. 1,620,972; Mar. 15.

Hobbs, Frank D., and C., Los Angeles, Calif. Roller screen. 1,626,086; Apr. 26.
Hobbs, Franklin W., Bangor, Me, Fish lure. 1,620,972; Mar. 15.
Hobs. Thomas M. (See Cross, Frank, assignor.) Hobbs, Stromas M. (See Cross, Frank, assignor.) Hobbs, William R. (See Blackford, Gilbert V., assignor.) Hobbs, William R., and A. (Add. 1914) Hobbs, William R., New York, N. Y. Button. Des. 71,971; Feb. 8.
Hobe, William W., New York, N. Y. Appliqué trimming. Des. 72,947; June 28.
Hobe, William W., New York, N. Y. Appliqué trimming. Des. 72,948; June 28.
Hobe, William W., New York, N. Y. Appliqué trimming. Hobe, William W., New York, N. Y. Button. Des. 10,948; June 28.
Hobe, William W., New York, N. Y. Button. Des. 73,130; July 26.
Hobson, Frank E., Bellingham, Wash. Fuel-distilling apparatus. 1,614,028; Jan. 11.
Hobson, John H., Sulphur Springs, Ark, assignor of canflit to W. J. Brown, and one-fifth O. W. T. Feazell. Rotary timer. 1,641,972; Sept. 13.
Hobson, John S., Chicago, Ill., assignor to The Union Switch & Signal Company, Swisswale, Pa. Light signal. Hobson, John S., Chicago, Ill., assignor to The Union Switch & Signal Company, Swisswale, Pa. Light signal. Hobson, John S., Chicago, Ill., assignor to The Union Switch & Signal Company, Swisswale, Pa. Light signal. Hobson, John S., Chicago, Ill., assignor to The Union Switch & Signal Company, Swisswale, Pa. Light signal. Hobson, John S., Chicago, Ill., assignor to The Union Switch & Signal Company, Swisswale, Pa. Light signal. Hobson, John S., Chicago, Ill., assignor to The Union Switch & Signal Company, Swisswale, Pa. Light signal. Hobson, John S., Chicago, Ill., assignor to The Union, Rockford, Ill., Passignor to Robotcheriem Manu-Ho

Hochmuth, Carl, et al. (See Castleton, Eldred O., as

signor.)
Hochriem, Gustav F., assignor to Rhodes-Hochriem Manufacturing Co., Chicago, Ill. Coin selector. 1,623,186;

Apr. 5. Hochstadter, Irving. (See Stoddard, W. B., and Hoch-

stadier.)

Hochstetter, Frederick W. (See McCurdy, R. P., and Hochstetter.)

Hochstetter, Prederick W., Dayton, Ohio, and W. W. Thorpe, New York, N. Y. Sound receiver and transmitter, 1,629,869; May 24.

Hochtritt, Benheart A., Wausau, Wis. Pipe-cleaning machine. 1,648,048; Nov. S. W. Y., assignor to Mergenter Little Company, Incorporated, Machine for clearing matrix cavities. 1,627,093; May 3.

Hocker, Carl D., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating composition. 1,634,559; July 5.

Hocker, Carl D., East Orange, N. J., assignar to Western Little Company, Incorporated, New York, N. Y. Coating composition. 1,638,579; Aug. York, N. Y. Coating composition. 1,638,579; Aug. S., assignor.)

signor.)
Hocker, Ivan S., assignor to The Hocker Corporation, Philindelphia, Pa. Preparing chocolate beverage.
1.650,385; Nov. 28.
Hocker, Ivan S., assignor to The Hocker Corporation, Philindelphia, Pa. Preparing fat-free chocolate.
1.650,356; Nov. 22.
Hockley, Horace R., Slough, England, assignor to The National Pneumatic Company, New York, N. Y. Apparatus for operating and controlling the doors of transway or like vehicles. 1.644,380; Oct. 4.

Hockmeyer, Clive B., assignor to Zip-On Mfg. Co., Lowell, Mass. Logging. d.041,487; Sept. 6.

Mass. Logging. d.041,487; Sept. 6.

Hodes, David H., New York, N. Y. Coat lining. double-walled glass yessels. 1,023,311; Apr. 5.

Hodes, David H., New York, N. Y. Coat lining. 1,040,601; H.S. 50.

Logging. S. A. F. Schultz, South Gate, Calif. Orlanent for automobile radiators. Des. 73,978; Nov. 29.

Hodge. Forrest H., Lodi, Ohio. Oil-purifying apparatus. 1,644,648; Oct. 28.

Hodge. Forrest H., Lodi, Ohio. Oil-purifying apparatus. 1,644,648; Oct. 28.

Hodge. Forrest H., Lodi, Ohio. Oil-purifying apparatus. 1,644,648; Oct. 28.

Hodge. Forrest H., Lodi, Ohio. Oil-purifying apparatus. 1,644,648; Oct. 28.

Hodge. Forrest H., Lodi, Ohio. Oil-purifying apparatus. 1,644,678; Oct. 27.

Hodge. Perry Y., Niagara Falls, N. Y. Sound-reproducing device. 1,645,651; Oct. 11.

Hodge, Robert J., assignor to The American Buckle Dec. 27.

Hodge, Thomas D., Duluth, Minn. Kick-off for shears. 1,641,678; Sept. 6.

Hodge, William B., (See Cramer, S. W., and Hodge.) Hodge, William B., (See Cramer, S. W., and Hodge, William B., Charlotte, N. C., assignor to Parks-Cramer Company, Fitchburg, Mass. Self-cleaning port. 1,645,700; Oct. 18.

Hodges, Benjamin, D. and C. E. Owen. Waco, Tex., assignor to Parks-Cramer Company, Fitchburg, Mass. Self-cleaning port. 1,645,700; Oct. 18.

Hodges, Edward G., Milwaukee, Wls. Combustion of liquid fuel. 1,649,696; Nov. 15.

Hodges, Edward G., Milwaukee, Wls. Combustion of liquid fuel. 1,649,696; Nov. 15.

Hodges, Warder, March Peater, 1,621,013; Mar. 15.

Hodges, Warder, March Peater, 1,621,014; March Peater, 1,

Hoe, Robert, Hyde Park, N. Y. Ironing machine. 1,651,600; Dec. 6.
Hoe, Robert, Hyde Park, N. Y. Ironing machine. 1,651,601; Dec. 6.
H. A. Middlesbero, Ky. Floor Hoe, William A. 2,401; Dec. 1,610,101; Dec. 1,610,101; Dec. 1,610,101; Dec. 1,610,101; July 2,310; Dec. 1,640,151; July 2,32.
Hoecker, Albert C., Collinsville, Ill., assignor, by meane assignments, to American Auto Rim Lock Corporation. Combined contractor and expander for automobile the rims. 1,654,420; Dec. 27.
Hoeff Dec. 27.
Hoeff May, Karl, Kemben in Alleau, Germany Angel.

Huss. 1,654,420; Dec. 27.

Hoefel, Frederick, Pottsville, Pa. Skylight. 1,634,288;
July 5.

Hoefel effective, Pottsville, Pa. Skylight. 1,634,288;
July 5.

Hoefelmayr, Karl, Kempten in Allgau, Germany. Apparatus for preparing liquid from milk powder.

1,637,415; Aug. 2.

Hoefelman, J. States, N. Y. Shield for automobile of the control of the control

Boeldtke, Albert, Detroit, Mich. Vehicle body. 1,631,431; June 7.

Hoener, Edmund A. (See Benner, W. W., and Hoener,) Hoener, Edmund A., assignor to Firestone Tire and Rubber Company, Akron, Ohio. Rotary cutter. 1,643,120; Hoenisch. Earnest, Wausau, Wis. Hose protector. 1,640,276; Aug. 28.

Hoeri, Louis A., assignor to Railway Devices Company, St. Louis A., assignor to Railway Devices Company, St. Louis Mo. Angle-cock holder. 1,616,086; Feb. 17, Omaha. Nebr. Pressure-actuated control device. 1,619,866; Mar. 8.

Hoevel, Herman F. (See Aucrbach, Karl, assignor.) Hoevel, Herman F., New York, N. Y. Carriage arrangement for sand-blast apparatus. 1,628,317; May 10.

1,648,455; Nov. 8.

Hoey, Frank J. (See Fefel, Jchn E., assignor.) Hofer, Bert G. (See Wagner, C. E., and Hofer.) Hoferer, Daniel W., assignor to J. J. Richart. Whittler, Hoff, Carlton L., York, Pa., Pseud grip for vehicle tires. 1,638,034; Aug. 9.

Hoff, Carlton L., York, Pa., assignor to Hoff Metal Products Company, New York, N. Y. Trend grip for vehicle tires. July 19.

Hoff, Henry N. and G. B. Bush, York, Pa. Vehicle wheel

July 19.

Hoff, Henry J., and G. B. Bush, York, Pa. Vehicle wheel jack. 1,624,243; Apr. 12.

Hoff, Martin, Frankfort-on-the-Main, assignor to Kaspar Geriedeschalmaschine G. m.b. H., Offenbach-on-the-grain and the like. 1,640,996; Aug. 30.

Hoff. Martin, Frankfort-on-the-Main, assignor to Kaspar-Getreideschalmaschine G. m.b. H., Offenbach-on-the-Main, Germany, Machine for shelling and polishing grain and the like. 1,647,521; Nov. 1.

Hoff Metal Products Company. (See Hoff, Carlton L., assignor).

assignor.)

Hoffenberg, Maurice J., New York, N. Y. Window-sash starter. [425,941; Apr. 28.

Hoffer, Fred A., Frankfort, N. Y. Holder for washing machines. 1,632,735; June 14.

Hoffer, Joseph G., P. W. Sullivan, and J. H. Bourgot, assignors to The Studebaker Corporation, Detroit, Mich. Seat construction. 1,647,522; Nov. 1.

Hoffer, Le Roy H., Nynck, assignor to T. E. Murray, Brooklyn, N. Y. Electric welding and the like. 1,620,206; Mat. I. sssignor to T. E. Murray, Brooklyn, N. Y. Electric welding apparatus. 1,648,137; Nov. S. Hoffert, Roy G., assignor to The Christensen Machine Co., Racine. Wis. Signature-stitching machine. 1,651,122; Nov. 29.

Hoffman, Abe A., Kansas City, Mo. Costume sllp. 1.618,198; Feb. 22.

Hoffman, Abbert F., Newark, N. J. Bottling machine. 1.631,530; June 7.

Hoffman, Affred, W., New York, N. Y. Tabular calculator. 1.640,703; Aug. 30.

Hoffman, Ben P. (See Bisbee, W. G., and Hoffman.) Hoffman, Carl C., Euporia, Kans. Dinner-pail container. 1.646,147; Oct. 18.

Charles, Tuckahoe, assignor to Ward Baking ny, New York, N. Y. Making food products.

Hoffman, Charles, Tuckahoe, assignor to Ward Baking Company, New York, N. Y. Making food products. 1,640,193; Aug. 23.
Hoffman, Charles C., New York, N. Y. Magazine pencil. 1,633,529; June 21.
Hoffman, Drothly B. (See Larson, Edward, assignor.) Hoffman, Drothly B. (See Larson, Edward, assignor.) Hoffman, Drothly B. (See Larson, Edward, assignor.) Hoffman, Frank, Buffallo, N. Y. Woodworking machine. 1,628,724; May 17.
Hoffman, Frank, Buffallo, N. Y. Woodworking machine. 1,628,724; May 17.
Hoffman, Frank, Duffallo, N. Y. Woodworking machine. May 24.
Hoffman, Frank, Duffallo, N. V. Woodworking May 24.
Hoffman, Frank, Duffallo, N. O. Pump. 1,612,817;

May 24.

Hoffman, Fred D., Kausas City, Mo. Pump. 1,612,817;
Jan. 4.

Hoffman, Fred D., Kansas City, Mo. Pump. 1,618,337;
Feb. 22.

Hoffman, Fred D., Kansas City, Mo. Pump. 1,618,337; Feb. 22.
Hoffman, Fred D., Kansas City, Mo. Conveyer. 1,618,338; Feb. 22.
Hoffman, Fred D., Kansas City, assignor to Hoffman Smoke Abator Company, Jackson County, Mo. Smoke consumer. 1,613,564; Jan. 4.
Hoffman, Fred D., Kansas City, assignor to Hoffman Smoke Abator Company, Jackson County, Mo. Smoke consumer. 1,613,563; Feb. 22.
Hoffman, George A., assignor to The New Method Stove Company, Jackson County, Mo. Smoke Company, Jackson County, Mo. Smoke Consumer. 1,618,363; Feb. 22.
Hoffman, George A., assignor to The New Method Stove Company, Mansfield, Onio. Gas-range oven. 1,643,339; Sept. 27.

Hoffman, George E., Rockford, Ill. Combination window shade and curtain holder. 1,651,525; Dec. 6. Hoffman, George K., Neffs, Pa. Ladder. 1,647,915,

Hoffman, George K., Neffs, Fa, Ladder. 1,647,915, Nov. 1.
Hoffman, Glenn R., Springfield, Ill. Braking mechanism, more particularly for motor vehicles. 1,627,308; May 3.
Hoffman, Glenn R., Springfield, Ill. Braking mechanism, more particularly for motor vehicles. 1,627,309; May 3.
Hoffman, Glenn R., Springfield, Ill. Braking mechanism, more particularly for motor vehicles. 1,627,510; May 3.
Hoffman Heater Company, The. (See Reinecke, John P., assignor.)
Hoffman, Herbert E., assignor to General Fire Extinguisher Company, Providence, R. I. Automatic mixing and the second of the second

5. n. Herman F. Apr. 5 Hoffman, (See McLellan, Joseph R., as

Hofman, John A., Painesville, Ohlo, assignor to The Cuya-hoga Spring Company. Making spring clips. 1,641,631; Sept. 6. Hofman, John E., Casper, Wyo. Wrecking tool.

Hoffman, Rudolph, Cleveland, Ohio. Burner. 1,650,716; Nov. 29.

Hoffman Smoke Abator Company. (See Hoffman, Fred D. assignor.)

Hoffman Specialty Company. (See Emerson, Ralph R.,

assignor.)

diffusion Specialty Company. (See Haynes, Charles V., assignor.)

assignor.)
Hoffman, Sten E., Gary, Ind. Check protector. 1.634,105:
June 28.
Hoffman, Zigmund. (See Taylor, W. E., and Hoffman.)
Hoffman, Emil. Cologne, Germany. Tensioning and
locking device for wire-binding mechanism. 1,636,777;
July 26.

Hoffmann, Hans. (See Koref, F., and Hoffmann.)
Hoffmann, Henry L., East Orange, N. J., assignor to
Western Electric Company, Incorporated, New York,
N. Y. Telephone system. 1,647,993; Nov. 8.
Hoffmann, Jasseph J., Denver, Colo. Hopper for molds.
1,635,844; July 12.
(See Plein, A., and Hoffman, Joseph W. (See Plein, A., and Hoffman, Joseph W. (See Plein, A., and Hoffman, Seeph J. (See Preiswerk, Ernst, assignor).

Hoffmann-La Roche Chemical Works, The. (See Wuest, Helinz M., assignor.)
Hoffmann, Oswald, Neugersdorf, Germany. Dyeing yarns. 1,615,124; Jan. 18.
Hoffmann, Otto E., Hamburg, Germany. Oll-returning device for axie bearings. 1,634,124; Dec. 27.
Hoffmann, Semon, executor. (See Schmidt, Wilhelm, as-

siguor.)
Hoffmann, Simon, executor. (See Schmidt, Wilhelm.)
Hoffmann, Wilima H., assignor of oue-half to A. J. La.
Hoffmaster, Harry W., assignor to Reading Chain 18 12.
Hoffmaster, Harry W., assignor to Reading Chain 18 12.
Corporation, Reading, Pa. Trolley. 1,632,009; Dec. 6.
Hoffmester, Hermann, Gilesmarode, near Brunswick, assignor to Grimme, Natalia & Co., Aktlengesellschaft, Mrusslek, Germany. Calculating matchine. 1,535,1,635;

Brunswick, Germany, Gazanarode, near Brunswick, 28-May 31.

Hoffmeister, Hermann, Gliesmarode, near Brunswick, 28-signor to Grimme, Natalis & Co. Aktiengesellschaft, Braunschweig, Germany, Calculating machine, 1,635,125, 1 July 5.

Hoffmer, Alwin C. (See Timmons, Lindsay H., assignor.) Hoffmer, Frank, Nanticoke, Pa. Gasoline engine, 1,994,196; Anr. 26.

Hoffner, Alwin C. tote Arms.

Hoffner, Frank, Nanticoke, Pa. Gasoline engine.

1,626,196; Apr. 26.

Hoffstetrer, George O., Fidelity, Ill. Measuring device.

1,631,682; June 7.

Holand, Curistian, Newburg, N. Dak. Hitch for draft animals.

1,633,698; Aug. 16.

Hoffand, Christian, Newburg, N. Dak. Coupling.

Honand, Christain, Newburg, N. Dak. Couping. Aug. 16,
Hofmaister, Robert C., Bartlesville, Okla. Combination tool. 1,624,785; Apr. 12.
Hofmann, Conrad, Berlix 12.
Hofmann, Friedrich, Multein-Khar, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Valve. 1,634,360; July 5.
Hofmann, George, Chicago, Ill. Preserving eggs. 1,635,843; July 12.
Hofmann, John M., Brooklyn, N. Y. Radio loud speaker. Des. 72,905; Mar. 1,615,984; July 11.
Hofmann, Josef, Baumaroche, Switzerland. Recorder for musical dynamics. 1,615,984; Jan. 18.
Hoff Glydes. 1,618,976; Mar. Y. Self-defense shoot-ing divide. 1,618,976; Mar. 17.
Hofmann, William F., Brooklyn, N. Y., assignor to H. L. Judd Co., Inc., Wallingford, Conn. Pole end. Des. 72,258; Mar. 22.
Hofmann, William F., Brooklyn, assignor to H. L. Judd Co., New York, N. Y. Curtain-pole fixture. Des. 73,131; July 26.

Co., New York, N. Y. Curtain-pole fixture. Des. 73,131; July 26. Hofmann, William F., Brooklyn, assignor to H. L. Judd Co., New York, N. Y. Curtain-pole end. Des. 73,178;

Aug. 2.

Hofmann, William F., Brooklyn, assignor to H. L. Judd
Co., New York, N. Y. Curtain-pole end. Des. 73,179;
Aug. 2.

Hofmann, William F., Brooklyn, assignor to H. L. Judd
Co., New York, N. Y. Curtain-pole end. Des. 73,180;
Aug. 2.

And the Mark N. 1. Cutthin-plote end. Des. 13,269; Authorizer, Leo. Milwaukee, Wis. Authologgan. 1,622,719; Mar. 29. Hoffmeister, Leo. Milwaukee, Wis. Producing fur pelts. 1,622,720; Mar. 29. Hofschenfeler, Frederic J., Rochester, N. Y. Method and apparatus for grinding teeth. 1,648,272; Nov. 8. syringe. 1,648,308; Nov. 8. Hofstad, Leif, Ambrose, N. Dak. Device for releasing tractor clutches. 1,644,001; Jan. 11. Hofstede-Crull, Rento W. H., assignor to Naamhooze Tractor charged the syringe. 1,648,612,11; Dec. 27. Hofstetter, Lawrence A. Union City, N. J. Lamp-socket Construction. 1,638,691; Aug. 9. Hofstetter, Robert, Downers Grove, Ill. assignor to West-Not-tightening apparatus. L648,944; Nov. 15. Hogan, George F., Chicago, Ill. Envelope. 1,624,137; Apr. 12.

Apr. 12.
Hogan, George F., Chicago, Ill. Ankle protector.
1.634,576; July 5.
Hogan, Louise C., Spokane, Wash. Hair net. 1,616,800; Feb. 8.

Feb. 5:

Graph R., and L. E. Spence, Bladen, Nebr. Fabric treatment. 1,622,444; Mar. 29.

Hoge, Edward and F. K., Philadelphia, Pa. Tool. 1,635,398; July 19.

Hore, Friedrich K. (See Hoge, Edward and P. K.)

Hore, James B., Cleveland, Ohto, and E. E. Clement, Washington, D. C., assignors to E. F. 25 landay, Resh. Moce, John A., Tremont, La. Micrometer. 1,627,332; May. 3.

Dec. 27.

Dec. 27.

(loge, Max, assignor to Sefton Manufacturing Corporation, Chicago, Ill. Paper display box. 1.616,047; Feb. 1.

(loge, Smith A. (See Masters, William T., assignor.)

Hoge, Smith A., Rices Landing, Pa. Duplex control switch. 1,621,781; Mar. 22.

Hoge. Smith A., Rices Landing, Pa. Signaling apparatus for motor vehicles. 1,633,252; June 21.

Hoge. Smith A., Rices Landing, Pa. Jar closure. 1,640,122; Aug. 23.

Hoge, William, assignor to The General Fireproofing Company, Youngstown, Ohio. Index system for cards and the like. 1,641,488; Sept. 6.

Hohenstein, Frank and H. H., Rochester, N. Y. Coat collar. 1,638,692; Aug. 9.

Hohenstein, Henri. (See Hohenstein, Frank and Hohl, George I. (See Ewans, H. L., and Hohl.), Holl, John, Lincoln Park, N. J., and O. J. Maurer, Wilkinsburg, Pa. Material-dividing machine. 1,629,917; May 24.

May 24.

Hogeph P., Flemington, N. J. Display device.

May 24.

Hohmann, Joseph P., Flemington, N. J. Display device.

1,630,744; May 31.

Hohn, Max P. E., Dresden, Germany, assignor to "Universelte" Cigarettenmaschinen-Fabrik, J. C. Müller & Co. Attachment for rod-cigarette machines. 1,614,554; Jan. 18.

Hohn, Max P. E., Dresden, Germany, assignor to "Universelle" Cigarettemmaschinen-Fabrik, J. C. Müller & Go. Attachment for rod-cigarette matchines. 1,614,554; Hotsington, Harry, Davenport, Iowa. Shutter latch for shields. 1,626,827; May 3.

Hojer, Wilhelm, Munich, assignor to Slemens-Schuckert-werke Gesellschaft mit beschränkter Haftung, Slemensstadt, near Berlin, Germany. Steam generator for Holmowicki. Jakob 1,626,671 Mar. Device for holding the movable laws of coupiers open. 1,633,784; June 28.

Hojnowski, Jakob, Nekoosa, Wis. Automobile snowplow. 1,635,643; July 5.

Hojnowski, Jakob, Nekoosa, Wis. Sectional railway tle. 1,636,364; July 5.

Holmowski, Jakob, Nekoosa, Wis. Sectional railway tle. 1,636,365; July 19.

Hokanson, Martin, assignor to Marshall-Wells Company, Duluth, Minn. Shovel and making the same. 1,614,956; Jan. 18.

Hokanson, Martin, assignor to Marshall-Wells Company, Duluth, Minn. Shovel handgrip. 1,648,685; Nov. 8.

Hokanson, Otto A., assignor to Woodstock Typewriter Company, Woodstock, Ill. Power-operated typewriter. Hokanson, Otto A., assignor to Woodstock Typewriter Company, Woodstock, Ill. Power-operated typewriter. 1,614,475; Jan. 18.

Hokanson, Otto A., assignor to Woodstock Typewriter Company, Woodstock, Ill. Power-operated back spacer Company, Woodstock, Ill. Power-operated back spacer (Company, Woodstock, Ill. Power-operated back spacer (Company, Woodstock, Ill. Emile stop for shiftable Tokanson, Otto A., assignor to Woodstock Typewriter Company, Woodstock, Ill. Emile stop for shiftable Tokanson, Otto A., assignor to Woodstock Typewriter Company, Woodstock, Ill. Emovable carriage for typewriters. 1,625,890; Apr. 20.

Hokanson, Otto A., assignor to Woodstock Typewriter Company, Woodstock, Ill. Emovable paten support. Company, Woodstock, Ill. E

Nov. 22. oke, Harry A., Altoona, Pa. Oil cup. 1,641,269;

graph and musical-instrument cabinet. Des. 73,912;
1869; Larry A., Altoona, Pa. Oil cup. 1,641,269;
1869; Larry A., Baltimore Md. Apparatus for finishing high-grade gears. 1,630,845; May 31.
1868; William E., Baltimore Md. Apparatus for finishing high-grade gears. 1,630,845; May 31.
1868; Marry, and L. T. Johnson, Minneapolis, Minn. Clear-vision spindle guard. 1,652,669; Dec. 13.
1868; Marry, and L. T. Johnson, Minneapolis, Minn. Clear-vision spindle guard. 1,652,669; Dec. 13.
1868; Marry, and L. T. Johnson, Minneapolis, Minn. Clear-vision spindle guard. 1,632,763; Apr. 19.
1869; Marry, L. T. Leging, Apr. 19.
1869; Marry, C. Kansas City, Mo. Travel bag. 1,651,762; Dec. 6.
1861; Marry, C., Kansas City, Mo. Travel bag. 1,651,765; Dec. 6.
1861; Marry, C., Kansas City, Mo. Travel bag. 1,651,765; Dec. 6.
1861; Marry, C., Kansas City, Mo. Travel bag. 1,651,765; Dec. 6.
1861; Marry, C., Kansas City, Mo. Travel bag. 1,651,765; Dec. 6.
1861; Marry, C., Kansas City, Mo. Travel bag. 1,651,765; Dec. 6.
1861; Marry, Marry

ment Company, General, Mar. 1.
Holcomb and Hoke Manufacturing Company. (See Hoke, Frank J., assignor.)
Holcomb, J. I., Mfg. Co. (See Martin, E. E., and Dietrich, assignors.)
Holcomb, Lambert H. (See Peterson, T. B., and Holcomb, Lambert H.

comb.)
Holcomb Safety Garment Company. (See Holcomb, Charles R., assignor.)

Holcombe, Henry H., and W. A. Bartschmid, Marshall, Tex. Hydrocarbon burner. 1,616,124; Feb. 1. Holcombe, Jolly R., Columbia, S. C., and F. F. Dunbar, Augusta, Ga. Apparatus for tilting automobiles. Holcoroft, Chronics T., Detroit, and C. E. Doll, Mount Clemens, Mich. Firing ceramic and other products. 1,620,022; Mar. 8. Holcroft & Company. (See Ruckstahl, Alfred, assignor.) Holcoroft and Company. (See Ruckstahl, A., and Cadbond assignors.)

Holicroft and Company, (see Rockstan, mell, assignors).

Holdaphone, Incorporated. (See Hoban, Fairfield W., asHoldaway, William S., Los Angeles, Calif. Disk bit.

1,620,589; Mar. 15.
Holdaway, William S., Los Angeles, Calif. Disk bit.

1,620,589; Mar. 15.
Holdaway, William S., Los Angeles, Calif. assignor to Allied
Metal Industries, Inc. Italian-effect lighting-fixture
panel. Des. 71,833; Jan. 11.
Holdeman, Harry R., assignor to The J. M. Feldman
Co. Inc., Los Angeles, Calif. Gothic-effect lighting-fixture
ornament. Des. 73,434; Sept. 13.
Holdeman, Harry R., assignor to The J. M. Feldman Co.
Inc., Los Angeles, Calif. Italian-effect lighting-fixture
ornament. Des. 73,435; Sept. 13.
Holdeman, Harry R., assignor to The J. M. Feldman Co.
Inc., Los Angeles, Calif. Italian-effect lighting-fixture
ornament. Des. 73,435; Sept. 17.
Holdeman, Harry R., assignor to The J. M. Feldman Co.,
Inc., Los Angeles, Calif. Italian-effect lighting-fixture
shield. Des. 73,521; Sept. 27.
Holdeman, Harry R., assignor to The J. M. Feldman Co.,
Inc., Los Angeles, Calif. Italian-effect lighting-fixture
shield. Des. 73,521; Sept. 27.
Holdeman, Harry R., assignor to The J. M. Feldman Co.,
Inc., Los Angeles, Calif. Scoll-effect lighting-fixture
ornament. Des. 73,521; Sept. 27.
Holdeman, Harry R., assignor to The J. M. Feldman Co.,
Inc., Los Angeles, Calif. Scoll-effect lighting-fixture
ornament. Des. 73,522; Sept. 27.
Holdeman, Harry R., assignor to The J. M. Feldman Co.,
Inc., Los Angeles, Calif. Scoll-effect lighting-fixture
ornament. Des. 73,521; Sept. 27.
Holdeman, Harry R., assignor to The J. M. Feldman Co.,
Inc., Los Angeles, Calif. Gothic-effect lighting-fixture
ornament. Des. 73,521; Sept. 27.
Holdeman, Des. 73,531; Nov. 22.
Holden, Arthur P., P. Morgan, and S. R. Williams, Torotto, Ontario Canada. Oli-feed control for oil burnere. 1,630,265; May 81.
Holdender Medical Calif. Scolled Control for oil burnere. 1,630,265; May 81.
Holdender Medical Califor Corporation of the Scolled Control for oil burnere. 1,630,265; May 81.
H

Holden Company Limitea. (See Gifford, Harrison H., assignor,)
Holden, Fenn M. (See Schwarze, H., and Holden.)
Holden, Fenn M., assignor to General Motors Corporation. Detroit, Mich. Yielding motor suspension.
Holden, Fenn M., assignor to describe the suspension.
Holden, Frank. Hompstead. London, assignor of onehalf to Measurement, Limited, London, England. Electricity meter. 1, 653, 961; Dec. 27.
Holden, Harry C., Norwood, assignor to The American
Laundry Machinery Company, Cinchmati, Ohio. Puff
Holden, Lind Gold, Holderfer, N. H., assignor to W. H.
McElwain Company, Boston, Mass. Machine for inserting fastenings. 1,625,863; Apr. 10.
Holden, Walker. (See Berry, J. L., and Holden.).
Holden, William H. T. (See Shackelford, B. E., and

Bolden, William H. T. (See Shackelford, B. E., and Holden).

Holden, William H. T., New York, N. Y., assignor to Westinghouse Lamp Company, Vaporizing a getter in an evacuated vessel. 1,1026,752, May 3.

American Telephone and Telegraph Company, Carrier amplitude-control system. 1,628,833; May 17.

Holden, William H. T., New York, N. Y., assignor to American Telephone and Telegraph Company. Electrical discharge device. 1,636,054; July 19.

Holden, William H. T., New York, July 19.

Holder, William H. (See Evans, C. T., and Holder.)

Holder, William H. (See Evans, C. T., and Holder.)

Holderle, Carl L. (See Holderle, Frederick W. and C. L., Rochester, N. Y. Beverage cooling and dispensing apparatus. 1,626,935; May 3. Holderman, Samuel J., and R. E. Cryder, Morris, Ill. Student's portable desk. 1,632,476; June 14. Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company. Truck. 1,614,029; JAn. 11. Fred D. (Everport N. H., assignor to Sullivan Machinery Company).

Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company. Shaft coupling. 1,634,499; July 5.

July 5.

Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company, Compressor-controlling mechanism. 1,634,542; July 5.

Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company. Controlling mechanism. 1,634,677; July 5.

Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company. Compressor-controlling mechanism. 1,649,909; Nov. 22.

Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company. Compressor-controlling mechanism. 1,649,909; Nov. 22.

Holdsworth, Fred D., Claremont, N. H., assignor to Sullivan Machinery Company. Compressor-controlling mechanism. 1,649,909; Nov. 22.

Hole, Sidney, Albourne, Hassocks, England. Receiving apparatus for attachment to house doors, walls, or other parts of buildings. 1,643,639; Sept. 27.

Holenoof Hosiery Co. (See Evans, H., and Hellbronner, assignors.)

72535-P-19

Holford, Hastings J. Addiscombe, assignor of two-third to P. P. Harvey, London, England. Centrifugal separating apparatus, 1,616,575; Feb. 8.
Holford, Hastings J. Addiscombe, assignor of one-hal to P. P. Harvey, London, England. Separating water and other impurities from mineral or other oils on liquids, 1,625,845; July 12.
Holined, Alsae J. Mobile, Ala. Spring stabilizer

and other impairties from mineral or other oils indude. Indudes, 1935,845; July 12.

10. 1839,944; 100. 28. Mobile. Ala. Spring stabilizer Holinger. Emil F., assignor to E. Chase Crowley, New York, N. Y. Anticreeping device for railway rails 1,615,100.

1,615,190 the Holinger, Emil F., assignor to E. Chase Crowley, New York N. Y. Antiereeping device for railway rails. 1,638,095; Aug. 9.
Holinger, Emil F., assignor to E. Chase Crowley, New York N. Y. Antiereeping device for railway rails. 1,638,096; Aug. 9.
Holinger, Emil F., assignor of one-half to E. C. Crowley, New York, N. Y. Loud-speaker unit. 1,653,045; Dec. 20.

New Y Dec. 20

New York, N. Y. Loud-speaker unit. 1,653,045; Dec. 20.
Hölken, Martin, sr., Barmen, Germany. Production of Hölken, Martin, ir., Barmen, Germany. Manufacturing artificial silk. 1,641,588; Sept. 6.
Höll, Alfred, Offenhach-on-the-Main, Germany, assignor to Grasselli Dystuff Corporation, New York, N. Y. Vat dysetuffs of the anthraquinone series. 1,627,738; May 10.
1,632,091; Mar. 29.
Höllafolla, George, Syracuse, N. Y. Scarf holder and former. 1,641,861; Sept. 6.
Hölland, Cyrus J., Chicago, Ill. Friction draft gear. 1,653,098; Dec. 20.
Hölland, Earl R., Mansfield, Tex. Gas heater. 1,029,384; Hölland, Frank, Poplar Bluff, Mo. Plotting square. 1,623,117; Apr. 5.
Hölland, Frank, Company. (See Kolla, John P., assignor.)

Holland Furnace Company. (See Nystrom, O. P., and Knoll, assignors.) Holland Furnace Company. (See Selby, C. M., and Nys-

Holland Furnace Company.

Knoll, assignors.)

Holland Furnace Company.

(See Selby, C. M., and Nys-Holland, Hurry A., Los Angeles, Calif. Physical-execising apparatus. 1,646,818; Oct. 25.

Holland, Joseph B., Baltimore, Md. Reversing gear for locomotives. 1,625,364; Apr. 19.

Holland, Letz, John assignor to The Letz Manufacturing Relations.

Rels, 113; Aug. 23.

Holland-Letz, Ludwig. Oak Park, Ill. Gear-changing machine. Rels, 113; Aug. 23.

Holland-Letz, Ludwig. Oak Park, Ill. Gear-changing mechanism. 1,624,244; Apr. 12.

Holland, Louis E., Kansas City, Mo. Rotary sprinkler. Holland, Newman H., East Orange, N. J. Phonograph record. 1,643,770; Sept. 27.

Holland, Roy E., 1643,770; Sept. 27.

Holland, Roy E. (See Boker, Vitus A., assignor.) Holland, Roy H. (See Boker, Vitus A., assignor, Roy H. (See Boker, Vitus

Hollander, Aladar, assignor to Byron Jackson Prump Mrs.
Co., Berkeley, Calif. Vertical pump mechanism.
1.625.893; Apr. 26.
Hollander, Aladar, assignor to Byron Jackson Pump Mfs.
Co., Berkeley, Calif. Multistage centrifugal pump.
1.628.841; May 17.
Hollander, Aladar, assignor to Byron Jackson Pump Mfs.
Co., Berkeley, Calif. Multistage balanced pump.
1.644.129; Oct.
Co., Lockeley, Calif. Multistage balanced pump.
1.668.841.29; Oct.
Co., Lockeley, Calif. Vertical-shaft turbine. 1.644.130;
Oct.
Co., Lockeley, Calif. Vertical-shaft turbine. 1.644.130;
Oct.
Co., Aladar, assignor to Byron Jackson Pump Mfs.
Collander, Aladar, assignor to Byron Jackson Pump Mfs.

Oct. 4. Aladar, assignor to Styron Jackson Pump Mfg.
Calif. Packing gland mechanism,
16.44.472. No. 13.
16.44.472. No. 13.
16.44.472. No. 14.
16.14.472. No. 16.
16.1

dle, Joseph. Newark, N. J. Valve-actuating mechanism. 1644.059: Oct. 4

Holleman, Hugh, Smackover, Ark. Gas burner. 1.641,888;

Sept. 6.
Hollenback, Charles T., La Porte, Ind. Measuring and dispensing device. 1.648,481; Nov. 8.
dispensing device. 1.648,481; Nov. 8.
for radived Moscob F. Carnyon Greek, Mont. Cattle guard for radived Moscob F. (See Rabjohn, L. E., and Hollenberg, Ralph W. (See Rabjohn, L. E., and Hollenberg, Ralph W.

Hollenberg, lenberg, lenberg, Wighland Park, Mich., assignor, by Holley, Clarence M., Highland Park, Mich., assignor, by mesue assignments, to The Hoover Company, North mesue assignments, to The Hoover Company, North Canton, Ohio. Thermostatically-controlled electric Canton, Ohio.

switch. 1,633,65; Aug. 23.

[folloy, Earl. (See Anderson, Walter S., assignor.)

[folloy, Earl. (See Candler, De Forest W., assignor.)

[folloy, Earl. (See Candler, De Forest W., assignor.)

[folloy, Garl. (See Udale, Stanley M., assignor.)

[folloy, George M. (See Anderson, R. M., and Udale, as-

Holling, Frederick C. (See Johnsen, M., and Holling, Julianshead, Arthur J., North Olmsted, Ohio. Automobile body construction. 1,639,037; Aug. 16.
Hollingsworth, William F., assignor of one-half to J. H.
Blair, San Fraucisco. Calif. Cable brake. 1,622,785; Blair, S Mar. 29.

Rinir, San Francisco, Calif. Cable brake, 1,622,785; Rinir, San Francisco, Calif. Cable brake, 1,622,785; Calinir, worth, Edward, Dohcrosz, England, assignor to The Crompton and Knowles Loom Works, Worcester, Mass. Loom for weaving chenile Azminster and like carpets, blankets, and other fabrics. 1,631,531; June 1 Hollins, Denis M., Blackburn, England, assignor to Draper Corporation, Hopedale, Mass. Bobbin battery for auto-Hollins, Denis M., Blackburn, England, assignor to Draper Corporation, Hopedale, Mass. Automatic weft-replenishing loom. 1,628,047; May 10.
Hollister, Harvey F., Spencer, Iowa. Condenser and Condenser (1,627,628 May 3).
Condenser, 1,627,628 May 3.
Hollister, Solomon C., Swarthmore, assignor to J. H. McClatchy, Philadelphia, Pa. Form work for casing walls and the like. 1,640,397; Aug. 3, arrison, Minneapolis, Minne, Man bolder, 1,614,97; Jan. 18.
Holloway, Harold L., Columbus, Ohio, Toy, 1,614,366; Jan. 11.

Jan. 11. Hollowsy, John H., La Fayette, Ind. Gaseous-fuel-mixing-manifold. 1,652,010; Dec. 6. Hollunder, Richard, White Plains, N. Y. Necktie fasten-ing. 1,628,004; May 10. Hollywood Chemical Company. (See Levy, Gaston J., as-

signor)
Holm, Carl, and A. H. Johnson, Worcester, Mass. Labeling machine. 1,622,381; Mar. 29.
Holm, Iarry N. (See Neitzel, O. A., and Holm.)
Holm, John, Brooklyn, assignor to American Kron Seale-Company, New York, N. Y. Recording weighing mecha-Company, New York, N. Y. Recording weighing mecha-Holman, Arthur J. Boston, Mass. Optical system for moving-picture projectors. 1,617,566; Feb. 15.
Holman, Clinton B., and F. L. Eze. Detroit, Mich. Projecting apparatus. 1,644,781; Oct. 11.
Holman, Edward E., Portland, Oreg. Air core transformer. 1,638,3966; Aug. 16.
Sen Denial Supply Co., 81; Paul, Minn. Movable live-fish container. 1,616,125; Feb. 1,41.
Holman, Leonard B., et al. (See Burlin, Adolph L., assignor).

Holman, Leonard B., et a., Gassignor.)
Holman, Lesle A., Waltham, Mass. Lift magazine for heel-building machines. 1,645,531; Oct. 18.
Holman Pump Manufacturing Company, The. (See Holman, Stephen W., assignor.)
Holman, R. C., et al. (See Owens, John G., assignor.)
Holman, Roger P., Omaha, Nebr. Trash burner., 1,629,162; May 17.

Holman, Stephen W., Marmarth, N. Dak., assignor to The Holman Pump Manufacturing Company. Propeller Holman, Virgil L. (See Raiston, Samuel F., assignor.) Holmberg, Charles G., if., Oak Park, and J. S. Stull, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Material-working mechanism. 1,529,705; May 24.

Holman, J. S., assignor to Western Electric Company, Incorporated, New York, N. Y. Material-working mechanism. 1,529,705; May 24.

Holman, Alfred E., assignor to One-half to De Nordiske Colling arrangement for electrolytic cells. 1,632,184; June 14.

Holmes, Alfred E., assignor to W. H. Plunkett, Chicago, Ill. Liquid dispenser. 1,618,339; Feb. 22.

Holmes, Alfred E., assignor to Menhift to J. D. Holmes, Richmond, Va. Rod clamp. 1,634,422; July 5.

Holmes, Arthur S., Oshkosh, Wis. Threat-cutting ma Holmes, Arthur S., Oshkosh, Wis. Threat-cutting mand H. B. Coats, Veedersburg, D. E. Jaques, Thortown and H. B. Coats, Veedersburg, Ind. System of feeding poultry and livestock. 1,624,245; Apr. 12.

Holmes, Benjamin, assignor to Morrell Mills, Inc., Philadelphia, Pa. Textile fabric. Des. 72,260; Mar. 22.

Holmes, Bradford B., New York, N. Y. Air spring.

Oct. 11.

Holmes, Frank E., assignor to Bloomfield-Holmes Corporation, Pasadena, Calif. Compressor. 1,623,596; Apr. 5.

Holmes, George A., Naugathek, Com. Machine for shoe

Holmes, Horge A., Dever, Colo. Power transmission

for wheek. 1,619,672; Mar. 1.

Holmes, Harry A., Aurelia, Iowa. Mechanical movement,

1,623,672; Apr. 5.

Holmes, Harvey A., Elyria, Ohio. Bee escape. 1,636,635;

Holmes, Harvey A., Elyria, Ohio. Bee escape. 1,636,635;

Holmes, Harvey A., Elyria, Ohio. Bee escape. 1,636,635;

July 19.

Holmes, Henry S., New York, assignor to T. B. Murray,
Brooklyn, N. Y. Axle housing, 1,615.083; Jan. 18.
Holmes, Julie D. (See Holmes, Allan T., assignor),
Holmes, Loving E. Davton, Fla. Apparatus for washing
cans. 1,651.208; Nov. 2, Fla.
Holmes, Lowell Li., Cambridge, Mass. Fountain pen
Golmes, Minot K., assignor to Hemingray Glass Company,
Muncle, Ind. Glassworking machine. 1,642.658;
Sont. 13.

Sept. 13.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Truck. 1,613,106; Jan. 4. Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Elevating mechanism. 1,614,030;

Machinery Company, Jan. 11.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Traction mechanism. 1,614,031;
Jan. 11.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,614,032;

Machinery Company, Jan. 11.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,614,033;
Jan. 11.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,614,034;
1,11.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,614,035;

Machinery Company.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Bearing. 1,624,837; Apr. 12.

Holmes, Morris P., assignor to Sullivan Machinery Company, Claremont, N. H. Mining apparatus. 1,635,623;

Holmes, Morris P., Rissignor to Sulfivan apparatus. 1,636,623;
4117 12 Holmes, Morris P., Claremont, N. H., assignor, by messe
assignments, to The Jeffrey Manufacturing Company,
Columbus, Ohio. Rotary fluid-pressure motor.
1,637,568; Aug. 2.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan
Machinery Company. Mining apparatus. 1,641,430;

Sept. 6.1.

Sept. 6.2.

Sept. 6.2.

Sept. 6.2.

Sept. 6.2.

Sept. 6.2.

Sept. 6.2.

Machinery Company. Sprocket. 1,642,356; Sept. 20.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,645,002; Oct. 11.

Oct. 11.

olmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company, Mining apparatus, 1,645,003;

Oct. 11.

Itolmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Controlling mechanism. 1,645,004; Oct. 11.

Itolmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Controlling mechanism. 1,646,644; Oct. 25.

1,646,644; Oct. 25.

Itolicolist, Oct. 25.

Nov. 8.

Nov. 8.

Nov. 8.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan
Machinery Company. Mining apparatus. 1,648,879;

Nov. 8. olmes, Morr Machinery Morris P., Claremont, N. H., assignor to Sullivan nery Company. Mining machine. 1,648,880;

Machinery Company. Mining machine. 1,648,880;
Nov. S.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Truck. 1,652,528; Dec. 13.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery. Company. Colarining machine. 1,652,529; Dec. 13.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,654,218; Dec. 27.
Holmes, Raph C., assignor to The Texas Company, New York, N. Y. Treating hydrocarbon oils, 1,623,729; L. P. D. Maghall, C. New York, N. F. T. Maghar, Hone.

Apr. 5.
Holmes, Ralph C., New York, N. Y., F. T. Manley, Houston, and O. Behimer, Port Arthur, Tex., assignors, by mesne assignments, to The Texas Company, New York, New Yor

Company, Davenport, July 12. Holmes, Robert E. L. 1888 Iowa.

Company, Davemport, Iowa. Pump. 1,635,846;

July 12.

Holmes, Robert E. L., assignor to Westco-Chippewa Pump Company, Davenport, Iowa. Pump-operating mechanism. I.651.330; Nov. 20a. Composition for killing certain weeds. In Composition for killing certain for killing certai

assignor.) Holmström, Johan G. (See Malmberg, C. J. G., and

Holmstrom.)

Holmwood, Mason H. (See Dudley, C. J., and Holmwood.)

Holophane Company. (See Dorey, William A., assignor.) Holophane Company. (See Thompson, Willard W., as-

Holophane Glass Company. (See Dorey, William A., as-

Holorth, Inc. (See Loucke, James F., assignor.)
Holshuh, John J., Brooklyn, N. Y. Combined reflector
and support therefor. Des. 73,914; Nov. 22.
Holsinger, Lloyd, Faribault, Minn. Air pump. 1,649,530;
Nov. 15.

Holslag, Claude J., South Orange, assignor to Electric Arc Cutting & Welding Company, Newark, N. J. Electric arc welding and cutting system. 1,621,068; Mar. 15.

Mar. 13.
Holsiag, Claude J., South Orange, assignor to Electric Arc Cutting & Welding Company, Newark. N. J. Electric-arc welding and cutting system. 1,621,069; Mar. 15.

Holslag, Claude J., South Orange, N. J., assignor to Elec-tric Arc Cutting & Welding Company, Newark, N. J. Electric-arc welding and cutting system. 1,621,070; Mar. 15. 1,621,070;

Holst, Edwin J., Lake City, Minn. Lubricant-dispensing device. 1.630,846; May 31. Holst, Ellis G., Lavoye, Wyo. Mine-track tie. 1.631,034;

Hoist, Eans G., Latter, May 31.
Holst, Gilles, assignor to N. V. Philips' Gloeilampen-fabricken, Eindhoven, Netherlands, X-ray tube, 1,643,453; Sept. 27.

Holst, Gilles, and A. Bouwers, assignors to Naamlooze Vennootschap Ehilips' Gioellampentabrieken, Einde Vennootschap Ehilips' Gioellampentabrieken, Einde Gioellampentabri

Dec. 20. Holte, Halvor, special administrator. (See Holte, Harold

Loc. 20.

Holte, Harvol, special administrator. (See Holte, Harold Holte, Harold O., deceased, Pittsburgh, H. Holte, special administrator, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffice-controlling apparatus. 1,629,624 May 24.

Holte, Harold O. deceased, Pittsburgh, Pa.; H. Holte, administrator, Crookston, Minn, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffice-controlling apparatus. Holte, Harold O. dependent Pittsburgh, H. Holte, Special Company, Swissvale, Pa. Railway-traffice-controlling apparatus, Pa. Paratus, Pa. Traffice-controlling and Company, Swissvale, Pa. Traffice-controlling and Company, Swissvale, Pa. Traffice-ceiver for automatic train-control systems, 1,643,377; Sept. 27.

Holte, Harold O., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical Telay, 1,643,340 Sept. (See Yost, Pa. 1,604,307). The Union Switch & Signal Company, Swissvale, Pa. Electrical Telay, 1,643,340 Sept. (See Yost, Pa. 1,604,307). The Union Switch & Signal Company, Swissvale, Pa. Electrical Telay, 1,643,340 Sept. (See Yost, Pa. 2014). The Union Switch & Signal Company, Swissvale, Pa. Electrical Telay, 1,653,340 Sept. (See Yost, Pa. 2014). The Union Switch & Signal Company, Swissvale, Pa. Electrical Telay, 1,653,650 Sept. (See Arthur, Paul, assignor, 1,654,650 Sept. 1,654,650 See Hartold, Photon, 1,665,650 See Hinckley, B. C., Thoman, and Holton, Holton, Phoenix, Aris, Abrading brush.

Holfon, Frank & Co. Isse Arthur, Holfon, Frank & Co. Isse Hinckley, B. C., Thoman, and Holfon, Grorge E. (See Hinckley, B. C., Thoman, and Holfon, Hol

oltz, Karl, assignor to Carl Lindström Aktiengesell-schaft, Berlin, Germany. Talking machine. 1,620,257; Mar. 8. oltz, William M., Shelton, Nebr. Fence. 1,632,231; Holtz.

schart, Berlin, Gerhany. Taiking machine. Accessed Mar. 8.

Mar. 8.

Mar. 8.

Mar. 14.

Mar. 14.

Holtzer-Cabot Electric Company, The. (See Kennedy, Carlton L., assignor.)

Holtzer-Cabot Electric Co., The. (See Meinema, Thomas G., assignor.)

Holtzman, John, New York, N. Y. Cleaning device.

10.

Mar. 14.

Moltzman, John, New York, N. Y. Safety razor.

1.642.333; Sept. 13.

Holtzman, John, New York, N. Y. Razor-blade holder.

1.647.357; Nov. 1.

Holtzman, John, New York, N. Y. Cutting mechanism.

Holtzman, John, New York, N. Y. Cutting mechanism.

Holtzman, John, assignor of one-half to B. Roman, New York, N. Y. Razor-blade-sharpening machine. 1,614.302; Jan. 11.

Holtzman, John, Assignor of One-half to B. Roman, New York, N. Y. Razor-blade-sharpening machine. 1,614.302; Jan. 11.

Holtzman, John, Assignor of One-half to B. Roman, New York, N. Y. Razor-blade-sharpening machine. 1,632.352; Mily 26.

Holtzman, Minard, Bexley, Ohio. Radiotable. 1,620.352; Malbe. Charles J. assignor to The W. E. Lamneck Com-

Mar. 8.
Holub, Charles J., assignor to The W. E. Lamneck Company, Columbus, Ohio. Double-wall conductor pipe.
1,652,827; Dec. 13.
Holy, George H. F., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Resilient Graph of the Company of the Shendal, Peter S., assignar Heater Company. (See Shendal, Peter S., assignar.

Holyoke Heater Company, (See Shylight, 1,651,391; Signor.)
Holyoz, Roman P., Chicago, Ill. Skylight, 1,651,391;

signor, Holvez, Roman P., Chleago, Hr. Say, Braunsdorf, and Dec. 6. Holzapfel, Eduard. (See Nawiasky, P., Braunsdorf, and Holzapfel, John A., Jackson, Mich. Anchor. 1,613,107; Jan. 4.

Holzapfel, John A., Jackson, Mich. Auchor. 1,613,107; Jan. 4. Holzel, Johannes, Pasing, near Munich, Germany, as-signor to A. G. Brown, Boverl & Cle., Baden, Switzer-land. Catenary suspension system. 1,655,855; Dec. 27. Holzheuer, William F., Hale, Mich. Extraction process and apparatus. Rel6,739; Sept. 20-bries for emptying lolamann, Taul, Essen, Germanny. Device for emptying garbage blus into garbage-collecting receptacles or entrying-off cars in dustproof manner. 1,647,829;

Holzverkohlungs-Industrie Aktien-Gesellschaft. (See Krause, E., and Roka, assignors.) Holzverkohlungsindustrie Aktiengesellschaft. (See Von Hochstetter, Heinrich, assignor.) Holzverkohlungs-Industrie, A. G. (See von Retze, Ewald,

Holzwarth Gas Turbine Co. (See Hofmann, Friedrich,

assignor.)

Homan, Dominique A. (See Childs, George A., assignor.)

Homan, John G., Steubenville, Ohio. Device for retaining hernial supporting pads in place. Re16,792;

Nov. 22.

Nov. 22.

Homan, Louis J., Jr., Cincinnati, Ohio. Tracing tool. 1.643,302; Sept. 27.

Homan, Thomas F., Cincinnati, Ohio. Scalp-patting device. 1,634,273; July 5.

Homan, Thomas F., Cincinnati, Ohio. Scalp-patting device. 1,634,273; July 5.

Homan, Walter A., and C. T. Austin, Denver, Colo. Parking meter. 1,620,098; Mar. 8.

Homan, William C., Meriden, Conn., assignor, by mesne assignments, to Wilcox Patents Corporation, Peekskill, N. Y. Liquid-fuel burner. Rele. 794; Nov. 22.

Homans, Thomas S., assignor to Intertype Corporation, Brooklyn, M. Y. Golden, 1,648,474; Nov. 32.

Homans, Thomas S., Hempstead, assignor to Intertype Corporation, Brooklyn, M. Y. Magazine mounting for typographical machines. 1,650,448; Nov. 22.

Homberg, Felix, Barmen, Germany, assignor to American Nuplax Corporation. New York, N. Y. Treatment of horn or the like, 1,636,818; July 26.

signor.)
Tomo-O-Lite Co. (See Huck, T., and Meaney, assignors.)
Homer Furnace Company. (See Hyatt, Charles D., assignor.)

signor.)

Homer, Joseph, New York, N. Y. Dental relator.

1.622,910; Mar. 29.

Homer, Nettle M.. Brooklyn, N. Y. Steaming device.

1.653,569; Dec. 20.

Homestead Valve Manufacturing Company. (See Trinks, Williahid. assignor.)

Hommel, Leon, Onkland. Calif. Furring and fastening device.

1.635,6567; Aug. 16.

Homyer, Leon, Onkland. Calif. Furring and fastening device.

1.642,641; Sept. 13.

Homyer, Nicholas R. and W. M.. Granite City, Ill. Glare deflector for headlights. 1.625,660; Apr. 19.

Homyer, William M. (See Homyer, Nicholas R. and W. H.)

Honberger, Frank S., Los Angeles, Callf. Protected con-crete pile and making same. 1,629,103; May 17. Choey, Albert H., Los Angeles, Callf. Mike-up frame for X-ray photography. 1,629,104; May 17. Hong, Frank. (See Lee, J. H., and Honig.)

Honig, Frank, Oak Park, assignor to Cyclo Corporation, Chicago, Ill. Mechanism for and method of coiling wire or the like. 1.624.000; Apr. 12.

Honig, Frank, Oak Park, assignor to Cyclo Corporation, Chicago, Ill. Disposition mechanism and method.

Honig, Frank, Oak Park, assignor to Cyclo Corporation, Chicago, Ill. Dis for wire drawing, etc. 1.637,109; July 26.

Honig, Frank, Oak Park, assignor to Cyclo Corporation, Chicago, Ill. Manufacturing dies. 1.637,111; July 26.

Honig, Frank, Oak Park, assignor to Cyclo Corporation, Chicago, Ill. Manufacturing dies. 1.637,111; July 26.

Honig, Frank, Oak Park, assignor to Cyclo Corporation, Li633,461; Dec. 20. edrawing and take-up method.

1.633,461; Dec. 20. edrawing and take-up method.

Cheago, Ili. Manufacturing dies. 1.687,111, July 26, Honig, Frank, Oak Park, assignor to Cyclo Corporation, Chicago, Ili. Wire-drawing and take-up method. 1,653,641; Dec. 20.

Honigbaum, Harry H., Richmond Hill, N. Y. Retainer. 1,616,957; Feb. 8.

1.614,9643; Oct. 25.

Honigbaum, Harry H., Richmond Hill, N. Y. Shingle. 1,616,9643; Oct. 25.

Honigbaum, Harry H., Richmond Hill, N. Y. Retainer. 1,651,392; Dec. 6.

Honigbaum, Harry H., Richmond Hill, N. Y. Container. 1,649,501; Nov. 10.

1.694,501; Nov. 10.

1.693,501; Nov. 10.

1.694,501; Nov. 10.

1.694,501; Nov. 10.

1.694,501; Nov. 10.

1.694,601; Nov. 10.

1.693,902; June 24.

1.693,292; June 14.

1.601, Ernest J., Sleepy Eye, Minn. Operating track drills. 1,634,943; July 5.

1.603,292; June 14.

1.601, Ernest J., Sleepy Eye, Minn. Operating track drills. 1,634,943; July 5.

1.601, Souther F., Sasignor to Honold Manufacturing Company, Sheboygan, Wis. Fifth wheel. 1,633,828; Honold, Gottlob F., assignor to Honold Gottlob F., assignor to Honold Gottlob F., assignor, 10.

1.601, Souther F., Sheboygan, Wis., assignor to The Globe Company. Wheel and crank. 1,619,024; Mar. 1.

Honold, Gottlob F., Assignor to Honold, Gottlob F., assignor.) (See Honold, Gottlob F., assignor.)

hearing. 1.617,907; Feb. 15.
honold Manufacturing Company. (See Honold, Gottlob F., assignor.)
honold Manufacturing Company. (See Honold, G. F., and Leicht, assignors.)
honor, John, assignor of one-half to B. Watzman, Southwest, Fa.
honor, John, assignor of one-half to B. Watzman, Southwest, Fa.
honor, John, assignor of one-half to B. Watzman, Southwest, Fa.
honor, John, S. John, M. Y. Amusement device.
1,614,923; Jan. 18.
honis, Harry E. assignor to Rex Products Co. Inc.
1,636,230; July 19.
honiz, Harry E. assignor to Rex Products Co. Inc.
1,636,230; July 19.
honiz, Harry E. assignor to Rex Products Co. Inc.
1,630,230; July 19.
honiz, Harry E. assignor to Rex Products Co. Inc.
1,633,432; Aug. 13.
hoobier, George B. Norwood, Ohio. Fixture hanger.
1,633,432; Aug. 16.
hoobier, George B. Norwood, Ohio. Fixture hanger.
1,633,432; Aug. 18.
hoobier, George B. Norwood, Ohio. Fixture hanger.
1,633,432; Aug. 18.
hood Harry M., Chiego, Ill., assignor to United Shoe
Machinery Corporation. Paterson, N. J. Work-positioning device. 1,638,932; Aug. 16.
hood, Homer R. (See Robertshaw, G. A., and Hood.)
hod Ruber Company. (See Hands, Howard A., assignor.)

signor.) Hood Rubber Company. (See Perrault, Joseph E., as-

signor.)

Hood Rubber Company. (See Perrault, Joseph E., assignor.)

Sanuel B., Minneapolis, Minn., assignor to Line Onton Stand Company, South Milwaukee, Wis. Circuit making and breaking device. 1,653,283; Dec. 20.

Hood, William L., Lexington, Mass. Flour and shortening blender. 1,651,276; Nov. 29.

Hoove, Edwin D., Minneapolis, Minn. Bathhouse for Cage birds. 1,616,223; Feb. 1. III., assignor to General Electric Company. Blank for gears and making the same. 1,638,012; Aug. 9.

Hoofnagle, William T., Glen Ridge, N. J. Cotton picking machine. 1,636,132; July 199.

Hook, Arley U., New Washington, Dio. Electric thermostatic with the company of the company. Chicago, III. Fence post. 1,639,633; Aug. 16.

Hooker Electrochemical Company. (See Rowland, Jasper M., assignor.)

Hooker Electrochemical Company. (See Stuart, Kenneth E., assignor.)

Hooker Fastener Company. (See Stuart, Kenneth E., assignor.)

Hooker Fastener Company. (See Stuart, Kenneth E., assignor.)

Hooks, Bess, Thomas, Okla. Transplanting device. 1,638,693; Aug. 9.

Hooks, Floyd L. (See Hooks, Kirk S. and F. L.)
Hooks, Kirk S. and F. L., Paducah, Ky. Rerailing frog.
1.614,985; Jan. 18.
Hooks, William N., Norwich, Conn. Piston-ring remover.
1,616,621; Feb. 8;
Hooley, John W., Larchmont, N. Y. Electric-appliance
support and connection. 1,647,002; Oct. 25.
Hooper, Harold L. (See Hunter, F. E., and Hooper.)
Hooper, Harold L. (See Hunter, F. E., and Hooper.)
Hooper, Harold L. (See Hunter, F. E., and Hooper.)
Hooper, Sons Company, Baltimore, Md. Filter cloth.
1,617,597; Feb. 15.
Hooper, James P., Ruxton, assignor to William E.
Hooper & Sons Company, Baltimore, Md. Wrapping
machine. 1,654,258; Dec. 27.
Hooper, John E., Milford, Mass. Shoe rack. 1,623,244;
Apr. 5.

machine. S. 1634, 258; Dec. 27.

Gooper, John S., Wilkinsburg, Pa. Battery filler, 1,623, 244; Apr. 5.

Rooper, John S., Wilkinsburg, Pa. Battery filler, 1,624, 840; Apr. 12.

Hooper, Lester B., Columbus, Ohlo, assignor to United Shoe Machinery Corporation, Paterson, N. J. Chip deflector for skiving machines, 1,638,933; Aug. 16.

James E., assignor, Sons Company. (See Hooper, James E., assignor, & Sons Company. (See Hooper, James P., assignor).

Hooper, Penrose R., Hartford, assignor to The New England Enameling Company, Inc., Middletown, Conn. Dispensing-machine case. Des. 73,228; Aug. 16.

Hooper, Penrose R., Hartford, assignor to The New England Enameling Company. Inc., Middletown, Conn. Dispensing-machine case. Des. 73,228; Aug. 19.

Howevers, 1,225,146; May 10.

Hoss, Mannie F., et al. (See Gallagher, George D., assignor.)

Signor.)

Hoos, Willem, Wassenaar, assignor to Naamlooze Vennootschap Vereenigde Touwfabrieken, Rotterdam, Netherlands. Spoolless twine ball, cross-wound bobbin, or
the like. 1,628,244; May 10.

Hooser, Charles E., Indianapolis, Ind. Lubricating system. 1,622,121; Dec. 6.

Hoosier, Everett W., Brookline, Mass. Cloth-cutting malossier, Everett W., Brookline, Mass. Cloth-cutting maHoosier, Everett W., Brookline, Mass. Cloth-cutting masystem. 1,623,728; Apr. 5.

Hooven & Allison Company, The. (See Berry, William A.,
assignor.)

Hooven & Allison Company, The. (See Berry, William A. Hooven & Allison Company, The. (See Greger, Hooven Cowness, Rentschler Company, The. (See Stuntz, John B., assignor.)

Hooven, Owens, Rentschler Company, The. (See Stuntz, John B., assignor.)

Hooven, Gwens, Rentschler Company, The. (See Theile, George I., assignor.)

Hoovens, Amasa G., Goshen, Ind. Lightning rod. Hoovens, Amasa G., Goshen, Ind. Lightning rod. Hoovens, Amasa G., Goshen, Ind. Lightning-rod support. 1.649,697; Nov. 15.

Hoover, Senjamin J., Okolona, Miss. Railway tie remover. 1.627,094; May 3.

Hoover, George I., May 3.

Hoover, George I., May 3.

Hoover, Company, The. (See Bailey, William F., assignor.)

Hoover Company, The. (See Dandon, Gertrude G., assignor.)

signor.)
Hoover Company, The.
mings, assignors.)
Hoover Company, The. (See Ewing, F. K., and Cum-(See Holley, Clarence M., as-

Hoover Company, The.
signor.)
Hoover Company, The.
Hoover Company, The. (See Hoover, Howard E., as-(See Leahy, William P., as-

signor.) Hoover Company, The. (See Nulsen, Marvin E., as-

signor.)

Hoover Company, The. (See Nulsen, Marvin E., assignor.)

Hoover Company, The. (See White, Harry B., assignor.)

Hoover, Elbert C. and I. C., Washington, D. C. Racket case. 1,629,105; May 17.

Hoover, Howard E., Chicago, Ill., assignor, by mesne assignments, to The Hoover Company, North Canton, Ohio. Suction sweeper. Re16,585; Apr. 5.

Hoover, Howard E., Glencoe, Ill., assignor, by mesne assignments, to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,624,246; Apr. 12.

Hoover, Howard E., Glencoe, Ill., assignor, by mesne assignments, to The Hoover Company, North Canton, Ohio. Suction Severer. Re16,763; Oct. 4.

Hoover, Howard E., Glencoe, Ill., assignor, by mesne assignments, to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,624,247; Apr. 12.

Hoover, Jay F., Buffalo, N. Y. Lingual bar. 1,615,191; Jan. 18.

Hoover, Sidney L., assignor of one-half to H. F. Miller, St. Louix, Mo. Insectifuge. 1,619,258; Mar. I.

Hoover, Sidney L., assignor of one-half to H. F. Miller, St. Louix, Mo. Insectifuge. 1,619,258; Mar. I.

Hoover, William C., R. D. Fritz, and E. F. Calll, Akron, Aug. 23.

Hoover, William C., R. D. Fritz, and E. F. Calll, Akron, Aug. 23.

Adve. 23.

H. Ody. 27.

H. Ody.

Alfred, New York, N. Y. Egg holder. 1,622,143;

Hope, Alfred, New Pites, N. 1 assumer to F. W. AtHope, Educated, Oxford, England, assignor to F. W. AtHope, Educated, Oxford, Canada, Manufacture of glass
or glass-like objects, 1,644.131; Oxf. 4
Hope, Frederick T., assignor of one-fourth to G. A.
Mengher, Scattle, Wash. Draft regulator, 1,625,880;
Mac 17.

Machine Company. (See Kinsley, L., and Moss,

assignors.)

Hope, Samuel N., assignor to The Campfire Company,
Milwaukee, Wis. Display device. 1.642,497 Sept. 13.

Hopedale Manufacturing Company. (See Draper, Clare

H., assignor.) Hopedale Manufacturing Company. (See Dunaway, Clar-

assignor.)
le Manufacturing Company. (See Northrop, Hopedale Jonas, assignor.)
Hopedale Manufacturing Company. (See O'Connell, John

Jonas, assignor.)

Hopedale Manufacturing Company. (See O'Connell, John J., assignor.)

Hoper, Karl.

(See Wolfard, Merl R., assignor.)

Hoperwell Detrees. (See Wolfard, Merl R., assignor.)

Hoperwell Charles. Ortava. Ontario, Canada. Device for holding collapsible tubes. 1,633,155; Aug. 9.

Hopewell, Lester H., Brooklyn, N. Y. Apparatus for preventing grade-crossing accidents. 1,651,955; Dec. 6.

Hopf, Rudolph A., assignor to Averill Mfg. Co., New Cort., William L. Gassignor 10 1646, Krupp Germany. Water tube boller. 1,614,839; Jan. 18.

Hopfield, Lewis D., Natoma, Calif., assignor to Taylor-Whatron fron & Steel Company, High Bridge, N. J.

Horedge tumbler. 1,632,602; June 14.

1,038,439; Aug. 9.

Hopkins, Alfred, Allston, assignor to Hopkins Manufacturing Co., Boston, Mass. Pressing arm. 1,622,195; Mart. 22.

Mar. 22.

Hopkins, Arthur C., Niles, Mich. Braiding carrier.
1,631,634; June 7.

Hopkins, Arthur C., assignor to National Standard Company, Niles, Mich. Tire-bead reenforcing element.
1612,922; Jan. 4.

1612,922; Jan. 4.

1612,932; Jan. 4.

pany, I July 19.

Hopkins, Arthur C., assignor to National Standard Company, Niles, Mich. Braiding machine. 1,636.660;

pany, Niles, Mich. Braiding machine. 1,638,689; July 19.

Hopkins, Arthur C., assignor to National Standard Company, Niles, Mich. Tire spreader. 1,638,387; Aug. 16.

Hopkins, Arthur C., assignor to National Standard Company, Niles, Mich. Mikling spools. 1,645,701; Oct. 18.

Hopkins, Arthur C., assignor to National Standard Company, Niles, Mich. Lifting Jack. 1,632,406; Dec. 13.

Hopkins, Arthur C., Compton, Callt, assignor to U. S.

Tool Co. Coshion Joint for rotary drill pipes. 1,619,728; Mart 1.

Hopkins, Cally and L. Cleveland Heights, assignor to The Company and Company, Cleveland, Ohio. Spring manufacture. 1,630,941; Nov. 29.

Hopkins, Charles E., deceased, Plainfield, N. J.; The Plainfield Trust Company, administrator. Machine for finishing curved stereotype plates. 1,652,717; Dec. 13.

Hopkins, Charles L., River Forest, assignor to Englamin Electric Manufacturing Company, Chicago, Ill. Switch Marchael Company, Chicago, Ill. Switch mechanism. 1,846,964; Oct. 25.

Hopkins Corporation. (See Hopkins, Marcus C., assignor). Thills, W. Oberlin, Kans.

Hopkins Corporation. (See Hopkins, Marcus C., assignor.) Ellis W. Oberlin, Kans. Corn nubliner. 1,621,925; Mar. (22. Edwer, Loren, assignor.) Hopkins, Frank H., Arlington, Mass., assignor to American Schaeffer & Budenberg Corporation, Brooklyn, N. Y. Spring seat for spring-loaded valves. 1,648,124; Nov. 8.

Note: Scatt of sping-rounds tartes. 1,020,127. Hopkins, Harry A., Taft, Calif. Apparatus for treating crude oils. 1,621,782; Mar. 22. Hopkins, Homer S. (See Conklin, W. F., Hopkins, and Hover.) Hopkins, James L., trustee. (See Peebles, Frank W. L.,

Hopkins, Leonard S. B., New York, and H. L. Corthell, Bronxville, assignors to Bacterial Sewage Purification Company, New York, N. Y. Bacterial sewage tank, 1,622,646; Mar. 29.
Hopkins Manufacturing Co. (See Hopkins, Alfred.

Hopkins Manufacturing Co. (See Hopkins, Alfred, assignor.)

Alfred, assignor.

Hopkins, alarcus C., Washington, D. C., assignor to Green Composertion. Jersey City, N. J. Loud speaker.

Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud speaker. Des. 72.262; Mar. 22.

Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud speaker.

Hopkins, Marcus C., Washington, D. C., assignor to Hopkins Corporation, Jersey City, N. J. Loud speaker.

Hopkins, Corporation, Jersey City, N. J. Loud speaker.

Hopkins Corporation. Cone-type loud speaker. 1,630,008; May 24.

Hopkins, Marcus C., Brooklyn, N. Y., assignor to Hopkins Corporation. Translating device. 1,630,009;

opkins depotation. Transmission of the Mins Corporation. Transmission of the Mins Corporation. Electrical translating device. 1,630,010; Corporation. Electrical translating device. 1,630,010;

Corporation. Electrical translating device. 1,630,010; May 24.
Hopkins, Marcus C., Brooklyn, N. Y., assignor to Hopkins
Corporation. Loud speaker. 1,630,011; May 24 years
Swarthmore, assignors to Charles Eneu Johnson and
Company, Philadelphia, Pa. Ink and making the same.
1,621,541; Mar. 22.
Hopkins, Matthew S., Reading, and N. Underwood,
Swarthmore, assignors to Charles Eneu Johnson and
Swarthmore, assignors to Charles Eneu Johnson and
Swarthmore, assignors to Charles Eneu Johnson and
Mar. 22. Philadelphia, Pe. Intaglio Ink. 1,621,542;
Mar. 22.

Company, Finiadelpnia, Fa. Intagno ink. 1,621,542; Mar. 22.
Hopkins, Matthew S., Reading, and N. Underwood, Swarthmore, assignors to Charles Eneu Johnson and Company, Philadelphia, Pa. Printing ink. 1,621,543; Mar. 22.

Mar. 22.

Hopkins, Nathan F., Rockland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lockstitch sewing machine. 1.616.049; Feb. 1.

Hopkins, Nevil M., New York, N. Y., assignor to National Carbon Company, Inc. Electrical apparatus and core therefor. 1.623.345; Apr. 5.

Hopkins, Nevil M., New York, N. Y., assignor, by mesne assignments, to Glimont Products Corporation. Article therefor. 1.636.699; Aug. 5.

Hopkins, Raymond R. (See Hamilton, M. E., and Hopkins).

Hopkins, Rapmond R. (See Hamilton, M. E., and Hopkins), Roy S., Parkersburg, W. Va. Automaticallyfocusing camera. 1,623,538; Apr. 5.
Hopkins, Roy S., Parkersburg, W. Va. Automaticallyfocusing camera. 1,623,538; Apr. 5.
Hopkinson, Ernest, New York, N. Y. Vulcanizing mold. Hopkinson, Ernest, New York, N. Y. Vulcanizing mold. Hopkinson, Ernest, New York, N. Y. Vulcanizing mold. Hopkinson, Ernest, New York, and W. A. Gibbins, Little Neck, N. Y., said Globons assignor to The Naugatack Index I. (632,759; June 14.
Hopkinson, Ernest, New York, and W. J. Steinle, Flushing N. Y.; said Steinle assignor to The Hartford Rubber Works Company, Hartford, Conn. Manufacturing tire castings for motor vehicles. 1,625,122; Apr. 19.
Dayton, Ohio. Scale. 1,626,828; May 3.
Hopkinson, Joseph, assignor to Dayton Scale Company, Duyton, Ohio. Scale. 1,626,828; May 3.
Hopkinson, Joseph, assignor to Dayton Scale Company, Duyton, Ohio. Scale. 1,626,829; May 3.
Hopkinson, Joseph, assignor to Dayton Scale Company, Phoppe, Boris B., assignor to Dayton Scale Company, Hoppe, Boris B., assignor to Pauly Jail Puliding Company, E. (Louis, Mo. Jail-door-operating Louis) and the property Samuel E., Crafton, Pa. Beller stand. 1,635,415; July 12.
Hopson, Clifford P., Bakersfield, Calif. Eyeglass-glare sheld. 1,647,626; Nov. 1.

July 12.

Hopson, Clifford P., Bakersfield, Calif. Eyeglass-glare shield, 1.647,626; Nov. 1.

Hopson, Edward H. (See Buffington, G. L., and Hopson.)

1. 1649,632; Nov. 15.

Hopwood, Charles A., St. Louis County, Mo. Double-cutting-edge golf sickle or scythe. 1,638,807; Aug. 9.

Hopwood, John M. (See Feebles, Thomas A., assignor.)

Hopwood, John M. (See Feebles, Thomas A., assignor.)

Frank, Valparaiso, Ind. Padlock. 1,616,449:

Horak, I Feb. 8.

Horak, Frank, Valparaiso, Ind. Padlock. 1,616,449: Feb. 8.
Feb. 8. Samuel, Pittsburgh, Pa., assignor to Pittsburgh Fransformer Company. Transformer bushing support. 1,641,270; Sept. 6.
Horelick, Samuel, Pittsburgh, Pa., assignor to Pittsburgh Transformer Company. Transformer tap changer. 1,641,271; Sept. 6.
Horelick, Samuel, Pittsburgh, Pa., assignor to Pittsburgh Transformer Littsburgh, Pa., assignor to Pittsburgh Littsburgh, Pa., assignor to United Shoe Machinery Corporation, Paterson, N. J. Press. 1,642,870; May 24.
Horilata, Kenji, White Plains, N. Y. Window cleaner. Horilata, Kenji, White Plains, N. Y. Window cleaner. Horil, Shinjiro, Tokyo, Japan. Stencil sheet. 1,645,141; Oct. 11.
Horle, Lawrence C. F., Newark, N. J., assignor to Federal Telephone Manufacturing Corporation, Buffalo, N. Y. Vacuum-tube voltmeter. 1,622,786; Mar. 29.
Horn, Earlanen Minnetturing Co., The. (See Horn, Horn, Earlanen Manufacturing Co., The. (See Frerichs, Frederick A., assignor).
Horn, Earla M. (See Dunlap, J. E., and Horn.)
Horn, Earla M., Pallsade, Colo, Arm sling. 1,621,323; Mar. 15.

Horn, Ernst, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Telephone system, 1,615,206; Jan. 18.

Horn, Heinrich, Freital-Dohlen, near Dresden, Germany. Apparatus for comminuting pasty and liquid materials.

1,011,320; Feb. 15.

1,011,320; Feb. 15.

1,011,320; Feb. 15.

Horn, Heinrich, Freital-Dohlen, near Dresden, Germany. Apparatus for comminuting pasty and liquid materials.

1,011,320; Feb. 15.

Horn, Herman, Jr., assignor to The Horn & Brannen Manufacturing Co., Philadelphia, Pa. Floor lamp.

1,619,76; Mar. 8.

Horn, Herman, Jr., assignor to The Horn & Brannen Manufacturing Co., Philadelphia, Pa. Floor lamp.

1,619,76; Mar. 8.

Horn, Max, assignor to Maschinenfabrik Augsburg. Germany. Starting and stopping device for offset printing machines. 1,617,713; Feb. 15.

Horn, Max, assignor to Thaper-Iloyd Corporation, Providence, R. 1. Jewelry-display stand. 1,615,275; Jan. 25.

Horn, Pleasant W. (See Patrick, N. M., and Horn.)

Horn, William G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,647,293; Nov. 1.

Hornaday, Charles W., Sidney, Nebr. Sanitary bottle carrier for milk bottles. 1,629,981; May 24. relegraphic Gesellschaft mit beschränkter Haftung System Stille, Berlin, Germany. Controlling device for electromagnetic talking machines. 1,638,998; Aug. 16.

Hornaber, Willy, Neukolin, assignor to Telegraphic Gesellschaft mit beschränkter Haftung System Stille, Berlin, Germany. Controlling device for electromagnetic talking machines. 1,638,998; Aug. 16.

Hornaber, Willy, Neukolin, assignor to Telegraphic Gesellschaft mit beschränkter Haftung System Stille, Berlin, Germany. Controlling System Stille, Berlin, Germany. Toxic System Stille, Berlin, Germany. Toxic System Stille, Berlin, Germa

New York, N. Y. Advertising device. 1,653,707; Dec. 27.
Horner, Earl B., and L. Holt, Burlington, N. C. Majure, T. Teating road-building material. 1,632,969; June 7.
Horner, Glenn M., Minneapolis, Kans. Gate. 1,624,169; Apr. 12.
Horner, Glenn M., Minneapolis, Kans. Gate. 1,624,169; Apr. 12.
Horner, Marie L. and M. M., New Orleans, La. Favor. 1,631,205; June 7.
1,631,205; June 7.
1,631,205; June 7.
1,632,105; June 7.
1,632,105;

Horsfield, Walter R., Selly Oak, Birmingham, assignor to Morland and Impey, Limited, Northfield, Birming-ham, England. Loose-leaf book or binder. 1,621,783; Mar. 22. Mar. 22 Horsman,

E. I., Co. Inc. (See Goldenberg, Benjamin,

to Morland and Impey, Limited, Northfield, Birmingham, Enginnd. Loose-leaf book or binder. 1,621,783; Mar. 22.
Horsman, E. I., Co. Inc. (See Goldenberg, Benjamin, Horsman, Benjamin, Horsman, Benjamin, Horsman, Benjamin, Horsman, Benjamin, Horsman, Benjamin, Horsman, Device for the production of concrete pipes and especially for devices for applying the concrete. (1625, 123; pp. 19. Horten, Alphons, Berlin-Wilmersdorf, Germany, Device for the production of concrete pipes and especially for devices for applying the concrete. (1625, 123; pp. 19. Horten, Alphons, Berlin-Wilmersdorf, Germany, Device for the production of concrete pipes and especially for devices for applying the concrete. (1625, 123; pp. 19. Horten, Alphons, Berlin-Wilmersdorf, Germany, Device for the production of concrete pipes and especially for devices for applying the concrete. (1625, 123; pp. 19. Horten, Bayard M., Kingston, Pa., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for Horten, Bayard M., Kingston, Pa., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for Horten, Bayard M., Kingston, Pa., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for Horten, Bayard M., Kingston, Pa., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for Horten, Bayard M., Kingston, Pa., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for Horten, Bayard M., Kingston, Pa., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for Horten, Bayard M.,

Dec. 27.
Horton, Joseph W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., Submarine signaling, 1,624.412; Jar. 12.
Borton, Joseph W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., East, Drange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., Prequent meter, 1,641.973; Sept. 13.
Horton, Rajph, New York, N. Y. Milk-transfer system, 1,623,313; Apr. 6.
L023,313; Apr. 6.
Mayo, Molert W. (See Hawes, A. B., Horton, and

Mayo.)
Horton, Spencer, Birmingham, England. Valve for automatic sprinkler apparatus for fire extinguishing. 1,614,002; Jan. 11.
Horton, Thomas A., Kingston, N. Y. Cigar machine. 1,629,163; May 17.
Horvat, Anton, Baltimore, Md. Wedding ring. Des. 71,834; Jan. 11.

Horvat, Anton, Baltimore, Md. Wedding ring, Des. 71,835; Jan. 11.
Horvath, Steven, Lorain, Ohio. Sugar-dispensing receptacle. 1,642,678; Sept. 20.
Horwith, Fuall H., assignor to Independent Paper Mills, Inc., Brooklyn, N. Y. Package of paper napkins, Horwitz, Alexander, New York, N. M. Resilient supporting device. 1,651,331; Nov. 29.
Horwitz, Alexander, New York, N. Resilient supporting device. 1,651,331; Nov. 29.
Horwitz, Edward S., St. Louis, Mo. Bed, folding bed, or any substitute for beds. 1,618,589; Feb. 22.
Horwitz, Hyman, Brooklyn, N. Y. Collar button. Horwitz, Vincent, Co. (See Goldberg, Leon, assignor.) Horydczak, Joseph, Newark, N. J. Shoe former. 1,650,351; Nov. 22.
Hosbein, Louis H. (See Stevens, N. D., and Hosbein, Hosbein, Louis H., Winnetka, assignor to M. H. Detrick May 24.
Hogsbein, Louis H., Chicago, Ill., and R. D. Foltz, East Orange, N. J., assignors to M. H. Detrick Company, Chicago, Ill., Furnace-arch construction. 1,628,706; May 24.
Hosseit, William J., assignors to M. H., Betrick Company, Chicago, Ill., Furnace-arch construction. 1,628,318; Hosseit, William J., assignor to H. S. Hart, Chicago, Ill.

Orange, N. J., assignors to M. H. Detrick Company, Chicago, Ill. Furnace-arch construction. 1,628,318; Hosciet, William J., assignor to H. S. Hart, Chicago, Ill. Surnacior control. 1,620,023; Mar. S. Hosceit, William J., and D. Hindahl, assignors to Rodger Ballast Car Company, Chicago, Ill. Railway dump Gar. 1,634,107; June 28.

Gar. 1,634,107; June 28.

Gar. 1,634,107; June 28.

Gar. 1,634,107; June 28.

Hosch, J. Chaude, Los Angeler, J. L., Reed, and Hosch, Hosch, Greene C., assignor to The Measuregraph Company, St. Louis, Mo. Shutter for measuring-machine charts. 1,619,935; Mar. S. Hosch, J. Chaude, Los Angeles, Calif. Air-cleaning machine, J. Chaude, Los Angeles, Calif. Fan. 1,642,205; Sept. 13. Chaude, Los Angeles, Calif. Fan. 1,642,205; Sept. 13. Chaude, Los Angeles, Calif. Fan. 1,642,205; Sept. 13. Chaude, Los Angeles, Calif. Fan. 1,642,205; Mosch, Mathias J., Randolph, Nebr. Hog water fountain. 1,637,340; Aug. 2.

Hosch, Henry G., Brooklyn, N. Y. Changeable-feature 12. Hose, Henry G., Brooklyn, N. Y., and W. E. Ramsdell, Bridgeton, N. J. Roofing supporting strips. 1,638,005; July 19.

Hose, Paul, and G. Pagel, Charlottenburg, Germany, assignors, by meane assignments, to General Electric Construction Conference of the Construction Conference of the Construction Conference of the C

Method and apparatus for coating cores. 1,615,881;
Method and apparatus for coating cores. 1,615,881;
Hostord, William F., Maplewood, N. J., assignor to Westerern Electric Company, Incorporated, New York, N. Y.
Coated strands. 1,627,740; May 10.
Hostord, William F., Oak Park, III., assignor to Western Electric Company, Incorporated, Method of and apparatus for drying and storing dried material preparation of the company of

Dec. 13.
Hoskin, Fred. (See Kelley, E. H., Greiwe, and Heskin). Hosking Fred.
Hosking Fred. Hosking Hesking, the Break established to the Hosking Region to Messe assume that the Hosking Richard T., Washer. 1615.382; Jan. 25.
Hosking, Richard T., Wilmette, assignor, by mesne assignments, to Shakeproof Lock Washer Company, Incorporated, Chicago, Ill. Lock washer. 1631.416;

Biginary Corporated, Chicago, III. Lock Massignor to E. W. Corporated, Richard T., Wilmette, III., assignor to E. W. Pitcher, Sagianaw, Mich. Broiler. 1.642.071; Sept. 13. Hosking, Richard T., Wilmette, assignor to Shakeproof Lock Washer Company, Incorporated, Division of Hilmois Tool Works, Chicago, III. Lock washer for can screws. 1.645.50; Oct. 18. Lock washer for can screws. 1.646.80; Oct. 10. Cylindrical lock washer. 1.648.347; Nov. 8. Hosking, Robert, Jr., Berkley, Va. Can opener. 1.647.253; Feb. 8. W. Sag. Bridges, F., Firman, Tisdale,

Hosking, Robert, jr., Berkley, Va. Can opener. 1,617,253; Feb. 8.
Hoskins, Ben D. W. (See Bridges, F., Firman, Tisdale, and Hoskins.)

Hoskins, William, Chicago, Ill. Method of and compound for removing from the barrels of firearms the residues deposited by lead bullets and smokeless and semismokeless powder 1,614,129; Jan. 11. Hoskins, William, Chicago, Ill. Treating wood. 1,633,728; June 7. Hoskins, William, Chicago, Ill. Removing oil from oilbearing materials. 1,635,530; Aug. 9. Hoskins, William, Chicago, Ill. Induction furnace. Hoskins, William, Licago, Ill. Induction furnace. Hoskins, Zachary T., Chicago, Ill. Rail joint. 1,629,791; May 24. Hosko, Stephen, Bone, Ohlo, Fish net. 1,636,096; July 19. Hosler, Grace B. Reedsburg, Wis. Hot-dish lifter. 1,623,679; Apr. 6. Hoskins, Zachary T., Chicago, Ill. Rail joint. 1,629,791; May 24. Hosko, Stephen, Bone, Ohlo, Fish net. 1,636,096; July 12. Hosler, Grace B. Reedsburg, Wis. Hot-dish lifter. 1,623,679; Apr. 6. Hoskins, Chester C., Huntington Beach, Calif. Oil-well casing head. 1,623,010; Mar. 29. Hosmer, Chester C., Huntington Beach, Calif. Blow-out-preventer attachment for casing heads. 1,635,749; July 12.

off-preventer attachment for classing neates. 4,000,1 av. July 12.

Hosmer, Chester C., Huntington Beach, and S. E. Furman, Long Beach, Calif Oil-well plunger attachment and sucker-soc connection. 1,645,428; Oct. 11.

and sucker-soc Aportin, Tex. Recovering gasoline. 1,613,108; Jan. 4,0 orth, Tex. Recovering gasoline.

Hosmer, 613,108; Jan. 4.
Hosmer, Crville H., St. Paul, Minn. Valve. 1,628,140.
Hosmer, Orville H., St. Paul, Minn. Valve. 1,628,140.
Hossel, Fred, assignor of one-half to C. A. Winslow. Minneapolis, Minn. Toy horse device. 1,615,883; Jan. 25.
Hosself, Harry E. (See Rose, D. E., Pulliam, and Hosselfd.)
Hosstelfd. Hosselfd. Ho

tetter, Fritz, Bern, Switzerland. Peparation of Hostetter, Fritz, Bern, Switzerland. Peparation of Hostettler, Holland, Calif. Folding table. 1,619,124; Mar. J. Chicago, Ill. Suspending device for lighting fixtures. 1,630,745; May 31. Hotchien, Joseph, San Francisco, Calif. Illuminated sign. 1,638,785; June 28. Hoth, Calif. Hothers, H

Hotsenpiller, William L. (See Fleshner, Lawrence P.,

assignor.) Hotstream Heater Company, The. (See Mendelson, Louis R., assignor.)
Hotstream Heater Company, The. (See Morrow, Clarence

Hotsiream Heater Company, The. (See Morrow, Clarence H., assignor.)
Hott, Ion V. K., assignor to The Joyce-Cridland Company, Dayton, Ohio. Lifting jack. 1,653,179; Dec. 20.
Hottel, Louis W., Bres. Rev., 1653,179; Dec. 20.
Hottel, Louis W., Erie, Pa., Forming plastic articles. 1,652,940; Dec. 13.
Hotter, Edward, Chicago, Ill. Die-casting apparatus. 1,622,788; Mar. 29.
Hotze, Charles, St. Louis, Mo., Golf bag. 1,617,115; Peb. 8.

Houch, Jay W., Minneapolis, Minn. Heat regulator. 1,688,582; Aug. 9.

1000K, George C., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Pad for ironing and pressing machines. 1,628,447; May 10.

1000K, Loren D., Toledo, Ohio. Arm rest. 1,620,810; Mar. 13.

Houde Engineering Corporation. (See Shultz, A. B., and

Houde Engineering Corporation. (See Shultz, A. B., and Casper, assignors.)
Hough, Arthur, Summit, N. J., assignor to The Durliron Company, Inc., New York, N. Y. Method of and apparatus for making nitric acid. 1,649,901; Nov. 22. Hough, Asel C., assignor to Hough Shade Corporation, Janesville, Wiss. Woven slat shade. 1,643,951; Oct. 18. Hough, Clinton W., Boonville, assignor to Wired Radio, Inc., New York, N. Y. Piezo-electric crystal apparatus, 1049,122. Medical Medical Company of the Property of the Property of the Radio, Inc., New York, N. Y. Directing light rays upon light-sensitive elements. 1,646,292; Oct. 18. Hough Shade Corporation. (See Hough, Azel C., assignor.)

signor.)
Houghton, Carl R., assignor to The Connersville Blower
Co., Connersville, Ind. Pressure-temperature compen-sator and slip integrator for meters. 1,621,203;
Mar. 15.

Houlis, Louis D., Dallas, Tex. Gas burner. 1,653,285; Dec. 20.

House, Arthur C., Weldon, N. C., and G. B. Scheffey, Weehawken, N. J. Frame for cloth boards and similar articles. 1,616,898; Feb. 8.

House, Granies M., Bloomington, Ill. Draft sill. House, Ernest W., Birmingham, Ala. Radio receiving circuits. 1,643,016; Sept. 20.

House, Ernest W., Birmingham, Ala. Radio receiving circuits. 1,643,016; Sept. 20.

House, Ernest W., Elizabeth, N. J. Supporting rack. 1,621,410; Mar. 15.

House, Henry A.. Bridgeport, Conn. Link beiting. The Conn. Link beiting. The Conn. And Co

appliance 1.637,599; Aug. 2.

House, Samuel D., deccased, Mount Pleasant, Tenn, M. House, administratrix. Permutation lock. 1,633,244; Sept. 20.

House, Samuel C., aesignor of one-third to B. Small and Missel, Sept. 20.

House, Samuel C., aesignor of one-third to B. Small and Toul tanks. 1,652,011; Dec. 6.

Housel, Standard C., assignor of one-third to B. Small and Toul tanks. 1,652,011; Dec. 6.

Housel, Fred L., Brooklyn, N. Y. Appliance for cooking vessels. 1,622,587; Mar. 29.

Houseman, Harold E., assignor to Standard-Trump Brothers Machine Company, Wilmington Del. Circular-knitting machine. 1,631,817; June 7.

Houseman, Harold E., assignor to Standard-Trump Brothers Machine Company, Wilmington, Del. Circular-knitting machine. 1,634,817; June 7.

Houser, Charles B., Detroit, Mich. Division board for Houser, Orville E., Chillicothe, Ohio, Valve-seat-reconditioning machine. 1,634,219; Dec. 27.

Housh Company, The. (See Eburne, Robert, assignor.) Houskeeper, William G., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,635,999; July 19.

Houskeeper, William G., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,645,068; Aug. 30.

Houskeeper, William G., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,645,068; Aug. 30.

Houskeeper, William G., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,647,994; Nov. 8.

Houskeeper, William G., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,647,994; Nov. 8.

Houskeeper, William G., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,647,994; Nov. 8.

Houskeeper, William G., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,647,994; Nov. 8.

Houskeeper, William G., assignor to Goodman Manufacturing Company, John S., assignor to Goodman Manufacturing

Houston, Harold A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Truck structure. 1,637,342; Aug. 2.

Houston, Harold A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radial Houston, English Marchael Review of Manufacturing Company. Radial Houston, English Marchael Review of Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Welded spring structure. 1,619,346; Mar. 1.

Houston, Madeline B., Evanston, Ill. Envelope shield for crib beds. 1,620,660; Mar. 15.

Houston, Madeline B., Evanston, Ill. Envelope shield for crib beds. 1,620,660; Mar. 15.

Houston, William, Haverbill, Mass. Ple-plate attach-Houts. John R., McLean, Va., Scraper-edge turner. 1,633,193; June 21.

Houtz, Robert L. (See Hall, T., and Houtz.)

Houze, Leon J., Point Marion, Pa. Glass-gathering ring. 1,628,465; May 10.

Hovda, Oliver H., Billings, Mont. Nail-sorting device. 1,634,192; June 28.

Hovden, Olav, Monterey, Calif. Fish head and entrails removing means. 1,642,442; Sept. 13.

Hovden, Olav, Monterey, Calif. Fish-positioning means. 1,642,443; Sept. 13.

Hovell, Aldert A., executor. (See Cary, Spencer C.)

Hovell, Prank. (See Barth, E. J., and Hovell.)

Hover, John M. (See Conklin, W. F., Hopkins, and Hover.)

Hover, Hover

Hover, John M. (See Conkin, W. F., Hopkins, and Hover, Joren, assignor of one-half to B. Hopkins, Saginaw, Mich. Cultivator attachment for tractors. 1,620,039; Mar. S. Hovand, J. Warden, S. Hovand, J. Lander, J. Lander,

Chicago, Ill. Ignition-controlling apparatus. 1,644,591; Oct. 4.
Howard, Andrew. (See Ludwin, J., and Howard, Illoward, Burton J., and C. H. Stephenson, Washington, D. C., assignors to the Government and the People of the Comparation of the Comparation of Maggots from Blueberries. 1,615,700; Jan. 23; Howard, Charles H., Saugus, Mass., assignor by mesne assignments, to American Re-enforced Paper Company, Attleboro, Mass. Sealing device. 1,652,861; Dec. 13. Howard, Charles R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Pattern-chain guide for looms. 1,653,209; Dec. 20.
1,631,416; June J., Kansas City, Mo. Traffic gate. 1604,1416; June J., Howard, Frank A., Chicago, Ill. Carburetor. 1,649,531; Nov. 15. Howard, Frank A., Westfield, N. J., assignor to Standard Development Company. Operating water-gas generators. 1,634,833; July 5. Howard, Frank A., Wew York, N. Y., assignor to Standard Development Company. Distillation of hydrocarbon oils. 1,649,552; Nov. 15. Howard, Frank A., Elizabeth, N. J., assignor to Standard Development Company. Power transmission. 1,653,360; Howard, Frank A., and N. E. Loomis, Elizabeth, N. J., assignores to Standard Development Company. Power transmission. 1,653,360; Howard, Frank A., and N. E. Loomis, Elizabeth, N. J., assignores to Standard Development Company. Power transmission. 1,653,360; Howard, Frank A., and N. E. Loomis, Elizabeth, N. J., assignores to Standard Development Company. Power transmission. 1,653,360; Howard, Frank A., and N. E. Loomis, Elizabeth, N. J., assignores to Standard Development Company. Power transmission. 1,653,360; Howard, Frank A., and N. E. Loomis, Elizabeth, N. J., assignores to Standard Development Company. Power transmission. 1,653,360; Howard, Frank A., and N. E. Loomis, Elizabeth, N. J., assignores to Standard Development Company. Power transmission. 1,653,360; Howard, Frank A., and N. E. Loomis, Elizabeth, N. J., assignores to Standard Development Company. Company. Company.

Development Company. Power transmission. 1,653,360; Dec. 20; Fank A., and N. E. Loomis. Elizabeth, N. J., assignors to Standard Development Company. Consultant Company. Consultant Company. Consultant Company. Consultant Company. Distribution of the Company. Consultant Company. Distribution of the Company. Consultant Company. Consultant Company. Consultant Company. Consultant Company. New York, N. Y. Controlling combustion in internal-combustion engines. 1,623,053; Apr. S. Controlling combustion in internal-combustion. Apr. Controlling Combustion. Apr. Controlling Control

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Howard, George E., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparents for forming sheet glass, 1,616,370; Feb. 1. Howard, George E., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for forming sheet glass. 1,616,371; Feb. 1. Howard, George E., Butler, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Method and apparatus for feeding molten glass. 1,617,588; Feb. 15. Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Leer. 1,618,659; Feb. 22.

Empire Company, Hartford, Conn. Leer. 1,618,659; Feb. 22.
Howard, George E., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. 1,618,660; Feb. 22.
Howard, George E., Butler, Pa., assignor to Hartford-Conn. Method and apparatus for feeding molten glass. 1,620,207; Mar. 8.
Howard, George E., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Method and apparatus for blowing glass parisons. 4630,770; Hartford. Conn. English Company, Hartford, Conn. Regulating glass feeders. 1,636,564; July 19.
Howard, George B., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for glass feeders. 1,636,564; July 19.
Howard, George B., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for forming sheet glass. 1,646,654; Oct. 11.
Howard, Henry, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Manufacture of ammonium nitrate. 1,625,807; Apr. 26.
Howard, Henry, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Manufacture of ammonium nitrate. 1,625,807; Apr. 26.
Howard, Henry, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Manufacture of ammonium nitrate. 1,625,807; Apr. 26.
Howard, Henry, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Manufacture of ammonium nitrate, 1,625,807; Apr. 26.
Howard, Henry, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Manufacture of ammonium nearly Cleveland, Ohio. Manufacture of

Howard, Henry, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Purifying cadmium. 1,644,431; Oct. 4.
Howard, Henry, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Process and apparatus for producing a gas of uniform sulphur-dioxide content. 1,650,358; Nov. 22.
Howard, Henry, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Making ammonium chlodides. 1,654,648; Gewortobis, Edson L., assignor, Howard, John A., Johnson City, N. Y. Manufacture of rubber soles and analogous articles. 1,654,001; Dec. 27.
Howard, John C. (See Bray, Mark, assignor.)

Dec. 27.

Howard, John C. (See Bray, Mark, assignor.)

Howard, Lemuel F., Edgewood Borough, assignor to The

Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,624,248; Apr. 12.

Howard, Lemuel F., Edgewood Borough, assignor to The

Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,630,531; May 31.

Howard, Nelson F., La Fayette, Ind. Fence-tightening

post. 1,635,416; July 12.

Howard, Oliver, O., et al. (See Andresen, Halvor, as
signor.)

vard, o... ignor.) Rauland

post. 1,635,416; July 12.

Roward, Oliver, O., et al. (See Andresen, Halvor, assignor.)

Roward, Rauland H., Omaha, Nebr. Medical truss.

1,044,835; Oct. R., Milton, assignor to Pneumatic Scale
Corporation, Ltd., Norfolk Downs, Mass. Cartonfeeding machine. 1,638,390; Aug. 9.

Howard, William B., assignor to Sattley Company, Detroit, Mich. Coln-wrapper crimper. 1,629,625; May 24.

Howard, William N., Los Angeles, Calif. Index device.
1,616,624; Feb. 8.

Howard, William R., Los Angeles, Calif. Index device.
1,616,624; Feb. 8.

Howard, William R., Washington, D. C., assignor to Uniward, William R., Washington, D. C., assignor to Uniman apparatus for treating hydrocarbons. 1,627,436;
May 8.

Howarth, Harry A. S., assignor, by mesne assignments,
to Kingsbury Machine Works, Inc., Fhiladelphia, Pa.

Kongsbury Machine Works, Inc., Fhiladelphia, Pa.

Howarth, Harry A. S., who orieans, La. Oll-refining
dust from and settling fur, hair, and the like material.
1,626,339; Apr. 26.

Howcott, Harley A., W. New Orieans, La. Oll-refining
dust from and settling fur, hair, and the like material.
1,626,339; Apr. 26.

Howe, James F., Worcester, Mass, assignor of one-half to
American Steel and Wire Company of New Jersey.

Howe, James F., Worcester, Mass, assignor to The
American Steel and Wire Company of New Jersey.

Howe, James F., Worcester, Mass, assignor to The
American Steel and Wire Company of New Jersey.

Howe, James F., Worcester, Mass, assignor to The
American Steel and Wire Company of New Jersey.

Howe, James F., Worcester, Mass, assignor to The
American Steel and Wire Company, Cleveland, Ohio.

Bearing mechanism. 1,636,636; July 19.

Howe, James M., Leveland Heights, assignor to The
Morray Manufacturing, Company, Cleveland, Ohio.

Bearing mechanism. 1,640,366; Aug. 30.

Howe, James M., Cleveiand Heights, assignor to The Murray Products Company, Cleveiand, Ohio. Juvenile vehicle. 1,640,537; Aug. 30.
Hole. 1,640,537; Aug. 30.
Howe, Raiph A., Washington, D. C. Needle, Dumping mechanism for vehicles. 1,640,358; Aug. 30.
Howe, Raiph A., Washington, D. C. Needle. 1,620,550; Mar. 8.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Intermittent Inductive train control. 1,619,730; Mar. 1.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Intermittent Inductive train control. 1,619,730; Mar. 1.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,628,319; May 10.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Train control. 1,628,319; May 10.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Skatte machine. 1,636,577; Jlowe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Washing-machine cylinder. 1,636,578; July 12.
Howe, Winthrop K., assignor, by mesne assignments, to General Railway Signal Company, Rochester, N. Y. Washing-machine cylinder. 1,636,578; July 12.
Howe, Winthrop K., assignor, by mesne assignments, to General Railway Signal Company, Rochester, N. Y. Aug. 30, Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Rochester, N. Y. Aug. 30, Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Rochester, N. Y. Aug. 30, Howe, Winthrop K., Rochester, Sasignor to General Railway Signal Company, Rochester, N. Y. Aug. 30, Howe, Winthrop K., Rochester, Sasignor to General Railway Signal Company, Rochester, N. Y. Aug. 30, Howe, Winthrop K., Rochester, Sasignor to General Railway Signal Company, Rochester, N. Y. Aug. 30, Howe, Winthrop K., Rochester, Sasignor to General Railway Signal Company, Rochester, N. Y. Aug. 30, Howe, Winthrop K., Rochester, Sasignor to General Railway Signal Company, Rochester, N. Y. Aug. 30, Howe, Winthrop K., Rochester, Sasigno

General Railway Signal Company, Rochester, N. Y. Clothea wringer for washing machines. 1,640,773: 16400,773: 1640,773: 1640,773: 1640,773: 1640,773: 1640,773: 1640,77

pany, Chicago, 111. Film sprocket game. 1,622,431; Apr. 12.

Howell, Albert S., assignor to The Bell & Howell Company, Chicago, III. Motion-picture projecting machine. 1,623,4732, Apr. 12.

1,624,733, Apr. 12.

1,625,668; May 17.

Howell, Albert S., assignor to The Bell & Howell Company, Chicago, III. Filat spiral power spring. 1,628,668; May 17.

Howell, Albert S., assignor to The Bell & Howell Company, Chicago, III. Motion-picture mechanism. 1,633,101; June 21.

Howell, Albert S., assignor to The Bell & Howell Company, Chicago, III. Motion-picture mechanism. 1,635,373; Aug. 2.

Howell, Albert S., assignor to Henry Howell & Company Limited, London, England. Smoker's companion. 1,622,196; May. 22.

Howell, Bruffs, and G. M. Fast, Haviland, Ohlo. Cultivator. 1,647,700; Nov. 1.

Howell, Charles C., Kisbey, Saskatchewan, Canada Stubble burner. 1,619,516; May. 1.

Howell, Francis, Decatur, Ind. Automatic mechanically-controlled power-driven cash drawer. 1,654,045; Dec. 27.

Dec. 27.

Howell, Frank B., Buffalo, N. X., assignor to American Radiator Company, Chicago, III. Boller. 1,633,666; June 28.

Howell, Frank B., Buffalo, N. X., assignor to American Radiator Company, Chicago, III. Boller. 1,633,667; June 28.

Howell, Frank B., Buffalo, N. X., assignor to American Radiator Company, Chicago, III. Boller. 1,651,526; Dec. 8.

Radiator Company, Chicago, H. Boner, Avenue, Dec. 6.
Howell, Fred E. (See Karling, C. A., and Howell, Howell, Gorge M., Northumberland, Pa. Automatic control for motor vehicles. 1,623,921; Apr. 5.
Howell, Harry H., Hope, Ark. Clip. 1,616,625; Feb. 8.
Howell, Henry, & Company Limited. (See Howell, Bernard C., assignor C.
Howell, John E., and C. E. Sapp, Sacramento, Calif. Retreading moid. 1,641,490; Sept. 6.
Howell, Manuel W., Monroe, La. Firearm, 1,615,385; Jan. 25.

Jan. 25.
Howell, Martin L., Freedom. Pa. Brake-chain-operating means. 1.637,151; July 26.
Howell, Wallace H., Jr., Willsboro, N. Y. Method and apparatus for producing paper pulp. 1,645,754; Oct. 18.
Howell, Willie A., Jayes, Miss. Hand grip. 1,643,891; Sept. 27.
Howells, Frank E., and L. L. Leach, Steelton, assignors to Bethlehem Steel Company, Bethlehem, Pa. Device for tilting rails. 1,643,714; Sept. 27.

Howells, Morgan, assignor to Icy-O Metal Products Com-pany, Atlanta, Ga. Dispensing cabinet. 1,613,514; Hower, John B., and J. V. Zeller, assignors to The Akron-Selle Company, Akron, Obio. Liquid gauge. 1,648,731; Nov. 8.

Nov. 8.

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Howes, S. M., Compaby, the Signor, J. Howeth, George O., Morattico, assignor of one-half to W. D. Newbill. Lancaster County, Va. Transmission gear for auto vehicles. 1,642.609; Sept. 13. Howey, John V., Munson, Alberta, Canada. Pencil. 1,642.609; Republic, Co., Norristiown, P. Rantting machine. 1,643.674; July 5. Howie, Kenneth, assignor to Wildman Mfg. Co., Norristown, P.a. Knitting machine. 1,643.674; July 5. Howie, Kenneth, assignor to Wildman Mfg. Co., Norristown, P.a. Spring-beard knitting machine. 1,652.308; Julee, 13.

town, Pa. Spring-beard knitting machine. 1,652,808; Dec. 13.

1 Med. 15 Mort L. Colicago, Ill. Rotary-pipe coupling. 1 Med. 15 Mort L. Colicago, Ill. Rotary-pipe coupling. 1 Mewith, George D., Ottawa, Ontario, Canada. Convertible vehicle seat. 1,626,340; Apr. 26.

Howitz, Alfred A., assignor to Sun Shipbuilding & Dry Dock Company, Chester, Pa. Retarding mechanism for Dock Company, Chester, Pa. Retarding mechanism for Jowach and Carly W. Seignov Wahl. Combination 12.

Howland, Jarry W., assignor to Electric Hand Saw Company, Seattle, Wash. Machine for sawing and boring on a plarality of angles. 1,613,431; Peb. 26.

1,644,592; Oct. L., Mason City, Iowa. Golf bag. 1,644,592; Oct. A. Moline, Ill. Automatic self-loading hoist. 1,622,589; Mar. 29.

Howser, Curtis L., Detroit, Mich., assignor to Craig Damper Regula (120, 13), Hydraulie engine for company of the Company of Company (120, 13).

Howser, Christopher L. (See Brogdon, K. M., and Howser.)

Howser, Walter M., Hammond, Ind. Valve reseater. 1,616,498; Feb. 8. Hoxie, Charles A., Schenectady, N. Y., assignor to General Electric Company. Speed regulator. 1,618,757: Feb. 22.

erai Electric Company. Speed regulator. 1,618,757: Feb. 22.

Hoxie, Cherles A., Schenectady, N. Y., assignor to General Electric Company. Electric clock system. 1,622,588; Mar. 29.

Hoxie, Charles A., Schenectady, N. Y., assignor to General Electric Company. Photographic-developing apparatus. 1,623,788; Apr. 5.

Hoxie, Charles A., Schenectady, N. Y., assignor to General Electric Company. Production of phonographic records. 1,637,903; Aug. 2.

Hoxie, Charles A., Schenectady, N. Y., assignor to General Electric Company. Narrow light aperture. 1,646,249; Oct. 18.

Hoxie, Charles A., Schenectady, N. Y., assignor to General Electric Company. Method and apparatus for the transfer of the Company. Method and apparatus for the transfer of the Company. Signaling apparatus. 1,653,099; Dec. 20.

Hoxie, William D., Westerly, R. J., assignor to The Hoxie, William D., Westerly, R. J., assignor to The

1,655,099; Dec. 20.

Hoxie, William D., Westerly, R. J., assignor to The Babeock & Wilcox Company, Bayonne, N. J. Watertube bolict. 1,638,960; July 26.

Hoxton, Llewellyn G., University, Va. Braking engine-driven vehicles. 1,620,100; Mar. 8.

Hoy, Henry W. S., Dunedin, New Zealand, Gramophone stand or similar article. Des. 73,081; July 19.

Hoy, Henry W. S., Dunedin, New Zealand, Combination Library, W. S., Dunedin, New Zealand, Conditionation of the Company of the Company of the Company of the Company of the Company, Midland, Mitch. Working light metals. 1,647,095; Oct. 25.

Oct. 25. Hoyle Hoyle & Co. Limited. (See Flewitt, Edwin J., assignor.)

signor.)

Hoyle, John L., New Orleans, La. Electric-meter cover.
1,631,684; June 7.
Hoyler, Willard E., Buffalo, N. Y. Circuit-protecting system.
1,644,525; Oct. 4.
Hoyler, Willard E., Buffalo, N. Y. Controlling switch.
Hoyler, Willard E., Buffalo, N. Y. Creuit-protecting system.
1,644,527; Oct. 4.
Hoyne, Christopher R., New York, N. Y. Diaper.
1,649,583; Nov. 22.
Hoyse, St. Chicago, Ill. Hydraulic engine.
Hoyt, Arthur Gr. Z.
Hoyt, Arthur Gr. Z.
Hoyt, Arthur Chicago, H., New York, N. Y.
Hoyt, Hoyter Company, Use Hoyt, Robert C., assignor.)
Hoyt, John C. (See Au, Carl H., assignor.)
Hoyt, John C. (See Au, Carl H., assignor.)
Hoyt, Los Angeles, Calif. Water-heater coil. 1,614,242;
Jan. 11.

Hoz, Heinrich, W. Bernoulli, and A. Link, assignors to Society T. R. Geigy S. A., Basel, Switzerland. Dyeing and printing acetyl-cellulose. 1,613,228; Jan. J. Hoz, Heinrich, W. Bernoulli, and A. Link, assignors to the Firm J. R. Geigy S. A. Basel, Switzerland. Dyeing and printing acetyl cellulose. 1,650,275; Nov. 22. Hozlak, Anthony, Nanticoke, Pa. Submarine vessel. 1,647,866; Nov. 1, assignor to Le Febure Ledger Company, Tunke, Frank J., assignor to Le Febure Ledger Company, April 2, April 2, Nov. 1, Nov

Apr. 5.

Hubbard, Arthur. (See McEvoy, W. L., and Hubbard.)

Hubbard, Cecil R., Newark, N. Y., assignor to The Mechanical Rubber Company, Cleveland, Ohio. Machine

for cutting annular articles. 1,647,358; Nov. 1.

Hubbard, Cecil R., Newark, assignor to The Garlock Packlog Company, Falmyra, N. Y. Packing. 1,651,277;

Nov. 28.

ing Company, Paimyra, N. Y. Packing, 1,001,271; Nov. 29.

Hubbard, Clayton M., Elk Mound, Wis. Strainer-cloth fastener. 1,618,433; Feb. 22.

Hubbard, Edward L., Oakland, Calif. Golf club. Blubard, Edward L., Oakland, Calif. Golf club. Elwhord, Elmer A.F. Flagstaff, Arlz. Flexible spotter for repairing tire casings. 1,632,651; June 14. Hubbard, Francis A., Wyoming, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Determining inequalities in wall thickness of tubes. 1,632,076; June 14. Hubbard, Francis A., West Englewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. System for determining the direction of propaga-fix. System for determining the direction of propaga-fix. System for determining the direction of propaga-fix. New York, N. Y. Direction finding and indicating system, 1,645,810; Oct. 18.

Hubbard, Franklin G., assignor to New-Clog Products, Inc., Bridgeport, Conn. Stapling machine. 1,654,170; Dec. 27.

Hubbard, Henry E. (See Duncan, J. S., and Hubbard.)

Dec. 27.

Hubbard, Henry E., (See Duncan, J. S., and Hubbard.)

Hubbard, Henry E., assignor to Addressograph Company,

Chicago, Ill. Index tab. 1,829,033; May 17.

Hubbard, Lemott D., Utica, N. Y. Culinary utensil.

1,627,285; May 3. ssignor of one-fourth to B. Martin

and B. G. Oneal, Wichtla Falls, Tex. Reversible rotary

and B. G. Oneal, Wichtla Falls, Tex. Reversible rotary

Hubbard, 1,1646,635; Oct. 25.

Hubbard, Chime Company. (See Hubbard, William E.,

assigno.)

assignor.)

assignor.)
Hubbard, Moses G., Chatham, N. J. Air valve.
1,614,613; Jan. 18.
Hubbard, Moses G., Chatham, N. J. Thermostatic valve.
1,638,410; June 21.
1,638,410; June 21.
Hubbard, Moses G., Chatham, N. J. Pressure regulator.
1,635,274; July 12.
Hubbard, Moses G., Chatham, N. J. Fluid valve.
1,647,539; Nov. 1.
Hubbard, Morman, Elizabeth, N. J., assignor to The Bab.
cock & Wilcox Company, Bayonne, N. J. Method of
and apparatus for spraying liquids. 1,650,128;
Hubbard William Hacklang, N. V. assignor to Intela-

and apparatus for spraying inquids. 1,600,128; Nov. 22.
Hubbard, William, Herkimer, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. 11 Heel-Shoe Machinery Corporation, Paterson, N. 11 Heel-Shoe Machine Company, San Francisco, Califf. Pumping system. 1,619,474; Mar. 1.
Hubbard, William E., assignor to Hubbard Machine Company, San Francisco, Califf. Pumping system. Hubbard Machine Company, San Francisco, Califf. Pumping system. Hubberl, Aired W., assignor to Hubbard Machine Company, Bartlesville, Okla. Internal-combustion engine. 1,682,478; June 14.
Hubbell, Clarence Z. (See Kelly, W. E., and Hubbell, Hubberl, Harry C., assignor to Wice Effectic Company, West Springfield Mass. Ignition system for burners. Hubbell, Harry, Fridgeport, Conn. Canopy switch. 1,617,521; Feb. 15.
Hubbell, Harvey, Bridgeport, Conn. Double T cap. 1,1617,810; Feb. 15.

Hubbell, Harvey, Bridgeport, Conn. Candle pull socket.

Hubbell, Harvey, Bridgeport, Conn. Candle pull socket.

Hubbell, Socket.

Hubbell, Grander, C., Cincinnati, Ohio, Tractor.
1,633,743; June 28.

Hubbell, Harvey, Incorporated. (See Newton, William J., assignor.)

assignor.)

Rubbell, Jay H. (See Kovanda, L. P., and Hubbell.)

Rubbel, Grover C., Bonners Ferry, Idaho. Arc-welding
machine. I,628,148; May 10.

Rubener, Joseph F., Grantwood, N. J. Electric-cord
supporting device. I,636,366; July 19.

Rubener, William A., assignor to Diamond Expansion
J. (23,789; Apr. 5.

Ruber, Charles J., Baltimore, Md. Furnace-arch and
coking-shelf structure. I,627,741; May 10.

Ruber, Frank, Middletown, Ind. Dispensing apparatus.
I,633,634; Aug. 16.

Ruber, Frederick W., Riverside, Calif. Making table salt.

Ruber, Frederick W., Riverside, Calif. Well cementing.
I,647,003; Oct. 25.

Huber, Fritz, Mannheim, assignor, by mesne assignments to Heinrich Lanz Aktiengesellschaft, Mannheim, Ba-Harden (1988), 1884-1813, Apr. 128. Sam for sewing futber, Gustav, Stuttgart, Germany. Production of overseems, 1,612,819, Jan. 4. Huber, Gustav, Stuttgart, Germany. Production of overseems, 1,612,820, Jan. 4. Huber, Gustav, Stuttgart, Germany. Sewing machine. 1,612,822; Jan. 4. Germany. Sewing machine. 1,612,821; Jan. 4. H. Schenectady, N. Y., assignor to German Electric Company. Electric switch. 1,645.055; Oct. 11.

Huber, Johannes S., assignor to Harnischfeger Corpora-tion, Milwaukee, Wis. Power shovel. 1,625,855; Apr. 26. Apr. 26.

Huber, Louis E., Phoenix, Ariz. Direction signal.
1,642,995; Sept. 20.

Huber, Matthew W., Chicago, Ill., assignor to Motor
Wheel Corporation, Lansing, Mich. Running board.
1,637,570; Aug. 2.

Huber, Walter, Pforzheim, Germany. Combined timeplece and support. Des. 71,973; Feb. 8.

Huber, William, assignor of one-half to O. W. Meyer,
Bentley, N. Dak. Whipping or prodding device.
1,634,193; June 28.

Huberich, Charles H., et al. (See Wendler, Alex., assignor.)

signor.)
Huberty, August, Canton, Ohio. Lawn trimmer.
1,632,479; June 14.
Hubley Manufacturing Co., The. (See Hartman, John H.,
assignor.)
Huboux, Magloire, Montreal, Quebec, Canada. Broomsupporting device. 1,652,243; Dec. 13.
Huck Axle Corporation. (See Huck, Louis C., assignor.)
Huck Axle Corporation. (See Huck, Lo. C., and Twight,
assignors. assignors.)

Huck, Louis C., assignor to Huck Axle Corporation, Chicago, Ill. Final drive for motor trucks. 1,636,819; uck, cago, In. July 26. Louis

uck, Louis C., assignor to Huck Axle Corporation, Chicago, Ill. Final drive for motor trucks. 1,636,820; July 26. Huck

Huck, Joseph III. Final drive for motor trucks. 1,000,020, 51112, 68.
Huck, Louis C., and M. Twight, assignors to Huck Axie Corporation, Chicago, III. Brake for automobile vehicles. 1,652,479; Dec. 13.
Huck, Theodore, and T. Meaney, Brooklyn, N. Y., assignors to Home-O-Lite Co., Inc., Lamp shade. Rel 6,560; Feb. 22.
Huck, William, assignor to R. Hoe & Co. Inc., New York, N. Y. Mechanical movement for molding presses. N. Y. Mechanical movement for molding presses. Huckel, John Fr. assignor to F. Harvey, Kansas City, Mo. Luch-counter stool. 1,626,832; May 3.
Huckins, Charles W., Seattle, Wash. Toy. 1,649,533; Nov. 15.
Huckes, William, Camden Town, London, assignor of one-

Nov. 15.

Hucks, William, Camden Town, London, assignor of one-half to Sodastream Limited, Camden Town, England, Apparatus for aerating liquids. 1,623,011; Mar. 29.

Hucks, William, Camden Town, assignor of one-half to Edward to the Camber of the Camber

Hudgens, Albert C., assignor to Loom Lay Patch Company, Greenwood, S. C. Checkstrap holder. 1,620,463;

Hudson, Alexander, Round Lake, Minn. Phonograph cablnet. Des. 73,229; Aug. 9. Hudson, Armond D., Keyapaha, and E. L. Smith, as-signors of one fourth to W. A. Tibbles, Miliboro, and The Company of the Company of the Company of the Involvement. 1,633,52; July 10, 12, S. Dak. Mechanical Hudson, Augustus H. (See North, C. E. H., and Hud-son.)

Hudson, C. R. (See Campbell, Howard D., assignor.)

Hudson, Charles B., Akron, and H. C. Bostwick, Kenmore, assignors to The Akron Standard Mold Company, Akron, Ohio, Vulcanizer, 1,644,433; Oct. 4.

Hudson, Chaule S., Trenton, N. J., assignor to Standard Development Company, Glazing composition, 1,646,731; Oct. 25.

Hudson Coal Company, The. (See Cook, T. R., and Smith, assignors.)
Hudson, Finn S., Kansas City, Mo. Automobile driving mechanism. 1,629,707; May 24.
Hudson, Hayard F., Wichita, Kans. Radiator protector. 1,642,025; Sept. 20.
Hudson Heating Systems, Inc. (See Hudson, Walter E.,

L.042.3220; Sept. 20.
Hudson Heating Systems, Inc. (See Hudson, Walter E.,
Hudson Heating Systems, Inc. (See Shriner, Robert
L., assignor.)
Hudson, Herbert D., Minneapolis, Minn. Sprayer.
1.630.294; Aug. 16.
Hudson, James A., 16.7ger, Ter. Automatic switch for
Hudson, John, Brooklyn, N. Y. Air-circulating system for
cargo vessels. 1.623.922; Apr. 5.
Hudson, John W., Lynbrook, N. Y. Cooling internalcombustion engines. 1.612.868; Jan. 4.
Hudson, John W., Lynbrook, N. J. (1636.988; July 12.
Hudson Motor Car Company. (See Fekete, S. I., and
Baits, assignors.)
Hudson Motor Car Company. (See Groehn, Otto J., assignor.)

signor.) Hudson Motor Car Company. (See Koppin, Alfred O., assignor.)

Hudson Mo assignor.) Motor Car Company. (See Rumely, Vincent P.,

Hudson Motor Car Company. (See Rumely, Vincent P., assignor.)

Budson, Robert S., et al. (See Pangborn, Redmond H., assignor.)

Hudson, Walter C., Anderson, S. C., assignor to Draper Corporation, Hopedale, Mass. Thread-cutting temple of the property of t

slgnors.)
Hueller, Walter, Union, N. J. Needle mechanism.
1,645,532; Oct. 18.
Huelse, Hugo A. (See Smurr, Samuel P., assignor.)
Huelse, Hugo A. (See Smurr, Samuel P., assignor.)
Huelse, Hugo A. (See Smurr, Samuel P., assignor.)
States Gummed Paper Company, Chicago, Ill. Wiretying tool. 1,636,741; July 26.
Huenert, William See State, Letter, Chicago, Ill. Wiretying tool. 1,636,741; July 26.
Huenert, William See State, Letter, Alexan, assignor, Demoks Company, Chicago, Ill. Display case. 1,644,675; Oct. 11.
Hüertle, Karl, Akron, Ohio, assignor to Lutreshifftaur
Zeppelin Gesellschaft mit beschränkter Haftung, Friedrichshafen, Bodensee, Germany. Outer cover of rigid
alrships. 1,623,681; Apr. 5.
Huetteman, Gustay A., and F. A. Gercich, assignors to

airships. 1.623,681; Apr. 5.

Huetteman, Gustav A., and F. A. Gercich, assignors to Hammer-Bray Company. Oakland, Calif. Air-supplying device for gas burners. 1.650,339; Nov. 22.

Huetter, Andrew, assignor of forty-nine one-bundreds to K. Roelli and twenty-five one-bundreds to B. B. Huetter, Latton, Ohio, Tube-spilcing device. 1.610,565; Feb. 8.

Chio, Expansible core. 1.010,555; Feb. 8.

Ruetter, Elfriede B., et al. (See Huetter, Andrew, assignor.)

signor.)
Iluey, Harold I., assignor to Sayles Finishing Plants, Inc.,
Saylesville, R. I. Producing woollike effects on cotton fabrics. I,616,746; Feb. S.
Iluey, Harold I., assignor to Sayles Finishing Plants
Inc. Saylesville, R. I. Method of and apparatus for
feeding fabrics. I,645,501; Oct. 11.
Ituey, Henry. (See Sott, H. B., Widmont, and Huey.)
Ilut. Emmet. C. Walla Walla, Wash. Target.
Iluf. Exp. A., Mansfeld, Ohlo. Snubber. 1,643,016;
Sept. 20.

Huff. Floyd A., Mansfield, Ohio. Automobile seat. 1644 528; Oct. 4. Huff. Leslie R., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Constant-volume regulator. 1,016,450; Feb. 8.

Holo-tou; peo, 8:

Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Valve., 1,619,037: Mar. 8.

Huff, Lyman C., assignor to Universal Oil Products Company.

Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill.

Hydrocarbon oil conversion.

Huff. Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for drawing off gases and liquids from pressure systems. 1,652,171; Dec. 13. Huff. Omer, Fresno, Calif. Blow-off cock. 1,620,464; Huff. William D., assignor of one-half to J. A. Gorr, La Huff. William D., assignor of one-half to J. A. Gorr, La Huff. William H., Hamiet, N. C. Adjustable tie plate. 1,632,970; June 21.
Hufferd, George. (See Alden, H. W., and Hufferd, Hufferd, George H., Detroit, Mich., assignor to Thompson Produces Inc., Cleveland, Ohlo. Universal coupling. 1,643,017; Sept. 20.
Huffman, George H., Detroit, Mich., assignor to Thompson Products Inc., Cleveland, Ohlo. Universal coupling. 1,643,017; Sept. 20.
Huffman, Charles A., assignor to The Long-Bell Lumber Company, L. Daylew, Wash. Pacific coast type Company, L. Daylew, Wash. Pacific coast type Company, L. Daylew, Wash. Pacific coast type Huffman, Robert L., South Mami, Fla. Surveyor's instrument. 1,630,180; May 24.
Huffman, Robert L., South Mami, Fla. Surveyor's instrument. 1,630,180; May 24.
Huffman, Gilver C., assignor to The Dayton Pump & Manufacturing Company, Daylon, Ohlo. Pump or the like. 1,647,361; Nov. 11.
Huffmagle, Oliver C., assignor to The Daylon Pump & Manufacturing Company, Daylon, Ohlo. Pump or the like. 1,647,361; Nov. 11.
Huffmagle, Oliver C., assignor to The Daylon Pump of the Huffer, 1,647,361; Nov. 11.
Huffmagle, Oliver C., assignor to The Daylon Pump or the Auto-Meter Co., Inc., New York, N. Y. Electric indicating means. 1,617,287; Feb. S.
Hughes, Merion J., Upper Saddle River, N. J., assignor to Auto-Meter Co., Inc., New York, N. Y. Electric indicating means. 1,617,287; Feb. S.
Hughes, Benjamin, Montreal, Quebec, Canada. Shield for use with electrical appliances. 1,653,242; Juny 19.
Hughes, Renjamin, Montreal, Quebec, Canada. Shield for use with electrical appliances. 1,653,244; June 28.
Hughes, Hugh T., Cleveland, Ohlo, assignor, by mesne assignments, 1648,644; Nov. 8.
Hughes, George, Southampton, June 21.
Hughes, Hugh T., Cleveland, Ohlo

Highing, Landschaff, and the second of the s

thes, Paul C., Tulsa, Okla. Burner. thes, Paul C., Tulsa, Okla. Burner.

Hughes, Percy A. (See De La Concha, Tomas, assignor.)
Hughes, Ralph C. (See Gaunt, F., Reynolds, and

Hughes, Nobert S., Beaver, Pa., assignor to The Decal Products Company, East Liverpool, Ohlo. Decorated glassware and process. 1,647,362; Nov. 1. Hughes, Roland M., assignor of one-half to R. E. Ferguson, Clinton. S. C. Let-off mechanism for looms, 1,628,540; May 10. Hughes, Thomas F., Pawtucket, assignor to United Wire and Supply Collegny, Abburn, R. I. Molding a fin Into Hughes Thool Company. (See Fletcher, Harold W., assignor to Company. (See Scott, F. L., and Wellensiek, assignors.)

Hughes Tool Company. (See Scott, Floyd L., assignor.)
Hughes, William, Taunton, Mass., assignor to United Shoe
Machinery Corporation, Paterson, N. J. Connecter for
Hughes, William Cannot Canada Canada
Hughes, William S., 1619, 17, 1811. 17, 1811. 17, 1811. 1812. 1

Hulfaß, David S., Toronto, Ontario, Cainada. Printing-telegraph system with way stations. 1,653,047;
Dec. 20.
Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Electron device and method of operating. 1,628,466;
May 10.
Y., assignor to General Hull, Albert W., Schenectady, N. y. assignor to General Sept. 6.
Genpany. Regulating apparatus. 1,641,679;
Sept. 6.
Hull, Charles C. and M. R., Connersville, Ind. Automobile top. 1,637,112; July 26.
Bull, Cloice B., Cleveland, Ohio. Brake for airplanes. 1,641,679;
Sept. 6.
Mull, Edward T., New York, N. Y., Sbeed-controlling and Hull.
Jull, Edward T., New York, N. Y., Sbeed-controlling and

and Hull.

Hull, Edward T., New York, N. Y. Speed-controlling apparatus for internal-combustion engines. 1,620,763; Mar. 15.

Hull, Edward T., New York, N. Y. Speed-controlling apparatus for engines. 1,620,764; Mar. 15.

Hull, Foster J. (See Fairchild, C. N., and Hull).

Hull, George J., assignor to Equipment Specialties Co., Tefrigerator cars. 1,618,830; Jan. 11.

Hull, George A., assignor to Equipment Specialties Co., Chicago, Ill. Car-door-latching device. 1,626,834; May 3.

Hull, George A., assignor to Equipment Specialties Co., Chicago, Ill. Car-door-latching device. 1,626,834; May 3.

May 3.

Hull, George A., assignor to Equipment Specialties Co., Chicago, Ill. Ventilating door for the hatchways of refrigerator cars. 1,637,861; Ang. 2.

Hull, George A., assignor to Equipment Specialties Co., Chicago, Ill. Air circulating means for refrigerator cars. 1,643,892; Sept. 27.

Hull, Harold S., New York, N. Y. Table cover or similar varieties. Proceedings of the cover of similar article. Des. 76,083; July 19.

Hull, Harold S., New York, N. Y. Table cover or similar article. Des. 76,083; July 19.

Hull, Harry B., Ollton, assignor of one-half to C. S. Goodall, Yale, Okla. Fan-belt pulley. 1,637,773; Aug. 2.

Aug. 2.

Hull, Harry B., assignor to Delco-Light Company, Dayton, Ohio. Refrigeraing apparatus. 1.648.178; Nov. 8.

Hull, Harry E., Washington, D. C. Motor-vehicle control pedal. 1.619.421; Mar. 1.

Hull, John I., Schenectady, N. Y., assignor to General Electric Company, System of speed control for induction motors. 1.619.673; Mar. 1.

Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Alternating-current motor. Beletric Company. Alternating-current motor. 1.619.674.

Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Power system. 1.635.788; July 12.

Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Self-excited induction motor. 1.637.040; July 26.

Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Induction motor. 1,637.041; July 26.

Hull, John Electric July 26.

Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Brush-shifting arrangement for dy-namo-electric machines. 1,648,688; Nov. 8.

Hull, John W., assignor of one-half to J. Riggs, San Antonio, Tex. Liquid-level gauge. 1,642,656; Sept. 13. Hull, Joseph, assignor of one-half to William Spiers, Limited, Leicester, England. Knitting-machine needle. 1,634,423; July 5. Hull, Lewis M., Mountain Lakes, and R. W. Seabury, as-signors to Radio Frequency Luboratories, Incorporated, Boonton, N. J. Inductive coupling device. 1,625,723; Apr. 19.

Apr. 19.
Apr. 19.
Apr. 19.
Apr. 19.
Apr. 19.
Hull, Matthew R. (See Hull, Charles C. and M. R.)
Hull, Matthew R., assignor to Rex Manufacturing Company, Connersville, Ind. Automobile top. Re16,581;
Mar. 29.

Hull, Matthew R., assignor to Rex Manufacturing Company, Connersville, Ind. Windshield. 1,624,170; Apr. 12.

pany, Connersyllie, Ibu. Housework Apr. 12.
Hull, Matthew R., assignor to Rex Manuracturing Company. Connersylle, Ind. Connecter plate for vehicle doors. 1.644,018; Oct. 4.
Hull, Matthew R., and R. H. Money, assignors to Rex Manuracturing Company, Connersylle, Ind. Automobile window. 1.650,276; Nov. 22.
Hull, Robert W., assignor to Rex Manufacturing Company, Connersylle, Ind. Connecting means for two-part automobile doors. 1.616,3603; Feb. 8.
Hull, Scholer P., Yonkers, M. Y. Front rod. 1,621,884; Mar. 22.
Mar. Calage M. Western Springs, Ill., assignor to Western Springs, Ill., assignor to Western Springs, Ill., assignor to Western

Holl, Samuel P., Yonkers, N. Y. Front rod 1,621,884; Mar. 22.

Iudl, Sidney M., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Organic molding composition. 1,648,179; Nov. S. Hulme, Frederic G., assignor to Hensel Silk Manufacturing Company, Philadelphia, Pa. Bullion fringe loom. Hulmer, Joseph, and K. Jonas, Chicago, Ill. Electrolytic plating machine. 1,618,199; Feb. 22.

Hulser, Lolph R., Tuscaloosa, Ala. Veneer bucket. 1,654,376; Dec. 25: kinst to Kelly-Springfield Tire Combuse, Edison G., assignor to Kelly-Springfield Tire Combuse, Edison G., assignor to Kelly-Springfield Tire Communer, Mar. 29.

Hulse, Edward P., Westfield, N. J. Knife. 1,622,870; Mar. 29.

Hulse, George E., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Apparatus for generator regulation. 1,622,282; Mar. 29.

Hose, George E., New Haven, Conn., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,621,254; Mar. 19.

Hulshizer, George W., Stewartsville, assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,621,254; Mar. 19.

Hulstier, Robert I., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric-discharge device. 1,625,822; May 17.

Hulstier, Robert I., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric-discharge device. 1,625,82; May 17.

Hulstier, Robert I., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric-discharge device. 1,625,82; May 17.

Hulstier, Robert I., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric-discharge device. 1,625,82; May 17.

Hulstier, Robert I., East Orange, N. J., assignor to Western Marchalla Chilo. Paper detector for printing Hult, John A., assignor to The American Multigraph Company, Cleveland, Ohlo. Addressing machine. 1,627,240; May 3.

Hult, John A., assignor to The American Multigraph Company, Cleveland,

May 3.

Hult, Oscar W., Stockholm, Sweden. Motor with extra
cooling of the air or fuel mixture before admission into
the working cylinder. 1,635,697; July 26.

1,627,647; May 10.

Newport, E. I. Dispensing device.

1,627,647; May 10.

Nutgren, Axel G. E., and J. H. E. Thorfen, assignors to
Aktiebolaget Svenska Kullagerfabriken, Gottenborg,
Sweden. Self-locking nut. 1,635,032; July 5.

Hultgren. Charles R., assignor to S. Karpen & Bros.,
Chicago, Ill. Uplostery construction. 1,654,171;

Chicago, Dec. 27.

Lec. 24. Hultgreen, Jacob. (See Hebs, W. J., and Hultgreen.)
Hultin, Valter K., Stockholm, Sweden. Method and arrangement for making naked flooring. 1,622,829;
Mar. 29.
Hultquist, Charles A., Los Angeles, Calif. Fluid-operated percussive tool. 1,626,087; Apr. 26.
Hultquist, Charles A., Los Angeles, Calif. Drill-steel-retaining device. 1,647,628; Nov. 1.
Humason, Granville A., Houston, Tex. Pump plunger. 1,629,034; May 17.

1,629,034; May 17.
Humason, Granville A., Houston, Tex., and C. G. Lambert, Shreveport, La., assignors of one-third to J. A. Logan, Harris County, Tex. Oil vaporizer and burner. 1,621,509; Mar. 22.
Humbert, Louis, New York, N. Y. Sanitary device for cleaning and wiping razors. 1,618,661; Feb. 22.
Humble Cili and Refining Company. (See Ricker, Norman

assignor.)

Humble, William S., Riverside, Calif. Surgical instrument. 1.636,636; July 19.

ment. 1,030,630; July 19.

Humboldt, Elle S., Oakland, assignor to The Pacific Lumber Company, San Francisco, Callf. Wooden battery separator. 1,631,867; June 7.

Humbrecht, Jules, assignor to the Firm of Optische Austait C. P. Gorza Aktlengesellschaft, Friedenau, near Berlin, Germany. Periscope more particularly for submarines. 1,624,733; Apr. 12.

Hume, John E., Clinton, assignor to Crompton & Knowles
Loom Works, Worcester, Mass. Weft detector on loom
transferrer arms. 1,658,210; Dec. 20.
Australia. Apparatus for the manufacture of Dipes and the like
from metal sheets or plates. 1,645,239; Oct. 11.
Humidity Control Company, The. (See Ascher, Louis K.,
assignor.)
Humiston, John M., Gee Genung, Gilbert, assignor.)
Humiston, John M., Gee Genung, Gilbert, assignor.)
Humiston, John M. (See Genung, Gilbert, assignor.)
Humiston, John M., Gee Genung, Gilbert, assignor.)
Humiston, John M. (See Genung, Gilbert, assignor.)
Humiston, John M., Bervyn, Ill. Installing ground pipes.
1,638,578; July 5.
Humm, General M. (See March, Carolica Conty, Ind.
Hummerson, Samuel, Clay Township, Carroll County, Ind.
Game apparatus. 1,629,386; May II.
Hummert, Robert H., assignor to The S. H.
Humphrey, Alfred H., Salem, N. Y. License-plate unit.
1,621,411; Mar. 15.
Humphrey, Alfred H., Salem, N. Y. Sign. 1,621,412; Mar. 15.
Humphrey, Charles F., Pasadena, Calif. Sprinkler.
1,621,204; Mar. 15.
Humphrey, Charles F., Pasadena, Calif. Sprinkler.
1,621,204; Mar. 15.
Humphrey, Clifford W., et al. (See Humphrey, C. W.
and McKittrick, Oakland, assignors to C. W. Humphrey, San
Francisco and H. I. Lea, Santa Monica, Calif. Solidifying aluminum chloride. 1,645,142; Oct. 11.
Humphrey, Clifford W., Redbank, N. J., and D. S. McKittrick, Oakland, assignors to C. W. Humphrey and
H. Lea, Santa Monica, Calif. Apparatus for purifying
and solidiying aluminum chloride. 1,645,142; Oct. 11.
Humphrey, Clifford W., Redbank, N. J., and D. S. McKittrick, Oakland, assignors to C. W. Humphrey and
H. Lea, Santa Monica, Calif. Apparatus for purifying
and solidiying aluminum chloride. 1,645,142; Oct. 11.
Humphrey, Clifford W., Redbank, N. J., and D. S. McKittrick, Oakland, assignors to C. W. Humphrey, San
Francisco and H. I. Lea, Santa Monica, Calif. Solidi

Humphrey, Hubert R., assignor to General Gas Light Com-pany, Kalamazoo, Mich. Gas heating stove. 1,647,995; Nov. 8.

Humphrey, Hubert R., Assignor to General Gas Light Company, Kalamazoo, Mich., assignor to General Gas Light Company, Gas heater. 1,650,885; Nov. 29.

Humphrey, Irvin W., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Nitrocellulose lac-Humphrey, Irvin W., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Pine-oil product and making same. 1,653,009; Dec. 20.

Humphrey, Irvin W., Wenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Nitrocellulose lac-Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del. Nitrocellulose lac-Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Powder Company, Unlimington, Del. Nitrocellulose lac-Humphrey, Charles F., assignor to Armstrong Cork Company, Lancaster, Pa. Rug or similar article. Des. 71,794; Jan. 4.

Humphreys, Charles F., assignor to Armstrong Cork Company, Lancaster, Pa. Linoleum or similar hard-surfaced floor covering. Des. 71,796; Jan. 4.

Humphreys, Charles F., assignor to Armstrong Cork Company, Lancaster, Pa. Linoleum or similar hard-surfaced floor covering. Des. 71,796; Jan. 4.

Humphreys, Charles F., assignor to Armstrong Cork Company, Lancaster, Pa. Rig or similar article. Des. Humphreys, Charles F., assignor to Armstrong Cork Company, Lancaster, Pa. Rig or similar article. Des. Humphreys, Charles F., and J. C. McCarthy, Lancaster, Rel. Milling or similar article. Pa. Linoleum floor coverings and process of manufacture. Humphreys, Charles F., and J. C. McCarthy, assignors to Covering and ornamenting the same. 1,642,954; Sept. 20. Armstrong Co covering and Sept. 20.

Humphreys, Charles F., and J. C. McCarthy, assignors to Armstrong Cork Company, Lancaster, Pa. Surface cor-ering and ornamenting the same. 1,642,955 s. Sept. 20. Humphreys, Harry S., assignor to Armstrong Cork Com-pany, Lancaster, Pa. Rug or similar article. Des.

Armstrong Cork Company, Lancaster, Pa. Surface covering and ornamenting the same. 1,642,955; Sept. 20. Humphreys, Harry S., assignor to Armstrong Cork Company, Lancaster, Pa. Rug or similar article. Des. Humphreys, Harry S., assignor to Armstrong Cork Company, Lancaster, Pa. Rug or similar article. Des. 72,051; Feb. 15. Humphreys, Harry S., assignor to Armstrong Cork Company, Lancaster, Pa. Rug or similar article. Des. 17,062; Feb. 15. Humphreys, Harry S., assignor to Armstrong Cork Company, Lancaster, Pa. Rug or similar article. Des. 72,007; Mar. 1. Humphreys, Harry S., assignor to Armstrong Cork Company, Lancaster, Pa. Rug or similar article. Des. 72,007; Mar. 1. Humphreys, Harry S., assignor to Armstrong Cork Company, Lancaster, Pa. Rug or similar articles. Des. 72,007; Mar. 1. Humphreys, Harry S., assignor to Armstrong Cork Company, Lancaster, Pa. Rug or similar articles. Des. 72,007; Mar. 1. Humphreys, Harry S., assignor to Armstrong Cork Company, Whiting, Ind. Distilling oils. 1,647,629; Nov. 1. Humphries, Chad H., assignor to Metals Protection Corporation, Indianapolis, Ind. Producing corrosion-resisting coatings on iron and steel and products thereof. Humphries, Chad H., assignor to Metals Protection Corporation, Indianapolis, Ind. Producing corrosion-resisting coatings on iron and steel and products thereof. Humphries, Chad H., Rokomo, assignor, by mesne assignments, to Metals Protection Corporation, Indianapolis, steel and products. 1,651,278; Nov. 29. Humphris, Frank, Parkstone, England. Construction of bearer plates for use in presses and like machines. 1,644,548; Cort. 25. Humphris, Frank, Parkstone, England. Edge-pressure plate for use in presses and like machines. 1,648,849; Nov. 29. Humphris, Frank, Parkstone, England. Edge-pressure plate for use in presses and like machines. 1,648,849; Nov. 29. Frank, Parkstone, England. Edge-pressure plate for use in presses and like machines. 1,648,849; Nov. 29. Frank, Parkstone, England. Edge-pressure plate for use in presses and like machines. 1,648,849; No

Humpbris, Frank, Parkstone, Dorset, England. Sheet metal. 1,630,518; Nov. 22. Humpbris, Frank, Parkstone, ansignor of one-half to K. A. Roberts, London, England. Machine for manufacturing nails or other articles from sheet or strip metal of material. 1,622,144; Mar. 22. Horning the strip metal of material. 1,622,144; Mar. 22. Horning the strip metal of the strip metal of the strip metal. Of the strip metal of the strip metal. 1,622,144; Mar. 22. Horning the strip metal. 1,622,144; Mar. 22. Horning the strip metal. 1,621,144; Mar. 22. Horning the strip metal. 1,630,144; Mar. 22. Horning the strip met

Humphris, Frönk, Parkstone, assignor of one-half to K. A. Roberts, London, Bngland, Machine for maknataks, nails, rivets, pins, or the like. 1,647,830; Mumpton, M. R., et al. (See Nix, Neely, assignor.) Humpty Dumpty Stores Company. (See Stanton, Edward F.)
Humpton, M. R., et al. (See Nix, Neely, assignor.) Humpty Dumpty Stores Company. (See Stanton, Edward F.)
Hund, August, Bethesda, Md., assignor to Wired Radio, Inc., New York, N. Y. Condenser transmitter.
Hund, August, Bethesda, Md., assignor to Wired Radio, Inc., New York, N. Y. Preparing plezo-electric plates. 1,649,828; Nov. 22.
Hundemer, Walter F., Alameda, assignor, to Gat Gun Lubricating Corporation, Oakland, Calif. Lubricating device. 1,619,126; Mar. 1.64, assignor, by mesne agreed with the stand of the standard of the standard

Stoker Company, Reco., Ark. Chock. 1,655,100; Dec. 20. Hunt, Andrew S., Hope, Ark. Chock. 1,655,100; Dec. 20. Hunt, Andrews R., Kansas City, Mo. Tamping and tamping machine. 1,624,734; Apr. 12. Hunt, Charles J., assignor of thirty-five per cent to E. G. Infield, Barnsdall, Okla. Drying apparatus. 1,623,540; Apr. 5. Hunt, Charles M. (See Everett, James M., assignor.) Hunt, Charles W. (See Schule, F. W., and Hunt.)

Hunt, Chester. (See Barett, L. A., and Hunt.)
Hunt, Charene, Benish West, Victoria, Australia. Feedlog or conducting tube for signicultural drills or cultivators. 1,687,416; Aug. 2.
Hunt, Clarence T. New Haven, assignor to W. C. Beers,
Danbury, Conn. Mechanical miniature theatrical.
1,628,628; May 10.
Hunt, Harry L., Bigelow, Mo. Oil cup. 1,636,742;
Hunty Harry L., Bigelow, Mo. Pitman boxing. 1,637,004;
Aug. 2.
Aug. 2.

1.023.025; May 10.

[Junt, Harry L., Bigelow, Mo. Oil cup. 1,636.742;
July 26.

Hunt, Harry L., Bigelow, Mo. Pitman boxing. 1,637.04;
Aug. 2.

Hunt, Harry L., Bigelow, Mo. Pitman boxing. 1,637.04;
Aug. 2.

Hunt, Barry L., and L. A., Bigelow, Mo. Pitman boxing. 1,632.485;
Aug. 2.

Hunt, Helm, Ferris & Company. (See Ferris, Henry L., assignor).

Hunt, Helm, Ferris & Company. (See Ferris, Henry L., assignor).

Hunt, Helm, Ferris & Company. (See Ferris, Henry L., assignor).

Hunt, Helm, Ferris & Company. (See Ferris, Henry L., assignor).

Hunt, Helm, Ferris & Company. (See Ferris, Henry L., assignor).

Hunt, J. Harold. (See Budd, E. G., and Hunt.).

Hunt, J. Harold. (See Budd, E. G., and Hunt.).

Hunt, J. Harold. (See Budd, E. G., and Hunt.).

Hunt, John D., assignor of one-third to R. E. Martin and one-third to T. H. Greer, Providence, Ky. Land roller, 1,615,905; Feb. 1.

Hunt, John B., and C. Assignor of One-third to R. E. Martin and one-third to T. H. Greer, Providence, Ky. Land roller, 1,615,905; Feb. 1.

Hunt, John H. (See Kettering, C. F., and Hunt.).

Hunt, John H. (See Kettering, C. F., and Hunt.).

Hunt, John H., assignor to General Motors Research Corporation, Dayton, Ohio. Control of engine-oil heaters.

Hunt, John H., assignor to General Motors Research Corporation, Dayton, Ohio. General Motors Research Corporation, Dayton, Ohio. General Motors Research Corporation, Dayton, Ohio. Battery-charging system. 1,641.365; Sept. 6.

Hunt, John H., assignor, by mesne assignments, to Delco-Hunt, John H., assignor, by heater assignments, to Delco-Hunt, John H., assignor, by mesne assignments, to Delco-Hunt, John H., assignor, by heater assignments, to Delco-Hunt, John H., and J. T. Fitzsimmons, assignors to General Motors Research Corporation, Dayton, Ohio. Lighting and ignition system. 1,641.363; Sept. 6.

Hunt, John H., and J. T. Fitzsimmons, assignors to General Motors Research Corporation, Dayton, Ohio. Lighting and Ignition system. 1,641.361; Sept. 6.

Hunt, John H., and J. T. Fitzsimmons, assignors to Genera

mesne assignment to the control of t

Hoods N. F. Paper-tolling machine. 1,010,111; incolors N. F. Paper-tolling machine. 1,618,712; Feb. 22. Hunt, John O., assignor to Independent Paper Mills, Inc., Brooklyn, N. Y. Banding machine. 1,618,712; Feb. 22. Hunt, John O., Brooklyn, assignor to Independent Paper Mills Inc., Brooklyn, N. Y. Paper folding, cutting, and delivering machine. 1,623,341; Apr. 26. Modern Kir machine. 1,635,368; Dec. 70. N. Y. Paper-napkir machine. 1,635,368; Dec. 70. N. Y. Paper-napkir machine. 1,635,368; Dec. 70. N. Y. Paper-napkir machine. 1,636,368; Dec. 70. N. Y. Pa

signor.)
unt, Ormond E., assignor to General Motors Corpora-tion, Detroit, Mich. Differential mechanism. 1,616,627;

tion, Detroit, Mich. Differential mechanism. 1,616,627; Feb. 8.

Hunt, Ormond E., assignor to General Motors Corporation. Detroit, Mich. Mounting for control levers. 1,627,777; May 10.

Hunt, Ormond E., assignor to General Motors Corporation. Detroit, Mich. Spilot. 1,621,206; June 7,141, Ormond E., assignor to General Motors Corporation. Detroit, Mich. Cowl light. 1,640,831; Aug. 30.

Hunt, Ormond E., assignor to General Motors Corporation. Detroit, Mich. Brake mechanism for motor vehicles. 1,644,736; Oct. 11.

Hunt, Pergy. (See Hunt, Herbert W. and P.)

Hunt, Hodney, Machine Company. (See Riggs, H. C., Hunt, Serger, See Hunt, Herbert W. and P.)

Hunt, Ed. B., trustee. (See Mann, Matthew D., jr., assignor.)

signor.)

Hunt-Spiller Manufacturing Corporation. (See Platt,
John G., assignor to The Will'rs-Overland Comnutry, Total Control of the Corporation of the Corporati

Hunt, William E. (See Phillips, H., and Hunt.)
Hunt, Wilson P., assignor to Moline Tool Company,
Moline, H. Control and Company, New York, N. Y. Semiautomatic can-closing
machine, 1,639,045; Jung. 28.
Hunter, Edit, Hillie State, 28.
Hunter, David E., assignor to The Shaw-Walker Company, Muskegon, Mich. Safety device for safe doors.
1,613,755; Jan. 11.
Hunter, Edgar K., assignor to J. R. C. August, London,
Eagland. Justification mechanism for type-composing
Hunter, Edward. (See Bosserdet, Alfred E., assignor, Junter, Frances H. (See Hunter, George H. and F. H.)
Hunter, Frank E., and H. L. Hooper, Grandwiew, Wash.
Chair support. 1,644,924; Oct. 11.
Hunter, Frederick L., E., Towaco, and S. W. Crowley,
Hunter, George H. and F. H., New York, N. Y. Windowcleaning device. 1,625,669; May 17.
Hunter, Harry G. (See Ash, L. R., Tammen, and
Hunter, Harry G. (See Ash, L. R., Tammen,

Hunter, Hunter

Hunter, Huward V., New York, N. Y., assignor to American Telephone and Telegraph Company. Multiplex telegraph system with magnitude discrimination. 1,614,555; Jan. 18.
Hunter, Irving J., Medina, N. Y. Vapor-utilizing device. 1,637,941; Aug. 2.
Hunter, James E., Monaca, Pa. Cast-steel freight-car and are the state of the state of

mapring plank with brake-beam safety device. 1,621,014; Mar. 15.

llunter, John S., Coalinga, Calif. Double-acting pump. 1,627,922; May 24.

Hunter, John S., Coalinga, Calif. Pump. 1,637,942; Aug. 2.

Hunter, John S., Coalinga, Calif. Pump. 1,637,942; Aug. 2.

Hunter, Joseph H., assignor to Detroit Insulated Wire company, Detroit, Mich. Machine for forming armored insulated conductors. 1,640,389; Aug. 30.

Hunter, Joseph H., assignor to Detroit Insulated Wire Company, Detroit, Mich. Nonstretchable cord. 1,644,529; Oct. 4.

Hunter, Lewis B., Yonkers, assignor to R. T. Williams, Kensington, N. Y. Making chocolate products. 1,642,307; Nov. 15.

Hunter, Lewis B., Yonkers, assignor to R. T. Williams, Chocolate tubes. 1,642,308; Nov. 15.

Hunter, Perey B., Assignor to Pttburgh Annealing Box Company, Pittsburgh, Pa., Method of and apparatus for welding. 1,622,5245; May 10.

Hunter, Pierre R., Lakewood, assignor to The Brown Box Company, Pittsburgh, Pa., Method of and apparatus for welding. 1,622,5245; May 10.

Hunter, Repen R., Lakewood, assignor to The Brown Box Company, Pittsburgh, Pa., Method of and apparatus for welding. 1,622,5245; May 10.

Hunter, Ralph, New York, assignor to Hall, Hartwell & Co., Inc., Troy, N. X. Semisoft collar. 1,642,858; Sept. 20.

Hunter, Robert N., Charlotte, N. C. Crutch. 1,621,255;

pot tor Village and the property of the proper

Hunter, Samuel, Bellevue, Pa., assignor to Wappat Gear Works. Door-lock-mortising machine. 1,633,370; June 21.

June 21.

Hunter, William A., West Orange, N. J. Sudatory receptor pad. 1,633,586; June 28.

Hunter, William K., assignor of one-half to M. F.

Nichols, Knoxville, Tenn. Producing improved lime
hydrate. 1,634,242; July 5.

Huntington, Arthur S., Omaha, Nebr. Jar handle and
producing same. 1,625,210; Apr. 19.

Huntington, Charles S., Los Angeles, Calif. Hose reel
and carrier. 1,652,718; Dec. 33.

Huntington, Huam H., and E. E. Towle, Richmond, Ind.,
assignors to International Harvester Company, Chiassignors to International Harvester Company, ChiJan. 111. Seed-discharging mechanism. 1,631,881;
Jan. 121. Seed-discharging mechanism. 1,631,881;
Jan. 121. Seed-discharging mechanism. 1,631,881;

Jan. 11.

Huntington, J. T., Flint, Mich. Screen attachment.
1.647,179; Nov. 1.

Huntington, Victor C., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for advancing articles.

Huntington, Willis G. (See Roberts, Frank B. assignor.) Huntley, Ernest R. (See Brockway, C. P., and Huntley, Huntley, Ernest R., Milwaukee, Wis., assignor to Industrial Research Corporation, Toledo, Ohio. Air cleaner.
1.620,890; Mar. 15.

Huntley, Philip C. (See Carpenter, A. H., and Huntley, Huntley, Brillip S. (See Frieder, I. P., Huntley, and Hollss)

Hollas.)
Huntley, Willis I., et al. (See Dickie, James, assignor.)
Huntloon, Charles F., Pasadena, Calif. Bolster spring seat
Huntloon, Charles F., South Pasadena, Calif. Truck
bolster, 1,619,576; Mar. 1.
Huntloon, Charles F., South Pasadena, Calif. Truck
bolster, 1,619,576; Mar. 1.
Huntloon, Charles F., Chicago, Ill. Brake beam. 1,634,995;

Huntoon, Cullen L., Los Angeles, Calif. Band press for shoe-sole presses. 1,624,996; July 5.

Hunt's Modern Paper Products, Inc. (See Hunt, John O., assignor.)

Hunt's Modern Paper Products, Inc. (See Hunt, John O. assignor; A. assignor; Prank, Detroit, Mich. Vehicle braking systems, 1647.294; Nov. 1.
Huptel, Adolph G., Jr., New York, N. Y. Olintment, 1.615,277; Jan. 25.
Huptel, Adolph G., Jr., and T. M. Rector, assignor to Institute of the Product of the Product

Corporation, New Britain, Colm. Sautout Cylines. L., 1.850,668; Nov. 22.

Hurdiebring, William, Jr., et al. (See Flori, Jules L., 1882), 189.

Barris, France. Powder box. Des. 73,570; Oct. 4.

Hurewitz, Joseph. assignor of one-half to H. Cohn and B. Ashenfarb, copartners under the name of American Mirror Works, and one-half to L. Hurewitz, doing business as Rose Novelty Co., New York, N. Y. Mirror. 1,651,771; Dec. 6.

1,651,771; Dec. 6.

1,651,771; Dec. 6.

1,652,094; May 10.

Hurlburt Research Corporation. (See Zeidler, William A., assignor.)

Hurlburt Research Corporation. (See Zeidler, William A., assignor.)

Hurlbut, Daniel C., assignor to Bennington Wax Paper Company, Bennington, Vt. Paper package and forming Hurley, Charles, Jersey City, N. J., assignor to Continental Can Company, Inc., New York, N. Y. Liquid atomizer. 1,645,537; Oct. 25.

Hurley, Joseph M., assignor to D. C. McClain, Minneapolis, Minn. Card holder. 1,639,946; Aug. 23.

Hurley, Joseph M., assignor to D. O. McClain, Minneapolis, Minn. Erling device. 1,644,676; Oct. 11.

Hurley, Joseph M., assignor to D. O. McClain, Minneapolis, Minn. Card holder. 1,639,946; Aug. 23.

Hurley, Joseph M., assignor to D. O. McClain, Minneapolis, Minn. Card holder. 1,639,946; Aug. 23.

Hurley, Joseph M., assignor to D. O. McClain, Minneapolis, Minn. Card holder. 1,639,946; Aug. 23.

Hurley, Joseph M., assignor to D. O. McClain, Minneapolis, Minn. Card holder. 1,639,946; Aug. 23.

Hurley, Joseph M., assignor to D. O. McClain, Minneapolis, Minn. Card holder. 1,639,946; Aug. 23.

Hurley, Joseph M., assignor to D. O. McClain, Minneapolis, Minn. Erling device. 1,644,076; Oct. 11.

assignor.)

Hurley, Joseph M., assignor to D. O. McClain, Minneapolis, Minn. Card holder. 1,639,946; Aug. 23.

Hurley, Mice N., Whittler, Calif. Automobile bumper. 1,635,618; July 12.

Hurley, Mice N., Whittler, Calif. Automobile bumper. 1,635,618; July 12.

Electric Marchael Minneapolis, Minneapolis, Minn. Card holder. 1,639,946; Aug. 23.

Hurley, Joseph M., assignor to G. (See Fisher, Al

Buron Industries, Inc. (See Rydner, Gustaf W., assignor.)
Huron Manufacturing Co. (See Elstone, Stanley W., assignor.)
Hurst, Albert E., assignor to Textile Publishing Company, New York, N. Y. Pictorial illustration. 1.649,939; Nov. 22.
Hurst, George H., Jr., assignor to S. M. Hurst, Sumter, S. C. Hydraulic blood aspirator for embalming. Hurst, James D., assignor to Schumann Phano Company, Rockford, Ill. Truss structure for upright plano cases. 1,623,188; Apr. 5.
Hurst, James E., and F. B. Ball, assignors to Centrifugal Castings Limited, Kilmarnock, Scolland. Metal-pouring apparatus for centrifugal casting machines. 1,626,342; Apr. 26.

apparatus for centrituga custur manner.
Apr. 26.
Hurst, John W., Minneapolis, Minn. Trolley retriever.
1.646,685; Oct. 28.
Hurst, George H., Jr., assignor.)
Hurst, Willia T., Pittsburgh, Pa. Slag-casting apparatus.
1.616,885; Feb. 8.
Hurt, Helen J., New York, N. Y. Method of and composition for transferring designs, pictures, and the like. 1,829,165; May 17.

Hutt, John C., et al. (See Boone, D. C., and Burkett, assignors.)
Hutt, William P., et al. (See Jones, Henry R., assignor.)
Hürttle, Karl. (See Baumeister, H., Dörr, and Hürttle, Hürttle, Karl, Akron, Ohlo, assignor to Luttschifbau
Zeppelin Gesellschaft mit beschränkter Haftung, Friedrichshafen, Germany. Outer cover on rigid air-Zeppelin Gesellschaft mit beschrunger on rigid air-Friedrichshaften, termany. Outer cover on rigid air-Stips. 1,023,080; Apr. 5. Hirtite, Karl, Akroa, Ohio, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Fried-rlehshaften, Germany. Gas-Indated airsbip. 1,637,774;

High and the second of the sec

signor.)
Hurwitz, Israel R. (See Morrison, William E., assignor.)
Hurxthal, Alpheus O. (See Kershaw, F., and Hurxthal.)
Hurxthal, Alpheus O., assignor to Frector & Schwartz,
1.613,460; Jan. Handler, Jan. Girt for loop driers.
1.613,460; Jan. Assignor to Frector & Schwartz,
Incorporated, Philadelphia, Fa. Rack dryer for brake
linings and other strip material. 1.624,735; Apr. 12.
Huseby, Edmond A., Chleago, Ill. Tempo box. 1,636,911;
Hush, Baloh, Johannesburg, Transval, South Africa.

History or the plain and the strip material. 1.624.735; Apr. 12. Huseby, Edmond A., Chicago, Ill. Tempo box. 1,636,911; July 26.
Hush, Ralph, Johannesburg, Transval, South Africa. Machine for breaking ore and other minerals. Machine for breaking ore and other minerals. Hush, Wrench C. 26.
Husky, Wrench C. 27.
Husky, Wrench C. 27.
Husky, Wrench C. 27.
Husky, Wrench C. 27.
Husky, William B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. St. Louis, Mo. Vehicle traffic signal. Husky, Writiam B. P. Lukens, Horvath, Ferdiam A. New York, N. Y. Photographic album, 1,625.724; Apr. 19.
Hutchens, Husky, Writiam B. Hutchens, Ralph W., assignor to Gillette Rubber Company, Eau Claire, Wis. Theotecher, 1,622,731; Apr. 5.
Hutchings, Charles, See Eldred, F. H

Hutchins Car Roofing Company. (See Fitzpatrick, John

T., assignor.) Hutchins Car Roofing Company. (See Franck, Edwin G.

Hutchins Car Roofing Company. (See Hawksworth, David W., assignor.)
Hutchins Car Roofing Company. (See Thompson, William D., assignor.)
Hutchins Car Roofing Company. (See Wilson, Alfred R., assignor.) assignor.)

Hutchins, Colin, Leamington, Ontario, Canada. Collapsible mold cove. 1632 599; June 21. Hutchins, Colin. Leamington, Ontario, Canada. Walmold. 1.652,480; Dec. 13.
Hutchins, Elliott H., Baltimore, Md. Invalid-bed elevator. 1,645,969; Oct. 18.

Hutchins, Ernest B., Bangor, Me. Vehicle ventilating apparatus 1,618,152; Feb. 15.

Hutchins, George F., assignor to Crompton & Knowles 1,651,603; Dec. 6.

Hutchins, George F., assignor to Crompton and Knowles Loom Works, Worcester, Mass. Picking shoe for looms. 1,651,603; Dec. 6.

Hutchins, George F., assignor to Crompton and Knowles Loom Works, Worcester, Mass. Let-off, and tension mechanism for looms. 1,654,126; Dec. 27.

Hutchins, George H. (See Fitz Geran, C. H., and Hutchins, James E., Buford, Ga. Slot machine. 1,618,200; Feb. 22.

Hutchinson, Ely C., Oakland, assignor to The Pelton Water Wheel Co., San Francisco, Calif. Attaching May 24.

Hutchinson, Ely C., and C. V. Foulds, Oakland, assignors to Pelton Water Wheel Company, San Francisco, Calif. Water-tight seating for butterfly valves and such. Hotelinson, Ely C., and C. V. Foulds, Oakland, assignors to Hutchinson Scale Company, Sheboygan, Wis. Indicator device for instruments. 1,635,479; July 12.

Hutchinson, George, assignor to Hutchinson Scale Company, Sheboygan, Wis. Indicator device for instruments. 1,646,511; Oct. 25.

Hutchinson, George, assignor to Hutchinson Scale Company, Sheboygan, Wis. Indicator device for instruments. 1,646,511; Oct. 25.

inson.)

Hutchinson, Henry B. (See Richards, E. H., and Hutchinson, Henry B. (1970).

Hutchinson, Hoyard M., Brock, Nebr. Wrench. Hutchinson, May 10.

Hutchinson, Joh, Saugerties, N. Y. Liquid-fuel vaporizer. 1,624,239; Apr. 12.

Hutchinson, Job, Saugerties, N. Y. Washing and wringing machine. 1,627,438; May 3.

Hutchinson, Mackintosh, Philadelphia, Pa. Woodworking machine. 1,617,211; Feb. 8.

Hutchinson, Mackintosh, Philadelphia, Pa. Woodworking machine. 1,617,211; Feb. 8.

Hutchinson, Overe English and Search of the Company. (See Hutchinson, George, assignor.)

Hutchinson, Urlah, assignor, by mesne assignments, to Motor Fatents Corporation, New York, N. Y. Rotary Hutchinson, William A., Orlando, File. Wheel structure. 1,643,379; Sept. 27.

Hutchinson, Benjamin F., Los Angeles, Calif. Producing camera copy for the photo-engraver. 1,614,924; Jan. 18.

ing camera copy for the photo-engraver. 1,614,924; Jan. 18.

Hutchison, Benjamin F., Los Angeles, Calif. Producing multicolor printing plates. 1,614,925; Jan. 18.

Hutchison, Benjamin F., Los Angeles, Calif. Art of photogravure color printing. 1,618,533; Feb. 22.

Hutchison, Benjamin F., Los Angeles, Calif. Art of all tong, photo-engraving color printing. 1,618,584; Butchison, Charles B., Parsons, Kans. Speed-controlling mechanism for motors. 1,625,634, Apr. 19.

halftone photo-engraving color printing. 1,618,534; Feb. 22.
Hutchison, Charles B., Parsons, Kans. Speed-controlling Hutchison, Charles B., Mount Holly, N. C. Chain-wrapping machine. 1,613,832; Jan. 11.
Hutchison, Charles E., Mount Holly, N. C. Chain-wrapping machine. 1,613,832; Jan. 11.
Hutchison, Francis A., Wimbledon Park, England. Detachable heel for boots, shoes, clogs, and the like footwear. 1,638,433; Aug. 16. Shick, Jacob, assignor, to The Safety Car Heating & Lighting Company. Fower transmission. 1,615,544; Jan. 25.
Hutchison, Robert A., 17., Bridgeton, N. J. Oil burner. 1,647,732; Nov. 1.
Hutchison, Thomas S., Chicago, Ill. Combination tool. Hutchison, Thomas S., Chicago, Ill. Combination tool. Hutchison, Thomas S., Chicago, Ill. Combination tool. Hutchison, Themas S., Chicago, Ill. Combination tool. Hutchison, Themas S., Chicago, Ill. Combination tool. Hutchison, Engele Laubegast, Germany, Packing of rotary shafts. 1,622,911; Mar. 29.
Huth, Dr. Erich F., G. m. b. H. (See Messtorff, Gerhard, assignor.)

assignor.)

Huth, Dr. Erich F., G. m. b. H. (See Kühn, Ludwig.
assignor.)

Huth, Walter H., Chicago, Ill. Electrical condenser.
1.633,019; June 21.

Huther Brothers Saw Mfg. Company. (See Stauder.
Emanuel, assignor.)

Huther, William F., Canton, Ohio. Rail-clamping device.
1.647,701; Nov. 1.

Huther, William F., Canton, Ohio. Rail-clamping device.
Huther, William F., Canton, Ohio. N. Y., assignor to Voices
Huthlow, Theodore, Brooklyn, N. Y., assignor to Voices
Sept. 20.

Hutsell, Ernest O., assignor of one-half to C. L. Fowler, Athens, Tenn. Lawn mower. 1,647.867; Nov. 1. Hutsell Motor Company. (See Hutsell, Thomas A., as-

Hutsell, Thomas A., assignor to Hutsell Motor Company, Spokane, Waish. Piston. 1,625.943; Apr. 26. Hutsell, Thomas A., assignor to Hutsell Motor Company, Spokane, Waish. Spokane, Viston Thomas A., assignor to Hutsell Motor Company, Spokane, Wash. Internal-combustion engine. 1,645,647; Oct. 18.

Hutson, Roy D., Rosendale, Mo. Tool brace. 1,623,541;

Hutt, Albert E., Ardmore, Pa. Semi-Inclosed, collapsible, upper deck roof. 1,631,518; June 7, Hutt, Joseph. (See Young, A. P., and Hutt.) Hutt, Leonard P. (See Murphy, E. J., and Hutt.) Hutt, Leonard P., Schemeerady, N. Y., assignor to General Electric Company. Valve. 1,624,736; Apr. 12.

Hutt, Leonard P. Schenectady, N. Y. assignor to General Electric Company. Combined automatic and manual circuit controller. J. 637,042; July 23.

Hutton Controller. J. 637,042; July 24.

Huttinger, Charles A., Lakewood, assignor, by mesne assignments, to The Acme Rayon Corporation, Cleveland, Ohio. Producing threads from viscose. 1,646,588; Oct. 25.

Hutton, Earl S., Detroit, Mich. Locking mechanism. Ligacity, July 5.

Hutton, Earl S., Detroit, Mich. Locking mechanism. 1,626,197; Apr. 28.

Hutton, Earl S., Detroit, Mich. Locking mechanism. 1,626,197; Apr. 28.

Hutton, Earl S., Detroit, Mich. Locking mechanism. 1,626,197; Apr. 28.

Hutton, James. Gee Petter, E. W., and Hutton. Jultion, Julico. July 50.

Hutton, James. (See Petter, E. W., and Hutton, Jultion, Julico. Julico. 1,639,497; Aug. 18.

Hutton, James. (See Petter, E. W., and Hutton, Julico. Julico. 1,639,497; Aug. 18.

Hutton, Julico. Assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Apparatus for effecting and regulating a flow of finic. 1,630,493; May 31.

Huyard, Henri, San Francisco. Callf. Window-sash attachment. 1,620,817; Mar. 15.

Huyert, Daniel D., assignor to Atlas Powder Company, Wilmington Del. Automatic dwell-control device for embossing presses. 1,641,632; Sept. 6.

Huyette, Faul B., assignor to Homer Furnace Company, Coldwater, Mich. Tongs. 1,630,018; May 24.

Hyatt, Charles D., assignor to Homer Furnace Company, Coldwater, Mich. Tongs. 1,630,018; May 24.

Hyatt, Charles D., assignor to Homer Furnace Company, Coldwater, Mich. Tongs. 1,630,018; May 24.

Hyatt, Charles D., assignor to Homer Furnace Company, Coldwater, Mich. Tongs. 1,630,018; May 24.

Hyatt, Charles D., assignor to Homer Furnace Company, Coldwater, Mich. Tongs. 1,630,018; May 24.

Hyatt, Charles D., assignor to Homer Furnace Company, Coldwater, Mich. Tongs. 1,630,018; May 24.

Hyatt, Charles D., assignor to Homer Furnace Company, Coldwater, Mich. Furnace Cassing. 1,634,643; July 5.

Hyatt, Charles D., assignor to Homer Furnace Company, Coldwater, Mich. Tongs. 1,630,018;

signor.)
Hyde, Henry W., North Cohasset, assignor to Hyde English, Henry W., North Cohasset, assignor to Hyde English, Henry W., Boston, Mass. Spring suspension for vehicles. 1,643,611, Sept. 27.
Hyde, John, Alblon Township, Rene County, Kans. Luggage carrier. 1,625,803; Apr. 26.
Hyde, Leon W., Hillsboro, Oreg. Coffeepot. 1,631,486; June 7.

June 7.

Hyde, Reed W., Summit, N. J., assignor to Dwight & Lloyd Metallurgical Company, New York, N. Y. Treating mercury-bearing ores. 1,650,360; Nov. 22.

Hyde, Robert C., Des Moines, Iowa. Annular exhaust the 1,649,688; Nov. 15.

Hyde, Rollin M., assignor to McCord Radiator & Mig. Co., Detroit, Mich. Refrigerating unit. 1,641,853; Sept. 6.

Sept. 6. Hydorn, Rex. and D. Forsyth, Bonners Ferry, Idaho. Seat for barbers' chairs. 1,630,432; May 31.
Hydraulic Brake Company. (See Loughead, Malcolm, as-

signor.) Hydraulic Brake Company. (See Sherbino, Morton R.,

Hydraulic Brake Company. (See Sherbino, Morton R., assignor.)
Hydraulic-Press Brlck Company. (See McArdle, Montrose P., assignor.)
Hydraulic-Press Manufacturing Company, The. (See Ernst, Walter, assignor.)
Hydraulic Specialty Manufacturing Company, The. (See McKinney, Edward H., assignor.)
Hydraulic Steel Company, The. (See Culhane, Patrick J., Jr., assignor.)
Hydraulic Steel Company, The. (See Irish, William E., assignor.)

Hydrocarbon Refining Process Co., The. (See McMichael,

Paul, assignor.) ydro Refrigerator Company. (See Potter, Thomas I. assignor.) Hyer, Floyd R., Boynton, Okla. Well. 1,647,630; Nov. 1.

Hykon Manufacturing Company, The. (See Hick, Harry

J. assigner.)

Hyland, Charles, Leeds, England. Rheostat for liquid-level indicators. 1,641,491; Sept. 6.

Hyland Stanford Company, The. (See Korner, J. H., and Stanford, assigners.)

Hylarides, Walter, Granville, Iowa. Animal forceps. 1,619,299; Mar. 1. Hyle, Jacob A., Atlantic City, N. J., and N. H. Scott, Philadelphia, Pa., assignors to Continental Railway Supply Corporation. Rail anchor for railways. 12,22,2030; Mar. 22, 11,262,030; Mar. 22, 12,262,030; Mar.

Supply Corporation. Hall anchor for railways. 1,622,068; Mar 22.
Charles, assignor.)
Hyman, Bettie, Richmond Hill, N. Y. Holder for nursing bottles. 1,685,789; July 12.
Hyman, Bettie, Richmond Hill, N. Y. Holder for nursing bottles. 1,685,789; July 12.
Hyman, Elias, New York, N. Y. Reversible folded stair covering. 1365,084; July 12.
Hyman, Henry, & Co. (See Kleinman, Jack, assignor.)
Hyman, Henry, & Co. (See Rubin, Abraham, assignor.)
Hyman, Henry, & Co. (See Rubin, Abraham, assignor.)
Hyman, Frederick, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Roping for hoist-ing apparatus. 1,625,084; Apr. 19.
Hymans, Frederick, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Roping for hoist-ing apparatus. 1,625,084; Apr. 19.
Hymans, Frederick, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Safety appliance. 1,633,090; Dec. 27.
Hymans, Frederick, Philadelphia, Pa. Power transmission. 1,644,337; Oct. 4.
Hymer, Rajph N., New Berg, Oreg. Comb. 1,633,893; June 2.
Licety 349; Nov. 16.

Hymer, Ralph N., New Berg, Oreg. Comb. 1,633,893; June 28.

Hynan, Arthur C., Chicago, Ill. Demountable wheel. 1,649,846 to No. 15.

Hynes, Lee P., Albany, assignor to Consolidated Car-Heating Company, Albany, N. Y. Thermostat. 1,617,487; Feb. 15.

Hynes, Lee P., assignor to Consolidated Car-Heating Company, Albany, N. Y. Thermostat. 1,627,180; May 3. N. Y. Motor system for car doors. 1,627,180; May 3. N. Y. Motor system for car doors. 1,627,180; May 3. N. Y. Overload relay for electric heaters. 1,635,674; July 12.

Hynes, Lee P., assignor to Consolidated Car-Heating Company, Albany, N. Y. Overload relay for electric heaters. 1,635,674; July 12.

Hynes, Lee P., assignor, by mesne assignments, to Consolidated Car-Heating Company, Albany, N. Y. Overload relay for electric heaters. 1,635,674; July 12.

Hynes, Lee P., assignor, by mesne assignments, to Consolidated Car-Heating Company, Albany, N. Y. Thermostat. 1,643,454; Sept. 27.

Hynes, Lee P., and H. A. Williams, assignors to Hynes & Cox Electric Corporation, Albany, N. Y. Thermostat. 1,650,942; Nov. 29.

Hynnien, Armas F. (See Hallenberg, H. D., and Hynning).

ninen.)
Hyperbo-Electric Flow Meter Co. (See Epstein, Hirsch.

assignor.)

Hyrup, Hans K., Los Angeles, Calif. 1

threader and chaser. 1,614,197; Jan. 11

L. & C. Company. (See Packer, Eben R., 8

I. G. Farbenindustrie Aktiengesellschaft. Internal pipe

Rends. Ludwig, assignor.)
G. Farbenindustrie Aktiengesellschaft. (See Benda,

G. Farbenindustrie Aktiengesellschaft. Louis, assignor.) G. Farbenindustrie Aktiengesellschaft. L. and Sievers.) G. Farbenindustrie Aktiengesellschaft. (See Benda, I.

(See Bosch,

I.

G. Farbenindustrie Aktiengesellschaft. (See Bosch. Carl, assignor.)
G. Farbenindustrie Aktiengesellschaft. (See Ernst, O., G. Farbenindustrie Aktiengesellschaft. (See Ernst, O., G. Farbenindustrie Aktiengesellschaft. (See Ernst, O., G. Farbenindustrie Aktiengesellschaft. (See Herzbertitz, assignor.)
G. Farbenindustrie Aktiengesellschaft. (See Herzbertitz, assignor.)
G. Farbenindustrie Aktiengesellschaft. (See Herzberg. W., and Ohlendorf, assignors.)
G. Farbenindustrie Aktiengesellschaft. (See Herzberg. W., and Ohlendorf, assignors.)
G. Farbenindustrie Aktiengesellschaft. (See Jannek. Josef., assignor.)
G. Farbenindustrie Aktiengesellschaft. (See Jannek. J., W. Farbenindustrie Aktiengesellschaft. (See Jannek. J., W. Farbenindustrie Aktiengesellschaft. (See Jannek. J., W. Farbenindustrie Aktiengesellschaft. (See Kalt-Wasser, O., and Kochhof, assignors.)
G. Farbenindustrie Aktiengesellschaft. (See Kricheisen, Theodor, assignor.)

(See Krannich.

G. Farbenindustrie Aktiengeseitschaft.
W., Krzikalla, and Schuster, assignors.)
G. Farbenindustrie Aktiengeseilschaft. (See Kropp.

Walter, assignor.)
G. Farbenindustrie Aktiengesellschaft. (See Langer,

Hans, assignor.) G. Farbenindustrie Aktlengesellschaft. (See Lohöfer,

Wilhelm, assignor.)
G. Farbenindustrie Aktiengesellschaft. (See Lommel.

G. Farbenindistric Akticagesellschaft. (See Wilhelm, assignor.)
G. Farbenindustric Akticagesellschaft. (See Drucker, and Thienemann, assignors.)
G. Farbenindustric Akticagesellschaft. (See haus. A., Nersehelmer, and Wolff, assignors.)
G. Farbenindustric Akticagesellschaft. (See haus.) (See Lueg, P.,

(See Lüttring-

I. (See Miller, I. G. Farbenindustrie Aktiengesellschaft.
W. and Siedier, assignors.)
I. G. Farbenindustrie Aktiengesellschaft.
G. Farbenindustrie Aktiengesellschaft.
G. Farbenindustrie Aktiengesellschaft.
G. Farbenindustrie Aktiengesellschaft.
Wilhelm, assignor.)
I. G. Farbenindustrie Aktiengesellschaft.
G. Farbenindustrie Aktiengesellschaft.
G. Farbenindustrie Aktiengesellschaft.
H. G. Farbenindustrie Aktiengesellschaft.
G. Farbenindustrie Aktiengesellschaft.
H. and Hähle, assignors.)
I. G. Farbenindustrie Aktiengesellschaft.
H. and Hähle, assignors.)
I. G. Farbenindustrie Aktiengesellschaft.
H. and Hähle, assignors.
I. G. Farbenindustrie Aktiengesellschaft.
H. G. Harbenindustrie Aktiengesellschaft.
H. G. Farbenindustrie Aktiengesel

eless Automatic Refrigerator Company. (See Orto, S., and Jankus, assignors.)
re. Baptiste, New York, N. Y. Vehicle fender and brake.
1,432,879; Sept. 20.
y-O Metal Products Company. (See Howells, Morgan

ley-O Metal Products Company. (Sec. Manager of the A., Warren, Ohlo. Nonevaporating oil tank. 1,623,246; May 10.

Ide, Harry H., La Grange, assignor to Kellogg Switch-beard and Supply Company, Chicago, Ill. Transformer. 1,652,203; Dec. 13.

Ideal Brake Reliner Company. (See Hird, John B., as itempral.)

Hoberton Dear Company. (See Hird. John B. as Ideal Brake Reliner Company. (See Hird. John B. as Ideal Brake Reliner Company. The. (See Printan, Henry V. assignor.)
Ideal Heating Equipment Company. The. (See Preston, Bruce B., assignor.)
Ideal Removable Body Company. (See Baxter, William M., assignor.)
Ideal Wrapping Machine Company. (See Sergent, Walter H., assignor.)
Ideal Wrapping Machine Company. (See Sergent, Walter H., assignor.)
Ideal Wrapping Machine Company. (See Sergent, Walter H., assignor.)
Ideal Wrapping Machine Company. (See Sergent, Walter H., assignor.)
Ideal Wrapping Machine Company. (See Sergent, Walter H., assignor.)
Ideal Wrapping Machine Company. (See Sergent, Walter H., assignor.)
Ideal Removable Body Company. (See Machine)
Ideal Removable Body Company. (See Machine)
Ideal Removable Body Company. Are light. 1,640,450; Aug. 30.
Iline, Charles, Baltimore, Md. Spray nozzle. 1,620,209:
Ideal Removable Body Company. Are light. (See Wallace G. W. and [hyig.)

Ihne, Un. Mar. 8. Mg. Harry Voj

Ile, William. (See Stuart, Colin, assignor.)
Ile, William, assignor to Reynolds Spring Company,
Jackson, Mich. Cord connecter. 1,627,286; May 3.
Ile, William, assignor to Reynolds Spring Company, Jackson, Mich. Electric switch. 1,628,884; May Onynany,
Jackson, Mich. Push-through switch. 1,630,433;

Jackson,

Ile. William, assignor to Reynolds Spring Company, Jackson, Mich. Push-through switch. 1.630,433; Ile. William, assignor to Reynolds Spring Company, Jackson, Mich. Dupler receptacle. 1.633,668; June 28. Ile. William, assignor to Reynolds Spring Company, Jackson, Mich. Cap and shell fastening for lamp Jackson, Mich. Cap and shell fastening for lamp Jackson, Mich. Cap and shell fastening for lamp 1.635,889; July 12. Ile. William, assignor to Reynolds Spring Company, Jackson, Mich. Combined lamp socket and current tap. 1.635,889; July 12. Ile. William, assignor to Reynolds Spring Company, Jackson, Mich. Double lamp socket. 1.638,935; Aug. 13. Ile. William, assignor to Reynolds Spring Company, Jackson, Mich. Discounting the Spring Company, Jackson, Mich. Three-way socket. 1.644,593; det. 4. Ile. William, assignor to Reynolds Spring Company, Jackson, Mich. Three-way socket. 1.644,593; det. 4. Ile. William, assignor to Reynolds Spring Company, Jackson, Mich. Three-way cap tin-type socket. 1,645,240; Oct. 11.

Oct. 11.

II. Willium, assignor to Reynolds Spring Company, Jackson, Mich. Table tap. 1,645,241; Oct. 11.

Ile, William, assignor to Reynolds Spring Company, Jackson, Mich. Electric-lamp socket. 1,645,860; Oct. 18.

Icente Bleetric Manufacturing Corporation. (See Giles, Isanc F., assignor.)

Ignac F., assignor.) (See Frank, John M.,

Issaid F., Assignor.)

Is Electric Ventilating Company. (See Frank, John M.,

Ig Electric Ventilating Company. (See Frank, J. M.,
and Sutcliffe, assignors.)

Ig Electric Ventilating Company. (See IIg, Robert A.,
assignor.)

Ig, Robert A., assignor to IIg Electric Ventilating Company. (She IIg, Robert A.,
assignor.)

Ilega. Hattle, East Elmhurst, N. Y. Window shade.

I.630,344; May St.

Ilega. Hattle, East Elmhurst, N. Y. Window shade.

I.630,344; May St.

Illega. Hattle, East Elmhurst, M. St.

Illega. Hattle, East Elmhurst, N. St.

Illega. Assignor, Seotland.

Illega. Assignor, Seotland.

Illega. Adam, New York, N. Y. Clgar holder. 1,841,538;

Sept. 6.

Sept. 6.

Sept. 6.

Ilig. Carl, Brooklyn, N. Y. Tailor's cutting knife.

1.614,243; Jan. 11.

Ilingworth. Carbonization Company, The. (See IllingIllingworth. Siewart B., Radyr, Wales, assignor to The
Illingworth Stewart B., Radyr, Wales, assignor to The
Illingworth Carbonization Company, Limited, Manchester, England. Apparatus for the manufacture of
carbonized fuel. 1.645,861; Oct. 18.

Illinois Cork Co. (See Codina, Peter, assignor.)

Illinois Refrigerator Company. (See Green, Fred C., as-

signor.)

Illinois Tool Works. (See Olson, Carl G., assignor.)
Illinois Tool Works. (See Olson, C. G., and England, as-

Hillion Statch Case Company. (See Bates, George T., May 10.

Hillion Swatch Case Company. (See Bowen, George W., assignor.)

Hillion Swatch Case Company. (See Edelstein, Edwin, as-Hillion)

signor.)
Illinois Watch Case Company. (See Lester, William H.,

assignor.)
Illinois Watch Case Company. (See Wakefield, Frank E.,

assignor.)
Illuminating Products Co. (See Chapman, Nathan E., assignor.

assignor.)
Imbery, Arthur. (See Alexander, H., and Imbery,)
Imbrind. Joseph. Brooklyn, N. Y. Knitting machine.
1.628,407; May 10.
Imbus, Alphonse E. (See Konerman, H. H., and Imbus.)
Imbus, Alphonse E. (See Konerman, H. H., and Imbus.)
Imbot. Karl, Essen, Germany. Joparatus for sewage
slunder digestion. 1.642,206; Sept. 13.
Imbof. Karl, Essen, Germany. Fish pond with sewage
supply. 1.643,273; Sept. 20.
Imbof. Max. (See Berg. O., and Imbof.)
Imbof. Max. (See Berg. O. and Imbof.)
Immerial Bress, Manufesting. Company. The Alexander Marchael Company.

and Locwe.)

Imperial Brass Manufacturing Company, The. (See McIntosh, Robert D., assignor.)

Imperial Brass Manufacturing Company, The. (See
Rudolph, Walter J., assignor.)

Imperial Oli, Limited. (See Leaver, Charles, assignor.)

Imperial Typewriter Company Limited. (See Pateman,

Arthur, assignor.)

Impore Robert R. (See Hein, G. N., Platt, and Impey.)

Improved Office Partition Co. (See Winogradoff, Alexan-

der, assignor.)

der, assignor.)

Improved Paper Machinery Company. (See Reed, H. J.,
and Spafford, assignors.)

Imschweller, John, Inglewood, Calif. Chicken fountain.
1,642.926; Sept. 20.

Imset, Otto, Oslo, Norway. Writing implement. 1,635,624; July 12. Imus, James H., Boardman, Oreg. Weeder. 1,637,862; Aug. 2. In-A-Wall Safe Company. (See Belknap, Samuel L., assignor.) Inco, Francis S., Los Angeles, Calif. Folding portable bed. 1,636,097; July 19. Independent Lock Company. (See Falk, Morris, as-

signor.) Independent Paper Mills, Inc. (See Horwitt, Paul H., assignor.)
Independent Paper Mills Inc. (See Hunt, John O., as-

ndespendent Paper Mills Inc. (See Hunt, John O., assignor.)
Independent Pneumatic Tool Company. (See Forss, Frithiof P., assignor.)
Independent Pneumatic Tool Company. (See Levedahl, Axcl. assignor.)
Independent Pneumatic Tool Company. (See Norling, Reinhold A., assignor.)
Indian Tentriory Illuminating Oil Company. (See Norling, Reinhold A., assignor.)
Indiana Canning Machinery Company. (See Brass, Ed-Indiana Canning Machinery Company. (See Brass, Ed-Indiana Canning Machinery Company.)
Indiana Fibre Products Company. (See Bell, G. A., and Carson, assignors.)
Indiana Classic Company. (See Haley, Reuben, assignor.)
Indiana Canning Machinery Company. (See Foster, Harry C., assignor).
Indiana Lass Company. (See Haley, Reuben, assignor.)
Indiana Lamp Corporation. (See Foster, Harry C., assignor.)

signor.)
Indiana Lamp Corporation. (See Hyatt, Samuel W., assignor.)
Indiana Lamp Corporation. (See Neuner, Frederick W. C., assignor.)
Indiana Lamp Corporation. (See Robour, Chris W., assignor.)
Individual Drinking Cup Company. (See Dawson, Cecil

F., assignor.)
Individual Drinking Cup Company. (See Wessman, Edwin Individual Drinking Cup Company. (See Wessman, Edwin G., assignoriking Cup Co. Inc. (See Dawson, C. F., and Wessman, assignors.)
Individualizing Company of Illinois. (See Magnus, E. G., and Dosch, assignors.)
Industrial Appliance Company. (See Logan, John I., assignor.)

assignor.)
Industrial Associates, Incorporated. (See Jones, Arthur E., assignor.)
Industrial Associates, Incorporated. (See Riley, Champlain L., assignor.)
Industrial Chemical Company. (See Wickenden, L., and Demmerle, assignors.)
Industrial Chemical Company. (See Wickenden, L., and Okel, assignors.)
Industrial Controller Company. (See Van Valkenburg, Industrial Research Corporation. (See Boughton, Solon Lassignor).

J., assignor.)
Industrial Research Corporation. (See Brockway, Carl P., assignor.)
Industrial Research Corporation. (See Brockway, C. P., P., assignor.) Industrial Research Corporation. (See Brockway, C. P., and Huntley, assignors.) Industrial Research Corporation. (See Buchenberg, Alvin E., assignor.) Industrial Research Corporation. (See Chilton, Ralph H.,

assignor.)
Industrial Research Corporation. (See Davies, Henry R.,

Industrial Research Corporation. (See Huntley, Ernest R., assignor.)
Industrial Research Corporation. (See Manchester, Clyde

C., assignor.)
Industrial Spray-Drying Corporation. (See Holliday, Robert L., assignor.)
Industrial Spray-Drying Corporation. (See Zizinia, Paul T., assignor.)
Industrial Technics Corporation. (See Arsem, William C.,

assignor.)
Industrial Waste Products Corporation. (See Dickerson, Walter H., assignor.)
Industriebedarf G. m. b. H. (See Mertens, Robert, as-Industrieledari G. M. b. H. (See Hertens, Robert, assignor.)
Infield, Earl G. (See Hunt, Charles J., assignor.)
Ingalls, Joseph B., Chicago, Ill. Coin bank. 1,619,073;
Mar. 1.

Mar. 1.

Ingalls, Willde A., Richmond, Va. Roadside signal.
1,651,126; Nov. 29.

Ingells, James, Muskegon, Mich. Dirigible headlight.
1,648,349; Nov. 8.

Ingersoil, Charles A., Portland, assignor to The Russell
Manufacturing Company, Middletown, Conn. TransIngersoil, George B., Dearborn, assignor, by mesne assignments, to Federal Motor Truck Company, Detroit,
Mich. Vehiele construction. 1,41,333; Sept. 6.

Ingersoil, Howard L., White Plains, N. Y. Locomotive.
1,615,464; Jan. 25.

Ingersoil, Howard L., White Plains, N. Y. Corrugated
Ingersoil, Howard L., White Plains, N. Y. Corrugated
Ingersoil, Joseph, assignor to J. B. Patterson, Los Angeles,
Calif. Ladder construction. 1,616,899; Feb. 8.

Ingersoll, Leonard R., Madison, Wis. Eye model. 1,630,944; May 31.
Ingersoil Milling Machine Company, The. (See Flsh, Samuel W., assignor.)
Ingersoil Milling Machine Company, The. (See Johnson, John R., assignor.)
Ingersoil Milling Machine Company, The. (See Malone, Frank J. assignor.)
Frank J. assignor.)
Ingersoil-Rand Company, (See Allen, Roy O., assignor.)
Ingersoil-Rand Company, (See Bancel, Paul A., assignor.)
Ingersoil-Rand Company, (See Bancel, Paul A., assignor.)

Ingersoll-Rand Company. (See Bancel, P. A., and Kirgan, assignors.) Ingersoli-Rand Company. (See Bayles, Lewis C., as-

Ingersol-Rand Company. (See Bayles, L. C., and Morrow, assignors.)
row, assignors.)
(See Bayles, L. C., and Slater,
lugersol-liand Company. (See Bayles, L. C., and Slater,

assignors.)
Ingersoil-Rand Company. (See Brackett, John C., as-(See Goodwillie, John E.,

signor.)
Ingersoll-Rand Company.
assignor.)
Ingersoll-Rand Company. (See Haight, Harry V., assignor.)

Ingersoll-Rand Company. (See Hansen, Charles C., assignor.) Ingersoll-Rand Company. Ingersoll-Rand Company. (See Huff, Leslie R., assignor.) (See Hulshizer, George W.,

assignor.)
Ingersoll-Rand Company. (See Jimerson, Francis A., assignor.)
Ingersoll-Rand Company. (See Kirgan, John F., as-

signor.) Ingersoll-Rand Company. (See Le Valley, John, assignor.) (See Lear, Earl B., assignor.) (See Lee, Gordon, assignor.) (See Levine, Hyman, assignor.) (See Longacre, Frederick van Ingersoll-Rand Company, Ingersoll-Rand Company, Ingersoll-Rand Company, Ingersoll-Rand Company, Ingersoll-Rand Company, D., assignor.) Ingersoll-Rand Company, Ingersoll-Rand Company, Ingersoll-Rand Company, Ingersoll-Rand Company, Ingersoll-Rand Company, Ingersoll-Rand Company, Ingersoll-Rand Company,

(See Lundstrom, Arthur G., (See Metzgar, Chester W., as-

(See Mock, John F., assignor.) (See Morrison, William A., assignor.)
Ingersoll-Rand Company.
Ingersool-Rand Company.

(See Naab, Julius, assignor.) (See Page, Robert F., assignor.) Ingersoll-Rand Company. (See Peters, Arthur E., as-

signor.)
Ingersoll-Rand Company. (See Prellwitz, William, assignor.)
Ingersoll-Rand Company et al. (See Rathbun, Edward,

Ingersoll-Rand Company. (See Redfield, Snowden B., assignor.)
Ingersoll-Rand Company. (See Rudlin, Frederick W., as-

signor.)
Ingersoll-Rand Company. (See Slater, Fred M., assignor.)
Ingersoll-Rand Company. (See Smickle, Raymond H.,

assignor.)
Ingersoll-Rand Company. (See Smith, William A., assignor.)

Ingersoll-Rand Company. (See Zimmermann, William F.,

Ingersoil-Rand Company. (See Zimmermann, William F., assignor.)
Ingham, Edward S., assignor to Budd Wheel Company, Philadelphia, Pa. Wheel-straightening machine. 1,650,216; Nov. 22.
Ingham, Robert A., Sellersville, Pa., assignor to United States Gauge Company, New York, N. Y. Pocket tire tester. 1,610,628; Feb. Son. Conn., assignor to Pratt Wilter, Company, New York, N. Y. Ball-turning device. 1,626,936; May 3.
Inghram, Howard T., et al., trustees. (See Inghram, Howard T., assignor.)
Inghram, Howard T., assignor, Inghram, Howard T., assignor, Wilter, Wilter, Wilter, M. T. Inghram, and G. Schaefer, trustees of the trust H. T. Inghram, and G. Schaefer, trustees of the trust K. T. Inghram, and G. Schaefer, trustees of the trustees of the Inghram, Howard T., assignor, Inghram, Ho

Apr. 19.

Ingles, Edward I., Indianapolis, Ind. Apparatus for preventing incrustation of water coils. 1,642,610; Sept. 13.

Inglis, Alfred H., Orange, N. J., assignor to American Telephone and Telegraph Company. Substation circuits, 1,618,201; Feb. 22.

Inglis, Aprec N., assignor of one-half to C. W. Inglis, Inglis, Horacon C., and C. C. W. Inglis, Clement W. (See Inglis, Bruce K., assignor.) Inglis, Henry B., Dayton, Obio. Gun sight. 1,650,628; Nov. 29.

Nov. 29.

Nov. 29.

Nov. 29.

Nov. 29.

Adjustable windowsash-fastening device. 1.633,861; June 28.

Rgold, Ernest A., assignor to W. & C. Pantin, London, England, Clutch mechanism particularly applicable to wire twisting or tylne machines. 1,622,146; Mar. 22.

Ingoldby, Maurice K., Westminster, London, assignor to Vickers Limited, and The Variable Speed Gear Limited. And The Variable Speed Gear Limited. The Company of the Swansh-plate type. 1,612,295; Jan. 4.

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Ingolfsrud, Leif J., and W. H. Soule, Coniston, Ontario,
Canada. Apparatus for separating magnetic material
from nonmagnetic material. 1,625,237; Apr. 19.
Ingram, Floyd M., Sloux Rapids, Iowa. Cow hopple.
1,633,020; June 21.
Ingram, George P., San Jose, Calif. Pliers. 1,639,183;
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Ingram, George P., San Jose, Calif. Phers. 1,009,100, Aug. 16.
Ingram, Harry, Brooklyn, N. Y. Vacuum sealing machine for jars and other containers. 1,624,869; Apr.

12.

Ingram, Oscar L., Walla Walla, Wash. Liquid-level gauge. 1.641.837; Sept. 6.

Ingram, Walter M., Sudsbrook Park, assignor of two-thirds to I. Blum, Baltimore, Md. Making a commodity package, 1.616.804; Feb. 8.

Ingram, Walter M., assignor to The Reliance Pump and Machine Company, Baltimore, Md. Tire pump. Ungram, Walter M., Baltimore, Md., assignor to S. S. Unglaub. Air-pump connection. 1,652.626; Dec. 13.

Ingram, Walter M., Baltimore, Md., assignor to S. S. Unglaub. Air-pump connection. 1,652.626; Dec. 13.

Ingram, William C., and B. J. Everest, Hackney Wick. London, England. Teat and valve for feeding bottles. 1,640,152; Aug. 23.

Inhofe, Perry D., assignor to C. B. Hess, Des Molnes, 1,638.308; Aug. 9.

Inland Empire Paper Company. (See Rosebush, Waldo E., assignor.) Inland Engineering Company. (See Alexander, Ralph I.,

Inland Engineering Company. (See Alexander, R. I., and

Inland Engineering Company. (See Alexander, R. I., and Exton, assignors.)
Inland Glass Company. (See Allen, Joseph H., assignor.)
Inland Manufacturing Company, The. (See Chilton, Ralph H., assignor.)
Inland Manufacturing Company, The. (See Geyer, Harvey D. assignor.)
Inland Sent assignors.

Inland Sent assignors.

Inland Manufacturing Company, The. (See Geyer, H. D., and Scott, assignors.)
Inland Manufacturing Company, The. (See Lee, John W., assignors.)

assignor.)
Inland Manufacturing Company, The. (See Nellis, C. P., and Scott, assignors.)
Inland Steel Company. (See McIntosh, R. L., and Fox, assignors.)

Inland Steel Company. (See McIntosh, Robert L., as-

Steel Company. (See Murton, Crawford B., as-Haind Steet Company, signor), 10 man, 12 man, 12 man, 13 man, 14 man, 15 man, 16 man, 17 man, 18 man,

Innes, George, Davenport, Iowa. Grain shocker. 1,646,250; Oct. 18. Innes, George, Davenport, Iowa. Grain shocker. 1,646,251; Oct. 18. Innes, George, Davenport, Iowa, assignor to Innes Shocker Company, Philadelphia, Pa. Grain shocker. Re16,552; Feb. 15.

Ino, Kunisa shaker. Des. Vivo-shaan, William D.

Inskeep, William D., and E. B. Parsons, San Francisco, Calif. Automatic releasing clutch. 1,632,839; June 21.

Instrumenti di Misura C. G. S. Societa Anonima. (See Usigli, Bruno, assignor.) Insulex Corporation. (See Ashenhurst, Harold S., as-

signor.)
Insulex Corporation. (See Nelson, William K., assignor.)
Internan, William, Brooklyn, assignor to American Lithographic Company, New York, N. Y. Banding cigars.
1.618.983; Mar. 1.
Interessentskapet Johs. Rudlands Selvbinder. (See Rudland, Johannes, assignor.)
Internals Signal Corporation. (See Conover, Arthur V.,

assignor.)

assignor.)
Interlocking Shingle Co. (See Davis, Isadore, assignor.)
International Amusement Corporation. (See Newsbaum, F. J., and Lonn, assignors.)
International Banding Machine Company. (See Malocsay, Francis X., assignor.)
International Business Machines Corporation. (See Peirce, John R., assignor.)
International Cigar Machinery Company. (See Bronan-International Cigar Machinery Company. (See Bronan-International Cigar Machinery Company. (See Halstead, John F., assignor.)

International Combustion Engineering Corporation. (See Clendon, George W., assignor.) International Combustion Engineering Corporation. (See deLorenzi, Otto, assignor.)

International Combustion Engineering Corporation, London, William J. A., assignor.) In Corporation, London, William J. A., assignor.) Gorporation, International Combustion Engineering Corporation, McEwen, Samuel, assignor.) International Combustion Engineering Corporation, Schwartz, Carl, assignor, Schwartz, Carl, Ca (See (See (See

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Skelly, John S., assignor.)
International Combustion Engineering Corporation. (See
Van Brunt, John, assignor)
International Combustion Engineering Corporation. (See
Wiele, Sigurd J. A., assignor.)
International Combustion Engineering Corporation. (See
Wray, John W., assignor.)
International Controlled Lamp Company, The.
Isloss, Richard R. & Salpment Company, The.
International Derrick & Equipment Company. (See
Bloss, R. R., Strott, and Ansel, assignors.)
International Fire Equipment Corporation. (See Johnston, Charles O., assignor.)
International Fire Equipment Corporation. (See Johnston, Charles O., assignor.)
International Folding Paper Box Co. (See Soybel, Meyer.
assignor.)

assignor.)

International Fruit Vending Corporation. (See Redlinger, Michael, assignor.)
International Harvester Company. (See Anderson, Emil F., assignor.)
International Harvester Company. (See Anthony, J. E.,

and Baker, assignors.)
International Harvester Company. (See Baker, David B., assignor.)

assignor.)
International Harvester Company. (See Benjamin, B. R. and Raney, assignors.)
International Harvester Company. (See Benjamin, B. R., and Webber, assignors.)
International Harvester Company. (See Bozard, Harrison B., assignor.)
(See Cady, Sherman

W., assignor.) International Harvester Company. (See Danly, Philo

International Harvester Company. (See Dennis, Samuel K., assignor.)
International Harvester Company, (See Dewey, Frederick

L., assignor.) Lo., assignor.)
International Harvester Company, and Mitchell, assignors, International Harvester Company, taf W., assignor.)
International Harvester Company, and Golt, assignors, (See French, C. A., and Golt, assignors,)
International Harvester Company, (See Gronke, Barney,

assignor.) International Harvester Company. (See Hitchcock, Rex

Infernational Harvester Company,
B., assignor.)
International Harvester Company,
L., and Towle, assignors.)
International Harvester Company,
and Mitchell, assignors.)
International Harvester Company,
and Danly, assignors.)
International Harvester Company,
International Harvester Company,
See Kipp, Roy H., assignor.)

International Harvester Company. (See Kowalsky, Andrew, assignor.) International Harvester Company. (See Lindgren, Alexus

C., assignor.)
International Harvester Company. (See Mitchell, Robert M., assignor.)
International Harvester Company. (See Pearson, Charles, assignor.)

International H R., assignor.) al Harvester Company. (See Raney, Clemma

R., assignor.)
International Harvester Company. (See Rice, G. L., and Whittomb, assignors.)
International Harvester Company. (See Schoenrock, Otto R., assignor)
Fr., assignor)
Fr., assignor)
International Harvester Company.
International Harvester Company.
International Harvester Company. (See Sperry, H. B., and Witte, assignors).
International Harvester Company. (See Surrock, John Assignor).

International Harvester Company. (See Webber, William, assignor.)
International Harvester Company. (See Wiklund, Anders,

International Harvester Company. (See Wiklund, Anders, assignor.)
International Harvester Company. (See Witte, Gustav W., assignor.)
International Life Saving Water Making Cup Corporation. (See Armbrust, Charles W., assignor.)
International Motor Company. (See Adams, Clyde W., assignor.)

International Motor Company. (See Bernard, Harry, as-

signor.)
International Motor Company. (See Drumm, C. F., and Gurney, assignors.)

International Motor Company. (See Erskine, Clyde, as-International Motor Company. (See Froesch, Charles, International Motor Company. (See Gurney, Erving R., International Motor Company. (See Haag, Gustavus, as-International Motor Company. E. B., assignor.) International Motor Company. (See Hasselkus, William (See Heiney, John W., International Motor Company. (See Hewitt, E. R., and International Motor Company. Leipert, assignors.) International Motor Company, jr., assignor.) International Motor Company. Hanshew, assignors.) International Motor Company. (See Josephs, Lyman C., (See Jupp, W. B., and (See Kohlberger, Frank, International Motor Company. (See Leipert, August H., International Motor Company. (See Manville, Keith R., International Motor Company. (See Masury, Alfred F., assignor. International Motor Company. (See Masury, A. F., and Froesch, assignors.)
International Motor Company.
Gurney, assignors.)
International Motor Company. (See Masury, A. F., and (See Masury, A. F., and Leipert, assignors.)
International Motor Company. (See Matthews, Joseph L., assignor.)
International Motor Company. (See Matthews, Philip E., assignor. International Motor Company. (See McCall, George, assignor.)
International Motor Company. (See Nein, Charles L., assignor.)
International Motor Company. (See Pampinella, Frank, International Motor Company. (See Queeney, Frank E., assignor.)
International Motor Company. (See Reid, J. E., and Nein, assignors.)
International Motor Company. (See Robbins, Azor D., assignor.)
International Motor Company. (See Runyon, Carroll T., International Motor Company. (See Shields, Henry B., assignor.)
International Motor Company. (See Wilson, Raymond C. International Motor Company. (See Wirrer, Gottfried, International Nickel Co., The. (See Lellep, Otto, as-Signor.)
International Nickel Company, The. (See Merica, P. D. and Vanick, assignors.)
International Paper Company. (See Peschl, Frank A., assignor.)
International Patents Development Company. (See Buel, assignor.)
International Patents Development Company. (See Buel, International Patents Development Company. (See Copland, Charles, assignor.)
International Patents Development Company. (See McCoy, Rush O., assignor.)
International Patents Development Company. (See McCoy, Rush O., assignor.)
International Patents Development Company. (See Newbirk, William B., assignor.)
International Patents Development Company. (See Slate, Thomas B., assignor.)
International Precipitation Company. (See Deutsch, Waither, assignor.)
International Precipitation Company. (See Jakosky. Universational Precipitation Company. (See Schmidt, Waiter A., assignor.)
International Precipitation Company. (See Schmidt, Waiter A., assignor.)
International Precipitation Company. (See Viets, Floyd H., assignor.) H., assignor.)
International Precipitation Company. (See Welch, Harry International Precipitation Company. (See Jahn, Raymond F., assignor.)
International Postal Supply Company. (See Mitchell, J. A., and Zahn, assignors.)
International Postal Supply Company. (See Zahn, Lawrance I., assignor.) rence J., assignor.)
International Scale Company. (See Gilbert, William N., assignor.)
International Scale Company. (See Osgood, Louis A., assignor.)
International Scale Company. (See Osgood, L. A., and Wolf, assignors.) International Screw Company. (See Arenz, John A., as signor International Shoe Company. (See Foley, William, assignor.)
International Silver Company (1926) Limited, The.
(See Green, Archibald H., assignor.)
International Silver Co. (See Beck, Ernest T., as-International Silver Co. (See Brown, Leslie A., assignor.)

International Silver Company. (See Kintz, Alfred G., assignor.)
International Silver Co. (See Kintz, Robert R., assignor.)
International Silver Company. (See Leech John assignor.)
International Silver Company. (See McKeon, Patrick D., assignor.)
International Silver Company. (See Stark, Frederick W., assignor.)
International Silver Company. (See Zeitung, Alpeck L., assignor.) International Skywriters Limited. (See Sieber, Jacob, nor.) ational Stamping Company. (See Green, Walter International Stamping Company. (See Green, Walter R., assignor.)
International Sugar and Alcobol Company Limited, The. (See Levy, Marcel, assignor.)
International Time Recording Company of New York, The. (See Bryce, Junes W., assignor.)
International Time Recording Company of New York.
International Telephone Company. (See Heath, Earl R., assignor.)
Interstate Equipment Corporation. (See Kilcarr, Gilbert M., assignor.)
Interstate Folding Box Company, The. (See Bergstein, Samuel, assignor.)
Samuel, Indiner, assignors.)
Interstate Folding Box Company, Comp C., assignor.)
Interstate Iron and Steel Company. (See Forrest, Andrew, assignor.)
Intertype Corporation. (See Anderson, David L., assignor.)
Intertype Corporation. (See Freund, Herman R., assignor.) Intertype Corporation. (See Homans, Thomas, S., assignor.) signor.)
Intertype Corporation. (See Testi, Nicholas, assignor.)
Intertype Corporation. (See Tomlin, John R., assignor.)
Interwoven Mills, Inc., The. (See Mettler, J. W., and Davis, assignors.) tieri, Louis, Brooklyn, N. Y. Birdcage. Des. 71,797; Intleri, Louis, Brooklyn, N. Y. Birdcage. Des. 71,797; Jan. 4. Inventors' Trading Company. (See Ratcliff, William D., assignor.)
Invincible Laundry Equipment Co. (See Bell, Daniel, Incincible Laundry Equipment Co. (See Bell, Daniel, assignor.)
Invincible Metal Furniture Company. (See Anderson, Edgar W., assignor.)
Inzinga, Philip, assignor of fifty-one per cent to E. M. Pittenger, Chicago, Ill. Producing facsimile carbon impressions. 1,643,212; Sept. 20.
Indides, Philip D., assignor of one-half to Ransomes & Rapier Limited, Ipswich, England. Electrically-propelled vehicle. 1,619,616; Mar. 1. lowa State College of Agriculture and Mechanic Arts. Ipag. International Patent. Exploiting Company. (See Simmchen, Wilhelm, assignor.)
Ippco-Geselschaft mit beschränkter Haftung International Projektion-Propaganda-Compagnie. (See Boykow, Johann, assignor.) tionale Projektion-Propaganda-Compagnie. (See Boy-kow, Johann, assignor to The General Tire & Rubber Company, Akron, Ohio. Vehicle tire. Des. 78,835; Nov. 15. Ireland, Charles E., Jamaica, N. Y., assignor to Rich & McLean, Inc. Typographical machine. 1,638,036; Aug. 9. McLean, Inc. Typographical machine. 1,638,036; McLean, Inc. Typographical machine. 1,638,036; McLean, Coryge B., and R. T. Soule, assignors to Taylor Instrument Companies, Rochester, N. Y. Receptacle or case for thermometers. 1,634,028; June 28. Ireland, Harold W. F., assignor to C. L. Breeden, Birmingham, England. Temperature indicator suitable for use upon or in connection with the radiators of internal-combustion engines of automobiles. 1,652,244; Ireland, Ward S., St. Paul, Minn. Clutch. 1,649,116; Nov. 15. Ireland, Ward S., assignor to Lipman Refrigeration Company, Beloit, Wis. Alloy. 1,626,038; Apr. 26. Irgens, Finn T. (See Tanner, P. A., and Irgens.) Irish, Mary S., Los Angeles, Calif. Domestic cooking vessel. 1,622,98; Apr. 26. 1,617,523; Feb. 10. Irish, William E., assignor to The Hydraulic Steel Company, Cleveland, Ohio. Rivet heater. 1,641,085; 1,617,523; Feb. 15.
Irish, William E., assignor to The Hydraulic Steel Company, Cleveland, Ohio. Rivet heater. 1,641,686; Irish, William F., Anderson, S. C. Display hoeb; Irish, William F., Anderson, S. C. Display hoeb; Irisher, William F., Anderson, S. C. Display hoeb; Irisher, Henry G., Chicago, Ill. Window attachment. 1,649,164; Nov. 15.
Iron Products Corporation. (See Molby, Edgar C., assignor.)
froms, Roberts H., assignor to Central Iron & Steel Company, Harrisburg, Pa. Floor plate. Des. 73,834;
Nov. 15. Nov. 15. Ironside, Edward A., London, England. Apparatus for the extraction and recovery of volatile liquids. 1,631,036; May 31. Ironton Bernhard Boller Company. (See Bernhard, John

Irrgang William F., Chicopee, assignor to The Fisk Rub-ber Company, Chicopee Fulls, Mass. Folder for pres-182, 1998. The Company of the Company of the Com-Irvin Air Chute Co. (See Irvin, Leslie L., assignor.) Irvin, Leslie L., assignor to Irvin Air Chute Co., Buf-falo, N. Y. Method and apparatus for providing para-chute shroud lines. 1,525,725; Apr. 19. Irvin, Richard, Knoxville, Pa. Garage structure.

Caute Stroud nies. 1525, 25; 3pr. 19.

Frin. Richard. Knowville, Pa. Garage structure. Irvin. Richard. Knowville, Pa. Garage structure. Irvin. Roy. (See Kohman, H. A. Irvin, and Stateler.) Irvin. Russe J., assignor to R. C. Mitchell, Mount Vernon, N. Y. Dishwashing machine. 1,633,669; June 28.

Fryin, Walter. (See Murray, John F., assignor.) Irvine. Alexander R., Brooklyn, N. Y. Envelope opener. 1,649,669; Nov. 15.

Fryine. Charles, Foronto, Ontario, Canada. Starting Canal for internal combustion engines. 1,644,019; Canal for internal combustion engines. 1,644,019;

crank for internal comoustion engines. 1,044,045; Oct. 40.

1 Oct.

assignor.) Assignor to Irving Engineering Sales Co., Inc., Buffalo, N. Y. Operating mechanism for radiator shutters. 1,633,021; June 21. Irving Iron Works Company. (See Prince, Burton A., assignor.)

Irving Iron Works Company. (See Van Hoffen, William

Irving from works Company. (See Van House, Triman A., assignor.)
Irving, Norman B., Philadelphia, Pa. Automatic measuring device for liquids. 1,622,317: Mar. 29.
Irving-Pitt Manufacturing Company. (See Pitt, William P., assignor.)
Irving-Pitt Manufacturing Company.
(See Redies, E. F.,
and Van Valkenburgh, assignors.)
Irving-Pitt Manufacturing Company.
(See Rupf, Frank

and Van Valkenburgh, assignors, Irving-Pitt Manufacturing Company. (See Rupf, Frank E., assignor.)

Lyning-Pitt Manufacturing Company. (See Van Valkenburgh, Richard M., assignor.)

Lyning-Pitt Manufacturing Company. (See Van Valkenburgh, Richard M., assignor.)

Lyning, Fred, Kansas City, Mo. Radiographic attachment for X-ray machines. 1,651,707; Dec. 6.

Lynin Auger Bit Company, The. (See Robinson, Charles B., assignor.)

Lynin, Grant, administrator, (See Sheer, Henry M.)

Lynin, Grant, administrator, (See Sheer, Henry M.)

Lynin, Henry H., Greenville, S. C. Glare shield.

1,640,897; Aug. 30.

Lynin, Henry H., Greenville, S. C. Glare shield.

1,641,839; Sept. 6.

Lynin, Henry H., and W. A. Carpenter, Greenville, S. C. Fender attachment for automobiles. 1,631,417; Lynin, Howard W., et al. (See Rein, Edward A., assignor.)

Itwin, Howard W. (See Rein, E. A., Irwin, and Leidy,)
Irwin, Howard W. (See Rein, E. A., Irwin, and Leidy,)
Irwin, John P., Rocky River, assignor to Arthur G. McKee & Company, Cleveland, Ohlo. Self-propelled rail
car. 1,634,362; July 5.
Irwin, Lawrence C., assignor to Charles J. Tagliabue
Mfg. Co., Brooklyn, N. Y. Compensating means for
recording and indicating instruments. J. 633,380;
Irwin, Walter J., Akron, Ohlo. Molding machine.
1,621,141; Mar. 15.
Isaac. Archibald C. T., Pittsfield, Mass., assignor to General Electric Company. Fluid-flow indicator.
1,662,941; Dec. 13.
Isaac. Elmer B. (See Raus, A., and Isaac.)
Isaac. Elmer B. (See Raus, A., and Isaac.)
Isaac. Senses from a solution. 1,646,454; Oct. 25.
Isaacs, Fannie M. (See Stowe, W. C., and Isaacs.)
Isaacs, James, et al. (See Millinack, George E., assignor.)
Isaacs, James, et al. (See Millinack, George H., assignor.)

signor.)
Isaacs, Louis, Louisville, Ky. Building material.
1,335,676; July 12.
1saacs, Mark, Minneapolis, Minn. Grain tester.
1,622,515; Mar. 29.
Isaacs, Mark, Minneapolis, Minn. Milk can. 1,635,419;
July 12.
Isaacs, Mark, Minneapolis, Minn. Ground anchor.
1,640,504; Aug. 30.
Isaacs Mark, Minneapolis, Minn. Seed germinator.
Isaacson, Joseph T. (See Kellander, H. S., and Isaacson, Jasacson, Joseph T. (See Kellander, H. S., and Isaacson, William O., Chicago, Ill. Anchor. 1,616,426;
Feb. 1.

Isaacson, William O., Chicago, Ill. Anchor. 1,616,427; Feb. 1.

Isaacson, William O., Chicago, Ill. Anchor. 1,649,407; Nov. 15. Isago, Gensuke, Ely, Nev. Beet-topping machine. 1,637,644; Aug. 2.

Isbell, Loran, Little York, N. Y. Snowplow. 1,629,341;
May 17
May 18
May

Schinger, Bric. East Rochester, assignor of one-half to F. Keer, Rochester, N. Y. Guard for punch presses. Reley, Peter W., McLeansville, N. C. Disk harrow. 1,616,576; Feb. 8. Iseman, John W., Brooklyn, assignor of fifty per cent to J. D. Small, New York, N. Y. Rivet. 1,643,771; Sept. 27.

Sept. 27.

Iseman, Minnie, assignor to M. A. Vierling, Pittsburgh, Pa. Brush attachment for washing machines. I,637,448; Aug. 2.

Isemberg, Abrett Gee Borland, Delees, assignor.)

Settin, Germany, assignors to Universal Incinerator Corporation. Charging apparatus for furnaces and the Ilke. 1,618,011; Feb. 15.

Isemberg, Hans, O. C., New York, N. Y., and W. Piernay. Stettin, Germany, assignors to Universal Incinerator Corporation. Charging apparatus for furnaces and the Ilke. 1,618,011; Feb. 15.

Isembart, Edwin A. (See Isembart, John, and B. A., Isembart, John and E. A., and W. E. Johnson, Wenatchee, Wash. Spray-forming device. 1,640,546; Aug. 30.

Aug. 30.

Aug. 30.

Iserman. Samuel, Orange, N. J., W. Vernet, New York, and E. Q. Moses, Tarrytown, assignors to Boyce & Veeder Company, Incorporated, Long Island City, N. Y. Fuel for use in internal-combustion engines. I,654,259; Dec. 27.

Isguerra, Martin, Kanopolis, Kans. Bicycle wheel. 1,635,2619; July 12.

Isham, B. L., et al. (See Gregory, B., and Mitchell, as Isherwood, Joseph W., Chisiehurst, England, Construction of floating vessels. 1,622,830; Mar. 29.

Isherwood, Paul A., West Chicago, assignor to H. S. Fischer Co., Chicago, Ill. X-ray apparatus. 1,630,181; May 24.

May 24.

Isley, George H., assignor to Morgan Construction Company, Worcester, Mass. Apparatus for reversing and controlling regenerative furnaces. 1,635,539; July 12.

Isley, Gilbert W., Cleveland, Ohio. Holder arm for door property of the controlling of the

Apr. 5.

Isom, Edward W., Winnetka, Ill., and J. E. Bell, Brooklyn, N. Y., assignors to Sinclair Refining Company, Chicago, Ill. Apparatus for condensing vapors. 1,027,544; May 8.

Isom, Paule H. See Pennington, W. V., and Isom.) Isom, Paule H. See Kramer, J., and Israel. Israelson, Peder, Hillman, Minn. Potato cutter and planter. 1,028,779; May 17.

Isralsky, Jake. (See Rankin, Julian, assignor.) Isringhaus, Hugo, Barmen, Germany. Button-making machine. 1,629,214; May 17.

Isralsky, Jake. (See Rankin, Julian, assignor.) Isringhaus, Hugo, Barmen, Germany. Button-making machine. 1,629,214; May 17.

Isrical Vincent, Enosky, W. Mon, 1,618,930; Listrico, Vincent, Brooklyn, N. Y. Mon, 1,618,930;

Istrico, V Feb. 22 Vincent, Brooklyn, N. Y. Mop. 1,618,930;

Feb. 22.

Ithaca Gun Company. (See Smith, Louis P., assignor.)

Itier, Jules A. H., assignor to Society: Le Textilon Central, Paris, France. Rendering surfaces full dight.

1.649,592; Nov. 15.

Itlen. Martin, Skagway, Alaska. Spark-plug cleaner.

1.643,000; Sept. 27.

1.643,000; Sept. 27.

1.643,000; Jen. 11.

Ivanpah Lime and Chemical Company. (See Wood, Burton G., assignor.)

Ivarson, Victor E., New Rochelle, N. Y. Spirit level.

1.650,122; May 24.

Iversen, Lorenz, Pittsburgh, Pa. Valve. 1.615,270;

Ilan. 26.

Versen, Lorenz, Pittsburgh, Pa. Making valves. 1,629,504; May 24.

1ves, Herbert E., Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Tanssenssion of pictures by electricity. 1,631,963; June 14.

Ives, Herbert E., Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Optical system. 1,647,631; Nov. 1.

Ives, Herbert E., Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Transmission of pictures by electricity, 1,648,127; Nov. 8.

Nov. 8.
res, Herbert E., Montlair, N. J., assignor to Western
Electric Company, Incorporated, New York, N. Y.
Photomechanical reproduction of pictures. 1,649,309;

Dectric Company, Incorporated, New York, N. X.
Better Company, Incorporated, New York, N. X.
Nov. 15.
Nov. 15.
New, 16.

Apr. 12. Jackes-Evans Manufacturing Company. (See Jackes,

Stanley F., assignor.) Jackes, Stanley F., assignor to Jackes-Evans Manufactur-ing Company, St. Louis, Mo. Heater. Des. 72,768;

Jackes, Staniey F., assignor to Jackes-Evans Manutacturing Company, St. Louis, Mo. Heater. Des. 12,768; Jackevich, Joseph. (See Mullen, L., and Jackevich, Jacks, Sylvanus O., Sacramento, Calif. Covered indicating chance disk game. 1,640,998; Aug. 30. Jackson, Albert H., London, England. Electric motorcontrol system. 1,633,102; June 21.

Jackson, Alfred, Philadelphia, Pa. Attachment for emergency hand brakes. 1,616,260; Feb. 1.

Jackson, Andrew O., Portland, Org. Furnace-arch construction. 1,617,739; Feb. 15.

Jackson, Andrew O., Portland, Org. Furnace-arch construction. 1,617,739; Feb. 15.

Jackson, Arthur H. (See Jones, E. P., and Jackson.) Jackson, Byron Pump Mfg. Co., et al. (See Hollander, Aladar, assignor.)

Jackson, Byron, Pump Mfg. Co. (See Hollander, Aladar, assignor.)

Andar, assignor.)

Jackson, Byron, Pump Mfg. Co. (See Hollander, Aladar, acknown of the property of the proper

Jackson Corset Company.
signor.)
Jackson, Dennis E., Cincinnatt, Ohio.
piece and automatic valve. 1,653,572; Dec. 20.
Jackson, Elmer B., Brawley, Calif. Tire carrier.
1,641,890; Sept., Montreal, Quebec, Canada. Side
bearing for railway cars. 1,645,509; Oct. 18.
Jackson, Francis M., Russiaville, Ind. Yoke. 1,613,109;
Jackson, Francis M., Russiaville, Ind. Yoke. 1,640,411; Jackson,

Jackson, Aug. 30 Fred J., Minneapolis, Minn. Jack. 1,640,411;

Aug. 30.

Jackson, Frederick H. (See Bailey, F., and Jackson.)

Jackson, Harold, Garstang, England, Apparatus for hydrating fibrous pulp for the manufacture of paper and cellulose therefrom. 1,652,720; Dec. 13.

Jackson, Harry W., et al. (See Ferris, Roy W., assignor.)

Jackson, James A., Schenectady, N. Y., assignor to General Electric Company. Bicetric-ralway system.

Jackson, James A., Lynn, Mass, assignor to United Shoe Machinery Corporation, Paterson, N. J. Stock-fitting machine. 1,632,232; June 14.

Jackson, James M., Parkersburg, W. Va. Spring-oiling clip. 1,616,805; Feb. 8.
Jackson, James R., Nashville, Tenn. Automatic gate propeller. 1,638,202; Aug. 9.
Jackson, John A., Des Moines, Iowa. Corn popper. 1,620,765; Mar. 15.
Jackson, John A., and P. Swanson, Invercargill, New Jackson, John A., and P. Swanson, Invercargill, New Jackson, John A., and P. Swanson, Invercargill, New Jackson, John T. Gee Smith, E. R., Riee, and Jackson, John T. Goldwater, Mich. Foster board, Jackson, Joseph G., assignor to Edward Katzinger Company, Chicago, Ill. Covered baking pan. 1,628,885; May 17.

1,026,735; May 3
Jackson, Joseph G., assignor to Edward Katzinger Company, Chicago, Ill. Covered baking pan. 1,628,885;
May 17.
Jene G., Congrey R., J. Beston, Mass, assignor to A. B.
Jackson, Lloyd B., Pittsburgh, Pa. Treating hydrocarbon
oils. 1,632,376; June 14.
Jackson, Lloyd E., and H. E. Wassell, Pittsburgh, Pa.
Jackson, Lloyd E., and H. E. Wassell, Pittsburgh, Pa.
Jackson, Macco K., and H. E. Wassell, Pittsburgh, Pa.
Jackson, Macco K., and H. E. Wassell, Pittsburgh, Pa.
Jackson, Macco K., and H. E. Wassell, Pittsburgh, Pa.
Jackson, Macco K., and H. E. Wassell, Pittsburgh, Pa.
Jackson, Macco K., and H. E. Wassell, Pittsburgh, Pa.
Jackson, Macline & Tool Company. (See Dowley, Jesse
B., assignor.)
Jackson, Manusell B., Toronto, Ontario, Canada. Starter
for engines. 1,648,946; Nov. 15.
Jackson, Maunsell B., Toronto, Ontario, Canada. Starter
for engines. 1,648,946; Nov. 15.
Jackson, Maunsell B., Toronto, Ontario, Canada. Starter
for engines. 1,652,361; Dec. 13.
Jackson, Maunsell B., Toronto, Ontario, Canada. Starter
1,652,361; Dec. 18.
Jackson, Minnesota B., Gutbrie, Okia. Body garment.
1,632,137; June 14.
Jackson, Percy, assignor to Walsh & Weidner Boller Co.
Chattanooga, Tenn. Closure plug for pipes. 1,620,728;
Jackson Hertoleum Motor Company, The. (See Jackson,
Jackson, Petroleum Motor Company, The.

Mar. 15.

Jackson Petroleum Motor Company, The. (See Jackson,

Tereme (J. 1831grav)
Jackson, Philip A., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,621,985;
Mar. 22.
Jackson, Philip A., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,522,148;

Jackson, Philip A., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,522,148; Jackson, Philip A., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,680,298; May 81.

Jackson, Philip A., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,632,443; June 14, June 14, Line 14,

June 14.
Jackson, Philip A., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,633,103; June 21.
Jackson, Philip A., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,636,361; July 26.
Jackson, Philip A., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,650,892; Nov. 29.

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pany, Dayton, Ohlo. Autographic register. 1,659,892; Nov. 29.
Jackson, Philip A., Atlanta, Ga., assignor to The Egry Register Company, Dayton, Ohlo. Automatic register. 1,622,147; Mar. 22.
Jackson Telloupany, Dayton, Ohlo. Automatic register. 1,625,174; Apr. 26.
Jackson, Philip T. Toronto, Ontario, Canada. Cooking apparatus. 1,631,418; June 7.
Jackson, Ray P., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Conting inner surfaces of hollow bodies. 1,624,169; Louis Company. Insulator. 1,622,648; Mar. 29.
Jackson, Ray P., Edgewood. 1,628,869; May I. Turtle Creek, and E. J. Casselman, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Moled plywood. 1,628,869; May II. 1,615,368; Jan. 25.
Jackson, Richard W., Clear Creek, Utah. Egg beater. 1,615,368; Jan. 25.
Jackson, Samuel, Oxford, Ohlo. Rall-securing device. 1,647,229; Nov. 1.
Jackson, Simeon S., assignor to The Stafford Company, Boston, Mass. Weft-parter device for looms. 1,637,114; Jackson, Simeon S., assignor to The Stafford Company, Boston, Mass. Weft-parter device for looms. 1,637,114; Jackson, Release G., Rockford, Ill., assignor to The Jackson, Release G., Rockford, Ill., assignor to The Jackson, Release Merchants and Manufacturing Company.

June 21

Jackson, Thomas, A., Pittsburg, Calif. Pedal-propelled scooter, 1.644836; Oct. 11; Jackson, Vilas H., assignor, by mesne assignments, to The Gustav-Schnefer Wagon Company, Cleveland, Ohio. Drawbar reverse lock, 1,634,501; July 5.

Jackson Vitrified China Company. (See Wilson, James H., assignor.) Jackson, William E. (See Reynolds, W. B., and Jack-

Jackson, William E. (See Reynolds, W. B., and Jackson.)

Jacob, George N., Brooklyn, assignor to Haulon & Goodman Co., New York, N. Y. Brush., 1,616,858; Feb. 8.

Jacob, Max, Essen, assignor to Fried, Krupp Aktlengesellschaft, Essen-on-the-Ruhr, Germany. Cash register. 1,649,408; Nov. 15.

Jacob, Edward N. (See Brigss, S. F., and Jacobl.) Jacob, Edward N. (See Brigss, S. F., and Jacobl.) Jacob, Edward N. assignor, by mesne assignment, Automobile instrument-panel rim. Des 73,915; Nov. 22, Jacob, Bdward N., assignor, by mesne assignments, to Brigss & Stratton Corporation, Milwaukee, Wis. Horn push button. 1,638,037; Aug. 9.

Jacobi, Edward N., assignor to Brigss & Stratton Corporation, Milwaukee, Wis. Tumbler lock. 1,645,006; Oct. 11.

Jacobi, Emil R., assignor to Hayes Wheel Company, Jackson, Jacobi, Emil R., assignor to Hayes Wheel Company, Jackson, Jacobi, Emil R., assignor to Hayes Wheel Company, Jackson, Jacobi, Emil R., assignor to Hayes Wheel Company, Jackson, Jacobi, Emil R., assignor to Hayes Wheel Company, Jackson, Jacobi, Emil R., assignor to Hayes Wheel Company, Jackson, Jacobi, Emil R., assignor to Hayes Wheel Company, Jackson, Jacobi, Emil R., assignor to Hayes Wheel Company, Jackson, Ja

portion, minwance, wis. Tumber lock. 1,632,00c; Oct. I.mil R., assignor to Hayes Wheel Company, Jackson, Mich. John for split rims and making the same. 1,632,56c; June 14.

Jacobi, Emil R., and F. H. Le Jeune, Jackson, assignors, by mesne assignments, to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wheel. 1,650,794; Nov. 29.

Jacobowitz, Adolf. Nuremberg, Germany, Cutting disk for high-speed friction saws. 1,630,945; May 31.

Jacobowitz, Adolf. Nuremberg, Germany, Cutting disk for high-speed friction saws. 1,630,945; May 31.

Jacobo, Alaron. J. 1,640,832; Aug. 30.

Jacobs, Aaron. J. 1,640,832; Aug. 30.

Jacobs, Belle. (See Grenier, H. J., assignor.)

Jacobs, Belle. (See Grenier, H. J., assignor.)

Jacobs, Charles B., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Carbon catalyst and making it. 1,623,588; Apr. 5.

Jacobs, Charles B., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Removing cyanides from masses containing the same. 1,623,598; Apr. 5.

Jacobs, Charles B., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Furnacing in thermochemical treatment and apparatus therefor. 1,625,610;

Apr. 19.

Jacobs, Charles B., Wilmington, Del., assignor to Electro
Metallurgical Company. Casting having chromium alloy surface. 1,632,704; June 14.

Jacobs, Charles B., assignor to E. I. du Pont de Nemours
& Company, Wilmington, Del. Erosive resistant ferrous alloy. 1,647,096; Oct. 25.

Jacobs, Emanuel, Detroit, Mich. Razor-honing device.
1,630,182; May 24.

Jacobs, Ernest E., assignor to Lyons' California Glac'
fruit. 1,631,487; June 7, Jacobs, Ernest H., assignor to Electrical Engineers
Equipment Company, Chicago, III. Electrical switch.
1,631,268; June 7.

Jacobs, Ernest H., assignor to Electrical Engineers
Accobs, Ernest H., assignor to Electrical Engineers
Light States H., ass

Cobs. Ernes III. Chicago, III. Circuit breaker.
1041, 63-min III. Chicago, III. Circuit breaker.
1041, 63-min III. Chicago, III. Refining copper.
1048,947; Nov. 15.

1.646,947; Nov. 15.

Jacobs, Emest H., and C. F. Schoonmaker, Chicago, Ill.

Elsectric-transmission system, 1.620,552; Mar. S.

Jacobs, Francis A. (See Finney, H. F., and Jacobs.)

Jacobs, Francis A. (See Finney, H. F., and Jacobs.)

Jacobs, Francis A., Warren, Ohio, assignor, by mesne

assignments, to Chicago-Cleveland Car Roofing Com
pany, Chicago, Ill. Car roof, 1.637.307; July 26.

Jacobs, H. W., et al. (See Clark, Edward E., assignor.)

Jacobs, H. annah, Brooklyn, N. Y. Hair-waving device,

1.652,279; Dec. 13.

Jacobs, Harry, J., Buffalo, N. Y. Spring-lifting mecha
nism for folding couches and the like, 1,650,217;

Nov. 22.

Jacobs, Hugh A. and C. E., Minneapolis, Minn. Mul
tiple-needle hemstitching mechanism, 1,638,338;

Aug. 9.

Jacobs, Irving W. (See Jacobs, Robert and I. W.)

Jacobs, Irving W. (See Jacobs, Robert and I. W.) Jacobs, Isidor M. (See Cruner, William, assignor.) Jacobs, Joe, Denver, Colo, Tire flap. 1,620,318; Mar. 15. Jacobs, Joseph, Broxa, assignor to Webbing and Edging Company, New York, N. Y. Hose supporter. 1,618,435; Feb. 22.

Jacobs, Joseph H. Paxton, Mont. Educational toy. 1,634,194; June 28.

Jacobs, Lillian, Cincinnati, Obio. Carrier for buckets and the like. 1,633,022; June 21.

Jacobs, Louis. (See Litcher, Malvin, assignor.)

Jacobs Manufacturing Company, The. (See Englund, Gustaf A., assignor.)

Jacobs, Maurice, Tucson, Ariz. Spark plug. 1,648,770; Nov. 8.

Jacobs, Richard D., Detroit, Mich. Mechanical movement. 1,623,732; Apr. 5.
Jacobs, Robert, Boston, and I. W. Jacobs, Brookline, Mass. Game. 1,636,6364; July 26.
Jacobs, Thomas, Evansville, Ind. Automobile power transmission. 1,614,614; Jan. 18.

Jacobsen. Emil, New York, N. Y., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic Elephone system. 1,612,80; Jan. 26.

Jacobsen, Emil, Port Washington, N. Y., assignor to American Telephone and Telegraph Company. Telephone-exchange system. 1,623,118; Apr. 5.

Jacobsen, Emil, Plandome, N. Y., assignor to American Telephone system. 1,639,089; Aug. 16.

Jacobsen, Emil, Plandome, N. Y., assignor to American Telephone and Telegraph Company. By-pass selector circuit. 1,644,727; Oct. 11.

Jacobsen, Emil, Plandome, N. Y., assignor to American Telephone and Telegraph Company. By-pass selector circuit. 1,644,727; Oct. 11.

Jacobsen, Ib. H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobsen, Ib. H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobsen, John H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobsen, John H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobsen, John H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobsen, John H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobsen, John H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobsen, John H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobsen, John H. H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobson, Jacobsen, John H., Gedyed, near Horsens, Denmark. Fungicide. 1,617,255; Feb. S.

Jacobson, Arthur, and A. B. Jacobson, Jacobson,

May 17.

May 1'.

Jacobus, David S., Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Method and apparatus for burning fuel. 1,630,337; May 31.

Jacobus, David S., Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Air heater. 1,637,871; No. S.

Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Degassing water. 1,650,129; Nov. 22.

Jacobus, David S., Jersey City, and A. D. Pratt, Short Hills, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Method and apparatus for utilizing heat, 1,624,602; Apr. 12.

1,635,709; July 2.

Jacobus, William L. (See Wetherbee, H. E., and Jacobus, William L.

Jacobus, V

Jacobus, William L. (see Weiterbere, H. E., and Jacobus, Milliam L.) (see Weiterbere, H. E., and Jacoby Hermann, Eberstadt, near Darmetadt; Germany, Device for electrically exhibiting a dauger signal on a locomotive. 1,642,303; Sept. 13.

Jacoby, John, and B. Wieczorkiewicz, Cleveland, Ohio. Lamp shade. Des. 72,873; May 17.

Jacoby Richard, Berlin, Germany, assignor to General Electric Company. Making long crystal tungsten flaments. 1,648,690; Nov. 8.

Jacoba Richard, Berlin, Germany, assignor to General Rocking and Jacoby, Jacoby Richard, Berlin, Germany, assignor to General Electric Company. Making long crystal tungsten flaments. 1,648,690; Nov. 8.

Jacoba Richard, Berlin, Germany, assignor for General Function of the particular of the flaments of the fl

Jacques, Jean. (See Bawald, Adolph W., assignor.)
Jacques, Jean. (See Bawald, Adolph W., assignor.)
Jacques, Jean, assignor of one-half to A. W. Oswald,
Philadelphia, Pa. Closure. 1631,098: May J.
Jacques, Jean, and A. W. Oswald, Philadelphia, Pa.
Closure for automobile radiators and the like1,630,897; May 31.

Jacques, Raynaldo P., Woonsocket, R. I., assignor, by mesne assignments, to The Bassick Manufacturing company, Chicago, Ill. Connecter for lubricating apparatus. 1.637,326; July 26.

Jacques, William L., Central Falls, R. I. Handsaw. Jacques, William L., Central Falls, R. I. Handsaw. Jacques, Adolph W., Newark, N. J. Vehicle tail lamp. 73,181; Aug. 2.

Jacger, Adolph W., Newark, N. J. Vehicle tail lamp. 73,181; Aug. 2.

Jacger, August F. (See Jacger, Gustav A. and A. F.)

Jacger, Tarlies F., assignor to Jacger Portable Power Corporation, Detroit, Mich. Motor vehicle attachment. Jacger, Gustav A. and A. F., assignors to Perfect Pool Focket Irons Company, Morrison, Ill. Machine for forming leathers for pool pockets. 1,636,000; July 19.

Jacger, Max, assignor to Anchor Cap & Closure Corporation, Company, Marking Sanger, Max, assignor to Anchor Cap & Closure Corporation, Company, Marking Sanger, Max, Astoria, N. Y. Positive variable-speed transmission. 1,650,449; Nov. 22.

Jaeger Portable Power Corporation.

transmission. 1,650,449; Nov. 22.
Jaeger Portable Power Corporation. (See Jaeger, Charles F., assignor.)
Jaegler, Heinrich, Salem, Oreg. Warm-air-furnace radisagler, Salem, Salem,

Jahant, Charles J., assignor to The General Tire & Rubher Company, Akron, Ohio. Golf club. 1,636,514;
July 19.
Jahn, B., Manufacturing Company, The. (See Jahn, B.,
and Kahl, assignors.)
Jahn, Berthold, and E. E. Kahl, assignors to The B.
Jahn Manufacturing Company, New Britain, Conn.
Jahn, Erelevick L., assignor 1, Weston & McDaniel Co.,
Philadelphia, Pa. Screen. 1,631,822; June 7,
Jahn, Herman C., Springfield, Ill. Wrench. 1,627,035;
May 3.
Jahn & Ollier Engraving Co. (See Ronning, Victor C.,
Jahn & Ollier Engraving Co. (See Ronning, Victor C.)

abn & Ollier Engraving Co. (See Ronning, Victor Cassignor.)

assignor.)

Jahn, Raymond F., assignor to International Postal
Supply Company, Brooklyn, N. Y. Printing-die structure. 1,628,473; Apr. 5.

Francisco, Calif. Electrolytic
cell. 1,623,246; Apr. 5.

Jahnke, Charles B., Beloit, Wis., assignor to Fairbanks,
Morse & Co., Chicago, Ill. Oll filter. 1,644,728; Oct. 11.

Jahr, Arthur A., Forest Park. assignor of one-baif to
Apr. 10 Schultz, Chicago, Ill. Window. 1,625,611;

Apr. 10 Schultz, Chicago, Ill. Window. 1,625,611;

Apr. 10 Schultz, Chicago, Ill. Window. 1,625,611;

19 Apr. 19.
Jahraus, Joseph E. (See Schulz, Otto E., assignor.)
Jakeman, John W., Altrincham, assignor to Linotype
and Machinery Limited, London, England. Sheet-delivery mechanism for printing machines. 1,639,184;
Aug. 16.

Aug. 16.
Jakeway, George W. (See Paque, E. J., and Jakeway.)
Jakobson, Herman. (See Crook, Louis H., assignor.)
Jakobvits, Martin. (See Weinberger, V., Jakobovits, and

Roth.) Roth.) George and V. Schwarz, Chicago, Ill. Combined door-lock mechanism and burglar adarm. 1,639,566; Aug. 16. Jakopec

Jakopec, George and V. Schwarz, Chicago, Ill. Combined door-lock mechanism and burglar alarm. 1,639,565; Jakosky, John J., assignor to International Precipitation Company, Los Angeles, Calif. Electrical phonograph reproducer. Des. 71,837; Jan. 11. Jakosky, John J., Los Angeles, Calif. Electrical phonograph reproducer. Des. 71,837; Jan. 11. Jakosky, John J., Los Angeles, Calif. Apparatus for sound company, Los Angeles, Calif. Apparatus for sound reproductions. 1,626,088; Apr. 26. Jakowsky, Jay J., Los Angeles, Calif. Process of and apparatus for distilling bituminiferous material. Jakowsky, Jay J., Los Angeles, Calif. Process of and apparatus for distilling bituminiferous material. Jakowsky, Jay J., Los Angeles, Calif. Process of and apparatus for distilling bituminiferous material. Jakowsky, Lag Mand. J., Detroit, Mich. Light support. 1,643,455; Sept. 27. Jakubiec, Kazimierz, Chicago, Ill. Shade-roller bolder and curtain-rod bracket. 1,634,364; July 5. Jalbert, Georges, assignor of one-half to Societté Parisleme Company, Calif. Process of and Calif. Guard for half clippers. 1,652,439; Dec. 13.

assignor.)

James Corporation Limited. (See Gosing, William J., assignor).

James, Bund L., New York, N. Y. Belt and buckle James, Edwin F. Cleveland, Ohlo. Refrigerating apparatus. 1,626,835; May 3.

James, Bdwin F., Abngton, Pa. Folding stool or table. 1,652,942; Dec. 13.

James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switch. 1,622,649; Mar. 23.

James, Henry D., Edgewood Park, Pa., assignor to Westingship of the Company of the Comp

Feb. 22. James Joe, Brownwood, Mo. Filtering device. 1,621,413;

James Age, Brownwood, Mo. Filtering device. 1,621,416; Mar. 15. Jumes, John A., Sailes, La. Clevis. 1,618,663; Feb. 22. Jumes, Keith D., Hobart, Tasmania, Australit. Variable-transmission gearing. 1,526,611; May 8. James Manufacturing Company. (See Markey, George T., James Manufacturing Company.)

assignor.)
unes Manufacturing Company, (See Olson, J. B., and Shodron, assignors.)
James Manufacturing Company. (See Stader, O., and

Olson, assignors.)
James, Nepthamus E., et al. (See Clayton, William F.,

James, Wellmanne St., et al. (See Calyston, Wellmanne)

James Samuel W., Chicago, Ill. Service platter. Des.

73,744; Nov. 1.

James Samuel W., Chicago, Ill. Serving implement.

1.643,456; Sept. 27.

James, Ghore V., assignor to William A. Rogers, Ltd.,

Niagara Falls, N. Y. Spoon. Des. 72,769; May 31.

James, Thomas, Battle Creek, Mich. Surgical appliance.

1.615,845; Feb. 1.

James, William, C. Hugton, Kans. Broomcorn harvester

and cleaner. 1.615,881; Feb. 1.

James, William D. (See Tooker, Harry S., assignor.)

James, William D. (See Tooker, Harry S., assignor.)

James, William D. (See Tooker, Harry S., assignor.)

assignor.)

assignor.)

James William R., Portland, Oreg. Brush with detachable handle. 1,630,703; May 31.

Jameson, Percy R., assignor to Taylor Instrument Companies. Rochester, N. Y. Barometer-setting means. 1632,736; June 14.

Jameson, Stewart W., Duluth, Minn. Shaft-kila construction. 1,630,489; May 31.

Jamgotch, Hagop A., Minneapolis, Minn. Stair-carpet fastene. 1,529,505; May 24.

Jamison, Chamber M., Masignor Dy mesne assignments, to Taylor M. Masignor May 14 aren. Fla. Bulling apparatus. 1,611,350; Nov. 29.

Jamison, Frank B., Kansas City, Kans. Attachment for paper-folding mechines. 1,627,333; May 3.

Jamison, George S., et al. (See Chapman, Charles E., assignor.)

Jamison, George S., et al. (See Chapman, Charles E., assignor.)

Jammer, Jacob S., assignor to Western Electric Company, Incorporated, New York, N. Y. Carrier-wave signaling system. 1613,951; Jan. 11. (Western Electric Company, Jammer, Jacob S., assignor to Western Electric Company, Incorporated, New York, N. Y. Carrier-transmission system. 1617,391; Feb. 15.

Jammer, Jacob S., assignor to Western Electric Company, Incorporated, New York, N. Y. Carrier-transmission system. 1617,392; Feb. 15.

Jammer, Jacob S., assignor to Western Electric Company, Incorporated, New York, N. Y. Transmission regulation. 1,623,600; Apr. 5.

Jammer, Jacob S., Cumberland, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Multiplez transmission. 1624,650 A. Wew York, N. Y. Multiplez transmission. 1624,650 A. Wew York, N. Y. Multiplez transmission. 1624,650 A. Wew York, N. Y. Signaling system. 1,632,078; June 14.

Jammer, Jacob S., Cumberland, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Repeater circuit for multiplex systems. 1,632,900; June 21.

Repeater circuit for honory, June 21. Jammer, Jacob S., assignor to Western Electric Company, Incorporated, New York, N. Y. Transmission regulation 1042,494; Sept. 19. Djokjakarta, Java, Dutch East Indies, assignor to N. Y. Constructic Ateller der Vorstenlanden, Djokjakarta, Netherlands East Indies. Three-roller sugar-cane mill with a particularly arranged feed roller. 1,821,077; Mar. 15.

Janac, Edward J., Chicago, III. Milling-machine attachment. 1,614,246; Jan. 11.

Janacke, Benno F., assignor to Shelton-Jancke Corporation,
New York, N. Y. Heater for hair waving. 1,618,592;

Jeen Z. Bonno F., assignor, by mesne assignments, to the Hallwell Shelton Electric Corporation, New York, N. Y. Electric massage machine. 1,630,435; May 31. Jancke, Benno F., Brooklyn, assignor, by mesne as signments, to Halliwell-Shelton Electric Corporation New York, N. Y. Air-puritying device. 1,637,448

Aug. 2.
Jancke, Beno F., Brooklyn, assignor to Manhattan Elec-trical Supply Company, Incorporated, New York, N. Y. Electronic device. 1,647,364; Nov. 1.
Janda, Anna J., Chicago, Ill. Marcel waver. 1,615,702; Jan. 25.

Jan. 25.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,309; Aug. 23.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, betroit, Mich. Clamp for vehicle bumpers. Des. 73,308; Aug. 23.

Jandus, Herbert S., assignor to The C. G. Spring & Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,309; Aug. 23.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,318; Aug. 23.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,320; Aug. 23.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,320; Aug. 23.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,320; Aug. 23.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,329; Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp for vehicle bumper. Des. 73,321; Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Bumper-supporting means. 1,614,734; Jan. 18.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Bumper-supporting means. 1,614,734; Jan. 18.

Jandus, Herbert S., assignor to The C. G. Spring & Bumper Company, Detroit, Mich. Automobile bumper. Jandus, Herbert S., and R. A. Flum, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper S., and R. A. Flum, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Jan. 24, 164, 165; Nov. 15.

Jandus, Herbert S., and H. L. Blydenburgh, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Bumper, 1,623,413; Apr. 5.

Jandus, Herbert S., and E. R. Keelor, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Weblicle bumper. Des. 72,292; Aug. 23.

Jandus, Herbert S., and E. R. Keelor, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,292; Aug. 23.

Jandus, Herbert S., and E. R. Keelor, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Vehicle bumper. Des. 73,292; Aug. 23.

Jandus, Herbert S., and E. R. Keelor, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp for vehicle bumpers. Des. 73,314; Aug. 23.

Jandus, Herbert S., and E. R. Keelor, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp for vehicle bumpers. Des. 73,314; Aug. 23.

Jandus, Herbert S., and E. R. Keelor, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp for vehicle bumpers. Des. 73,314; Aug. 23.

Jandus, Herbert S., and E. R. Keelor, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp blate for vehicle bumpers. Des. 73,316; Aug. 23.

Jandus, Herbert S., and J. R. Morgan, assignors to

Jandus, Herbert S., and J. R. Morgan, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp for vehicle bumpers. Des. 73,316; Aug. 23. Jandus, Herbert S., and J. R. Morgan, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp for vehicle bumpers. Des. 73,316; Aug. 23. Jandus, Herbert S., and J. R. Morgan, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and J. R. Morgan, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp for vehicle bumpers. Des. 73,322; Aug. 23. Jandus, Herbert S., and J. R. Morgan, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Clamp for vehicle bumpers. Des. 73,322; Aug. 23. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and C. E. Rasmussen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and N. Van Husen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Jandus, Herbert S., and N. Van Husen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Pandus, Herbert S., and N. Van Husen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Pandus, Herbert S., and N. Van Husen, assignors to The C. G. Spring & Bumper Company, Detroit, Mich. Pandu

Janestine Frontier Company. See Konier, Watter L., assignor). Janette, John T., Chicago, Ill. Motor-driven apparatus. 1,613,634; Jan. 4. Janette, John T., Chicago, Ill. Brush holder. 1,614,616; Jan. 18.

John T., Chicago, Ill. Strainer. 1,616,577; Janette, Feb. 8.

Feb. 8.

Janette, John T., Chicago, Ill. Brush-holder connection. 1,631,059; Nov. 29.

Janette, John T., Chicago, Ill. Heating apparatus. 1,611,060; Nov. 29.

Janette, John T., Chicago, Ill. Motor construction. 20.

Janette, John T., Chicago, Ill. Motor construction. 20.

Janette, John T., Chicago, Ill. Motor construction. 20.

Janette, John T., Chicago, Ill. Motor construction. 21.

Janette, José C. (See Otto S., and Janetus.)

Janette, Janette,

assignor.)
Janosek. Albin B., Corpus Christi, Tex. Harrow.
1,625,318; Apr. 19.
Janosko, George J. Anaconda, Mont. Snow shovel.
Janosey. George J. Anaconda, Mont. Snow shovel.
Janosey. Hendrik, J. J., assignorto Namibooze Vennoctschap Nederlandsche Kunstzijdefabriek, Arnbem. Netherlands. Treatment of textile fibers, yarns, fabrics,
or the like for obtaining effects of color or luster, or
both. 1,653,962; Dec. 27.
Jansen, Harry. (See Thurston, H., and Jansen.)

Janso, Ernest J. (See Richards, E. W., and Janso.)
Janson, Edwin, Webster City, Iowa. Boller-clean-out device. 1,616,372; Feb. 1.
Janson, George W., Nutley, N. J., assignor to The Western
Union Telegraph Company, New York, N. Y. Mes1,640,325; Aug. 23
Janssen, Henry, assignor to Textile Machine Works, Wyomissing, Pa. Braiding carrier. 1,630,266; May 31.
Janssen, Henry, assignor to Textile Machine Works, Wyomissing, Pa. Braiding carrier. 1,651,527; Dec. 6.
Knitting Mills. Bothing suit. Self6,783; Nov. 8.
Jantzen Knitting Mills. (See Jantzen, Carl C., assignor.)

Jantzen, Catl C., Forthand, St., Re16,783; Nov. 8.

Jantzen Knitting Mills. (See Jantzen, Carl C., assignor.)

Jantzen Paul, Newark, N. J. Trouser-cuff support,

Janus, Willam, St. Louis County, Mo., assignor to Chicago, Rallway Equipment Company, Chicago, Ill. Adjustable eccentric chair for brake beams. 1,622,516;

Mar. 29.

Janzen, Franz, Berlin-Tempelhof, assignor to W. Vobach,

Berlin, Germany. Producing chromophotographs on

paper and chromodiapositives. 1,613,516; Jan. 4.

Janzen, Otto, Berlin, Germany. Bearing for movements

and driving gears. 1,626,536, Apr. 26.

Janzen, Germany. Amerikan St., Jan. 4.

Japolsky, Nicolas, and M. Kostenko, London, England.

Electric driving instalation. 1,617,394; Feb. 15.

Japs, Bernard W., Minneapolis, Minn. Loose-leaf binder.

1,626,289; Apr. 26.

Jaquemot, Eugène. (See Pattay, M. A., and Jaquemot.)

Jaques, Donald E. (See Holmes, A. W., Jaques, and

Coats.)

Jaquette, Albert G., et al. (See Replogle, Ulysses G.,

assignor.)
Jaquette, Hazel E., et al. (See Replogle, Ulysses G., assignor.)

signor. William E. (See Balley V. H., and Jaquith.) Jaquith, William E. (See Balley V. H., and Jaquith.) Jaquith, William E. (See Carpenter, C. L., and Jaquith.) Jaquith, William E. B. A. Evans, and G. Foerstner, Akron, Ohio, assignors to The B. F. Goodrich Company. New York, N. Y. Method and apparatus for covering tubing, 1,639,408; Aug. 16.

Jardy, Janu, Friedrichshafen, Germany. Motor car.

Jardin, Wilhelm Jardin, Gee Axelson, J. C., and Jardin, Jardine, A. B., & Co. Limited. (See Jardine, James V., assignor.)

Jardine, James V., assignor to A. B. Jardine & Co., Limited, Hespeler, Ontarlo, Canada. Pipe cutter or threader. 1,641,928; Sept. G.

Limited, Hespeler, Ontarlo, Canada. Pipe cutter or threader. 1,641,928; Sept. G.

Limited, Hespeler, Ontarlo, Canada. Pipe cutter or threader. 1,641,928; Sept. G.

Limited, Hespeler, Ontarlo, Canada. Pipe cutter or threader. 1,641,928; Sept. G.

Limited, Hespeler, Ontarlo, Canada. Pipe cutter or threader. 1,641,928; Sept. G.

Limited, Hespeler, Ontarlo, Canada. Pipe cutter or threader. 1,641,928; Sept. G.

Limited, Hespeler, Ontarlo, Canada. Pipe cutter or threader. 1,641,938; June 21.

Jardine, Robert, assignor to Rich Tool Company, Detroit, Mich. Tappet and making same. 1,649,409; Nov. 15.

Jardine, Thomas. (See Smith, J. D., and Phillips, assignors.)

Jardine, Thomas. (See Smith, J. D., and Phillips, assignors.)
Jardot, Louis J., Stillwater, Okla. Bricklayer's gauge.
1.641.854; Sept. 6.
Jarecki, Frank J., Grand Rapids, Mich. Machine for use
Jarecki, Frank J., Grand Rapids, Mich. Welding fixture.
1.642.549; Sept. 13.
Jaret, Joseph T., Brooklyn, N. Y., assignor to Sun-Ray
Lighting Products Co., Inc., New York, N. Y. Lamp.
Des. 72.360; June 23.
Jarnagin, Harry S., assignor of one-half to R. W. Bidwell,
Jarnagin, Harry S., assignor of one-half to R. W. Bidwell,
1.622.012; Mar. 23.
Jaros. Matthew. (See Clarke, Patrick J., assignor.)
Jarsen, Issae, Cincinnati, Ohio. Sterilizing food and beverage products. 1.630,661; May 31.
Jarvis, Charles D., San Francisco, Calif. Automatic air
Jarvis, Charles H., assignor to United Steel and Wire
Company, Battle Creek, Mich. 1.619.259; Mar. 1.
Jarvis, Charles H., assignor to United Steel & Wire Company, Battle Creek, Mich. 1.619.259; Mar. 1.
Jarvis, George O. (See Dunn, Lorance, assignor.)
Jarvis, George O. (See Dunn, Lorance, assignor.)
Jarvis, George O. (See Dunn, Lorance, assignor.)
Jarvis, Lewis A., Grand Rapids, Mich. Water gauge for automobile radiators. 1,630,388; May 31.

assignors.)
Jarvis, Lewis A., Grand Rapids, Mich. Water gauge for automobile radiators. 1,630,388; May 31.
Jarvis, Nelson L. and F. J., Palmer, Mass. Caster. 1,633,638; June 28.
Jarvis, Nelson L. and F. J., assignors to Jarvis & Jarvis, Ibc., Palmer, Mass. Service cart. 1,649,065; Nov. 13.

Nov. 15.
Jarvis, William B., Grand Rapids, Mich. Radiator cap.
1.645.384; Oct. 11.
Jarvis, William B., Grand Rapids, Mich.
Jack J., William B., William B., William B.,

Jasperson, Charlie, Baldwin Township, Sherburne County, Minn. Potato harvester. 1,680,763; Nov. 29. Jasperson, Charlie, Princeton, Minn. Potato picker, cleaner, sorter, and barger. 1,641,492; Sept. 6. Jaspert, William B., Wilkinsburg, Ph., assignor to Westinghouse Electric & Manufacturing Company. Moiding Jaspert, William B., Wilkinsburg, Ph., assignor to Westinghouse Electric & Manufacturing Company. Electrode-feeding means. 1,643,773; Sept. 27. Jassen, Bern, Brookin, N. Y. Automobile mirror. Jassen, Bern, Brookin, N. Y. Automobile mirror. Jassen, Bern, Stowy, N. Y. Wind defector for automobiles. 1,634,290; July 5. Jauch, Robert J., Fort Wayne, Ind. Foot rest for shoeshining stands. 1,622,382; Mar. 29. Jauch, Robert J., Fort Wayne, Ind. Paper-tube-making Jauch, Robert J., Fort Wayne, Ind. Tube ironing and gripping device. 1,625,471; Apr. 19. Jauvert, Pierre M., Toulon, France. Refrigerating apparatus. 1,626,536; May 3. Javins, John M., et al. (See Ward, Andrew W., as-Jaxon, George S., Huntington, W. Va., assignor to Link-Belt Company, Chicago, Ill. Coat-handling plant. 1,617,117; Feb. 8. Javins, John M., et al. (See Ward, Andrew Wheel Company, Chicago, Ill. Coat-handling plant. 1,617,117; Feb. 8. Jayne, Ames R., assignor to American Steel Wheel Corporation, Chicago, Ill. Steel vehicle wheel. 1,637,256; July 26. J

signor.) Jeannin Electric Company, The. (See Jeannin, Harry W.,

Jeannin, Harry W., assignor to The Jeannin Electric Company, Toledo, Ohio. Electric motor. 1,638,531; Aug. 9. Company, Toledo, Ohio. Electric motor. 1,638,531, Aug. 9.
Jeannotte, Arthur A., Nashua, N. H. Combined stool, steps, and tool box. 1,635,183; July 12.
Jeannotte, Emile A., Montreal, Quebec, Canada. Passing Hight. 1,626,281; Apr. 26.
Jeavons, Albert N., et al. (See Rentschler, Mahlon J., assignot.)

assignor.) Jeck, George G. (See Clemmensen, Peter C., assignor.) Jefferies, Ebenezer A. W. (See Jefferies, Ernest S., as-

Jeck, George G. (See Clemmensen, Peter C., assignor.)
Jefferies, Ebenezer A. W. (See Jefferies, Ernest S., assignor.)
Jefferies, Ebenezer A. W. (See Jefferies, Ernest S., assignor.)
Jefferies, Ernst S., Hamilton, Ontario, Canada, assignor of one-third to E. A. W. Jefferies, Worcester, Mass. Jefferies, Samuel Ls. (Saffier, S. C. Dental casting machine. 1,653,911; Dec. 27.
Jeffers, Samuel Ls. (Saffier, S. C. Dental casting machine. 1,653,911; Dec. 27.
Jeffers, Salley L., assignor of one-half to H. C. Gay, Spokane, Wash. Pan holder. 1,632,972; June 21.
Jeffers, John F., Burbank, Calif. Saw guide. 1,615,703; Jan. 25.
Jefferson, Benjamin H., assignor to Lyon & Healy, Inc., Chicago, Ill. Devices for indicating position of pianos on floors or other surfaces. 1,622,445; Mar. 29.
Jefferson, Jetome G. W., and Reflly, assignors.)
Jefferson Electric Manufacturing Company. (See Daley, James C., assignor).
Jefferson, Jerome D., Federalsburg, Md., assignor to Del-Mar-Va Sales Company, Laurel, Del. Poultry catcher. Jefferson, Jerome D., Federalsburg, Md., assignor to Del-Mar-Va Sales Company, Laurel, Del. Poultry catcher. Mar-Va Sales Company, Laurel, Del. Poultry catcher. Jefferson, Jerome D., Federalsburg, Md., assignor to Del-Mar-Va Sales Company, Laurel, Del. Poultry catcher. Jefferson, Jordan J. (See Wilburn, J., and Jefferson.)
Jefferson, Jordan J. (See Wilburn, J., and Jefferson.)
Jefferson, Jordan J. (See Wilburn, J., and Jefferson.)
Jefferson, Lorennet, manufung material. 1,631,729;
June 7. Jefferson, Lorennet, manufung material. 1,631,729;
June 7. Jefferson, A. and E. T. Montgomery, assignors, by Jefferson, Joseph A., and E. T. Montgomery, assignors, by Jefferson, Joseph A., and E. T. Montgomery, assignors, by Jefferson, Joseph A., and E. T. Montgomery, assignors, by Jefferson, Joseph A., and E. T. Montgomery, assignors, by June 7. Jefferson, J

June 7.

Jun

Jeffrey Manufacturing Company, The. (See Levin, Nis D., assignor.)

Jeffrey Manufacturing Company, The (See Liggett, William K., assignor.)

Jeffreys, William L., Riverton, Nebr. Power plant. 1637,115; July 26.

Jeffries, John C., Angola, Ind. Balt. 1,653,400; Dec. 20.

Jeffries, Schuyler A., assignor to Reo Motor Car Company

Lansing, Mich. Transmitton. 1,610,127; Mar. I.

Lansing, Mich. Transmitton. 1,610,127; Mar. I.

Lansing, Mich. J. Praysmitton. Hand planing machine. 1,636,863; July 26.

Jelbert, Martin, Jr., Lead, S. Dak. Piston-ring contractor. 1,625,258; Apr. 19.

Jelenko, J. F., & Co. (See Aderer, Hugo, assignor.)

Jelley, Henry, Birmingham, and J. Jelley, Coventry, England. Manufacture of cycle and like saddles. 1,620,554;

Jelley, Henry, Birmingham, and J. Jelley, Coventry, England. Manufacture of cycle and like saddles. 1,620,554; Mar. 8.
Jelley, James. (See Jelley, Henry and J.)
Jelley, James. (See Ledyard, H. A., and Jelley.)
Jelley, James. (See Ledyard, H. A., and Jelley.)
Jelley, James. (See Ledyard, H. A., and Jelley.)
Jelliey, Lengal J. (See Ledyard, H. A., and Jelley.)
Jelliek, C. D., Manufacturing Corporation, The. (See
Jelliek, Lengal Jelley, Lengal Jelliek, C. D., See Jelliek, Lengal Jelliek, C. Jelliek, Lengal Jelliek, C. Jelliek, C. Jelliek, C. Jelliek, C. Jelliek, Carles, et al. (See Pecker, Joseph S., assignor.)
Jenick, Stephen, Clevenaid, Ohio. Starting dovice for Jenickes Knitting Machine Company. (See Miller, Max. C., assignor.)
Jenicks, Knitting Machine Company. (See Miller, Max. C., assignor.)
Jenkins, Addison, assignor to D. C. Jenkins Glass Co., Kokomo. Ind. Ash tray. Des. 74,112; Dec. 20.
Jenkins, Charles F., Boone, Md. Acetylene generator.
Jenkins, Charles E., Boston, Mass. Food-conveying truck. 1,654,330; Dec. 27.
Jenkins, Charles F., Washington, D. C. Airplane stop-Jenkins, Charles F., Washington, D. C. Multiple light-matches, Charles F., Washington, D. C. Radio tablet method. 1,642,110; Sept. 13.
Jenkins, Charles F., Washington, D. C. Radio tablet method. Lower Sept. 13.
Jenkins, Charles F., Washington, D. C. Twin-light-cell transmitter. 1,642,733; Sept. 20.
Jenkins, Charles F., Washington, D. C. Twin-light-cell transmitter. 1,642,733; Sept. 20.
Jenkins, Charles F., Washington, D. C. Twin-blade transmitter. 1,643,832; Oct. 4.
Jenkins, Charles F., Washington, D. C. Apparatus for Jenkins, Charles F., Washington, D. C. Twin-blade transmitter. 1,643,832; Oct. 4.
Jenkins, Charles F., Washington, D. C. Apparatus for Jenkins, Charles F., Washington, D. C. Radio tablet, Jenkins, Charles F., Washington, kins Laboratorles. Prim-Jens disk. Ref6.789; Nov. 22.
Jenkins, Charles F., assignor to Jenkins Laboratorles,
Washington. D. C. Two-way oscillating mirror.
Ref16.790; Nov. 22.
Jenkins, Charles F., Washington. D. C., assignor to Jenkins Laboratorles. Pneumatically-controlled light valve.
Ref6.818; Dec. 13.
Jenkins, Charles F., assignor to Discrola, Inc., Washington,
D. C. High-speed motion-picture machine. 1,618,090;
Feb. 15.
Jenkins, D. C., Glass Co. (See Jenkins, Addison, assignor.)

Jenkins, Charles F., assignor to Discroin, the Theorems, 1618,090; Feb. 15.
D. C. High-speed motion-picture machine. 1,618,090; Feb. 15.
Jenkins, D. C., Glass Co. (See Jenkins, Addison, assignor.)
Jenkins, Earl R., New York, N. Y. Whirligig. 1,621,784; Mar. 2.
Jenkins, Earl R., New York, N. Y. Whirligig. 1,621,784; Mar. 2.
Jenkins, George M. O., London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Pneumatic vilve. 1,632,079; June 14.
Jenkins, Herry C., Hove, England, Device for compressing whe springs of the Company of the

containing copper and making the same. 1,022615.
Sept. 13.
Jenkins, John E., Chicago, Ill. Rheostat. 1,621,466;
Mar. 15.
Jenkins Laboratories. (See Jenkins, Charles F., as-

gnor.) kins Machine Company. (See Stuedeman, Anton G.,

signor.)
Jenkins Machine Company. (See Stuedeman, Auton on assignor.)
Jenkins, Nathan, Chicago, III. Buckle. 1,648,017;
Nov. 8.
Jenkins, Richard H. (See Reynolds, H. W., and Jenkins.)
Jenkins, Samuel B., West Barnstable, assignor to H. N.
Sweet, Boston, Mass. Berry picking machine.
1,622,117; Mar. 22.
Jenkins, Stanley S. (See Hammond, Robert O., assignor.)

Levz, 117; Mar. 22.

Ionkins, Stanley S. (See Hammond, Robert O., assignor.)

Jenkins, Stanley S., Buffalo, N. Y., assignor to Livezey,
Surgical Service, Inc. Newark, N. J. Invalid lifter and carrier. 1,641,388; Sept. 6.

Jenkins, Wellington E., Pittsburg, Kans. Container for blasting charges. 1,648,302; Aug. 9.

Jenkins, William Detroit, Mich. Attachment for alarm clocks. I. 4648,302; Nov. 15.

Jenkins, William L., Son, E., Canonsburg, Pa, assignor of one-half to J. A. Hellstrom, Wheeling, W. Va. Apparatus for annealing metal plates and sheets. 1,615,627; Jan. 25.

Jenkins, William L., San, Jose, Calif. Classification.

Jenkinson, Ellis L., San Jose, Calif. Gasoline filling apparatus. 1.650,837; Nov. 29. Jenkinson, Richard C. (See Bauer, Adolph, assignor.)

Jenkinson, Richard C., & Co. (See Bauer, Adolph, as-Signor.)
Jenks, Abbott B. (See Coates, S. D., Davis, and Jenks.)
Jenks, Charles R., assignor of one-half to C. M. Rawlins,
Cleveland, Ohio. Soda-fountain draft-arm valve.

Jenks, Abbott B. (See Coates, S. B., Darts, and S. Jenks, Charles R., assignor of one-half to C. M. Rawlins, Cleveland, Ohio. Soda-fountain draft-arm vaive. 1,630,947 May 21 (Biderpoint, Calif. Roadway embankment. 1,633,211; June 21.

Jenks, Fred A., Plymouth, assignor to Plymouth Cordage Company, North Plymouth, Mass. Label for rope. 1,635,750; July 12.

Jenks, John S., Pittsburgh, Pa. Washing machine. 1,632,407; June 14.

Jenks, Stuart W., Washington, D. C. Electrolytic reJenner, George O., assignor to Oxford Press Incorporated, Los Angeles, Calif. Mailing card. 1,632,185; June 14.

Jenner, Jan, Walter. (See Pomplum, E., and Jennerjahn, Jennery, Thacher, Lexington, Mass., and H. G. Miner, Louisville, Ky., assignors to American Soda Fountain Company. Refrigerated compartment and cover therefor. 1,615,628; Jan. 25.

Jennings, Carl E., Graham, Calif. Radiomantel. Des. Jennings, Harvey L. (See Bell, A. W., sr., and Jennings, Harvey L. (See Bell, A. W., sr., and Jennings, Harvey L. (See Bell, A. W., sr., cose-leaf

nings.)
Jennings, Henry B., jr., Long Island, Va. Loose-leaf
binder. 1,620,103; Mar. S.
Jennings, Henry B., jr., Leesburg, Va. Loose-leaf binder.
1,620,104; Mar. S.
Jennings, Henry B., jr., Leesburg, Va. Loose-leaf binder.
1,620,405; Mar. S.
1,630,849; May 31.
Jennings, Henry T. (See Gelger, E. A. Schraegle, and
Jennings, Henry T. (See Gelger, E. A. Schraegle, and
Jennings, Henry T.

1,630,849; May 31.

Jennings, Henry T. (See Geiger, E. A. Schraegle, and Jennings, J. Claud, Winnsboro, Tex. Mattress-display rack. 1,626,282; Apr. 26.

Jennings, J. Claud, Winnsboro, Tex. Mattress-display rack. 1,626,282; Apr. 26.

Jennings, James W. (See Green, H. K., and Jennings.) Jennings, James W. (See Green, H. K., and Jennings, Jennings, John T. Birmingham, England. Carburetor. 1,622,683; Apr. 5.

Jennings, John T. Birmingham, England. Carburetor. 1,622,683; Apr. 5.

Jennings, Oliver S., Brooklyn, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,642,027; Sept. 13.

Jennings, Oliver S., Brooklyn, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,642,0389; May 31.

Jennings, Oliver S., Brooklyn, N. Y., assignor to Westinghouse Electric and Manufacturing Company. Switch mechanism. 1,630,389; May 31.

Jennings, Oliver S., Brooklyn, N. Y., Jet-dyeln gappartus. 1,627,349; May 10.

Jennings, Robert G., Elmira, N. Y., Jet-dyeln gapparatus. 1,627,349; May 10.

Jennings, Robert G., Elmira, N. Y., Jet-dyeln gapparatus. 1,627,349; May 10.

Jennings, Viderius T., Chiengo, Ill. Hanger bar for outlet boxes. 1,615,329; Jan. 25.

Jennings, Viderius T., Chiengo, Ill. Hanger bar for outlet boxes. 1,615,329; Jan. 25.

Jennings, Viderius T., Chiengo, Ill. Hanger bar for outlet boxes. 1,615,329; Jan. 25.

Jennings, Viderius T., Chiengo, Ill. Hanger bar for outlet boxes. 1,615,329; Jan. 25.

Jennings, William R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Device to prevent rotation of bobblins. 1,626,837; May 3.

Jennings, William A., Raytown, Mo. Cylinder-honing tool. 1,647,134; Nov. 1.

Jennings, William F., London, England. Compression pump. 1,646,294; Oct. 18.

Jenny, William A., Raytown, Mo. Cylinder-honing tool. 1,647,134; Nov. 1.

Jennings, William F., London, England. Compression pump. 1,646,294; Oct. 18.

Jennings, Germany, Ardfeline derivatives and making seems.

Dec. 20.

Jensch, Heinrich, Hochst-on-the-Main, assignor to I. G.
Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, Actifien derivatives and making same, 1,629,873; May 24.

Jenschke, Adolph, Frederleksburg, Tex. Automobile shock absorber, 1,619,422; Mar. I.

Jensen, Adolph C. W. Moioney, and G. Biltgen, Chicago, Ill. Window-cleaning device, 1,628,783; May 17.

Jensen, Andrew M., Stockton, Call. Griddle greaser, 1,612,926; Jan. 4.

Jensen, Hans, C. Chicago, Ill. Fastening device, 1,612,936; Jan. 4.

Jensen, Hans, C. E. Salsbery, and G. G. Graham, Kanasa City, Mo. Producing anthrax aggressin, 1,615,876; Feb.

Jensen, Hans C., Port Clinton, Ohio. Catoptric light, 1.629,506; May 24, 1.629,506; May 24, 1.650,638; Nov. 29, 1.650,638; Nov. 29, 1.650,638; Nov. 29, 1.614,617; Jan. 18, Schleswig, Iowa. Hay holst, 1.614,617; Jan. 18, assignor to Quaker City Iron Works, Thiladolphia, Pa Emergency valve-control system for tank vehicles. 1.626,283; Apr. 26.

ensen, James A., assignor to Quaker City Iron Works, Philadelphia, Pa. Closure for filler openings. 1,654,501; Dec. 27.

J. 1.604.501; Dec. 21.
Jensen, Jens C., and O. L. Miles, Chicago, Ill.; said
Jensen assignor to said Miles. Article-dispensing device. 1.620,766; Mar. 1.
Jensen, Jens J., assignor to Boggild & Jacobsen, Copenha
gen, Denmark. Machine for casting chocolate.
1.645,505; Oct. 11.
Jensen, Jons O., Baltimore, Md. Cooling comminuted
solid material. 1.619,577; Mar. 1.
Solid material. 1.619,577; Mar. 1.
Solid material. 1.619,577; Mar. 1.

Jensen, Jo Apr. 12

Apr. 12.
Jensen, Josef E., Frederiksberg, near Copenhagen, Denmark. Manufacturing floor slabs and the like of cork and similar materials. 1,640,659; Aug. 30.

Jensen, Kresten R. (See Jensen, William G. and K. R.)
Jensen, Louis, assignor to United Autographic Register Company, Chicago, Ill. Web-feeding mechanism. 1,627,905; May 10.

Jensen, Louis, assignor to United Autographic Register Company, Chicago, Ill. Autographic register; 1,648,549; Company, Chicago, Ill. Autographic register. 1,648,549;

Nov. 8.

Jensen, Louis, Chicago, assignor to United Autographic Register Company, Chicago, Ill. Autographic register. 1,651,456; Dec. 6.

Jensen, Nels, Grass Valley, Callf. Display rack. 1,625,544; Apr. 19.

Jensen, Peter L. (See Pridham. E. S., and Jensen.) Peter L. (See Pridham. E. S., and Jensen. Assmus N., Salt Lake City, Utah. Wall board. 1,635,214; July 12.

Jensen, Rasmus N., Salt Lake City, Utah. Lathing sheet. 1,640,483; Oct. 25.

Jensen, Sersignor to F. L. Smidth & Co., New York, N. Y. Resilient gearing. 1,637,379; Aug. 2.

Jensen, Severin, St. Paul, Minn. Moctar-laying machine. 1,613,833; Jan. 11.

Inote, Soren, Los Angeles, Calif. Adjustable can opener and liquid preserver. 1.686,821; July 26. Jensen, Soren G., Green River, Wyo. Combined emergency tire and towline. 1.652,442; Dec. 13. Jensen, Thomas C., assignor to Scandinavian Export Agency, Ltd., Copenhagen, Denmark. Automatic weighing scale. 1,623,414; Apr. 5. Jensen, William G. and K. R., Nowata, Okla. Pump jack. 1,621,414; Mar. 15.

1,621,414; Mar. 15.
Jeppson, George N., assignor to Norton Company, Worcester, Mass. Aggregate-cement tile. 1,619,733; Mar. 1.
Jeppson, George N., and M. F. Beecher, assignors to Norton Company, Worcester, Mass. Making laminated ceramic articles. 1,614,928; Jan. 18.
Jepson of Worcester, Mass. Terrazzo tile and making the same. 1,619,734; Mar. 1.
Jeppson, Julius. (See Lundberg, G. E., and Jeppsson.)
Jepsen, Julius. (See Polachek, J., Jepsen, and Peremi.)
Jepson, John W., Elizabeth, N. J. Brake. 1,623,733;
Apr. 5.

Apr. 5.
Jepson, Percy, St. Kilda, Victoria, Australia. Machine for pitting drupaceous fruits. 1,617,909; Feb. 15.
Jerabek, Behard D. Hutchinson, Minn. Wheel puller. Jerdone, Francis, Jr., assignor to The Willys-Overland Company, Toledo, Ohio. Fuel-reserve supply system for motor vehicles. 1,628,150; May 10.
Jereszek, Viktor, Weissensee, near Berlin, assignor to Stock Motorpflug Aktiengesellselnft, Eerlin, Germany. Chains wheel for chain-track drives. 1,633,746; Chain June 28.

June 28.

Jerome, Benjamin, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich. Internal-combustion engine. 1,631,208; June 7.

Jerome, Edward, New York, N. Y. Musical instrument. 1,632,627; Dec. 13.

Jerrae, William, San Francisco, Calif. Pneumatic bumper. 1,646,056; Oct. 11.

Jerry-J., Inc. (See Cohen, Samuel H., assignor.) Jersey-Creme Company. (See Boswell, John S., assignor.) Jersey-Creme Company. (See Boswell, John S., assignor.) Jersey-Thomas M., Washington, D. Automatic gun. 1,651,128; Nov. 29.

Jervey, Thomas M., Washington, D. C. Automatic gun. 1,651,128; Nov. 29.

Jervey, Thomas M., Aberdeen, M., and S. G. Green, Gray, Ga. Mount for machine guns. 1,625,124; Apr. 19.

19.

Jesdale, Charles, Chicago, Ill. Fuel-mixture homogenizer, 1,643,072; Sept. 20.

Jeske, Clarence W., Walnut Grove, Minn. Motor-cycle stand. 1,622,383; Mar. 29.

Jesnig, Contreles, Philacelle, P. A. Automatic cigarette-delivering, Charles, Philadelphia, Pa. Automatic cigarette-delivering container, 1,639,296; Aug. 16.

Jespersen, Helgo W., Riverside, Ill., assignor to Western Ellectric Company, Incorporated, New York, N. Y. Method of and apparatus for coating cores. 1,615,387; Jan. 25.

Jespersen, Helgo W., Riverside, Ili., assignor to Western Electric Company, Incorporated, New York, N. Y. Moisture-extracting apparatus. 1,615,388; Jan. 25.

Jespersen, Helgo W., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Mechanism for working pulpous material.

N. Alechanism for working pulpous material.

1,633,181; June
Jesperson, Hans P., Sloux City, Iowa. Oil pump.
1,024,738; Apr. 12.

Jessen, Charles C., assignor to Atlas Powder Company,
Wilmington, Del. Spinning machine. 1,617,118;

Feb. 8.

Jessen, Charles C., assignor to Atlas Powder Company,
Wilmington, Del. Manufacture of artificial silk.

Jessen, Charles C., assignor to Atlas Powder Company,
Wilmington, Del. Manufacture of artificial silk.

Jessen, Christian. (See Schulz, P. H., and Jessen,

Jesser, Albert E., (See McCrery, H. E., Jesser, and

Montgomery,)

Jessup & Moore Paper Co., The. (See Plumstead, Joseph
E., assignor.)

Montgomery.)

Jessup & Moore Paper Co., The. (See Plumstead, Joseph B., assignor.)

B., assignor.)

A., Charlottesville, Va. Bottle. Des. 21,176; 176. 8.

Jester, John R. (See Clark, A. T., Leonhauser, and Jester.)

Jetel. Otto, Chicago, Ill. Laundry-bag hoider. 1,638,203; Aug. 9.

Jetel. Otto, Chicago, Ill. Laundry-bag hoider. 1,638,203; Aug. 9.

Jetel. Otto, Chicago, Ill. Laundry-bag hoider. 1,638,203; Aug. 9.

Jetel. Otto, Chicago, Ill. Laundry-bag hoider. 1,638,203; Aug. 9.

Jetel. Otto, Chicago, Ill. Laundry-bag hoider. 1,638,203; Aug. 9.

Jetel. George C., assignor of two-fifths to W. H. Steinke, Milwaukee, Wis. Snapping roll for corn harvesters. 1,614,436; Sept. 0.

Jewell, Charles De., Seneca Falls, N. Y. Adjustable hanger or support. 1,631,209; June 7.

Jewell, Charles De., Seneca Falls, N. Y. Adjustable hanger or support. 1,631,209; June 7.

Jewell, Edward W., San Diego, Calif. Rotary-valve-type internal-combustion engine. 1,650,362; Nov. 22.

Jewell, Electrical Instrument Co. (See Simpson, Ray, Jewell, Electrical

Jewett, Anna, Lawrence, Kans. Making belts. 1,630,617; May 31.

Jewett, Nelson I. Jewell Station, Va. Golf game. Jewett, Nelson E. Jewell Station, Va. Golf game. Jewett, Nelson E. Old Bilton, near Rugby, England, assignor to General Electric Company. Ship propulsion. 1,618,827; Feb. 22.

Jiffy Wire Connector Company. (See Sommer, W. R., Ree, and Kerkhof, assignors). A assignor to Ingersoll-merson, Francis A., Athens, Pa., assignor to Ingersoll-mitically operated tools. 1,641,39; Jan. 1,191.

Jimerson, Francis A., Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Percussive tool. 1,637,192; July 26.

Jimerson, Francis A., Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Crank shaft. Jimmis, John E., Oshkosh, Wis. Traffic safety gate. 1,646,820; Oct. 25.

Jimask, John, Detroit, Mich. Hot-water vest. 1,629,626; May 24.

John Detroit, atten. Hot-water vest. 1,629,626; July S. Bohumil, Berlin, Germany, assignor to the Firm. Otto Sprenger Patentverwerium: Jirotka mit beschränkter Haftung, Yaduz, Lichtenstein. Variable condenser. 1,626,537; Apr. 26. Jirotka, Bohumil, Berlin, assignor to the Firm Dr. Otto Sprenger Patentverweriung Jirotka mit beschränkter mensured quantities of a duent material. 1,635,126; July 5, Joachim. Harry J., Webster Groves, Mo. Seat covering. 1,650,130; Nov. 22. Joachim. Foss. Company. (See Martin, James W., as-Job, Albort. (See Tesche, H., and Job.) Jobe, George M. (See Gibb. J. M., and Johe.)

signor.)
Job. Albert. (See Tesche, H., and Job.)
Jobe, George M. (See Gibb. J. M., and Jobe.)
Jobes, Frank M., Ann Arbor. Mich. Internal-combustion
engine. 1,629,795; May 24.
Jobes, Frank M., Ann Arbor, Mich. Internal-combustion
Jobes, Frank M., Ann Arbor, Mich.
Jobes, Frank M., Ann Arbor, Mich.
Jobes, Frank M., Ann Arbor, Mich.
Jobes, Tondon, Onio, assignor, by mesne assignments, to The Uline Ice-Scoring Machine Company,
Wilmington, Del. Ice-scoring machine. 1,619,128;
Mar. 1.

Wilmington, Del. 10escioning account of Mar, 1.
Jobst, Conrad, assignor to The Toledo Automatic Brush Machine Company, Toledo, Ohio. Motor brake. 1,639,038; Aug. 16.
Jochum, Luis. Buenos Aires, Argentina. Compressed-air motor for bicycles. 1,650,450; Nov. 22.
Jodeck, Paul. Berlin, assignor to Aligemeine Gesellschaft für Chemische Industrie m. b. H., Berlin-Schoneberg, Germany. Obtaining liquid sulphurous acid from the products of combustion of sulphur or sulphurous pyrites. 1,649,701; Nov. 15.
Jodeck, Paul. (See Edeleanu, L., Pfelffer, Gress, and Lodeck).

pyrites. 1,643/101; Nov. 15.
Godeck, Paul. (See Edeleanu, L., Pfelffer, Gress, and Jodeck.)
Jodeck John N., and J. E. Craver, Atlantic City, N. J.,
assignors to Craveroifer Company of American, Philadelphia, Pa. Lubricating system for internal-combustion engines. 1,632,634; June 14.
Josech, Bernhard, St. Louis, Mo. Dental appliance. 1,628,469; May 10.

Joha, Elmer N. (See Rosenberg, S., and Joha.) Johanknegt, Jan C., The Hague, Netherlands. Adver-tising device. 1,632,973; June 21. Johannesen, Johan E., Dunmore, Pa. Strap. 1,613,516; Jun. Seen, Svend E., Pittsfield, Mass., assignor to Genomatic Electric Company, Stationary induction apparatus 1.644,729; Oct. 1.

Johannesmeyer, Charles G., Glendale, assignor to The Liberty Machine Tool Company, Hamilton, Ohto. Metal-planing machine. 1.631,132; June 7.

Johannesn, Friedrich, Clausthat-lon-the-liarz, assignor to Fried, Krupp Grusonwerk Aktiengseslischaft, Magdeburg-Buckau, Germany. Treatment of ores and metal-lurgical products. 1.618,204; Feb. 22.

Johansen, Harry C., Medigan City, Mining machine. 1.645,007; Oct. 1.9

Johansen, Kasmus D. (See Kittredge, E. E., Forster, and Johansen.) and Johansen, Victor E., Oakland, Calif. Centrifugal switch. 1.651,708; Dec. 6.
Johanson, Adolph T., et al., trustees. (See Johanson, Adolph T., assignor.) Johanson, Adolph T., chicago, Ill., assignor to Consolidated Bollers Corporation, Benton Harbor, Mich. Heater. 1,619,50; Feb. 8.
Johanson, Adolph T., assignor one-half to H. V. Tutton, June 7, J Heater. 1,616,960; Feb. 8.
Johanson, Adolph T., assignor of one-half to H. V. Tutton, Benton Harbor, Mich. Water heater. 1,631,533; Johanson, Adolph T., assignor to M. E. Page, fr, A. T. Johanson, Adolph T., assignor to M. E. Page, fr, A. T. Johanson, and C. M. Page, Chicago, Ill., as trustees for Aaball Manufacturing Company. Air preheater for oil burners. 1,640,081; Aug. 23.
Johanson, Emil G., University J. Metal-working implements. 1,636,744; July 28.
Johanson, Emil G., Chicago, Ill. Cream separator. 1,641,493; Sept. 6.
Johanson, Georg K. V., Lidingo, assignor to Aktiebolaget Gassactumulator, Stockholm, Sweden. Fluid meter. 1,626,538; Apr. 26.
Johanson, Georg K. V., Stockholm, Sweden. Aktiebolaget Gassaccumulator, Stockholm, Sweden. Fluid meter. 1,626,538; Apr. 26.
Johanson, Georg K. V., Stockholm, Sweden, assignor to American Gassaccumulator Company, Elizabeth, N. J. Aug. 16.
Johanson, Gustaf E., Sundsvall, Sweden. Motor vehicle. 1,638,561; Aug. 16.
Johanson, Magnus H. (See Candee, A. H., and Johanson, Magnus H. assignor to Glesson Works Roch. Soul) Johnson, Magnus H., assignor to Cleason Works, Roch-better, N. Y. Tool mechanism for gear-cutting machines, 1,643,843 i Sept. 27 Johnnson, Gustaf, Bay City, Mich. Display rack, 1,637,573; Aug. 2. Johnnson, Gustav V. (See Eriksson, E. O., and Johnns-Johnsson, Gustav V. (See Eriksson, E. O., and Johnsson, Johnsson, Karl M., Stockholm, Sweden. Manufacturing lathing for walls and ceilings. 1,630,618; May 31.

John, Alfred, Gera-Reuss, Germany. Loom. 1,636,515;

John, Fordinand, Dusseldorf-over-Kassel, Germany. Rotary-key clutch. 1,630,183; May 24.

John, Robert, New York, N. Y. Fim-printing machine and method. 1,654,291; Dec. 27.

Johns, Emory R., Dallas, Tex. Nut encasement. 1,633,639; June 28.

Johns, Lenger M., Rockdale, Tex. Retort. 1,621,785; Mar. 22.

Johns, Henry S., assignor to The Crystalite Stone Products Limited, Hamilton, Ontario, Canada. Bagging apparatus. 1,647,703; Nov. 1.

Johns, Lee, Mami, Fla. Fish hook. 1,622,118; Mar. 22.

Johns, Lee, Mami, Fla. Fish hook. 1,622,118; Mar. 22.

Johns, Lee, Mami, Fla. Fish hook. 1,622,118; Mar. 22. signor.)
Johns-Manville Corporation. (See McMillan, Luther B.,

Johnson, Albert B., New Britain, Conn. Pad for dentaluse. 1,635,275; July 12.

Johnson. Albert M., assignor to Barnes Drill Company. Rockford, Ill. Drilling machine and the like. 1,617,510; Feb. 15.

Johnson, Albert B., Safety signal. 1,648,356; Nov. 8.

Johnson, Albin H., Chicago, Ill. Fountain comb. 1,629,389; May 17.

Johnson, Altrid C., assignor to Belle City Manufacturing holder. 1,640,278; Aug. 23.

Johnson, Altrid C., assignor to more the first properties of the proper Johnson, Andrew M., Pasco, Wash. Car seal. 1,615,225; Jan. 25.
Johnson, Aron E., Seattle, Wash. Necktle holder. 1,636,368; July 19.
Johnson, Arthur A., assignor to Dictaphone Corporation, Bridgegort, Conn. Phonograph record. 1,641,142;
Johnson, Arthur A., New York, N. Y., assignor to The-Egry Register Company, Dayton, Ohio. Autographic register. 1,649,234; Nov. 15.
Johnson, Arthur H., Woburn, Mass. Bottle. Des. 72,951; June 28.
(See Schesvold, G. T., and Johnson, Johnson, Arthur S., assignor to Draper Corporation, Hopedale, Mass. Brake mechanism for looms. 1,646,530; Oct. 25.
Johnson, Arvid H. (See Holm, C., and Johnson, Johnson, Arthur S., assignor to Draper Corporation, Hopedale, Mass. Brake mechanism for looms. 1,646,530; Oct. 25.
Johnson, August. (See Johnson, John S, and A.)
Johnson, August. S., Brookiny, assignor to Model Brassiere Co., Inc., New York, N. Y., Garment. 1,615,629; Jan. 25.
Johnson, Augusta B., Wellsboro, Pa. Cultivator. 1,652,012; Johnson, Austin B., Wellsboro, Pa. Cultivator. 1,652,012; Dec. 6. Johnson Automatic Sealer Co. (See Sandberg, Oscar, as-Johnson Automatic Sealer Co. (See Taylor, William L., assignor.)

Johnson Automobile Lock Co. (See Johnson, Colvin L., assignor.)

October Collic Electric heater. Johnson, Axel, Oakland, Calif. 1.620.767: Mar. 15. Johnson, Axel, Oakland, Calif. Saw set. 1,631,534; June 7. June 7.
Johnson, Axel, Oakland, Calif. Electric heater.
1,636,369 ; July 19.
Johnson, Axel Z., assignor to The Dahlstrom Metallic
Door Company, Jamestown, N. Y. Doorframe.
1,623,874; Apr. 5.
Johnson, Bernard G., Brookfield, assignor to GrigsbyGrunow-Hinds Co., Chicago, Ill. Spring reel. 1,648,948; Johnson, Bernard G. Brookfield, assignor to GrigsbyJohnson, Bernard G. Brookfield, assignor to CorNov. 15.
Johnson, Boone V. H., St. Louis, Mo., assignor to Commonwealth Steel Company, Granite City, Ill. Railway
truck. 1,615.802; John 25.
Johnson, Bror A. E. (See Ekström, G. C., and Johnson,
Johnson, Bror A. E. (See Ekström, G. C., and Johnson,
Johnson, Bror A. E. (See Ekström, G. C., drström,
Johnson, Carl E., Detreit, Mich. Electric heating apparatus. 1,633.747; June 28.
Johnson, Carl E., Chicago, Ill. Baffle plate for boiler
fire boxes. 1,642.737; Sept. 13.
Johnson, Carl E., assignor to United States Electrical
1,637.631; Aug. 2.
Johnson, Carl E., assignor to United States Electrical
Manufacturing Company, Los Angeles, Calif. Mold.
Johnson, Carl E., assignor to United States Electrical
Statt motor. 1,647.633; Nov. 1.
Johnson, Carl E., assignor to United States Electrical
Manufacturing Company, Los Angeles, Calif. Autostart motor. 1,647.633; Nov. 1.
Johnson, Carl B., Los Angeles, Calif., assignor to United
States Electrical Manufacturing Company. Bimetalle
rotor for induction motors. 1,660.795; Nov. 2.
Johnson, Carl B., Los Angeles, Calif. Clamp.
1,634.834; July 5.
Johnson, Carl G. E., Los Angeles, Calif. Clamp.
1,634.834; July 5.
Johnson, Carl M., Chleago, Ill. Burlat vault. Des.
73,009; Oct. 11. assignor.)
Johns-Manville Corporation. (See Wardell, Henry R., Johns-Manville Incorporated. (See Baldwin, L. A., and Schaeffer, assignors.)

Johns-Manville Incorporated. (See Beckwith, Charles J., assignor.)
Johns-Manville Incorporated. (See Christenson, George, assignor.)
Johns-Manville Incorporated. (See Graham, James H., Johns-Manyille Incorporated. (See Seigle, William R., assignor.)

Johns-Manyille Incorporated. (See Wardell, Henry R., Johnson, Agnar, Rockford, Ill. Headwer, 1,631,210; June 7. June 7. Julian and E. C. Holling, Antioch, Calif. Johnson, Agnar, Rockford, Ill. Headwer, 1,631,210; June 7. Julian and E. A. Findell, Missoula,

Jöhnson, Albas J., J. Bolleau, and E. A. Findell, Missonia, June 7, Johnson, Aklas J., J. Bolleau, and E. A. Findell, Missonia, Johnson, Albert, Altadena, Cailf. Combustion regulator and economizer. 1,653,401; Dec. 20. Johnson, Albert, et al. (See Sopher, Ted L., assignor.) Johnson, Albert, et al. (See Sopher, Ted L., assignor.) Johnson, Albert, assignor of one-fourth to L. V. and H. E. Hughes, Los Angeles, Calif. Draft control for locomotives. 1,623,034; Apr. 5.

Johnson, Carl O., assignor to Bradford Machine Com-pany, Bradford, Pa. Machine for trimming tenpins. 1,064,502; Dec. 27. Johnson, Carl O., Lincoln, assignor to Highway Main-1,648,310; Nov. Bavelock, Nebr. Highway maintainer. Johnson, Charles A., Duluth, Minn. Cement block. Des. Johnson, Charles A., Duluth, Minn. Cement block. Des. Johnson, Charles A.

71,798; Jan. 4.

Johnson, Charles A., Nashville, Tenn. Vending machine. 1,648,812; Nov. 8.

Johnson, Charles A., Superior, Wis. Grain door. 1,618,758; Feb. 22.

Johnson, Charles A., Unionville, Conn. Threading tool. 1,640,941; Aug. 30.

Johnson, Charles A., Unionville, Conn. Threading tool. 1,640,942; Aug. 30.

Johnson, Charles A., Sassignor to The Piston Ring Company Mich. Flexible closing fixture for piston rings. 1,644,883; Oct. 11.

Johnson, Charles E. (See Casselman, E. J., Griffith, and Johnson.)

Johnson, Charles H., Sacramento, Calif. Direction indi-cator. 1,630,014; May 24. Cator. 1,630,015; May 24. Cator. 1,630,015; May 24. Johnson, Charles J., Sacramento, Calif. Handy measur-ing device. 1,629,108; May 17. Johnson, Charles L., et al. (See Bauer, Jacob, as-signor.)

Johnson, Charles M., Avalon, Pa., assignor to Crucible Steel Company of America. Alloy steel. 1,617,334; 15. n. Charles W. (See Johnson, Richard W., as-Johnson,

Johnson, Charles W. (See Johnson, Richard W., assignor.)
Johnson, Chester A., Wells, Nev. Noiseless rail joint.
Johnson, Chester A., Wells, Nev. Noiseless rail joint.
Johnson, Chester B., Hasbrouck Heights, N. J. Bearer.
1,653,912; Dec. 27.
Johnson, Chester F., Detroit, Mich. Hydrocarbon motor.
1,613,706; Jan. 11.
Johnson, Clarence A., Larimer, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor-starting system. 1,633,943; June 28.
Johnson, Clarence A., Detroit, Mich. Garage door and operating mechanism therefor. 1,623,623; Apr. 5,000.
Johnson, Charence L., Littleton, Colo. Tire boot and fastener therefor. 1,623,923; Apr. 5,000.
Johnson, Coivin L., Cheedgo, Ill., Inssignor to Johnson Automobile Lock Co. Automobile lock. 1,632,655; June 12.

June 14.

Johnson, Colvin L., assignor to Johnson Automobile Lock Co., Sr. Louis, Mo. Transmission-housing cover-Johnson, Eads, Morristown, N. J. Docking apparatus, 1,614,131; Jan. 11. Johnson, Earl R., Chicago, Ill. Frame for flexible sheet material. 1,621,727; Mar. 22. Johnson, Earl R., Chicago, Ill. Ruler. 1,631,731; Johnson, Earl R., Chicago, Ill. Ruler. 1,631,731;

Johnson, Earl R., Chicago, Ill. Frame and mounting. 1,645,862; Oct. 18. Johnson, Edward E., St. Paul, Minn. Screen coupling. 1,623,055; Apr. 5. Johnson, Edward H., and A. H. Winterton, East Rand, Transvanl, South Africa. Concentrator. 1,627,648; May 10.

Johnson, Edward M., Pawnee City, Nebr. Hay track hanger. 1.653.769; Dec. 27. Johnson, Edward P., Superior, Wis. Fish lure. 1,644,884; ohnson,

Oct. 11. Johnson, Edward T., Greenfield, Mass. Collapsible con-tainer. 1,651,528; Dec. 6. Johnson, Edwin A., Houston, Tex. Connection between well-plpe sections of different materials. 1,613,461;

Johnson, Elmer J. (See Booth, George A., assignor.) Johnson, Elmer W., Tracy, Minn. Camper's back rest. 1,647,297; Nov. 1. Johnson, Emelyn O., Brooklyn, N. Y. Toe adjuster. 1,624,171; Apr. 12, Johnson, Emil L., et al. (See Knistrom, Joseph, as-

signor.) Johnson, Emma K., administratrix. (See Johnson, Homer

B.)
Johnson, Eric, Seattle, Wash, Portable elevator, 1,644,891; Sept. 6.
Johnson, Eric, Seattle, Wash, Fuel-feeding device for internal-combustion engines. 1,653,287; Dec. 20.
Johnson, Ernest E., Scotia, N. Y., assignor to General Electric Company. Displacement-responsive device, 1,620,465; Mar. 8.
Johnson, Total Company. Displacement-responsive device, 1,620,465; Mar. 8.
Johnson, O. The Palmer Electric and Manufacturing Company. Combridge, Mass. Relay, 1,622,186; June 14.
Johnson, Ernest J., St. Cloud, Minn. Bumper. 1,618,880; Feb. 22.

Feb. 22

Johnson Ernest S. Webster City, Iowa. Automobile the min and holder 1,613,111; Jan. 4. Johnson, Ernest S. Webster City, Iowa. Leg structure. 1,636,012; July 26. Johnson, Ernest S. Webster City, Iowa. Awning struc-ture. 1,640,660; Aug. 30.

Johnson, Everard L., Patchogue, N. Y. Flash-light apparatus. 1,615,455; Jan. 25.

Johnson, Pord, Helena, Mont.

Books. 1,635,625; July 12.

Johnson, Frank K., Chicago, Ill. Row-boat motor.

Johnson, Frank K., Akron, Ohio.

Collapsible tire-building form. 1,618,153; Feb. 15.

Johnson, Frank L., Akron, Ohio.

Johnson, Fred A., Wolverton, Minn. Bag holder.

Johnson, Fred H., and S. R. Lathrop, Sapulpa, Okla.

Conveyer for leer-charging apparatus. 1,628,247;

Johnson, Fred H., and S. R. Lathrop, Sapulpa, Okla.

Leer-charging apparatus. 1,624,250; Apr. 12.

Johnson, Fred H., and S. R. Lathrop, Sapulpa, Okla.

Leer-charging apparatus. 1,624,250; Apr. 12.

Johnson, Frederick H., Los Angeles, Calif. Sprinkler system control valve 1,636,370; July 19.

Johnson, Frederick H., Los Angeles, Calif. Sprinkler system control valve 1,636,370; July 10.

Nov. 8.

Johnson, George A., Chleago, Ill., assignor, by mesne as-

system courself.

Johnson, George A., assignov.
cago, Ill. Friction shock-absorbing memor.
Nov. 8.

Johnson, George A., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Surplus-water discharge system for locomotive tenders. 1,640,037;
Aug. 23.

George F., Endicott, N. Y. Shoe. 1,638,339.

Aug. 9.

Aug

Johnson, Gustav, West Roxbury, Mass., assignor, by mesne assignments, to The Bassick Manufacturing Commence assignments, to The Bassick Manufacturing Commence assignments, to The Bassick Manufacturing Commence and Commence and

Johnson, Harry W., et al. (See Schauman, Bror M., as-

Johnson, Harry W., v. signor, signor, Johnson, Harvey F., assignor to Union Machinery Company, Joliet, Ill. Dough-molding machine. 1,653,211; Johnson, Harvey L., assignor to American Locker Com-pany, Chicago, Ill. Coin-controlled lock. 1,640,605;

pany, C Aug. 30 Aug. 30.

Aug. 30.

Hervey L. assignor to American Locker Componisson, Chicago, Ill. Coin-controlled lock. 1,643,458; Sept. 27.

Johnson, Hastings H., Minneapolis, Minn. Wire-measuring device. 1,662,407; Dec. 13.

Johnson, Henning A. (See Whitfield, Joseph E., assignor.)

signor.)
Johnson, Henry C., Colton, Calif. Rotary steam engine.
1.642.996; Sept. 20.
Johnson, Herbert B., Erocklyn, assignor to Bell Telephone
Johnson, Herbert B., Brooklyn, assignor to Rell Telephone
system. 1.632.901; June 21.
Johnson, Herbert B., Brooklyn, and L. La Fayette Eagon;
said Johnson assignor to Bell Telephone Laboratories,
lacorporated, New York, N. Y., and said Eagon assignor to American Telephone and Telegraph Company. Telephone systems. 1.639,136; Aug. 16.
Standard Development Company. Lubricant. 1.619,074;
Mar. 1.

Johnson, Herbert W., et al. (See Gerau, George D., assignor.)
Johnson, Herman M., Portland, Oreg. Coin-controlled
optical instrument. 1,632,377; June 14.
Johnson, Homer B., deceased, Sheridan, Ind. E. K.
Johnson administratrix. Harvester. 1,629,215; May 17.
Johnson, Iter, Vancouver, British Columbia, Canada.
Johnson, J. E., Chicago, Ill., assignor to The Wahl Company, Wilmington, Del. Eraser-holding device and the
like. 1,636,822; July 26.
Johnson, James C., Sacramento, Calif. Patent envelope.
1,639,566; Aug. 16.
Johnson, James C., Sacramento, Calif. Patent envelope.
1,639,566; Aug. 16.
Johnson, James C., Sacramento, Calif. Patent envelope.
1,639,568; Sept. 6.
Johnson, James C., Sacramento, Calif. Patent envelope.
1,641,33; Sept. 6.
Johnson, James T., Birmingham, Ala. Picture frame.
1,632,138; June 14.

Son:
Johnson, Jay M. (See Hansen, Henry, assignor.)
Johnson, Jay M. Chicago, Ill., assignor to Great Lakes
Auto Products Company. Adjustable spotlight.
1.014.743; Jan. 12.
1.014.743; Jan. 12.
1.014.744; Jan. Spotlight. 1,614.744;
Jan. Jay M. Chicago, Ill., assignor to Great Lakes
Johnson, Jay M. Chicago, Ill., assignor to Great Lakes

Johnson, Jay M., Chicago, Ill., assignor to Great Lakes Auto Products Company. Spotlight mounting. 1.614.745; Jan. 18. Johnson, Jonnie S., et al. (See Gerau, George B., as-

1.614.746; Jan. 18.
Johnson, Jonnie S., et al. (See Gerau, George B., assignor.)
Johnson, Jesse C. Oskland, Calif., assignor to S. T.
Johnson, Co., Oskland, Calif., Control mechanism for
Johnson, John S., Mexia, Tex. Fishing tool for use in
oil wells. 1.646.965; Oct. 25.
Johnson, John A. (See Luckett, G. B., and Johnson,
Johnson, John A., New York, N. Y. Bottle-capping machine. 1.634.464; July 5.
Johnson, John B., Elmhurst, assignor to Western Electric
Company, Incorporated. New York, N. Y. Electric
Company, Incorporated. New York, N. Y. Electric
Johnson, John E., (See Oslund, C. H., and Johnson,
Johnson, John E., Chicago, Ill. Lathe. 1,639,090;
Aug. 16.
Johnson, John E., assignor to The Speedaumatic Company, Chicago, Ill. Addressing machine. 1,623,542;
Apr. 5.

Johnson, John E., assignor to The Speedaumatic Com-pany, Chicago, Ill. Embossing machine. 1,639,733;

Johnson, John E., assignor to The Speedaumatic Company, Chicago, Ill. Embossing machine. 1,638,733; Aug. 23. Johnson, John G., Tacoma, Wash. Stuffing box. 1,632,293; June 14. Johnson, John H., and Sons. (See Umsted, B. T., and Johnson, John H., and Sons. (See Umsted, B. T., and Johnson, John H., Chicago, Ill. Pressure gauge. 1,622,517; Mar. 29. Johnson, John H., Astoria, N. Y. Necktie supporter. 1,638,809; Aug. 9. Johnson, John M., Kansas City, Mo., assignor to The United States Automatic Fire Alarm Company. Fire-Alarm system. 1,629,107; Mar. 3. Johnson, John M., Greenwich, Johnson, John R., Greenwich, Con. Fire pot. 1,620,353; Mar. 8. Johnson, John R., assignor to The Ingersoil Milling Ma-Johnson, John R., assignor to The Johnson, John R., assignor to The Johnson, John R., assignor to The Johnson John R., assignor to The Jo

Mar. 8.
Johnson, John R., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Feed mechanism for machine tools. 1,623,462; Apr. 5.
Johnson, John S. and A., Fargo, N. Dak. Oil injector. 1,639,409; Aug. 16.
Johnson, John W. Auckland, assignor of one-half to L. Johnson, John W. Auckland, assignor of one-half to L. Johnson & Johnson. (See Dailey, Frank L. assignor.) Johnson & Johnson. (See Dickoon, English Practice assignor.) Johnson & Johnson. (See Dickoon, English Practice assignor.) Johnson & Johnson. (See Dorman, William R., assignor.)

Johnson & Johnson.

Johnso

assignors.)

Johnson, Joseph, Birmingham, England. Shock-absorbing device for the handle bars of cycles and the like.

1,622,912; Mar. 29.

Johnson, Joseph B., Los Angeles, Calif. Vending machine. 1,641,539; Sept. 6.

Johnson, Joseph D., Leola, S. Dak. Disk cultivator.

Johnson, Josiah F., Swarthmore, Pa., assignor to Westing-house Electric and Manufacturing Company. Bleeder turbine. 1,619,129; Mar. 1.

Johnson, Josiah F., Swarthmore, Pa., assignor to Westing-house Electric and Manufacturing Company. Fluid-pressure control. 1,647,135; Nov. 1.

pressure control. 1,647,135; Nov. 1.

pressure Electric and Manufacturing Company. Coupling. 1,647,136; Nov. 1.

Johnson, Kenneth S., Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric-way filter. 1,613,952; Jan. 11.

Johnson, Kenneth S., Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric-way Electric City, N. J., assignor to Johnson, Kenneth S., Jersey City, N. J., assignor to Johnson, Kenneth S., Jersey City, N. J., assignor to Johnson, Kenneth S., Jersey City, N. J., assignor to N. Y. Electric-waye filter. 1,647,634; Nov. Y. York, Johnson, Kenneth S., Jersey City, and T. E. Shea, Rutherford, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated. Wave Beach, Douglas County, Nebr. Desk set and pencil sharpener. 1,627,705; May 10.

Johnson, Lane, (See Biggort, F. C., Jr., and Johnson, Johnson, Lane, Ingram, assignor to United Engineering & Fueducal, 1,652,602; Nov. 29.

Johnson, Lane, Georgian, See See Rogers, Harry Johnson, Lars, Chicago Ill. Separating butter fats, etc. 1,651,028; Nov. 29.

Johnson, Lars, and W. W. Hillson, Ossining, N. Y. Floor Jack, 1,615,705; Jan. 25.

Johnson, Lars, Lenger, Willmar, Minn, Door-closing device

Johnson, Lars. and W. W. W. Hillson, Ossining, N. Y. Filoor Jack. 1,613,705; Jan. 25.
Johnson, Lawrence et al., trustees. (See Rogers, Harry R., assignor; B. Willman. Minn. Door-closing device Johnson, Lewis H., Midison, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Testing system. 1,638,694; Aug. 9.
Johnson, Lewis H., Madison, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Testing system. 1,638,2902; June 21.
Johnson, Lewis H., Madison, N. J., and T. H. Roberts, New York, N. Y. Sasignors, by mesne assignments, to exchange system. 1,616,127; Feb. 1.
Johnson, Lindey W., et al. (See Bauer, Jacob, assignor.) Johnson, Lindey W., et al. (See Bauer, Jacob, assignor.) Johnson, Lidde A. San Francisco, Calif. Laminated shim. 1,623,763; July 12.
Johnson, Magnus. (See Sever F. and Johnson.) Johnson, Magnus. (See Sever F. and Johnson.) Johnson, Magnus. (See Sever F. and Johnson.) Johnson, Martin B., Tillamook, Oreg. Desk-sanding machine. 1,621,831; Mar. 22.
Johnson, Mervin C., Lovyaton, Calif. Lumber-piling Jack. 1,645,488; Oct. 11.
Johnson, Miton M. (Jeburne, Tex. Combination gaugharmen, Nels A. Jamestown, N. Y. Wrench. Johnson, Norman E., assignor to Chicago Rhopac Products Company, Chicago, Ill. Packing and making the same. 1,646,548; Oct. 19.
Johnson, Norman E., assignor to Chicago Rhopac Products Company, Chicago, Ill. Packing and making the same. 1,646,548; Oct. 19.
Johnson, Olaf W., Seattle, Wash, A. sasignor to Bakeries Company, Chicago, Ill. Packing and making the same. 1,646,548; Oct. 19.
Johnson, Olaf W., Seattle, Wash, A. sasignor to Bakeries Company, Chicago, Ill. Packing and making the same. Johnson, Olaf W., Seattle, Wash, A. Sangipor to Ward-Love Pump Corporation, Rockford, Ill. Lubrication means for pumps and the Hiller Labert School of the products and the Hiller Labert School of the Pump Corporation, Rockford, Ill. Lubrication means for pumps and the Hiller Labert School of the Pump Corporation, Rockford, Ill. Lubrication means for pumps and the Hi

May 10.
Johnson, Oscar W., assignor to Ward-Love Pump Corporation, Rockford, III. Lubrication means for pumps and the like, 1.683,160; Aug, 9.
Johnson, Oscar W., assignor to Ward-Love Pump Corporation, Rockford, III. Closure operator. 1,639,091; Aug, 16.
Johnson, Oscar W., assignor to Ward-Love Pump Corporation, Rockford, III. Deep-well pump. 1,649,593; Nov. 15.

ration. Rockford, Ill. Deep-well pump. 1,649,593; Nov. 15. bhrson, Oscar W., assignor to Ward-Love Pump Cor-poration, Rockford, Ill. Water softener. 1,654,172; Dee 27. Nov. I

Dec 27.
Johnson, Oscar W. and C. H., Chicago, Ill. Emergency
raincoat. 1,639,185; Aug. 16.
Johnson, Paul W., Portland, Oreg. Fabricated spring
support. 1,621,445; Mar. 15.
Johnson, Perry, Topeka, Kans. Combined tomb marker
and decoration container. 1,619,735; Mar. 1.
Johnson, Pete. (See Johnson, A., Persson, and John-

and decoration Container. Johnson, Nat. 1.

Son.)

Johnson, Peter B., Freemont, Nebr. Stacker. 1,628,725;
May 17.

Johnston, Peter D. (See Strom Gustav, assignor.)

Johnson, Philip M., Newton, Mass., assignor, by mesne
Johnson, Philip M., Newton, Mass., assignor, by mesne
Hawen, Conn. Valve. 1,622,723; Mar. 20.

Johnson, Richard W., an Antonio Tex. Automobile jack.

1,650,016; Nov. 22.

Johnson, Richard W., assignor of one-fourth to C. W.

Johnson, Richard W., assignor of one-fourth to C. W.

Johnson, Robert C., Rotton, Lefeester, England. Runner for curtain rods. 1,628,984; May 17.

Johnson, Robert C., Rotton, Lefeester, England. Button
of distance piece for supporting the runner rails of cur
Johnson, Robert M., Washington, D. C. Vaporizer for
gasoline engines. 1,625,661; Apr. 19.

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Johnson, Robert J., Spokane, Wash. Shirt retainer. 1,653,288; Dec. 20.
J. 1653,288; Dec.

Johnson, Robert W., assignor to Johnson & Johnson, New Brunswick, N. J. Bandage compress. 1,622,948; Johnson, Robert W., assignor to Johnson & Johnson, New Brunswick, N. J. End-locked sanitary napkin 1,620,393; May 17. Johnson, Robert W., assignor to Johnson & Johnson, Johnson, S. T., Co. (See Johnson, Jesse C., assignor.) Johnson, S. T., Co. (See Johnson, Jesse C., assignor.) Johnson, S. T., Co. (See Johnson, Jesse C., assignor.) Johnson, S. T., Co. (See Johnson, Jesse C., assignor.) Johnson, Stanley G., assignor to The Burkhardt Company, Detroit, Mich. Display book. 1,635,420; July 12. Johnson, Stanley G., assignor to The Burkhardt Company, Detroit, Mich. Display book. 1,635,420; July 12. Johnson, Stanley G., assignor to The Burkhardt Company. Detroit, Mich. Display book. 1,635,420; July 12. Johnson, Theodore, E. Display book. 1,635,421; July 12. Johnson, Theodore, G., Kansas City, Mo. Mop head. 1,617,524; Feb. 16. Johnson, Theodore G., Kansas City, Mo. Floor mop. Johnson, Theodore G., Kansas City, Mo. Convertible seat for motor vehicles. 1,632,233; June 14. Johnson, Thomas L., Charleston, W. Va. Coal-loading for coal-loading machines. 1,635,085; July 5. Johnson, Thomas L., Charleston, W. Va. Conlever chair for coal-loading machines. 1,635,085; July 5. Johnson, Thomas L., Charleston, W. Va. Conveyer chain for coal-loading machines. 1,635,085; July 5. Johnson, Thomas L., Charleston, W. Va. Conveyer chain for coal-loading machines. 1,635,085; July 5. Johnson, Thomas L., Charleston, W. Va. Conveyer chain for coal-loading machines. 1,635,085; July 5. Johnson, Thomas L., Charleston, W. Va. Conveyer chain for coal-loading machines. 1,635,085; July 5. Johnson, Thomas L., Charleston, W. Va. Conveyer chain for coal-loading machines. 1,635,085; July 5. Johnson, Thomas L., Charleston, W. Va. Conveyer chain for coal-loading machines. 1,635,085; July 5. Johnson, Thomas L., Charleston, W. Va. Conveyer chain for coal-loading machines. 1,635,085; July 5. Johnson, Waldo P., Chicago, Ill. Peuttry car. 1,651,129; Nov. 29. Johns

try cars. 1,643,501; Sept. 21.
Johnson, Waldo P., Chicago, Ill. Poultry car. 1,651,129; Nov. 29.
Johnson, Waldo P., Chicago, Ill. Poultry-car constructions of the property of

Johnson, William A. Chicago, II. assignor to J. W. Martin, Omaha, Nebr. Disappearing foot Johnson, William H. Chicago, L. Sept. 6.

Johnson, Wilfred G., assignor to The Colson Company, Blyria, Ohio. Caster. Des. 73,844; Nov. 15.

Johnson, Wilfred G., assignor to The Colson Company, Johnson, William, Sussignor to The Colson Company, Johnson, William, Muskegon Heights, Mich. Cylinderhoning device. 1.643,459; Sept. 27.

Johnson, William, Chicago, III. assignor to J. W. Martin, Omaha, Nebr. Disappearing shoe-shining foot Johnson, William A. Chicago, III. assignor to Pennsylvania Flexible Metallic Tubing Company, Philadelphia. Pa. Coupling for amoved hose. 1.649,594; Nov. 16.

Johnson, William B. (See Isenhart, John and E. A., and Johnson, William E. (See Isenhart, John and E. A., and Johnson, William E. (See Isenhart, John and E. A., and Johnson, Milliam E. (See Buncan, Charles H., as-

Johnson.) physon, William F., et al. (See Duncan, Charles H., as-

Johnson, William F., et al. (see Duncan, Charles H., as-Signori) Johnson, William H., Cambridge, Md. Window bracket. 1,627,241; May 3. Johnson, William H., Haverhill, Mass. Figure toy. 1,635,550; July 12.

Johnson, William H., Havethill, Mass. Figure toy.
1.635,550; July 12.
Johnson, William M., assignor of one-half to F. E. Brown,
Fomona, Calif. License plate. Dev. 72,164; Mar. 8.
1.647,868; Nov. 1.
1.647,868; Nov. 1.
1.648,868; Nov. 1.
1.648

Johnston, Benjamin W., Rosedale, Alberta, Canada, assignor of one-half to Berton A. McDwen, Brumheller, Canada. Latch. 1,634,195; June 2.
Johnston, Carl W., et al. (See Andrews, Walter S., assignor.)

signor.)
Johnston, Charles F., and G. G. Rees, San Francisco,
Calif. Piston ring. 1,649,474; Nov. 15.
Johnston, Charles O., assignor, by mesne assignments, to
International Fire Equipment Corporation, New York,
N. Y. Fire extinguisher. 1,633,254; June 21.
Johnston, Charles O., assignor, by mesne assignments,
to Standard Fire Equipment Corporation, New York,
to Standard Fire Equipment Corporation, New York,
Johnston, Pire extinguisher. 1,648,233; Nov. 8.
Johnston, Brice extinguisher. 1,648,233; Nov. 8.

Johnston, Clarence, Townsend, Mont. Weeder attachment for harrows. 1,624,789. Apr. 12.

Johnston, Clarence, Townsend, Mont. Weeder attachment for harrows. 1,624,789. Apr. 12.

Johnston, Clarence L., assignor to Marchant Calculating Machine Company, Oakland, Calif. Calculating marchine. 1,628,154; May 10.

Johnston, Clarence L., Oakland, Calif., assignor to American Sales Book Company, Limited, Toronto, Canada. Autographic register. 1,649,595; Nov. 15.

Johnston, Clarence S., Glendive, Mont., assignor to The wheel. 1,621,932; Mar. 22.

Johnston, Clyde M. (See Coleman, C. R., and Johnston, Johnston, Dryden & Co. (See Smart, Russel S., assignor.)

Johnston, Bdward A., and P. H. Danley, assignors to International Harvester Company, Chicago, Ill. Tractor. 1,641,813; Sept. 6.

Johnston, Frank H., assignor, by mesne assignments, to Acme Card System Company, Chicago. Ill. Visible card system. 1,651,732; June 7.

Johnston, Gordon G. Berlick Seat. 1,649,702; Nov. 15.

Johnston, Gordon G. Behlick Seat. 1,649,702; Nov. 15.

Johnston, George W. Sand Springs, Okla. Boat-propelling mechanism. 1,626,736; May 3.

Johnston, Gustave V., Chicago, Ill., assignor to Steel and Tubes, Incorporated, Cleveland, Ohio. Electric tube-welding machine. 1,652,481; Dec. 13.

Johnston, Herbert L., assignor to The Hobart Manufacturing Company, Troy, Ohio. Glass hopper. 1,616,750; Johnston, Herbert L., assignor to The Hobart Manufacturing Company, Troy, Ohio. Glass hopper. 1,616,750;

Tubes, Incorporated, Cleveland, Ohio. Electric tube-welding machine. I, 685,481; Dec. 13.
Johnston, Herbert L., assignor to The Hobart Manufacturing Company, Troy, Ohio. Glass hopper. 1,616,780; Johnston, Herbert L., assignor to The Hobart Manufacturing Company, Troy, Ohio. Transmission mechanism. 1,651,822; Dec. 6.
Johnston, Heward H., See Riley, L. G., Meyer, Johnston, Johnston, Howard H., Dagewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, System of control. 1,642,028; Sept. 13.
Johnston, James H., assignor to Stamm-Scheele Manufacturing Co., Limited, Rayne, La. Centrifugal pump. Johnston, James H., Utlea, assignor to Randometr Dyeling Machine Corporation, Syracuse, N. Y. Coloring yarn on bobbins, 1,613,707; Jan. 11.
Johnston, John, New Haven, Conn., assignor, by mesne assignments, to Western Electric Company, Incorposition, 1,613,707; Jan. 11.
Johnston, John A., Westmount, Ouebec, Canada. Belt-shifting mechanism. 1,653,463; Dec. 20.
Johnston, John J., Benson, Minn. Bearing plane. 1,648,703; Nov. 15.
Johnston, John J., Benson, Minn. Bearing plane. 1,649,703; Nov. 15.
Johnston, John J., Benson, Minn. Bearing plane. 1,649,703; Nov. 15.
Johnston, Norman M., Fremont, Ohlo. Capo tasto. 1,616,859; Feb. 8.
Johnston, R. L., et al. (See Dougherty, Charles T., Johnston, Robert E., Collingswood, N. J., assignor to Charles T. Wilson Company, Inc., New York, N. Y. Apparatus for shelling palm nuts. 1,548,456; Nov. 8.
Johnston, Robert E., Collingswood, N. J., assignor, Johnston, Robert F., (See McLean, James S., assignor, Johnston, Robert F., (See McLean, James S., assignor, Johnston, William A. (See Palawin, R. S., and Johnston, Johnston, William A. (See Palawin, R. S., and Johnston, Johnston, William A. (See Palawin, R. S., and Johnston, Johnston, William P., Los Angeles, Callf., assignor, by messe assignments, to Reminfor Rand, Inc., Tonawand, N. Y. Index. 1,645,508; Oct. 18.
Johnston, William A. (See Palawin, R. S., and Johnston, Johnston, William M., (See Palawin, R. S., and Johnston, Johnston, W

ne. John I., Lynwood, assignor of one-half to I. inkey, Maywood, Calif. Casing head. 1,650,131;

Nov. 22.

Johnstone, Robert M., Roselle Park, assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting means. Re16,702; Aug. 9.

Johnstone, Robert M., Roselle Park, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y. Handling webs of flexible material. 1,614,244; Jan. 11. Johnstone, Robert M., Roselle, Park, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y. Core-supporting means. 1,642,850; Sept. 7. Johnstone, Samuel, Sparks, assignor of one-third to F. G. Sparks, New Pathitub mat. 1,615,706; Jan. 25. Johnstone, New Bathitub mat. 1,615,706; Jan. 25. Johnst, Syarks, New Bathitub mat. 1,615,706; Jan. 25. Johnst, Sylvester L., McGregor, Tex. Reversible placard holder for tank cars. 1,614,792; Jan. 18. Johnst, Sylvester L., McGregor, Tex. Centrifugal dirt collector. 1,637,257; July 26. Lindstrom Aktiengesell-10kel, Franz, assignor to Carl Lindstrom Aktiengesell-10kel, Franz, assignor to Carl Lindstrom Aktiengesell-10kell, Franz, Assignor to The S. S. White Dental Manufacturing Company. Flexible Shaft, 1,649,310; Nov. 15. England. Driving and respinding machine. 1,645,489; Oct. 11. Jolly, James, Bolton, England, assignor to Whitin Machine Works, Whitnsville, Mass. Combing machine. 1,640,705; Aug. 30. Johns, Gottried B., assignor to M. V. Philips' Gloeilampenfabricken, Eindhoven, Netherlands. Joint between metal and glass and making the same. 1,627,780; May 10.

metal and glass and making the same. 4,027,100.

May 10.

Jonas, Jacob F., Bellevue, Ky. Shoe-tip stiffener.
1,638,263; Aug. 9.

Jonas, Jacob F., Belvue, Ky. assignor to The Krippencharter of the stiffener.
2 Jonas, Julius, assignor to Aktiengesellschaft Brown,
Boveri & Cie, Baden, Switzerland. Apparatus for
diminishing injurious earthing currents. 1,647,869;
Nov. 1.

diminishing injurious earthing currents. 1,647,869; Nov. 1.
Jonas, Julius, and W. Niggeler, assignors to Aktlengsesell-schaft Brown Boveri & Cle., Baden, Switzerland. Flame-are furnace. 1,650,072; Nov. 22.
Jonas, Kaspar. (See Hulmer, J., and Jonas.)
Jonasson, Carl V., and H. J. Boal, Portland, Oreg. Standing board. 1,640,326; Jung. 23.
Jones, A. H., Co. Inc., The. (See Jones, Augustus H., assignor.)

Jones, A. H., Co. Inc., The. (See Jones, Augustus H., assignor.)

Jones, A. H., Company, The. (See Jones, Augustus H., assignor.)

Jones, Anton R., assignor to Miliville Manufacturing Company, Miliville, N. J. Stop motion for looms.

Jones, Adolph G., Celeron, N. Y., assignor, by mesne assignments, to The Lobdell-Emery Mfg. Co., Alma, Mich. Wood-spoked steering wheel. 1,642,629; Sept. 13.

Jones, Albert E., assignor to The Whitehead Torpedo Company Limited, Westminster, London, England. Lubricating device. 1,614,565; Jan. 18.

Jones, Anthur G., Painfield, N. J., assignor to Industrial Associates, Incorporated, New York, N. Y. Spray drying, 1,624,739; Apr. 12.

Jones, Arthur G., Painfield, N. J., assignor to Industrial Associates, Incorporated, New York, N. Y. Spray drying, 1,624,739; Apr. 12.

Jones, Arthur C., assignor to A. S. Kelly, South Pittsburg, Tenn.

Jones, Arthur W., Randolph, Wis. Splint. 1,643,850; Sept. 27.

Jones, Arthur W., East Orange, assignor to Elevator Supplies Company, Inc., Hoboken, N. J. Combined door latch and switch mechanism. 1,649,475; Nov. 15.

Jones, Augustus H., assignor to The A. H. Jones Co. Inc., Manuschys H. Assignore, On The A. H. Jones Co.

Jan. 4

Jan. 4.

Jones, Augustus H., assignor to The A. H. Jones Company, Meriden, Conn. Combination candlestick.

Jones, Avoca, Seattle, Wash. Loud-speaker casing. Des. 71,915; Jan. 25.

Jones, Barton, et al. (See Hanson, Roy E., assignor.) Jones, Benjamin H., Allegany, N. Y. Clothes basket. 1,617,055; Feb. 8.

Jones, Benjamin T. New Haven, Conn. Separator. Jones, Benjamin T. New Haven, Conn. Separator. Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. System of motor control. 1,614,198; Jan. 11.

Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Electromagnetic device. 1,620,565; Mar. 8.

Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Automatic reciosing-circuit-breaker system. 1,626,467; Apr. 26.

Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Automatic reciosing-circuit-breaker system. 1,626,467; Apr. 26.

Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company.

Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Phase-failure protection. 1,637,043; July 26.

Jones, Henjamin W., Schenectady, N. Y., assignor to General Electric Company. Summation metering sys-tem, 1,841,762; Sept. Jones, Benjamin W., and N. A. Wolfe, Schenectady, N. Y., assignors to General Electric Company. Elec-tromagnetic device for alternating-current circuits. 1,620,555; Mar. 8. Jones, Bert. (See Walstead, Gustav A., assignor.) Jones Bros. Co. (See Jones, M., and Goldstein, assignors.) Jones Bros. Co. (See Jones, M., and Goldstein, assignors.) Mar. 22.

Jones Bros. Co. (See Jones, M., and Goldstein, assignors.)
Jones, Burrell L., Oakland, Calif. Wall bed. 1,621,885;
Mar. 22.
Jones, Byron Q., Washington, D. C. Diaphragm muffler,
1,622,150; Mar. 22.
Jones, Shries, See Edwards, E., Jones, and Hanson.)
Jones, Charles, E., See Edwards, E., Jones, and Hanson.)
Jones, Charles, E., and M. A. Atuesta, Scheriectady, N. Y.,
assignor to General Electric Company, Corrosion-resisting metal. 1,615,707; Jan. 2.
Jones, Charles E., and M. A. Atuesta, Scheriectady, N. Y.,
assignor to General Electric Company, Corrosion-resisting metal. 1,615,707; Jan. 2.
Jones, Charles L., Pittsburgh, Pa. Maintaining inert
atmospheres in electrical apparatus 1,641,814; Sept. 6.
Jones, Charles L., Pittsburgh, Pa. Discharging carbon
dioxide. 1,644,388; Cet. 4.
Jones, Charles L., Pittsburgh, Pa. Discharging carbon
dioxide. 1,644,388; Cet. 4.
Jones, Charle, White Plains, N. Y. Cotton cultivator.
1,628,542; May 10.
Jones, Charlotte M., Philadelphia, Pa. Music-scale-indicating device. 1,643,303; Sept. 27.
Jones, Endrotte M., Philadelphia, Pa. Music-scale-indicating device. 2,643,303; Sept. 27.
Jones, Endrotte M., Philadelphia, Pa. Music-scale-indicating device. 2,643,303; Sept. 27.
Jones, Endrotte M., Philadelphia, Pa. Music-scale-indicating device. 2,643,303; Sept. 27.
Jones, Endrotte M., Philadelphia, Pa. Music-scale-indicating device. 3,643,303; Sept. 27.
Jones, Endrotte M., Philadelphia, Pa. Music-scale-indicating device. 3,643,303; Sept. 27.
Jones, Edward L., Elicsmer Port, M., Sept. 27.
Jones, Edward M., St. Louis, Mo. Inclinerator.
1,628,639; Apr. 26.
Jones, Edward P., Elicsmer Port, and A. H. Jackson,
Machester England. Machine for shearing metal
1,652,011; Apr. 19.
Jones, Elenor H., Boston, Mass. Golf tee. 1,631,270;
June J., Charles M., Jones, and Willard.)
Jones, Elenor H., Boston, Mass. Golf tee. 1,631,270;
June J., Charles M., Jones, and Willard.)
Jones, Elenor H., Boston, Mass. Golf tee. 1,631,270;
June J., Charles M., Jones, and Willard.)
Jones, Elenor H., Boston, Mass.

Jones, Elmer M. (See Green, M., Jones, and Willard.) Jones, Elmore D., et al. (See Jones, Winfield S., assignor.)

Jones, Elmore D., et al. (See Jones, Winfield S., assignor.)

Jones, Ernest. (See Jones, Frank and E.)

Jones, Erwin J., St. Paul, Minn. Mouth cleaning and massaging device. 1,631,133; June 7.

1,644,121 Sept. 20.

Jones, Floyd D., Cleveland, Ohio. Magazine and book support. 1,628,247; May 10.

Jones, Floyd D., Cleveland, Ohio. Magazine and book support. 1,628,247; May 10.

Jones, Floyd E., Torrance, Calif. Gas anchor for oil well. 1,639,734; Aug. 23.

Jones, Floyd F., Torrance, Calif. Adjustable beam hanger. 1,634,434; Oct. 4,1639,736; Aug. 23.

Jones, Floyd F., Torrance, Calif. Adjustable beam hanger. 1,634,434; Oct. 4,162,163,736; Aug. 23.

Jones, Frank S., Portheawl, South Wales. Liquid-Relationary of the company Central Falls, R. I. Hosiery machine for making Jones, Frank E., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Hosiery machine for making Jones, Frank E., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Feeding means for knitting machines. 1,631,593; Sept. 8, P. Gearing for metal-Jones, Frank E., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Feeding means for knitting machines. 1,631,593; Sept. 8, P. Gearing for metal-Jones, Frank E., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Feeding means for knitting machines. 1,631,593; Sept. 8, P. Gearing for metal-Jones, Frank E., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Feeding means for knitting machines. 1,631,593; Sept. 8, P. Gearing for metal-Jones, Frank E., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Feeding means for knitting machines, 1,631,935; Sept. 8, P. Gearing for metal-Jones, Fred E. (See McConkey, M. W., and Jones, Jones, George, Flushing, N. Y. Protector for glass and metal door knobs and automobile handles. 1,633,985; June 26.

Sept. 13, Sept. 6, P. New London, Conn. Electric forge. 1,634,365; July 5.

Sept. 13.

Jones, George A. E., New London, Conn. Electric forge, 1,634,365; July 5.

Jones, George A. E., assignor of one-third to A. B. Hart and one-third to H. H. Starr, New London, Con. Jones, George D., Petersburg, Va. Distribution of the Jones, George D., Petersburg, Va. Distribution of the Jones, George D., Petersburg, Va. Troning-board attachment for wardrobe trunks. 1,617,911; Feb. 1,626,468; Apr. 26.

Jones, George D., Petersburg, Va. Honing-board attachment for wardrobe trunks. 1,626,468; Apr. 26.

Jones, George D., East Cleveland. Ohio, assignor to The Cleveland Tractor Company, Euclid, Ohio. Tractor-propelled implement. 1,644,885; Oct. 11.

Jones, George E., sr., Knoxville, Tenn. Wheel. 1,643,460;
Josept 27: 30 Jones, George H., administrator. (See Jones, Harold C.)
Jones, George H., Oregon, Ill. Sound board for planos.
1,034,699; July 5.
Jones, George W. (See Herman, J. H., and Jones,
Jones, George W., and H. D. Roberson, assignors to
Wachusett Shirt Company, Leominster, Mass. Soft
Collar. 1,650,717. Company, Leominster, Mass. Soft
Collar. 1,650,717. Company, Leominster, Mass.
Jones, Harold F., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Guard
for pulleys. 1,629,709; May 24.
Jones, Harry C. (See Darby, J., and Jones,
Jones, Harry S., Chicago, Ill., assignor to Lithoprintex
Explic plates. 1,650,182; Nov. 22.
Jones, Harry S., Chicago, Ill. Steel stock rack. 1,619,476;
Mar. 1.
Jones, Harry W. (See Sanford, H. W., and Jones)
Jones, Harry W. (See Sanford, H. W., and Jones)
Jones, Harry W. (See Sanford, H. W., and Jones)
Jones, Harry W. (See Sanford, H. W., and Jones, Henry A., Lilbourn, Mo. Tube valve. 1,616,806;
Feb. S.

Jones, Harry W. (See Sanford, H. W., and Jones.)
Jones, Henry A., Lilbourn, Mo. Tube valve. 1,616,806;
Feb. 8.
Jones, Henry D., assignor to The American Seeding Machine Company, Springfield, Ohio. Fastening seed distributors to metal hoppers. 1,630,850; May 31.
Jones, Henry R., assignor of one-third to W. Ft. Hurnone-third to N. Sale, Bedford, Va. Internal-combustion
one-third to N. Sale, Bedford, Va. Internal-combustion
of the Company of the Company of the Company
Jones Hoppers of the Company of the Company
Jones Hurb H., Camden, N. J., assignor to General
Jones, Hurb H., Camden, N. J., assignor to General

Doc. 1. Jones, William, ass. Door lates. 1,031,11, Jones, Hugh H. Camden, N. J., assignor to General Chemical Company, New York, N. Y. Carboy package. 1,642,072; Sept. 13. Jones, Hulbert A., Ada, Okla. Dispensing and advertising device. 1,625,944; Apr. 26. Bechstein and E. E. Jones, Ira M. assignor to Apparatus for stretching skins and lenther. 1,632,551; June 14. Jones, Isaac, Denver, Colo. Combined Jash light and handle. 1,638,089; Aug. 9. Jones, Jacob H., Harborcreek, Pa., assignor, by mesne assignments, to Eric City Iron Works. Pulverizer beater. 1,621,256; Mr. 1. Sewickley, Pa., assignor to The Consolidated Paper Company, Monroe, Mich. Machine for forming blanks for corrugated-paper boxes. 1,619,207; Mar. 1.

forming blanks for corrugated pages.

Mar. 1.

Jones, James J., New York, N. Y. Broller. 1,627,742;

May 10.

Jones James M., Lewisburg, Tenn. Railway and highvalue of the state of the

Kennedy, Hamilton, Ohio. Wire wheel. 1,642,207; Sept. 13. Jones, Jesse L., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Solder. 1,651,709; Dec. 6. Jones, Jesse M., and R. R. Webb, assignors to Charles R. Hadley Company. Los Angeles, Calif. Tray binder. 1,633,023; June 21. Legon, III. Electrically-illuminated floor indicator for passenger elevators. 1,651,710;

Jones, John F., Chicago, III. Electrically-lluminated floor indicator for passenger elevators. J.651,710; Dec. 6.

Dec. 6.

Dec. 6.

Method and apparatus for making paper strips with thinned edges. 1,634,997; July 5.

Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Conveyer. 1,641,437; Sept. 6.

Jones, John G., and H. G. Dewey, Assignors to Eastman Kodak Company, Rochester, N. Y. Conveyer. 1,641,437; Sept. 6.

Jones, John G., and H. G. Dewey, Assignors to Eastman Kodak Company, Rochester, N. Y. Automatic to Estman Kodak Company, Rochester, N. Y. Automatic to Estman Kodak Company, Rochester, N. Y. Automatic strain Jones, John T., assignor of one-half to F. G. Stephens, St. Louis, Mo. Smoke consumer. 1,639,736; Aug. 23.

Jones, John U. Dallas, Tex. Valve for engines and motors. 1,620,355; Mar. 8.

Jones, John W., Philadelphia, Pa. Compound for removing paint and stains. 1,651,130; Nov. 29.

Jones, Joseph H. (See Burgess, Robert, assignor.)

Jones, Joseph L. (See Burgess, Robert, assignor.)

Jones, Joseph L. (See Burgess, Robert, assignor.)

Jones, L. W., Tool Company. (See Jones, Louis W., assignor.) Jamson Machine Company.

Jones & Lamson Machine Company. (See Loues, Louis W., assignor.)

Jones & Lamson Machine Company. (See Flanders, Ralph E., assignor.)

Jones & Lamson Machine Company. (See Lovely, John

Jones & Lamson Machine Company. (See Lovely, John E., assignor.)
Jones & Laughlin Steel Corporation. (See Boardman, Charles S., assignor.)
Jones & Laughlin Steel Corporation. (See Boardman, Jones & Laughlin Steel Corporation. (See Jones, Wm. L., assignor.)
Jones & Laughlin Steel Corporation. (See Rendleman, Norman C., assignor.)
Jones & Laughlin Steel Corporation. (See Sennett, John H., assignor.)
Jones & Laughlin Steel Corporation. (See Rendleman, Norman C., assignor.)
Jones & Laughlin Steel Corporation. (See Sennett, John H., assignor.)
Jones & Laughlin Steel Corporation. (See Rendleman, Norman C., assignor.)
Jones & Laughlin Steel Corporation. (See Rendleman, Norman C., assignor.)
Jones & Laughlin Steel Corporation. (See Rendleman, Norman C., assignor.)
Jones & Laughlin Steel Corporation. (See Jones, Wm. Norman C., assignor.)
Jones & Laughlin Steel Corporation. (See Jones, Wm. L., assignor.)

Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Method and mechanism for centrifugal treatment of substances. 1,634.243; June 28.

Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Method and mechanism for Lost June 28.

June 28.

Junes 18.

Junes 18.

Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal separator. 1.634.244; June 28.

Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Method and anechanism for centrifugally separating substances. 1.649.118; Nov. 15.

Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Method and apparatus for centrifugally separating substances. 1.649.118; Nov. 15.

Jones, Leo D., and A. U. Ayres, assignors to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal management of the Sharples Specialty Company, Philadelphia, Pa. Centrifugal management of the Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine. 1.6425.613; June 28.

Jones, Leo D., and A. U. Ayres, assignors to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine. 1.6425.613; June 28.

Jones, Leo D., and A. U. Ayres, assignors to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine. 1.6425.613; June 28.

Jones, Leo D., and A. U. Ayres, assignors to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine and process involving the use of the Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine and process involving the use of the Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine and process involving the use of the Same. 1.634.246; June 28.

Jones, Lester L., Oradell, N. J. Radiofrequency amplifying system. 1.620.661; Mar. 16.

Jones, Lester L., Oradell, N. J. Radiofrequency amplifying system. 1.620.661; Mar. 16.

Jones, Levis N. W. W. York, N. Y. Assignor to L. W. Jones, Louis M. New York, N. Y. Assignor to L. W. Jones, Louis M. New York, N. Y. Assignor to L. W. Jones, Louis M. New York, N. Y. Assignor to L. W. Jones, Louis W. New York, N. Y. Assignor to L. W. Jones, Louis W. New York, N. Y. Assignor to L. W. Jones, Louis W. New York,

Rochester, N. X. Portable projection success. May 10.
Jones, Loyd A., assignor to Eastman Kodak Company,
Rochester, N. Y. Illuminating apparatus. 1,631,488;
June 7.
Jones, Martha, Akron, Ohlo, and T. H. Forehand, Nashville, Tenn. Adjustable bearing. 1,652,014; Drc. 6.
Jones, Maurice F. (See Riley, L. G., Candee, and Jones,
Jones, Mayer, and B. E. Goldstein, Brooklyn, N. Y., assignors to Jones Bros. Co., Inc., New York, N. X.
Container for candy and other articles. Des. 71,800;
Jan. 4.

Jan. 4.

Jones, Minnie L., Cornelia, Ga. Danger Indicating means
for highways. 1,641,279; Sept. 6.

Jones, Morris. (See Metcali, R., and Jones.)

Jones, Mortimer. (See Panadiotricos A., and Jones.)

Jones, Norman and S., Bolton, England. Detaching roller
of combining machines for combing cotton and other
fibrous materials. 1,639,802; Aug. 23.

Jones, Paul A., Jacksonville, Ill. Hand covering.

1,612,822; Jan. 4.

Jones, Paul A., Jacksonville, Calif., assignor to Balfour,

Outhing Co. Insecticide emulsion. 1,646,149;

Oct. 18.

Jones, Percival W., Warwick, R. I. Hook. 1,685,277;

Jones, Percival W., Warwick, R. I. Hook. 1,635,277; July 12. Jones, Percival W., Warwick, assignor to Louis Stern Company, Providence, R. I. Safety catch. 1,631,824;

June 7.
Jones, Percival W., Warwick, assignor to Rosenheim Co.
Inc., Providence, R. I. Bracelet. 1,638,633; July 19.
Jones, Percival W., Warwick, assignor to Rosenheim Co.
Inc., Providence, R. I. Bracelet. 1,641,763; Sept. 6.
Jones, Pillip J., Ekhart, Ind. Rallway gauge or the rod.
Jones R. A., & Company. (See Jones, Ruel A., asStront A., & Company. (See Jones, Ruel A., asStront A.)

signot.)
Jones. Richard G., Hynes, Calif. Trausmission.
1,633,989; June 28.
Jones. Richard G., Hynes, Calif. Dephlegmator.
1,633,980; June 28.
Licas. Solvent Company, Lion, N. Y. Typewriting Company, Lion, N. Y. Typewriting machine.
1,646,407; Oct. 25.
Jones. Robert R., Akron, Ohio. Curing rubber articles.
1,642,614; Sept. 18.
Jones. Robert R., assignor to Tice Firestone Tire and Rubber Company, Akron, Ohio. Apparains for coating and drying fabric or the like. 1,622,740; June 14.

Jones, Robert R., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Seal for driers, heaters, or the like. 1,635,546; June 21.

Jones, Ruel A., assignor to R. A. Jones & Company, Inc. Covington, Ky. Carton-feeding mechanism for car. Covington, Ky. Carton-feeding mechanism for car. Jones, Rufus B. (See Shipley, C. W., and Jones, Inc. Jones, Rufus B. (See Shipley, C. W., and Jones, Inc. Jones, Rufus B. (See Shipley, C. W., and Jones, Inc. Jones, Rufus B. (See Shipley, C. W., and Jones, Inc. Jones, Rufus B. (See Shipley, C. W., and Jones, Inc. Jones, Rufus B. (See Shipley, C. W., and Jones, Inc. Jones, Rufus B. (See Shipley, C. W., and Jones, Inc. Jones, Rufus B. (See Shipley, C. W., and Jones, Jones, Rufus B. (See Shipley, C. W., and Jones, Jones, Russell Company, New York, N. Y. Bent tube evaporator, 1,617,119; Feb. S. Jones, Russell Company, New York, N. Y. Deacerator. Jones, Russell Company, New York, N. Y. Heat exchanger with self-draining tube surface, 1,641,975; Sept. 13.

Jones, Russell C., Bronxville, assignor to The Griscom-Russell Company, New York, N. Y. Beacrator. Jones, Russell Company, New York, N. Y. Deacerator. Jones

Jones, Vincent L., New Haven, Conn. Boiler. 1,618,829; Feb. 22.

Jones, Virgil B., Hawarden, Jowa. Valve. 1,649,235; Nov. 15.

Jones, Wirren C., Flushing, assignor to Western Electric Company, Incorporated New York, N. Y. Telephore receiver. 1,642,776; Sept. 20.

Jones, Warren C., Flushing, assignor to Western Electric Company, Incorporated, New York, N. Y. Receiver. 1,642,777; Sept. 20.

Jones William, Los Angeles, Calif. Automatic-reversemotion brake. 1,644,061; Oct. 4.

Jones, William E., Miller File. Wick for cooking and heating stoves. 1,651,209; Nov. 29.

Jones, William F., Little Falls. N. J. Construction and installing subaqueous conduits. 1,647,448; Nov. 1.

Jones, William F., Little Falls. N. J. Construction and installing subaqueous conduits. 1,647,448; Nov. 1.

Jones, William F., Little Falls. N. J. Construction and construction of the constr

tindous mill and folling structurist suapes. 1,00e,soup. June 14. Jones, William P., Dover, N. J. Wire-cloth-stretching machine. 1.649,390; Nov. 15. The property of one-elghth to H. U. Jones, Winfield S., Brea, assistate of one-elghth to H. U. Taft, one-court to L. T. McCutcheon, and one-fourth to J. F. McCutcheon, and one-fourth to J. F. McCutcheon, and one-fourth to J. F. McCutcheon, Los Angeles, Calif. Cutter. 1814,840; Jan. 18.

to J. F. McMahon, Los Angeles, Calif. Cutter, Jones of McMahon, Los Angeles, Calif. Cutter, Jones of McMahon, Los Angeles, Calif. Cutter, Jones of McMahon, Composited, New York, N. Y. Machine press. 1614,557; Jan. 18.
Jonick, Michael, New York, N. Y., assignor to Jonick Sirken Co., Inc. Lighting-fixture strap. Des. 72,318; Mar. 29.

Mar. 29. Tonick, Michael, Sirken Co., In May 24. dichael, New York, N. Y., assignor to Jonick-Co., Inc. Lighting-fixture strap. Des. 72,710;

Jonick, Michael, New York, N. Y., assignor to Jonick-Sirker, Co., Jon. Lighting-Sirture wall bracket. Des. Jonick Sirker, Co. (See Jonick, Michael, assignor.) Jonick Sirker, Co. (See Jonick, Michael, assignor.) Jonickle, Steven. (See Schuur, J. M., Kesselring, Schuur, and Jonisch.)
Jonkhoff, Henri W., Semarang, Java, Dutch East Indies. Brake device. 1,625,727; Apr. 19.

Jonnes, Lloyd, Circleville, Ohio. Support for garment hangers or the like. 1,628,623; May 10. Jonsson, Gustar E., Halmstad, Sweden. Nut lock. 1,639,803; Aug. 23. Jonsson, Jonas, Vansbro, Sweden. Transport wagon for railways. 1,622,543; May 10. W. Dyheck, Falun, Jonsson, Jonas, Vansbro, and C. W. Dyheck, Falun, Jonsson, Jonas, Vansbro, Mass, assessing a sasignments, to C. A. Reed Company, Williamsport, Pa. Shipping tag. 1,632,632; June 14. Jordan, Daniel, Harrison, Nebr. Mower. 1,616,629; Feb. 8.

Jordan, Feb. 8.

Jordan, Eugène, Franconville, assignor to Societe l'Air Liquide (Societe Anonyme pour l'Etude et l'Exploita-tion des Frocedes Georges Claude), Paris, France. Tray for gas and liquid contact apparatus. 1,621,728; Mar. 22.

Mar. 22.
Jordan, Franz, Berlin-Lichterfelde, Germany, Track brake. 1,618,535; Feb. 22.
Jordan, Hans, Karlshorst, Germany, assignor to General and the state of th

by the Secretary of Commerce. Alloy. 1,638,850; Aug. 16.

Jordan, O. F., Company. (See Protzeller, Harry W., as-

signor, signor, Jordan, Roy E., Newark, N. J., assignor to The Mosaic Tile Company. Toothbrush holder. Des. 72,998;

July 5.

Jordan, Roy E., Newark, N. J., assignor to The Mosaic
Tile Company. Bar and shelf bracket. Des. 73,038;
July 12.

July 12.

Jordan, Roy E., Newark, N. J., assignor to The Mosaic
Tile Company. Receptacle for rolls of toilet paper.
1.643,389; Sept. 27.

Jordan, Silas V., assignor to Delco-Light Company, Dayton, Ohio. Lamp stand. Des. 74.113; Dec. 20.

Jordan, Wesley, assignor to South Bend Bait Co., South
Bend, Ind. Reel seat. 1.617,951; Feb. 15.

1.649,829; Nov. 22.

Jordan, William C., Madison, N. J., assignor to Western
Electric Company, Incorporated, New York, N. Y.
Telephone-exchange system. 1,624,953; Apr. 19,
Jordan, William M., and C. S. Nichols, Lincoln, Nebr.
Comp. Believ. 1,650,985; Nov. 29.

Jordan, William M., and C. S. Nichols, Lincoln, Nebr.
Comp. Believ. 1,650,985; Nov. 29.

Jording, Charles A. (See Gardner, Leonard T., assignor.)

Jorgensen, Aage K., Oakland, Callf. Block for wall con-

signor.)

Jorgensen, Ange K., Oakland, Calif. Block for wall construction. 1,651,893; Dec. 6.

Jorgensen, Bernhardt, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Tacksupplying mechanism. 1,631,134; June Y.

Shoe Machinery Corporation, Paterson, N. J. Assembling and lasting machine. 1,634,502; July 5.

Jorgensen, Bernhardt, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for working uppers over lasts. 1,648,403; Nov. 8.

Shoe Machinery Corporation, Paterson, N. J. Machine for use in lasting shoes. 1,653,299; Dec. 20.

Jorgensen, Bernhardt Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in lasting shoes. 1,653,299; Dec. 20.

Jorgensen, Bernhardt, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lasting shoes. 1,653,299; Dec. 20.

Ch. Charence H. (See Jorgensen, Peter J. and C. H.)

Jorgensen, Hans G., Erle, Pa. Ash receptacle. 1,627,907; Spressen, Hans G., Erle, Pa.

Jorgensen, Hans G., Erie, Pa. Ash receptacle. 1,627,907; May 10.

Jorgensen, Hans G., Erle, Pa. Ash receptacle. 1,627,907; May 10.

Jorgensen, Hans G., Erle, Pa. Antirattle joint scrip. 1,632,903; June 21.

Jorgensen, Hans G., Erle, Pa. Antirattle joint scrip. 1,000,000; Jorgensen, Lewis, Sioux City, Iowa. Current retarder. 1,633,530; June 21.

Jorgensen, Olav E., Forest Hills, assignor to Worthingston Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1,615,282; Jan. 25.

Jorgensen, Olav E., Forest Hills, assignor to Worthington Spray valve for oil engines. 1,615,437; Jan. 25.

Jorgensen, Olav E., Forest Hills, assignor to Worthington Pump and Machinery Corporation. New York, N. Y. Internal-combustion engine. 1,615,438; Jan. 25.

Jorgensen, Olav E., Forest Hills, assignor to Worthington Pump and Machinery Corporation. New York, N. Y. Jorgensen, Olav E., Forest Hills, assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Scavenging air pump or compressor. 1,619,131; Mar. 1.

Jorgensen, Olav E., Forest Hills, assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Scavenging air pump or compressor. 1,619,131; Mar. 1.

Jorgensen, Olav E., Forest Hills, N. Y., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Piston for internal-combustion engines. 1,626,838; May 3. Jorgensen, Olav E., Forest Hills, N. Y., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Reversing and starting mechanism for internal-combustion engines. 1,636,964; July 26. Jorgensen, Olav E., Forest Hills, assignor to Worthington Fig. 1, and Charley Grovest Hills, assignor to Worthington Fig. 1, and C. F., Chicago, III. Lubricant cup. 1,622,557; Mar. 8. Jorgensen, Peter J. and C. H., Chicago, III. Lubricant cup. 1,629,158; Apr. 12. Jorner, Victor G., Chicago, III. Lathe chuck. 1,625,481; July 12. July 12.

Jurstad, Osmund M., East Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company, Pantograph trolley shoe. 1.688.56; Aug. 16.

Jory, William E., Martinez, Calif. Automobile headlight. 1.620.366; Mar. 8.

Josef, Edward E., Buffalo, N. Y. Shaft coupling. Joseph, Arthur E., Detroit, Mich., assignor to The Mileometer Company, Chicago, Ill. Speedometer. 1,649,830; Nov. 22.

ometer Company, Chicago, Ill. Speedometer. 1,649,830; Nov. 22.
Joseph, Edmond C., New Orelans, La. Washing and polishing device. 1,641,494; Sept. 6.
Joseph & Feiss Co., The. (See Feiss, Richard A., assignor.)
Joseph, Frederick, and I. Creamer, assignors of one-third to J. Alterman, New York, N. Y. Faucet attachment. J. 622,248; Apr. 5.
Joseph, Henry Company, Williamsport, Pa. Sheet abrasive material, Rel6,535; Jan. 11.
Joseph, Henry, Pittsburgh, Pa., assignor to United States Sand Paper Company, Williamsport, Pa. Sheet abrasive material, 1,614,618; Jan. 18.
Joseph, Henry, assignor, by mesne assignments, to R. Joseph, Henry, assignor, by mesne assignments, to R. Joseph, Milwaukee, Wis. Washing machine, 1,617,526; Feb. 15.

Feb. 15.

Joseph, Leslie B., assignor to The P. Goldsmith Sons Company, Cincinnati, Ohio. Shoe. 1,643,851; Sept. 27.

Joseph, Rosa. (See Joseph, Henry, assignor.)

Joseph, Shelod, assignor of eighteen one-hundredths to Joseph, Benry, B. Casey, and sixten one-hundredths to E. H. Meagle, Wheeling, W. Va. Kerosene-gas generator and burner using radiant. 1,630,184; May 24.

Josepho, Anatol M., New York, N. Y. Developing apparatus for photographic films. 1,642,227; Sept. 20.

Josepho, Markol M., New York, N. C. Developing apparatus for photographic films. 1,642,227; Sept. 20.

Josepho, M. Y. Photographic apparatus. 1,631,593; June 7.

June 7.

June 7.

June 7.

Josephs, Benjamin, et al. (See Methot, John A., assignor.)

Josephs, Lyman C., fr., Allentown, Pa., assignor to

International Motor Company, New York, N. Y. Bogie
truck for self-propelled rail cars. 1,617,715; Feb. 15.

Josephson, Walter S., New York, assignor, by mesne assignments, to Dry fee Corporation of America, New
York, N. Y. Bre-extinguishing apparatus for motor

Josey, J. E., et al. (See Ravon, Joseph D., assignor).

Joselin, Charles T., Cleveland, and C. W. Klotz, Parma
Village, Ohio, assignors to The Russ Manufacturing

Company, Cleveland, Ohio, Sirup pump. 1,641,280;

Sept. 6.

Sept. 6.

Joslin, Lydia E., Los Angeles, Calif. Eraser cleaner.

1.641.000; Aug. 30.

Joslin, Pliny N. De Kaib. III. Roller. 1.627,561; May 10.

Joslin, Pliny N. De Kaib. III. Roller. 1.627,561; May 10.

1.642.208; Sept. 3 Kaib. III. Holel-room-record rack.

1.642.208; Sept. 3 Kaib. III. Holel-room-record rack.

Joslin, William H., assignor to Shoe Lace Company, Ltd.,

Providence, R. I. Box. 1.646,203; Oct. 18.

Jos-Pe Farbenphoto Gesellschaft mit beschrankter Haftung. (See Piloty, Hans, assignor.)

Juids of different densities. 1.646,913; Oct. 25.

Jostam Manufacturing Co. (See Ammann, Albert H., assignor.)

signor. Jourdan. Alvin S., et al. (See Jourdan, Roy E., assignor.) Clarence C., et al. (See Jourdan, Roy E., Jourdan

assignor.)
Jourdan, Felix, Rome, 1taly. Treatment of leucite and
other sodium and potassium silicates with lime for the
purpose of extracting potassium or sodium and aluminum values. 1,620,212; Mar. 8.
Jourdan, Roy E., assignor of one-fourth to A. S. Jourdan,
one-fourth to C. C. Jourdan, and one-fourth to E. J. P.
Lutzke, Rhinelander, Wis. Wire cutter. 1,622,446;

Journet Blaine, New York, N. Y. Handkerchief, Des. 72,065; Feb. 22.
Joylno, John V. Brooklyn, N. Y. Safety holster. 1,641,439; Sept. 6.
Joy. Charles H., Jr. (See Sauer, L. J., and Joy.) Joy Charles H., Jr. (See Sauer, L. J., and Joy, as-

Joy, Guy A., Lombard, assignor to Joy-Kelsey Corporation, Chicago, Ill. Inductance coil for high-frequency
circuits. I.648,888; Nov. 8.
Joy, Henry W., New York, N. Y.
Focusing device to
Man. 15.
Joy, Joseph F., assignor, by mesne assignments, to Joy
Manufacturing Company, Franklin, Pa. Londing machine. 1,619,269; Mar. 1.
Joy, Joseph F., Pittsburgh, assignor, by mesne assignments, to Joy Manufacturing Company, Franklin, Pa.
Joy-Kelsey Corporation. (See Joy, Guy A., assignor.)
Joy Manufacturing Company. (See Joy, Joseph F., assignor.)

Joy Manufacturing Company. (See Joy, 18gaor.)
Joy Manufacturing Company, The. (See Nicks, Ira G., assignor.)
Joy Toy Manufacturing Company, The. (See Nicks, Ira G., assignor.)
Joy, Vernon A., New York, N. Y. Hairpin box. 1,623,684;
Joy, Vernon A., New York, N. Y. Hairpin box. 1,623,017;

Mar. 15.
Joyce, Ada. (See Kadane, C., and Joyce.) Packing ring.
Joyce, Bryan P., Davenport, Jowa. Packing ring.
Rel6,725; Aug. 30.
Journal of the Communication of the Communicat

Joyce, Bryan P., Washington, 2.
July 12.
Joyce-Cridland Company, The. (See Hott, Ion V. K.,
Joyce-Cridland Company, The. (See Hott, Ion V. K.,

Joyce Cridiand Company, The. (see Hott, 16a 1. Across of the construction of the const

Judd., Randall F., Brookline, Mass. Game-ball holder. 1,625,856; Apr. 26.
Judell, H. L., and Company. (See Mullen, John E., assignor.)
Judelshon, Oscar I., Park Ridge, N. J. Fabric-cutting Judelshon, Oscar I., Park Ridge, N. J. Fabric-cutting Judes, Martin P. Judes, Edward A. (See Cameron, Huzh M., assignor.)
Judge, Edward A. (See Cameron, Huzh M., assignor.)
Judge, Joseph S., Brooklyn, N. Y. Wazer and polisher. 1,622,904; June 21.
Judge, Joseph S., Brooklyn, N. Y. Wazer and polisher. 1,623,704 and Rapids, Mich. Forming designs. 1,645,534; Oct. 18.
Judkins, Orlo W., assignor to H. M. Reynolds Shingle Company, Grand Rapids, Mich. Forming designs. 1,645,534; Oct. 18.
Judson, Russell V., Detroit, Mich. Portable apparatus for cleaning and grading grain, seed, and the like. Re16,600; Apr. 19. betroit, Mich. Centrifugal sorting Judy, Phillip S., Kansas City, Mo. Making and maintain ing wells. 1,642,245; Sept. 13.
Jufe, Fannie. (See Jufe, Joseph E., assignor.)
Jufe, Joseph B., assignor to F. Jufe, New York, N. Y. Shass, Gurter Centrol Council Science, Science, Juffe, Joseph E., assignor.)
Jufe, Joseph B., assignor to F. Jufe, New York, N. Y. Shass, Gurter Centrol Council Science, Juffe, Joseph E., assignor.)
Juffe, Joseph B., assignor to F. Jufe, New York, N. Y. Shass, John, assignor, to Juhasz, John, assignor, to J signor.)

signor.)
Juhasz, John, assignor to Juhasz Carbareter Corporation,
New York, N. Y. Carbaretor. 1,640,412; Aug. 30.
Juhasz, Michael, Dover, Ohio. Vehicle signaling system.
1,629,342; May 17.
Julian Gideon, Everly, Mass., assignor to United Shoe
Machinery Corporation, Paterson, N. J. Sole-rounding
machine. 1,620,027; Mar. 8.
Julian & Kokenge Company, The. (See Wilke, John M.,
sr., assignor.)

Julian, Marcena R., assignor to Julian Pump and Manufacturing Corporation, Jamestown, N. Y. Liquid-dispensing pump. 1,650,073; Nov. 22.

Julian, Jung and Manufacturing Corporation. (Se Julian, Marcena R., assignor.)

Juliano, John, assignor of one-fourth to J. F. Braden, Magara Falls, N.Y. Rear ali-brake control. 1,618,132;

Ningara Falls, N. Y. Rear an orac control of the Mar. 1. Julich Jakob W., Tulsa, Okla. Land and water auto. 1,615,389; Jan. 25. Jull. Charles H., Ben Avon, assignor to Pittsburgh, Era Saw Company, Pittsburgh, Pa. Power saw. 1,633,122; Aug. 9. Jumonville, Edward, New Orleans, La. Combined mop and wringer. 1,620,028; Mar. 8. Jumonville, Edward, New Orleans, La. Making mop heads. 1,625,657; Apr. 26. Jump, George H., Buffalo, N. Y., assignor to General Electric Company. Frequency changer. 1,637,653; Aug. 2

Aug. 2.
Jung Arch Brace Company, The. (See Jung, George H.,

Jung Arch Brace Company, The. (See Jung, George 11., jr., assignor.)
Jung, George H., jr., assignor to The Jung Arch Brace Company, Cincinnati, Ohio. Surgical device and making same. 1,615,173; Jun. 18.
Jung, Peter. (See Heinlick, Hermann, assignor.)
Jung, Peter. (See Heinlick, H. Y. Internal-combustion Jung, 1,624,489; Apr. 2, Jung, Picto, Staten Island, N. Y. Internal-combustion engine. 1,633,581; Sept. 27.
Jungger, Drick, Staten Island, N. Y. Internal-combustion engine. 1,633,581; Sept. 27.
Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine. 1,640,451; Aug. 30.

bingine: Austrober, Schreiber, Aug. Schreiber, Schreiber, Schreiber, Schreiber, Aug. Schreiber, Schreiber, Schreiber, Schreiber, Schreiber, Schreiber, Schreiber, Aug. Schreiber, Schreiber, Schreiber, Schreiber, Schreiber, Aug. Schreiber, Schreiber, Schreiber, Schreiber, Aug. Schreiber,

Assigno: Assignor to Carbide indicator for gas generators. 1,644,602; Oct. 4.
Kabislus, Charles F., Santa Monica, Calif. Pneumatic sander. 1,613,277; Jan. 4 Monica, Calif. Pneumatic sander. 1,613,277; Jan. 4 Monica, Calif. Pneumatic sander. Ansierdan, Netherlands, assignor to Kabus, Fernand, Amsierdan, Netherlands, assignor to Calif. Physical Computer of Computer of Cambridge States of Calif. Physical Calif. 1,638,205; Aug. 9, Kachel, Charles, Miami, Fla. Vehicle brake. 1,633,013; Dec. 20

Racele, Charles, Mami, Fia. Venicle Drage. 1,605,013; Dec. 20.

Rachman. John, Berwyn, Ill. Connecter. 1,647,097; Oct. 25.

Kacziba, Alexander, San Antonio, Tex. Steering device. 1,621,206; Mar. 15.

Kadane, Cora, and A. Joyce, Wichita Falls, Tex. Permanent-wave device. 1,638,443; Aug. 9.
Kaddatz, Emil, Ortonville, Minn. Color-testing device for translucent fluids. 1,647,569; Nov. 1.
Kadel, Byers W., Baltimore, Md. Railway car. 1,617,895; Pb. 15.
Kadel, Byers W., Baltimore, Md. Car truck. 1,630,567; Kadel, Byers W., Baltimore, Md. Car truck. 1,630,568; May 31.

May 31. Kadel, Byers W., Baltimore, Md. Car truck. 1,630,569;

May 31.
Kadel, Byers W., Baltimore, Md. Car truck. 1,630,570;
May 31.
Kadel, Brers W. Baltimore, Md. Dreft rigging

May 21.

Kadel, Byers W., Baltimore, Md. Car truck, 1,630,570; May 31.

Kadel, Byers W., Baltimore, Md. Draft rigging, 1,634,368; July Baltimore, Md. Draft rigging, 1,634,368; July Baltimore, Md. Draft rigging, 1,634,368; July Baltimore, Md. Draft rigging, 2,634,368; July Baltimore, Md., assignor, by mesne assignments, to The Symington Company, Draft rigging, Re16,559; Feb. 22.

Kadel, Byers W., Baltimore, Md., assignor, by mesne assignments, or The Symington Company, New York, N. Y. Spiltering draft gent, 1,624,742; Apr. 12.

Kadel, Byers W., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Side frame Symington Company, New York, N. Y. Spiltering draft gent, 1,624,742; Apr. 12.

Kadel, Byers W., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Manufacturing draft yokes, 1,633,670; June 28.

Kadel, Byers W., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Manufacturing draft yokes, 1,633,670; June 28.

Kadel, Byers W., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Key adapter for draft gears, 1,649,351; Nov. 15.

Kadel, Byers W., Baltimore, Md., assignor, by mesne assignments, to The Symington Company. Key adapter for draft gears, 1,649,351; Nov. 15.

Kadel, Byers W., Baltimore, Md., and D. S. Barrows, Rochester, N. Y. Car truck, 1,630,572; May 31.

Kadel, Byers W., Baltimore, Md., and D. S. Barrows, Rochester, N. Y. Car truck, 1,630,573; May 31.

Kadel, Byers W., Baltimore, Md., and D. S. Barrows, Rochester, N. Y. Car truck, 1,630,573; May 31.

Kadel, Byers W., Baltimore, Md., and D. S. Barrows, Rochester, N. Y. Car truck, 1,630,573; May 31.

Kadel, Byers W., Baltimore, Md., and D. S. Barrows, Rochester, N. Y. Car truck, 1,630,573; May 31.

Kadel, Byers W., Baltimore, Md., and D. S. Barrows, Rochester, N. Y. Car truck, 1,630,573; May 31.

Kadel, Byers W., Baltimore, Md., and D. S. Barrows, Rochester, N. Y. Car truck, 1,630,573; May 31.

Kadel, Byers W., Baltimore, Md., and D. S. Barrows, Rochester, N. Y. Car

Leiding Browsin, A.

Nov. 15.

Kaechele, George. (See Kaechele, Ernest and G., and Leidig.)

Kaegi, Emil, Detroit, Mich., assignor to D. J. Burns, Bronxville, N. Y. Oli filter. 1,631,594. June 7.

Kaehni, Frank J. and W. L., assignors to The Cleveland Trust Company, trustee, Cleveland, Ohio. Sound-producing device. 1,632,408; June 14.

Kaeser, Otto F. (See Kaehni, Frank J. and W. L.)

Kaeser, Otto F. (See Bager, S. R. W. M., Kaeser, and Lehman).

Kaestner & Hecht Company. (See Dunlop, James, assignor.)
Kaestner & Hecht Company. (See Dunlop, J., and Clancy, assignors.)

assignors.) Kafka, Heinrich, Berlin-Lichterfelde-West, and S. Klein, Copenick, near Berlin, assignors to Slemens & Halske Aktiengesellschaft, Slemensstadt, near Berlin, Germany, Measuring device for high-voltage networks. 1,617,912;

Measuring device for high-voltage networks. 1,617,912; Feb. 15. reahing A., Brooklyn, N. Y. Cushion bumper. Kahl, Ernest B. (See Jahn, B., and Kahl.) Ernest B. (See Jahn, B., and Kahl.) Kahl, Leopold, Berlin-Dahlem, assignor to Rütgerswerke Aktiengesellschaft, Abtellung Planiawerke, Berlin, Germany. Production of arc-light electrodes. 1,654,046; Dec. 27.

Kabler 2 Paul F. Chicago, Ill. Photographic printing frame 1,638,393: Aug. 16. Kahlisch, Gustav. (See Reiners, W., and Kahlisch.) Kahn, Bertrand B. Clicinnati, assignor to The Estate Stove Company, Hamilton, Ohio. Heater. Re16,707; Aug. 16.

Stove Company, Hamilton, Ohio. Heater. Re16,707; Aug. 16.
Kahn, Bertrand B., Clncinnati, assignor to The Estate Stove Company, Hamilton, Ohio. Heater. Des. 72,264; Mar. 22.
Kahn, Isasa T., Cleveland Ohio. Container for collapsible tubes. 1,645,381 Sept. 27.
Loose-leaf-binder lock. 1,645,385; Nov. 1. Loose-leaf-binder lock. 1,647,635; Nov. 1. Kahn, Julius, Youngstown, Ohio. Electric-welding machine. 1,623,249; Apr. 5.
Kahn, Marcus, Brooklyn, N. Y. Collar. 1,622,087; Mar. 22.
Kahi, Marcus, Brooklyn, N. Y. Collar. 1,622,087; Chandid Millimentaires Agotes, Paris, France. Manufacture of nitrogen-containing products. 1,642,209; Sept. 13.
Kahn, Michael M. (See Bromberg, Samuel, assignor.)

ahn, Milton, New York, N. Y. Educational device. 1,645,008; Oct. 11.
ahn, Myrtil, Cologne, and R. Mayer, Leverkusen, near Cologne-on-the-Rhine, Germany, assignors to Grasselll Dyestuff Corporation, New York, N. Y. Catalytic reduction of organic nitro compounds. 1,639,186;

Cologne-on-the-Rhine, Germany, assignors to Grasselli Dyestuff Corporation, New York, N. Y. Catalytic reduction of organic nitro compounds. 1,639,186; Kalos Sauuel, San Francisco, Calif., assignor to Byllesby Engineering and Management Corporation, Chicago, Ill. Safety car. 1,617,761; Feb. 15.
Kahns, Walter R., and K. Keller, assignors to J. H. White Manufacturing Company, Brooklyn, N. Y. Hapthing, Rxture. 1,639,508; Aug. 16.
Kahns, Walter R., and K. Keller, assignors to J. H. White Manufacturing Company, Brooklyn, N. Y. Carlotto, Co. New Haven, Conn. Latch for vehicle doors. Re16,735; Sept. 13.
Kaln, Clifford H., San Carlos, Calif. Rotary internal-combustion engines. 1,623,875; Apr. 5.
Kaln, Clifford H., San Carlos, Calif. Rotary pump and Kaiser, Auguston D., Mountain Home, Tex. Gate. 1,630,704; May 31.
Kaiser, Paris C. Calif. Grass catcher for lawn mowers. 1,622,835; Dec. 13.
Kaiser, Grassell C. Calif. Rotary pump and Calif. Rotary pump and Calif. Rotary pump and Kaiser, Grassell C. Calif. Grass catcher for lawn mowers. 1,632,836; Dec. 13.
Kaiser, Grassell C. Calif. Grass catcher for lawn mowers. 1,632,636; Dec. 13.
Kaiser, Grassell C. Calif. Grass catcher for lawn mowers. 1,632,636; Dec. 13.
Kaiser, Grassell C. Calif. Grass catcher for lawn mowers. 1,632,636; Dec. 13.
Kaiser, Grassell C. Calif. Grass catcher for lawn mowers. 1,632,636; Dec. 13.
Kaiser, Grassell C. Calif. Grass catcher for lawn mowers. 1,632,637; Dec. 13.
Kaiser, Grassell C. Calif. Grass catcher for lawn mowers. 1,632,637; Dec. 13.
Kaiser, Grassell C. Calif. Grassell C. Calif. Rotary pump and Calif. Rotary pump an Kaji, Jiro, Vancouver, British Columbia, Canada. Sign-making device. 1,633,703; June 28. Kalaf, John, jr., Meta, Mo. Friction clutch. 1,635,086; July 5.

Kalamazoo Stove Company. (See Wolverton, Harry H.,

Rallamizoo Stove Company. (See Stationary hub for vehicles. 1,644,339; Oct. 4.
Kalbach, Raymon B., Philadelphia, Pa. Attachment for braiding machinery. 1,649,476; Nov. 15.
Kalberc, George J., Hamilton, Ohio. Caster. 1,622,447; Mar. 29.
Kalbers, Corporation, The. (See Fredriksson, John Salbidess).

Kannersch Cerpotation, F., assignor.) Kale, William G. (See Nell, G. M., and Kale.) Kalenborn, Arion S. (See Frickey, R. E., and Kelenborn.) Kales Stamping Company. (See Whitchead, James F.,

Assegnon, Coopany, (See Vanceau, Sasignor, Carlot, Car

lix Cup Company. (See Prudden, Theodore M., as-lix Cup Company.

Kalix Cups Company. (See Prudden, Theodore M., assignor.)

Kalkbrenner, Louis, Wall, S. D. Automatic valve.
1,622,448; Mar. 29.

Kallbeck, John A., San Francisco, Calif. Fluid-operated
motor. 1,641,001; Aug. 30.

Kalle & Co. Aktiengeselischaft. (See Schmidt, M. P.,
and Krieger, assignors.)

Kallmeyer, Ernst, New York, N. Y. Syringe head.
1,638,532; Aug. 9.

Kallmeyer, Ernst, New York, N. Y. Catheter. 1,626,839;
May 3. Steel Company. (See Walley Cover L. 1626,839;
May 3. Steel Company. (See Walley Cover L. 1626,839;

Kalman Steel Company. (See Weller, George L., assignor.)

Kalman Steel Company. (See White, William E., as-

Raiman Steer Company and Steer Company and Steer Company and Steer Company Blowing Company, Blowing engine 1,683,001; July 19, Kaltschmidt, William, Erie, Pa. Tape holder, 1,642,152;

Kaltschmidt, William, Erie, Pa. Tape holder, 1,642,152; Sept. 13.
Kaltwaser, Oskar, Berlin, and H. Kirchnör, DessaudinKaltwaser, Oskar, Berlin, and H. Kirchnör, DessaudinKaltwaser, Oskar, Berlin, and Karbar, Sakaria, Kaltwaser, Sakaria, Karbar, Sakaria, Karbar, Sakaria, Kewis J., Kanawha, Iowa, Poultry roost. 1,652,234; June 14.
Kamberling, John A., Jenkins, Minn. Road-map case.
Käimmer & Reinbarut A.-G. (See Sörgel, Waldemar, assistnor.)

Kämmer & Reinhard A-O. (See Solgs., 1987).

Kammerdiner, James A., Los Angeles, Calif. Rotary jar. 1,618,759; Feb. 22.

Kammerdiner, James A., Los Angeles, Calif. Blow-out packer. 1,650,074; Nov. 22.

Kammerer Corporation. (See Kammerer, George, as-Rammerer Corporation. (See Reilly, J. B., and Stone,

Kammerer Corporation. (See Reilly, J. B., and Stone, assignors, assignors, assignors, to Kammerer, George, Fullerton, assignor to Kammerer Corporation, Brea, Calit. Tool for cutting and removing proporation, Brea, Calit. Tool for cutting and removing the control of the contro

Mar. 15.
Kanders, Helen, New York, N. Y. Sound smplifler.
1,645,829; Oct. 11.
Kandle, Furman M., Atlantic City, N. J. Floor and celllng construction. 1,630,185; May 24.
Kane, Edmund J. Chicago, H., Assigne, Ws. Steering,
mechanism for locomotive cranes. 1,649,596; Nov. 15.
Kane, John J., assignor to Allis-Chalmers Manufacturing
Company, Milwaukee, Wis. Electric-power system.
1,643,213; Sept. 20; Frown, J. E., and Káne.)
Kane, Matthew M., Rome, Ga. Explosive engine.
1,653,856; Dec. 27.
Kane, Marray A., Johnstown, Pa. Flag holder for the
motometers and similar devices of automobiles.
Kania, Ratoloph, Vindex, Md. Domestic bolier. 1,616,050;
Feb. 1.
Kankas, John J. (See Kindler, J. C. and Kankas.)

Kania, Rudoiph, Vindex, Md. Domestle boller. 1,616.050; Feb. 1.

Kankas, John J. (See Kindher, J. C., and Kankas.)

Kanner, Samuel, New York, N. Y. Pen deek stand or similar article. Des. 72.555; May 3.

Kanner, Samuel, New York, N. Y. Pen deek stand or similar article. Des. 72.555; May 3.

Kansas City Gasoline Company, The. (See Lasher, Gasoline Company, The. (See Wellman, Frank E., assignor.)

Kant-Luck Corporation. (See Gonard, John L., assignor.)

Kant-Luck Corporation. (See Gonard, John L., assignor.)

Kantack, Walter W., St. Albans, Long Island, N. Y., assignor to Alfred Vester Sons, Inc., Providence, R. I.

Wall plate for lighting fixtures. Des. 71,975; Feb. 8.

Kantack, Walter W., St. Albans, Long Island, N. Y., assignor to Alfred Vester Sons, Inc., Providence, R. I.

Plate for lighting fixtures. Des. 71,979; Feb. 8.

Kantack, Walter W., St. Albans, Long Island, N. Y., assignor to Alfred Vester Sons, Inc., Providence, R. I.

Spindle for lighting fixtures. Des. 71,979; Feb. 8.

Kantack, Walter W., St. Albans, Long Island, N. Y., assignor to Alfred Vester Sons, Inc., Providence, R. I.

Spindle for lighting fixtures. Des. 71,980; Feb. 8.

Kantack, Walter W., St. Albans, V. N., assignor to Alfred Vester Sons, Inc., Providence, R. I.

Spindle for lighting fixtures. Des. 71,980; Feb. 8.

Kantack, Walter W., St. Albans, V. N., assignor to Alfred Vester Sons, Inc., Providence, R. I.

Banding for lighting fixtures. Des. 73,084; July 19.

Kanten, Marry B., et al. (See Stoll, H. C., and Schroder, Kanter, Marry B., et al. (See Stoll, H. C., and Schroder, Kanter, Marry B., et al. (See Stoll, H. C., and Schroder, Kanter, Marry B., et al. (See Stoll, H. C., and Schroder, Kanter, Marry B., et al. (See Stoll, H. C., and Schroder, Kanter, Marry B., et al. (See Stoll, H. C., and Schroder, Marry B., et al. (See Stoll, H. C., and Schroder, Kanter, Marry B., et al. (See Stoll, H. C., and Schroder, Marry B., et al. (See Stoll, H. C., and Schroder, Marry B., et al. (See Stoll, H. C., and Schroder, Marry B., et al. (See Stoll,

Kantenwein, Usear E. (See Burner, W. L., and Kantenwein.) Kanter, Harry B., et al. (See Stoll, H. C., and Schroder, assignors.)

Kantor, Ad. Spokane, Wash. Gear, sectional replace-Kantor, Ad. 148.550; Nov. 8. Kanzel, Maxwell, New York, N. Y. Wailet. 1,635.940; July 12. Kapitowitz, Aaron. Stevensville. N. Y. Oli gauge for motors. 1,515.762; Jan. 25

Kaplan, Harry E., Chicago, Ill. Envelope. 1,635,278; July 12.

Kaplan, Jacob, assignor to Record-O-Phone Company, Inc., Washington, D. C. Reel-stopping device for record-o-Kaplan, Jacob 4., Boston, Mass. Apparatus for photographing checks, etc. 1,614,619; Jan. 18.

Kaplan, Louis M., Philadelphia, Pa. Thermostatic-control electrical heater plug. 1,641,002; Aug. 30.

Kaplan, Louis M., Philadelphia, Pa. Cutting board and Rule. Apparatus to the property of the p

Kapian, Samuel, Monroe, La. Automobile wheel. 1,636,525, July 12.

Rappes, Carl H., New York, assignor to Eberhard Faber Pencil Co., Brooklyn, N. Y. Paper box. 1,631,595; June 7.

Rapue 7.

Rapue 7.

Robert E., assignor to W. & L. E. Gurley, Troy, Tripod. 1,641,692; Sept. 6.

Kaptuller, Alexander F., Chicago, Ill. Universal joint. 1,633,333; June 21.

Kapuczin, Dave, Los Angeles, Calif. Device for dispensing fluids. 1,618,430; Feb. 22m.n. M., and Karaban. Rubin. (See Godman, M., and Karaban.) Rapuelin, Conn. Flower holder, 1,627,649; May 10.

Karapan, Hubin. (See Godman, M., and Karaban.) Karaban. (See Godman, M., and Karaban.) Rapuelin, Conn. Flower holder, 1,627,649; May 10.

Karapotan, Mike, Los Angeles, Calif. Toothpick holder. Des. 72,017; Feb. 15.

Karapotan, Mike, Los Angeles, Calif. Toothpick holder. Des. 72,017; Feb. 15.

Karapotan, Mail. Philadelphia, Pa. Renovating device. 1,623,761; Apr. 5.

Karapetan, Vladimir, Ithaca, N. Y., assignor to General Electric Company. Regulating system for dynamoelectric machines. 1,646,823; Oct. 25.

Karapetoff, Vladimir, Ithaca, N. Y., assignor to General Electric Company. Regulation of dynamoelectric machines. 1,646,823; Oct. 25.

Karapetoff, Vladimir, Ithaca, N. Y., assignor to General Electric Company. Regulation of dynamoelectric machines. 1,646,823; Oct. 25.

Karapetoff, Vladimir, Ithaca, N. Y., assignor to General Electric Company. Regulation of dynamoelectric machines. 1,646,823; Oct. 25.

Karapetoff, Vladimir, Ithaca, N. Y., assignor to General Electric Company. Handle N. Y., assignor for General Electric Company. Regulation of dynamoelectric machines. 1,648,623; Nov. 8.

Karas, Joseph. Chicago, Ill. Transformer construction. 1,651,713; Dec. 6.

Karas, Joseph. Chicago, Ill. Transformer construction.

And State of the S

Karnes, James C., Buffalo, N. Y. Fire-control system for guns. 1,655,365; July 12.

Karnopp, Arno W. (See Perry, R. S., and Karnopp.) Karow, Emil, assignor of one-half to E. Garwick, Sarles, N. Dak. Automobile Hitting device. 1,623,013; Mar. 29.

Karp, Jacob N. (See Smith, C. E., and Karp.) Karp, Karp, S., & Bros. (See Edwards, Budward J., assignor.) Karpen, S., & Bros. (See Edwards, Budward J., assignor.) Karpen, S., & Bros. (See Edwards, Budward J., assignor.) Karpen, S., & Bros. (See Hultgren, Charles R., assignor.) Karpf, Lester J., Dalyon, Ohio. Apparatus for treating the feet. 1,634,949; Nov. 15.

Karpinsky, Stephan, Seves, and J. S. Anderson, St. Ouen, France. Manufacture of butter. 1,644,264; Oct. 4.

Kart, Glen L. (See Butterfield, C. L., and Sawdon, assignors.)

France. Manufacture of butter. 1,644,254; Oct. 4.
Karr. Andrew S., Avalon, Pa. Rali spilee. 1,645,886;
Karr. Glen L. (See Butterfield, C. L., and Sawdon, assignors.)
Karrer, Paul, Zurich, assignor to Chemical Works formerly Sandoz, Basel, Switzerland. Preparation of coton thers. 1,650,989; Nov. 29.

Karst, Clarence E., assignor to The Brunhoff Manufacturing Company, Cincinnati, Ohio, Display and vending apparatus. 1,628,846; May 17.

Karst, Clarence E., assignor to The Brunhoff Manufacturing Company, Cincinnati, Ohio, Display and vending apparatus. 1,628,846; May 17.

Kasanof, Maurice M., New York, N. Y. Drier for tubular fabrics. 1,647,449; Nov. 1.

Kasanof, Maurice M., New York, N. Y. Fabric steaming and stretching means. 1,648,614; Nov. 8.

Kasantzeff, Elorentin, Berlin, Germany. One-lined air Kasantzeff, Florentin, Berlin, Germany. Alr brake for railways. 1,621,987; Mar. 22.

Kasantzeff, Florentin, Berlin, Germany. Air brake of the one-lined type. 1,652,886; Dec. 15.

Kasantzeff, Florentin, Berlin, Germany. Air brake of the one-lined type. 1,652,886; Dec. 15.

Kasantzeff, Florentin, Berlin, Germany. Air brake of the one-lined type. 1,652,886; Dec. 15.

Kasantzeff, Porentin, Berlin, Germany. Air brake of the one-lined type. 1,652,886; Dec. 15.

Kasantzeff, Porentin, Berlin, Germany. Air brake of the one-lined type. 1,652,886; Dec. 15.

Kasch, Henry J., Dayton, Ohio. Knob or similar article. Jes. 73,182; Aug. 2.

Kasch, Henry J., Dayton, ohio. Knob or the like. Kasch, Henry J., Dayton, Saignor to The Knrz-Kasch Company, South Broadway, near Dayton, Ohio. Vernier dial. 1,636,238; July 19.

Kasdan, Nathan, Bronx, and D. Pollack, Brooklyn, assignors to Majestic Metal Specialities, Inc., New York, N. Y. Vanity box. 1,651,132; Nov. 29.

Kasdan, Nathan, Bronx, and D. Pollack, Brooklyn, assignors to Majestic Metal Specialities, Inc., New York, Andrew Company, New York, N. Y. Car-wheelboring machine. 1,649,411; Nov. 15.

Kasec, William J., Chicago, Ill. Making pies. 1,624,4490; Apr. 12.

Kaser, William J., Chicago, I

Kaser, William J., assignor to Colborne Manufacturing Company, Chicago, Ill. Apparatus for making pastry and the like 1.683 402; Dec. 20. Kashiwagi, Kosuke, Yamaguchi, Japan. Clinical ther-mometer and manufacture of same. 1.646,914; Oct.

asiey, Alexander T., Essington, Pa., assignor to West-inghouse Electric and Manufacturing Company. Cut-ting elemental slots in cylindrical bodies. 1,614,658; Jan. 18.

ting elemental slots in cylindrical bodies. 1,614,508; May 18, texander T. Essington, Pa, assignor to Westnational Electric & Manufacturing Company. Blade fastening. 1,619,133; Mar. 1.
Kasley, Alexander T., Essington, Pa, assignor to Westinghouse Electric & Manufacturing Company. Turbine. 1,620,662; Mar. 15.
Kasley, Alexander T. Essington, Pa, assignor to Westblie. 1,620,663; Mar. 15.
Kasley, Alexander T., Essington, Pa, assignor to Westinghouse Electric & Manufacturing Company. Turblie. 1,620,663; Mar. 15.
Kasley, Alexander T., Essington, Pa, assignor to Westinghouse Electric & Manufacturing Company. Blade lashlouse Electric & Manufacturing Company. Blade lashlouse Electric & Manufacturing Company. Blade lashlouse Electric & Manufacturing Company. Blade lashBlade State State

Drill socket

Raspur Getreideschilmaschiae G. m. b. H. (See Hon,
Legin, 1891; A. (See Hon,
Raspur Getreideschilma Kasper, Walter F., assignor to Fairmont Railway Motors, Inc., Fairmont, Minn, Two-piece crank shaft. 1,613,835; Jan. 11.

Kasper, Walter F., assignor to Fairmont Railway Motors. Inc., Fairmont, Minn. Wheel. 1,615,709; Jan. 25. Kasperais, Joseph, et al. (See Soland, Emerson L., as-

Kasperais, Joseph, et al. (See Soland, Emerson L., assignor.)
Kass, Samuel M., Philadelp'ila, Pa., Immersible water heater. 1640,943; Aug. 30.
Kassebeer, William, Lhue, Hawaii. Contour cane-plant-Kasser, Mouris, San Fruncisco, Calif. Treating eggs. 1,936,420; July 19.
Kasser, Mouris, San Fruncisco, Calif. Treating eggs. 1,636,420; July 19.
Kassler, Adolf, New York, N. Y. Collapsible-tube holder. 1,652,862; Dec. 13.
Kassler, Adolf, New York, N. Y. Collapsible-tube holder. 1,652,862; Dec. 13.
Kassler, Adolf, New York, N. Y. Lock for car-door-operating mechanism. 1,631,321; June 7.
Kassler, Frederick W., St. Louis, Mo. Coin-controlled lock. 1,633,411; June 21.
Kass-Santich-E-Mon-E-Too So-Ne-Ah Limited. (See du Mazuel, Edmond G., assignor.)
Kassy, Charles, West Newton, Pa. Chicken feeder. 1,622,840; Apr. 5.
Kassy, Charles, West Newton, Pa. Chicken feeder. 1,622,840; Apr. 5.
Light-Paris College College

Sept t. 13. Morgan D., Pendleton, Oreg. Weeder. 1,631,733;

Kast, Morgan D., Fellowski, A., Skignor to Fairmont Railway Motors, Inc., Kairmont, Minn. Sliding-base engine. 1,629,918; May 24.
Kastner, James J., Chicago, Ill. Culinary utensil. 1,617,120; Feb. 8.

friction Jan. 11.

Jan. 11.

Katz, Aaron S., New York, N. Y. Console table. Des. 73,611, Oct. 11.

Katz, Aaron S., New York, N. Y. Console table. Des. 73,612; Oct. 11.

Katz, Aaron S., New York, N. Y. Table. Des. 73,613: Oct. 11.

Katz, Aaron S., New York, N. Y. Flower stand. Des. 73,73,73; Oct. 25.

Katz, Aaron S., New York, N. Y. Flower stand. Des. 73,703; Oct. 25.
Katz, Frank, Brooklyn, assignor to Anchor Manufacturing Company, New York, N. Y. Plate or similar article. Des. 72,480; Apr. 19.
Katz, Braedrick J., Shreveport, La. Differential lock for motor vehicles. 1.622,449; Mar. 29.
Katz, Hatry L., Baltimore, Md. Reenforced concrete constant of the control of the

May 24. atz, Jack, New York, N. Y. Clock case. Des. 73,524;

Karz, Jack, New York, N. Y. Clock case. Des. 78.525; Sept. 27. Karz, Jack, New York, N. Y. Clock case. Des. 73.526; Karz, Jack, New York, N. Y. Clock case. Des. 73.526; Sept. 27. tz. Jack, New York, N. Y. Clock case. Des. 73,846; Katz

Nov. 15. Katz, Jacob, Chicago, Ill. Game. 1,650,840; Nov. 29.

Katz, John A., York, Pa., assignor to S. F. Laucks, York, Pa. Key-identification device. 1,629,343; May 17. Katz, Max, Providence, R. I. Fountain pen. 1,621,166;

Katz, Mik, Flovidence, M. Mar, 16.
Katz, Morris, New York, N. Y. Apron. 1,628,670;
Katz, Samuel, Greenville, S. C. Changeable sign or advertising device. 1,631,870; June 7.
Katz, Sarah, Detroit, Mich. Attachment for telephones. 1,632,883; Apr. 26.
Kutulet, Morris, et al. (See Pecker, Joseph S., assignot.)

Kalzander, Morris, et al. (Sverreas, 1918).

Kalzenmeyer, John A., Ellwood City, Pa. Mechanism for threading pipes, rods, etc. 1,613,395; Jan. 4.

Kalzenmeyer, Harry E., Rosedale, Pa., assignor, by mesne assignments, to The Torrington Company, Torrington, Conn. Latch knitting needle. 1,629,464; May 17.

Kalzin, Nathan, Winston-Salem, N. C. Amusement device. 1,616,461; Feb. 8.

Kitc. 1,616,461; Feb. 8.

Kitc. 1,616,462; May 3.

Kalzinger, Arthur, assignor to Edward Kalzinger Company, Chicago, Ill. Making containers. 1,627,549; May 3.

May 3.

Katzinger Arthur, assignor to Edward Katzinger Company, Chicago, Ill. Covered pan. 1,627,541; May 3.

Katzinger, Chicago, Ill. Reinforced drawn laking pan 1,627,650; May 10.

Katzinger, Arthur, assignor to Edward Katzinger Company, Chicago, Ill. Covered baking pan. 1,631,734; June 7.

Katzinger, Arthur, assignor to Edward Katzinger Com-pany, Chicago, Ill. Reenforced baking pan. 1,634,248; June 28.

Katzinger, Arthur, assignor to Edward Katzinger, Company, Chicago, Ill. Jeily mold or similar article. Des. 73,786; Nov. 8.
Katzinger, Edward, Company. (See Jackson, Joseph G., assignor).
Katzinger, Edward, Company. (See Katzinger, Arthur, assignor).

Kaufman, Joseph, assignor to American Safety Razor Corporation, New York, N. Y. Combined case and razor blades. Des. 72,897; June 21.
Kuufman, Joseph, assignor to American Safety Razor Characteristics, New York, N. Y. Container. 1,026,840; Kuufman, Locatherican Safety Razor Characteristics and Container. 1,026,840; Kuufman Locatherican Safety Razor Characteristics and Container.

aufman, Joseph, assignor to American Safety Razor Corporation, New York, N. Y. Container. 1,631,965;

Corporation, New York, N. Y. Container, June 14. Kaufman, Joseph, assignor to American Sa Corporation, New York, N. Y. Container, June 14. Safety Razo. er. 1,631,966;

June 14.

Kaufman, Joseph, Bronxville, assignor to American
Safety Razor Corporation, New York, N. Y. Container.
1,631,967; June 14.

Kaufman, Joseph, assignor to American Safety Razor
Corporation, New York, N. Y. Combined case and razor
holder. 1,632,840; June 21.

Kaufman, Joseph, Bronxville, assignor to American Safety
Razor, Corporation, New York, N. Y. Container.
Kaufman, Joseph, New York, N. Y. Foldable-gate lock.
1,651,394; Dec. 6.

Kaufman, Martin, Trenton, N. J. Garment hanger.
1,641,680; Sept. 6.

Kaufman, Solomon, New York, N. Y. Collar button.
Des. 71,985; Feb. 8.
Kaufman, Solomon, New York, N. Y. Collar button.
1,629,822; May 24.
Kaufman, Solomon, New York, N. Y. Collar button.
1,629,823; May 24.
Kaufman, Solomon, New York, N. Y. Collar button.
1,629,973; Mar. 15.
Kaufmann, Albert J., Wellsboro, Pa., assignor to Pet
Milk Company, St. Louis, Mo. Can-body assorter and
piler. 1,615,763; Jan. 25.
Kaufmann, Arno, Ffortheim, Germany. Necktie holder.
1,629,967 Mar. 16.
L. Carburetor. 1,624,603; Apr. 12.
Kaufmann, Ethel A., et al. (See Kaufmann, Jacob L., assignor.)

Carouretor. 1,628,603, Apr. 12.

Kaufmann, Ethel A., et al. (See Kaufmann, Jacob L., asKaufmann, Jacob, Elkins Park, assignor to Steel Heddle
Manufacturing Company, Philadelphia, Pa. Loom
harness. 1,637,380; Aug. 2.

Kaufmann, Jacob L., assignor of one-third to A. E. Post,
one-third to M. B. Curtis, and one-sixth to E. A. Kaufmann, Los Angeies, Calif. Hair-collecting attachment
for elippers. 1,618, 713; Feb. 22.

Kor elippers. 1,618, 713; Feb. 22.

Kor elippers. 1,618, 713; Feb. 22.

Kaufmann, Michael M., J. P. Lynn, and F. C. Deli,
assignors to Autopoint Company, Chicago, Ill. Grinding
machine. 1,619,736; Mar. 1.

Kaufmann, Walter L. (See Kaufmann, Charles F. L.
and W. L. L.
and W. L. L.
Roberts, A. S. L. S. L. S. L. S. L. S. L. S. L.

Kautz, Charles W., Ir., Lancaster, Pa., assignor to Westinghouse Electric & Manufacturing Company, Circuitrestoring relay. Re16,661; June 21.

Kautzky, Joe, Ir., Fort Dodge, lowa. Automatic singletrigger mechanism for double-barrel guns. 1,625,546;

Apr. 19. Alms. Philadelphia. Pa. Corset clasm.

Attention of the control of the cont

Kawneer Company, The. (See Eaglesfield, Frederick R., Kawneer Company, The. (See Eaglesheid, Frederick R., assignor.).

Kawneer Company, The. (See Plvm, Francis J., as-Kawneer Company, The. (See Plvm, Francis J., as-Kay, Edgar B., Washington, D. C. Incinerator. 1,628,000; Apr. 26.

Kay, Lloyd D., Los Angeles, Calif. Dual-tired truck wheel. 1,640,338; Aug. 23.

Kay, Lloyd D., Los Angeles, Calif. Dual-tired wheel. Lloyd,338; Aug. 23.

Kay, Manufacturing Co. (See Krakauer, Phillip, as-

signor.)

Kay, Ocear, assignor of one-twentieth to B. C. Ryan, one-twentieth to H. C. Phipps, and one-twentieth to E. R. Phipps, los Angeles, Calif. Rotary blower. 1,650,873; Nov. 29.

Kay, Pete. (See Gardner, Phoebe G., assignor.)

Kay Sign Company. (See Walsh, Harrie H., assignor.)

Kaye, John A., Sault Ste. Marie, Ontario, Canada. Billiard compass. 1,625,770; Apr. 19.

Kaye, Samuel, Columbus, Miss., assignor, by mesne assignments, to C. A. Frick, Muncie, Ind. Cooler for hottled goods. Des. 16609; July one-signor to American Francisco, Phys. Rev. B 1,647,636; Nov. 1.

Kayline Co, The. (See Maerz, Frederick K.)

Kayline Company, The. (See Maerz, Frederick K.)

Kaynor, Warren F., assignor to Waterbury Button Com-

signor.)

Kaynor, Warren F., assignor to Waterbury Button Company, Waterbury, Conn. Detachable metal button. 1,626,582; Apr. 26.

Kayser, Friederich, and K. Schranz, Elberfeld, near Cologne-on-the-Rhine, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Pharmaceutical product. 1,631,458; Dec. 6.

Keall, Frank B. (See Barclay, W. R., and Keall.)

Keall, Frank B., Leleester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Press. Keall, Frank B., Leleester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Perforating. 1,645,648; Oct. 1,648.

Kean, Paul W., Corvallis, Oreg. Road grader. 1,617,256; Feb. 8.

Kenne, Francis B. (See Papet, Hermann, assignor.) Kenney, Edward J., Waumatoss, and J. Armitare, Mil-waukee, assignors to Kearney-Trecker Corporation, West Allis, Wis. Machine-tool drive. 1,628,001; Apr. 26. Kearney, Graham, Lisbon, Ohio. Tee for golf balls. 1,623,119; Apr. 5.

Kearney, James R., Kansas City, Mo. Ground anchor. 1,620,896; Mar. 15.

Kearney, James R., Kansas City, Mo. Ground anchor. 1,622,871; Apr. 12.

Kearney, James R., Kansas City, Mo. Ground anchor. 1,622,020; Mar. 8.

Kearney, Trecker Corporation. (See Kearney, E, J., and Armitage, assignors.)

Kearney, Trecker Corporation. (See Parsons, Fred A., assignor.)

Kearns, John, assignor to The Lee Tire & Ruber Co., Conshohocken, Pa. Machine for treating rubber, 1,640,834; Aug. 30.

Kearns, John J., Spokane, Wash. Weeding implement, 1,627,038; May 8.

Kearsley, William K., jr., Schenectady, N. Y., assignor to General Electric Company. Electron-discharge apparatus. 1,653,102; Dec. 20.

Keas, Charles E., assignor to Economy Products Corporation, 138 Angeles, Calif. Corner bead. 1,627,674; Keatling, Daniel A., assignor to The American Tube and Stamping Co., Bridgeport, Conn. Variable-speed rolling mill. 1,639,851; Aug. 23.

Keating, Henry J., Chicago, Ill. Card game. 1,614,132; Jan. 11.

Keating, I Jan. 11

Reating, John D., et al. (See Keating, Robert M., as-signor.) Keating, Katherine, et al. (See Keating, Robert M., as-signor.)

signor.)
Keating, Robert M., deceased, by Keating Valve Company,
Incorporated, assignee, assignor, by mesne assignments,
to K. and J. D. Keating and B. E. Brutuell, Springfield, Mass., and M. K. Quirk, Middletown, Conn. Flushing valve. Relô, 185, Nov. 15.
Keating Valve Company, assignee. (See Keating,
Robert M.)

Keating Valve Company, assignee. (See Keating, Robert M.)

seaton, Robert J., San Francisco, Calif. Combination advertising folder and gauge. 1,637,715; Aug. 2.

Keaton, Theodore P., Pearson, Ga. Turpentine-gathering apparatus. 1,622,119; Mar. 22.

Keys, Herbert O., assignor to Laurentide Company 1,650,133; Nov. 22.

Keys, Herbert O., assignor to Laurentide Company 1,650,133; Nov. 22.

Keys, Robert J., and E. I. Coffey, San Francisco, Calif. Piling device. 1,646,969; Oct. 27.

Keek, Charles H., U. S. Army. Propellant powder. 1,651,459; Dec. 6.

Keck, George S., Pasadena, Calif., assignor to The International Controlled Lamp Company, Wilmington, Del. Dirigible headlight. 1,634,589; July 5.

Keck, George S., Pasadena, Calif., assignor to The International Controlled Lamp Company, Wilmington, Del. Dirigible headlight. 1,634,589; July 5.

Keck, George S., Pasadena, Calif., assignor to The International Controlled Lamp Company, Wilmington, Del. Dirigible headlight for automobiles and the like. 1,651,133; Nov. 29.

Keck, George W., Independence, Kans. Self-service gasoline-pump attachment. 1,652,408; Dec. 13.

Keck, George W., Independence, Kans. Self-service gasoline-pump attachment. 1,652,408; Dec. 13.

Keck, George W., Independence, Kans. Self-service gasoline-gump attachment. 1,652,408; Dec. 13.

Keck, George W., Independence, Kans. Self-service gasoline-gump attachment. 1,652,408; Dec. 13.

Keck, George W., Independence, Kans. Self-service gasoline-gump attachment. 1,652,408; Dec. 13.

Keck, George W., Independence, Kans. Self-service gasoline-gump attachment. 1,652,408; Dec. 13.

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Keck, George W., Independence, Kans. Self-service gasoline-gump attachment. 1,652,408; Dec. 13.

Keck, George W., Independence, Kans. Self-service gasoline-gump attachment. 1,652,408; Dec. 13.

Keck, George W., Independence, Kans. Self-service gasoline-gump attachment. 1,652,408; Dec. 13.

Keck, George W., Independence, Kans. Self-service g

Reter, P. Vacoum creates to The Win Co., the burg. Pr. Vacoum floor scrubbing and washing machine. 1,647,065; Oct. 25.
Keefover, Daisy, et al. (See Fritts, George E., assignor.) Keefover, F. A., et al. (See Fritts, George B., assignor.) Keegan, Francis W. (See Pokorny, Frank, assignor.) Keelan, Bernard J., Los Angeles, Calif. Wheel. 1,620,897; Mar. 15.
Keeler, Aleert E. Jasper Park, Alberta, Canada. Child's Keeler, Aleert E. Jasper Park, Alberta, Canada. Child's Keeler Flanss Co. (See Burton, Edward, assignor.) Keeler Brass Company. (See Graf, Raymond I., assignor.)

signor.)
Keeler, Harry F., fr., Longmont, Colo. Berry box.
1.633.306; July 19.
Keeler, Lewis J., assignor of one-half to Le Rue P. Bensing, Cleveland, and one-half to G. P. Koelliker, Cleveland, Cle

Keeler, Everett R. (See Jandus, H. S., and Keeler.) Keen Waving Company. (See Carlough, Howard W., as-

signor.)

Keen Waving Company. (See Metz, John, assignor.) Keen, William C. (See Eaves, R. E., and Keen.) Keen, William H., Albany, N. Y. Alloy steel. 1,621, Mar. 22.

Mar. 22.

Keena, George F., Detroit, Mich. Valve cap. 1,627,908;
May 10.

Keenan, Charles G., Olai, Calif. Illuminated sign. 1,626,286; Apr. 26.
Keenan, Charles J., Piedmont, E. P. Kennedy, San Francisco, and G. H. Kirsch, Larkspur, Calif., assignors to Alaska Puh and Paper Company. Pulp-forming machine. 1,621,671; Mar. 22ec. Fla. Vibration machine for screens. 1,620,218; Mar. 8.
Keenan, James W., Farmington, Mich. Combined muffler and heater. 1,641,086; Aug. 30.
Keenan, Walter F., Jr., Felham, assignor to Power Specialty Company, New York, N. Y. Superheater boiler. Keenan, William J., Schenectady, N. Y., assignor to General Electric Company. Electric furnace. 1,641,764
Sept. 6.

Genera. Sept. 6

Keenan, William J., Schenectady, N. Y., assignor to General Electric Company. Electric furnace. 1,641,648
Sept. 6.

Keene, Alvio D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heat-treating University of the Company. Heat-treating Electric & Manufacturing Company. Electric furnace. 1,622,650; Mar. 29.

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric furnace. 1,622,655; Mar. 29.

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric furnace. 1,624,844; Apr. 12.

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heatingunit terminal. 1,624,345; Apr. 12.

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric Turnace. 1,638,557; Aug. 16.

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric Turnace. 1,638,557; Aug. 16.

Keene, Alvin D., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Heatinghouse Electric & Manufacturing Company. Furnace. 1,638,357; Aug. 16.

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Furnace. 1,638,357; Aug. 16.

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Furnace. 1,638,357; Aug. 16.

Keene, Alvin D., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric & Manufactur

Oct. 11. eener, William M., et al. (See Moore, S., and Sheets, Keener, Will assignors.) Keeney, Cl May 10. Charles H., Avon, Conn. Exhaust fan. 1,627,608;

My 20.

Kenter Gordon H., Sacramento, Calif. Card holder. 1,637,344; Aug. 2.

Keener Gordon H., Sacramento, Calif. Card holder. 1,637,344; Aug. 2.

Keeran, Charles R., assignor, by mesne assignments, to Autopoint Company, Chicago, Ill. Clip for penells and the like. 1,625,809; Apr. 26.

Keese, Matthew F. (See Ferris, W., and Keese.)

Keese, Richard A., Lose Farris, W., and Keese.)

Keese, Richard A., Los Angeles, Calif. Motor cultivator. 1,635,422; July 12.

Keezer, Lillian M., and F. A. Osgood, Boston, Mass.; sald Osgood assignor to said Keezer. Knife sharpener. 1,622,197; Mar. 22.

Keel. Zoltan J., York, Pa. Garter shield. 1,642,030; Sept. 13.

Keyler, Anton W., Minneapolia, Minn.

Keel. Zottan J., York, Pa. Garfer shield. 1,642,030; Sept. 13.
Kegler, Anton W., Minneapolis, Minn. Sprayer. 1,632,297; Aug. 16:ris, France. Removable creeper Keffers, 1621,371; Mar. 15.
Kegness, Adolphe, Paris, France. Endless supporting and driving flexible belt for motor and other vehicles. 1,621,371; Mar. 15.
Kegness, Adolphe, Paris, France. Endless supporting and driving flexible belt for motor and other vehicles. 1,627,287; May 3.
Ke Haw Ke Manufacturing Company. (See Hawkinson, Paul B., assignor). Work. N. J., assignor to Oxweld Retylene Company. Pressure-regulator casing. Des. 72,830; June 14.
Kehoe, Arthur H., Rutherford. N. J., assignor to Westinghouse Electric and Manufacturing Company. Electical distribution system. 1,642,031; Sept. 13.
Kehoe, Michael J. (See Kehoe, Thomas J. and San Sene. 3.
Signments, to Cascade Manufacturing Company. Dishwashing machine. 1,632,007; June 14.
Kehoe, Thomas J., Toledo, and M. J. Kehoe, London, Ohio, assignors, by messe assignments, to Cascade Manufacturing Company. Dishwashing machine.
Kahoe, William B. San Francisco, Calif. Display stand.

Ohlo, assignors, by mesne assignments, to custome Manufacturing Company. Dishwashing machine, 1,631,968; June 14.
Rehoe, William B., San Francisco, Calif. Display stand. Des, 73,230; Aug. 9.
Rehrer, John A., Rockport, Ind. Automobile bumper, 1,637,152; July 26.
Reichline, Anna W., Bellefonte, Pa. Portable partition, 1,647,733; Nov. 1.

Keichline, Anna W., Bellefonte, Pa. Building block. 1.655.711; Dec. 27.

Keiding, Einar, Birkerod, and J. Keiding, Charlottenlund, Denmark. Production of complex aurothiosulphate compounds. 1.640.775; Aug. 30.

Keiding, Johannes. (See Keiding, Einar and J.)

Keiloling, Johannes. (See Keiding, Einar and J.)

Keiloling, Johannes. (See Keiding, Einar and J.)

Keilholtz, Lester S., and E. Dickey, assignors to Delco-Light Company, Dayton, Ohio. Switchboard construction. 1,613,708; Jan. 11.

Keim, Harvey A., Naponee, Nebr. Foldable, portable Keim, Harvey A., Naponee, Nebr. Foldable, portable R. (See Keider, 1982). Aug. 18.

Kein, Harvey A., Naponee, Nebr. Foldable, portable R. (Sein, Harvey A.)

Kein, Harvey A., Naponee, Nebr. Foldable, portable R. (Sein, Harvey A.)

Kein, Genga, Berlin-Charlottenburg, assignor to Oil Well Supply Company, Los Angeles, Calif. Rotary draw works. 1,625,847; May 17.

Keinath, Georg, Berlin-Charlottenburg, assignor to Siemens and Haiske Aktiengeselischaft. Berlin, Ger-Keiner, Frank. (See Streif, Rudolph A., assignor.)

Keiper, Frank. (See Streif, Rudolph A., assignor.)

Keister, James, Steubenville, Ohio. Internal-combustion

Keisling, Ira F., Kokomo, Ind. Door operator. 1,632,028; June 14.
Keister, James, Steubenville, Ohio. Internal-combustion Keister, Charles F. (See Kelly, William H., assignor.) Keistler, Charles F. (See Kelly, William H., assignor.) Keith, Charles W., Denver, Colo. Ensilage cutter. 1,621,510; Mar. 22.
Keith, Groge, assignor to James Keith & Blackman Company, Limited, London, England. Delivering a mix-Reitory of the Company of the Control System. 1,625,233; Dec. 13.
Keith, George, assignor to James Keith & Blackman Company Limited, London, England. Injector for gas burners. 1,652,533; Dec. 13.
Keith, Henry M., West Frankfort, Ill. Brushing machine. 1,632,705; June 14.
Keith, Iring L. (See Sawyer, Albert F., assignor.)
Keith, James, & Blackman Company. (See Keith, George, assignor.)

Keith, James, & Blackman Company Limited. (See Keith,

Keith, James, & Blackman Company Limited. (See Keith, George, assignor.)
Keith, Nathaniel S., deceased, Philadelphia, Pa.; C. L. Roth, administrator. Amaigamator. 1,627,181; May 3. Keith, William G., Chicago, Ill., assignor to Welsbach Traffic Signal Company, Philadelphia, Pa. Signal device. Des. 17,801; Jan. 4. Keizer, Aron, assignor to T. Keizer, New York, N. Y. Fraudproof bottle. 1,645,954; Oct. 18. Keizer, Atrol., assignor. Kekenes, Peter E. (See Comatl. C. N., Kekenes, and Kelch, Jones W. and J. J. Sunday. Detroit Mich. ass.

Peters.)

Kelch, James W., and J. J. Sunday, Detroit, Mich., assignors to Kelch Ventilating Heater Company. Heater for automobiles. 1,628,671; May 1,72.

Kelch, James W., and J. J. Sunday, Detroit, Mich., assignors, by direct and mesne assignments, to Kelch Ventilating Heater Company. Heater for automobiles. 1,651,029; Nov. 29.

Kelch Ventilating Heater Company. (See Kelch, J. W., and Sunday, assignors.)

and Sunday, assignors.)
Kelch Ventilating Heater Company. (See Sunday, James

J., assignor.) Kelchner, Sara A., New York, N. Y. Doil. Des. 73.659; Uct. 18. Kell, James B., et al. (See Cunningham, Roy S., as-

signor.)

Kell, James R., et al. (See Cunningham, Roy S., assignor.)
Kellackey, Timothy, Cleveland, Ohio. Pipe-threading diestock. 1,645,535; Oct. 18.
Kellander, Harold S., and J. T. Isaacson, Minneapolis, Minn. Hollow frame bar for doors, windows, and the like. 1,644,531; Oct. 4.
Kelleher, Daniel Berea, assignor to The Foote-Burt Combine. 1,645,285; Oct. 1.
L645,285; Oct. 1.
Kelleher, James, Chippawa, Ontario, Canada, assignor to Harper Electric Furnace Corporation. Electric furnace. 1,637,486; Aug. 2.
Kelleher, James, Chippawa, Ontario, Canada, assignor to Harper Electric Furnace Corporation. Tunnel kiln. 1,643,745; Sept. 27.
Kelleher, James, Chippawa, Ontario, Canada, assignor to Harper Electric Furnace Corporation. Electric tunnel kiln. 1,647,5324; Nov. 1.
Kelleher, Thomas J., Chicago, Ill. Eye and face shield for grinding wheels. 1,633,412; June 21.
Kelleher, Thomas J., Chicago, Ill. Eye and face shield for grinding wheels. 1,633,412; June 21.
Kelleher, Thomas J., Chicago, Ill. Electric sheet-metal cutter. 1,651,823; Dec. 6.
Kelleher, Thomas J., Chicago, Ill. Compound wheel. 1,641,440; Sept. 6.
Aug. 2.

Kelleher, James Chippawa, Ontario, Construction Company, Wordel S., assignor to Morgan Constructio

Aug. 2.

Reller, Andrew P., Tiffin, Ohio. Spray disk and method and apparatus for making the same. 1,633,31; June 21.

Keller, Arnold B., et al., trustees. (See Graham, William S., assignor.)

Keller, Charles B., assignor to H. C. La Ruc, Jenkintown, Fa. Grinding mechanism. 1,635,782; July 12.

Keller, Cornelius H., San Francisco, Calif., assignor to Minerals Separation North American Corporation, New York, N. Y. Concentration of ores. 1,628,151; May 10. Keller, Ernest U., Pawhuska, Okla. Drill bit. 1,625,030; Apr. 19. Keller, Eva, Pasadena, Calif. Voice placer. 1,621,207; Mar. 15. Keller, Eva, Pasadena, Calif. Piano practice exerciser. Keller, Frederick A., New York, N. X., assignor to Bright Star Battery Company. Battery cell. 1,640,039; Aug. 16.

Star Battery Company, Battery cell. 1,640,038; Aug. 23.
Keller, Harry C., Hummelstown, Pa. Belt replacer. 1,651,063; Nov. 29.
Keller, Julius, sr., Chicago, Ill. Brush gear for vacuum clemers. 1,613,336; Jan. 4.
Keller, Karl. Kee Kahna, W. R., and Keller.)
Keller, Karl. (See Kahna, W. R., Minn. Marking capsules. 1,636,823; July 26.
Keller Knitting Company, The. (See Keller, William A., assignor.)

Keller, Keller A., Anneapons, Minn. Marking capulate in 1630,823, July 25.

Rassignor.) Reloc. (See Craft, E. B., and Keller, William A., assignor.) Reloc. (See Craft, E. B., and Keller, Lo. (See Shaw. John C., assignor.) Reloc. (See Shaw. John C., and R. D., assignors.) Reloc. (See Shaw. John C., and R. D., assignors.) Reloc. (See Shaw. John C., and R. D., assignors.) Reloc. (See Shaw. John C., and R. D., assignors.) Reloc. (See Shaw. John C., and Reloc.) Reloc. Robert, Ennetbaden, assignor to Aktiengesellschaft Brown, Boveri and Cie. Baden, Switzerland, Protective device for use in polyphase-current installations. Reloc. Willer, Willer M. (See Yanney, G. W., and Keller.) Keller, Willer M. (See Yanney, G. W., and Keller.) Keller, Willer, Los Angeles, Calif. Goncrete-mold form. See Shaft. (See Shaft) Reloc. (See Relley, W. V. D., and Tronolone, assignors) Reloc. (See Kelley, W. V. D., and Tronolone, assignors) Reloc. (See Kelley, W. V. D., and Tronolone, assignors) Reloc. (See Kelley, Frank R., Pittsburgh, Pa. Ventilator. 1,633,815; June 28. (See Kelley, Frank R., Pittsburgh, Pa. Ventilator. 1,633,815; June 28. (See Shaft) Reparatus for treating of the Reloc. (See Reloc. Calif. Apparatus for treating all Reference Reloc. (See Reloc. Calif. Apparatus for treating all Reference Reloc. (See Reloc. Calif. A

real Electric Company, Electric terminal. 1,633,815; June 28.

Kelley, Frank R., Pittsburgh, Pa. Ventilator. 1,639,187; Aug. 16.

Kelley, George C., Tatt. Calif. Apparatus for treating the decrease of the company, Philadelphia, Pa. Preventing the development of stretcher strains in metal sheets. Kelley, George L., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Rolley-leveler mechanism. 1,649,706; Nov. 15.

Kelley, George L., and J. Winlock, assignors to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Rolley-leveler mechanism. 1,649,706; Nov. 15.

Kelley, George L., and J. Winlock, assignors to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Metal-working machine. 1,649,704; Nov. 15.

Kelley, George L., and J. Winlock, assignors to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Metal-working machine. 1,649,704; Nov. 10.

Kelley, John S., Group Parterson, N. J. Treating rubber latex and product obtained thereby. 1,044,720; Oct. II. and J. A. Hueber, Philadelphia, Pa. Color-changing attachment for motion-picture projectors. 1,626,841; May 3.

Kelley, John R., Covington, Ky. Radiographic apparatus. 1,622,321; Mar. 29.

Kelley, John R., Covington, Ky. Radiographic apparatus. 1,643,382; Sept. 27.

Kelley, John R., Covington, Ky. Radiographic apparatus. 1,643,382; Sept. 27.

Kelley, Othon R., Covington, Ky. Radiographic apparatus. 1,643,382; Sept. 27.

Kelley, John R., Covington, Ky. Radiographic apparatus. 1,644,134; Oct. 4.

Kelley, John R., Covington, Ky. Radiographic apparatus. 1,644,134; Oct. 4.

Kelley, Villiam V., Austin, Tex. Knee pad. 1,637,116; Kelley, William V., Sasignor to American Optical Company, Southbridge, Mass. Frame stretcher. 1,636,473; July 19.

Kelley, William V. D., Los Angeles, Calif., assignor, by messe assignments, to Prisma, Incorporated. Photographic image and making same. 1,622,248; May 10.

Kelley, William V., D., Jose Alley, Color Laboratory, Inc. Pallsade, N. J. Photography, 1,616,283; Jan. 26.

Kellner, Alexis. (See Hannebohn, Curt W. A., assignor.) Kellner, Gustay A. H., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Projecting system for Education of the Company, Rochester, N. Y. Projecting system for Company, Rochester, N. Y. Projecting system for Company, Rochester, N. Y. Projecting system for Company of the Company of the

July b. Kellogg, Leroy D., Deerfield, assignor to Kellogg Switch-board and Supply Company, Chicago, Ill. Receiving circuit. 1,626,239; Apr. 26. Kellogg, M. W., Company, The. (See Cooke, Maurice B., assignor).

Kellogg Manufacturing Co. (See Hazard, George E., assignor.)

Kellogg, M. (Wordon, Apr., 20).

Kellogg Manufacturing Co. (See Hazard, George E. assignor.), Company, The. (See Roll-assignor.)

Kellogg Switchboard and Supply Company. (See Bohl-man, Ernest A., assignor.)

Kellogg Switchboard & Supply Company. (See Currier, Hiram D., assignor.)

Kellogg Switchboard & Supply Company. (See Currier, Hiram D., assignor.)

Kellogg Switchboard and Supply Company. (See Grout, Martin B., assignor.)

Kellogg Switchboard and Supply Company. (See Ide, Harry H., assignor.)

Kellogg Switchboard and Supply Company. (See Ide, Harry H., assignor.)

Kellogg Switchboard and Supply Company. (See Kais-Kellogg Switchboard and Supply Company. (See Kais-Hellogg Switchboard and Supply Company. (See Kellogg, William, assignor.)

Kellogg Switchboard and Supply Company. (See Kellogg, Leroy D., assignor.)

Kellogg Switchboard and Supply Company. (See Kellogg, Switchboard and Supply Company. (See Nielsen, Emil J., assignor.)

Kellogg Switchboard and Supply Company. (See Nielsen, Emil J., assignor.)

Kellogg Switchboard and Supply Company. (See Robl-son, Daniel B., assignor.)

Kellogg Switchboard and Supply Company. (See Robl-son, Daniel B., assignor.)

Kellogg Switchboard and Supply Company. (See Sauer, Louis B., assignor.)

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Kellogg Switchboard and Supply Company. (See Sauer, Lo

Kelly, Hanson C., West Burlington, Iowa. Combination knife for peeling oranges. 1,630,186; May 24. Kelly, Harry D. (See Steel, B. F., and Kelly.) Westing-Kelly, Harry D., Bloomfield, N. J., assignor to Westing-house Lamp Company. Lamp-making machine.

kelly, Harry D. (See Steel, B. F., and Kelly, WestingKelly, Harry D., Boomfield, N. J., assignor to Westinghouse Lamp Company. Lamp-making machine.
16,22,673; May 3.

Kelly, Harry G., Omaha, Nebr. Roofing strip. 1,634,465;
May 3.

Kelly, J. A., et al. (See McKenney, F. Y., and Cheney.
assignors.)

Kelly, J. A., et al. (See McKenney, F. Y., and Cheney.
assignors.)

Kelly, J. F., et al. (See McKenney, F. Y., and Cheney.
assignors.)

Kelly, John A., Brooklyn, N. Y., assignor to United Shoe
Machinery Corporation, Paterson, N. J. Heel-seat
fitting machine. 1,642,033; Sept. 13.

Kelly, John A., Brooklyn, N. Y., assignor to United Shoe
Machinery Corporation, Paterson, N. J. Heel-seat
fitting machine. 1,642,033; Sept. 13.

Kelly, John A., Brooklyn, N. Y., Assignor to United Shoe
Machinery Corporation, Paterson, N. J. Heel-seat
fitting machine. 1,647,525; Nov.

Kelly, John A., Brooklyn, N. Y., Applying
heels to shoes. 1,647,525; Nov.

Kelly, John D., New York, N. Y. Order-signal device.
1,617,850; Feb. 15.

Kelly, John D., New York, N. Y. Order-signal device.
1,617,850; Feb. 15.

Kelly, John F. (See Kelly, John A. and J. F.)

Kelly, John F. (See Kelly, John A. and J. F.)

Kelly, John F. (See Kelly, John A. and J. F.)

Kelly, John F. (See Kelly, John A. and J. F.)

Kelly, John F., See Kelly, John A., N. S.

Kelly, John F., See Kelly, John A., N. S.

Kelly, John F., See Kelly, John A., N. S.

Kelly, John F., See Kelly, John A., 16,25,294; Dec. 13.

Kelly, Orson N., Los Angeles, Calif. Vending machine.
1,628,731; N., Los Angeles, Calif. Vending machine.
1,648,813; Nov. 8.

Kelly, Orson N., Los Angeles, Calif. Vending machine.
1,648,813; Nov. 8.

Kelly, Orson N., Los Angeles, Calif. Vending machine.
1,648,813; Nov. 8.

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1,648,813; Nov. 8.

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1,648,813; Nov. 8.

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1,648,813; Nov. 8.

Kelly, Orson N., Los Angeles, Calif. Vending machine.
1,648,813; Nov. 8.

Kelly, Ors

closing inkwell. 1,628,786; May 17.
Kelly Reamer Company, The. (See Marty, John M., Jr., assignor.)
Kelly Reamer Company, The. (See Marty, John M., Jr., assignor.)
Kelly, Sherman L. (See Kelly, George M., assignor.)
Kelly, Sherman L., Toledo, Ohlo. Electric heat element. 1,649,033; Nov. 16.
Kelly, Sherman L., and L. E. Koos, Toledo, Ohlo. Engine starter. 1,638,662; June 28.
Kelly, Sherman L., and L. E. Koos, Toledo, Ohlo. Engine starter. 1,638,662; June 28.
Kelly, Sherman L., and L. E. Koos, Toledo, Ohlo. Engine starter. 1,638,662; June 28.
Kelly, Sherman L., and L. E. Koos, Toledo, Ohlo. Engine Starter. 1,638,602; June 28.
Kelly, Sherman L., and L. E. Koos, Toledo, Ohlo. Engine Starter. 1,628,602; June 28.
Kelly, Sherman L., and L. E. Koos, Toledo, Ohlo. Engine Starter. 1,638,602; Ang. 9.
Kelly, Thomas H., Ompany. (See McClenathen, Robert, assignor.)
Kelly, Thomas B., Lowa City, Lowa. Farm implement. 1,653,292; Dec. 20.
Kelly, Thomas H., New Castle, Pa. Oll burner. 1,638,377; Aug. 16.
Kelly, Thomas H., New Castle, Pa. Oll burner. 1,638,377; Aug. 16.
Kelly, William A., assignor of one-half to F. J. Timmerman, Green Bay, Wis. Fulp-web cutter. 1,625,472; Apr. 18.
Kelly, William M., assignor of one-half to F. J. Timmerman, Green Bay, Wis. Fulp-web cutter. 1,625,472; Apr. 18.
Kelly, William M., assignor of the Goodyear Tire & Rubber Company, Akron, Ohlo. Manufacturing mer-halism for sheet feeders. 1,623,674; May 24.
Kelly, William M., Westfield, N. J. Front guide.
Kelly, William M., Westfield, N. J. Sheet-feeding mechanism for sheet feeders. 1,629,874; May 24.
Kelly, William M., Westfield, N. J. Automatic placevating mechanism for sheet feeders. 1,629,874; May 24.
Kelly, William M., Westfield, N. J. Automatic placevating mechanism for sheet feeders. 1,629,874; May 24.
Kelly, William M., Westfield, N. J. Extension sheet deKelly, William M., Westfield, N. J. Extension sheet deKelly, William M., Westfield, N. J. Sheet-feeding mechanism. 1,645,963; Oct. 18.

elevating mechanism for sheet reeques.

May 24.

Kelly, William M., Westfield, N. J. Extension sheet delivery. 1, 1645,993; Oct. 18.

Kelly, William M., Jersey City, N. J. Printing press.
1,651,774; Dec. 6.

Kelly, William M., Westfield, N. J. Machine element.
1,654,127; Dec. 27.

Kelly, William M., Westfield, N. J. Printing press.
1,654,128; Dec. 27.

Kelly, William M., Westfield, N. J. Printing press.
1,654,128; Dec. 27.

Kelly, William M., Westfield, N. J. Printing press.

Keller, George, Cleveland, Ohio. Spring lubricator.
1,635,327; July 12.

Kel-Plastic Corporation. (See Mechan, G. F., and

Kennedy, assignors.)

1,635,327; July 12.
Kel-Plastic Corporation. (See Mechan, G. F., and Kel-Plastic Corporation.)
Kennedy, assignors, S. Kennedy, assignors, S. Kennedy, assignors, S. Kennedy, assignors, S. Kelester, Electric Company, Incorporated, New York, N. Y. Cartridge fuse. 1,633,534; Aug. 9.
Kelsea, Clarence H., Belmont, assignor to Peter Gray & Sons Inc., Cambridge, Mass. Huminating apparatus. 1,614,068; Jan. 11.

Kelsey, Cadwallader W., Short Hills, N. J. Steering gear. 1,619,880; Mar. 8. Kelsey, Charles A., Schemetady, N. Y., assignor to Gencelson, Charles A., Schemetady, T. Y., assignor to Gencelson to the Steering of the Steering of the Computer of the Steering of the Steerin

kensty, Tittsburgh, Par Duton, Parker of the McConway & Torley Company, Pittsburgh, Pa. Uncoupling device. 1,645,757; pany, Pittsburgh, Pa. Uncoupling device. 1,645,757;

Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Uncoupling device. 1,946,757; Oct. 18.
Kettle, George R., Woonsocket, R. I., assignor to American Wringer Company, Inc. Wringer roll. 1,630,086; May 24.
Keltner, Moody C. (See Allensworth, J. N., Keltner, and Collins.)

Collins.)
Kelty, Charles C., Poast Town, assignor of one-fourth to
M. W. Renick, Middletown, Ohio. Rail clamp.
1,622,152; Mar. 22.
Kelyin English, Marssillon, Ohio. Blowtorch and
pot. 1,629,628; May 24.
Kelyin Engineering Co. (See Merlls, Ira, assignor.)
Kelyin Engineering Co. Inc. (See Merlls, Ira, assignor.)
Kelvin Engineering Co. Unc. (See Merlls, Ira, assignor.)
Kelvin Engineering Co. Inc., (See Merlls, Ira, assignor.)
Kelvin Corporation. (See Mercer, William D., assignor.)

signor.)

Kemp, C. M., Manufacturing Company, The. (See Kemp, William W., assignor.) Kemp, Charles T., and N. E. Ryckman, assignors to The Coffield Washer Company of Canada Limited, Hamilton, Ontario, Canada, wasning machine, 1,629,891; May 17.

ton, Offirite, canada. washing machine. Apocody, May 17.

Kemp, Demetrius, assignor to Kemp & Beatley, Inc., New York, N. Y. Bedspread. Des. 72,265; Mare 22.

Kemp, Demetrius, assignor to Kemp & Beatley, Inc., New Kemp, Employers, State of State

assignor.)

assignor.)

Kempf, Conrad, assignor to Suddeutsche Christbaumschmuck- u. Reflektoren Gesellschaft mit beachränkter
Haftung, Nuremberg, Germany, Reflector for Christmas-tree decoration. Des. 72,481; Apr. 19.

Kempf, Ida E. L., St. Louis, Mo. Mail-delivery system.

Kempf, Karl F. W. Bullalo, N. Y. Manufacturing bolts.
1,651,395; Dec. 6.

Kempf, Stephen S., Chicago, Ill. Traction chain,
1,622,014; Mar. 29.

Kempien, August J. St. 1511; Mar. 22.

Kempien, August J. St. 1511; Mar. 22.

Kempien, August J. St. 1511; Mar. 22.

Kempien, Margh, M

Kempter, Philip, assignor to Geuder Paeschke & Frey Company, Milwaukee, Wis. Strainer. 1,653,214; Dec. 20.

Rigaud, Inc., New York, N. Y. Vanity case. 1,613,718; Jan. 11.

Kener, Jan. 14.

Kener, Edward, Jr., assignor to Buffalo Co-operative Stove Co., Buffalo, N. Y. Incinerator. 1,645,663. Oct. 18.

Kener, Edward, Jr., assignor to Buffalo Co-operative Stove Co., Buffalo, N. Y. Incinerator. 1,645,663. Oct. 18.

Kenerson, Joseph E., Saugus, assignor to Trimont Manufacturing Company, Roxbury, Mass. Wrench. 1,613,229; Jan. 4.

Kenerson, Joseph E., Saugus, assignor to Trimont Manufacturing Company, Roxbury, Mass. Apparatus for securing vises to posts, poles, or the like. 1,625,319; Apr. 19.

Kenilworth, Mfg. Co. (See Kosofsky, Morris, assignor.)

KADR. 19.
KADR.

C., East Orange, N. J. Figure toy.

Kenly, Henry C., East Orange, N. J. Figure toy, 1,648,404; Nov. 8.

Kennedy, Albert H., Rockport, Ind. Inking roller for typewriter ribbons. 1,638,340; Aug. 9.

Kennedy, Alexander. (See Wilkes, W. R., and Kennedy.) Kennedy, Allen E., assignor to Ken-Wel Sporting Goods Company, Inc., Gloversville, N. Y. Football heimet. 1,648,830; Nov. 8.

Company, Inc., Gloversville, N. Y. Football helmet. 1,048,850; Nov. 8.

Kennedy, Angus B., Charlottesville, Va. Leaching method and apparatus. 1,628,787; May 17.

Kennedy, Arthur L. (See Meehan, G. F., and Kennedy.) Kennedy, Arthur L. (See Meehan, G. F., and Kennedy.) Kennedy, Arthur L. (See Meehan, G. F., and Kennedy.) Kennedy, Carlton L., Braintree, assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass. Short-circuiting device for electric motors. 1,652,482; Dec. 13.

Kennedy, David, East Ham, London, and A. C. Anderson, Forest Gate, London, England. Apparatus for cleaning boiler tubes, condenser tubes, and other surfaces. 1,618,083; Feb. 15.

Kennedy, David, East Ham, London, and A. C. Anderson, Forest Gate, London, England. Apparatus for cleaning boiler tubes, condenser tubes, and other surfaces. 1,618,083; Feb. 15.

Kennedy, David, East Company, Typographical distributing machine. 1,648,051; Nov. 8.

Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, Typographical distributing machine. 1,648,051; Nov. 8.

Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, Typographical composition of the Company of the Company of the California See Calif. Stucco of the Company of the California See Calif. Stucco Science 7. (See Kennan, C. J., Kennedy, and Kirsch.) Edward C., Kennedy, Ennest N., London, England. Safety razor. Calif. Stucco See Calif. Stucco Science 1, 1,647,647; Oct. 25.

Kennedy, Frank M., Clarendon, Ark. Running gear for wagons. 1,647.047; Oct. 25. Kennedy, Frank W., assignor to De Laval Steam Turbine Company, Trenton, N. J. Rotary gear pump.

Company, Trenton 1,620,261; Mar. 8.

Company, Trenton, N. J. Rotary gear pump. 1,620,261; Mar. 8.

Kennedy, Gurney W., Quincy, Fla. Machine for stringing tobacco leaves. 1,650,990; Nov. 29.

Kennedy, Homer assignor, by mesne assignments, to the company of the company. Partisburgh, Pa. Scale. 1,646,151; Oct. 18.

Kennedy, Howard L., assignor to Kennedy Manufacturing Company, Van Wert, Ohio. Traveling bag. 1,636,060; July 19.

Kennedy, Howard L. assignor to Kennedy Manufacturing Company, Van Wert, Ohio. Carpenter's tote case. 1,647,735; Nov. 1.

Kennedy, James S., Yonkers, N. Y., assignor to The Bartlett Hayward Company, System for automatic valve control. 1,632,905; June 21.

Kennedy, James S., Yonkers, N. Y., assignor to The Bartlett Hayward Company. Sequence Interlock for automatic valves. 1,648,032; Nov. 8.

Kennedy, James W., Canton, Ohio. M. Y., assignor to The Bartlett Hayward Company, Automatic sequence control for valves. 1,634,627; July 5.

Kennedy, James W., Canton, Ohio. Electrical apparatus for treating nerves, muscles, and blood. 1,636,568; July 19.

July 19.

Kennedy, John A., Seattle, Wash., assignor to Pacific Rim
Tool Company, Cleveland, Ohio. Rim contracting and
expanding tool. 1643.122; Sept. 20.

Kennedy, John E. and M. A., Los Angeles, Calif. Visual
defiation signal for tires. 1.644.4193; Oct. 4.

Kennedy, John J., and T. W. Stene, Los Angeles, Calif.
Burglar-carching and cashier-protective apparatus.
1.640.572; Aug. 30.

Kennedy, John J., New York, N. Y. Constructing underground tunnels. 1.644.476; Oct. 4.

ground tunnels. 1.644.476; Oct. 4.

ground tunnels. 1.644.476; Oct. 4.

Kennedy, Julian, Pittsburgh, Pa. Blast furnace.
1.629.508; May 24.

Kennedy, Julian, Pittsburgh, Pa. Elevator tower for
blast-furnace structures. 1.630.088; May 24.

Kennedy, Manufacturing Company. (See Kennedy, Howard L., assignor.)

Kennedy Manuacturing Company. (See Kennedy, Howard L., Sssignor.) (See Kennedy, John E. and M. A.) (Kennedy, Phillip and B., Gloversville, N. Y. Basebali glove. 1,631,735; June C., Kennedy, Ralph A., et al. (See Jones, James M., assignor.)

Kennedy, Ralph M., Philadelphia, Pa. Power saw. 1.622.237; Mar. 22. Kennedy, Richard D., Altoona, Pa. Dial. 1,646,408; Oct. 25.

Oct. 25.

Kennedy, Stephen S. S., Pontiac, Mich. Grate.
1.639.343: Aug. 16.

Kennedy, Thomas D., Owen Sound, Ontario, Canada.
Stake pocket for vehicles. 1,645,196; Oct. 11.

Kennedy, Thomas H., Alta Loma, Tex. Heater.
1.623,415; Ap. 5.

Loc. (See Kennedy, Walter, assignor.)

Kennedy, Walter, Cliffside, N. J. Gas-heater grill.
Des. 72,713; May 24.

Kennedy, Walter, Cliff Side, N. J., assignor to Radiant Heat Corporation of America, New York, N. Y. Heater. 1,646,026; Oct. 18.

Kennedy, Walter, New York, N. Y., assignor, by mesne assignments, to Kennedy-Toombs, Inc. Gas heater. 1,642,111 Step 18.

L642,111 Step 18.

Kennedy-Toombs, Inc. Gas burner, 1,647,137; Nov. 1.

Kennedy, William P., New York, N. Y., Motor vehicle. 1,619,841 Step 18.

L619,841 Step 1

Kenney, Kenney, 19

July 18.

Kenney, Edward F., Bethlehem, Pa. Heat treatment of Kenney, Edward H., Bethlehem, Pa. Heat treatment of Kenney, Edward H. and E., Philadelphia, Pa. Sled and Wagon. 1,622,759; Mar. 29.

Kenney, Clizabeth. (See Kenney, Edward H. and E.)

Kenney, Myron E., Everett, Wash. Condensed-milk-can perforator. 1,651,923; Dec. 6.

Kenney, Nicholas C., assignor to Chase Companies, Inc., Marchael C., St. Chase Companies, Inc., Marchael C., St. Chase Companies, Inc., Marchael C., St. Chase Companies, Inc., William J., Chicago, Ill., assignor to Zeolite Engineering Co. Method of and apparatus for reconditioning zeolite water softeners. 1,617,288; Feb. 8.

Fcb. 8.

Kennington, William O., London, England, assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Engine-starting apparatus. 1,638.265; Aug. 9.

Kennon, Louis H., and L. J. Langdon, Houston, Tex. Valve. 1,625,367; Apr. 19.

Kent, Arthur A. (See Appleby, Thomas, assignor.)

Kent, Arthur A., Ardmore, Pa. Radiocabinet. Des. Kent. Arthur A., Ardmore, Pa. Vacuum-tube unit. 1,650,754; Nov. 29.

Kent Company, The. (See Kent, G. E., and Yutzler, assignors.)

signors.)
Kent, Dolores W., San Francisco, and M. C. Gale, Oakland, Calif. Manieure set. 1,621,789; Mar. 22.
Kent, Frank J., Verona, N. J., assignor, by mesne assignments, to Unitrol Condenser Corporation, New York,
N. Y. Electric condenser. 1,652,263; Dec. 13.
Kent, George, North Chatham, Mass. Clock-dial game.
1,634,197; June 28.
Kent, George C. (See Jackson, R. P., Kent, and Casselman)

Kent, George C. (See Jackson, R. P., Kent, and Casselman.)
Kent, Gordon E., and F. W. Yutzler, assignors to The Kent Company, Inc., Rome, N. Y. Vacuum cleaning tool. 1,651,894; Dec. 6.
Kent, Martha A., Verona, N. J. Necktie holder. 1,659,755; Nov. 29.
Kent, Philip J., Royal Oak, assignor to Chrysler Corporation. Detroit, Mich. Automobile instrument panel. Des. 73,087; July 19.
Kent, Philip J., Royal Oak, assignor to Chrysler Corporation. Detroit. Automobile instrument panel. Des. 73,527; Sept. 27.
Kent, Philip J., Royal Oak, assignor to Chrysler Corporation. Detroit. Mich. Automobile head lamp. Des. 74,013; Dec. 6.
London, Ragland. Liquid meter.
Kent Walter G. London, England. Liquid meter.

74,013; Dec. 6.

Kent. Walter G., London, England. Liquid meter.
1,633.532; June 21.

Kent. William J., Brooklyn, N. Y., assignor to The Mechanical Rubber Company, Chicago, Ill. Cleaning device. 1,635,002; July 19.

Kent., William J., Brooklyn, N. Y., and E. Martin and F.

Kochan, assignors to The Mechanical Rubber Company, articles. 1,654,173; Dec. 27.

Kent-Jones, Douglas W., and C. W., Chitty, assignors to Woodlands Limited, Charlton Green, Dover, England. Treatment of cereal substances. 1,635,669; July 19.

Kent-Moore Organization. (See Benedict, George W., assignor.)

assignor.)

Kenton Baking Powder Company, The. (See Becht, Röbert F., assignor.)

Kent Owens Machine Company, The. (See Shepherd, Kent Owens Machine Company, The. (See Shepherd, Kent Tup, Clemens To, Chicago, III., assignor to The Graubock Company, Chechmatt, John. Vehicle lock. Re16,801; Nov. 29.

Kenward, Leo N. Lakewood, Ohio. Automobile head-light, 1,624,491; Apr. 12.

Kaskpracting Goods Company, (See Kennedy, Allen E., assignoring Goods Company, (See Kennedy, Allen E., assignoring Goods Company, (See Kennedy, Allen E., assignoring Goods Company).

E., assignor.)

E., assignor.)

Kenworthy, Charles F., Incorporated. (See Kenworthy, Charles F., assignor.)

Kenworthy, Charles F., Woodbury, Conn., assignor to Charles F. Kenworthy. Incorporated, Waterbury, Conn. Furnace. 1.617,065; Feb. S.

Kenworthy, James A., Los Angeles, Califf. Oil burner. 1.625,529; Apr. 19.

Kenyon, Frank C., Philadelphia, and F. R. Goodell, Kenyon, Frank C., assignors to Congoleum-Nairn, Inc., New York, Y. V. Sales rack. 1.636,608; July 19.

Kenyon, Oliver C., Geneva, Ill. Lawn rake. 1,631,875; June 7.

Kenyon, C June 7.

Kenyon, Silas F. Indian Orchard, assignor to The Fiber-loid Corporation, Indian Orchard, Mass. Hinge struc-Kenyon, William H., assignor to Entwisle & Kenyon Limited, Accrington, England, Carpet 1,620,385; Mar. & Kenyon, William H., assignor to Entwisle & Kenyon Limited, Accrington, England. Carpet

1200.363; Mar. 8.
Kenyon, William H., assignor to Entwisle & Kenyon
Limited, Accington, England. Carpet sweeper.
1,645.759; Oct. 18.
Keough, W. E., Company. (See Eklund, K., and Loeck,
assignors, Carlyin L. Portland, Oreg. Ribbon guide for
Keplaut, Calvin L. Portland, Oreg. Ribbon guide for
Kepler, Cles and the like 1,621.167; Mar. 16.
Kepler, Cles and the like 1,621.167; Mar. 16.
Kepler, Cles and the like 1,621.167; Mar. 18.
Kepler, Cles and the like 1,621.167; Mar. 18.
Kepler, George W., assignor of one-half to R. D. Kimm,
1,638,541; Aug. 9.
Kepler, George W., assignor, by mesne assignments, to
Dayton Scale Company, Dayton, Ohio. Scale.
Company, Dayton, Ohio. Scale.
Company, Cheminati, Ohio. Oil cup.
1,646,409; Oct. 25.
Keplinger, Martha Q. (See Keplinger, Livingston B.
and M. Q.)

1.646.409; Oct. 25.

Keplinger, Martha Q. (See Keplinger, Livingston B. and M. Q.)

Kepner, Robert C. (See Johnson, W. V., and Kepner.)

Kepner, Bobert C. (See Johnson, W. V., and Kepner.)

Kepner, Johann, Birkesdorf, Germany, Loom for weaving with pile wires, 1.642.112; Sept. 18.

K. Bailey Company, Carton, 1.653.914; Dec. 27.

Keppner, Furst, assignor to the Firm Blechspielwaren-fabrik Johann Distier, Nuremberg, Bavaria. Mechanically-moved toy. 1.636.864; July 26.

Kercher, Arthur J. Berkeley, Calif. Refrigerating ap-Kercher, Arthur J. Berkeley, and W. W. Hieks, San Francisco, Calif. Electric heater. 1.617.916; Feb. 15.

Kercher, Arthur J. Berkeley, and W. W. Hicks, San Francisco, Calif. Electric heater. 1.617.916; Feb. 15.

Kercher, Arthur J. Berkeley, and W. W. Hicks, San Francisco, Calif. Electrical heating device. 1.644.255; Oct. 4.

Francisco, Calif. Electrical heating device. 1,634,255; Oct. 4. Daniel C., and R. Copp. assignors to Pevely Chairy Company, St. Louis, Mo. Pasteurising apparatus. 1,635,629; Dec. 27. Keremes, Paul, et al. (See Coughlin, Joseph D., assignor.)
Kergan, Robert H., Frostburg, Md. Resmer drill. 1,614,363; Jan. 11.
Kerkhof, Cornelus. (See Sommer, W. R., Ree, and Kerkhof, Cornelus.)

Kerkhof, Cornelus.

Kerkhof, Cornelus.

Kerkhof, Cornelus.

Kerkhof, Nerlin, John F., and H. J. Rosenhoffer, Bradford, Pa., dssignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y. Pigtall connection Kern, Albert L., Aurora, Ill.

Kern, Albert L., Aurora, Ill. Automobile bumper. Lenn. Abhert L., Aurora, Ill. Automobile bumper. Kern. Abhert L., Aurora, Ill. Automobile bumper. Kern. Elmer L. (See O'Nell, E. F., and Kern.) Kern. Eugene F., assignor to W. P., Fuller & Co., San Francisco, Call. Color chart. 1,618,664; Feb. 22.

Kern. Aldrew J., Paris, Ky. Cultivator. 1,623,120; Apr. 5.

Kern. Elmer L. (See O'Nell, E. F., and Kern.) Eugene F., assignor to W. P., Fuller & Co., San Francisco, Call. Color chart. 1,618,664; Feb. 22.

Kern. George A., Berkeley, Calif. Ornamental fountain. 1,637,487; Aug. 2.

Kern. George A., Berkeley, Calif. Ornamental fountain. 1,611,612 B. G. of Angeles. Calif., assignor to The Producers Pictures Corporation, St. Louis, Mo. Motion-picture machine. 1,624,667; Apr. 12.

Kern. Joseph M., Oswego, N. Y. Door-controlled electric-lighting switch. 1,619,134; Mar. 1.

Kern. Joseph M., Oswego, N. Y. Door-controlled electric-lighting switch. 1,619,134; Mar. 1.

Kern. Joseph M., Oswego, N. Y. Door-controlled electric-lighting switch. 1,619,134; Mar. 1.

Kern. Mayon, H., Toledo, Ohlo. Automobile light deflec-

Kern, Junwig, Saturday, Allowski, Automobile light deflector, 1,628,152; May 10.
Kern, Mason H., Toledo, Ohio, Automobile headlight, Kern, Mason H., Toledo, Ohio, Automobile headlight, 1,628,153; May 10.

Kernes Mar assignor.)

assignor.)

Kerns, John R., Covington, Ky. Illuminated license-tag holder for automobiles. 1.619,520; Mar. 1.

Kerns, Lewis H., Greenville, Obio. Key-ring holder. 1.618,831; Feb. 22.

Kero, Jacob, Saxon, Wis. Bark cutter and peeler. 1.617,835; Feb. 15.

Keroisei Manufacturing Company. (See Forbes, John S., assignor.)

Kerr, Harold H. (See O'Connell, J., and Kerr.) Kerr, Harry E., assignor to The Cleveland Gas Burner. 1.613.611; Jan. 11. Kerr, Herbert W., Augusta, Kans, Wire-line belt guide. 1.613.7613; Mar. 1. Kerr, Howard J., assignor to The Babcock & Wilcox Com-pany, Bayonne, N. J. Air-cooled walls. 1,634.291;

Rerr, Howard J., assignater pany, Bayonne, N. J. Air-coolea pany, Bayonne, N. J. Air-coolea July 5.

Kerr, John B., and J. R. Young, Albuquerque, N. Mex. Pneumatic cushion wheel. 1,633,748; June 28.

Kerr, Robert M., assignor to Detroit Dental Manufacturing Company, Detroit, Mich. Dental case. 1,623,793; Apr. 5.

Mg Company, Detroit, men. Definit case. 1,022,139; Kerr, William J., Smethport, Pa. Spinning toy. 1,622,199; Mar. 22. Kerrigan, Edward L., Arlington, and W. J. Murphy, West Roxbury, Mass. Elevator-gate-operating mechanism. 1,621,857; Mar. 22.

1,621,887; Mar. 22.

Kevris, Harry L., Daytona Beach, Pla. Sanitary brush holder for shaving brushes. L616,580; Feb. 8.

Kerrison, Mrs. A. G. (See Smith, Frank, Sasignor.)

Kersey, William F., Lebanon, Ohio. Wire splicer. 1,651,210; Nov. 29.

Kershaw, Frederick, assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Veneer drier. 1,637,945;

corporated, Philadelphia, Pa. Veneer drier. 1,637,945; Aug. 2.
Kershaw, Frederick, and A. O. Hurxthal, assignors to Proctor & Schwarz. Incorporated, Philadelphia, Pa. 1642,466 (spt. 13.
Kershaw, Harry, assignor by mesne assignments, to Visible Pump Company, Newark, N. J. Liquid-delivering system. 1,648,457; Nov. 8.
Kerstein, Ernest A., Brooklyn, assignor to American Meter Company, Incorporated, New York, N. Y. Resetting device for gas meters. 1,627,133; May 3.
Kersten, Carl C. E., Columbus, Ga. Freserving appa-Kersten, Jacob, Kalamazoo, Mich. Radio loud speaker. Des. 73,184; Aug. 2.
Kersten, Jacob, Kalamazoo, Mich. Radio loud speaker. Des. 73,184; Aug. 2.
Kersten, Samuel, Chicago, Ill. Mixing-valve support for laundry trays. 1,526,343; Apr. 26.
Kersten, Samuel, Chicago, Ill. Mixing-valve support for laundry trays. 1,526,343; Apr. 26.
Kersten, Samuel, Chicago, Ill. Mixing-valve company, Chicago, Ill. Angle plug. 1,636,539; July 26.
Kerwin, William C., Joplin, Mo. Manifold. 1,629,706; May 24.
Kesel, Fred, and G. Nichols, Honeoye Falls, N. Y. Mouse-

Kerell, Alliam C., Jopin, M. Mannoid. 1,029,109; Keel, Fred, and G. Nichols. Honeoye Falls, N. Y. Mouse-trap. 1,630,123; May 24. Keser, Fritz, Schomberg, near Wildbad, Germany. Flush-ing and disinfecting apparatus for spittoons. 1,614,069; Jan. 11.

Kesler, Earle H., Boise City, Okla, Harrow. 1,616,261; Feb. 1.

Resier, Barie H., Bolse City, Okia. Hartov. Lotzou. Feb. 1. Bluer C., Bloomfield, Mo. Speed-changing Kesling Elimer G., Bloomfield, Mo. Speed-changing mechanism 1,635,483; July 12.

Resiling, Elimer G., Bloomfield, Mo. Speed-changing mechanism for motor vehicles. 1,635,484; July 12.

Ressel, Monanes B., Chicago, Ill. Carburetor. 1,636,187; July 19.

Ressel, William H., Louisville, Ky. Coat collar and forming the same. 1,618,488; Feb. 22.

Ressel, Milliam H., Louisville, Ky. Coat collar and forming the same. 1,618,488; Feb. 22.

Resselving, Louis P., Whittier, Calif. Oil pump. Resselving, Frank. (See Schur, J. M., Kesselving, Schnur, and Jonisch,)

Resselving, Frank. (See Schur, J. M., Kesselving, Chine. 1,626,199; Apr. 26.

Resses, Charles, New York, N. Y. Torpedo. 1,636,307; July 19.

ses, to

Resses, Charles, New York, N. Y. Torpedo, 1,636,307; July 10, Indries, New York, N. Y. Flying torpedo. Resses, Charles H., New York, N. Y. Electric signal transmitter, 1,637,080; July 26. Ressler, Archibeld K., Huntington, W. Va. Emergency kit. 1,625,547; Apr. 19. Ressler, Archibeld Co., Inc., Buffalo, N. Y. Fluid-circulating plate. 1,621,742; Mar. 22. Ressler, Charles A. (Soe Hutchens, H. O., and Ressler, Nessler, Charles A. (Soe Hutchens, H. O., and Ressler, Ressler, Charles A. (Soe Gompan, Brooklyn, N. Y. Hinge. Ressler, Charles L., San Diego, Calif. Furniture-joint-securing means. 1,649,903; Nov. 2, Utch mechanism. 1,628,629; May 10. West Orange, N. J. assignor to E. I. (28,629), May 10. West Orange, N. J. assignor to E. R. (de Pont de Nemours & Company, Wilmington, Del. Ressler, charling coating composition. 1,642,155; Sept. 13.

Sept. 10.

Sessier, John J., St. Louis, Mo. Indurating porous objects and material for use in some 1,613,894; Jan. 11.

Oil and making some 1,616,821; Feb. 1.

Kessler, John J., St. Louis, Mo. Indurating porous objects 1,638,342; Aug. 9.

Kessler, Morris S. (See Bell, C. L., and Kessler.)

Kessler, Morris S. (See Bell, C. L., and Kessler.)

Kessler, Morris S. (See Bell, C. L., and Kessler.)

1,634,581; July M.

1,634,581; July M.

1,634,581; July M.

1,634,681; July M.

1,634,6

Kestenman, Charles H., assignor to Kestenman Bros. Mig. Co., Providence, R. I. Fastening device for wrist-watch straps and bracelets. 1,633,381; June 21. Ketcham, Garry M. (See Ricken, Charles B., assignor.) Ketcham, Garry M., Jr. (See Ricken, Charles B., assignor.)

Aggnor,

Kettering, Charles F., assignor, by mesne assignments, to Dayton-Wright Company, Dayton, Ohio. Control apparatus. 1,623,121; Apr. 5.

Kettering, Charles F., assignor to General Motors Research Corporation, Dayton, Ohio. Fuel-supply device. 1,624,139; Apr. 12.

Kettering, Charles F., assignor to General Motors Restering, Charles E., assignor to General Motors Restering, Charles E., assignor to General Motors Research Company, Charles F., assignor to Delco-Light Company, Cettering, Charles F., assignor to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,650,524; Nov. 22.

Kettering, Charles F., and J. A. Hunt, assignors to Geterical Motors Research Corporation, Dayton, Ohio. Electrical opporatus. 1,650,524; Nov. 22. Charles F., and W. A. Chryst, assignors, by mesne assignments, to Delco-Light Company, Dayton, Ohio. System of electrical distribution and control. Charles F., and J. C. Federle, assignors to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,630,523; Nov. 22. Kettering, Charles F., and J. H. Hunt, assignors to General Motors Research Corporation, Dayton, Ohio. Electrical system for automative vehicles. 1,622,154; Lettering, Charles F., and J. H. Hunt, assignors to General Motors Research Corporation, Dayton, Ohio. Electrical system for automative vehicles. 1,622,154; Kettering, system for automative vehicles. 1,622,154; Kettering, Charles F., and J. H. Maria Signors to General Motors Research Corporation, Dayton, Ohio. Electrical system for automative vehicles. 1,622,154; Kettering, Charles F., and T. Midgley, iv., Dayton, Ohio. Stetering, Charles F., and T. Midgley, iv., Dayton, Ohio.

eral Motors Research Corporation, Dayton, Ohio. Electrical system for automotive vehicles. 1,622,154; Mar. 22. Kettering, Charles F., and T. Midgley, jr., Dayton, Ohio, designors, by mesne assignments, to General Motors Corporation, 1988. 1989. 1

Keyes Fibre Company. (See Williamson, Bert A., except Fibre Company. (See Williamson, Bert A., except Seyes, Frederick G. Cambridge, assignor, by mesne assignments, to National Refrigerating Company, Boston, Mass. Apparatus for producing refrigeration. 1,622,519; Mar. 29.

Keyes, Frederick G. Cambridge, assignor, by mesne assignments, to National Refrigerating Company, Boston, Mass. Refrigeration. 1,622,521; Mar. 29.

Keyes, Frederick G. Cambridge, assignor, by mesne assignments, to National Refrigerating Company, Boston, Mass. Refrigeration. 1,622,521; Mar. 29.

Keyes, Frederick G. Cambridge, assignor, by mesne assignments, to National Refrigerating Company, Boston, Mass. G. Cambridge, assignor, by mesne assignments, to National Refrigerating Company, Boston, Mass. Gas and Iquid storing device. 1,622,523; Mar. 29.

skynments, to National Refrigerating Company, Boston, Mass. Gas and liquid storing device. 1,622,523; Mar. 29. Keyl, Hans, Berlin, Germany, High-frequency signaling system. 1,845,956; Oct. 18. Keyroid Cement Block Co. (See McPherson, D., and Schultz, assignors.) Keyrs, John H., assignor to The Dayton Irrigation Company, Dayton, Ohio. Hose reel. 1,635,103; Dec. 20. Keys, Francisch, Charlett, Pasadena, Calif. Trap nest. 1,616,661; Keyser, Johann J. Aarau. Switzerland. Actuating device for the cops of spinning, rwisting, and the like machines. 1,646,542; Oct. 25. Keystone Mfg. Co. (See Marks, Isidore, assignor.) Keystone Reamer & Tool Co. (See Seiler, Michael I., assignor.)

signor.)

Keystone Roofing Manufacturing Company. (See Taylor, Thomas M., assignor.)

The (See Levy, Bernard, as-

Keystone Roofing Manufacturing Company. (See Taylor, Thomas M., assignor.)
Keystone Watch Case Co., The. (See Levy, Bernard, assignor.)
Keyston, John R., Bothan, Ala. Circuit maker and breaker, 1,652,123; Dec. 6.
Keywood. William. Easton, Wash. Water motor.
I,625,886; Anv. 26.
Khalifah, Abd-El-Raiman Z. A., Philadelphia, Ph. ApKhalifah, Abd-El-Roiman Z. A., Philadelphia, Ph. ApKhalifah, Ph. ApK

Khetah Corporation. (See Sartakoff, Jack D., assignor.)
Kiam, Edward, assignor of one-half to M. G. Collins, New
York, N. Y. Alloy. 1,653,630; Dec. 27.
Kiander, Anna M., executrix. (See Kiander, Lawrence A.)
Kiander, Eawrence A., deceased, New York, N. Y.; A. M.
Kiander, Eawrence A., deceased, New York, N. Y.; A. M.
Kiander, Edward C., See Kiander, Local C., Local

May 5: Kibitz, Frank X. See La Hodny, W., and Kibitz.) Kidd. Albert E., Jr., Chicago, Ih. Food 1,620,895; Mar. 15. Kidd, Thomas J., Birmingham, Ala. Process paratus for delinting cottonseed bulls. 1,6 Process and

Kidd, Thomas J., Birmingham, Ala. Process and apparatus for delinting cottonseed hulls. 1,639,568; Aug. 16.
Kidd, Thomas J., Birmingham, Ala. Apparatus for defiberating cottonseed hulls. 1,554,263; Dec. 27.
Extracting contenseed hulls. 1,554,263; Dec. 27.
Extracting and holding meons. 1,620,467; Mar. 8.
Kidder, Arthur B., Canton, Ohio, assignor to The Kidder Furnace Company, Furnace. 1,615,087; Jan. 18.
Kidder Furnace Company, The. (See Kidder, Arthur B., assignor).

assignor.)
Kidder, Imogene, Portland, Oreg. Candy box. Des.
73.331; Aug. 80.
Kidder, Imogene, Portland, Oreg. Candy box. Des.
73.382; Aug. 80.
Kidder, William V. (See Zeratsky, A. W., and Kidder, Kidder, William V. (See Bacon, R. F., and Kidwell, Cleo H. (See Bacon, R. F., and Kidwell, Kidwell, Edgar, assignor.)
Kidwell Boller Company, (See Kidwell, Edgar, assignor.)
Kidwell, Edgar, Session to Kidwell Boller Company,
Milwaukee, Wis. Steam boller, 1629,954; May 24.
Kidwell, Edgar, Milwaukee, Wis., assignor to Kidwell
Boiler Company, Milwaukee, Wis. Steam boller, 1.647,638; Nov. 1.
Kieckhefer, Bdwin F., Milwaukee, Wis. Cable equalizer, 1.632,938; June 144.
Kiefer, Karl, Cincinnati, Ohio, Ellipsograph, 1,623,348;
Apr. 5.

Apr. 5.
Kiefer, Karl, Cincinnati, Ohio. Collapsible tube.
1,624,140; Apr. 12.
Klefer, Karl, Cincinnati, Ohio. Filling machine.
1,635,754; July 12.
Klefer, Karl, V. 12.
Klefer, Karl, V. 12.
Klefer, Kenneth H., Baltimore, Md. Extinguishing fires.
1,632,339; June 14.
Klefer, Kenneth H., assignor of one-fourth to S. C. Vincent and one-fourth to F. C. Volkman, Baltimore, Md.
Liquid-level gauge for gasoline tanks. 1,618,442;
Feb. 22.

Feb. 22.

Kiefer, William G., Brookline, Mass. Column and guard.
1.617,762; Feb. 15.

Kieffer, Martin, Olean, N. Y. Attachment for silk doubling
and twisting machines. 1,623,685; Apr. 5.

Kieffer, Massell J. (See Perrenot, Frederick A., assignor.)

Kieflick, Hossell J. (See Perrenot, Frederick A., assignor.)

Kiehl, Levi, Waynesboro, Pa. Tool-removing device.

Kiehl, Levi, Waynesboro, Pa. Tool-removing device.

Kiehler, Frederick. (See Atwood, E. H., Wanner, Kiehle,
and Wright.)

Kiehler, Frederick. (See Marshall, W., and Kiehler.)

Kielar, Stanislaw, Milwaukee, Wis. Buckle. 1,615,331;

Jan. 25.

Kiehler, Sinislaw, Milwaukee, Wis. Toy top. 1,631,272;

Kiehler, Henry, Martine Ferry Obio.

June 7.

Kielberg, Henry, Martins Ferry, Ohio. Burner for radiant gas heaters. 1,643,607; Sept. 27.

Kiely, Jinnes F., Syrause, N. Y. Recording machine. 1,629,078; May 17.

Kien, Stanislaus, Rochester, N. Y. Securing means for rails. 1,632,605; June 14.

Klenast, Ernst A. Los Angeles, Calif. Automatic hydraulic irrigation system. 1,624,744; Apr. 12.

Klenate, Cito L., Leavenworth, Kans. Socket wrench. 1,648,134; Nov. 8.

Klenate, Martine J. S. Klenate, Martine J. S. Klenate, Otto L., Leavenworth, Kans. Socket wrench. 1,648,134; Nov. 8.

Klenate, Martine J. S. Klenate, Martine J. J. J. and C. B. Fowler, Queens, assignors to Bell Telephone Laboratories, Incorporated. New York, N. Y. Telephone system. 1,642,500; Sept. 13.

Klesel, William F., Jr., Alteona, Pa. Car and tender

1.642.500; Sept. 18.

Klesel, William F., jr., Altoona, Pa. Car and tender truck. 1,649.352; Nov. 15.

Klesel, William F., jr., Altoona, Pa. Locomotive tender. 1,651.280; Nov. 29.

Kletz, Adolf P., Cleveland Heights, Ohio. Curling iron. 1,639.136; Auz. 16.

Klewicz, John. assignor to The Reece Button Hole Machine Company. Boston, Mass. Tool for inserting or different company. Boston, Mass. Tool for Inserting or Gill 480.

Klewicz, John. assignor to The Reece Button Hole Machine Company. Assorting the Tool of the State of the Company. Assorting the Tool of the Company. Astron. Ohio. Tre-vulcanizing device. 1,633,587; June 28.

Kilbourne, Kenneth A., Monrovia, Calif., assignor to American Cyanamid Company, New York, N. Y. Apparatus for spraying liquid hydrocyanic acid. 1,642,779; Sept. 20.

Sept. 20. Kilgore Mfg. Company, The. (See Peake, Edward S., as-

Kilgore Mig. Company, The. (See Peake, Edward S., assignor.)
Kilham, Oliver W., assignor to American Steel Pipe and
Tank Co., Los Angeles, Calif. Joint for casing sections and making the joint. 1.637,750; Aug. 2.
Killam, Gaston B., Edmonton, Alberta, Canada. Gas
burner. 1.616,807; Feb. 8.
Killebrew, Charlie A., Eastport, Fla., assignor to W. S.
Sherman, Minneapolis, Minn. Board kicker for endmatching machines. 1,638,310; Aug. 9.
Killefer Manufacturing Company, The. (See Killefer,
Millefer Manufacturing Company, The. (See Killefer,
M., assignor.)
Killefer Mountacturing Company. (See Watters, Daniel
M., assignor.)

M., assignor.)
Killefer, Kobert, assignor to The Killefer Manufacturing
Company, Los Angeles, Calif. Disk cultivator.
1.619,208; Mar. 1.
Killen, George B., Chicago, Ill. Invalid's toilet chair.
1.638,640; Jang. 9.
Killgore, Robert J. (See Marshall, W. H., Killgore, and
Bedortha.)

Bedortha.)

Killinger, Paul, Shippensburg, Pa. Wheel attachment for sleds, 1,637,999; Aug. 2.

Killion, James B., Washington, Ind. Storage plant to preserve by nature, 1,629,392; May 17.

Killion, John H., Chlcago, Ill. Machine for making grooved strips. 1,615,984; Feb. 1.

Killion, Joseph L., Minneapolis, Minn. Fly-paper holder. 1,622,591; Mar. 29.

Killmnick, Samuel. (See Eagles, Joseph, assignor.)

Kilmnick, Samuel. (See Eagles, Joseph, assignor.)

Kilmer, Edgar, Manchester, England. Loom for weaving. 1,639,776; Aug. 23.

Kim, Julius, assignor, by mesne assignments, to T. Jenchner, Pittsburgh, Fa. Sanitary cover. Re16,705; Tenchner, Pittsburgh, Fa. Sanitary cover. Re16,705; Kimball, A., Company. (See Laencher, Frederick W., assignor).

Aug. 16.
Kimball, A., Company. (See Laencher, Freeden), assignor.)
Kimball, A., Company. (See Wallin, Gustaf A., assignor.)
Kimball, A., Company. (See Wallin, Gustaf A., assignor.)
Kimball, Frank I., assignor to Sargent & Company. New
Haven, Conn. Takedown square. 1,615,013; Jan. 18.
Kimball, James L., Salem, Mass. Regulator. 1,634,878;
July 5.

July 5.

Kimbail, James L., assignor to Tuggles-Klingeman Manufacturing Co., Salem, Mass. Damper regulator. 1.649.707; Nov. 15.

Kimbail, Ritchie, New Canaan, Conn. Cigarette container, 1.613.173; Jan. 4.

Kimbail, Wallace D., and A. E. Rideout, assignors to Standard Sealing Equipment Corporation, New York, Kimbail, Wallace D., A. E. Rideout, and M. McFaull, assignors to Standard Sealing Equipment Corporation, New York, N. Y. Filled-carton closing and sealing machine. 1.615.631; Jan. 25.

Kimber, Henry. (See Coale, Robert J., assignor, N. Kimber, Henry. (See Coale, Robert J., assignor, Kimber, Herbert G. (See Parsons, C. A., Cook, and Kimber, Walter E., Highgate, London, assignor to Alax Kimber, Walter E., Highgate, London, assignor to Alax Kimber, Walter E., Highgate, London, assignor to Alax

Kimber.) Kimber. Walter E., Highgate. London, assignor to Ajax Trucks Limited. Manchester, England. Lifting truck or trolley. 1.630.619; May 31.
Kimberlin, William H., Bismarck, N. Dak. Bow-facing oar. 1,624,431; Apr. 12.
Kimberly, Alfred K., assignor to The Multi-Print System Co., Inc., Neenah, Wis. Roller tension device. 1,646,824; Oct. 25.
Kimberly-Chrik Company. (See Mahler, E., and Roth-Child, assignors.)

signor.) Kimble, Raymond T., assignor to The Cambridge Glass Company, Cambridge, Mass. Machine for inishing pressed-glass articles. 1,629.827; May 24. Kime, Charles G., assignor to The Burch Plow Works Co., Crestline, Ohio: Cottonseed cleaner. 1,627,782;

May 10.

Kimme, Rudolph D. (See Kepler, Clell S., assignor).

Kimmel, Abraham, Newark, N. J. Bow tie. 1,646.295;
Oct. 18.

Kimmel, Charles P., Gary, Ind. Rail-holding device.

L.629,344; May 17.

Kimmerling, Michel, Birmingham, Ala. Tire-stripping machine. 1,653,104; Dec. 20.

Kimmerling, Michel, Dec. 20.

Kimma, Eigiro, San Pedro, Calif. Vehicle traffic signal.
Kimma, Bisich, Los Angeles, Calif. Variable condenser,
1.637,646; Aug. 2.
Kimura, Lissich, Los Angeles, Calif. Variable condenser,
1.637,646; Aug. 2.
Kimura, Lawrence Y., Richmond, Calif. Pivoted-type
compass, 1,620,640; Apr. 26.

Kincade, Forrest J., New York, N. Y., assignor, by mesne assignments, to C. 1. Link, Denver, Colo. Film-feeding apparatus, 1,631,137; June 7. Kincaid, Charles W., Wikinsburg, Fa., assignor to West-Kincaid, Charles W., Wikinsburg, Fa., assignor to West-Speed induction-motor set. 1,640,547; Aug., 20. Kincaid, Frank J. (See Small, J. B., and Kincaid). Kind, Ewald J., fr. (See Lochr, L. K., and Kincaid, Kindervater, Julius, Richmond, Va. Locomotive main rod. 1,634,784; July 5. Kichmond, Va. Locomotive main rod. 1,634,786; July 5. Kinder, John A., Moorroe, Wash. Check protector. Kindle, John A., Moorroe, Wash. Check protector. Kindler, Joseph C. Jersey City, and J. J. Kankas, Bayone, N. J. Shiedding taps for use upon clothesilnes. 1,653,855; Dec. 27. Kindrat, Metro J., and H. Zatzerkowny, Detroit, Mich. Newspaper-dispensing machine. 1,622,292; Mar. 22. Kindsvater, Frederick J., Aurora, 111. Automobile radiator emblem. Des. 73,847; Nov. 15. Kindfat, Metro J., and H. Zatzerkowny, Detroit, Mich. Coin-controlled means. 1,649,831; Nov. 22. Kindsvater, Frederick J., Aurora, 111. Automobile radiator emblem. Des. 73,847; Nov. 15. Kindfat, Metro J., and H. Zatzerkowny, Detroit, Mich. Kindrat, Metro J., and H. Satyerkowny, Detroit,

Kinestinetic Fronzes assignor, Ming, Bert W., assignor to Barnes Scale Company, De-troit, Mich. Scale. 1,617,851; Feb. 15. King, Chandler, Chattanooga, Tenn. Bottle. 72,831;

King, Camber, June 14.

June 14.

Line 14.

Li

King, Clarence R., assignor to volve wheel. 1,616,531; Feb. 8.
King, Clifford F., New Orleans, La. Double-acting trap. 1,623,841; Apr. 5.
King, Clifford G., Providence, R. I. Pin. 1,645,649; King, Clifford G., Providence, R. I. Pin. 1,645,649; King, Clifford G., Providence, R. I. Pin. 1,630,705; May 31.
King, Emory A., Corydon, Iowa. Trailer. 1,618,094; Feb. 15.
King, Emory A., Corydon, Iowa. Trailer. 1,618,094; Feb. 15.
King, Ernest V., Topeka, Kans. Photographer's light-distributing means. 1,632,606; June 14.
King, Francis E., Huntington, W. Va. Rail joint. 1,645,364; Cct. 18.
L. 1,645,364; Cct. 18.
L. 1,645,364; Cot. 18.
L. 1,646,364; Cot. 18.
L. 1,646,36

May 3.

King & Hamilton Company. (See Gillman, Albert.

Signor.)

King, Horace W., assignor to King-Seeley Corporation,
Ann Arbor, Mich. Depth-indicating device. 1,634,427;
July 5.

King, Howard K., Philadelphia, Pa., assignor to Chambers Brothers Company. Repressing bricks. 1,630,436;
May 31.

King, Howard K., Philadelphia, Pa., assignor to Chambers Brothers Company. Sheet-feeding machine. 1,652,172;
Dec. 13.

The Howard K., Philadelphia, Pa., assignor to Chambers Howard K., Philadelphia, Pa., assignor to Chambers Howard K., Philadelphia, Pa., 1,653,806; Dec. 27.

Brothers Company, Sheet-feeding machine, 1,002,114; Dec. 13.

Kling, Howard K., Philadelphia, Pa., assignor to Chambers Brothers Company, Sheet feeding, 1,655,806; Dec. 27.

1,029,155; May 10.

King, Jefferson D., Griffin, Ga. Bed brace, 1,643,502; Sept. 27.

Kling, Jefferson D., Griffin, Ga. Bed brace, 1,643,502; Sept. 27.

Kling, Jesse G., assignor to Deico-Light Company, Dayton, One of the Company of the

tem. 1,621,790; Mar. 22.

king, John C., Lumber Company, The. (See Fulton, James O., assignor.)

O., assignor.)

King, John L., Baltimore, Md. Safety razor. 1,653,105; King, Joseph F., Brooklyn, assignor to H. A. Metz, New York, N. Y. Chemical composition. 1,633,213; June 21. King, Joseph M., Detroit, Mich. Carburetor. 1,636,308; July 19.

King, Joseph M., Detroit, Mich. Carburetor. 1,636,308; July 19.

King, Joseph R., Oklahoma City, Okla. Gas heater. 1,636,308; July 19.

King, Kaper R., Oklahoma City, Okla. Gas heater. 1,636,308; July 19.

King, Landreth H., Orange, N. J. assignor to King Mechanism and Engineering Company, New York, N. Y. Dumping truck. 1,633,092; Aug. 16.

King, Louise C., Clevelband, Ohlo. Spectacles. 1,625,614; King, Mark, Jr., New Rochelle, N. Y., assignor to American Telephone and Telegraph Company. Linear measuring device. 1,616,499; Feb. 8.

King Mechanism and Engineering Company. (See King, Landreth H., assignor.)

King, Milford A., Los Angeles, Calif. Apparatus for sinking and cleaning oil and water wells. 1,639,852;

Aug. 23. ng. Nathaniel, and R. A.

Aug. 23.

King, Nathaniel, and R. A. Ashton, assignors to Seneca Falls Machine Company, Fitchburg, Mass. Back squaring attachment for lathes. 1,644,733; Oct. 11.

King, Oral A., South Norfolk, Va. Antiglare attachment for headlights. 1,652,015; Dec. 6.

King, Otis C. F., assignor to Carbic Limited, London, England. Calculating apparatus. 1,645,009; Oct. 11.

King, Percival E., Seymour, Conn. Wickless torch for soldering irons. 1,615,764; Jan. 25.

King, Percival F., Miami, Fla. Piler wench. 1,653,182; King, Phenyatic Tool Company. (See Guyer, William J.

Dec. 20.

King Pneumatic Tool Company. (See Guyer, William J., assignor.)

King Pneumatic Tool Company. (See Hendricks, Albert

King Pneumatic Tool Company. (See Hendricks, Albert E., assignor.)
King, Ralph E., East Orange, and W. M. Beaumont, Summit, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,623,734; Apr. 5.
King, Robert, Pendiston Oreg. Safety connecting hook King, Robert P., Greensboro, N. C. Portable wall cabinet. 1,645,058; Oct. 11.
King, Robert W., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,613,612; Jan. 11.
King, Robert W., assignor to Yestern Electric Company Incorporated, New York, N. Y. Electron-discharge device. 1,613,612; Jan. 11.
King, Robert W., assignor to Yestern Electric Company Incorporated, New York, N. Y. Electron-discharge device. 1,613,612; Jan. 11.
King, Robert W., assignor to Yestern Electric Company Incorporated, New York, N. Y. Electron-discharge fevice. 1,613,612; John V. S. S. Thermionic device and North Market Mark

Feb. 8.
King, Rufus, Plainville, assignor to Bugbee & Nile
pany, North Attleboro, Mass. Bracelet. 1,6:
Feb. 8.
King, Rufus, Plainville, assignor to Bugbee & Nile Niles Com-1.617.290:

Feb. 8.
King, Rufus, Plainville, assignor to Bugbee & Niles Company, North Attleboro, Mass. Watch-bracelet latch. 1,651,134; Nov. 29.
King, Samuel, Carlingford, New South Wales, Australia. Jib-crane excavator. 1,640,124; Aug. 23.
King Sanitary Pipe Cleaner Company. (See Griscom, Alfred C., assignor.)
King-Seeley Corporation. (See King, Horace W., assignor.)

signor.) The Wayne, Ind., assignor to General Signor.) The Company. Automatic pressure regulator. 1,623,842; Apr. 5.

Automatic pressure regulator. 1,623,842; Apr. 5.

1,623,842; Apr. 5.

King Ventilating Company. (See Fedder, Louis J., assignor.)

King Ventilating Company. (See Fedder, Louis J., assignor.)

King Land Company. (See Fedder, Louis J., assignor.)

King, William B., Leaksville, N. C. Combination bench and wardrobe. Des. 73,704; Oct. 25.

King, William B., Leaksville, N. C. Combination bench and wardrobe. Des. 73,704; Oct. 25.

King, William H., Clinton, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Lock for Knowles Loom Works, Worcester, Mass. Lock for Knowles Loom West, Works, Worcester, Mass. Lock Stand, William J., assignor to The E. T. Burrowes Company 12.

King, William P., Syracuse, N. Y. Locking mechanism. 1.645.059; Oct. 11.

King, William S., Hartford, Com. Gravity propeller King, William S., Hartford, Com. Gravity propeller King, William S., Hartford, Com. Gravity propeller Company. Newark, N. J. File. 1,031,212; June 7.

Kingdon, Kenneth H., and I. Langmuir, Schenectady, N. Y., assignors to General Electric Company, Method and apparatus for conducting current. 1,648,183;

Nov. 8.

Kingdon, Kenneth H., and I. Langmuir, Schenectady,
N. Y., assignors to General Electric Company. Eletron-discharge device. 1.648,312; Nov. 8. buck and Co.,
Kingdon, Ralph H., assignor to Sears, Roebuck and Co.,
Kingman, Russell B., Orange, assignor to Metal Textile
Corporation, West Orange, N. Stapling tags to articles. 1.628,381; May 17.

Kings, Thomas W., Harvey, III., assignor to Inc E.
Apr. 12.

Apr. 12.

Kingsbury, Edward J. (See Kingsbury, Harry T. and
B. J.)

Kingsbury, Edward J. Keene, N. H. Automatic drilling E. J., Kingsbury, Edward J. Keene, N. H. Automatic drilling Kingsbury, Edward J. and H. T. Keene, N. H. Automatic feeding device, 1.624.872; Apr. 12. Kingsbury, Harry T. (See Kingsbury, Edward J. and H. T.)

H. T.)

H. T.)

Kingsbury, Harry T. and E. J., Keene, N. H. Automatic hopper-feeding device. 1,650,278; Nov. 22.

Kingsbury Machine Works, Inc. (See Howarth, Harry A. Kingsford, Russell T., Wyncote, assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Grille front for radio loud speakers. Des. 73,261; Aug. 16 Kingsley, Charles B., Claitrion, Pa. assignor to Mississippi Glass Company, Batch feeding to glass tanks. 1,623,637; Apr. 5.

Kingsley, Francis, Pelham Manor, N. Y. Change-making device. 1,627,662; May 10.
Kingsley, Francis, Pelham Manor, N. Y. Polishing shoes 1,635,607; Aug. 9.
Kingsley-Miller Company, The. (See Dewire, John A...

Kingston, Charles T. (See Wallis, H. E., and Kingston.) Kingston, George, Kokomo, Ind. Carburetor. 1,617,599;

Kingston, Charles T. (See Wallis, H. E., and Kingston, Kingston, George, Kokomo, Ind. Carburetor. 1,617,599; Feb. 15.
Kinkade, Willard D. and C. J. Baugh, Barnsdall. Okla. Treating acid sludge to provide a fuel. 1,621,071; Mar. 15.
Kinkaid, Charles R., and E. T. Shreve, Rotan, Tex. Valve-actuating mechanism. 1,634,198; June 25.
Kinkead, Charles B., Huntington, W. Va. Device for use with telephones. 1,632,816; June 28.
Kinkead, Charles B., Huntington, W. Device for use Kinkead, Charles B., Huntington, W. Device for use Kinkead, Charles B., Huntington, W. Device for use Kinkead, Charles M., Boston, Mass. Headlight. 1,628,545; May 10.
Kinker, Clarence C., assignor to The O'Neill Machine

Kinkead, Föwler M., Boston, Mass. Headlight. 1,628,545; May 10.

Kinker. Chrence C., assignor to The O'Neill Machine Council Toledo, Gho.

Kinker. Chrence C., assignor to The O'Neill Machine Council Council

Kinnear, John K., Geneva, Ohio, Handle, 1,641,226; Sept. 8.

Kinnear Manufacturing Company, The. (See Greegor, Ralph H., assignor; Company, The. (See Rush, A. Kinnear, Manufacturing Company, The. (See Rush, A. Kinnear, Manufacturing Company, The. (See Rush, A. Kinnear, Wannear, Manufacturing Company, Theo. Storm-window screen, 1,615,632; Jan. 25.

Kinnebrew, Marcus. (See Jones, W. H., and Kinnebrew, Kinney, Aldon M., Norwood, Ohio, assignor to The Bryant Electric Company, Bridgeport, Com. Electric switch. 1,645,3874 Oct. 11st. Replaceable liner for reverberatory furnaces. 1,645,011; Oct. 11.

Kinney, Herbert A., Tampa, Fla. Fishing lure. Des. 73,503; Sept. 20.

Kinney, James A., Lebanon, assignor to Bethlehem Steel Company, Bethlehem, Pa. Work-handling mechanism Company, Bethlehem, Pa. Die opening and closing mechanism. 1,643,662; Sept. 27.

Kinney, Junes A., Jamaica Plain, assignor to Kinney, Manufacturing Co., Boston, Mass. Vacuum pump. 1,623,315; App. 5.

Kinney, Manufacturing Co., Gee Kinney, Justus R., aser for rotary pumps. 1,623,316; App. 5.

Kinney Manufacturing Co. (See Kinney, Justus R., aser signor.)

signor.)
Kinney, Norton W
Company, Ha:
1,640,359; Aug. Norton W., assignor to Slipper City Wood Heel any, Haverbill, Mass. Wood-heel marker.

Kinney signer Rome Company. (See Hanauer, Darwin, as

Kinney Rome Company. (See Hanauer, Darwin, as signor.)
Kinney-Rome Company. (See Hanauer, Darwin, assignor.)
Kinney-Rome Company. (See Hanauer, Darwin, assignor.)
Kinsey, Edmond E., San Angelo, Tex. Pump jack.
1.632.296; Jun 14
Wauwatosa, Wis. Internal grinder
1.635.137; July 19.
Kinsler, George B., Hartford, Conn. Universal joint.
1.638,400; Aug. 9.
Kinsley, Lewis, Philadelphia, Pa., and J.-W. S. Moss. New
Kinsley, Lewis, Philadelphia, Pa., and J.-W. S. Moss. New
Hosley, Lewis, Philadelphia, Pa., and J.-W. S. Moss. New
Lewis, Philadelphia, Pa., and J.-W. S. Moss. New
Kinsley, Lewis, Philadelphia, Pa., and J.-W. S. Moss. New
Lewis, Philadelphia, Pa., and J.-W. S. Moss. New
Kinsley, Lewis, Philadelphia, Pa., 1845.146; Oct. 11,
Kintner, Alcuin E., Painesville, Ohio, Locking device,
1.621.934; Mar. 22.
Kintner, Alcuin E., Painesville, Ohio, Locking device,
1.625.034; Nov. 22.
Kintner, Alcuin E., Painesville, Ohio, Guard mechanism.
1.650.134; Nov. 22.
Kintz, Alfred G., Wallingford, assignor to International
Silver Company, Meriden, Conn. Frame for a hand
mirror or similar article. Des. 73.748; Nov. 1.
Kintz, Alfred G., Wallingford, assignor to International
Silver Company, Meriden, Conn. Hand mirror frame or
similar article. Des. 73.748; Nov. 1.
Kintz, Earl E., Bucyrus, Ohio, Eyeshield and face protector. 1.635.282; July 12.
Kintz, Robert R., assignor to International Silver Co.,
Meridon, Conn. Dish or similar article. Des. 72.898;
June 21.

ntz, Robert R., assignor to International Silver Co. Meriden, Conn. Tray or similar article. Des. 72.899 June 21. Robert

ntz, Robert R., assignor to International Silver Co., Meridian, Conn. Bowl or similar article. Des. 72,900;

Meridian, Conn. Bowl or similar article. Des. 72,900; June 21.
Kintz, Robert R., assignor to International Silver Co., Meriden, Conn. Cup or similar article. Des. 72,901; Kintzele, Julius H., St. Louis, Mo., assignor to Dryden Rubber Company, Chicago, III. Machine for piscing washers upon the pins of rubber-heel molds. 1,626,039; Apr. 26.

Kinyon, Alonzo G., Allentown, assignor to J. W. Fuller, Catasauqua, Pa. Conveying apparatus. 1,652,281; Dec. 13.

Kinzbach, Frank, Houston, Tex. Whipstock. 1,634,582;

July 5. Kinzel,

July 5.
Kinzel, Arch H., Akron, Ohio. Gasket. 1,843,561;
Kinzel, Arch H., assignor to The Akron Metallic Gasket
Company, Akron, Ohio. Gasket. 1,616,088; Feb. 1.
Kinzer, Sam C., Bstill, Ky. Trap. 1,623,925; Apr. 5.
Kinzie, Charles J., Nigarar Falls, assignor to The Titinium Alloy Manufacturing Company, New York, N. Y.
Zirconjum compound and making same. 1,618,286;

Kinzie, Charles J., Niagara Falls, assignor to The Tita-nium Alloy Manufacturing Company, New York, N. Y. Zirconium compound and making same. 1,618,287;

Feb. 22.
Kinzie, Charles J., Niagara Falls, assignor to The Titanium Alloy Manufacturing Company, New York, N. Y.
Zirconium oxtle silica composite and making same.
Kinzie. Elmer G., Loyansport, Ind. Flying rachine.
1,635.892; July 12.
Kiper, Stefan, Anderson, Ind. Wheeled toy. 1,623,033;
Mar. 29.

Aper, Steian, Anderson, Ind. Wheeled toy. 1,622,033; Mar. 29.

Kipp, Orin L., St. Paul, Minn. Concrete-pavement finishing machine. 1,629,276; May 17.

Kipp. Roy H. Chicago. H., assignor to International results of the control of th

Kirby, Incorporated. (See Kirby, G. T., and Day, assignors.)

signors.)
Kirby, James B., West Richfield, Ohlo. Rebound retarder. 1,641,334; Sept. 6.
Kirby, James W., Harlan, Iowa. Stock waterer.
1,646,532; Freb. 8.
Kirby, Theodore. New York, N. Y. Powder container.
1,647,527; Nov. 1.
Kirby, Walter B., Chappaqua, assignor to Clarence Whitman & Sons, Inc., New York, N. Y. Textile fabric or
similar article of manufacture. Des. 74,013; Dec. 6.
Kirby, Warren J., Miami, Ariz. Rock-drill bit. 1,627,909;
May 10.

May 10.

Kirch, Charles, Pasadena, Calif. Safety device and bumper. 1,621,635; Mar. 22.

Kircheisen, Theodor, Dessau in Anhalt, assignor to I. G. Farbenindustrie Aktlengesellschaft, Frankfort, Germany. Fast dyeing on the fiber. 1,646,296; Oct. 18.

Kirchen, Otto J., Lansing, Mich. Liquid-fuel burner. 1,640,240; Aug. 23.

Kirchen Otto J., Lansing, Mich. Oll heater. 1,640,241; Aug. 23.

Aug. 23: Lansing, anch. On neatest. 1,630,241; Aug. 23: Liner. Johann. Wetzikon, Switzerland. Motor brakes 1,637,117; July 26. Kirchen Sciency. Johann. Wetzikon, Switzerland. Motor brake for autos. 1,637,118; July 26. Kircher, Raiph N., assignor to West Bend Aluminum Company. West Bend. Wis. Cover indexing device and fastener for cooking utensils. 1,639,033; Aug. 16. Kircher. Raiph N., West Bend. Wis., assignor to West Ing. 1,639,034; Aug. 16. Kircher. Raiph N., assignor to West Bend. Aluminum Company. West Bend. Wis. Supporting kettle balls. 1,644,063; Oct. 4. Kircher, Raiph N., assignor to Elias Relss and Company. Wew York, N. Y. Textile fabric. Des. Kirchhoff. Ernest, Great Kills, assignor to Elias Relss and Company. New York, N. Y. Textile fabric. Des. Kirchhoff. Ernest, Great Kills, assignor to Elias Relss and Company. New York, N. Y. Textile fabric. Des. 72,675; May 17. Kirchhoff, Hermann. (See Kaltwasser, O., and Kirchhoff.)

Kirchhoff. William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Dough molder. 1,620,559;

Nov. 29.

Kirk, Lawrence M., Newton, Mass. Compass attachment for writing implements. 1,649.353: Nov. 15.

Kirk, Leotis W. (See Hamliton, E. H., and Kirk.) Kirk, Leotis W. (See Hamliton, E. H., and Kirk.) Kirk, Percy and S. M., London, England. Phoe-nez and spectacles. J.622.724; Mar. 29.

Kirk, Robert W., Adrian, Mich., assignor to American Cham Company, Inc. Automobile bumper. 1,629,509; May 24.

May 24. rk. Samuel and Son, Incorporated. (See Kirk, Henry

Kirkpatrick, George M., Pittsburgh, Pa. Fluid separator. 1,630,748; May 31.
Kirkpatrick, Richard J., Dodge City, Kans. Valve-spring compressor. 1,619,870; Mar. 8.
Kirkpatrick, Robert S., Des Moines, Iowa, assignor to J. B. Ladd, Des Moines, Iowa, Caster centering and retaining device. 1,625,213; Apr. 19.
Kirkpatrick, Roy A., executor. (See Clark, Philippe L.)
Kirkpatrick, Roy A., executor. (See Clark, Philippe L.)
Kirkpatrick, William C., Alhambra, assignor to National Refining Process Corporation, Los Angeles Calif., Ols.
Kirkwood, Maclean. (See Gannett, D. K., and Kirkwood, Kirkwood, Matida A., Pittsfield, Mass. Window-cleaning device. 1,647,138; Nov. 1.
Kirn, Max, assignor to Siemens & Halske Aktiengesell-schaft, Siemensstadt, near Berlin, Germany. Electrical transmission system. 1,634,684; Dec. 27.
Kirn, William, Solomon, Kans. Door latch. 1,617,641; Feb. 16.

Kirn, Feb.

Kirn. William, Solomon, Kans. Love at the Kirsh. Beb. 15.
Kirnbauer, Michael, Forest Park, III. Check for garage-door-closing means. 1,620,109; Mar. 8.
Kirner, Anton, Neustadt, Germany. Motion-recording apparatus. 1,642,114; Sept. 13.
Kirner, Josef, Stuttgart, Germany. Bearing for spinning spindles. 1,631,736; June 7.
L. 1,642,915; Sept. 20.
Kirsch. George H. (See Keenan, C. J., Kennedy, and Kirsch.)

Kirsch.) Kirsch. Jack, and A. Glieberman, Brooklyn, N. Y. Hand bag. Des. 73,614; Oct. 11. Kirsch, Michael J., Seattle, Wash. Combined cartridge, kinife, and ax belt. 1,617,600; Feb. 15. Kirschbung, Albert, Newark, N. J. Door. 1,619,578; Mar. 1. Kirschberg, Sigmund, San Francisco, Calif. Bedspring Kirschberg, Sigmund, San Francisco, Calif. Bedspring Kirschbergun, Lester. (See Rahr, C. E., and Kirschbraun, Lester. (See Rahr, C. E., and Kirschbraun).

braun)
Kirschbraun Lester, Chicago, Ill., and R. T. Pollock,
Boston, Mass., assignors to Universal Oil Products
Company, Chicago, Ill. Valve. 1,638,162; Aug. 9.

Kirschbraun, Lester, Chicago, Ill. Hydrocarbon fuel and making same. 1,614,559; Jan. 18.
Kirschbraun, Lester, Chicago, Ill. Combustible fuel and making same. 1,614,560; Jan. 18.
Kirschbraun, Lester, Chicago, Ill. Motor fuel and making same. 1,614,735; Jan. 18.
Kirschbraun, Lester, Chicago, Ill. Making bituminous emulsions. 1,615,303; Jan. 26.
Lin. Making multiply waterproof sheets. 1,616,901; Feb. 8.
Kirschbraun, Lester, Chicago, Ill. Making multiply waterproof sheets. 1,616,902; Feb. 8.
Kirschbraun, Lester, Chicago, Ill. Process and apparatus for making paper. 1,616,902; Feb. 8.
Kirschbraun, Lester, Chicago, Ill. Bituminous composition and making same. 1,620,899; Mar. 15.
Kirschbraun, Lester, Chicago, Ill. Bituminous composition and making same. 1,620,899; Mar. 15.
Kirschbraun, Lester, Chicago, Ill. Bituminous composition and making same. 1,620,899; Mar. 15.
Kirschbraun, Lester, Chicago, Ill. Making waterproof composition and product produced thereby. 1,621,791; Kirschbraun, Lester, Chicago, Ill. Making maner.

Kirschbraun, Lester, Chicago, III. Making paper.

Agrael Lester, Chicago, III. Making paper.

Lester, Chicago, III. Making paper.

Lester, Chicago, III., and W. H. Cady, Bostrischbraun, Lester, Chicago, III., and W. H. Cady, Bostrischbraun, Lester, Chicago, III., and C. E. Rahr, assignors to The Flintkote Company, Boston, Mass.

Apparatus for saturating materials. 1,631,826; June 7.

Kirschbraun, Louis. (See Colvin, W. J., and Kirschbraun, Louis. (See Colvin, W. J., and Kirschbraun, Louis. (See Colvin, W. J., and Kirschbraun).

Kirschbraum, Louis. (See Colvin, W. J., and Kirsch-Kirschenbaum, Hayman, New York, N. Y. Reenforced pocket, 1,643,162; Sept. 20.
Kirschenbaum, Issac, New Brunswick, N. J. Steaming brush. 1,641,037; Aug. 30.
Kirschenbaum, Issac, New Brunswick, N. J. Steaming brush. 1,641,037; Aug. 30.
Kirschom, Gustaf N. Sait Lake City, Utah, assignor to United States Smetting, Refining & Mining Company, Portland, Me. Controlling evolutions of elemental sulphur. 1,640,837; Aug. 30.
Kirschom, M. J. Keyboard cleaner. 1,635,127 aug. 30.
Kirstane, Man M., Indore. Central India. Optical system for viewing tubes. 1,655,575; Dec. 20.
Kirzner, Samuel, Malden, Mass. Ash tray. 1,647,006; Oct. 25.
Kischel, Erwin L., and W. M. Seitzinger, Chicago, Ill.,

Oct. 25.

Kischel, Erwin L., and W. M. Seitzinger, Chicago, Ill., assignors to Union Bag & Paper Corporation, New York, N. Y. Bag expander. 1,815,014; Jan. 18.

Kisco Works, Inc. (See Larson, I. C., and Cooper,

Kied. Works. 16. (See Larson, I. C., and Cooper, assignors.)
Rislinger, Joseph B., assignor to M. B. Kislinger, New York, N. Y. Watch. Des. 73,322; Aug. 23.
Kislinger, Joseph B., assignor to M. B. Kislinger, New York, N. Y. Watch. Crystal Des. 73,360 Aug. 23.
Kislinger, Joseph B., assignor to M. B. Kislinger, New York, N. Y. Watchense. Des. 73,361; Aug. 23.
Kislinger, Joseph B., assignor to M. B. Kislinger, New York, N. Y. Locket. Des. 73,362; Aug. 23.
Kislinger, Navie B. (See Kislinger, Joseph B., assignor.)
Kislinger, Marie B. (See Kislinger, Joseph B., Nemmba. Company, Company,

Kistler, A Mar. 22 Anna, Roseland, Nebr. Brooder. 1,621,544;

Kistier, Anna, Roseland, Nebr. Brooder. 1,621,544; Mar. 22.
Kistner, Herman H., Elizabeth, N. J. Work holder, 1,654,174; Dec. 21, Nev. Heat retaining for engines. Kistope, 1,654,174; Dec. 21, Nev. Heat retaining for engines. Kistope, Robert R., Ridley Park, J. L. Lippard, and J. E. Mullan, Philadelphia, assignors to Bayuk Cigars Incorporated, Philadelphia, Pac. (igar bunch machine. 1,641,816; Sept. 6, Ridley Park, and J. E. Mullan, assignors to Bayuk Cigars Incorporated, Philadelphia, Pac. (Kitchel, Robert R., Ridley Park, and J. E. Mullan, assignors to Bayuk Cigars Incorporated, Philadelphia, Pac. (Kitchel, Holder, 1,643,895; Kitchel, Horace G., Greenwood, Miss. Hoist. 1,433,895;

Kitchell, Horace G., Greenwood, Miss. Jan. 11. Hoist. 1,613,895;

Jan. 11.

Kitchin, Frank G., Anne Arundel County, Md. Window operator. 1,631,490; June 7.

Kitchin, John C., Gridley, Calif. Antirodent preparation. 1,653,710; Dec. 27.

Kitley, Clyde, Berkeley, Calif. Dental-floss holder. 1,640,607; Aug. 30.

Kitrell, Virgil H., University Place, Nebr. Clutch. 1,629,036; May Mr. University Place, Nebr. Clutch. 1,629,036; May Mr. See Noter, Maurice D., assignor.)

Kitson Machine Shop. (See Curley, Robert S., assignor.)

Kitson Machine Shop. (See Whittier, J. K., Langevin, and Curley, assignor.)

Curley, assignors.)
tson Machine Shop. (See Woodward, John W., as-

signor.) Kittelson, Halmer C., deceased; J. O. Estrem, admit trator, assignor to Standard Chain Company, Minneapolis, Minn. Chain fastener. 1,613,278; Jan Kittinger, Otis A., Pearl City, Hawaii. Rotating spikler. 1,618,537; Feb. 22.

Kittinger, Otis A., San Anselmo, Calif. Rotating sprin-kler. 1,018,538; Feb. 22.

kler. 1,018,538; Feb. 22.
Kittl, Theodor. (See Kemn, P., and Kittl.)
Kittredge, Ernest E., J. A. Forster, and R. D. Johansen,
Alameda, Calif. Electric water heater. 1,614,620;
Jan. 18.

Alameda, Calif. Electric water heater. 1,044,520 v. Jan. 18.
Kittredge, Ernest E., J. A. Forster, and R. D. Johansen, Alameda, Calif. Induction heater, 1,653,614 ; Dec. 20.
Kitzeman, George G., Los Angeles, Calif. Water heater. 1,617,601 ; Feb. 15.
Kitzeman, George G., Chicago, Ill. Water heater. Kitzeman, George G., Chicago, Ill. Water heater. Kitzinger, Edward, et al. (See Hertel, Carl L., assignor). Kitzingler, Edward, et al. (See Hertel, Carl L., assignor). Kitzmiller, Edaine, Oakland, Calif. Mechanical game device. 1,650,135; Nov. 22.
Kitzul, William, Hamtramck, Mich. £azor 1620,901; Mar. 15.

vice. 1,650,135; Nov. 22.

Kitzul, William, Hamtranck, Mich. £azor 1 620,901;
Mar. 15.

Kivlan, John L. Boston, Mass. Closure for fruit jars.

1,640,591; Nov. 15.

1,640,592; Nov. 15.

1,640,590; Nov. 15.

1,640,600; Nov. 15.

Kjellberg, Carl F. G., Stockholm, Sweden. Explosion engine. 1,614,736; Jan. 18.

Kjellstrom, John H., assignor to J. L. Clark Manufacturing Co., Rockford, Ill. Face-powder container.

1,630,437; May 31.

Kjellstrom, John H., assignor to J. L. Clark Manufacturing Co., Rockford, Ill. Face-powder container.

1,630,437; May 31.

Kjelsberg, Harald A. Wilkinsburg, Fa. assignor to West-bie shaft. 1,649,119; Nov. 15.

Kjerner, Ragnar L., Crestwood, N. Y. Radiator.

1,630,749; May 31.

Kjetsaa, Chester E., Philadelphia, Pa. Toilet box.

1,623,877; Apr. 5.

Klaasen, Benjaimi J., Detroit, Mich. Wall construction.

1,619,300; Mar. 1.

Klatos, Raiph, Chieage, Ill. Combination tool. 1,620,262;

Klafte Albart Munich Germany. Lock for nuts and

Mar. 8.

Klafke, Albert, Munich, Germany. Lock for nuts and screw heads. 1,643.384; Sept. 27.

Klaften, Berthold, Berlin-Grunewald, Germany. TherKlates, Berthold, Berlin-Grunewald, Germany. Thertion of nuclear substituted aromatic cyanogen mercury
compounds. 1,618.095; Feb. 15.

Klages, Frank E. P., assignor to The Powers Regulator
Company, Chicago, Ill. Method of and apparatus for
controlling the moisture content of paper. 1,563.5817;

June 28.
Klahn, Emil, New Vernon, N. J. Sustaining bodies in space. 1,629,577; May 24.
Klaiber, Aldert, Ridgewood, N. V. Medical apparatus for the treatment of the intestines. 1,628,540; May 17.

May 17.

Klain, Joshua J., deceased, Wynnefield, Philadelphia, Pa.;
L. M., Klain, executrix. Storage-battery fluid.
1.652,945: Dec. 13.

Klain, Lillian M., executrix. (See Klain, Joshua J.)

Klamroth, Wilfried, New York, N. X. Running-board
luggage carrier for vehicles. 1,623,794; Apr. 5.

Klanecky, Henry, Sargent, Nebr. Governor. 1,621,545; Klanecky, Mar.

Mar. 22.
Klann, August A., Waynesboro, Va. Electromagnetic relay. 1,636,609; July 19.
Klann, Rudolph, Chicago, Ill. Flush valve. 1,637,825;
Klang, Leone J., Chicago, Ill. Aeronautical advertis
ling device. 1,615,947; Feb. 1.
Klappal, Emiel L. (See Kollman, M. L., and Klappal.)
Klappenerger, Joseph C., Baltimore, Md. Adjustable
shade bracket. 1,622,450; Mar. 29.
Klapper, Theodor B., Garden City, N. Y. Windshield
Klasing, Augustus F. (See Sherwood, Glenn L., assignor.)

Signor. Augustus F., Chicago, Ill., assignor to The Kla-sing Car Brake Company. Brake-operating apparatus. 1,621,642; Mar. 22. Klasing, Augustus F., Chicago, Ill., assignor to The Kla-sing Car Brake Company. Brake mechanism. 1,621,843;

Mar. 22

Klasing, Augustus F., Chicago, Ill., assignor to The Klasing Car Brake Company. Car brake. 1,621,844; Mar. 22.
Klasing Car Brake Company, The. (See Klasing, Augustus F., assignor.), Klasnich. John, Cleveland, Ohio. Indicator. 1,635,128: July 5.

Klasnich, John, Levensun, July 5, Klasstorner, Samuel, (See Eaith, S. and Klasstorner, Stanuel, See Eaith, S. and Klasstorner, Stanuel, See Eaith, S. and Klasstorner, Stanuel, S. Schwanhalmon, the Milh, as signors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort, Germany, Production of methane. 1.643.663; Sept. 27.
Klauer Manufacturing Co. (See Flagge, Phillipp F., as-

Klaus, Daniel, Golden Valley, N. Dak. Bolt. 1,644,477;

Klaus, Fred R., assignor to The American Welding and Manufacturing Company, Warren, Ohio. Cushion the structure and method of applying to wheels. 1,638,810;

Aug Aug. 9.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Belt shifter, 1,620,214; Mar. 8.

Klausmeyer, David C., assignor to The Cincinnati Bick-ford Tool Company, Cincinnati, Ohio Aran mount with accessible gear unit. 1.622.725; Mar. 29. Klausmeyer, David C., Cincinnati, assignor to The Cin-cinnati Bickford Tool Company, Oakley, Cincinnati, Qhio. Engke mechanism for drill spindles. 1,363,4,189; Ohio. I June 28

June 28.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Spring-suspended sievev. 1,560.756; Nov. 29.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Lubricating system for drill heads. 1,635.576; Dec. 20.
Klautter, August G. (See Schmidt, O. C., and Kla-Klautter, August G. (See Schmidt, O. C., and Kla-

Klawitter, Carl E. (See Pagel, F. F., and Kalwitter.) Klebanoff, David. et al. (See Grossman, Samuel, signor.)

Klebanoff and Grossman. (See Grossman, Samuel.) Klebanoff, Kel, and Grossman. (See Grossman, Samuel,

Klebanoff, Kel, and Grossman, (See Grossman, Samuel, assignor).
Kleber, Jackson O., Pittsburgh, Pa. Radio-circuit-testing instrument. 1,646,132: Oct. 18.
Kleckner, Arthur C., assignor to Webster Electric Company, Rache, Wis. Actuating means for magnetos. 1,634,534; July 5.
Klee, Joseph, Munich, Germany. Disk wheel. 1,651,715; Dec. 6.
Klee, Asseph, Munich, Germany. Geo. Laidlaw, Walter G., as-

signor.)
Kleen Products Company, Inc. (See Bothe, Andreas,

assignor.) affman, John, Hibbing, Minn. Snare. Kleffman

Aleen Products Company, Inc. (See Bothe, Andreas, Affigur.)

Jan. 25.

Klehr, William, Forest Hills, assignor to E. F. Caldwell & Co., Inc., New York, N. Y. Globe for lighting fixtures. Des. 71,802; Jan. 4.

Klein, Alfred M., Wellington, Ohlo, assignor, by mesne assignments, to The Piercy Company, Dover, Del. Apparatus for treating food-containing materials. Klein, August C., Jamaica Plain, Mass., assignor to Stone & Webster, Inc., Boston, Mass. Making carburcted water gas. 1,630,300; May 31.

Klein, August C., Jamaica Plain, assignor to Stone & Webster, Inc., Boston, Mass. Making carburcted water gas. 1,630,300; May 31.

Klein, August C., Jamaica Plain, assignor to Stone & Webster, Inc., Boston, Mass. Making carburcted water gas. 1,630,301; May 32.

Klein, Algust C., Jamaica Plain, assignor to Stone & Webster, Inc., Boston, Mass. Making carburcted water gas. 1,630,301; May 32.

Klein, Algust C., Jamaica Plain, assignor to American Telephone and Telegraph Company. Cable clamp and bridle ring. 1,625,897; Apr. 28.

Klein, Charles H., Jersey City, N. J., assignor to American Telephone and Telegraph Company. Nail-expaniering and Foundry Company, Pittsburgh, Pa. Material-handling apparatus. 1,637,420; Aug. 2.

Klein, Clarence J., Bellevue, assignor to United Engineering and Foundry Company, Pittsburgh, Pa. Material-handling apparatus. 1,637,420; Aug. 2.

Klein, Clarence J., Bellevue, assignor to Englander Spring Bed Company, Brooklyn, N. Y. Glide hammock. 1,618,593; Feb. 22.

N. Y., assignor, by mesne assignor ments, to Grasselli Chemical Company, Cleveland, Ohlo. Preparation of substituted guandines. 1,648,184; Nov. 8.

ov. 8. in, Frankfeldt and Arnoff, Inc. (See Klein, Robert,

Nov. 8.
Klein, Frankfeldt and Arnoff, Inc. (See Assignor.)
Klein, Brad E., Cincinnati, Obio. Check-room appliance.
It 62,1792; Mar. 22.
It 62,1792; Mar. 22.
It 62,1792; Mar. 25.
It for the Watson-Stillman Co., New York, N. Y. Braiding machine. 1,615,587; Jan. 25.
Klein, Friedrich W. (See von Hütschler, Gustav, assignors.)

signor.)
Klein, George S., Granger, Wash. Knife-grinding attachment for meat-grinding machines. 1,631,491; June 7.
Klein, Georges, Parls, France. Counterbalancing means for movable devices. 1,639,094; Aug. 16.
Klein, Herbert F., Deerfield, Wis. Linoleum-display rack. 1,627,783; May 10.
Klein, Josef, Dresden-Loschwitz, Germany. Advertising apparatus. 1,560,630; Nov. 29.
Klein, Karl, St. Louis, Mo. Motor vehicle. 1,619,823; Klein, Mathias & Sons, Inc. (See Rose, William, assignor.)

signor.) Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Chandelier. Des. 72,832;

Klein, Max, Brooklyn, assignor,
Inc. New York, N. Y. Chandeller. Den: 12,002,1
Inc. New York, N. St. Arm for lighting fixtures.
Klein, Max, Brooklyn, assignor to Shapiro & Aronson,
Inc., New York, N. Y. Arm for lighting fixtures.
72,833; June 14.
Klein, Max, Brooklyn, assignor to Shapiro & Aronson,
Inc., New York, N. Y. Canopy for lighting fixtures.
72,834; June 14.
Klein, Max, Brooklyn, assignor to Shapiro & Aronson,
Inc., New York, N. Y. Wall bracket. 72,835; June 14.
Klein, Max, Brooklyn, assignor to Shapiro & Aronson,
Inc., New York, N. Y. Bracket back for lighting fixtures. 72,836; June 14.
Klein, Max, Brooklyn, assignor to Shapiro & Aronson,
Inc., New York, N. Y. Wall bracket. 72,837; June 14.
Klein, Max, Brooklyn, assignor to Shapiro & Aronson,
Inc., New York, N. Y. Wall bracket. 72,837; June 14.
Klein, Max, Brooklyn, assignor to Shapiro & Aronson,
Inc., New York, N. Y. Bracket back for lighting fixtures. 72,838; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., Nek York, N. Y. Lighting fixture. 72,839; Jien 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Wall bracket. 72,840; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Bracket back for lighting fixtures. 72,841; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Bracket back for lighting fixtures. Des. 72,842; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Lighting fixture. Des. 72,843; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Arm for lighting fixtures. Des. 72,844; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Plate for lighting fixtures. Des. 72,844; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Wall bracket. Des. 72,846; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Bracket back for lighting fixtures. Des. 72,847; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Bracket back for lighting fixtures. Des. 72,847; June 14.

June 14.

Kulin Max, Brooklyn, assignor to Shapiro & Aronson, Luc, New York, N. Y. Bracket back for lighting fix-tures. Des. 72.849; June 14. Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Wall bracket. Des. 72.850; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson Inc., New York, N. Y. Wall bracket. Des. 72,851 June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc. New York, N. Y. Ceiling light. Des. 72,852; June 14.

sin, Max, Brooklyn, assignor to Shapiro & Aronson, inc., New York, N. Y. Ceiling light. Des. 72.853;

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Lighting fixture. Des. 72,854; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson, Inc., New York, N. Y. Lighting fixture. Des. 72,855; June 14.

Klein, Max, Brooklyn, assignor to Shapiro & Aronson Inc., New York, N. Y. Wall bracket. Des. 73,000

Inc., New York, N. Y. Wall bracket. Des. 73,000; July 5. Klein, Michael A., Chicago, Ill. Bottle. 1,625,728;

Apr. 19. Apr. 19. ein, Paul M., Cedarhurst, N. Y. Oil burner. 1,647,409;

Nov. I. Richard M., assignor to F. A. D. Andrea, Inc., New York, N. Y. Adjustable condenser. 1.641,635; Klein, Robert, assignor to Klein, Frankfeldt and Arnoff,

lein, Robert, assignor to Klein, Frankfeldt and Arnoff, Inc., Brooklyn, N. Y. Convertible cap. 1,648,551 Nov. 8. 1,648,551;

100. Brooklyh, N. Y. Convertible cap. 1,638,561;
100. Stanley, assignor to The Mendel-Drucker Company, Cincinnation of the Mendel-Drucker Company, Rich, William F., St. Louis, Mo. Window-casement control. 1,632,885; Mar. 29. [Kelent, Villam F., St. Louis, Mo. Window-casement control. 1,622,885; Mar. 29. [Kelent, L. B., Rubber Company. (See Guinzburg, Ralph K., assignor.)
1, Richiert, I. B., Rubber Company. (See Guinzburg, Victor, Kleinert, I. B., Rubber Company. (See Henry, Beulah L., assignor.)
1, Richinamer, Bertha, Kankakee, Ill. Curtain or drapery holder. 1,654,002; Dec. 27. [Kleinhans, Arthur B., Easton, Pa. Building construction. 1,633,446; June 21. [Kleinhans, H., Company. (See Mann, Seward W., assignor.)

signor.) leinman, Jack, Bronx, assignor to Henry Hyman & Co., Inc., New York, N. Y. Telephone receiver. 1,620,263; Mar. 8. New York, N. Y. Top. 1,616,224; leinman, Jacob L., New York, N. Y. Top. 1,616,224; Kleinman

reb. 1. leinschmidt, Edward E. (See Faller, E. A., and Klein-schmidt.)

Schmidt., Edward E., Brooklyn, N. Y., assignor, by mesne assignments, to Morkrum-Kleinschmidt Corporation, Chicago, Ill. Synchronizing system. 1,616,808; Feb. 8.

Klens, S., idt. Edward E. Long Island City, N. Y. Kleinsch, McKrum-Kleinschmidt Corporation, City III. Motor-control system. L620,359; Mar. 8. Kleinschmidt, Edward E., Brooklyn, N. Y., assignor, meane assignments, to Morkrum-Kleinschmidt Constion, Chicago, III. Printing telegraphy. 1,620,6 Chicago,

Mar. 15.

Kleinschmidt, Edward E., Brooklyn, N. Y., assignor, by mesne assignments, to Morkrum-Kleinschmidt Corporation, Chicago, Ill. Printing telegraphy. 1,632,297;

Kleinschmidt, Edward E., Brooklyn, N. Y., assignor, by mesne assignments, to Morkrum-Kleinschmidt Corporation, Chicago, Ill. Signaling transmitter. 1,632,298; June 14. Kleinschmidt, Emil, Frankfort-on-the-Main, Germany. Production of electrodes. 1,639,188; Aug. 16. Kleinsmith, Frederick, Indianapolis, Ind. Cushion adjuster. 1,648,715; Sept. 27. Kleinwort, Heinrich, Obendeich, near Gluckstadt, German, 1,644,070,111 for cutting and dredging diches. 1,644,070,111 for cutting and dredging diches. 73,039; July 12. Kleinm. Edwin O., Saginaw, Mich. Study chair. Des. 73,039; July 12.

Klemm, Hanns, Sindelfingen, assignor, by mesne assignments, to Daimler-Benz Aktiengesellschaft, Berlin, Germany, Flying machine, 1,651,716; Dec. 6.
Klemme, Maurice G., Belleville, Stove. 1,645,244; G.,

11. Klemoff, Paul, assignor to General American Tank Car Corporation, Chicago, Ill. Hopper car. 1,628,156; May

Klemoff, Paul, assignor to General American Tank Car Corporation, Chicago, Ill. Car underframe. 1,631,685;

June 7.
Klemoff, Paul, assignor to General American Tank Car Corporation, Chicago, Ill. Tank car. 1,635,717;

July 12.
Klemperer, Wolfgang B., assignor to Goodyear-Zeppelin
Corporation, Akron, Ohio. Flanged fin. 1,623,938; Apr. 5.

Apr. 5.

Klemte, August, Bremen, assignor to G. Kuepker, Wilhelmshaven, Germany, Football. 1,618,950; Feb. 22.

Klemte, August, Bremen, assignor to G. Kuepker, WilKlenck, Louis G., Jr., St. Paul, Minn. Radiator protector. 1,629,216: May 17.

Klenk, George, assignor to Allis-Chalmers Manufacturing
Company, Milwaukee, Wis. Manufacturing turbines.

Klett Manufacturing Company. (See Klett, Robert E.,
assignor: 1.

assignor.)

assignor.) Klett, Robert E., Ridgefield Park, N. J., assignor to Klett Manufacturing Company, Inc., New York, N. Y. Syringe. 1,648,135; Nov. S. Kleuver, Anna J. (See Cook, Frank J., assignor.) Klevins, Jaurice. (See Boyer, H., and Klevins.) Klevins, Jaurice. (See Boyer, H., and Klevins, Ellipser, Park, and Kleber, Park, assignor.) Kleber, Paul, assignor.) To The Klieber-Dawson Machine

radi, assignor.)
Klieber, Paul, assignor to The Klieber, Daul, assignor to The Klieber, Dauson Machine Company, Indianapolis, Ind. Wood-shaping machine. 1,615,088; Jan. 18.
Kliegi, Anton T., et al. (See Linnebach, Adolph, assignor.)

Kliegl, John H., et al. (See Linnebach, Adolph, as-

signor.)

1.625.848; Apr. 5.

Kline. Ambrose E. Brookville, Pa. Revolving sign.
1.618.343; Peb. 22.

Kline. Arthur H. Chicago, Ill. Separable attachment plus. 1.648.361; Nov. 8.

1.634.221; Dec. 27.

Kline. Fred J. (See Ellias, Justin A., assignor.)

Kline. Fred J. (See Ellias, Justin A., assignor.)

Kline. Fred J. (See Ellias, Justin A., assignor.)

Kline. Fred J. (See Alver. Victor. assignor.)

Kline. Harmon J., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,651,281;

Nov. 29.

Kline. Richard E. (See Grace. George G., assignor.)

Nov. 29.

Kline, Richard E. (See Grace, George G., assignor.)

Kline, Richard E. (See Keim, L. H., and Kline.)

Kline, Victor H., Lakewood, assignor to The American

kline, Victor H., Lakewood, assignor to The American

having chancenble form.) 1,627,242; May 3.

Klinenberg, Edward, Chicago, Ill. Ice-cream cabinet.

1,633,588; June 28.

Kling, Fred E., Youngstown, Ohio. Hot blast stove.

1,644,570; Nov. 1.

Kling, Loval, Lived L., Kolso, Wash. Actuating attachment

Klinge, John, Dubuque, Iowa. Rotary pump. 1,628,888;

May 17.

Klingelhöffer, Reinhard, Warden-Ruhr, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Recooling device for condensing locomotives. 1,617,057;

Feb. 8.
Klingelsmith, Stuart L., Alhambra, and F. J. Koepke, Los
Angeles, Calif. Collapsible baby carriage. 1,633,864;

June 28.

"June 28.

"

Klingerein, Willium, et al. (See Nathan, Samuel, assignor).

Klink, Heber C., Toledo, Ohio. Instruction device for musical instruments. 1,640,125; Aug. 23.

Klinke, Oscar, assignor to Smith & Crosby, Attleboro, Edines, Control of Smith & Crosby, Attleboro, Mars. Bracelet. Des. 72,369; Apr. 5.

Klinke, Oscar, assignor to Smith & Crosby, Attleboro, Mass. Bracelet. Des. 72,369; Apr. 5.

Klinker, Herman H. D., New York, N. Y. Landing gear for airships. 1,618,441; Feb. 22.

Klinker, Herman H. D., New York, N. Y. Landing gear for airships. 1,618,441; Feb. 228.

Klinker, Joseph, Clevelado, Ohio. Guard for fishhooks. 1,629,510; May 24.

Kliper, Joseph, Clevelado, Ohio. Guard for fishhooks. 1,629,510; May 24.

Klitenick, Mark. (See Turtle, D., and Klitenick.)

Kloebs, Gustaw H., Philadelphia, Pa. Cipheriess device to the control of the control

Slopsteg, Paul E., assignor to Central Scientific Company, Chicago, Ill. Advertising device. 1,630,490; May 31.
Klopsteg, Paul E., assignor to Central Scientific Company, Chicago, Ill. Educational apparatus. 1,630,234; July 19.
Klopsteg, Paul E., and H. P. Sachse, assignors to Central Scientific Compay, Chicago, Ill. Mercurial barometer. 1,632,084; July 14.
Klopsteg, Paul E., and W. H. Stannard, Homewood, assignor to Central Scientific Company, Chicago, Ill. Thermosensitive circuit controller. 1,629,710; May 24.
Klopsteg, Paul E., and W. H. Stannard, Homewood, assignor to Central Scientific Company, Chicago, Ill. Circuit breaker. 1,629,711; May 24.
Kloss, Alex, Aachen-Rothe Erde, Germany. Mud guard for vehicles. 1,631,320; June 7.
Kloss, Charles F., New Haven, Conn. Safe. 1,637,381; Aug. 24.

Kloss, Charles F., New Haven, Conn. Safe. 1,637,681; Aug. 2.
Kloss, Vitalis M., assignor of one-half to E. W. Tars. 9, Minneapolis, Minn. Bottle stopper. 1,638,207; Aug. 9.
Klosterman, Joseph J., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,622,799; Mar. 28.
Lice Charles Company, Dayton, Ohio. Cash register. 1,628,529; July 12.
Klostell, Theodor, Thouse, Switzerland. Blectrical connecter with automatic circuit breaker. 1,614,306; Jan. 11.

Jan. 11. Klouman, Henning, Michigan City, Ind., assignor to Chrobaltic Tool Company. Making metal castings. 1,643,777; Sept. 27. Klucas, Spencer E., Barry, Minn. End gate. 1,626,414;

lucas, S_I Ap**r.** 26.

Klupe, bela and E., assignors to Bradtjen and Kluge, Inc., St. Paul, Minn. Sheet-delivery mechanism. 1,621,546; Mar. 22.
Kluge, Abel and E., assignors to Brandtjen and Kluge, Inc., St. Paul, Minn. Sheet-delivering device. 1,621,546; Mar. 22.
Kluge, Abel and E., assignors to Brandtjen and Kluge. Inc., St. Paul, Minn. Sheet-delivering device. 1,621,646; Minn. (See Bauer. G., and Kluge.) Kluge, Hans. (See Bauer. G., and Kluge.) Kluge, Hans. (See Bauer. G., Wilde, and Kluge.) Klumb, Arthur H. (See Quade, A., and Klumb.) Klumbn. Carl S., Brooklyn, N. Y. Door-control system. Inc. 1,621,683 Mar. 15.
Klumb, Theodol. G., Whaven, Germany. Towing device with safety device against capsizing for tugs. 1,621,168 Mar. 15.
Kmentt, Waldemar D. (See Matthias, G. L., and Kuger) Kluge, Minn. All Minn. 1,621,618, Mar. 15.
F. Goodrich Company, New York, N. Y. Washer-feeding apparatus. 1,619,075; Mar. 1,618,063; Feb. 22.
Knab Corporation, The. (See Wilson, Sidney C., ashable Exwapped, Chegor, M.)

Knable, Raymond, Chicago, Ill. Automatic coat-hanger-forming device. 1,616,452; Feb. 8. Knable, Raymond, Chicago, Ill. Wire-feeding device. 1,616,453; Feb. 8.

Knabusch, Edward M., Monroe, and E. Shoemaker, Carleton, Mich. Saw guide. 1,639,039; Aug. 16.
Knaggs, Christopher J., Detroit, Mich. Furnace attachment. 1,648,950; Nov. 15.
Knaggs, Roy S. (See Bedington, Sydney J., assignor.)
Knape, Charles N. F., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing. Company.
Int-drive mechanism. 1,640,548; Aug. 30.
Knapp, Archer L. assignor to Packard Motor Car Company. Detroit, Mich. Dome-light bezel. Des. 73,583;
Knapp, Archer L. assignor to Packard Motor. Car Company.

Aug. 30.

Knapp, Archer L., assignor to Packard Motor Car Company. Detroit, Mich. Window regulator handle. Des. 73,787; Nov. 8.

Knapp, Archer L., assignor to Packard Motor Car Company. Detroit, Mich. Instrument-board panel. Des. 74,057; Dec. 13.

Knapp, Archer L., assignor to Packard Motor Car Company. Detroit, Mich. Hinge for motor vehicles. 1,013,279; Jan. 4.

Knapp, Archer L., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,639,890; Aug. 23.

Knapp, Begnand. (Sc. Car.)

Knapp, Bernard. (See Coburn, J. M., and Knapp.) Knapp Brothers Manufacturing Company. (See Thomas, Wingate S., assignor.) Knapp, Charles J., Eric, Pa. Collapsing tap. 1,613,036; Jan. 4.

Gan. 4.

Knapp, Charles L., Shenandoab, Pa. Music-leaf turner.
1,625,898; Apr. 26.

Knapp. Charles P., New York, assignor of one-half to
W. H. Mack, Johnson City, N. Y. Smoker's stand or
the like, Des. (2,902; June 21.

Knapp, Charles S., National City, Calif. Trouser shield.

Knapp, Edward L., assignor to The National Brass Company, Grand Rapids, Mich. Drawer pull. Des. 72,798;
June 7.

June 7.

Knapp, John C., Atlanta, Ga. Tripping device for car stanchions. 1,628,788; May 17.

Knapp, Joseph, Kaufman, Tex. Dishwashing machine. 1,615,844; Feb. 1.

Knapp, Raleigh T., Rochester, N. Y., assignor, by mesne assignments, to The Symington Company. Draft rigging. 1,641,087; Aug. 30.

Knapp, Rudolph Eli, Saginaw, Mich. Auxiliary-finel device of the company of the company. The company of the company of the company of the company of the company. The company of the company. The company of t

1.644.485; Oct. 4:

Knapp, William, Chanute, Kans. Chain brush for successfully william, Chanute, Kans. Steam-Jacketed still.

1.621.417; Mar. 15.

Knapp, William, Chanute, Kans. Steam-Jacketed still.

1.630.189; Aug. 16.

Knaster, Leon, Union City, N. J. Secret cabinet.

1.618.933; Feb. 22.

1.618.933; Feb. 22.

1.618.934; June 14.

Knauff, Ulysses G., Minneapolis, Minn. Holder for baking potatoes 1,630.188; May 2.

Knauff, Ulysses G., Minneapolis, Minn. assignor to.

C. J. Knutson, Portland, Oreg. Lawn sprinkler.

1.634.281; July 5.

Knauss, Frank V., et al. (See Knauss, Harry A., assignor.)

Signo, Italia V., et al. (See Rhauss, Barry A., 83Signo, Italia V., et al. (See Rhauss, Barry A., 83Kanus, Fearts, New York, N. Y., and one-third to E. V.
Kanuss, Portsmouth, Ohio. Recording and resulting
products. 162,483; Dec. 13.
Knaust, Frederick, Brooklyn, N. Y. Sanitary food container. 1616,262; Feb. 1.
Knaust, Frederick, Brooklyn, N. Y. Constructing cement
walls. 1,616,263; Feb. 1.
Kneass, Strickland L., assignor to William Sellers &
Company, Incorporated, Philadelphia, Pa. Injector.
1,623,712; May 24.
Knebel, Jacob V. Los Angeles, Callf., assignor to Pathe
Exchange, Inc. Producing composite moving-picture
films. 1,627,976; May 10.
Knec, Walter J., Omaha, Nebr., assignor to Underwood
Typewriter Company, New York, N. Y. Typewriding
Company, Latch and lock mechanism. 1,642,501;
Sept. 13.

Sept. 15.

Knopper, Harry H., Detroit, Mich. Spring structure for cushions or mattresses, 1.648,951; Nov. 15.

Knerr, Hugh J., Hampton, Va. Mileage meter. 1,664,421; Dec. 27.

Kness, Austin E., Auduben, Iowa. Pruning saw. Kness, Austin E., Lidden, Lidden

AMICKETBOCKET CASE Company. (See Labadie, H. H., and Beers, assignors.). Kalebusch, Frank W., Woodstock, Ill. Bowling-games apparatus. 1.647.451; Nov. 1. passignor to Metropolitan-telembal of Gloradie, N. Y., assignor to Metropolitan-telembal (Company). Lighting faxture part. Des. Kripplan.

Knierlem, John, Glendale, N. Y., assignor to Metropolitan-Columbia Mfg. Co., Inc. Loop for lighting fixtures. Des. 71,982; Feb. 8.

Knieriem, John, Glendale, N. Y., assignor to Metropolitan-Columbia Mfg. Co., Inc. Lighting-fixture canopy. Des. 72,018; Feb. 15.
Knieriem, John, Glendale, N. Y., assignor to Metropolitan-Columbia Mfg. Co., Inc. Lighting-fixture plate. Des. 73,040; July 12.
Knieriem, John, Glendale, N. Y., assignor to Metropolitan-Columbia Mfg. Co., Inc. Lighting-fixture plate. Des. 73,041; July 12.
Knieriem, John, Glendale, N. Y., assignor to Metropolitan-T3,042; July 2.
Knieziem, John, Glendale, N. Y., assignor to Metropolitan-T3,042; July 2.
Kniezner, William T., et al. (See Dieterich, Ludwig M., assignor).
Kniffen, Roy S., Superior, Wis. Machine for replacing railway ties. 1,613,037; Jan. 4. (See Knight, Charles Y., assignor.)

railway ties. 1,613,037; Jan. 4.

Knight American Patents Company. (See Knight, Charles Y., assignor.)

Knight American Patents Company, The. (See Knight, Charles Y., assignor.)

Knight Bronnamin, Whoma, Minn. Golf putter guide. Register Strain Whoma, Minn. Golf putter guide. Register Strain Whoma, Minn. Golf putter guide. Knight, Charles Y., Pasadena, Calif., assignor to Knight American Patents Company, Chicago, Ill. Cylinder-head Construction. 1,650,363; Nov. 22.

Knight, Charles Y., Pasadena, Calif., assignor to The Knight American Patents Company, Chicago, Ill. Mechanism for facilitating the starting of International Chaimers Manufacturing Company, Milwauke, Wis. Dynamo-electric machine. 1,631,737; June 7.

Knight, George H., Waterbury, Vt. Door hanger. 1,633,378; Aug. 16.

Knight, Henry J., Vancouver, British Columbia, Canada. Gear puller. 1,631,872; June 7.

Knight, Henry J., Vancouver, British Columbia, Canada. Gear puller. 1,631,872; June 7.

Knight, Henry J., Vancouver, British Columbia, Canada. Gear puller. 1,631,872; June 7.

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Knight, Henry J., Vancouver, British Columbia, Canada. Gear puller. 1,631,872; June 7.

Knight, Henry J., Vancouver, British Columbia, Canada. Gear puller. 1,631,873; June 7.

Angar, Ira, Midiand, Mich. wheel runner. 1,63,1878;
Khight, Ira, W., Cranston, assignor to General Fire Extinguisher Company, Providence, R. I. Testing device
for booster-pump dry-pipe systems. 1,633,107; June 21.
Knight, Ira W., Cranston, assignor to General Fire Extinguisher Company, Providence, R. I. Valve apparatus. 1,633,108; June 21.
Knight, Ira W., Cranston, assignor to General Fire ExKnight, Ira W., Cranston, assignor to General Fire ExKnight, Lawis, Plainview, Tex. Aeroplane toy.
I,615,986; Fib. 1.
Knight, Lowis, Plainview, Tex. Aeroplane toy.
I,615,986; Fib. 1.
Knight, Lowis, Plainview, Tex. Aeroplane
toy.
I,615,986; Fib. 1.
Knight, Lowis, Plainview, Tex. Aeroplane
toy.
I,615,986; Fib. 1.
Knight, Lowis, Plainview, Tex. Aeroplane
toy.
I,615,986; Fib. 1.
Knight, Lowis, Plainview, Tex. Aeroplane
toy.
I,615,986; Fib. 1.
Knight, Lowis, Plainview, Tex. Aeroplane
Signor.)

Knigoff, Leo, New York, N. Y. Radiodial. 1,646,648; Oct. 25.

Knigoff, Leo, New York, N. Y. Radiodial. 1,646,648; Oct. 25.
Knipp, Charles T., Urbana, Ill. Demonstrating and visualizing the track of alpha rays. 1,617,397; Feb. 15.
Knipping, Hugo W., Hamburg, Germany. Process of many of the control of the contro

Knistrom, Joseph, assignor of one-half to E. L. Johnson and one-half to O. Lundsten, Attleboro, Mass. Belt buckle, 1620,157; Mar. 8.
Knittel, Adam. Tyner, Tenn. Gasoline-tank lock. 1,620,692; Mar. 15.
Knittel, Adam, Tyner, Tenn. Filling-station valve and key. 1,629,197; May 24.
Knittel, Andrew W., deceased, New Castle, Pa.: M. Knittel, Andrew W

Knittel, Mary, administratrix. (See Knittel, Andrew W.) Knitter, William J., North Tonawanda, N. Y. Clothesline fastener. 1,650,364; Nov. 22. Knoche, Edward, Wheatland, Iowa. Stand. 1,653,772;

Knöchl, Leo, Vienna, Austria. Spring hammer. 1,639,459; Aug. 16. Knocke, Louis T., Waukesha, Wis. Consults. .to. Louis T., Waukesha, Wis. Centrifugal casting ne. 1,615.877; Feb. 1, machine.

June 21. Knoll & Co. (See Schmidt, K. F., and Zutavern, as-

Knoll & Co.
Knoll & Co.
See Schmidt, K. F., and Zutavern, assignors.
Knoll, John. (See Nystrom, O. P., and Knoll.)
Knoll, Lloyd M., Philadelphia, Pa., assignor to Federal Telegraph Company, San Francisco, Calif. Radio system. Heal6,834; Dec. 27 to H. P. Rouse & Company, Robert Company, San Francisco, Calif. Decorating fabric.
Lindiema, Jacquelline, San Francisco, Calif. Decorating fabric.
Li618,832; Feb. 22.
Knoop, William A., Dast Northport, assignor to Western Electric Company, Incorporated, New York, N. Y. Sweep Circuits for cathode-ray oscillographs. L. Knopp, John E., Calif. See Larson, C. M., and Knopf.
Knopp, John E., Tulsa, Okla. Box closer. 1,625,033; Apr. 19.
Knopp, Otto A., Oakland, Calif. Heater and drier.

Apr. 19.

Knopp, Otto A., Oakland, Calif. Heater and drier, 1.637,488; Aug. 2.

Knopp, Rudolph, New York, N. Y. Combination motion-picture camera and display apparatus. 1.624.103; Knopp, Vernon E., Deita, Pa. Card holder, 1.616,975; Feb. 8.

Knopp, Pernon E., Deita, Pa. Card holder, 1.616,975; Feb. 8.

Knopp, Pernon E., Deita, Pa. Card holder, 1.612,726; Mar. 29.

Knopp, Philip J., assignor to N. D. Q. Specialty Corporation, Brookiya, N. Y. Display holder 1.622,726; Mar. 29.

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Knorre, William J., assignor of one-half to G. C. Ealy, Spokane, Wash. Motion-picture apparatus. 1.628,250; Knothe, Jerman, Richmond Hill, N. Y. Pipe-cutting ma-chine. 1.617,314; Peb. 15.
Knott, Admirai S., Columbus, Ohio. Automatic advertis-ing projection apparatus. 1.617,642; Peb. 15.
Knott, Frank W., assignor to Detroit Belt Lacer Detroit, Mich. Belt-hook-closing machine. 1.619,137;

Knott, Frank W., assignor to Detroit Belt Lacer Co., Detroit, Mich. Belt-hook-closing machine. 1,619,137; Mar. 1.

Knott, Harry H., Washington, Iowa, assignor, by mesne assignments, to Washington Manufacturing Company, Machine Company, Transpose Electric & Manufacturing Company, Transpose Company, Machine Company, Machine Company, Transpose Company, Machine Company

Rowles, Frederick A. (See Donaid, Whitman, Signo).

Signo).

Signo).

George H., Minneapolis, Minn. Receptacle.

1,624,955, Apr. 19.

Knowles, Harvey C., assignor to The Procter and Gamble Company, Cincinnati, Obic. System for conveying and inspecting soap. 1,636,235; July 19.

Knowles, Roscoe C., assignor to V. B. Fitts, Quinton, Ala. Valve mechanism for internal-combustion engines. 1,642,156; Sept. 13.

Knowles, William E., Oakhand, Calif. Electric-current-Knowles, William H., Fort Clester, N. Y. Bottle closure. 1,619,136; Mar. 1.

Knowles, William L., Fostoria, Ohio. Jack. 1,638,859; Aug. 16.

1,619,136; Mar. I.

Knowles, William L., Fostoria, Ohio. Jack. 1,638,859;
Aug. 16.

Knowles, William L., Fostoria, Ohio. Jack. 1,638,859;
Aug. 16.

Knowlton, Daulel E., Buffalo, and E. W. Donnigan, Aldies, M. W. Handider, and preserving fish and the the state of th

Knowiton, M. D., Company. (See Hawkins, Edgar M., assignor.), Rnowiton, M. D., Company. (See Seymour, Charles M., assignor.), Knox, Charles P., Newark. and I. Simons, Passaic, N. J. Leveling means for railway cars. 1.616,376; Feb. S. Knox, George F., Milwaukee, Wis. Automatic differential expansion valve. 1,161,5129; Feb. 1.

Knox, George F., Milwaukee, Wis. Valve for refrigerating systems. 1,616,130; Feb. 1.
Knox, George F., assignor to Knox Refrigeration Co., Milwaukee, Wis. Compressor piston. 1,616,128;

Milwaukee,

Milwauke, Wis. Compressor piston. 1,616,128: Feb. 1.
Knox, Glen, Gunn, Wyo., assignor to Link-Belt Company, Chicago, Ill. Loading boom. 1,617,490; Feb. 15.
Knox, Harry A., Davenport, Iowa. Trackless vehicle. 1,629,079; May 17.
Knox, John, Chatham, N. J., assignor to Dwight & Lloyd Sintering Co., Inc., New York, N. Y. Sintering under the company of t

23.

nox, Luther L., Bellevue, assisnor to Knox Products Company, Pittsburgh, Pa. Compound insulated structure. 1,650,279; Nov. 2, 2 ssignor to Knox Products Company, Pittsburgh, Pa. Portioning apparatus. Knox

Company, Pittsburgh, Pa. Compound instance ture. 1,650,279; Nov. 22.
Knox, Luther L., Bellevue, assignor to Knox Products Company, Pittsburgh, Pa. Portioning apparatus. Company, Pittsburgh, Pa. Portioning apparatus. Knox, Luther L., assignor to K. A. Knox, Bellevue, Pa. Open-hearth furnace. 1,621,268; Mar. 16.
Knox, Orville M., assignor of one-third to L. G. Archer, Knoxvoro, N. Y. Pole. 1,641,227; Sept. 6.
Knox Products Company. (See Knox, Luther L., assignor.)

signor.) lox Refrigeration Co. (See Knox, George F., as-

Knox Refrigeration co., Signor.)
Knox, Robert P., Oakland, Calif. Gripper block for printing presses. 1,642,157; Sept. 13.
Knox, Walter F., Chicago. Ill. Radiator hanger. 1,625,473; Apr. 19.
Knudsen, Frank G. (See Bechman, W. O., and Knudsen.)
Knudsen, Frank G. (See Bechman, W. O., and Knudsen.)
Knudsen, Hans, Schleswig, Iowa. Folding farrowing house. 1,635,942; July 19.
Knudsen, Krestine, Oakland, Calif. Doll. Des. 73,088;

July 19.
Knudsen, Niels, Ogden, Utah. Tile-pipe holder. 1,638,343;
Knudsen, Paul A., Milwaukee, Wis. Bumper. 1,615,633;
Jan. 25.
Knudsen, William S., assignor to General Motors Corporation. Detroit. Mich. Making popper valves.

Kultisen. William S., assignor to General Motors Corpomition. Detroit. Mich. Making poppet valves.
1,644,021; Oct. 4
Knudson, Barney A., Santa Ana, Calif. Rotary valve for
combustion engines. 1,649,779; Nov. 15.
Knudson, Edwin H. (See O'Brien, J., and Knudson.)
Knudson, Edwin H. (See O'Brien, J., and Knudson.)
Knudson, Edwin H., Jewell, Iowa. Louking hoisting tackle.
1,650,281; Nov. 22.
Knut, Sargeant P., Washington, D. C. Sound magnifer.
1,619,981; Mar. 8.
Knutsen, John B. M., Elizabeth Bay, near Sydney, New
South Wales, Australia. Electric lift machine and the
like. 1,623,349 A.J. Rotts Polnt, near Sydney, New
South Wales, Australia. Apparatus for the control
and operation of electric lifts and the like. 1,639,190;
Aug. 18.
Knutson, Daration of electric lifts and the like. 1,639,190;
Aug. 18.
Knutson, C. J. (See Knauff, Ulysses G., assignor.)

and operation of electric intra and the like. 1,059,1507, Aug. 16.
Knutson, C. J. (See Knauff, Ulysses G., assignor.)
Knutson, C. J. (See Knauff, Ulysses G., assignor.)
Kny-Scheerer Corporation of America. (See Gallowitz, Gustave A., assignor.)
Kny-Scheerer Edword sistematic for Automatically charging containers with predetermined and adjustable amounts of liquids or the like. 1,653,106; The. 20.

matically charging containers with predetermined and adjustable amounts of liquids or the like. 1,653,108; K. 1653,108; W. 165,108; W. 165,508; W. 160,509; W. 160

Kobloike, Adolf M., Gilderoy, Victoria, Australia. Apparatus for drying and seasoning timber: 1,2625,48; Apr. 19.
Kobloike, Adolph M., Gilderoy, via Garra Junction, Victoria. Australia. Vacuum-producing apparatus. 1,622,155; Mar. 22.
Kobrin, Harry, New York, N. Y. Pad for ironing boards. 1,636,913; July 26.
Koca, James F. (See Hokanson, O. A., and Koca.)
Koca, James F., assismor to Woodstock Typewriter Company, Woodstock, Ill. Case-shift mechanism. 1,640,127; Aug. 23.

Koch, August W., Hanover-Kleefeld, Germany. Fertilizerdistributing machine. 1,622,546; May 10.
Koch, Charies N., Kane, Pa. Combustion turbine.
1,653,217; Dec. 20.
Koch, Charies N., Kane, Pa. Combustion turbine.
1,653,217; Dec. 20.
1,653,218; July 26.
Koch, Feit, Bellevue, assignor to Pressed Steel Car Company, Pittsburgh, Pa. Anchorage for vestibule members of articulated cars.
1,622,326; Sept. 20.
Koch, Frederick, Newark, N. J., assignor to U. S. Tool
Company, Inc. Vernier condenser. 1,631,738; June 7.
Koch, Henry, Jamaica, N. Y., assignor to U. S. Tool
Company, Inc. Vernier condenser. 1,631,738; June 7.
Koch, Henry, Jamaica, N. Y., assignor to Dictograph Products Corporation.
Loud-speaking telephone reKoch, Henry, Jamaica, N. Y., assignor to Option of the Corporation.
Telephone receiver. 1,637,182; Nov. 1.
Koch, Lydia B., assignor to Reinforced Paper Bottle
Corporation, New York, N. Y. Bottle. 1,632,341;
June 14.
Koch, Paul W., & Company, (See Schreiner, John, assignor, Vernier, John, assignor, W. Koch, Lydia B., assignor to Reinforced Paper Bottle
Corporation, New York, N. Y. Bottle. 1,632,187;
June 14.
Koch, Paul W., & Company, (See Schreiner, John, assignor),
Koch, Piran W., & Company, (See Schreiner, John, assignor),
Koch, Piran W., & Company, Incorporated, New York, N. Y. Apparatus On beat treating metals. 1,624,668;
Apr. 12.
Kochendorfer, Frederic S., River Forest, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus Company, Incorporated, New York, N. Kochendorfer, Frederic S., River Forest, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus Company, Incorporated, New York, N. Y. Apparatus Company, Incorporated, New York, N.

Kocher, Löuis, Omaha, Nebr, Window Suutter, 1,000,000, Aug. 9.
Köchling, Wilhelm, Waidmannslust-Berlin, Germany, assignor to General Electric Company. Single-phase transformer. 1,653,107; Dec. 20.
Kochner, William B. (See Galvin, J. F., and Kochner.) Kochner, William B. (See Galvin, J. F., and Kochner.) Kochner, William B. (See Galvin, J. F., and Kochner.) Louis the superstance of the company of the company

Kodel Radio Corporation, The. (See Ogden, Clarence E., assignor.)

Roeb, Emil. (See Goldsmith, B. J., and Koeb.)

Roeb, Emil. Tuckshoe, assignor, by mesne assignments, to Perfect Window Regulator. (1929-271; May 1979-1979)

Koeb, Emil., and B. J. Goldsmith, assignors to Perfect Window regulator. (1929-271; May 1979-1979)

Koeb, Emil., and B. J. Goldsmith, assignors to Perfect Window regulator. (1929-271; May 1979-1979)

Koebeke, Albert P., Mount Violet, Victoria, Australia. Vehicular leaf spring. (1922-727; Mar. 29)

Roegle, John G., assignor of one-half to H. Boelter, Toledo, Ohio. Ladle, 1,624-533; Apr. 12.

Koebeke, John G., assignor of one-half to H. Boelter, Toledo, Ohio. Casting machine. 1,627-698; May 3.

Koehler Manufacturing Company. (See Albere, William H., assignor.)

Roehler, William, Cleveland, Ohio. Production of magnesium from magnesia compounds. 1,650-6893; Nov. 29.

Keeler William, Cleveland, Ohio. Production of magnesium from magnesia compounds. 1,850.893; Nov. 29. Keeler William, Cleveland, Ohio. Production of magnesium from dolomite. 1,650.894; Nov. 29. Keeler, August W., Oshkosh, Wis., assignor to The Dear-May 31. Keeler, August W., Oshkosh, Wis., assignor to The Dear-May 31. Keeler, Daniel W., assignor of one-third to G. G. Dixon, Galva, and one-third to H. G. Rolf, McPherson, Kans. 1,621,418; Mar. 15. Keeler, John H., Atkins, Iowa. Rope cutter. 1,621,672; Keelering Compount (S. McChring Compount (S.

Mar. 22.
Koehring Company.
Koe

waukee, Wis. Twin-mixer concrete-paving machine, 1.623.622; Apr. 5. Koelkebeck, Carl W. A., Pittsburgh, Pa. Music rack, 1,618,760; Feb. 22.

Koelliker, George P., (See Bensing, Le Rue P., assignor.) Koelliker, George P., et al. (See Keeler, Lewis J., as-

Signor.)
Koelling, Edward A., jr., St. Louis, Mo. Loose-leaf binder. 1,646,697; Oct. 25.
Lodding, William F., Berwyn, Ill. Combined parting Koelling, William F., Berwyn, Ill. Combined parting Company, St. Louis, Mo. Device for stoning cutters. 1,613,174; Jan. Lus, Mo. Device for stoning cutters. 1,613,174; Jan. Lus, Mo. Device for stoning cutters. 1,653,015; Dec. 20.
Loss,015; Dec. 20.
Carbonators, (Inc.), Carbonator. 1,632,409; June 14.
Koenin Carbonators, (Inc.), The. (See Koenig, Alphonso Lu, assignor.)

Koenig, I Nov. 2

Nov. 22.
Keenig, Otto A., San Francisco, Calif. Surfacing machine. 1,653,108; Dec. 20.
Keenig, Remus, assignor to Metal Ware Corporation, Two Rivers, Wis. Toy electric range. 1,652,445; June 14.
Keenig, Robert H., Haddon Heights, N. J., assignor to Ruth Glass Company, Conshobocken, Pa. Machine for Shaping ends of glass tubes. 1,643,215; Sept. considerable grade of the content of

Koenigkramer, Frederick, Cincinnati, Onio. Instrument supporting and adjusting apparatus. 1,638,938; Aug. 16.
Koenigkramer, Frederick, Cincinnati, Ohio. Instrument-supporting apparatus. 1,638,939; Aug. 16.
Koenigkserg, Kurt, Seattle, Wash. Hollow-arm signal. 1,628,157; May 10.
Koenitz, Arthur C. (See Wappler, F. H., and Koenitz.)
Koepke, Frederick J. (See Klingelsmith, S. L., and Koenitz.)

Koepp, Herman, Wallowa, Oreg. Spacing arrangement of bee frames. 1,637,002; July 26. Koepp, Rudolph, & Co. (See Bredig, G., and Elöd, as-

Koepp, Hefman, 1,637,002; July 26.
Koepp, Rudolph, & Co. (See Bředig, G., and Břöd, asKoepp, Rudolph, & Co. (See Bředig, G., and Břöd, asKoepp, Rudolph, & Co. (See Bředig, G., and Břöd, asKoepp, Rudolph, & Co. (See Bředig, G., and Břöd, asKoepp, Hefman F., Detroit, Mich. Tank. 1,620,471;
Mar. 8.
Koerner, Ewald. Dresden, Germany. Cigarette-making
machine. 1,614,738; Jan. 18.
Koerner, Ewald. Dresden, Germany. Cigarette-making
machine. 1,614,738; Jan. 18.
Koerner, Erander, G., Inc., Lynchburg, Va. Tobaccocutting machine. 1,618,096; Feb. 15.
Koeser, Earl W., Minneapolis, Minn. Egg carton.
1,635,632; Dec. 27.
Koester, Henry, Ivington, N. J. Clothesline cleaner.
Kofford, Earl J., assignor to Denver Ice & Cold Storage
Company, Denver, Colo. Elevating platform for trucks.
1,635,024; June 21.
Koffaskey, George, New Orleans, La. Nautical instrument. 1,640,328; Aug. 23.
Kofford, James M., (See Van Fmon, Burton C.,
assignor.)
Koford, James M., trustee. (See Van Emon, Burton C.,
assignor.)

School, James M., (See Van Emon, Burton C., Assignor.)

Rostsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des 73,788; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,793; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,791; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,792; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,792; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,792; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,795; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Plaque. Des. 73,797; Nov. 8.

Rofsky, Henry M., and H. E. Gimbel, Philadelphia, Pa. Ende connection for vehicle springs. 1,623,844; Apr. 5.

Rostrom, Axil W. Upper Darby, assignor of one-half to A. F. H. Scott, Philadelphia, Pa. Ende connection for vehicle springs. 1,623,844; Apr. 5.

Rostrom, Axil W. Upper Darby, assignor of one-half to A. F. H. Scott, Philadelphia, Pa. Ende connection for vehicle springs. 1,623,845; Apr. 5.

Rostrom, Rostrings, 1,623,845; Apr. 5.

Rostr

Kohlberg, Alfred, Bronxville, N. Y. Embroidered table-cloth or similar article. Des. 73,917; Nov. 22.

Kohlberg, Alfred, Bronxyille, N. Y. Embroidered table-cioth or similar article. Des. 73,913; Nov. 22.
Kohlberg, Alfred, Bronxyille, N. X. Embroidered table-Kohlberger, Frank, Whitestone, assignor to International Motor Company, New York, N. Y. Seat for vehicles, 1.653,216; Dec. 20.
Kohler, Anthony M., East Liverpool, Ohio, assignor to The Babecck & Wilcox Company, Bayonne, N. J. June 7. June 7.

June 7

June 7.

Köhler, August, assignor to the Firm Carl Zedss, Jena, Germany. Microscope. 1,649,668; Nov. 15.

Kohler Company. (See Brotz, Anton F., assignor.)

Kohler Company. (See Brotz, Anton F., assignor.)

Kohler Company. (See Brotz, Frank G., assignor.)

Kohler, Jack D., Miami. Fla. Holder for confections and napkins. 1,623,926; Apr. 5.

Kohler, John F., Larrelmont Manor, N. Y. Coconutshelling machine. 1,645,600; Oct. 18.

Kohler, Urltch, assignor to Hasler Arm, Systerchand, Charles and Charl

Kohler, Walter R., assignor to Janesville Products Company, Janesville, Wis. Coaster wagon. 1,637,614; Kohler, Water K., assignor to Janesvine Products Cape.

Log 7.

Kohlmeier, Benjamin and E. C., Manitowoc, Wis. Vehicle radiator heater, 1,455,219; Nov. 22.

Kohlmeier, Earl C. (See Kohlmeier, Benjamin and E. C.)

radiator heater. 1,650/219; Nov. 22.
Kohlmeier, Earl C. (See Kohlmeier, Benjamin and Kohlmeyer, George, College Point, assignor to American Hard Rubber Company, Hempstead, N. Y. Comb. Des. 73,133; July 26.
Henry A. Pittsburgh, Pa., assignor to The Briston Henry A. Pittsburgh, Pa., assignor to The Object of the Company New York, N. Y. Manufacture of bread. 1,651/147; Dec. 6.
Kohman, Henry A., Pittsburgh, Pa., assignor to The Fleischmann Company, New York, N. Y. Manufacture of bread. 1,651/18; Dec. 6.
Kohman, Henry A., Rittsburgh, Pa., assignor to The Discounties of Dread. 1,651/18; Dec. 18.
Kohman, Henry A., Roy Irvin, and E. S. Stateler, Pittsburgh, Pa., assignors to G. S. Ward, New York, N. Y. Coagulating or curcing milk. 1,654/176; Dec. 27.
Kohn, Koby, New York, D. J. Fastening device. 1,620/18; App. 26.
Kohn, Koby, New York, N. Y., assignor to Victory Sparkler & Specialty Co., Elkon, Md. Color changer for sparklers and analogous lights. 1,620/560; Mar. 8.
Kohn, Killon M., New York, N. Y. Automatically controlled vulcanizer. 1,645/86; N. Y. Heating unit. 1,636,372; July 19.
Kohn, Milton M., New York, N. Y. Automatically controlled vulcanizer. 1,645/86; N. Y. Automatically controlled vulcanizer. 1,645/86; N. Y. Automatically controlled vulcanizer. 1,646/86; N. Y. Heating unit. 1,668,372; July 19.
Kohn, Simund F., New York, N. Y., assignor to Mergenther Linotype Company, Escapement, mechanism for typo-Cooking Sparkler and Scapement, mechanism for typo-Cooking Sparkler and Scapement, mechanism for typo-Kohn, Sigmund F., New York, N. Y. Folding refrigerator. 1,644,677; Oct. 11.

Kohn, Sigmund F., New York, N. Y. Folding refrigerator. 1,644,677; Oct. 11.
Kohnle, Frederick, assignor to The Monarch Marking System Company, Dayton, Ohio. Tag price-marking machine. 1,631,933; June 7.
Koholyt Aktiengesellschaft. (See Colditz, W., and Thommel assignors)

mel, assignors.)

mel, assignors.) Kohout, Addison S., Reading, Pa., assignor to Smith, Drum & Company, Philadelphia, Pa. Paddle wheel for dyeing machines. 1,648,771; Nov. Concrete building construction. 1,618,971; Feb. 8.
Kokes, L. V., et al. (See Criner, Harry J., assignor.) Kokes, L. V., et al. (See Criner, Harry J., 1,441; Kokes, L. V., et al. (See Criner, Harry J., 1,441; Kokes, L. V., et al. (See Criner, Harry J., 1,441; Kokes, L. V., et al. (See Criner, Harry J., 1,441; Kolbe, Robert E., Erle, Pa. Freezing method. 1,641,441;

Koles, Robert E., Erle, Pa. Freezing methou.

Koles, Robert E., Erle, Pa. Freezing methou.

Koles, Viktor M., Berlin, Germany. Device for rendering advertisements luminous by the opening or closing of doors. 1.640,001; Aug. 23.

Kolbeck, Ebbe S., San Diego, Calif. Leaf-spring assembling machine. 1,648,405; Nov. 8.

Kole, Lessing L. and E. Loeffler, Milwaukee, Wis. Vanlty case. 1,642,780; Sept. 20.

Vanlty case. 1,642,780; Sept. 20.

Automatic coupler for miners cars. 1,621,419; Mar. 15.

Kolisch, Pull. (See Aldendorff, Fritz, assignor.)

Koll, Henry R., Omaha, Nebr. Meat banger. 1,618,833; Feb. 22.

Krop. 22:
Krop. 22:
Krop. 22:
Krop. 24:
Krop.

Kollath, Francis C., Chicago, Ill. Amplifier. 1,021,1 Nov. 1. Koller. Henry. Chicago, Ill. Combined rear automo window and warning signal. 1,646,617; Oct. 25.

automobile

Koller, John, assignor to The American Coal Chute Co., Newark, N. J. Drying oven. 1,618,380; Feb. 22. Kollinck, Theodor. (See Sauveur, H., and Kollinck). Kollman, Amos C., assignor of one-half to H. Kenimer, San Antonio, Tex. Dirigible headlight. 1,617,166;

Kollinck, Theodor. (See Sauveur, H. and Kollinck).

Kollman, Amos C., assignor of one-half to H. Kenimer,
San Antonio, Tex. Dirigible headlight. 1,817,160;
Feb. S.

Kollman, Melvin L., Sioux City, Iowa, and E. L.
Klappal, Witton, S. Dak. Seed-cleaning machine.
1,622,858; Apr. 20.

Kollock, Lemuel E., Boston, Mass. Pipe-joint filling
spout. 1,923,958; Apr. 5.

Kollstede, Alfred G. (See Ruprecht, L., and Kollstede.)

Kollstede, George, Providence, R. I. Strap for personal
wear. 1,619,138; Mar. 1.

Kollstede. George, Providence, R. I. Snap fastener.
1,636,919; July 26.

Kollstede. George, Providence, R. I. Snap fastener.
1,636,919; July 26.

Kollstede. George, Providence, R. I. Snap fastener.
1,636,919; July 26.

Kollstede. George, Providence, R. I. Snap fastener.
1,636,919; July 26.

Kolmer, Wilhelm, and E. Wirschinger, assignors to Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft, Augsburg-Germany, Two-revolution fast printing Kolmer, Wilhelm and E. Wirschinger, assignors to Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft, Augsburg-Germany, Roller inking apparatus for fast printing presses. 1,650,283; Nov. 22.
Kolodge, Louis P. New Kensington, Pa. Geometrical instrument. 1,623,623; Apr. 5.
Kolotizic, Edward J., Buffalo, N. Y. Shock absorber. 1,651,883; Dec. 68; Apr. 1,685, Chiston, Mich. Base frame for spring structures. 1,650,284; Nov. 22.
Kolstad, Ole O., Duluth, Minn. Mail box. 1,640,154; Aug. 2,3.
Kolstad, Ole O., Duluth, Minn. Mail box. 1,640,154;

Kolstad. Ole O., Duluth. Minn. Mail box. 1,640,154; Aug. 23.

Aug. 23.

Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio receiving apparatus. 1,636,570; July 19.

Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Electrontube apparatus. 1,637,564; Aug. 2.

Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Multiple variable condenser. 1,641,593; Sept. 6.

Kolster, Frederick A., Palo Alto, assignor to Kongara, 1,641,593; Sept. 6.

Kongara, 1,641,593; Sept. 6.

Kolster, Frederick A., Tonshington, D. C., assignor to Radiocompass. 1,637,615; Aug. 2.

Kolster, Frederick A., and S. A., Sollie, Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Electromagnetic sound reproducer. 1,637,119; July 26. July 26.

Call. Electromagnetic sound reproducer. 1.637,119: July 26.
Kolthoff, Helge G. L., Vanersborg, Sweden. Self-locking nut. 1.623,686; Apr. 5.
Kolmberg, John, Philadelphia, Pa. Window screen. 1.623,686; Apr. 5.
Kolmarek, Gustav, Chicago, Ill., assignor to Malcolmson Engineering and Machine Corporation, St. Louis, Mo. Drier. 1.641,337; Sept. 6.
Komarek, Albert J., assignor to The Excelsior Hardware, 1.652,677; Dec. 13.
Kondarkina, Daniel, Conn. Trunk lock and drawbolt. 1.652,677; Dec. 13.
Kondolf, Henry E., New York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Tag and making Corporation, Brooklyn, N. Y. Tag. 1.640,766; Aug. 23.
Kondolf, Henry E., New York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Tag. 1.640,766; Aug. 23.
Kondolf, Henry E., New York, assignor to The Lox Seal Corporation, Brooklyn, N. Y. Tag. 1.642,781; Sept. 20.
Corporation, Brooklyn, N. Y. Tag. 1.642,781; Lox Seal Corporation, Brooklyn, N. Y. Tag. 1.642,781; Lox Seal Corporation, Brooklyn, N. Y. Method and apparatus for making tags. 1.645,6013; Oct. 1.
Kondolf, Mathias R., Cynwyd, assignor to Boxboard Products Company, Philadelphia, Pa. Packing, 1.262,634; Apr. 26.

Könmann, Hermann H., Minnster, Germany, Vacuum tine, 1,642 210 · Sept. 13. Konciman, Harry H., and A. E. Imbus, assignors to The Globe Register Company, Cincinnati, Ohio. Feeding de-vice for roll stationery. 1,620,666; Mar. 15. Konbelm, Harvey S. (See Albersheim, W. J., and Kon-

heim.)
Könicke, Hildegard M. G., assignor to F. K. A. Voigt, Hamburg. Germany. Ornamental foot covering, 1.640-808; Aug. 30.
König, Albert, assignor to the Firm Carl Zeiss, Jean, Ger-König, Fritz, & Co. Gesellschaft mit beschrünkter Haftung. (See Hamel, Franz. assignor; Manuel, Manuel,

signor.) onoff. Alexander, assignor to Overland Metal Novelty Co. Inc., New York, N. Y. Eye set. 1,619,824; Mar. S. Konoff, Alexander, assignor to Overland Metal Novelty Co. Inc., New York, N. Y. Doll's eyes with lashes. 1,620,667; Mar. 15. Konoff, Alexander, assignor to Overland Metal Novelty Co., Inc., New York, N. Y. Eye set. 1,621,072; Mar. 15.

Konoff, Acxander, assignor to Overland Metal Novelty Konoff, Acxander, New York, N. Y. Attaching doil eyes. 1.621.073; Mar. 15. Konoff, Alexander, New York, N. Y., assignor to Voices Incorporated, Wilmington, Del. Post structure for voice devices. 1.625.230; July 12. Konrad, Otto, Oskosh, Wis. Reenforcing concrete floors. 1.628.230; Japr. 5.

Konrad. Otto, assignor to Three C Davenport Company, Oshkosh, Wis. Foldable bed couch. 1,623,251; Apr. 5. Konta, Alexander. (See Pirquet, Clemens, assignor.) Koons, John F., Alexis, III. Valve-pin replacer. 1,633,110; June 21.

Koontz, Charles E., Baltimore, Md. Fire-alarm apparatus. 1,628,547; May 10.
Koontz, Liouel E., East Palestine, Ohio. Adjustable support for range boilers. 1,645,197; Oct. 11.
Koop, Joseph C., Newark, N. J. Support for folding doors. 1,637,194; July 26.
Koop, William, New York, N. Y. Page turner for music notebooks. 1,653,634; Dec. 27.

Koop, William, New York, N. Y. Fuge turner on the constant of the control of the

Kopenhaver, Anna A., Stockton, Calif. Sanitary egg beater. 1,629,956; May 24. Kopf. Joseph L., East Orange, N. J., assignor to Jabez Burus & Sons, Inc., New York, N. Y. Coffee product and making it. 1,637,648; Aug. 2. Kopf., Joseph L., East Orange, N. J., assignor to Jabez Housting mixtre. New York, N. Y. Apparatus for Light State of the Computer of the Computer of the 1,649,781; Nov. 15.

Kopp. Anton J., San Francisco, Calif. Door latch and lock mechanism. 1,618.344; Feb. 22.

Kopp Glass, Incorporated. (See Kopp, Nicholas, as-

Ropp Ganso, signor.)

Ropp, John A., J. G. Guenthner, F. J. W. C. J. Meyer, Louisville, Ky. Switch. Nov. 22. Wellkam 1,650,137

C. J. Meyer, Louisvine, Nov. 22.

Kopp. Nicholas, Pitteburgh, assignor to Kopp Glass Incorporated, Swissvale, Pa. Illuminating glass bowl or globe. Des. 73.437; Sept. 13.

Kopp. Ottmar I., Brooklyn, assignor, by messe assignments, for Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system.

ments, to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. 1,613,613; Jan. 11.

Koppe, Alexander T., Chicago, III., assignor, by mesne assignments, to Directoplate Corporation. Machine, for making offset press plates. Reid-Seff: Mar. 8.

Koppe, Alexander T., assignor to Directoplate Corporation. Chicago, III. Machine for making press plates. 1,639,738; Aug. 23. and Realement Corporation. Chicago.

Schmout, Alfred C., assignor.)

Köppen, Wilhelm. Beckum, and C. Pfelfler, Neubeckum, termany. Rail or tube mill. 1.636.138: July 19.

Koppers Company. The. (See Becker, Joseph. assignor.)

Koppers Company. The. (See Hall. Raiph B., assignor.)

Koppers Company. The. (See Sperr, F. W., jr., and Jacobson, assignors.)

Koppers Company. (See Cavett, John J., assignor.) Koppers Company. (See Gluud. Wilhelm, assignor.) Koppers Company, The. (See Van Ackeren, Joseph, as-

Kopners Development Corporation, The. (See Koppers, Heinrich assignor.)
Kopners, Heinrich, Essen-Ruhr, Germany, assignor to The Kopners Development Corporation, Pittsburgh, Pa. Apparatus and process for burning ceranics and the like. 1.631,536; June 7. Kopners, Injurich, Essen-Ruhr, Germany, assignor to The Koppers Corporation. Frictional distillation of the Corporation of the Corporation of the Koppers and apparatus, 1.646,608; Oct 25. Koppers, Ichirich, Essen-Ruhr, Germany, assignor to The Koppers Development Corporation. Pittsburgh, Pa. Waste-heat boiler system. 1.658,635; Dec. 27. Koppin, Alfred O., assignor to Hudson Motor Car Company, Detroit, Mich. Rod clamp and clevis. 1,641,038; Aug. 30.

Koppitz, Carl G., assignor to Railway and Industrial Engineering Company, Greensburg, Pa. High-tension construction work. 1,614,889; Jan. 18.

Koppleman, Morris, Brooklyn, N. Y. Manufacture of nonplaniform fibrous articles. 1,618,289; Feb. 22. Kops Bross, Inc. (See Kops, Waldemar, assignor.)
Kops, Waldemar, New York, N. Y., assignor to Kops Bross, Inc. Apparel garment. 1,615,634; Jan. 25. Kops, Waldemar, New York, N. Y., assignor to Kops Bross, Inc. Apparel garment. 1,616,264; Feb. 0. Kops. Waldemar, assignor to Kops Bross, Inc. Apparel garment. 1,622,278; Mar. 29. Kops, Waldemar, assignor to Kops Bross. Inc., New York, N. Y. Apparel garment. 1,636,516; July 19. Kops, Waldemar, assignor to Kops Bross. Inc., New York, N. Y. Apparel garment. 1,637,526; Aug. 2. Kops, Waldemar, New York, N. Y. Sassignor to Kops Bross. Inc. Dec. 27. Kops, Waldemar, New York, N. Y. assignor to Kops Bross, Inc. Apparel garment. 1,654,264; Dec. 27. Kops, Waldemar, New York, N. Y. assignor to Kops Bross, Inc. Apparel garment. 1,654,264; Dec. 27. Kopsyraph, Incorporated. (See Taylor, George L., assignor)

Bros., Inc. Apparel gar Kopygraph, Incorporated. signor.)

Korb, William, Cheviot, Ohio. Sectional bin. 1,648,277;

Nov. 8. Nov. 8

orkames, Joe, Temple, Tex. Fishing line. 1,634,030; June 28.

Norkames, Joe, Temple, Tex. Fishing line. 1,634,030; June 28.

Korkames, Joe, Temple, Tex. Combined chocolate dipping table and cooler. 1,638,041; Aug. 9.

Korn, Arthur, Berlin-Charlottenburg, Germany. Tele-autographic transmission. 1,615,015; Jan. 18.

Korn, Arthur, Charlottenburg, near Berlin, Germany. Phototelegraph. 1,618,964; Feb. 21 to C. Seiler, San Korn, Francesca, assignor of one-11 to C. Seiler, San Korn, Louis, Houston, Tex. Collapsible container. 1,646,544; Oct. 25.

Kornahrens, John N., Summerville, S. C. Game. 1,622,156; Mar. 22.

Korner, John H., and F. G. Stanford, Los Angeles, Calif.; said Stanford assignor, by mesne assignments, to The Hyland Stanford Company Inc., Toledo, Ohio. Fruit-Korngiehel, Gustav, Kassel, Germany. Regulator for the movements of air or smoke in flues. 1,615,588; Jan. 25.

Kornicker, Arnold and G. Engel, New York, N. Y. Display stand. 1,627,632; May 10.

Kornitz, Ewald E., assignor of one-half to Carl A. Bechstein, Milwaukee, Wis. Apparatus for stretching and Markey Stans, leather, and other materials. 1,620,821; Korley Electric Corporation. (See Kotchi, Charles J., assignor)

Koro Electric Corporation. (See Kotchi, Charles J., as-

signor.)

Koroknay, Paul, Houston, Tex, Signal lantern.

1,625,474; Apr. 19.

Korsetz, Emil, Milwaukee, Wis. Receptacle. 1,629,728;

Mar. 29.

Korsno, Torbjorn C., assignor to Madison-Kipp Corporation, Madison, Wis. Die-casting machine. 1,627,784;

May 10.

Korsmo, Torbjorn C., assignor to Madison-Kipp Corpora-tion, Madison, Wis. Die-casting machine. 1,631,686; June 7.

Mine 7.

Korsunsky, Michael G., Jackson Heights, N. Y., now, by judicial change of name, M. G. Corson, assignor to Electro Metallurgical Company. Silver-silkon alloy and making the same. 1,643,304; Sept. 27.

Kortenhoever, Peter, assignor to Equipment Devices Company. Chicago, Ill. Cot for poultry cars. 1,614,993; Jan. 18.

Kortz, Conrad J., Cleveland, Ohlo. Bill hook. 1,639,137; Aug. 16.

Aug. 10.
Korvallis, John N., Los Angeles, Calif. Automobile signal. Des. 73,705; Oct. 25.
Korvin-Kroukovsky, Boris V.
(See Zimmermann, P. G., and Korvin-Kroukovsky). Bris V.
Korwan, Harty B., Brooklyn, assignor to American Can Company, New York, N. Y.
Holding device for lunch lits. 1,638,913; Dec. 7.
Koślancie, Valentine J., Crescent Valley, British Columbia, Canada. Hand feed for drag-saw machines. 1,637,616;

Aug. 2.
Koske, Mike, Proberta, Calif. Combination brush, comb, and mirror. 1,626,415; Apr. 26.

Kosken, Wilho A., Boston, Mass., assignor to Steadyllte Motion Picture Machine Corporation, New York, N. Y. Expansible pulley or the like. 1,626,240; Apr. 28. Koslowski, Franz, Glatz, Germany. Lace joint for shoes and other apparel. 1,629,713; May 24. Kosofsky, Morris, assignor to Kenliworth Mfg. Co., Inc., New York, N. Y. Fastening means. 1,616,196;

and other apparel. 1,629,713; May 23.

Kosofsky, Morris, assignor to Kenliworth Mig. Co., Inc., New York, N. Y. Fastening means. 1,616,190; Kostenko, Michael, and N. Japolsky, London, England. High-speed dynamo-electric machine for continuous current. 1,624,254; Apr. 12.

Kostenko, Michael, and N. Japolsky, London, England. High-speed dynamo-electric machine for continuous current. 1,624,254; Apr. 12.

Kotchi, Charles J., assignor to Koro Electric Corporation, Chicago, Ill. Holder for electric-welding electrodes. 1,622,512; Mar. 22.

Kothe, Bernard E. (See Hughes, C. H., and Kothe). Rechards and the second of the control of the

1,647,529; Nov. 1.
Kolzebug Meinhard H., Tulsa, Okla. Separator.
Koultzman, Joseph M. (See Thener, A. F., and Kountzman, Joseph M. (See Thener, J. 1831, 138; June 7.
Kounty, Michael G., Cairo, Ill. Double-acting internal-combustion engine. 1,623,461; June 21.
Kounty, Michael G., Cairo, Ill. Double-acting internal-combustion engine. 1,623,461; June 21.
Kovács, Theodor, Berlin, Germany. Reservoir pen. 1,623,111; June 21.
Kovács, Theodor, Meran, Italy, Fountain pen. 1,633,896; June 28.
Kovács, Theodor, Meran, Italy, Fountain pen. 1,633,896; June 28.
Kovács, Theodor, Meran, Italy, Fountain pen. 1,633,896; June 28.
Kovács, Theodor, Meran, Italy, Fountain pen. 1,633,896; June 28.
Kovács, June 21.
Kovács, Theodor, Meran, Italy, Fountain pen. 1,633,896; June 28.
Kovács, June 21.
Kovács, Tasid Hubbell assignor to said Kovanda. Lining block for sewers and the like. 1,642,417; Sept. 13.
Kovanda, Louis P., and J. H. Hubbell, Los Angeles, Calif.; said Hubbell assignor to said Kovanda. Moiten-material-spraying apparatus. 1,642,418; Sept. 13.
Kovanda, Louis P., and J. H. Hubbell, Los Angeles, Calif.; said Hubbell assignor to H. Rosenthal, Vienna, Austria. Belt fastener. 1,615,176; Jan. 18.
Kovarik, Karl, assignor to H. Rosenthal, Vienna, Austria. Belt fastener. 1,615,176; Jan. 18.
Kovarik, Karl, assignor to Lorraine Metal Manufacturing Company, Elicitrode steam boiler. 1,650,632; Nov. 29.
Kovalski, Charley, Chicago, Ill. Fernery stand. Des.
Kowalski, Charley, Chicago, Ill. Fernery stand. Des.
Kowalski, Charley, Chicago, Ill. Fernery stand. Pes.
Kowalski, Andrew, Oak Park, assignor to International Harvester Company, Chicago, Ill. Beet topper. 1,651,630; Nov. 29.
Kowalski, Charley, Chicago, Ill. Fernery stand. Des.
Ko

Kraft, Heinrich A. E., assignor to Firma Kraft & Steudel Fabrik Photographischer Papiere G. m. b. H., Dresden, Germany. Embossing appliance for photographs and Kleike. 1,634,486; July 6,500 for photographs and E. A. Darr, executors. Threinflating coupling and gauge. 1,614,307; Jan. 11. Fraft, Henry P., deceased, Ridgewood. N. J.; E. J. Phillips and E. A. Darr, executors. Water-bottle stopper. 1,641,594; Sept. 6.
Kraft, Henry P., deceased, Ridgewood, N. J.; E. J. Phillips and E. A. Darr, executors. Water-bottle stopper. 1,641,594; Sept. 6.
Kraft, Henry P., deceased, Ridgewood, N. J.; E. J. Phillips and E. A. Darr, executors. Valve cap. 1,654,176; Dec. 37.

raft, Herman T., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Valve. 1,615,016; Jan. 18.

Jan. 18
Kraft, Herman T., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Constructing columns 1,623,939; Apr. 5.
Kraft, Herman T., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Truss construction. 1,645,060; Oct. 11.
Krag, Erik L. Chicag, H. Binder. 1,648,406; Nov. 8.
Krag, Erik L. Chicag, H. Binder. 1,648,406; Nov. 8.
Krag, Thomas R., and T. A. Errett, Los Angeles, Calif. Sterilizer. 1,620,360; Mar. 8.
Krain, Georg, assignor to the Firm Metallstanzwerk G. m. b. H., Schwarzenberg, Germany. Device for making pins with headplates. 1,650,625; Nov. 22.
Kraininger, Anton J. (See Rinker, J. C., and Kraisinger.) Kraininger, Anton J. (See Rinker, J. C., and Kraisinger, Brooklyn, N. Y. Spring cushion structure. 1,649,832; Nov. 22.
Krakora, John J., Cromwell, Minn. Bread-slicing ma-

Nov. 22.
Krakora, John J., Cromwell, Minn. Bread-slicing machine. 1,617,058; Feb. 8.
Kral, Ludwig, Vienna, Austria. Magnesium burner and lamp. 1,653,963; Dec. 27.
Kralik, Blanche R., Chicago, Ill. Baking utensil. 1,637,617; Aug. 2.
Krall, Sinner, J., Chicago, Ill. Baking utensil. 1,637,617; Aug. 2.
Krall, Sinner, J. Chicago, Ill. Baking utensil. 1,627,763; Aug. 2.
Lee Company, Chicopee Falls, Mass. Vulcanizing tires. 1,627,765; May 10.
Kramer, Andrew A., Kansas City, Mo. Tank. 1,614,561; Jan. 18.

Kramer, A Jan. 18

Jan. 18.

Kraner, ndrew A., Kansas City, Mo. Liquid level inGuettor. 1.623,122; Apr. 5.

Krimer, Andrew A., Kansas City, Mo. Tank for dispensing liquids. 1.633,642; June 28.

Krämer, Christian, Berlin, Germany, assignor to General
Electric Company, Mercury-vapor arc rectifier.

1.642,216; Sept. 20.

Krämer, Christian, Pankow, Germany, assignor to General Electric Company. Cooling arrangement.

1.652,898; Dec. 13.

Krämer, Christian, Pankow, Berlin, Germany, assignor

1.655,899; Dec. 13.

Krumer, Erwin, Berlin, Germany, Device for recording
and reproducing sounds. 1.645,911; Oct. 18.

Kramer, Eugene, Astoria, N. Y. Box. Des. 72,952;
June 28.

Kramer, Gustav A., Concord, assignor, by mesne as-

Kramer, Gustav A., Concord, assignor, by mesne assignments, to Simplex Refining Company, San Francisco, Calif. Producing lubricating oils. 1,619,348; cisco, 6 Mar. 1.

May 24

May 24. aul. (See Heinrich, R., and Kramer.)
Framen, Henry E., New York, N. Y. Sectional flying
boat. 1,627,184; May 3.

Krammer, Henry E., New York, N. Y. Aircraft.
1,627,185; May 3.

Krammer, Henry E., New York, N. Y. Sounding line for
Krammer, Henry E., New York, N. Y. Sounding line for
Krammer, Henry E., Hempstead, N. Y. Shock absorber.
1,653,361; Dec. 20.

Kranner, Henry E., Hempstead, N. Y. Shock absorber.
1,653,361; Dec. 20.

Kranner, Araf F., assignor to Carl Heinze Machinenfabrik
A. G.
G. Guben, Germany, Hat-forming machine.
Kranner, Airce J., St. Paul, Minn. Adjustable powder dispenser.
1,638,684; Aug. 9.
Krank, Airce J., St. Paul, Minn. Adjustable powder
Krank, Airce J., St. Paul, Minn. Adjustable powder
Krank, Airce J., St. Paul, Minn. Adjustable powder
Krank, Airce J., St. Y. Sep. 13.

Krannich, Walter, Ludwigshafen-on-the-Rhine, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production
of emulsions. 1,652,016; Dec. 6.

Krautz, Fritz, Munich, and II. Krantz, Bud-Nauheim, Germany. Plant for fermenting and storing organic manure, foodstuffs, and the like. 1,643,018; Sept. 20. Krantz, Heinrich. (See Krantz, Fritz, and H.)
Krantz, Hermann, Anchen, Germany. Drying textile manure, foodstuffs, and the like. 1,642,018; Sept. 20. Krantz, Hermann, Anchen, Germany. Drying textile manure foodstuffs, and like treatment. 1,652,992; Dec. 13.
Krantz, Hubert K., Brooklyn, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Switch foodstuffs, and the like treatment. 1,652,888; May 17.
Krantz, Hubert K., Brooklyn, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Switch foodstuffs, and the like treatment of the like treatment of the like treatment. 1,642,900; Sept. 20.
Krantz, Philip M., Brooklyn, N. Y. Automotive equipment. 1,642,900; Sept. 20.
Krantz, Philip M., Brooklyn, N. Y. Automotive equipment. 1,642,900; Sept. 20.
Krantz, Hubert K., Geneva, Ill. System of secret wireless relephony. 1,628,411, May 10.
Kranz, Michael, assignor of one-fourth to W. H. Nelles, Chicago, Ill. Switch plug. 1,633,025; June 21.
Kränzlein, Georg, and A. Voss, Hochst-on-the-Main, Germany, assignors to Grasseli Dystuff Corporation, New Arapt, Jacob H., Chicago, Ill. Carton-blank separator. 1,635,299; June 14.
Kranz, Albert assignor to Entes Valve Bag Company. 1,636,517; July 19.
Kranson, Philip Miwankee, Wis Internal-combustion-cassel Dystuff Corporation, New 1,642,502; Sept. 13.
Krasson, Philip Miwankee, Wis Internal-combustion-casseli Dystuffs. May 31.

Kuning, House, 1, 2029, III. Freight-handler's truck. Itasberg, Rudolf, 136.
Krasno, 505, 1919, Milwaukee, Wis. Internal-combustion-engine valve. 1,630,760; May 31.
Krasselt, Robert O., Leipzig, Germany. Washing basin. 1,630,865; July 26.
Krattli, Michael, Kansas City, Mo. Curtain fixture. 1,633,262; June 21.
Kratz, Arthur B., Detroit, Mich. Rubbing machine. 1,622,562; Mar. 29.
Kratz, Arthur B., Detroit, Mich. Rubbing machine. 1,622,562; Mar. 29.
Kratz, Company, Feed device for film-forming machines. 1,649,860; Nov. 22.
Kratz, Edouard M., assignor to Marsene Products Co., Chicago, III. Transparent-paper machine. 1,650,585; Nov. 22.
Kratz, Howard L., assignor to John Wanamaker Philadelphia, Philadelphia, Pa. Flag. Des. 71,341; Jan. 11.
Kratz, Howard L., assignor to John Wanamaker Philadelphia, Philadelphia, Pa. Flag. Des. 71,341; Jan. 11.
Kelphia, Philadelphia, Pa. Statuettae. Bes. 72,089; Mar. 1.

Mar. 1.

Krauhs, Carl, Leverkusen, near Cologne, Germany, assignor to Grasselli Dyestuff Corporation New York, N. Y. Vat dyestuff of the Isatine oxythionaphthene group. 1,650,139; Nov. 22.

Kraus, Charles A., and C. C. Callis, Worcester, Mass., assignors to Standard Development Company. Alloy. 1,628,050; May 10.

Kraus, Charles A., and C. C. Callis, Worcester, Mass., assignors to Standard Development Company. Making assignors to Standard Development Company. Making Kraus, Charles A., and C. C. Callis, Worcester, Mass., assignors to Standard Development Company. Making Kraus, Charles Composition. 1,629,741; May 24.

Kraus, Harry G., Orange, N. J. Boiler. 1,638,163; Aug. 9.

Kraus, Joseph A., St. Louis, Mo. Can-puncturing device. 1,649,505; Aug. 30.

Kraus, Louis, et al., trustees. (See Inghram, Howard T., assignor.)

assignor.) Kraus, Martin J., Gary, Ind. Cab for tractors. 1,650,757; Nov. 29.

Nov. 29.

Kraus, Morris F., Chicago, Ill., assignor to M. Perciabosco and J. Rosinia. Coin detector. 1,640,453; Aug. 30.

Kraus, Samuel, New York, N. Y. Preventing freezing of drainpipes. 1,652,784; Dec. 13.

Krause, Arnold R. (See Hutchens, H. O., and Krause.) Krause, Arnold R. (See Hutchens, H. O., and Krause.) Krause, Arnold R. (See Hutchens, H. O., and Krause.) Krause, Arnold R. (See Hutchens, H. O., and Krause.) Krause, Arnold R. (See Hutchens, H. C. eliling lighting fixture. Des. 74,059; Dec. 13.

Krause, Arthur, Woodhaven, N. Y., assignor to Lion Electric Manufacturing Company, Inc. Chandeller. Des. 74,061; Dec. 13.

Krause, Arthur, Woodhaven, N. Y., assignor to Lion Electric Manufacturing Company, Inc. Chandeller. Des. 74,061; Dec. 13.

Krause, Arthur, Woodhaven, N. Y., assignor to Lion Electric Manufacturing Company, Inc. Chandeller. Des. 74,061; Dec. 13.

74.061; Dec. 13.

74,061; Dec. 13.

Krause, Arthur, Woodhaven, N. X., assignor to Lion Electric Manufacturing Company, Inc. Wall lighting Electric Manufacturing Company, Inc. Wall lighting Krause, Arthur, Woodhaven, N. Y., assignor to Lion Electric Manufacturing Company, Inc. Wall lighting fixture. Des. 74,063; Dec. 13.

Krause, Arthur J., Cleveland, Ohio. Speed-reduction mechanism. 1,631,739; June 7.

Krause, Arthur R., Woodhaven, and F. W. Mathieu, New York, N. Y. Lamp shade or analogous article of manu facture. Des. 72,856; June 14.

Krause, Charley, S. C. S.

Apr. 20.
rauss, Kurt, Berlin-Friedenau, Germany, assignor to
Westinghouse Electric & Manufacturing Company.
Alternating-current motor. 1,630,390; May 31.
rauss, Ralph A., Philadelphia, Pa. Rheostat. 1,652,017;

Alternating-current motor. 1,630,390; May 31.
Krauss, Rajba A., Philadeiphia, Pa. Rheestat. 1,652,017; Dec. 6.
Krauss, Rajba A., Philadeiphia, Pa. Rheestat. 1,652,017; Dec. 6.
Kraussee, Louis M., Houston, Tex. Stamping machine. 1,1613,463; Jan. 4.
Kraussee, Michael E., Buckingham, Colo. Insulated Kraxherger, Michael E., Buckingham, Colo. Insulated Kraysler, Irving, assignor to Farber-Kraysler & Bro., New York, N. X. Bracelet. 1,626,139; Apr. 26.
Kreager, William A. J., Denver, Colo. Burners for oil-well cleaners. 1,626,240; May 3.
Krebs, Adolf. Boston, Mass. Welding apparatus 1,613,262; Jan. Wilmston, assignor to The Krebs Pignett & Chemical Company, Newport, Del. Method and apparatus for quenching lithopone. 1,630,267; May 31.
Krebs, John W., Goodyear, Ariz. Buck rake. 1,650,453; Nov. 22.

ment & Chemical Company, Newport, Del. Method and apparatus for quenching lithopone. 1,630,267; May 31. Krebs, John W., Goodyear, Artz. Buck rake. 1,650,453; Krebs Playment & Chemical Company, The. (See Krebs, August S., assignor). Wield, Marchard Render, 1,614,477; Jan. 18. Kreb, Max. New Orleans. La., assignor to Wick Narrow Falce. Company. Philadelphia, Fa. Hatband. Kreidel, Hans, Wiesbaden, Germany. Lubricating gun. 1,614,134; Jan. 11. Kreider, Irvin K., Luncaster, Pa. Elevator for silos. 1,634,585; July 5. Render, Germany. Lubricating gun. 1,614,134; Jan. 11. Kreider, Irvin K., Luncaster, Pa. Elevator for silos. 1,634,585; July 5. Render, Cash Register Company, Dayton, Ohio. Cash register, 1,636,747; July 26. Kreider, Aifred, Stuttgart, Germany. Wire-drawing machine. 1,648,514; Nov. 8. Kreider, Aifred, Stuttgart, Germany. Wire-drawing machine. 1,648,514; Nov. 8. Kreisberg, Jacob, New York, N. Y. Hair curler. 1,616,534; Feb. 3. Kreisberg, Henry, Piermont, assignor to Combustion Engineering Corporation, New York, N. Y. Finely-Rivided-fuel-burning furnace. 1,645,651; Oct. 18. Kreisinger, Henry, Piermont, assignor to Combustion Engineering Corporation, New York, N. Y. Finely-Rivided-fuel-burning furnace. 1,645,651; Oct. 18. Kreisen, Jacques, New Rochelle, N. Y. Furnace-wall protection. 1,649,121; Nov. 15. Kreise, Edward J. and C. F., Kreise, Edward J. and

Mar. 8.
Kreiss Sign Co., Inc. (See Kreiss, Edward J. and C. F.,
assignors.)
Kreissig, Ernst. Uerdingen. Germany. Spring-supporting
means and the like. 1.633,027; June 21.
Kreiter. Richard F. (See Rhodes, H. F., and Kreiter.)
Kreil. George, (See Davis, Marvin B., assignor.)
Kreil. George, Sapulpa, Okla. Casing elevator. Rei6,771;
Kreil. Joseph, Rerlin-Pankow, assignor to the Firm
Addoma Masschinenbauges m. b. H., Berlin, Germany.

Tell. Joseph, Berlin-Pankow, assignor to the Firm Adrena Maschinenbauges m. b. H., Berlin, Germany. Printing plate and the like. 1,616.089; Feb. 1, remenck, John, Nampa, Idaho. Revolving table top. 1,635,296; Dec. 20.

Krengel, Charles H., Twin Falls, Idaho. Agricultural implement. 1,628,158; May 10.
Krengel, George F., Frankfort, Ind. Chicken-roost hanger. 1,653,773; Dec. 27.
Krentler-Arnold Hinge Last Company. (See Krentler, Waltor A., assignor.) Krentler-Arnold Hinge Last Company. (See Krentler, Waltor A., assignor.) Krentler-Arnold Hinge L. (1,621,208; Mar. 12.
Krentler, Walter A., assignor to Krentler-Arnold Hinge Last Company, Detroit, Mich. Last. 1,621,988; Mar. 22.

Krentler, Walter A., assignor to Krentler-Arnold Hinge Last Company, Detroit, Mich. Last. 1,621,989; Last Co

Krentler, Walter A., assignor to Krentler-Arnold Hinge Last Company, Detroit, Mich. Hinge. 1,651,824; ast 6

Last Company, Detroit, Mich. Hinge. 1,04.5027, Dec. 6, John G., assignor to Advance-Rumely Company, La Porte, Ind. Lubricating system for train of gears. 1,631,537; June 7. Krenzler, Emil, Barmen, Germany. Braiding machine. 1,632,698; June 14. Kreps, John C., Jr., Canden, G. M. Marsh, Gloucester, and W. C. Lutz, Runnemede, N. J. Humidifier. 1,617,124; 8.

Feb. 8.

Kresky, Jesse E., Petaluma, Calif. Gaseous-fuel burner, 1,616,051; Feb. 1.

Kress, Fritz, Dresden, Germany. Gasifier for liquid fuel. 1,658,772; Aug. 9.

Kress, Geo., Co., The. (See Buchrer, Emil, assignor.)

Kress, Henry H., Philadelphia, Pa. Oll-burning pressure torch. 1,617,399; Feb. 16.

Kress, Otto, Appleton, Wis., assignor to American Lakes Faper Company, Chicago, Ill. Oll and grease proof June 28. Kress, Otto,

ress, Otto, Appleton, Wis., assignor to American Lakes Paper Company, Chicago, Ill. Bleaching paper pulp. [465,061; Oct. 11. ress, Otto, Appleton, Wis., assignor to American Lakes Paper Company, Chicago, Ill. Bleaching paper pulp. 1.651,530; Dec. 6. ress, Theodore, and L. J. Koch, Fort Wayne, Ind., assignor of one-half to said Kress and one-half to said Kcch. Heater attachment for automobiles. 1,643,278;

Dec. 18.

Retschmer, Henry A., La Grange, assignor to W. Good-kretschmer, Park, Ill. Window cornice and the like. 1.652,265; Dec. 13.

Krettingen, Dmanuel, Los Angeles, Callf, Internal-com-bustion engine. 1.648,647; Nov. 8.

Kreuchauf, Edward J. (See Nicolai, Albert R., as-

Kreuchauf, Edward J. (See Nicolai, Albert R., assignor.)

Kreuder, Norman W., Chicago, Ill. Spraying device. 1.647,918; Nov. 1. Lelaware. Ohio. Making a rubber rarticle. 1.625,810; Apr. 26.

Krichbaum, William F., Irvington, N. J. Pressure regulator. 1.615,285; Jan. 25.

Krick, Arthur E., Danville, assignor to The Humidity Control Company, Indianapolis, Ind. Humidity regulator. 1.629,107; May 17.

Krick, George W. 10. Sangeles, Calif. Extension top for Krick, Homer, assignor of one-half to E. N. Harber, Fort Wayne, Ind. Gang mail box. 1.620.474; Mar. 8.

Krick, Leonard B., assignor to Citrus Products Company, Chicago, Ill. Bottle. Des. 71,918; Jan. 25.

Kriege, Walter L., assignor to Bendix Brake Company, Chicago, Ill. Bottle. Des. 71,918; Jan. 25.

Krieger, Jan. 1. Leonard B., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,620,030; Mar. 8.

Krieger, A. Edward, et al., trustees. (See McArthur, Robert C., assignor). (See Draher, J., and Krieger.) Krieger, Adolph J. (See Draher, J., and Krieger.) Krieger, Frederick A., Livingston, Mont. Agricultural machinery. 1,644,549; Co. 44. P., and Krieger.)

Krieger, Bohn P., Milwawke, Wis. Angle foat. 1,646,649; Kriegshelm, Heinrich, New York, and W. Vaughan, Brook-

Kriegsheim, Heinrich, New York, and W. Vaughan, Brooklyn, assignors, to The Permutit Company, New York, N. Y. Manufacture of precipitated zeolites. 1,642,880; Sept. 20. rleser, Ralph M., et al. (See Ditzler, Guy E., as-signor.) Krieser.

Kriete, William H., Des Moines, Iowa. Pop-corn kettle. 1.617.643; Feb. 15. Krietemeyer. Herbert G., Quincy, Ill. Microphone mounting. 1.653.109; Dec. 20. Krippendorf-Dittman Company. (See Jonas, Jacob F., Krippendorf-Dittman Company.)

assignor.)
Krisch, Frank, Los Angeles, Calif. Hydraulic brake
mechanism. 1,855,331; July 12.
Krischer's Manufacturing Company.
(See Freysinger,
John B., assignor.)
Krist, Erhel M., Sacramento, Calif. Curtain rod.
1,617,162; Feb. 8.
Krive, James, St. Louis, Mo. Telephone latch.

1,644,194; Oct. 4.

Kriveshein, Gregory G., Prague, Czechoslovakia, assignor of one-haif to J. R. Freeman, Providence, R. I. Combined suspension and arch bridge. 1,626,241; Apr. 26. Kriz, Frank H. (See Appleton, J. H., and Kriz, Kriz, William, et al. (See Frink, Melvin L., assignor.) Kroczek, Anton M., Chicago, Ill. Birdeage. 1,020,361;

Kroczek, Anton M., Chicago, III. Bird cage. 1,653,637; Kroczek, Anton M., Chicago, III. Bird cage. 1,653,637;

Dec. 27. Kroder, Daniel D., et al. (See Oliver, R. M., and Penn,

assignors.)
Kroder, John, and Henry Reubel Company. (See Crawford, James O., assignor to Eastman Kodak Company, Kroedel, Robert, assignor to Eastman Kodak Company, Expedite cameras. 1,613,535; Jan. 4.
Kroedel, Robert, assignor to Eastman Kodak Company, Rochester, N. Y. Holder for photographic materials such as cut films. 1,615,062; Feb. 8.
Kroedel, Robert, assignor to Eastman Kodak Company, Rochester, N. Y. Holder for photographic materials such as cut films. 1,615,002; Feb. 8.
Kroedel, Robert, assignor to Eastman. 2,651,460; Robert, Ro

Rochester, N. Y. Photopaparate, Dec. 6.
Kroedel, Robert, and C. F. Speidel, assignor to Eastman Kodak Company, Rochester, N. Y. Freusing mechanism Kodak Company, Rochester, N. Y. Freusing mechanism Kodak Company, Rochester, N. Y. Frederick, C., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Obio. Engine-starting apparatus. 1,634,751;

mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Enginestarting apparatus, 1,634,751; July 5.
Kroeger, Frederick C., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Ignition apparatus, 1,641,442; Sept. 6.
Kroeger, Frederick C., and H. E. Norviel, Anderson, Ind., assignors, by mesne assignments, to Delco-Remy Corporation, by March Condenser-winding machine, 143,835 (co. 16). Condenser-winding machine, 143,835 (co. 16). Condenser-winding machine, 145,835 (co. 16). Kroeger, Martin, (See Beaching, Robert V., assignor.) Kroeger, Martin, et al. (See Pradas, Henry, assignor.) Kroelier Mfg. Co. (See Beech, Alexander C., assignor.) Kroeling, Karl, New York, N. Y. Door stop. 1,616,265; Feb. 1.

Feb. Ingene O. Paso Robles, Calif. Sleeve puller for cuttomobiles. 1,632,462; June 14. Kroff. Leonard D. Sterling, Ill. Mechanical toy. 1,626,640; Apr. 26. Kroff. Leonard D., Sterling, sasignor to Patent Novelty Company, Fulton, Ill. Mechanical toy. 1,648,352;

Kroll, Philip J., Joplin, Mo. Container. 1,627,851;

Company, Fulton, Ill. Mechanical toy. 1,638,302;
Nov. 8.

Kroll, Philip J., Joplin, Mo. Container. 1,627,851;
May 10.

Kroll, Philip J., Joplin, Mo. Container. 1,627,852;
May 10.

Kroll, Philip J., Joplin, Mo. Closure member. 1,646,154;
Oct. 18.

Kroll, Philip J., Joplin, Mo. Closure member. 1,646,154;
Oct. 18.

Kroll, Grand, Mo. Closure member. 1,646,154;
Oct. 18.

Kronauer. Frank C., Glen Rock, N. J. Rail joint. 1,637,449; Aug. 2.

Krone, Frederick W., San Francisco, Calif. Tire construction. 1,636,779; July 26.

Kronenberg. Frederick W., San Francisco, Calif. Tire construction. 1,636,779; July 26.

Kronenberg. Frederick W., Philadelphia, Pa. Steam boilCra. 1,625,649 A. Philadelphia, Pa. Steam boilCra. 1,625,649 A. Philadelphia, Pa. Steam boilCra. 1,640,649 A. Philadelphia, Pa. Steam boilCra. 1,625,649 A. Philadelphia, Pa. Steam boilCra. 1,625,649 A. Philadelphia, Pa. Steam boilCra. 1,656,649 A. Philadelphia, Pa. Steam boilCra. 1,640,242; Aug. 1,845,640 A. Philadelphia, Pa. Steam boilCan Company, Syracuse, N. Y. Can-testing ampairatus. 1,650,895; Nov. 29.

Kronquest, Alfred L., Chicago, Ill., assignor to Continental
Can Company, Syracuse, N. Y. Can-testing machine. 1,640,242; Aug. 23.

Krongward, Marter, Elberfeld, near Cologne-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft,
Frankfort-on-the-Main, Germany, Vulcanization of rubKropp, Waiter, Elberfeld, mear Cologne-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft,
Frankfort-on-the-Main, Germany, Wanufacture of condensation products of crotonaldehyde, 1,640,899;
Aug. 30.

Kroschel, Louis A. Los Angeles, Calif. Side stop hinge.

Aug. 30 Kroschel,

densation products of crotonaldehyde. 1,640,899; Aug. 30.

Rroschel, Louis A., Los Angeles, Callf. Side stop hinge. 1,622,451 Mar. 2. See Rutherford, H. K., and Krotee. 1,622,451 Mar. 2. See Rutherford, H. K., and Krotee. 1,670 Mar. 2. See Rutherford, H. K., and Krotee. 1,670 Mar. 2. See Rutherford, H. K., and Krotee. 1,670 Mar. 2. See Rutherford, H. K., and Krotee. 1,671 Mar. 2. See Rutherford, H. K., and Krotee. 1,671 Mar. 2. See Rutherford, H. K., and Krotee. 1,671 Mar. 2. See Rutherford, H. K., and Krotee. 1,671 Mar. 2. See Rutherford, H. K., and Krotee. 1,671 Mar. 2. See Rutherford, H. K., and Krotee. 1,671 Mar. 2. See Rutherford, H. K., and Krotee. 1,671 Mar. 2. See Rutherford, H. K., and Krotee. 1,671 Mar. 2. See Rutherford, H. S., and Genzald, and Genzalde, and See Rutherford, See Rutherford, May 10. See Rutherford, H. S., and See Rutherford, H. S., and See Rutherford, H. S., and Genzalde, and See Rutherford, See Rutherford, See Rutherford, See Rutherford, H. S., and Genzalde, and See Rutherford, H. S., and Genzalde, and See Rutherford, See Rutherford, See Rutherford, See Rutherford, H. S., and See Ruth

Kruckenberg, Franz, and F. Gentzcke, Heidelberg, Germany; said Gentzcke assignor to said Kruckenberg, Arrangement for changing the machinery of high-speed suspension, 1,637,778 Aug., 1,648,149, Heidelberg, Germany; said Stedefeld assignor to said Kruckenberg, Braking arrangement for high-speed suspension rail-way, 1,614,841; Jan. 18.
Kruckenberg, Franz, and C. Stedefeld, Heidelberg, Germany; said Stedefeld assignor to said Kruckenberg, Emergency braking arrangement for high-speed suspension rail-way, 1,614,842; Jan. 18.
Kruckenberg, Franz, and C. Stedefeld, Heidelberg, Germangener, Franz, and C. Stedefeld, Heidelberg, Germangener, Franz, and C. Stedefeld, Heidelberg, Germannerg, Franz, Germannerg, Germanner

Co., Green Bay, Wis. Dispensing cablnet. 1,632,446; June 14. Krueger, Hermang O., Niles Township, Floyd County, Krueger, Hermang O., Niles Township, Floyd County, Krueger, Theodore H., New York, N. Y. Envelope and the like and carrier thereof. 1,616,535; Feb. 8. Krueger, Theodore H., New York, N. Y. Tape-serving device. 1,635,816; Aug. 9. York, N. Y. Tape-serving Krueger, Theodore H., New York, N. Y. Tape-serving Krueger, Theodore H., New York, N. Y. Envelope. 1,642,116; Sept. 13. Kruger, English St. York, N. Y. Envelope. 1,642,116; Sept. 13. Kruger, Harry B. (See Stranders, Julien, assignor), Kruger, Faul W., Attal County, Miss. Composition of matter for unpling pulps in tech and improvements Krüger, Richard, Nienburg-on-the-Saale, Germany. Extension table. 1,639,510; Aug. 16. Krum, Charles L. and H. L., assignors, by mesne assignments, to Morkrum-Kleinschmidt Corporation, Chicago, Ill. Telegraph transmitter. 1,653,129; July See assignments, to Morkrum-Kleinschmidt Corporation, Chicago, Ill. Printing or selecting telegraph. 1,635,486; July 12. Krum, Howard I. (See Krum, Charles L. and H. L.)

cago, Ill. Printing or selecting telegraph. 1,635,486: July 12.

Krum, Howard L. (See Krum, Charles L. and H. L.)

Krum, Howard L. (See Krum, Charles L. and H. L.)

Morrow Krum, Etenschmidt Corporation, Chicago, Ill. Telegraph system. 1,635,130; July 5.

Krum, Howard L., assignor, by mesne assignments, to Morkum-Kleinschmidt Corporation, Chicago, Ill. Selective telegraph system. 1,635,131; July 5.

Krum, John H., assignor of one-half to C. E. McGlocklin and C. McGlockli

Kruse, Max, Creswell, Oreg. Saw oiler. 1,621,420; Mar. 15.

Mar. 15.
Kruttschnitt, John, San Francisco, Callf. Balanced plug
valve. 1,614,890; Jan. 18.
Krystofak, Josef, New York, N. X., assignor, by mesne
assignments, to E. and B. Willbrandt, copartners trading
as Art Asentible Furniture Company, St. Louis, Mo.
Mechanical movement. 1,639,191; Aug. 18.
Kriskalla, Hans. (See Krannich, W., Krzikalla, and

Schuster.)
Kubat Enil J., et al. (See Barry, Richard P., assignor.)
Kubelka, Jerry, Ridgewood, N. Y. Concealed fastening
for push and puil handles. 1,652,018; Dec. 6.
Kublac, Lester S., Youngstown, Obio. Electric arc lamp
1,648,019; Nov. 8.
Kublac, Lester S., assignor to The Photogenic Machine
Company, Youngstown, Obio. Clutch. 1,618,127;

Feb. 15.
Kubicek, John, Yonkers, N. Y. Clutch for power transmission. 1,614,870; Jan. 11.
Kubierskhy, Konrad, Eisenach, and W. Schultze, Halleon-the-Saale, Germany. Fire-extinguishing liquid. 1,633,838; June 21.
Kubista, Charile L., Sleepy Eye, Minn. Clothesline holder. 1,635,850; July 12.
Kubista, Joseph. Owatonna, Minn. Spinal-adjustment device. 1,642,158; Sept. 18.
Kubier, Johannes, assignor to Aktiengeselischaft Brown venting oxidation of oil in transformers. 1,635,332; July 12.
Kubo, Masakichi, Tokyo, Japan. Manufacturing malleable cast iron. 1,634,586; July 5.
Kuccra, Frank. (See Rubel, C. F., and Kucera,)
Kucera, Peter, assignor to Capstan Glass Company, Connelisville, Pa. Method and apparatus for regulating glass machines. 1,640,944; Aug. 30.

Kucharski, Stanislaus, Berlin, Germany. Keyboard musical instrument. 1,643,562; Sept. 27.
Küchen, Nicolaus, Aachen, Germany. Brake for vehicles. 1,025,777; Apr. 19.
Kuchenmeister, Fritz, assignor to Gebrüder Steimel, Henaef, Germany. Dalry machine. 1,643,503; Sept. 27.
Küchenmeister, Helnrich J., Berlin, Germany. Sound-reproducing machine. 1,649,477; Nov. 15.
rigeration. 1,645,198; Oct. 11.
Kucher, Charles W., Seattle, Wash. Anchor. 1,617,528; Feb. 15.

Kucher, C Kucher, C

Kucher, Charles W., Seattle, Wash. Anchor. 1,617,528; Feb. 15.
Kucjnak, George, Seneca Fails, N. Y. Automobile signal. 1,630,192; Aug. 11,630,192; Aug. 11,630,192; Aug. 11,100,192; Aug. 11,100,

May 17. Arthur T., St. Augustine, Fla. Journal box. 1,632,552; June 14. L. Chain. 1,626,416; uehner, Wilhelm, Providence, R. L. Chain. 1,626,416;

Lious Bern, Wilhelm, Providence, R. L. Carlon, Wilhelm, Providence, R. L. Carlon, Cher. 26.

Kuebker, Georg. (See Klemte, August, assignor.)

Kuester, Otto, Detroit, Mich. Pin-wheel toy. 1,630,852;

Kuester, Otto, Detroit, Mich. Pin-wheel toy. 1,630,852;

May 31.

Cleansing and polish-

Kuever, Rudolph A., Iowa City, Iowa, assignor to Pep-sodent Company, Chicago, Ill. Cleansing and polish-ing agent. 1,619,076; Mar. I. Kufabl. Anton. J. Wausau, Wis. Ironing board,

ing agent. 1,619,076; Mar. 1. Licansing and polish-lufabl, Anton J. Wausau, Wis. Ironing board, 1,616,907; Feb. 8. ugel, Max. Leverkusen, near Cologne, Germany, assignor to Grasselli Dyestuff Corporation, New York, N. Y. Vat dyestuffs of the anthraquinone series, 1,651,461; Dec. 6.

Dec. 6.

Kugler, Benjamin, Chicago, Ill. Safety harness and coupling for window cleaners. 1,649,240; Nov. 15.

Kugler, Otto, sr. (See Goebert, C., and Kugler.)

Kuhar, George, Chicago, Ill. Plumb trowel, 1,617,125;

Feb. 8.

Kuhlke Machine Company, The. (See Kuhlke, Otto J., assignor).
Kuhlke, Otto J., assignor to The Kuhlke Machine Company, Akron, Ohio. Apparatus for vulcanizing inner tubes. 1,644.678; Oct. 11.
Kuhlke, Otto J., assignor to The Kuhlke Machine Company, Akron, Ohio. Tube vulcanizer. 1,652,366; Dec. 13.

Dec. 13.
Kubliman Edward H., assignor, by mesne assignments, to
The National Cash Register Company, Dayton, Ohio.
Engraving machine. 1,620,975; Mar. 15.
Kublimann, Frederick J. P. (See Girton, T. C., and Kubl-

Nullimann, Frederick J. P. (See Girton, T. C., and Kuhlmann, Frederick J. P., San Francisco, Calif. Orchard ladder. 1.613.836; Jan. 1.51.
Kuhn, Clinton J., Vanderburgh, assignor to Graham Brothers, Evaneville, Ind. Finger guard for foldable in the Company of th

Oct. 11. Kuhn, John W., Akron, Ohio. Tire-building machine. 1.637.195; July 26. Kuhn, Leah, Spokane, Wash. Portable toilet for infants. 1,650.365; Nov. 22.

Kuhn, Louis V., and F. H. Vogel, assignors to The Columbus Vending Company, Columbus, Ohio. Vending matchine. 1,631,605: Dec. 6.

Kuhn, Louis V., and F. H. Vogel, assignors to The Columbus Vending Company, Columbus, Ohio. Vending matchine. 1,631,606: Dec. 6.

Kühn, Ludwig, Charlottenburg, near Berlin, assignor to Westinghouse Electric & Manufacturing Company, Modulation system. 1,630,891: May 31.

Kühn, Ludwig, Charlottenburg, near Berlin, assignor to the Firm: Dr. Erich F. Huth G. H. Rerlin, Germany. Apparatus for influencing alternating currents. 1,653,859: Dec. 27.

Kuhn, Max O., assignor to The Firestone Steel Products Company, Akron, Ohio. Riveting press. 1,622,248: Mar. 22.

Company, Akron, Ohio: Asvessis p. Gebhart, Reed. Mar. 22.
Kuhn, McClellan A., Porterville, and G. D. Gebhart, Reed. ley, Calif. Railway-cressing signal. 1,616.809; Peb. 8.
Kuhn, Otto, et al. (See Aichiele, Ernest, assignor; Kühn, Paul, Niederschelden-on-the-Sieg, Germany.) Smelting and refining of iron, steel, and other metals in open-hearth furnaces. 1,618,934; Feb. 22.
Kuhn, Wilfred H., assignor to Wright-Austin Company, Detroit, Mich. Water-column alarm. 1,620,729; Mar. 15.

Mar. 15.

Kuhnast, Fredrick W., New York, N. Y. Combined cover and strainer. L614.745; Apr. 12.

Kühne, Beat, Lewistown, Mont. Bottle cap or closure. Ruhne, Beat, Lewistown, Mont. Tooth-cleaning device. 1.624.054; Apr. 12.

Kuhne, Beat, Lewistown, Mont. Milk-bottle cap. 1.638.459; Aug. 9.

Kuhne, Heat, Lewistown, Mont. Milk-bottle cap. 1.638.459; Aug. 9.

Kuhne, Joseph, Iserlohn, Germany. Connecting-rod bear-Kuhne, Joseph, Iserlohn, Germany. Single-stroke-heading machine. 1.618.445; Feb. 22.

Kuhne, Joseph, Iserlohn, Germany. Making cold screw blanks, rivets, and similar headed articles. 1.618.446;

Kuhne, Joseph, Iserlohn, Germany. Making cold screw blanks, rivets, and similar headed articles. 1,618,446; Feb. 22. Kuhnel, Paul, San Francisco, Calif. Velocipede. 1,622,243; Apr. 9. for locomotive-valve chambers. 1,615,906; Feb. 1. Kuhnert, Walter A., Los Angeles, Calif. Recovery of sodium sesquicarbonate from brines. 1,618,834; Feb. 22. Kuhnert, Walter A., Los Angeles, Calif. Recovery of mrines. 1,618,836; Feb. 22. Kuhnert, Walter A., Los Angeles, Calif. Recovery of brines. 1,618,836; Feb. 22. Kuhnert, Walter A., Los Angeles, Calif. Recovery of mrines. 1,618,836; Feb. 22. Kuhni, Hans, Rumlang, Switzerland, assignor, by mesne assignments, to Air Reduction Company, Incorporated. Heat-interchange device. 1,650,140; Nov. 22. Kuhns, Howard F. Allentown, Pa. Washing machine. Kuhnt, Otto C. Mount Vernon, N. Y., assignor to Hartford-Empire Company, Hartford, Com. Apparatus for aunealing glassware. 1,638,401; Aug. 2, 1,637,618; Aug. 2. Cannstatt, Germany. Baking oven. 1,637,618; Aug. 2. Cannstatt, Germany. Baking oven. 1,637,618; Aug. 2. Cannstatt, Germany. Baking oven. 1,650,742; Dec. 27. Kulk, Mary E., Kacine, Wis. Mothproof bag. 1,622,323; Mar. 29. Rulka, Joseph, Monongah, W. Va. Dough-rolling machine. 1,650,738; Nov. 29. Kulbeck, Niels, Oslo, Norway. Scaffold. 1,633,112; June 21. Kuldell. R. C., administrator. (See Hughes, Howard R.)

Kulage Dominick, St. Louis, Mo. Weather-strip unit. Kulage Dominick, St. Louis, Mo. Weather-strip unit. Kulage Dominick, St. Louis, Mo. Weather-strip unit. Kulage Dominick, St. Louis, Mo. Weather-strip, Louis, Lo

Apr. 5.
Rundee, Albert H., assignor to Premier Warm Air Heater
Company, Dowagiac, Mich. Automatic humidifier for
warm-air furnaces. 1,641,172; Sept. 6.

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Kündig, Fritz, Wallisellen, near Zurlch, Switzerland. Pro-duction of coffee free from caffeine. 1,629,512; May 24. Kundrat, Michael, Haftey, Pa. Sleigh. 1,617,529

duction of coffee free from caffeine, 1,629,512; May 24. Kundrat, Michael, Haftey, Pa. Sleigh. 1,617,529; Peb. 15. Kuney, Clarence F., Brookfield, assignor to Federal Steel Sash Company, Waukesba, Wis. Sash-welding apparatus. 1,648,409; Nov. Olsen, Minneapolis, Minn.; safd Olsen assignor to said Kunin. Hair-curling apparatus. 1,643,411; Sept. 27. Luish, Enail. (See Lorenz, C., Kunish, and Seitz.) Kunish, Fallerick L., Milwaukee, Wis. Fabric. 1,636,640; July 10.

Kunkel Stamping & Manufacturing Company. (See Broome, William J., assignor.) Kuno, Schichigoro, Ogden, Utah. Heating steering wheel. 1.615,635; Jan. 25. Kuntz, Frank A. (See Shann, O. A., and Kuntz.) Künzer, Marcel, La Chauz, De-Fonds, assignor to Societé

1.610,635; Jan. 25.

1.620,635; Jan. 25.

1.620,635

Aug. 2.

Kupec, William J. (See Chapin, P. P., and Kupec.)

Kupetz, Adolph G., New Rochelle, assignor to Underwood

Typewriter Company, New York, N. Y. Typewriting

machine. 1,619,349; Mar. Arthur, assignor.)

Küpfmüller, Karl. (See Lüschen, P., and Küpfmüller.)

Küpka, Johann, Endon, Bagland, Cylinder casting for Kupka, Johann, London, England, Cylinder casting for Kupka, William, Chicago, Ill. Rail lock. 1,627,743;

May 10.

Stephen William, Chicago, L. Kupke, William, Chicago, L. Kupke, William, Chicago, L. Kupke, William, Chicago, L. Cassel, Kupke, Kurt. assignor to Kall-Industrie A. G., Cassel, Kupke, William, Chicago, L. Cassel, Cormany, Hoisting system for mines. 1,642,585; Cormany, Hoisting system for mines.

Sept. 15.
Kurda, Karl. (See Rüdenburg, R., and Kurda.)
Kurdioff, Samuel, assignor to Lehman Brothers Silverware
Auticle. Des. 72,156; Mar. 8.
Eeverage un or similar
article. Des. 72,156; Mar. 8.
Kurkowski, Joseph. Pittsburgh. Pa. Apparatus for joining or connecting pipes. 1,627,288; May 3.
Kurman, Nathan A., assignor to The Herald Electric
Company, New York, N. Y. Loud speaker. Des.

Company, New York, N. Y. Loud speaker. Des. 72,799; June 7.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,614,003; Jan. 11.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,622,1074; Mar. 15.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,622,621; Mar. 22.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,623,481; Apr. 5.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,623,481; Apr. 5.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,623,421; Apr. 5.

Kurowski, Alfred G. F., Brooklyn, N. Y. Typewriting Machine. 1,623,421; Apr. 19.

Kurowski, Alfred G. F., Brooklyn, N. Y. Typewriting machine. 1,623,635; July 26.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,636,635; July 26.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,636,635; July 26.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,636,635; July 26.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,636,635; July 26.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,636,635; July 26.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,636,635; July 26.

machine. 1,636,696; July 26.

Kunowski. Alfred G. Challen, Segment to Underwood Typerfell (189,000), New York, N. Y. Typewriting machine. 1,643,602; Aug. 16.

Kunowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,640,641; Aug. 30.

Kunowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter (199, 199), Sept. 6.

Kunowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,641,624; Sept. 13.

Kunowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,643,644; Sept. 13.

Kunowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,643,644; Sept. 27.

Kunowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,643,684; Sept. 27.

Kutowski, Alfred G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,643,687; G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,643,887; G. F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,643,887; G. F. Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,643,887; G. F. Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,643,887; G. F. Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,643,887; G. F. Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,643,887; G. F. Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,643,887; G. F. Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,643,887; G. F. Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting Machine. 1,642,888 and 1,842,888 and 1,842,888 and 1,842,888 and

Kurowski, Alfred G. F. Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine, 1,648,966; Oct. 25.
Kurowski, Alfred G. P., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine, 1,653,862; Dec. 20.

Kurscheidt, Peter J., Woodhaven, and H. E. Norwood, Brooklyn, N. Y. Clutch for window regulators, 1,628,672; May 17. Kurscheidt, Peter J., Woodhaven, and H. E. Norwood Brooklyn, assignors, by meane assignments, to Perfect Clutch, 1,632,763; June 14. Long Island City, N. Y. Kurscheidt, Peter J., and H. E. Norwood, New York, assignors, by meane assignments, to Perfect Window Regulator Corporation, Long Island City, N. Y. Window regulator, 1,642,053; Sept. 18, gpor of one-half to R. L. Lorot, Fasalena, and one-half to R. L. Carot, Fasalena, and one-half to R. L. Carot, Fasalena, and one-half to R. L. Calif. Advertising device and the like. 1,617,126; Feb. 8.

Calif. Advertising device and the like. 1,617,126; Feb. 8.
Kurth, Paul. (See Barthel, H., and Kurth)
Kurth, Paul. (See Barthel, H., and Kurth)
Kurth, Chicago, Ill. (See Barthel, H., and Kurth)
Kurtosay, László, Budapest, Hungary. Automatic coupling for railway vehicles. 1,618,363; Feb. 22.
Kurtt, Nathan, Chicago, Ill. Coupler. 1,650,366; Nov. 22.

urz, Robert F., New Haven Conn., assignor of two-thirds to F. A. Damon and one-third to F. Starita, New Haven, Conn. Box-nailing machine. 1,632,085; June 14.

June 14.
Kurzer, Solomon, New York, N. Y. Hose supporter.
1,637,948; Aug. 2.
Kus, Thomas G., Evanston, assignor to American Coke & Chemical Company, Chicago, Ill. Coke oven.
1,635,679; July 12.
Kuschel, Clemens J., Brown Valley, Minn. Babbitting frame. 1,624,605; Apr. 12.
Kusel, Isidor J., Chicago, Ill. Coin bank. 1,639,344;
Ang. 16. Aug. 16.

Kushlan, Max, and H. E. Young, Chicago, Ill. Gate mechanism. 1,697,575; Aug. 2.
Kushner, William M., Brooklyn, N. Y. Adapter for vacuum bottles. 1,623,544; Apr. 5.
Kushnier, John, Powhatan Point, Ohio. Vegetable cutter. 1,618,935; Feb. 22.
Kusse, Frederick C., jr. (See Kusse, Frederick C., sr., and F. C., jr.)

and F. C., 1r., (See Kusse, Frederick C., sr., Kusse, Frederick C., sr., and F. C., 1r., Chicago, Ill. Kascraft Sci. 185: Dec. 20.

Kascraft Reinfold, Oakland, Calif. Cleaning molasses for manufacturing compressed yeast. 1,642,329; Sept. 20.

Sept. 20.

Kussmaul, Walter. (See Stoll, A., and Kussmaul.)

Kusterer, Carl C., Grand Rapids, Mich. Morris-chair

frame. Des. 73.231; Aug. 9.

Kusterer, Carl C., Grand Rapids, Mich. Morris-chair

frame. Des. 73.232; Aug. 9.

Kusterle, Frank, assignor to Simmons Company, Kenosha,

Wis. Crib. 1,618.447; Feb. 22.

Kusterle, Frank, assignor to Simnons Company, Kenosha,

Wis. Connection for tubes. 1,630,492; May 31.

Kutchka, Karl G., Wilkinsburg, Pa., assignor to Pitts
glass blanks. 1,617.955, Feb. 18, Turnace for heating

glass blanks. 1,617.955, Feb. 18, Turnace for heating

kutchka, Karl G., Wilkinsburg, Pa., assignor to Pitts
burgh. Plate Glass Company. Glass-melting tank.

1,638.737; Aug. 9.

Kutter, Herman L., Hamilton, Ohio. Bearling. 1,623,624;

Kutter, Herman L., Hamilton, Ohio. Bearing. 1,623,624;

Kuttes, Anthony, Alameda, Calif. Pliers. 1,625,615; Apr. 19. Kuttruf. Wilhelm. (See Walter, A., and Kuttruf.) Kuttruf, Wilhelm. (See Walter, A., and Kuttruf Kutz, Jacob H., Bethlehem, Pa. Figure toy. 1,

1.651.282:

Kutor, duft Leipzic-Stung, Germany. Benzine and oll Kutor, Lofas 861, July 26. Kutzin, Philip, New York, N. Y. Removable stocking supporter for ladies garments. L634 071; June 28. Kux, Albert S. (See Blitz. A., and Kux.)

assignor.) uyken, Pieter, Zaandam, Netherlands, Double-acting two-stroke internal-combustion engine. 1,618,345; Feb. 22.

Kvalvik, Kornelius P., Edberg, Alberta, Canada. Animal (val). 1,652,444; Dec. 13. Czechoslovakia. Drafting dekvalve. 1,622,554; Mar. 29.
Ewartin, Bernard, Philadelphia, Pa. Holder for telephone receivers. 1,647,833; Nov. 1.
Ewik-Mix Company. (See Glison, Michael, assignor.)
Ewik-Mix Concrete Mixer Co. (See Glison, John P.,

Kyfes, Rudolph, Locust Ridge, La. Gate. 1,640,329; Aug. 23. Kyfes, Vinko, St. Joseph, La. Farrier's knife. 1,619,619;

Mär. I.

Kyhl, Emil, Britt, Iowa. Startier's Kalle. 1,619,619;

Kyhl, Emil, Britt, Iowa. Starting switch for electric starting motors. 1,624,255; Apr. 12.

Kyle, Colin, San Jose, Calif. Acoustic device. 1,644,387; Oct. 4.

Kyle, George L., assignor to U. S. Light & Heat Corporation, Ningara Falls, N. Y. Testing batteries for leaks 1,643,949; Oct. 1.

Kyle Jewes Brighton, N. Y. Belt conveyer. 1,626,041; Apr. 26.

Kyle Jewes Brighton, N. Y. Belt conveyer. 1,626,041;

assignor.)
G. S. Devices Corporation. (See Starkey, William C., assignor.)

assignor.)

Laubs, Max A., assignor to American Optical Company,
Southbridge, Mass. Producing monocentric fused bifocal lenses. Relfs.830; Dec. 27.

Laubs, Max A., assignor to American Optical Company,
Southbridge, Mass. Producing monocentric fused bifocal lenses. 1630,766; May 31.

Laubs, William, Miwaukee, Wis., assignor to The Allbright.Nell Company, Chicago, Ill. Cooker. 1,630,124;

May 24.

bright-Neil Company, Chicago, Ill. Cooker. 1,630,124; May 24.

Labadie, Harry H., and B. B. Beers; said Beers assignor to Knickerbocker Case Company, Chicago, Ill. Sample La Barr, Joel S. (See Bradford, R. H., La Barr, and Thompson.)

Labbe, Roland A., Onaga, Kans. Device for supplying moistened at to internal combustion engines.

La Beand, Halile. New York, N. Y. Shower shawl. 1,641,039; Aug. 30.

Labelle, Edouard, Montreal, Quebec, Canada. Hydrocarbon burner. 1,653,207; Dec. 20.

La Bombard, Leon E., and M. H. Sidochtam, assignors to Specialty Automatic Machine Company, Chelsea, Mass. Fleatfed mechanism. 1,634,072; June 28.

La Bombard, Leon E., and M. H. Sidochtam, assignors to Specialty Automatic Machine Company, Chelsea, Mass. Feeder for warped articles. 1,651,135; Nov. 29.

Labombarde, Elle W., Nashua, N. H. Beenforced and leak-tight paper box. 1,634,073; June 28.

Labombarde, Harvold S., Nashua, N. H. Beenforced and leak-tight paper box. 1,634,073; June 28.

Labombarde, Harvold S., Nashua, N. H. Feeder for sheet material. 1,634,074; June 28.

Labor Saving Appliance Corp. (See Schulman, Soloman, assignors).

assignor.)

Labram, Alfred, Osterley Park, England, assignor to Whiting-Patterson Co., Inc. Cover paper or the like. Des. 72.019; Feb. 15.

Labram, Alfred, Osterley Park England, assignor to Des. 72.020; Feb. 15.

Labram, Alfred, Osterley Park, England, assignor to Whiting-Patterson Co., Inc. Cover paper or the like. Des. 72.021; Feb. 15.

Labram, Alfred, Osterley Park, England, assignor to Whiting-Patterson Co., Inc. Cover paper or the like. Des. 72.021; Feb. 15.

Labram, Alfred, Osterley Park, England, assignor to Des. 72.022; Feb. 15.

Labram, Alfred, Isleworth, England, assignor to W. H. S.

Lloyd Co., New York, N. Y. Wall decoration, 1,645,020; Nov. 8.

Labram, Alfred, Isleworth, England, assignor to W. H. S. Lloyd Co., New York, N. Y. Wall decoration. 1,648,021; Nov. 8. La Brie, Ludger E. (See Bendix, V., and La Brie.)

La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,616.583; Feb. 8.

Feb. 8.

La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,021,79+: Mar. 22.

La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,630,061; May 24.

La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Operating device. 1,632,794.2 June 21.

Brake Company, Chicago, Ill. Operating device. 1,632,794; June 21. a Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,634,367;

Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,634,368;

La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brike. Company, Chicago, Ill. Brake. 1,634,568; La Brie, Ludger E., South Bend, Ind., assignor to Motor Industries, Inc., Chicago, Ill. Wheel with brake disk. 1,635,688; July 5. La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1,636,6095; July 19.

July 19.
La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,633,004; July 19.
La Brie, Ludger E., South Bend, Ind., assignor to Motor Industries, Inc., Chicago, Ill. Wheel. 1,637,527;

Industries, Inc., Success, Aug. 2.

a Brie, Ludger E., South Bend, Ind., assignor to Bendix
Brake Company, Chicago, Ill. Brake-applying means.
1,639,095; Aug. 16.

a Brie, Ludger E., South Bend, Ind., assignor to Bendix
Brake Company, Chicago, Ill. Brake. 1,641,443;
Scar 6.

Erake Company, Chicago, III. Braac.
Sopt. 6.
La Brie, Ludger E., South Bend, Ind., assignor to Bendix
Brake Company, Chicago, III. Vehicle having brakes.
1,647,007; Oct. 25.
La Brie, Ludger E., South Bend, Ind., assignor to Bendix
Brake Company, Chicago, III. Brake anchor. 1,648,185;

Nov. 8.
Briek Ludger E., South Bend, Ind., assignor to Bendix
Brake Company, Chicago, III. Brake. 1,648,552;

Nov. 8.
a Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,651,608;

Nov. 5.

La Brie, Ludger E., South Bend, Ind., assignor to Bendix Dec. 6.

La Brie, Loughar E., South Bend, Ind., assignor to Bendix Dec. 6.

La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake shoe. 1.652.485; Dec. 13.

Lacerda, Harry A., Watervliet, N. Y. Oil burner. Lacerda, Harry A., Watervliet, N. Y. Oil burner. Lacerda, Harry A., Watervliet, N. Y. Boiler tool. 1.633.349; Aug. 2.

Lacerd, Day C., Lacerda, Lacerda, Harry A., Watervliet, N. T. Boiler tool. 1.628.159; May 10.

Lacey, Bohn S., Columbus, Ohio. Temporary binder. 1.628.159; May 10.

Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, F. E., and Lacey, Lacey, Robert M. (See Miller, Robert M. Lacey, Robert M. (See Miller, Robert M. Robert, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Threadhandling machine. 1,632.261; Aug. 16.

Lachman, Laurence S., New York, N. Y., assignor to United Shoe Machinery Corporation, Glorer, 1,638.632; Aug. 3.

Lachman, Laurence S., New York, N. Y., assignor to Universal Electric Welding Company. Girder. 1,638,635; Aug. 9.

Aug. 9.
Lachman, Laurence S., New York, N. Y., assignor to Universal Electric Welding Company. Electrically-welded girder. 1,638,563 Aug. 9.
Lachman, Laurence S., New York, N. Y., assignor to Universal Electric Welding Company. Girder. 1,638,637;

Aug. 9.

Lachman, Maurice and L. S., New York, N. Y., assignors to Universal Electric Welding Company, Girder. 1,620,362; Mar. 8.

La Choy Food Products, Inc. (See Peters, Lewis C., assignor).

Lacke, William A., Chicago, Ill. Spacing table. 1,625,215; Apr. 19.

Lacled-Christy Clay Products Company. (See Crawford, Issues J., ussignor).

Laciede-Christy Clay Products Company. (See Crawford, James L. assignor.)
Laconi. Thomas, and A. Ferretti. San Francisco, Calif. Vehicle direction indicator. 1.654.129; Dec. 27.
La Cour, Arthur C., Midwest, Wyo. Pumping mechanism. 1.617.335; Feb. 15.
La Croix. Louis E., Baltimore, Md. Vending machine. 1.633.215; June 21.

Ladane, Alexander. (See Szabo, J., and Ladane.) Ladanyi, Alexander. (See Sekely, A., and Ladanyi, J. Ladd, Frank C., Dalton, and F. G. Neal, Springheld, as-signor to Eastern Manufacturing Company, Boston, Mass. Belt for paper-finishing machines. 1.041,173.

Size Belt for paper-finishing machines. 1641.173.

Sept. 6.
Ladd, George F., Forbes, N. Dak. Device for use in sorting and delivering mail. 1.640.083; Aug. 23.
Ladd, J. B. (See Kirkpatrick, Robert S., assignor.)
Ladd, Lester L., Lockport, III. Grain-sorting device.
1.622,388; Mar. 29.
Ladd, Lester L., Lockport, assignor to Photometric Products Corporation. Chicago, III. Selecting device.
1.649,168; Nov. 15.
L. 1649,168; Nov. 16.
L. 1649,168; Nov. 1

Ladewig Emil, Vienna, Austria, assignor to Böhmisch Milhrische Malzfabrik and Export Gesellschaft Klatscher and Lorenz, Prague, Czechoslovakia. Sets of toy interfitting bullding blocks. 1,642,249; Sept. 13. Læncher, Frederick W., Brooklyn, assignor to A. Kimball Company, New York, N. Y. Machine for operating upon ticket strips. 1,650,076; Nov. 2, Machine for operating upon ticket strips. 1,650,076; Nov. 22. Lafewille, Fernand, Paris, France. Crystallizer. 1,653,712; Dec. 27. Lafewill, Fornand, 1,654,012; Nov. 13. Lafewill, George, Ridgefield, assignor to American Lock Nut Company, Longview, Wash. Lock nut. 1,639,511; Aug. 16.

Laffeer, George, Ridgement, Rasignot to Americana, Natt Company, Longview, Wash. Lock nut. 1,639,511.

Lafin, Fred, Chicago, Ill. Combination spool and pincushion holder. 1,642,860; Sept. 20.

Lafite, Theodore, Gennevilliers, France. Aeroplane bomb with safety device. 1,643,385; Sept. 27.

Lafilin, Lloyd A., Lake Forest, assignor to Elgin National device for meters. 1,634,785; July 5.

La France of the Company, Toldendale, Calif. Rotary dusting machine, 1,616,132; Feb. 1.

La France, Richard, assignor to The Owens Bottle Company, Toledo, Ohio. Delivering charges of molten plany, Toledo, Ohio. Forming charges of molten plans, 1,626,737; May 3.

La France, Richard, assignor to The Owens Bottle Company, Toledo, Ohio. Forming charges of molten glass, 1,626,737; May 3.

Lo France, Richard, assignor to The Owens Bottle Com-pany, Toledo, Ohio. Cooling molds. 1,633.028; a France, Richard.

June 21.

a France, Richard, assignor to The Owens Bottle Company, Toledo, Ohlo, Machine for forming glass articles.

A France, Richard, assignor to The Owens Bottle Company, Toledo, Ohlo, Machine for forming glass articles.

1,641,497; Sept. 6.

a France, Richard, assignor to The Owens Bottle Company, Toledo, Ohlo, Glass-forming machine. 1,650,368;

Nav. 22.

Lagaard, Alexander S. T. (See Thom, W. W., Lagaard, and Walzer.)

Lagaard, Alexander S. T. (See Thom, W. W., Lagaard, and Walzer.)

La Gasa, Arthur J. U. S. Navy. Rotary internal-combustion engine. 1.618.448; Feb. 22.

And the companies of th

Laher, Frank J., Portland, Oreg. Vehicle bumper.
1,625,550; Apr. 19.
Laher, Frank J., Portland, Oreg. Vehicle spring.
1,040,773; Aug. 30.
Laher, Frank J., Portland, Oreg. Luggage carrier för
automobiles. 1,640,779; Aug. 30.
Laher, Frank J., Portland, Oreg. Shock absorber.
1,640,750; Aug. 30.
Laher, Frank J., Oakland, Calif. Automobile luggage
carrier. 1,637,751; Aug. 2.
Laher, Frank J., Oakland, Calif. Combined automobile
luggage carrier and bumper. 1,637,732; Aug. 2.
Laher, Frank J., Oakland, Calif.
Lahey, John A., Sewaren, N. J. Fire-Game-coloring
means. 1,625,475; Apr. 19.
Lahman, Harry A., Kansas City, Kans. Flower bolder.
Des. 73,468; Sept. 6
Des. 73,468; Sept. 6
La Hodny, William, assignor to Standard Mirror Company, Inc., Buffalo, N. Y. Glass plate for a mirror or
the like. Des. 73,660; Oct. 18.
La Hodny, William, assignor to Standard Mirror Company, Buffalo, N. Y. Mirror bracket. 1,623,483;
A. D. S. William assignor to Standard Mirror Company, Buffalo, N. Y. Mirror bracket. 1,623,483;

pany, Buffalo, N. Y. Miller, Standard Mirror Com-pany, Juc., Buffalo, N. Y. Mirror bracket. 1,651,896; pany, Juc., Buffalo, N. Y. Mirror bracket. 1,651,896;

Laiddaw, Alexander B. S. (See Drew, E. S., and Laid-law.).
Laidlaw, Walter G., assignor to Kleen Kap Corporation, Syracuse, N. V. Bottle closure. 1.636,422; July 19. Laid Control of the Control of the

Laise, Clemens A., Haworth, N. J. Apparatus and method of wire drawing and allow vires used for radiothes and other purposes. I.613-562. Jan. 18.

Laise, Clemens A., Haworth, N. J. Apparatus and method of wire drawing and allow vires used for radiothes and other purposes. I.614-562. Jan. 18.

Laise, Clemens A., Haworth, N. J. Hefractory metal principal same. I.633-258. June 21.

Laise, Clemens A., assignor to The Electron Relay Company. Toledo, Ohio, Refractory metal product and making same. I.631-93; June 21.

Laise, Clemens A., assignor to The Electron Relay Company. Toledo, Ohio, Refractory metal product and making same. I.631-93; June 21.

Laise, Clemens A., assignor to The Electron Web. Laise, Company and Company. See May 17.

La Joie, Hubert J., assignor to Auto Pneumatic Action Company, New York, N. Y. Pneumatic pump construction. J. 631,274; June 19.

Laise, Alexander H., Marshfield, Wis. Weblied hand for

1.638.345; Aug. 9.
Lake, Alexander H., Marshfield, Wis. Webbied hand for swimmers. 1,625,730; Apr. 19.
Lake, Allan F., Oakland, assignor to Lake Mfg. Co., San Francisco, Calif. Bell. 1,628,3367; May 10.
Lake, Arthur E., Bishops Stortford, Dagland. Lifting fack. 1,647,049; Oct. 25.
Lake, Clyde A., Detroit, Mich. Liquid-level indicator. 1,64,118; Tune 21.
Lake, Clyde A., Detroit, Mich. Liquid-level indicator. 1,64,118; Tune 21.
Lake, Threat Company, The. (See Goss. Harold J., assignor).

assignor.

assignor.)
Lake, Fred L., Dallas, Tex. Plexible hand stamp.
1.634.614; Aug. 30.
Lake, Golladay, New York, N. Y. Device for fastening covers. 1.634.619; July 5.
Lake Mg. Co. (See Lake, Allan F., assignor.)
Lake Simon, Milford, Conn. Concrete-molding apparatus.
1.623.625; Apr. 5.
Lake, Simon, Milford, Conn. Apparatus for the treatment of variesse volus. 1.629.108; May 17.
Lakeman, William R., Rachester, N. Y. Machine for cleaning olertrolyne plates. 1.633.216; June 21.
Lakewood Engineering Company, The. (See Mosel, Joseph H., assignor.)

Lakhovsky, Georges, Paris, France. Diaphragm for tele-phonic apparatus. 1,640,330; Aug. 23. Lalli, Vincenzo, St. Albans, N. Y. Hod. 1,643,163;

phonic appuratus. 1.440.350; Aug. 26.
Lalil, Vincenzo, St. Albans, N. Y. Hod. 1,643,163;
Sapt. 20.
Lalily, John. Boston, Mass. Fireproof building construction. 1.625,899; Apr. 26.
Lalily, John. Boston, Mass. Fireproof building construction. 1.625,899; Apr. 26.
La Londe, Moses, assignor to W. B. Russell. Springfield
Mass. Brake-adjusting device. 1.639,379; Aug. 16.
Lalor Fuel Oil System Company, The. (See Lalor, James
D., assignor.)
Lalor Fuel Oil System Company, Inc., The. (See Lalor, James D., assignor.)

Lajor Fuel Oil System Company, Inc., The. (See Lalor, James D., assignor,)
Lajor, James D., assignor to The Lalor Fuel Oil System Company, inc., Baltimore, Md. Fluid-straining apparatus. [627,185; May 3.]
Company, inc., Faltimore, Md. Valve. 1,643,306; Sept. 27.
Lalor, James D., assignor to The Lalor Fuel Oil System Company, Inc., Baltimore, Md. Flitering apparatus. [662,178, Dec. 13.]
Lajor, James D., assignor to The Lalor Fuel Oil System Company, Inc., Baltimore, Md. Flitering apparatus. [162,178, Dec. 13.]
Lajor, James D., assignor to The Lalor Fuel Oil System Company, Inc., Baltimore, Md. Flitering apparatus. [162,178, Dec. 13.]
Lajor, James D., assignor to The Lalor Fuel Oil System Company, Inc., Baltimore, Md. Flitering apparatus. [162,178, Dec. 13.]
Lajor, James D., assignor to The Lalor Fuel Oil System Company, Inc., Baltimore, Md. Flitering apparatus for Education Company, Inc., Baltimore, Md. Flitering apparatus for System Company, Inc., Baltimore, Md. Flitering apparatus for System

Argentina. Apparatus for serving out beer. 1,646,916; Oct. 25.

Lamascus, Jesse. (See Beck, L. C., and Lamascus, Lamascus, Frederick, Grantwood, N. J., assignor to R. Lamascus, Frederick, Grantwood, N. J., assignor to R. State and C. Lamb, Arthur. (See Baird, G. W., and Lamb, Lamb, Charles, and D. R. Radford, Los Angeles, Calif. Vaive structure for slush pumps. 1,650,077; Nov. 22.

Lamb, Charles, A. West Hayen, assignor to Winchester for forming auger bits. 1,653,089; Dec. 27.

Lamb, Charles R., Kee Wood, George E., assignor; Lamb, Charles R., New York, N. X., Mural decoration, 1,540,781; Aug. 30.

Lamb, Charles R., New York, N. X., Mural decoration, 1,540,781; Aug. 30.

Lamb, Charles R., New Hork, N. C., Lamb, Charles R., New Hork, N. C., Stand, H. Lamb, Charles R., See Wood, George E., assignor; Damb, Charles P., assignor to Landers, Frany & Clark, New Britain, Coon. Electric radiator. 1,514,308; Jan. 11.

Lamb Knitting Machine Company. (See Wright, Charles L., assignor).

Jan. 11.

Lamb Knitting Machine Company. (See Wright, Charles L., assignor.)

Land, Morris C., Bermondsey, London, England. Preparation and dyeing of leather. 1,628,160; May 10.

Lamb, Morris C., Bermondsey, London, England, assignor to Henris C., Bermondsey, London, England, assignor Treating of leather. 1,640,706; Aug. 36.

Lamb, Walter T. (See Eston, W. D., and Lamb.)

Lamb, Ward D., Le Mars, Iowa. Can opener. 1,639,193; Aug. 16.

Lamb, William G., assignor to National Safety Devices (Ompany, Waterloo, Iowa. Signaling apparatus. 1,444,129; Aug. 23.

Lamb, William G., assignor to National Safety Devices (Ompany, Waterloo, Iowa. Signaling apparatus. 1,440,130; Aug. 23.

Lambert, Labert L., Rafberth, assignor to Heintz Manufacturing Company, Philadelphia, Pa. Vehicle door construction. 1,620,614; Mar. 8.

Lambert, Albert L., Rasignor to Heintz Manufacturing Company, Philadelphia, Pa. Vehicle door construction. 1,620,615; Mar. 8.

Lambert, Albert L., assignor to Heintz Manufacturing Company, Philadelphia, Pa. Vehicle door construction. 1,620,615; Mar. 8.

Lambert, Albert L., assignor to Heintz Manufacturing Company, Philadelphia, Pa. Post connection for vehicle bodies. 1,629,278; May 17.

Lambert, Cecil R., Company, The. (See Moon, Charles Lambert, Cecil R., Company, The. (See Preble, Norman H., assignor)

Lambert, Cecil R., Company, The. (See Preble, Norman H., assignor.) Lambert, Charles G. (See Humason, G. A., and Lambert, Lambert, Clara B., Pasadena, Calif. Mixer. 1,645,052;

Lambert, Oct. 11.

Oct. 11.

Lambert, Cara E., Fasadela, Chin. Airer. 1,035,002, Oct. 12.

Lambert, Edward G., Ottunwa, Iowa, assignor of one1,622,832; Mar. 29.

Lambert, Ernest E., Indian Orchard. Mass. Smash preventer. 1,647,870; Nov. 1.

Lambert, Dascph A. (See Hebert, H., and Lambert.)

Lambert, Joseph A. (See Hebert, H., and Lambert.)

Lambert, Losen, Nee Hebert, H., and Lambert.

Lambert, Lambert, Edward G., assignor, I.

Lambert, Oscala, Carabella, Mediclord, Me. Automobile tire.

Lambert, Oswaid, Tamise, Belgium, Cop-winding frame, 1,623,121; Apr. 5.

Lambert, Oswaid, Tamise, Belgium, Signor to James F.

Low & Company, Limited, Monifieth, Scotland. Selfdoffing mechanism for spinning, twisting, and like

frames, 1,652,720; Dec. 25; Jun. assignor to James F.

Low & Company, Limited, Monifieth, Scotland. Selfprinces, 1,652,720; Dec. 25; Lum. assignor to James F.

Low & Company, Limited, Monifieth, Scotland. Overhead gear-driven spindle mechanism for spinning and

like machines. 1,654,376; Dec. 27.

Lambert, Samuel B. St. Louis, Mo. Attachment for

clutches. 1,634,948; July 5.

Lambert, Theron B., and J. McCombs, Murray, Ky. Apparatus for pressing trousers while on wearer. 1,642,816; Sept. 20.

Lambert Tire & Rubber Co. (See Gillam, Wallace R.,

1,642,816; Sept. 20.
Lambert Tire & Rubber Co. (See Gillam, Wallace R., assignor.)
Lambert, Vernon H., Xenia, Ohlo. Automatic traction hitch. 1,618,714; Feb. 22.
Lambert, Vietor, Broodbyn, assignor to A. M. Sloss, New York, N. Y. Coffeepot. 1,632,342; June 14.
Lambert, Warts, H., Santa Monica, Calif. Shirt. Des. 72,157; Mark M., Santa Monica, Calif. Shirt. Des. 72,157; Mark M., Santa Monica, Calif. Shirt. Des. 12,157; Mark M., Santa Monica, Shirt. Mark Mold for casting clay blocks and the like and method of molding. 1,625,941; Aur. 26.
Lamblin, Alexandre, Paris, France. Radiator. 1,620,769; Mar. 15.
Lamblin, Alexandre, Paris, France. Cooling radiator for accombance and 4ther vehicles and 1st manufacture.

Lamblin, Alexandre, Paris, France. Radiator. 1,620,769; Mar. 15.

Lamblin, Alexandre, Paris, France. Cooling radiator for aeroplanes and other vehicles and its manufacture. 1,625,665; Apr. 19.

Lamboy, Lee W., assignor to Sefton Manufacturing Corporation, Chicago, Ill. Chick box. 1,617,059; Feb. S. Lambrigh, Emanuel, Mansfield, Ohio. Window ventilator. 1,650,940; Nov. 29.

Lambros, Harry. (See Fill, Henry G., assignor.)

Laguer). Shim Company. (See Rarmasin, John, assignor.)

Lamm. Authory, assignor to A. C. Goddard, New York

signor.)
Lamm, Anthony, assignor to A. C. Goddard, New York.
N. Y. Metallic building construction. 1,654,293; Dec.

Lamm, Norbert L., et al. (See Ernst, Emil, assignor.)

Lamm, Norbert L., et al. (See Ernst, Emil, assignor.)

Lamme, Benjamin G., Pittsburgh, Pa., assignor to West
inghouse Electric & Manufacturing Company. Gyro
scopic stabilizer system. 1.640.540; Aug. 30.

Lammers, Alfred F. R. (See Lammers, George J. C. and
Lammers, Bert C. (See Nelson, P. D., and Lammers.)

Lammers, George J. C., and A. F. R., Akron, Iowa
Multiple-socket wrench. 1,618,715; Feb. 22.
Lammine, Theodor, Cologne, Kolom-Mulheim, Germany.

Manufacturing seamless wrought-iron annealing boxes.
1,622,059; Apr. 5.
1,

assignor)

All Hard Republic R

Sept. 6.

Lamont, John A., assignor to American Steel Foundries, Chicago, Ill. Articulated car construction. 1,626,845; May 3.

Lamont, John W. F., and Herbert Dickinson, London, England, said Dickinson assignor to said Lamont, Sighting indicator for firearms. 1,624,347; Apr. 12.

Lamont, Lewis H., Chicago, Ill. Thermostutically-con-Lamore Tile Machine Company, (See Adams, Ash. assignor Tile Machine Company, (See Adams, Ash. assignor to William F., Jank 1988).

Lamore Tile Machine Company. (See Adams, Ash. assignor.)

Lamoureux. William F., Isabella, Tenn. Making sulphuric Lander. Islander. Lander. La

Nov. 15.

Lampert, Henry H., Chicago, Ill. Anchor for floor sweepcrs. 1,652,174; Dec. 13.

Lamplough, Leslie P., Chicago, Ill. assignor to Western
Electric Company, Incorporated, New York, N. Y.
Method of and apparatus for vulcanizing rubber.
1,633,590; June 28.

Chicago, Ill., assignor to Western
Electric Company, Incorporated, New York, N. Y.
Method of and apparatus for vulcanizing material.
1,633,691; June 28.

Lampros, Peter, Iron Mountain, Mich. Glove. 1,626,846;
May 3.

Lamson Company, The. (See Bengel, Edward C., assignor.) Lamson Company, The. (See Cowley, James T., assignor.) Lamson Company, The. (See Cunningham, Thomas H.,

Lamson Company, The. (See Hepperle, William J., as-signon.) Lamson Company, The. (See Maclaren, James G., as-signor.)

Lamson Company, The. (See Merrill, William F., as-

signor.)
Lameon, Dode M. (See Maus, H. P., and Lamson.)
Lamy. Edward J., deceased, Elizabeth, N. J.; J. T.
Hague executor.
Charles Villiam H., deceased, Lank, Villiam H., Minneapolis, Minn. Sadiron.
1,626,616, May 8.
Louis, Mo. Clamp. 1,615,948;

Lanaux,

Lancaster, George W., Richmond, Va. Sheet-metal window and balancing sheet-metal sashes. 1,027,053; May 10. Lancaster, George W., Richmond, Va. Connecter for sash and sash cord. 1,627,786; May 10. Lancaster, George W., Richmond, Va. Connecter for sash and sash cord. 1,627,786; May 10. Lancaster, Harry V., Louisville, Ky., assignor to Chattanooga Implement & Mig. Co., Chattanooga, Tenn. Fire-place grate. Des. 72,371; Apr. 5. Lancaster, Harry V., Louisville, Ky., assignor to Chattanooga Implement & Mig. Co., Chattanooga, Tenn. Fire-place grate. Des. 72,371; Apr. 5. Lancaster, Harry V., Louisville, Ky., assignor to Chattanooga Implement & Mig. Co., Chattanooga, Tenn. Fire-place grate. Des. 72,373; Apr. 5. Lancaster Implement & Mig. Co., Chattanooga, Tenn. Fire-place grate. Des. 72,373; Apr. 5. Lancaster Iron Works, Inc. (See Dupuy, Arthur O., assignor). Lancaster, John T., Canbridge, Mass. Coating maching the Company Southbridge, Mass. Coating maching Lance, Beulah G., Fulton, Calif. Steel-wool holder. 1,622,103; Mar. 15. Lance, Ora L., Fulton, Calif. Garment presser. 1,621,116; Mar. 15. Lanchester, Frederick W., Moseley, Birmingham, England. Steering mechanism of road vehicles. 1,621,161. Lanchester, Frederick W., Moseley, Birmingham, England. Chester's Laboratories. Limited. Coventry. England.

Mar. 15.
Lanchester, Frederick W., Birmingham, assignor to Lanchester's Laboratories Limited, Overatry, England.
Lanchester's Laboratories Limited. (See Lanchester, Lanchester's Laboratories Limited. (See Lanchester, Frederick W., assignor.)
Land, Charles H., Detroit, Mich. Tractor trailer.
1.621,592; Mar. 22
Land Charles H., Detroit, Mich. Tractor trailer.
Land Land, William C., Lancaster, Pa. Fishway. 1,621,170;
Mar. 15. Landau, W Mar. 15.

Mar. 15.
Landaw, Oak, Nappanee, Ind. Taure
May 24.
Landee, Arvid G., Caldwell, N. J., assignor to Western
Electric Company, Incorporated, New York, N. Y. Electric-energy-translation system. 1,647,998; Nov. 8.
Landell, Coates E. (See Kiwi, Walter, assignor.)
Lander, Erik, Oakland, Calif. Steaming appliance to be
artiched to bothtube. 1,550,798; Nov. 29.
Lander, Erik, Oakland, Calif. Steaming appliance
Lander, Jimes G., Milwaukee, Wis. Box. 1,644,782;
Lander, James G., Milwaukee, Wis. Box. 1,644,782;

Lander, James G., Milwanare, Oct. 11. Anders, Frary & Clark. (See Lamb, Joseph F., as-

Signor.) Frary & Clark. (See Smart, Joseph F., as-signor.) Frary & Clark. (See Smith, C. F., and Ed-danders, Frary & Clark. (See Warner, Alonzo A., as-

signor.)
Landgren, Charles A., and J. A. Landgren, Silverton, Oreg. Attachment for frying pans. 1,627,099; May 3. Landgren, Julia A. (See Landgren, Charles A. and Julia.)
Landis, Chester L., Reading, Pa. Hosiery-machine yarn-tension device. 1,648,151; Nov. 8.
1,631,039; May 3. Waynesboro, Pa. Shock absorber. 1.201,039; May 3. Waynesboro, Pa. Shock absorber. 1.201,039; May 3. (See Mettler, Josef, assignor.) Landis & Gyr A. G. (See Pudelko, Riccard, assignor.) Landis & Gyr A. J. (See Mettler, Josef, assignor.) Landis, Jereminh, Brookville, Ohio. Automatic drive gate. 1,624,236; Apr. 12.
Landis, Targer 12.
Landis Machine Company. (See Duchesne, Ernest, assignor.)

signor.)

(See Duchesne, Ernest, as-Landis Machine Company. (See Schildknecht, Leo, as-signor.)

Landis Machine Company. (See Shearer, Harry T., as-

Signor.)

Landis Tool Company. (See Steiner, Amos P., assignor.)

Landis, Walter S., Whitestone Landing, N. Y., and G. H.

Buchanan, Westfield, N. J., assignors to American

Cyanamid Company, New York, N. Y. Fumigating.

1.013,590; Jan. 4.

Landinan, Herman, Kanss City, Mo. Ice-cream-dipper

Landinan, Herman, Kanss City, Mo. Ice-cream-dipper

Landon, Benjamin, D. Canton, Pa. Tractor-wheel attachment. 1,030,950; May 31.

Landon, Elvie, Waterloo, Iowa. Vehicle wheel.

1,022,503; Mar. 20.

Landon, Livie, Waterloo, Iowa. Air-storing shock absorber. 1,630,915; July 26.

Landon, Vernon D., East Pittsburch, Pa., assignor to

Westinghouse Electric & Manufacturing Company.

Radio cabinet. Des. 72,623; May 10. signor.)

Landon, Vernon D., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control for pancake-type variometers. 1,621,018; Mar. 15. Landraud, Marc, Renage, France. Apparatus for guiding flexible bands or belts in motion. 1,644,927; Oct. 11. Landrum, Mark L., Plymouth. Calif. Automatically-adjusting gear puller. 1,644,839; Conclusional Landrum, Mark L., Plymouth. Calif. Automatically-adjusting gear puller. 1,644,839; Conclusional Landrum, Mark L., Plymouth. Calif. Automatically-adjusting gear puller. 1,644,839; Conclusional Landrum, Mark L., Plymouth. Calif. Automatically-adjusting landrum, Mark L., Plymouth. Calif. Automatically-adjusting landrum, Aldel, assignor to Hemphill Company, Central Falls, R. I. Xarn-feeding mechanism for knitting machines. 1,643,331; Sept. 27. Landsberger, Ernest P., Hastings, Minn. Heater. Landsledel, Harry, Norwood, Ohlo, assignor to The Dalton Adding Machine Company, Cincinnati, Ohlo. Adding machine. 1,624,104; Apr. 12. Landsledel, Harry, assignor to The Dalton Adding Machine Company, Cincinnati, Ohlo. Calculating machine. 1,634,763; June 28. Landsledel, Harry, assignor to The Dalton Adding Machine Company, Cincinnati, Ohlo. Calculating and recording machine. 1,624,103; June 12. Landsledel. Walter W., Norwood, Ohlo, assignor, by mesne assignments, to Remington Rand Inc., Tonawandd, N. Y. Calculating machine. 1,634,763; Nov. 15. Lane, Alexis T., New York, N. Y. Candinde cape and day. N. Y. Calculating machine. 1,649,478; Nov. 15. Lane, Alexis T., New York, N. Y. Laundry, Landsledel, Walter W., Norwood, Ohlo, assignor to Carolyn Laundry. New York, N. Y. Laundry Leven, P. Y. Laundry, Landsledel, M. J. S. Angeles, Calif. Tire structure. 1,037,753; Jun. 2.

Lane, Edwin, assignor to Carolyn Laundry. New York, N. Y. Laundry Leven, J. Candindry, New York, N. Y. Laundry Leven, J. Candindry, New York, N. Y. Laundry Leven, J. Candindry, New York, N. Y. Laundry-handling device. 1,625,551; Apr. 19. Lane, Edwin, assignor to Carolyn Laundry, New York, N. Y. Laundry-handl

Sept. 6. Lane, George L., and W. E. Sykes, Marietta, Ohio, Well-dilling machine, I.621,636; Mar. 22.

Lane, George L., and W. E. Sykes, Marietta, Ohio, Well-dilling machine, I.620,919; May 24.

Lane, John May 24.

Lane, John D., Cambridge, Mass. Catton-end-closing device for puckaging muchines. 1,624,257; Apr. 12.

Lane, Joseph E. (See Agricola, Herman A., Jr., as-

Lane, Leavitt J., Hamden, assignor to Winchester Re-peating Arms Co., New Haven, Coau. Manufacture of spilt-bamboo fishing rods. 1,645-312; Oct. 18, Lane, Louis, Habana, Cuba. Crystal detector, 1.617,956; Feb. 15.

Lane, Louis, Imbana, Chor. Crys., Lane, Moses R., Ardmore, Pa. Apparatus for supporting law-tenis nets and the like. 1,632,353; June 14. Lane, Munson H. (See Carson, Clark, assignor.)
Lane, Victor E., Detroit, Mich. Nonoxidizing annealing furnace. 1,624,258; Apr. 12.
Lane, Walter, assignor to Bush & Lane Piano Company, Holland, Mich. Upright piano. 1,635,755; July 12.
Lane, Wilfred C., et al. (See Wagoner, John E., assignor.)

Lane, was

Lane, Edward M., Jr., Srd., Portland, Me. Food-preserving can. Rel. 629; Ay J. Londer, Mo., assignor to Underwood Typewriter Company, New York, N. Y. Scale plate for typewriting machines. 1.631,494; June 7.

Langranchi, Jean T., Paris, Brance, assignor to N. J. and B. J. Gartinkel, New York, N. Y. Shock-protector and the statement of acting as lifting-jacks, 1.532,185; Dec. 20.
1.637,603; July 26.
Lang, Arthur A. D., London, England. Vehicle wheel. 1.630,507; Aug. 18.
Lang, Edward M., Jr., 3rd, Portland, Me. Food-preserving can. Rel.629; May 24.
Lang, Edward M., Jr., 3rd, Portland, Me. Food-preserving can. Rel.629; May 24.
Lang, Elmer I. and G. H. Boston, Mass. Marking ma-Lang, Pranz, Municle-Lyymphenburg, Germany, assignor to Acro Aktiengesellschaft, Kussnacht-on-the-litgl, Switzerland. Two cycle internal combustion engine. 1,645,199; Oct. 11.

Lang, Frederic H., River Forest, III., assignor to Western Electric Company, Incorporated, New York, N. Y. Finish remover, 1.615,089; Jun. 18. Lang, Frederick W., et al. (See Hawxhurst, John J., as-signor.)

signor.) Lang. George E., assignor to Oxford Varnish Corporation, Detroit. Mich. Producing wood grain surfaces. 1,651.136; Nov. 29. Lang. George H. (See Lang. Elmer L. and G. H.)

Lang, George H., Philadelphia, Pa. Inlet box for drains 1,422,562; Mnr. 23.

Lang, George H., assignor to Stover-Lang Company, Boston, Mass. Speet indicator. 1,640,107; Aug. 25.

Lang, George R. (See Smith, Norman C., assignor.)

Lang, George W., Litchleid, Nebr. Can spout. 1,641,003;

Lang, George W., Litchfield, Nebr. Can spout. 1,021,000-1, Aug. 8 and 1,2 and

feriock for elevator doors. 1,615,090; Jan. 18.
Lang, Philip, assignor to Wagner Manufacturing Company, Cedar Falls, Iowa. Door bolt. 1,622,791;
Mar. 29.
Langan, Wagel and one-third to M. Marks. New York.
N. Y. License-plate holder. 1,650,464; Nov. 22.
Langbein, Harold W. Los Angeles, Cnilf. Brake-testing machine. 1,612,928; Jan. 4.
Langbein, Werner. (See Wagner, H., Langbein, Beck. and Thioss).
M. T. License-plate was the control of the

Féb. 92.
Lange, Edward H., Baltimore, Md. Stabilizing amplifiers. 1,646,027; Oct. 18.
Lange, Edward H., New York, N. Y. Stabilizing amplificrs. 1,628,890; May 17.
Lange, George H. (See Linden, C. E., and Lange.)
Lange, Henry, Quincy, Ill. Combination stove. Des. 72 320; Apr. 26.
Lange, Henry, Quincy, Ill. Coal range. Des. 73,661; Oct. 18.

Oct. 18.
Lange, Henry, Quincy, III. Combination range.
1,637 950: Aug. 2.
Lange, Louvern G., Passaic, N. J. Apparatus for inserting insulating disks in metal caps. 1,629,513; May 24.
Lange, Paul H. (See Brenzinger, J., and Lange,
Jange, Paul H., assignor to The Max Ams Machine Company, Bridgeport, Conn. Edging machine. 1,615,711;
Lange, Paul H.

Jan. 25.

Lange, Paul H., assignor to The Max Ams Machine Company, Bridgeport, Conn. System of handling can bodies, 1.639.512; Aug. 16.

Lange, Paul H., assignor to The Max Ams Machine Company, Bridgeport, Conn. Body-forming mechanism. 1,639.513; Aug. 16.

Lange, Paul H., assignor to The Max Ams Machine Company, Bridgeport, Conn. Horn-supporting means. 1,639.514; Aug. 16.

Company, Bridgeport, Conn. Horn-supporting means. 1,639,514; Aug. 16. Lange, Paul H., assignor to The Max Ams Machine Company, Bridgeport, Conn. Seaming mechanism, 1,639,515; Aug. 16. Work, N. Y. Tone-modifying device for banjos. 1,615,500; Jan. 25. Lange, Elliam L., New York, N. Y. Banjo. 1,623,735;

Apr.

Lange, William L., New York, N. Y. Banjo. 1,625,811; Apr. 26.

Apr. 26.

Langen, George H. (See Linden, C. E., and Langen,)
Langen, Peter N. F., Valparaiso, Chie. Steam boiler.

1.644.064; Oct. 4.

Langenbach, Albert, Chicago. III. Planetary gear controlled propeller. 1,638.423; July 19.

Langenbeck. Albert, Chicago. III. Planetary gear controlled propeller. 1,638.423; July 19.

Langenbeck. Albert, Langenberg, Langenbeck. Albert, Langenberg, Langenberg, Langenberg, Langenberg, Langenberg, Langenberg, Langenberg, Langenberg, Erderick C. (See Solberg, John C., as
Langenberg, Frederick C. (See Solberg, John C., as
Langenberg, Adolph L., New Holstein, Wis. Propulsion
link for encloses traction belts. 1,638.3259; June 24

signor.)
Langenfeld, Adolph L., New Holstein, Wis. Propulsion link for endless traction belts. 1,633,259; June 21.
Langer, Hans, Berlin-Charlotteburg, assignor to I. C.
Pathenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing tuberculosis protective and curative material. 1,617,060; Feb. 8.

Langer, Harry, Milwaukee, Wis. Knitting machine. 1614;073; Jan. 11.
Langer, Henry, New York, N. Y., assignor to The Baltimore Enamel & Novelty Company, Battimore, Md. Wall covering. 1,651,332; Nov. 29.
Langer, Julius, Hamburg, Germany. Fire bridge.

Wall covering, 1.651,332; Nov. 29.
Langer, Julius, Hamburg, Germany, Fire bridge,
1.620,215; Mar. 8.
Langer, Rudolph J., assignor, by mesne assignments, to
Franklin Equipment Company, Monticello, Iowa. Stanchion. 1.621,209; Mar. 15.
Franklin Equipment Company, Monticello, Iowa. Stop
bar. 1.621,210; Mar. 15.
Langerak, Meyer. (See Langerak, Wiggert, assignor.)
Langerak, Meyer. (See Langerak, Wiggert, assignor.)
Langerak, Pella, Jowa. Grain weigher. 1.631,376; June 7.
Langevin, Felix D. (See Whittler, J. K., Langevin, and
Langevin, Felix D., Lowell, assignor to Saco-Lowell
Shops, Boston, Mass. Lap-winding machine, 1,618,716; Feb. 22.
Langitt, Pearley E. (See Thomas, E. R., and Langfitt.)

Langfit, Pearley E. (See Thomas, E. R., and Langfitt.) Langford, George W., assignor to Economy Baler Company, Ann Arbor, Mich. Baling press. 1,650,992; Nov. 29.

Nov. 29.

Langham, Brnest J., Johnstown, Pa. Shoring device.
1,630,516; Aug. 16.

W. E. Grueter, assignors to The horizont of Company, Menominee, Mich. Sawmill dog.
1,637,907; Aug. 2.

Langkammerer, Karl, assignor to Robel & Co., Munich, Germany, Double-acting ratchet wrench. 1,632,367;
Dec. 3.

Langkop, Theodore F. (See McCarty, E. E., Dicus, and Langkop.)

Langlais, Simon, Montreal, Quebec, Canada. Tool-grinding machine. 1,624,269; Apr. 12.
Langley, Herman O., St. Albans Gardens, N. Y. Camera-supporting means. 1,629,579; May 24.
Langley, Phillip G. (See Christensen, C. and Langley,) Langley, Raibh H., Schenectady, N. T., assignor of General Bectric Company. Dial. 1,631,687; Jone C. Langley, Tahpi A., Schenectady, N. X., assignor to General Electric Company. Dial. 1,631,687; June 1,662,901; Dec 18.

ceal Bleetric Company, Variane comes of the Dec. 13.
Laugmuir, Frank H., Woodbury, N. J., assignor to Belber Trunk & Bag Company, Philadelphia, Pa. Trunk Lott.
Loss, 1888; Alay H., assignor to Hartmann Trunk Company, Haeine, Wis. Trunk lott. LoS-1,792 Dec. 27.
Langmuir, Irving. (See Kingdom, K. H., and Langmuir.) Langmuir, Irving, Schenetady, N. Y., assignor to General Electric Company. Signaling system. 1,615,636; Jun. 26.

Ant. 25. Company. Signating system. 1,003,000 and 1,202,000 and 1,202,000 and 1,002,500 and 1,002,50

signor.)
Langston, Samuel M., Wenonah, N. J. Machine for making corrugated paper. 1,464,782; Sept. 20.
Langstroth, Ciliford B., and G. G. Wunder, assignors to A. O. Smith Corporation. Milwaukee, Wis. Weld rod for are welding. 1,642,74; Sept. 20.
Languepin, Jacques E. J., Paris, Franc. Machine for electric welding, soldering, or the like. 1,622,792;

Mar. 29. Langwell, Herbert, Epsom, England. Fermentation of cellulose. 1,639,571; Aug. 16. Lanham, Frank V., Dallas, Tex. Pavement. 1,623,417; Apr. 5. Lanning, James K. (See Branco, Jacquin M. C., as-

Lanning, James K. (See Webster, Charles B., assignor.)
Lanning, James K. (See Webster, Charles B., assignor.)
Lanning, James K., Fall River, Mass. Half lap for
combing textile fibers. 1.620,031; Mar. 8.
Lanning, John G., assignor to Detroit Lubricator Company, Detroit, Mich. Carburetor. 1,630,493; May 31.
Lanning, William H., assignor to W. W. Biskely, Detroit, Mich. Vehicle anchorage device. 1.617,400; Lanning, Dec pany, Dec Lanning, Willie troit, Mich. Pab. 15. Manu

reb. 15. Lannom Manufacturing Company. (See Lannom, Sharp, jr., assignor.) Lannom, Sharp, jr., assignor to Lannom Manufacturing Company, Grinnell, Iowa. Baseball center. 1,636.518;

July 19.

Lannon, John D., and R. R. Todd. Pontiac, assignors to General Motors Corporation, Detroit, Mich. Piston. Langue, Henry S., Woonscoket, R. I., assignor of one-half to J. L. Kotlier, Worcester, Mass. Butter-cutting device. 1,647,098; Oct. 25.

Lanphere, Clive W., New York, N. Y. Universal Jimmy-proof automatic lock. 1,621,549; Mar. 22.

Lanquetin, Léon, assignor to Société Etablissements Duceller, Paris, France, Electric apparatus serving 1.644.005; Oct 4. Lansing, Raymond P., et al. (See Church, Harold D., assignor), Lansing, Raymond P., et al. (See Marcus, Charles, as-signor), Raymond P., et al.

signor.)
Lansing, Raymond P., Montelair, N. J., assignor to
Edilpse Machine Company, Elmira, N. Y. Ignition apparatus. 1,633,704; June 28.
Lauson, Paul J., San Francisco, Calif. Liquid-level gauge.
1,617,315; Feb. S.
Lausrud, Endre A., Des Moines, Iowa. Automatic sand
valve. 1,646,753; Oct. 25.
Lantagne, Joseph, Centerdale, R. I. Meat jack. 1,631,827;
June 7.

Lantagne, Joseph, Celevina June 7.
Lantz, Alpha D., assignor to L. Helman, Sidney, Ohio.
Poultry waterer. 1.642.304; Sept. 13.
Lanz, Arthur, Oedikon, Switzerland. Flexible coupling. 1.652.564; Dec. 18.
Lanz, Heinrich, Aktiengesellschaft. (See Huber, Fritz, assistance).

1.632.634; Prec. 19.
Lanz, Heinrich, Aktiengesellschaft. (See Hussellschaft, assignor.)
Lanza, Benjamin, Philadelphia, Pa. Ball conveyer.
L.630.345; May M. Latelphia, Pa. Ductile wire trough for billing tables, 1.626.242; Apr. 28.
Lanza, Luigi, Plataci, Italy. Construction of buildings.
L.646.113; Oct. 18.
Lanzi, Elmo G., assignor to Bonus Candy Corporation, Chicago, Ill. Checolate-dipping machine. 1,637,577;
Aug. 2. Chieago, Ill. Choconte-supping analysis as Aug. 2.
Lauxillotta, Rudolph, Lynch, Ky. Spring sash balance, 1,654,423; Dec. 27.
Lauzka, Gustav A., et al., administrators. (See Luytles, Otto G.)
La Paugh, Louie T., Oakland, Calif. Handle-securing means for bottles. 1,617,213; Feb. 8.
La Pearle, William E., and W. H., Salt Lake City, Utah. Telephone receiver, 1,622,960; Mart. 20.
La Pearle, William II. (See La Pearle, William E. and W. H.)

La Perre, William E., Rote W. M., San.
Telephone receiver. 1,622,960; Mar; 29.
La Pearle, William H. (See La Pearle, William E. and
Lapeuta, Vincent A., and S. Rejker, Indianapolis, Ind.
Medical preparation of coloidal bismuth. 1,615,226;
Jan. 25.
Lapham, Anna M., St. Paul, Minn. Parcel carrier for
shoppers. 1,635,423; July 12.
La Pierre, Alexander J., Lu G. 268; Feb. 1.
La Pierre, Alexander J., New York, N. Y. Bather's safety appliance. 1,617,061; Feb. 8.
La Pierre, Julian B., Chicago, Ill. Steering wheel.
La Pierre, Julian B., Chicago, Ill. Steering wheel.
La Pierre, Julian B., Chicago, Ill. Steering wheel.
Lapin, Helen J. (See Lapin, William J., assignor; to
Lapin, William J., assignor to H. J. Lapin, Gary, Ind.
Window ventilator. 1,648,851; Nov. 8.
Lapin, William J., assignor to B.
E. E. Lioyd, Woodchiff, N. J. Eye mounting
B. E. Eloyd, Woodchiff, N. J. Eye mounting
Lapin, B., Limited, et al. (See Weber, Isaac E., assignor).

La Porte, B., Limited, et al. (See Weber, Isaac E., assignof).

Dursey, Washington, D. C. Means and apparatus for recording sound waves. 1.633,385; June 21.

Laip John S., assignor to Lapp Insulator Company. (See Lapp, John S., assignor.).

Laip, John S., assignor to Lapp Insulator Company. Let Itory, W. Y. Strain Insulator. 1.634,647; Dec. 27.

Laip, William H., Chiengo, Ill., assignor to The Concentrate Products Company. Supplementary poultry-food material. 1.643,703; Oct. 18.

Lappas, Nikitas, Peabody, Mass. Lock. 1,621,422; La Praim, John. (See O'Neal, H. D., and La Praim.).

Larpalester, Ernest, assignor to Fort William Paper Co., Limited, Fort William, Ontario, Canada. Core-three moving machine. 1,633,693; June 28.

Late, Frank W. 405, 1000.

device. 1,631,495; June 7.

"arc. Prank W., Monelova, Mexico. Boiler-tube-cutting device. 1,653,186; Dec. 20.

Levice. 1,652,606; Apr. 19.

Large, Edward N., Ryderwood, Wash, Saw clamp. 1,625,606; Apr. 19.

Large, Edward N., Ryderwood, Wash, Saw clamp. 1,625,606; Apr. 19.

Largent, William W., and C. A. Stiles. Tyrone. Pa. Socket member. 1,629,217; May 17.

Larimer Company, The. (See Orto, Miller W., assignor.)

Larimer Edward. 1,631,739 June 10.

Larimer Edward. 1,638,042; June 9.

Larimer Company, Anaconda, Mont. Concentration by evaporation of phosphoric acid. 1,648,137; Nov. 8.

Larkie, Loyd P., et al. (See Smith, Lawrence F., as-

Larkie, Loyd P., et al. (See Smith, Lawrence F., assignor.)
Larkin, Arthur J., Council Bluffs, Iowa, assignor of one-third to, J. Bodds, Omeha, Nebr. Power wheel. Larkin Automotive Parts Company, The. (See De Loache, George W., assignor.)
Larkin, Elwood T. (See Criqui, C. A., and Larkin.)
Larkin, Elwood T. (See Criqui, C. A., and Larkin.)
Larkin, Elwood T., assignor to C. A. Criqui, Buffalo, N. Y. Internal-combustion engine with rotary valve.
Larkin, Elwood T., assignor to C. A. Criqui, Buffalo, N. Y. Internal-combustion engine. 1,642,735; Sept. 20.
Larkin, Howard E., Raton, N. Mex. Vaporising earburctor, 1,618,449; Feb. 22.
Larkin, James F., Los Angeles, Calif. Ball and seat. 1,617,603; Feb. 15.
Larkin, James F., Los Angeles, Calif. Ball and seat. 1,617,603; Feb. 15.
Larkin, James F., Los Angeles, Calif. Ball and seat. 1,617,603; Feb. 15.
Larkin, James F., Los Angeles, Calif. Ball and seat. 1,617,603; Feb. 15.
Larkin, Walter, Norristown, assignor to Fidelity Machine Company, Philadelphia, Pa. Dogless knitting machine. 1,618,465; Jan. 4.
Larkin, Walter, Norristown, assignor to Fidelity Mackine Company, Philadelphia, Pa. Striping attachment for nottain furnal company, Dayton, Ohlo. Controlling the tension of a tennis racket stringing. Larner, Chester W., Philadelphia, Pa., assignor, by mesne assignments, to I. P. Morris Corporation. Plunger valve. 1,629,957; May 24.
Larner, Chester W., Philadelphia, Pa., assignor, by mesne assignments, to I. P. Morris Corporation. Plunger valve. 1,629,957; May 24.
Larner, Chester W., Philadelphia, Pa., assignor, by mesne assignments, to I. P. Morris Corporation. Plunger valve. 1,629,957; May 24.
Larner, Chester W., Philadelphia, Pa., assignor, by mesne assignments, to I. P. Morris Corporation. Double-plunger valve. 1,629,957; May 24.
Larner, Chester W., Philadelphia, Pa., assignor, by mesne assignments, to I. P. Morris Corporation. Plunger valve. 1,629,957; May 24.
Larner, Chester W., Philadelphia, Pa., assignor, by mesne assignments, to I. P. Morris Corporation. Double-plunger

Aug. 30.

La Roche, Olivier, assignor of one-third to W. H. Magill,
Hamilton, Ontario. Canada, and one-third to F. X.
Monette, Lowell, Mass. Stop mechanism for circularkinting machines. 1633-215; Dec. 277

kinting machin

Larrey, Teodoro, assignor to himself and L. Godard, Mexico, Mexico. Steam-superheating unit. 1.634.670; July 5. Construction Company. (See Tressler, Donald

K., assignor.)
Larrowe Milling Company. (See Wertenbruch, Antony.

assignor, larry, Edwin C., assignor to General Railway Signal Company, Rachester, N. Y. Railway-signaling system. 1,627,449; May 3. Larsen, Einar, Princeton, N. J. Automobile safety net. 1,649,961; Nov. 22. Larsen, Georg, Brooklyn, N. Y. Adjustable molding strip. 1637,187; May 8. Larsen, Johan, Edisvold, Norway. Locking mechanism of hammerless shofguns and rifles. 1,616,501; Feb. 8. Larsen, Johannes C., Sturtevant, Wis. Onion barvester. 1,627,289; May 3. Larsen, Joulis J., Astoria, N. Y. Shackle. 1,646,546; Larsen, Louis J., Long Island City, N. Y. Mounting for looms and sails. 1,650,759; Nov. 29. Larsen, Judwig B., Portland, Orce. Cutter. 1,653,578; Dec. 20.

Dec. 20.
Larsen, Mads M., Colton, Calif. Collapsible camp bed. 1,625,476; Apr. 19.
Larsen, Niel P., assigner to The American Conch. & Hody Company, Cleveland, Ohio, Vehicle, 1,627,911; May 10, Company, Cleveland, Ohio, Vehicle, 1,627,911; May 10, Larsen, Olaf. 1,620,471; May 10, Larsen, Olaf. 1,620,471; Mixinson, Wis., assigner to The Cremery Package Mix. Company, Chicago, Ill. Valve, 1,634,075; June 28.

1,634,075; June 28. Lersen, Olaf, Fort Atkinson, Wis., assignor to The Creamery Package Mfg. Company, Chicago. Ill. Valve. 1,638,436; Nov. 8. Lersen, Company, Chicago. Ill. Valve. Large and Company of the Control of the Company of

Larsh, John M., assignor of one-fourth to W. M. Taylor and one-fourth of E. C. Smith. Indianapatis, Ind. Road vehicle steering mechanim. 1.628,581; May 17 Lurson, Adolph S., North Lake, Wis. Lifting Jack, 1,624,103; Albert G., Pledmont, and E. R. Cooper, San Leandro, Calif.; said Cooper, E. R., and Larson, Albert G., Pledmont, and E. R. Cooper, San Leandro, Calif.; said Cooper, assignor to J. W. Cooper, 1,629,218; May 17. Washing-machine mechanism. Leandro, 121, 121, 121; May 17. Larson, Anna J., Naugatuck, Conn. Holder for flattrons, 1,637,120; July 26.
Larson, Carl U., Nattonal, assignor to S. M. Larson, King County, Wash, Food preservative, 1,654,003; Dec. 27.
Larson, Carl U., Nattonal, assignor to S. M. Larson, County, Wash, Food preservative, 1,654,003; Dec. 27.
Larson, Clifford M., Chicago, Ill. Viscosometer, 1,635,281; July 12.
Larson, Clifford M., Chicago, Ill. Viscosometer, 1,635,281; July 12.
Larson, Edward, assignor of one-half to D. R. Hoffman, Larson, Edward, assignor of on

Larson. David C. (See Lindquist, D. L., Dunn, and Larson.)

Larson. Edward, assignor of one-half to D. B. Hoffman, Los Angeles, Calif. Lighting-fixture support. Des. Particle of the Container of the Container. Los Larson, Edward Larson, Elvin L., Aberdeen, Wash. Hydraulie brake. Larson, Elvin L., Aberdeen, Wash. Hydraulie brake. L. (26,542; Apr. 26.

Larson, Frie H., Cheago, Ill., assignor to The Logo-Dial Corporation. Logging device for radio tuning instruments. L630,302; May 31.

Larson, Frank A., Lynn, Mass. Freed Mechanism for sewing machines. L615,546; Jan. 25.

Larson, Frank A., Lynn, Mass. Freed Mechanism for sewing machines. 1,615,546; Jan. 25.

Larson, Ivar C., East Providence, and G. S. Cooper, assignor to Kisco Works, Inc., Providence, R. I. Clipdoor catch. 1,636,637; July 28.

Larson, John M., assignor to National Regulator for the pressure of a common source of full utilized in operating independent devices. 1,643,624; Sept. 27.

Larson, John M., assignor to National Regulator Com-

May 24.

Larson, John M., assignor to National Regulator Company, Chicago, Ill. Regulator for heating systems. 1,650,983; Nov. 23.

Larson, John B., assignor to Champion Auto Equipment Carbon Jones E., assignor to Champion Automobile body. Des. 72.374; Apr. 5.

Larson, Leonard M. (See Von Boecklin, A. E. L., and Larson, Louis, New York, N. Y. Multiple-wall lamp shade. 1,614,004; Jan. 11.

Larson, Lydia F. (See Cooper, E. R., and Larson, assignors.)

shade. 1.614.004; Jan. ii.
Larson, Lydia F. (See Cooper, D. R., and Larson, assignors.)
Larson, Martin, La Grange, Ill. Cast or temporary shoe last and making same. 1.647,639; Nov. 1.
Larson, Martin, La Grange, Ill. Cast or temporary shoe last and making same. 1.647,639; Nov. 1.
Larson, Martin, La Grange, Ill. Cast or temporary shoe last and making same. 1.647,639; Nov. 1.
Larson, Suse M. (See Larson, Carl U., assignor.)
Larson, Susie M. (See Larson, Carl U., assignor.)
Larson, Wann, assignor to Geo. D. Roper Corporation,
Rockford, Ill. Fump. 1.622,029; June 14.
Larson, Winford P., Minneapolis, Minn. Modified bacteria and toxins, immunizing serums, and producing them. 1.621,118 Mar. 15.
Larson, Minford P., Minneapolis, Minn. Scarlet-fever antigen. 1.621,119; Mar. 15.
Larson, Winford P., Minneapolis, Minn. Dentifrice.
Larson, Uniford P., Minneapolis, Minn. Dentifrice. 1.633,336; June 21.
Larson, Edward, Niockholm. Sweden. Chain coupling for logs. 1019,675; Mar. 1. The Ohio Brass Company, Mansfield, Ohio. Car. air, and electric coupling system. 1.683,139; July 19.
Larson, Patrik W., and O. E. Forsberg, assignors to Aktiebolaget Princeps, Gottenborg, Sweden. Press Aktiebolaget Princeps, Gottenb

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La Rue, William D., Philadelphia, Pa., assignor to Victor Talking Machine Company. Dispensing device. 1.613,614; Jan. 11.

Larvex Corporation, The. (See Minacif, M. G., and Sachs, assignors.)

1,013,011 June 1.

Larvex Corporation, The. (See Minacii, M. G., and Sachs, assignors.)

Larvex Corporation, The. (See Stiriss, Jacob, assignor.)

Larzelere, Charles F., and C. H. Neumeyer, Flint, Mich. Vaporizing fuel. 1,023,253; Apr. 5.

Lasar, Frank J. (See Swett, Caswell D., assignor.)

Lasater, John B., Los Angeles, Calift. Barber's-chair headrest. 1,639,194; Aug. 16.

Lasater, John F., Paris, Tene. Bottle. Des. 73,233; Aug. 9.

Aug. 9.

Vaporizing Tucci. 1023-231 Apr. 10.
Lasart, Frank J. (See Swett, Caswell D., assignor:)
Lasart, Frank I. (See Swett, Caswell D., assignor:)
Lasarte, John P., Paris, Tenn. Bottle. Des. 73-233;
Aug. 9.
Lasavich, Frank. (See Waitch, John, assignor.)
Lasavich, Tankinamock, Pa. Guide device for musical instruments. 1,633,345; Jun. 11.
Lasaco, Stephen, Tunkinamock, Pa. Guide device for musical instruments. 1,633,345; Jun. 12.
Lasakar, Thomas B., Fairfield, Conn., and T. H. Lashar, Chicago, III., assignors to Associated Silver Company, Chicago, III., 118,572; Mar. 8.
Lasavich, III. 118,573; Mar. 9.
Lasavich, III. 118,573; Mar. 9

Sept. 0. Last, Erwin, Vienna, Austria. Electrode to be applied to the human body and making the same. 1,626,617: May 3

Aktiebolaget Princeps, Gottenborg, Sweden, Press feeding, 1,636,183; July 19.

Larter & Sons. (See Larter, Warren R., assignor, Larter & Sons, Newark, N. J. Cord-attaching device, 1,637,698; Aug. 2.

N. J. Cord-attaching device, 1,637,698; Aug. 2.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar button, 1,638,401; Aug. 9.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Larter & Sons, Newark, N. J. Clar or cigarette holder, 1,635,049; Noc. 20.

Larter, Warren R., assignor to Thysen & Co., Aktiencesell Lasure, Warren C. (See Lasure, Earl E., assignor, 10.

Larter, Warren C. (See Lasure, Earl E., assignor, 10.

Larter, Warren C. (See Lasure, Earl E., assignor, 10.

Larter, Warren C. (See Lasure, Earl E., assignor, 10.

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Larter, Warren C. (See Lasure, Earl E., assignor, 10.

Larter, Warren C. (See Las

La Tessa, Tully, Chicago, Ill. Lamp arm. Des. 73,925; Nov. 22. Litho & Printing Co. (See Haberfeld, Eugen,

signor.) nam Machinery Company. (See Leschhorn, Ernest,

assignor.)
Latham Machinery Company. (See Leschnoty, Ernesy, assignor.)
Lathrop, Alfred L., Waukesha, Wis. Mixing device.
1.638,585; Aug. 9.
1.638,585; Aug. 9.
1.638,585; Aug. 9.
1.608,585; Aug. 9.
1.608

signor.)
Latina, Harry B., East St. Louis, Ill., assignor to Rawlings Manufacturing Company, St. Louis, Mo. Shoulder
pad. 1,640,042; Aug. 25.
Latour Corporation. (See Latour, Marius, assignor.)
Latour Corporation. (See Latour, Marius C. A., as-

Latour Corporation. (See Latour, Marlus acs.) As a superior of the corporation of the corporation and the corporation are corporation, Jersey City, N. J. Yacuum-tube circuit 1,615,808; Jan. 25.
Latour, Marlus, Paris, France, assignor to Latour Corporation, Jersey City, N. J. Electrical conductor 1,625,125; Apr. 19.
Latour, Marlus, Paris, France, assignor to Latour Corporation, Jersey City, N. J. Radio signaling system. 1,627,707; May 10.
Latour, Marlus, Paris, France, assignor to Latour Corporation, Latour Corporation, Marlus, Paris, France, assignor to Latour Corporation, Jersey City, N. J. Amplifer for electrically disturbed telephone lines. 1,630,346; May 31.
Latour, Marlus, Paris, France, assignor to Latour Corporation, Jersey City, N. J. Electrical system. 1,631,218; June 7.
Latour, Marlus, Paris, France, assignor to Latour Corporation, Jersey City, N. J. Electrical apparatus. 1,637,828; Aug. 2.
Latour, Marlus, Paris, France, assignor to Latour Corporation, Jersey City, N. J. Electrical apparatus. 1,637,828; Aug. 2.

poration, Jersey City, N. J. Electrical apparatus.
1.637.828; Aug. 2:
Latour, Marius, Paris, France, assignor to Latour Corporation, Jersey City, N. J. Speed regulator for high-frequency generating sets. 1,640,002; Aug. 23.
Latour, Marius, Paris, France, assignor to Latour Corporation, 43,075; Sept. 20.
Latour, Marius, Paris, France, assignor to Latour Corporation, Jorsey City, N. J. Dynamo-cleetric machine.
1.630,947; Nov. 29.
Latour, Marius C. A. Berls, France, assignor to Latour Carlatour, Marius C. A. Berls, France, assignor to Latour Carlatour, Marius C. A. Berls, France, assignor to Latour Carlatour, Marius C. A. Berls, France, assignor to Latour, Marius C. A. Berls, France, assignor to

poration, Jersey City, N. J. Dynamo-electric machine. 1.650,947; Nov. 29. Latour, Marius C. A., Parls, France, assignor to Latour Corporation, Jersey City, N. J. Thermionic amplifying apparatus. 1.614,136; Jan. 11. Latoureli. Charles H., Heppner, Oreg. Gun sight. 1.620,364; Mail Charles H., Heppner, Oreg. Gun sight. 1.620,364; Mail Charles H., Heppner, Colo. Light-ray-filter-ing series. 1.465,367; July 12. Latroje. Bioceric Steel Company. (See Giles, David J.,

Latrobe Electric Steel Company. (See Giles, David J., 48853307.

Assignor. L. G., deceased, Syracuse, N. Y.; First Trust and Deposit Company, administrator, assignor to Underwood Typewriter Company. Typewriting machine. 1,629,514; May 24.

Latta, John L., Hickory, N. C. Pneumatic pump. 1,615,514; Jan. 25.

Lattimer, James. (See Leon, A., and Lattimer.)

Lattimer, James. (See Leon, A., and Lattimer.)

Lattimer, James. (See Leon, A., and Lattimer.)

Laub, Adolf. Basel, assignor to the Firm Progression S. A., La Chaux-de-Fonds, Switzerland. Change-speed gearing. 1,623,418; Apr. 5.

Laub, George M., assignor to Excella Pattern Company, New York, N. Y. Garment or dress patterns. Laube, Henry M., Kankakee, Ill. Collar. 1,645,431; Cull. Lauchin, George Y., Green Bay, Wis. Motor vehicle lamp. 1,623,687; Apr. 5.

Laucks, Laucks, Laucks, Case Changeon, C., Rippey, Cone, Laucks, and Banks, assignors.)

Jan. 4.
Laucks, I. F., Inc. (See Davidson, G., Rippey, Cone,
Laucks, and Banks, assignors, Jugh F., assignor.)
Laucks, I. F., Inc. (See Elippey, Hugh F., assignor.)
Laucks, and Banks,
Laucks, G. Forry. (See Katz, John A., assignor.)
Laucks, Samuel F., and W. E. Wilkinson, York. Pa., assignor to said Laucks. Constructing safes. 1,910,139;

signors to said Laucks. Constructing safes. 1,619,139; Mar. 1. Lauenstein, Otto, Wernigerode Harz, Germany. Wrapping device for irregularly-shaped delicate objects. 1,626,543; Apr. 26. Lauer, Anna A., administratrix. (See Adams, Julius F.) Lauer, Karl, assignor to Fried. Krupp Aktiengeselschaft. Besenbardhe-Rhur, Germany. Treelslon Indicator. 1,648,128; Nov. 8. Germany. Precision Indicator. 1,648,128; Nov. 8. (See Rumible, Alex C., assignor.) Laufe, Henry C., New York, N. Y., Massage and shampooing upparatus. 1,623,124; Apr. 5.

Lauffer, Jean, Logelbach, France. Device for distinguishing different sorts of cotton during spinning operations. 1,645,432; Oct. 11.
Laughery, E. A., (Mrs.) (See Schultz, Edward, assignor.) Laughlind, James V., Richmond, Ontario, Canada, Wheel attachment. 1,621,613; Mar. 22.
Laughlin, Alexander, Tr., Edgeworth, deceased; M. M. Laughlin, and The Union Trust Co. of Pittsburgh, executors, assignors to Central Tube Company, Fittsburgh, 2,616,861; Feb. S. Dparatus for manufacturing tubing, 1,616,861; Feb. S. Laughlin, Elmyr A., Oregon, Ill. Spring. 1,643,073; Sept. 20.

Laughlin Filter Corporation. (See Laughlin, William C.,

Laughlin, Homer, Colorado Springs, Colo. Metal furni-ture. 1,647,919; Nov. 1. Laughlin, James B., Bradford, Pa. Heat retaining and distributing element. 1,639,739; Aug. 23. Laughlin, Margaret M., et al., executor. (See Laughlin, Alexander, jr.)

Alexander, jr.)

Laughlin, Samuel L., assignor to The Cleveland Universal
Parts Company, Cleveland, Ohio. Universal Joint.
1,630,598; May 31.

Laughlin, William C., Glendale, Calif., assignor to
Laughlin Filter Corporation, New York, N. Y. Machine for separating solids from liquids or liquids from
liquids. 1,640,707; Aug. 20.

Laukel, Arthur K., Detroit, Mich. Electrolytic core box
1,643,612; Nov. 15.

Laukhlin Alde, Shorewood, Wis. Speed reducer.
1,643,66; Sept. 6.

1.641.766; Sept. 6.

Laurency, Guillaume C., Twickenbam, assignor of sixty per cent to G. McLean, London, England. Apparatus per cent to G. McLean, London, England. Apparatus Laurency, Guillaume C., Middlessex, England. Parallelization of textile fibers. in machines for preparing same Laurens Glassithe fibers in machines for preparing same Laurens Glassimon. (See Beitrick, Frank, assignor.) Laurent, Antoine A., Minneapolis, Minn. Hypodermic syringe. 1,641,976; Sept. 13.

Laurent, Jules, Marcinelle, Charlerol, Belgium. Vault for baking ovens or kilns. 1,616,322; Feb. 1.

Laurentide Company Limited. (See Keay, Herbert O., assignor.)

Laurentius, Walter, Berlin, Germany, assignor to General Electric Company. Multiple receiving device. 1,617,957; Feb. 15.

Feb. 15.

Laurie, William A., New Orleans, La. Binder for securing medical electrodes. 1,637,829; Aug. 2.

Laurine, William J., Scattle, Wash. Brake equaliser.

1,634,671; July 5.

Lauritsen, Charles C., assignor by mesne assignments to The Dyal Company, St. Louis. Mo. Vibration damping means for vacuum tubes. 1,633,100; May 31.

Laursen, Laurits A., Eau Claire, Wis. Tire mold.

1,639,169; Nov. 5.

Laursen, Laurits A., Akron, Ohio. Vulcanizing apparatus.

1,650,073, Nov. A., Akron, Ohio. Vulcanizing apparatus.

Laursen, Laurits A., Akron, Ohio. Tire mold. 1,652,020; Dec. 6.

Daniel Lauris A., Archy, Olio. The mola. 1,022-09; Dev. Yangheon A. Rockylle Center, N. Y. Production of anhydrous sodium bisuiphite. 1,638,492; Aug. 19. Laury, Napoleon A., Rockylle Center, N. Y. Producting zinc carbonate. 1,640,708; Aug. 30. Lautenschlager, Thurman H., Dayton, Ohio. Valvestem cap or the like. 1,639,303; Aug. 16. Lautenschlager, William F., Cincinnati, Ohio. Lahr detector for automobiles and the like. 1,648,278, Nov. 8, for making knotted stitches. 1,622,946; Dec. 13. Lautenschlager, William F., Cincinnati, Ohio, assignor to Lorenz Muther, Newton, Mass. Pressing device for folding matchines. 1,631,040; May 31. Lautenschlager, William F., Cincinnati, Ohio, assignor to Tropic and the control of the co

1,634,732; July 5.

Lautenschlager, William F., Cincinnati, Ohio, assignor to The Peerless Machinery Company, Boston, Mass. Gauge for perforating machines, 1,639,849; Jung. 23.

Lauter, Felix, Philadelphia, Pa., assignor to Rohm & Haas Company. Resinous reaction product of urea and formatidehyde. L633,337; June 21.

Lauter, Ignatz. (See Depew, John, assignor.)

Lauter, Philip, New York, N. Y., assignor to Polymet Manufacturing Corporation. Extension connecter, Lauterhach, Samuel, New York, N. Y. Jewelry clasp. 1,637,699; Aug. 2.

Lauterburg, Edward J. (See Lauterbur, Frank X. and E. J.)

Lauterbur, Frank X., Sidney, Ohio. Fleur sifter. 1.612.976; Jan. 4.
Lauterbur, Frank X. and E. J., Sidney, Ohio. Dough mixing and conditioning machine. 1.651.092; Nov. 29.

Lauver, George A. Ponca City, Ohla, assignor, by mesne assignments, to W. A. Morgan, Binfinlo, N. Y. Draining means for splash troughs of internal-combustion engines, 1,623,254; Apr. 5.
Lavagnino, Eduardo, Ancona, Italy. Blind for sho fronts, doors, windows, and the like. 1,648,074; Sept.

20.
Lavagnino, Joseph I., Angels Camp, Calif. Fruit-picking apparatus. 1,632,977; June 21.
Lavallee, William, Central Falls, R. I. Device for sanitary handling of milk. 1,636,474; July 19.
Lavarack, Frederick C., Montclair, N. J., and W. M. Page, Pittsburgh, Pa. Rail bond. 1,643,306; Sept. 27.
Company, Syringful of Hampden Auto Top & Metal Company, Syringful Mass. Vehicle top construction. 1,645,433; Oct. 11.

Laventure, William, Ste. Madeline, Quebec, Canada. Variable headlight dimmer. 1,630,621; May 31. Lavezzi, Samuel J., assignor to Hera Bed Company, Chicago, Ill. Day bed and the like. 1,627,609; May 10. Lavigne, Henry W., Worcester, Mass., assignor to American Automotive Corporation. Superadjustable generator. 1,642,448; Sept. 13.

Lavigne, Joseph E., Fall River, Mass. Truck and similar conveyance. 1,646 547; Oct. 25. Lavitt, Max, Ellington, Conn. Tobacco lath. 1,617,062; Feb. 8.

Feb. S. Farl River, Mass. Shade and curtain holder. I. 434,020; Sept. 20.
Law, Edward F., Reno, Nev., assignor to United States Disgineering Company. Roller mill. 1,619,739; Mar. 1.
Law, Henry Y., Marced, Calif. Tractor chain. 1,637,777; Aug. 2.

Lawer Scranton, Pa. Apparatus for dis-tributing as and air in fire boxes, L639,642, Aug. 16. Law, Robert, Woodside, and E. J. Sweda, Glendale, N. Y. Multiple switch, 1,643,894; Sept. 27. Law, Sanford S., Coraopolis, Pa. Overhead signal mir-ror, 1,622,157; Mar. 22.

Lawier, Santona S., Coraopolis, Pa. Overhead signal mirror, 1,622.15f; Mar. 22.

Lawhon, John W., Maryville, Tenn. Burglar alarm. 1,649.534; Nov. 15.

Lawier, Chester R. (See Sannar, J. T., and Lawier.)

Lawier, Frank P., San Francisco. Calif., assignor to Capper and Capper

Feb. 8.
Lawtor Fuel Oil System Company, The. (See Lalor, James D., assignor.)
Levtor, Joseph P., and J. I. Seay, Memphis, Tenn. Inselfing well strainers. 1,619,521; Mar. I. Lawtor, Joseph P., and J. J. Seay, Memphis, Tenn. Machine for making concrete blocks. 1,644,666; Oct. 4. Lawner, Nicholas, Brooklyn, N. Y., assignor to American Sundries Co., Inc. Vaporizer, 1,625,034; Apr. 19. Lawrence, Charles L., New York, N. Y. Tool kit. 1,633,030; June 21.

Lawrence, Charles L., New York, N. Y. Tool kit. 1839,227: Aug. 16.
Lawrence, Charles L., New York, N. Y., assignor to Wright Aeronautical Corporation. Internal-combustion engine. 1,621,326; Mar. 15.
Lawrence, Edward G. (See Adams, T. C., Noyes, and Lawrence.)

Lawrence, Edward G., Minneapolis, Minn., assignor to O. B. McClintock Co. Alarm system for vaults, 1,629,347; May 17.
Lawrence, Edwin F., et al. (See Enright, Thomas F., assignor.)

Floyd L., Mobile, Ala. Wheel.

Lawrence, Sept. 20.

Lawrence, George L., jr., Melrose, Mass. Game-ball bladder. 1.631.740; June 7. Lawrence, George L., Jr., Melrose, Mass. Overshoe and making same. 1.642.305; Sept. 13. Lawrence, John H., et al. (See Enright, Thomas P., as-

Lawrence, John H. (See Murray, T. E., and Lawrence.) Lawrence, Joseph A., Olden, Tex. Sand trap. 1,623,015; Mar. 29.

Mar. 29.

Lawrence, Leland E., Newcastle, Ind. Rotary valve. 1,613,466; Jan. 4.

Lawrence, Paul A., Grand Island, Nebr. Constant-pressure internal-combustion engine. 1,621,936; Mar. 22.

Lawrence, Ruben B., Bellevue, assignor to Federal Laboratories. Incorporated. Pittsburgh, Pa. Use of incapacitating gas. 1,614,739; Jan. B.

Lawrence, Ruben B., Bellevue, assignor to Federal Laboratories. Inc., Pittsburgh, Pa. Hand grenade. 1,620,475; Mar. 8.

Lawrence Sperry Aircraft Company, The. (See Simon, Robert, assignor.)
Lawrence, Thomas H., Corning, Iowa. Brush and broom attachment. 1,617,764; Feb. 15.
Lawrence, William E. (See Neiderehe, G., and Law-Bobert, assignor.)
Lawrence, Thomas H., Corning, Iowa. Brush and broom attachment. 1,617,764; Feb. 15.
Lawrence, William H., Goston, Mass. Wire or cord Lawrence, William H., Boston, Mass. Wire or cord Lawrence, William H., Boston, Mass. Wire or cord Lawrence, 1647,003; Oct. 26.

Lawrie, James W., assignor to E. I. du Pont de Nemours & Co., Willimigton, Del. Recovering glycerine from fermented molasses mash and apparatus therefor. 1,627,040; May 3.

Lawrie, Lesile G. (See Baddiley, J., Shepherdson, Swann, Laws, Andrew T., St. Helens, Oreg. Cream-removing device. 1,615,765; Jan. 25.

Lawson, Albert R., Hamilton, assignor to Toronto Type Foundry Company, Limited, Toronto, Onario, Canada. Manufacture of manifolding books. 1,639,004; Aug. 16.

Lawson, George D., Fort Dodge, Lowa. Carbon scraper. 1,620,822; Mar. 15.

Lawson, George D., Fort Dodge, Lowa. Carbon scraper. 1,620,822; Mar. 15.

Lawson, George D., Fort Dodge, Lowa. Cam-operated timer. 1,641,836 Sept. 6.

Lawson, Lindley S., Pittsburgh, Pa. Radiant heater. Des. 73,136; July 26.

Lawson, Lindley S., Pittsburgh, Pa. Radiant heater. Des. 73,136; July 26.

Lawson, Lindley S., Pittsburgh, Pa. Radiant heater. Des. 73,136; July 26.

Lawson, Lindley S., Pittsburgh, Pa. Radiant heater. Des. 73,136; July 26.

Lawson, Lindley S., Pittsburgh, Pa. Radiant heater. Des. 73,136; July 26.

Lawson, Lindley S., Pittsburgh, Pa. Radiant heater. Des. 73,136; July 26.

Lawson, Lindley S., Pittsburgh, Pa. Radiant heater. Des. 73,136; July 26.

Lawson, Robert H., Pawtucket, assignor to Hemphill Company, Contral Falls, R. I. Reverse plating mechanisms of the property of the

assignor.)
Layne & Bowler Corporation. (See Parker, William A., assignor.)
Layne & Bowler Corporation. (See Whann, Jesse P., as-

Layne & Bowier Corporation. tose whatm. standing. Layne, Mahlon E., South Pasadena, assignor to Layne & Bowler Corporation. Los Angeles, Calif. Guarded opening screen. 1.635.368; July 12. Layne, Mahlon E., Houston, Tex., assignor to Layne & Bowler Corporation, Los Angeles, Calif. Coupling for suspended shaft cashies. 1.652.368; Dec. 13. Layne, Oilyn A., Los Angeles, Calif. Tongs. 1.639.228; Aug. 16.

Aug. 16. Layne, William R. (See Frickey, R. E., and Layne.)

Layton, William M., Mansfield, Ohio. Tuentable. 1,617,063; Feb. S. Sniem, Va. Machine for packaging articles. 1,616,379; Feb. 1. Machine for packaging articles. 1,616,379; Feb. 1. Feeding mechanism for Lazaga. Ignation. 1,628,000; May 30. Lazam. David. Brooklyn, N. Y. Vending machine. 1,628,000; May 30. Lazam. David. Brooklyn, N. Y. Coin-controlled vending machine. 1,652,021; Dec. 6. Lazar, David, Long Island, City, N. Y., and H. A. Drew, West New York, N. J., said Urew assignor to said

ew York, N. J.; said Drew assignor to said Coin-controlled vending machine. 1,630,439; Lazar. Collicontrolled wearns.

May 31. Lazarus. Solomon A., London, England. Toothbrush.
1,643,217; Sept. 20.
1,623,736; Apr. Chicago, Ill. Hair-waving device.
1,622,736; Apr. Claude, Georges, assignor.)
Lazore, Inc. (See Claude, Georges, assignor.)
Lazari, Leone, and D. Saudino, New York, N. Y. Heel
for shoes. 1,631,441; June 7.
Lazaro, John, Sprague, Wash. Turntable. 1,614,891;
John 18.

r zaro, 18

Jan. 15. John, Sprägue, Wash. Turntane. 1,014,891; Jan. 15. Lea. John, Sprägue, Wash. Turntane. 1,014,891; Jan. 16. See (See Hathaway, E. E. and Lea.) Lea. Charles, Assignor to The Automatic Merchandizer, Inc., Boston, Mass. Coin-controlled apparatus. 1,628,522; May 17. Lea. Charles, Boston, assignor, by mesne assignments, to F. C. Blanchard, Dorchester, Mass. Lubricator. 1,631,742, June 17. Mass., assignor, by mesne assignments, to F. C. Blanchard, Dorchester, Mass. Lubricator. 1,638,941; Aug. 16. Lea. Charles, Mitton, assignor to Shawmut Engineering May 31. Boston, Mass. Tube frame. 1,633,101; May 31.

May 31.

Lea Company, The. (See Kurtz, Henry, assignor.)

Lea, Henry I., et al. (See Humphrey, C. W., and McKittrick, assignors.)

Lea, Henry I., Santa Monica, Calif., and C. W. Humphrey, Ked Bank N. J. Aluminum-chloride process

1,646,732; Oct. 25.

Lea, Henry I., Santa Monica, Calif., and C. W. Humphrey, Red Bank N. J. Aluminum-chloride process

Lea, Hances E., Manchester, England. Apparatus for the
volumetric measurement of granular materials.

1,647,704; Nov. 1.

1.646,733; Oct. 25.

Lea, James E., Manchester, England. Apparatus for the volumetric measurement of granular materials. 1.647,704; Nov. 1.

Lea, John M., Detroit, Mich. Storage-battery manufacture. 1.616,585; Feb. 8.

Lea, John M., Detroit, Mich. Manufacture of metallic bellows. 1,630,622; May 31.

Lea, John M., Detroit, Mich., assignor to The Milcometer Company. Chicago, Ill. Speedometer construction.

Lea, Edga 21. Oct. 11.

Lea, Lea, New Orleans, La. Resilient tire, 1,647,871; Nov. Lea, P Nov

Lea, Richard, Alameda, Calif. Fish-beheading machine. 1.643,504; Sept. 27. Leach, Alice F., Brookline, Mass. Tent. 1.635,756; July 12. Leach Company. (See Appleton, J. H., and Kriz, as-

Lench Company. (See Appleton, J. H., and Kriz, assignors.)
Leach Company. (See Rauter, Fred W., assignor.)
Leach Company. (See Rauter, Fred W., assignor.)
Leach Company. (See Runer, Richard W., assignor.)
Leach, Elbert C., assignor to Leach Company, Oshkosh, Wis. Concrete miser, 1.637,410; Nov.1.
Leach, Harry, Providence, R. I., Bricchon indicator for motor vehicles. L648,480,418, F. B., and Leach,
Leach, Harry, Providence, R. I., Bricken, Robert H., Bridgeport, Conn., assignor to Handy & Harmen. Sliver alloy. 1.628,973; May 17.
Leach, Sagito J., assignor to The Ashtabula Bow Socket Company, Ashtabula, Ohio. Top for vchicles and the Leach, William J., Burtington, Wis. Electrical-tube-connecter twisting device. 1.629,800; May 24.
Leach, William J., Burtington, Wis. Electrical-tube-connecter twisting device. 1.629,800; May 24.
Leach, William W., assignor to W. H. Duvey, A. I. Davey, S. Davey, J. Davey, F. A. Davey, and J. G. Davey, Mansfield, Ohio, and H. Davey, Detroit, Mich. Feeder Leader Iron Works. (See Summers, Louis D., assignor). Leaft, Edwin A., Los Angeles, Calif. Serving tray. 1.618,756; Jan. 11.
Leafe, Carl L. (See Jeppson, G. N., and Leafe, Leahy, Edward W., Albany, N. Y. Motor vehicle heater.

(1952-849), Apr. 5.
Leahy, Mantiee R., assignor of one-half to M. J. Phalen,
Kansas City, Kans. Sign. 1,652,207; Dec. 13.
Leaby, Michael J., Tucson, Artz. Tump, compressor,
or the like. 1,646-754; Oct. 25.
Leahy, Patrick F. (See Crosby, John J., assignor.)
Leahy Richard A., Bahne Terre, Mo. Method of and
apparents for serceoing granular materials. Ref0.701;

Leahy, Richard A., Bonne Terre, Mo. Screening apparatus. 1.650.896; Nov. 29.

Leahy, William P., Cauton, Ohio, assignor, by mesne assignments, to The Hoover Company, North Cauton, Ohio, Electric-cord anchorage, 1,625,477; Apr. 19, Leaks, Arthur G., Bridgeport, Conn. Collapsible-tube

Lenhy, William P., Canton, Ohlo, assignor, by messe assignments, to The Hoover Company, North Caston, Ohlo, Electric-cord anchorage, L.625,47; Apr. 19.
Lenke, L. 1631,275; June 7.
Lenke, Richard C., assignor to General Railway Signal Company, Rochester, N. Y. Starting switch for single-phase motors, L.631,102; May 31.
Lenke, Richard C., assignor to General Railway Signal Company, Rochester, N. Y. Starting switch for single-phase motors, L.631,102; May 31.
Lenke, Richard M. (See Price, J. W., and Leake, Lenke, Nichard M. (See Price, J. W., and Leake, Leake, Thomas C., assignor to Bear Tractor Corporation of America, New York, N. Y. Track chain for tractors, L.630,089; May 24.
Leake, Richard M. (See Price, J. W., and Leake, Leaming, Thomas II.) Leaming, Thomas II., deceased; E. Lenning, Gudmistrator, Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Copper acodyestuffs, 1,618,762; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.
Leary, Frank M., Cleveland, Oho, Muffler, 1,618,451; Feb. 22.

Leary, James W. (See Bronander, W. B., and Leary.) Leary, John, Philadelphia, Pa. Trick toy. 1,613,176;

Leavy, James W. (See Bronnader, W. B., and Leavy, Jary, James W. (See Bronnader, W. B., and Leavy, John, Philadelphia, Pa. Trick toy. 1,613,176; Jary, John J., Brooklya, N. Y. Printing machine. 1,627,041; May 3. Leavy, Richard J., Builington, N. J. Charging apparatus Lease, Thomas J., Wayne Township, Marion County, Ind. Water ski, 1,623,638; May 10. Leather, William F., Chicago, III. Transformer for open and closed signal systems. 1,643,958; Oct. 18. Leathers, Ward. (See O'Neil, J. H., and Leathers.) Leaver, Charles, Imperoyal. Nova Scotia, Canada, assignor to Imperial Oil, Limited. Refining oils. 1,635,718; July 12. Leaver, Charles, London, Marion County, Loydon, Loydo

Leavy, Abraham H. (See Leavy, Nathan and A. H.)
Leavy, Nathon and A. H., New York, N. Y. Combination
toilet and candy box. Des. 73.848; Nov. 15.
Lebanon Steel Foundry. (See Gerhard, Paul E., assignor.)
Le Bas, Edward. (See Hley, Alfred, assignor.)
Lebby, States L., Corning, N. Y. Photographic printing
apparatus. 1,635.54; July 12.
Lebby, States L., Corning, N. Y. Projector. 1,645,663;
Oct. 11.

Lebby, States L., Corning, N. Y. Decentered mirror. 1.651,719; Dec. 6. Le Bel, Joseph H., Detroit, Mich. Funnel. 1,638.446; Aug. 9.

Le Bel, Joseph H., Detroit, Firem.
Aug. 9.
Lebherz, Harry J., and R. W., assignors to The Everedy
Company, Frederick, Md. Bottle-capping tool.
1.648,076; Sept. 20.
Lebherz, Harry J. and R. W., assignors to The Everedy
Company, Frederick, Md. Bottle-capping tool.
1.651,720; Dec. 6.
Lebherz, Rottler S. A. M., assignor to Societé Anonyme
Dour Theological Company, Frederick, Md. Bottle-capping tool.
1.151,720; Dec. 6.
Lebherz, Harry J., and R. W.)
Lebherz, Harry J., and R. W.,
Lebherz, Harry J., and R. W.,
Jun. 11.
Lebel State Company, Mary J., and J. W.,
Jan. 11.
Lebel State Company, Mary J., and J. White Castle, La. Cable guide.

Jan. 11.

Le Blanc, John A., White Castle, La. Cable guide.

1.635.944; July 12.

Le Blond, Li. K., Machine Tool Company, The. (See
Le Blond, Li. K., Machine Tool Company, The. (See
Proceedings of the Company, Contiboro, Mass. Brush machine. 1.627.787; May 10.

Le Boeul Caser J., Gary, Ind. Arch supporter. 1,628.161;

Lebourcher, Paul J. (See Broussouse, Fernand L., assignor).

signor.)

Beoutener, Fan J. (See Broussouse, Fernand L., assignor.)

Le Chandrage Electrique Ideal Limited. (See Lévesque, Lechiere, Albert A., Montreott, Quebec, Canada, assignor to J. Robinson, Morristown, N. J. Automatic trainpine connecter. 1,647,571; Nov. 1.

Lechieder, Felix J., Brooklyn, N. Y. tachment, 1,617,267; Feb. S.

Lechier, Paul. (See Mysser, Robert, assignor.)

Lechieder, Paul. (See Mysser, Robert, assignor.)

Lechier, Darry J. M., Minneapolis, Alino.

Bullding clamp. 1,642,819; Sept. 6.

Leck, Water W., assignor to J. See, New York, N. Y. Coloring surfaces. 1,652,079; Nov. 22.

Leck, Water W., assignor to See Mill. Steel Company, St. Leckliter, Henry L., assignor of ne-balf to C. H. Tüden, Bakersfield, Callf. Utility rack. 1,640,279; Aug. 23.

L'Ecclairage des Vehicules Sur Rail. (See Benit, Henri, assignor)

Le Compte, Oliver P., Baltimore County, and S. A. Cahn, assignors to Miller Safe Company, Baltimore, Md. Safe. 1,623,255; Apr. Le Compte, Onesime H., Oklahoma City, Okla. Lock-pin Hitting and holding device for automatic car couplers. 1,834,588; July S. Le Comte, Le Comte, The County S. Le County, The County S. Le Count

May 3. Ledbetter, Elmer E. (See Shuell, F. W., Ledbetter and

Tobey.)
Ledbetter, James C
Ledbetter, James C
Prosperity Comp Company, Inc. Syracuse, N. Y. Power press.

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Prespointy Company, Inc. Syracuse, N. Y. Ironingpress buringuard. J. 618,586; Mar. 1.

Ledbetter, James C., New York, assignor to The Prosperity
Company, Inc., Syracuse, N. Y. Power press.

1.642,252; Sept. 13.

Ledbetter, James C., New York, N. Y., assignor to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,302; Oct. 4.

Ledbetter, James C., New York, N. Y., assignor to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,303; Oct. 4.

Ledbetter, James C., New York, N. Y., assignor to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,307; Oct. 4.

Ledbetter, James C., New York, N. Y., assignor to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,307; Oct. 4.

Ledbetter, James C., New York, A. Y., assignor to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,307; Oct. 4.

Ledbetter, James C., New York, assignor to The Prospour guard. 1,644,930; Oct. 11.

Ledbetter, James C., New York, N. Y., assignor to The
Prosperity Company, Inc., Syracuse, N. Y. Garment press.

1.647,641; Nov. 1.

Ledbetter, James C., New York, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Garment press.

1.647,641; Nov. 1.

Ledbetter, James C., New York, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Garment press.

1.647,641; Nov. 1.

Ledbetter, James C., Brooklyn, N. Y., assignor, by mesne
assignments, to The Prosperity Company, Inc., Syracuse,

Ledbetter, James C., Brooklyn, N. Y., assignor, to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,295; Oct. 4.

Ledbetter, James C., Brooklyn, N. Y., assignor to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,295; Oct. 4.

Ledbetter, James C., Brooklyn, N. Y., assignor to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,295; Oct. 4.

Ledbetter, James C., Brooklyn, N. Y., assignor to The
Thomas & Betts Co., Elizabeth, N. J. Cable connecter.

1.644,295; Oct. 4.

Ledbetter, James C., Brooklyn, N. Y., assignor to The
Thomas & Betts Co., Elizabeth,

1,644.300; Oct. 4.

Ledbetter, James C., Brooklyn, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Conveyer press. 1,644.928; Oct. 11.

Ledbetter, James C., Brooklyn, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Electric garmant press. 1,644.929; Oct. 11.

Ledbetter, James C., Brooklyn, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Garment press. 1,645.860; Dec. 22.

Ledbetter, James C., Brooklyn, assignor, by mesne assignments of the Prosperity Company, Inc., Syracuse, N. Y. Electric garment press. 1,634.332; Dec. 27.

Ledden, Thomas H., Ridgway, Pa. Incinerator, 1,630.393; May 31.

Leddick, Geogre S., Schenectady, N. Y. assignor, in Geo.

Ledien, Fundas May 31.
Leddick, George S., Schenectady, N. Y., assignor to General Fleetric Company. Electric switch. 1,626,469;
Apr. 26.

New Haven, Count. Hose supporter.

Lederer, David A., New Haven, Conn. Hose supporter. 1,613,799; Jan. 11. Lederer, Frederick J., Buffalo, N. Y. Spool holder. 1,652,310: Dec. 13.

Lederer, Henry & Bro. Inc. (See Butler, William J., as-signor.)

stgnor.)
Lederer, Irving R., Providence, R. I. Buckle. Des. 73.409. Sept. 6. Providence, R. I. Fastener for wrist-Lederer, Irving R. 61.446. Jan. 11.
Lederer, Irving R., Providence, R. I. Removable cross-bar for buckles. 1,625.501; May 10.
Lederer, Karl M., Newark, N. J. Transmission of sound. 1634.292. July 5.
Lederer, Martis W., Detroit, Mich. Toothbrush. Des. Lederer, Martis W., Detroit, Mich. Toothbrush. Des. Lederer, Martis W., Detroit, Mich. 2018.

Lederer, S. B., Co. (See Davis, Willard A., assignor.) Lederer, Sigmund L., assignor to Providence Stock Com-puny, Providence, R. I. End hook. 1617,291; Feb, 8. Ledig, Kurt K., assignor to American Pittinum Works, Newnrk, N. J. Alloy for pen points, 1.047,301;

Newark, A. J. Stery Nov. I. Ledig, Willy, and H. Asmussen, Berlin, Germany, as-signors to General Electric Company. Apparatus for unfitting tubing. 1,640,458; Aug. 30.

Ledin, Charles, assignor to The Yate & Towne Manufacturing Company, Stamford, Conn. Rim lock. 1,613,398; Jan. 4.
Ledin, Charles, assignor to The Yate & Towne Manufacturing Company, Stamford, Conn. Cylinder lock. 1,641,797; Sept. 6.
Ledioux, John W., Swarthmore, Pa., and M. M. Borden, Collagswood, J. assignors to Simplex Valve & Collagswood, J. Assignors to Simplex Valve & 1,649,602; N.W. 15.

1641.767. Sort. 6
Ledoux, John W., Swarthmore, Pa., and M. M. Borden, Collingswood, N. J., assignors to Simplex Valve & Meter Company, Philadelphia, Pa. Fluid meter, 1.649.602; Nov. 15.
Le Duc, John J., Burbank, Calif. Expansible-fluid motor. Ledwidge, Christopher J., Hot Springs National Park, Ark. Vault handle. 1.620.770; Mar. 15.
Ledwinka, Hans, Koprivnice, Czechoslovakia, Resilient axle mount for moior vehicles. 1.642.817. Sept. 20.
Letering, Company, Philadelphia, Pa. Automobile fender. Des. 72.266; Mar. 22.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile render. Des. 72.266; Mar. 22.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Motor vehicles. 1.610.478; Mar. 1.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch mechaledwinks, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch mechaledwinks, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Lifting and retaining device for sliding windows. 1.630,494; May 31.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch mechaledwinks, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch mechaledwinks, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch concedwinks, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body and mailing same. 1.643.739; Sept. 27.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body and mailing same. 1.643.739; Sept. 27.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body and mailing same. 1.643.739; Sept. 27.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body and mailing same. 1.643.739; Sept. 27.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelp

1.643.742; Sept. 27. Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body and making same. 1.643.743; Sept. 27. Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Buffer for automobile doors. 1.644,680; Oct. 11. Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Door for automobile bodies. 1.644,680; Oct. 11. Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Automobile door buffer. 1,644,681; Oct. 11.

1,644,681; Oct. 1.1.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Weather strip for automobile doors. 1,644,682; Oct. 11.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch bolt keeper and mounting the same. 1,645,332; Oct. 11.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch mechanism. 1,645,333; Oct. 11.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Apparatus for electrical vulcanizing. 1,645,704; Oct. 38.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Sectic specific specific production of the producti

1.662.865; Dec. 13.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Ps. Closed vehicle body structure. 1.652.902; Dec. 13.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing for automobiles. 1.652.247; Dec. 13.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Ps. Gudde for silding windows. 1.654.333; Dec. 27.
Ledyard, Harry A. and J. J. Jelley, Ashland. Ohio, said Jelley assignor to said Ledyard. Septic tank. 1,644.582; Oct. 4.

Oct. 4.

Lee Alexander F., Boston, Mass. Handle for cooking utensils. 1,625,731; Apr. 19.

Lee, Aubrey M., assignor to Simplex Ice and Manufacture of the Cooking of the Co

Lee, Charles M., Shreveport, La. Mirror mounting. 1,627,395; May 3. Lee, Charles W., Lock Haven, Pa. Composite reenforced railway tie. 1,630,190; May 24. Reil-fastening means for railway ties. 1,630,190; May 24. Reil-fastening means for railway ties. 1,634,200; June 28. Lee, Clarie M., Elyrin, Ohio, assignor of one-half to G. W. Lee, Wausson, Ohio, Automatic gas valve. 1,625,323; Apr. 19, Lee, Connie W., Paducah, Ky. Rolling and motor propelled jack. 1,641,444; Sept. 6. Lee Raignering Research Corporation. (See Lee, Royal,

Lee Engineering Avaasignor. assignor. Lee, Frank M., Chicago, Ill., assignor to Sullivan Machin-ery Company. Channeler mechanism. 1,643,665;

Lee Engineering Research Corporation. (See Lee, Royal, assignor).

Lee Frank M., Chicago, III. assignor to Sullivan Machiner mechanism. 1,643,605; Sept. 27.

Lee, Frederick W., Owings Mills, Md. Apparatus for and method of reproducing sound. 1,622,039; Mar. 22.

Lee, Frederick W., Baltimore, Md., and L. O. Grondahl, Pittsburga, assignors to The Union Switch & Signal apparatus. 1,638,043; Aug. 2, Lee, George E., et al. (See Kurten, Peter J., assignor.) Lee, George P., East Stroudsburg, Pa. Automobile jack. 1,619,942; Mar. 8.

Lee, George W. (See Lee, Claire M., assignor.) Lee, Goorge P., East Stroudsburg, Pa. Automobile jack. 1,619,942; Mar. 8.

Lee, George W., (See Lee, Claire M., assignor.) Lee, Gordon, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Rock drill. 1,623,419; Apr. 5.

Lee, Harry P., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Reel Universal Winding Company, Hother Modeling apparatus. 1,635,560; July 12.

Lee, Harry S., Plymouth, Mich. Molding apparatus. 1,635,445; Dec. 13.

Lee, Harry S., Plymouth, Mich. Alr cooling of perunanent Lee, Harry S., Plymouth, Mich. Heat control in castings. 1,645,601; Oct. 18.

Lee, James W., Grand Hayen, assignor to Challenge Machinery Company, Grand Rapids, Mich. Safety device.

Lees, James I., Washington, D. C. Gaine. 1920. Lee, James W., Grand Haven, assignor to Challenge Machinery Company, Grand Rapids, Mich. Safety device. 1.651.609; Dec. 6.
Lee, John A., Benson, Minn. Storm-sash holder. 1.644.886; Oct. 11
Lee, John A., Benson, Minn. Drawing and spooling mechanism and method. 1.637.700; Aug. 2.
Lee, John L., Sherill, assignor to Ouelda Community, Limited, Onelda, N. Y. Shipping and display device for silverware, etc. 1,614.740; Jan. 18.
Lee, John W., assignor to The Inland Manufacturing Company, Dayton, Ohlo. Handwheel. 1,638.044; Gomes Company, Dayton, Ohlo. Handwheel. 1,638.044; Jee, Josech. (See Välsyig, Martin J., assignor.)

Aug. 9.
Lee, Joseph. (See Välsvig, Martin J., assignor.)
Lee, Leif, Youngstown, Ohio. Rolling mill. 1,620,476;
Lee Leif, Youngstown, Ohio. Cultivating apparatus. Lee, Osseph.

Lee, Leif, Youngstown, Ohio. Adding Mar. 8.

Lee, Lewis M., Frankfort, Ky. Cultivating apparatus. 1,622,109; May 17.

Lee, Nixon, Brooklyn, N. Y. Closure. 1,632,086; Yuna 14.

Light and the control of the control

Lee, Raiph L., Dayton, Omo.

Sept. 13.

Sept. 14.

Sept

ee Rubber & Tire Corporation. (See Leopold, Frederick, Ir., assignot, assignor to North East Electric Company, Rochester, N. Y. Electrical instrument. 1.632.609; June 14. ee, Thomas L., assignor to North East Electric Company, Rochester, N. Y. Electric solenoid. 1,650,799; Nov. 28.

Nov. 29. Lee Tire & Rubber Co., The. (See Kearns, John, assignor.) Lee. U.G., & Co. Inc. (See Lee, Ulysses G., assignor to U. G. Lee & Co. (Inc.), Chienco, III. Marthe water-clost, L.625,902; Apr. 26. Lee, Ulysses G., assignor to U. G. Lee & Co. Inc., Chienco, III. Marthe water-clost, L.625,902; Apr. 26.

Lee, Verner B., et al. (See Marsh, H. E., and Dunten, ssignors.) Walter

Sections 2 of the control of the con

Leece-Neville Company, signor.)
Leech, Isaac, and T. H. Bradley, Okiham, assignor, by mesne assignments, to The Murray Company, Dallas, Tex. Rib rail for cotton gins. 1,630,018; May 24. Leech, John, Bridgeport, assignor to International Silver Company, Meriden, Conn. Spoon or similar article. Des. 73,384; Aug. 30.
Leedom, Laurie M., Trenton, N. J. Railway froz.

Leech, John, Bridgepott, assignor to international article. Des. 73.384; Aug. 30. Leedom, Laurie M., Trenton, N. J. Railway frog. 1.636.373; July 19. Leedom, Laurie M., Trenton, N. J. Heating device for Leedom, Laurie M., Trenton, N. J. Heating device for Leedom, Laurie M., Trenton, N. J. Kitchen cubinet. 1.645.652; P. N. York, N. Y. Kitchen cubinet. 1.645.652; Oct. 18. Leeds & Northrup Company. (See Martin, Charles A., assignor). Leedy, John S., Mouroe, Mich. Christmas-tree holder. 1.617.766; Feb. 15. Leedy Manufacturing Company. (See Strupe, Cecil II., assignor).

assignor.)
Leedy Manufacturing Company. (See Winterhoff, Herman B., assignor.)
Leedy Manufacturing Company. (See Winterhoff, Herman B., assignor.)
Leedy Manufacturing Corporation, Lodi, N. J. Reserve dyeing on vegetable fibers. 1,849,710; Nov. 15.
Leeper, Albert S., Kent, Wash. Engine brace. 1,639,950; Aug. 23.

Aug. 23. Lees, Afred, New York, N. Y. Musical toy. 1,613.896; Jan. 11. Lees, Ernest J., assignor to The Lees-Bradner Company, Cleveland, Ohio. Testing appuratus. 1,634.328;

Lees, John, Indianapolis, Ind. Scooter. 1,817,337; Feb. 15. Lees, John, assignor of one-half to E. O. Nicholls, Indianapolis, Ind. Advertising displayer, 1,618,718; Feb. 22. Lees-Bradner Company, The. (See Lees, Ernest J., assignor.). Lees-Bradner Company, The. (See McIntosh, James A., assignor.)

assignor.) Lees-Bradner Company, The. (See Schurr, Charles H., assignor.)

Le Febure Ledger Company. (See Hruska, Frank J., as-

Le reture Leuge: Company London, England. Manu-le Cartine of tile. 1.650.080; Nov. 22. Lefére, Benoile G., Flint, assignor to General Motors Corporation, Detroit, Mich. Brake. 1,616.586; Feb. 8. Lefever, Charles F., assignor to Daisy Manufacturing Company, Plymouth, Mich. Popgun. 1,633.031; June 21.

June 21.

Le Fever, Talmage H., New Bloomfield, Mo. Cranking device for automobiles. 1,632,300; June 14.

Le Fever, Eugene O., et al. (See Fox. Julius, assignor.) Lefevre, Jules, Paris, France. Lens-clamping bracket Fune with pince-nez glasses and spectacles. 1,632,900;

Leffel, James, and Company, The. (See Biggs, George A.,

Leffert, James, nau company, consistency, assignor, assi

Leffert, C Awning June 7.

Awning Company, Chicago, III. Tent. 1,631,215; June 7.

Leffert, Charles B., assignor to United States Tent & Awning Company, Chicago, II. Luggage carrier for automobiles. 1,640,360; Aug. 30.

Support for parasitle growths. 1,654,042; Dec. 27.

Lefkowitz, Amelia, New York, N. Y. Pyjama pants. 1,628,491; May 17.

Lefranc & Cle. (See Le Franc, Louis, assignor). Lefrance. Louis, assignor to Lefrance & Cle., Paris, France. Manufacture of butric acids and other allphaleftwich, Lesse H. Chicago. III. Trenting molasses and product resulting therefrom. 1,913,666; Sept. 27.

Legat, Robert C. (See Frentice, G. E., and Legat.) Le Gaucar, Jacques, assignor of one-half to E. E. McMorran, Chicago. III. Electric coli. 1,614,309; Jan. 11.

Legendre, Henri, Paris, France. Signal device for motor Legg. Joseph W. Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-interrupter system. 1,645,286; Oct. 11.

Legg. Joseph W. Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-inghouse Electric & Manufacturing Company. Vacuum gauge. 1,652,835; Dec. 13.

Legg. Oscar, assignor to Abdulla & Company Limited, London, England. Separation of the elements of follated or laminated masses. 1,614,371; Jan. 11.

Legg. Victor E. Montelair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic core. 1,647,737; Nov. 1.

Legg. Victor E. Montelair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Insulation of magnetic entering the Section of the Company of

Legrand, Albert L. (See Heid, Georges, assignor.)
Le Grand, John H., El Dorado, Kans. Headache-post
control for electric oil-well equipment. 1,652,311;
Dec. 13.
Dec. 13.
Dec. 13.
Dec. 14.
Dec. 15.
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Lehman, Warner. (See Bager, W. M., Kaeser, and Lehman.)
Lehman, Warner. (See Bager, W. M., Lehman, and RuhLehman, Werner. (See Wikkinson, F., and Lehman.)
Lehman, Brothers Silverware Corporation. (See Kurlloft,
Samuel, assignor.)
Lehman, Carl, assignor of one-half to E. Chemnitzer,
Ilamburg, Germany. Control valve for sheet-metal
wind instruments. 1.642,783; Sept. 20.
Lehmann, Ernst P., assignor to the Firm Ernst Paul
Lehmann, Ernst P., assignor to the Firm Ernst Paul
Lehmann, Patentwerk, Brandenburg-on-the-Havel, Germany. Locking means for the spring drums of clock
work mechanisms. 1,615,227; Jan. 25.
Lehmann, Patentwerk, Brandenburg-on-the-Havel, Germany. Locking means for the spring drums of clock
work mechanisms. 1,615,227; Jan. 25.
Lehmann, Wesley G. (See Owen, D. T., and Lehmann.)
Lehmann, Wesley G. (See Owen, D. T., and Lehmann.)
Lehmann, Wesley G. (See Owen, D. T., and Lehmann.)
Lehmann, Wesley G. (See Owen, D. T., and Lehmann.)
Lehment, Mesley G. (See Owen, D. T., and Lehmann.)
Lehment, Brachton, 164,156; Oct. 18.
Lehnert, Leouis. (See Follett, J. M., and Lehner.)
Lehnert, Henry W. A., New York, N. Y. Curtain-bar support or the like. 1,643,360; Jan. 11.
Lehnert, John A., Howard, S. Dak. Rotary engine.
1,628,162; May 10.
Lehner Lohn A., Howard, S. Dak. Rotary engine.
1,628,162; May 10.
Lehner Lohn, A., Howard, S. Dak. Rotary engine.
1,621,550; Mar. 22.
Lehr, John F., sr., Baltimore, Md. Jar lifter, 1,631,503;
June 7.
Lehr, Lohn, F., sr., Baltimore, Md. Jar lifter, 1,631,503;
June 7.
Lehr, Louis, Brighton Heights, assignor to S. Bruner,
Perb. 22:
Lehr, Louis, Brighton Heights, assignor to S. Bruner,
Perb. 22:
Lehr, Louis, Brighton Heights, assignor to S. Bruner,
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Lehr, Louis, Brighton Heights, assignor to S. Bruner,
Perb. 22:
Lehr, Louis, Brighton Heights, assignor to S. Bruner,
Perb. 22:
Lehr, Loui

Leib, August, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Variable condenser. 1,631,599; June 7.
Leiberman, Morris, Chicago, Ill. Collapsible box. 1,651,244; Nov. 29.
Leibing, William E., Oakland, assignor to Magnus Fruit Products Co., San Francisco, Calif. Beverage-dispensing container. Des. 73,824; Aug. 25.
Leibing, William E., Oakland, assignor to Magnus Fruit Liebing, William E., Oakland, assignor to Magnus Fruit Liebing, William E., Oakland, assignor beneau Chile. Leibing William E., Oakland, assignor to Magnus Fruit Liebing, William E., Oakland, assignor to Magnus Fruit

Louisday; Aug. 30. Leibing, William E., Oakland, assignor to Magnus Fruit Products Co., San Francisco, Calif. Apparatus for cubing sliced material. 1,040,951; Aug. 30. Leibovitz, Isidore, New York, N. Y. Belt for personal wear. Des. 72,432; Apr. 12. Leicester, Sheldon, et al. (See Burlin, Adolph L., assignor.)

Salu Ocear M., assignor to Leich Electric Company.
Genon III. Wibratory converter, 1,615,768; Jun. 25.
Leich Electric Company. (See Leich, Oscar M., assignor.)
Leicht, Fred. (See Honold, G. F., and Leicht,
Leicht, John, jr., Burlington, Iowa. Bag holder.
1,640,084; Jug. 23.

1,640.084; Aug. 23.
Leichter, Philip, New York, N. Y. Shirt neckband and making the same. 1,620,477; Mar. 8.
Leidecker, Föster H., assignar to The Leidecker Tool Leidecker, Föster H., assignar to The Leidecker, Spiral bits, and spiral substitutes. Helf-768; Oct. 11.
Leidecker, John F., Alameda, Calif. Paper-towel dispenser. 1,640,043; Aug. 23.
Leidecker, John F., Alameda, Calif. Paper dispenser. 1,1058,298; Dec. 20.
Lift Spiral Company, The. (See Leidecker, Foster II., assignor).

assignor.)
Leidig, Rudolf. (See Kaechele, Ernest and G., and
Leidig.)

Leidy, Ai Anthony F., et al. (See Rein, Edward A., as-

signor.)
Leidy. Anthony F. (See Rein, E. A., Irwin, and Leidy.)
Leightlitner, George W., Apollo, Pa. Processes for cleaning and pressing paper money. I,622,038; May 17.
Leighton, Alan. Washington, D. C., assignor to the following and pressing paper money. I,622,673; Kas. 2.
Leighton, Jalan. Washington, D. C., assignor to the following paper money. In Jalan. In Jal

Sept. 15.
Leins, Oscar J., assignor to Milwaukee Gas Specialty
Co., Milwaukee, Wis. The for igniting devices and
the like. 1.654,265: Dec. 27.
Leinweher, Adolf, Munich, Germany. Matrix holder.
1.614.479; Jan. 18.
Leinweher, Curtis H., et al. (See Leinweber, William H.,
assignor.)

Leinweber, William H., assignor of one-third to V. H.
Leinweber, and one-third to C. H. Leinweber, Chicago.
II. Propeller. 1,623,420; Apr. 5.
Leiper, John, assignor to New York Mills Corporation,
New York Mills, N. Y. Pile fabric. Des. 72,675;
May 17.

May 17.

Leiper, John, New York Mills, N. Y., assignor to New York Mills Corporation, New York Mills, N. Y. Pile fabric.
Des. 73,663; Oct. 18.

Leipert, August H. (See Hewitt, E. R., and Leipert.)
Leipert, August H. (See Masury, A. F., and Leipert.)
Leipert, August H., College Foint, assignor to International Motor Company, New York, N. T. Cushion
And Motor Company, New York, N. T. (Constitution of the Company New York, N. T. (Constitution)
Leipert, August H., College Point, assignor to International Motor Company, New York, N. Y. Private block, 1,640,460; Aug. 30.

Leipert, August H., assignor to International Motor Company, New York, N. Y. Nonmetallic centering device for shafting, 1,631,216; June 7. Leipert, August H., assignor to International Motor Company, New York, N. Y. Cooling system, 1,637,382;

pany, Aug. 2.

Aug. 2.
Loipert, August H., assignor to International Motor Company, New York, N. Y. Seatt. 1.644.683; Oct. 11.
Leipert, August H., assignor to International Motor Company, New York, N. Y.
International Motor Company, New York, N. Y.
Spring suspension for vehicles. 1.646,755; Oct. 25.
Leiser, Elorence, Madison, Wis. Pan. 1.618.097; Feb. 15.
Leiser, Elorence, Philadelphia, Pa. Rail-fustening device. 1.624.555; Apr. 12.
Leishman, Le Rev. J. Ogen. Utah. Telegraphophone religions of the Company Leishman Captal Company Leishman Captal Company Leishman, Lorence Company, Leishman, Leish

Leitch, George W. (See Fullips, George A., assignor.) Leitett Iron Works. (See Meyer, Frederick H., assignor.) Leitcr. Whifred D. (See Foulke, Roy D., assignor.) Leithauser, Peter J., Defiance, Ohio. Pump. 1,617,853;

Leithauser, Peter J., Dehance, Onto. Funds. Feb. 15.
Leith, Alvin. (See Bourgord, E., and Leith.)
Leither, Henry, Croydon, England. Manufacture of screw-propellers. 1,637,224; July 26.
Leither, Henry, Croydon, England. Screw propeller. 1,638,695; Aug. 9.
Leither, Henry, Croydon, England. Manufacture of screw propellers. 1,647,929 (Nov. 1.
Leitz, Ernst, Optische Werke. (See Barnack, Oskar, assienor.)

Ernst, Optische Werke. (See Berek, Max, as-

signor.) Le Jeune, Frank H. (See Jacobi, E. R., and Le Jeune.) Leland, Warren S. D. (See Vaughan, R. E., and Leland.) Leland-Gifford Company. (See Bishop, Benjamin S. T., assigner.) Leland-Gifford Company. (See Bishop, B. S. T., and

Dow, assignors.) Leland-Gifford Company. (See Gifford, Albert J., as-

signor.) Leland-Gifford Company. (See Gifford, A. J., and Bishop,

Lebind-Gifford Company. (See Gifford, A. J., and Bishop, assignors.)

Lebind-Gifford Company. (See Gifford, A. J., and Bishop, assignors.)

Lellep, Otto, Ezypt, Pa., assignor to The International Nickel Company. New York, N. Y. Converting nickel-containing matter. 1623,767; Apr. 5.

Letter of the Company of the Conversal of the

June 14.

Lemma, Joseph, assignor of one-third to M. Lemma and one-third to B. Garabelli, Detroit, Mich. Automatic device, 1.654.334; Dec. 27.

Lemma, Mary, et al. (See Lemma, Joseph, assignor.)

Lemma, Mary, et al. (See Lemma, Joseph, assignor.)

Lemma, Mary, et al. (See Lemma, Joseph, assignor.)

Lemma, Louis, assignor to Société Autonyme d'Applications des Gaz Liquéfiés, Pavis, France, Device for closing compressed or liquid gas cylinders, 1,632,447;

June 14.

June 14.
Lemoine, René, Paris, France, assignor to David Crystal, Inc., New York, N. Y. Dress, Des. 73,001; July 5.
Lemon, Frank R., Vicksburg, Mich, assignor of one-third to H. B. and L. L. Crawford. Deor-operating mechanism. 1,632,237; June 14.
Lemon, Frank R., Vicksburg, Mich., assignor of one-third to Henry R. and L. L. Crawford. Door-operating mechanism. 1,633,758; July 12.
Lemon, Robert L., Indianapolis, Ind. Container. 1,622,525; Mar. 28.
Lemon, Robert L., Holianapolis, Ind. Container. 1,622,525; Mar. 28.
Lemon, Collegion R. Louis, Mo. Dirigible airship. Lemon, Sangara, Sang

Lozzogi; Apr. 26.

Le Munyon, Ellan C. and H. N. Moore, assignors, by mesne assignments, to Rocky Mountain Steel Products, E. Le Logiston, Company, The. Gee Lewis, Wilbur S., assignor.)

Le Mur S., Company, The. (See Lewis, Wilbur S., assignor.)

Le Mur. S., Company. (See Lewis, W. S., and Murray.

Le alur. S. Company. (See Lewis, W. S., and Murray. Leadur. S. Company. (See Kim, Julius, assignor.) Lending. David M., Brooklyn, N. Y. Tassel tringe. Des. 72,521; Apr. 26.
Lenchan, Bernard E., Wilkinsburg, Pa., nssignor to Westinghouse Electric & Manufacturing Company. Frequency meter. 1,614,202; Jan. 11.
Lenchard, Leoha Littinova, Md. D. 2.
Lencerville, Robert J., Tacoma, Wash. Coffee percolator. 1,613,803; Jan. 11.
L'Elafant, Charles, New York, N. Y. Bill fold. 1,651,266; Lengerd, Elizabed, Calif. Automatic inking Lengers, Elizabed Cleveland, Ohio. Portière. Pes. 72,267; May. 22.
Lenhardt, Fritz, Manuletim onthe-Rhine, Germany. Resillent wheel. 1,629,715; May 24.

Lenhardt, Lawrence, Spencerport, assignor of one-half to F. De Felice, Rochester, N. Y. Milling tool. 1,623,927: Apr. 5.
Lenher Engineering Company. (See Barrett, George E.

Lenher Engineering Company. (See B:rrett, George E. assignor.)
Lenk, Gus F., Dallas, Tex. Furnace-roof construction. 1,629,668; May 24.
Lenn, James T., Newburgh, Ind. Shock absorber for vehicle springs. 1,630,125; May 24.
Lenning, Alvar, Brooklyn, assignor to Electrolux Servel Corporation, New York, N. Y. Thermosiphon circuitton for absorption refrigeration systems. 1,645,706; Oct. 18.
Lunnor Eurnace Company. (See Vrba, James, assignor).

Lennox Burnace Company. (See Vrba, James, as signor.)
Lennox, Thomas C., Pittsfield, Mass., assignor to General Blectric Company. Continuous -current generator.
1.635,000; July 5.
Lennox, Thomas C., Pittsfield, Mass., assignor to General Electric Company. Synchronous rectifier. 14635-001.
Lennox, Thomas C., Pittsfield, Mass., assignor to General Electric Company. Continuous-current transformer.
1.635,002; July 5.
Lenston. Charles S., assignor to Hobbs Manufacturing Company. Worcester, Mass. Scoring cutter. 1.646,918; Oct. 25.
Lenston. Charles S., assignor to Hobbs Manufacturing Company. Worcester, Mass. Scoring cutter. 1.646,918; Oct. 25.
Lents, John M., Evansville, Ind., assignor to The Owens Bottle Company, Toledo, Ohio, Chauging slass feeder Lents, John M., and F. R. Miller, assignors to Graham Glass Company, Evansville, Ind. Method and appurutus for fire-finishing glass articles. 1,626,743; May 3.
Lentz, Liugo, Berlin, Germany. Automatic closure for collapsible tubes or the like. 1,640,782; Aut. 30.
Lenz, Charles S., & G. Jupp., assignors to American rator. 1,614,074; Jan. 100. New York, N. X. Separator. 1,614,074; Jan. 100. New York, N. X. Separator. 1,614,074; Jan. 100. May 24.
Leo, Albert, Chicago, Ill. Food composition. 1,623,705;

May 24. eo, Albert, Chicago, Ill. Food composition. 1.643,951;

May 24.

Leo, Albert, Chicago, Ill. Food composition. 1.643,951;
Oct. 4.

Leo, Albert, Chicago, Ill., and H. T. Leo, Corona, Calif.
Food composition. 1,643,950; Oct. 4.

Leo, Herbert T., (See Leo, Albert, and H. T.)

Leo, Herbert T., Topeka, Kans. Dry powdered jelly base containing peetin and sugar and making same.

1.646,157; Oct. 18.

Leo, Herbert T., Conaa, Calif. Extracting peetin from the containing peetin and sugar and making same.

1.622,876; Mar. 29.

Leon, Authony, and J. Lattimer, Worcester, Mass Lecteam-cone storing and dispensing device. 1,641,040; Aug. 30.

Leon, Arthony, and J. Latermer, cream-cone storing and dispensing device. 1,641,040; Aug. 30.
Leon, Karl O., Lidkoping, Sweden, Roller bearing for radial and askal loads. 1,625,812; Apr. 26.
Leon, Lewicki J. West Chicago, Ill. Bird cage. Des. Leon, Lewicki J. West Chicago, Ill. Bird cage. Des. 1,522; Apr. 26.
Leon, Lewicki J. West Chicago, Ill. Bird cage. Des. 73,000; July 19.
Leon, Lewicki J., West Chicago, Ill. Bird cage. Des. 1,614,927; Jan. 18.
Leon Lewicki J., West Chicago, Ill. Bird cage. Lewicki J., West Chicago, Ill. Bird cage. Leonard, Curl H., Pender, Nebr. Wrench. 1,653,861. Dec. 27.
Leonard, Frank P., Troy, N. Y., assignor of one-bulf to F. C. Claessens, Troy, N. Y., Nall. 1,619,944; Mar. 8.
Leonard, Frank P., Troy, N. Y., Shingles and roofbes. 1,630,013; May 24.
Leonard, Frederick C., and C. W. Rietzel, assignors to Leonard, Brank P., Troy, N. Y., Rietzels and roofbes. 1,652,144; Dec. 6.

Signors.) Leconard, Stuart G. (See Wersley, R. J., and Stuart.) Leconard, Stuart G., Lobewood, Ohlo, assigner to Westing-house Electric & Manufacturing Company. Automatic station. 1.654,505, Dec. 27.

ionard, Wilbur A., Milford, Conn., assignor to The Geometric Tool Company, New Haven, Conn. Die head. 1,637,854; Feb. 15. none, Carmine, Waltham, Mass. Automobile safety fender. 1,630,951; May 31. Nonhauser, Henry A. (See Clark, A. T., Leonhauser,

Leone, Carmine, Waltham, Mass. Automobile safety fender, 1,630,951; May 31.

Leonhauser, Henry A., Gee Clark, A. T., Leonhauser, Leonhauser, Henry A., Baltimore, Md., assignor to The J. G. Brill Company, Philadelphia, Pa. Automatic slack adjuster, 1,631,969; June 14.

Leoni, Alfonso M., (See Asprootli, A. H., and Leoni.) Leoni, Huge, assignor to Super-Rubber Lining Corporation, Company, Prince of Super-Rubber Lining Corporation, 1,633,632; June 28.

Leopoid, Frederick, ir., Harmonville, Pa., assignor to Lee Rubber & Tire Corporation, Conshobocken, Pa. Tire casing or and similar article. Des. 72,102; Mar. 1.

Leopoid, Frederick, ir., Harmonville, Fa., assignor to Lee casing and similar article. Des. 72,102; Mar. 12.

Leopoid, Frederick, ir., Harmonville, Fa., assignor to Lee casing or similar article. Des. 72,431; Apr. 12.

Leopoid, George O. (See Fegley, T. J., and Leopold.) Leopoid, Joseph, New York, N. Y. Water turbine. Leopoid, Goorge O. (See Fegley, T. J., and Leopold.) Leopoid, Joseph, New York, N. Y. Water turbine. Leopoid, Dasph, New York, N. Y. Water turbine. Leopoid, Dasph, New York, N. Y. Water turbine. Leopoid, Dasph, New York, N. Y. Water turbine. Leopoid, Done Decatur, Ill. Corn popper, 1,683,493; Aug. 9.

Leopoid, Daniel F., deceased; P. V. Lipley, executor, assignor to Conceleville Manufacturing and Mine Suplified and Conceleville Manufacturing and Mine Suplified and Mine Suplified

Le Pere, John G., assignor to U. S. Manufacturing Corporation, Decatur, III. Corn popper, 1,638,403; Aut. 9

Aut. 9

Daniel F., deceased; P. V. Lipley, executor, assignor to Connellsville, Pan. Overwind control for hoists. 1,614,437; Jan. 11.

Lepley, Daniel F., deceased; P. V. Lepley, executor, assignor to Connellsville, Pan. Skip-loading apparatus. 1,614,373; Jan. 11.

Lepley, Paniel F., deceased; P. V. Lepley, executor, assignor to Connellsville, Pan. Skip-loading apparatus. 1,614,373; Jan. 11.

Lepley, Paul V., executor. (See Lepley, Daniel F.)

Lepper, John G. (See Meyer, J. J., jr., and Lepper.)

Lepper, John G. (See Meyer, J. J., jr., and Lepper.)

Lepper, John G., (See Meyer, J. J., jr., and Lepper.)

Lepper, Lepter, C., Chicago, Ill. Concertina or according to the control of the co

Signol. Amorte (See Birelett. A. C., and Le Rossignol.)

Le Rouge, Jean, Boulogne, assignor to Societe l'Air Liquide (Societe Anonyme pour l'Etude et l'Exploitation guardier se le la company de la c

Oct. 4. Lesavoy, Isadore L. (See Lesson, Isadore.) Lesavoy, Isadore L., New York, N. Y. Chess. 1,628,412; May 10. Fernand, Brussels, Beigium. Variable-speed Lescalus, 1,618,967; Mar. 1. Lescalus, Enreet, Chicago, III., assignor to Latham Machinery Company. Stitching machine. 1,612,870; T. 2014.

Jan. 4. Leschman, William, assignor, by mesne assignments, to Chicago Electric Manufacturing Company, Chicago, Ill. Spring-retracted electric cigar lighter. 1,630,952;

May 31.
Leschman, William, assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Switcuing socket. 1,644.479; Oct. 4.
Leschnik, Phillip. (See Bruer, V., and Leschnik, François, Les Erfalbissements Foulenc Frères. (See Billon, François,

Les Etablissements Foulenc Frères. (See Billon, François, assignor; Lesher, Charles O., Fairfield, Iowa, assignor to The Lunden Machinery Company. Filler for the panels of animal peas. 1,620,876; Mar. 15.

Leshin, Alex R., Seattle, Wash, Shoe and manufacturing the same. 1,622,350; Apr. 5.

Lestiewica, Michael, and W. Bartkowiak. Chicago, Ill. Combined picture frame and stand therefor. Des. 72,212; Mar. 15.

Lesley, Hugh, Philadelphia, Pa. Storage battery, 1,613,955; Jan. 11. Leslie, Eugene H., Ann Arbor, Mich., and B. R. Tunison, New York, N. Y. Carrying out chemical reactions with liquids. 1,644,736; Oct. 11. Leslie, John N., Colusa, assignor of one-half to O. E. Rudd, Arbuckle, Calif. Tire carrier. 1,617,766;

slie, John Rudd, Arbuckle, G., Feb. 15. Aslie, Maud, Paintsville, Ky. Jnc. (S Curtain. 1,619,945

Les Parfums de Rosine, Inc. (See Raynor, Harold H., les Fartune de Asservation de la Sasignot. Lespinasse, Victor D., Chicago, Ill. Caponizing instrument. 1.615.125; Jan. 18.
Lesquendleu, J., Inc. (see Lesquendleu, Joseph, as-

Lesquendieu, J., Inc. teee Lesquendieu, S. Sandri, Signori, Lesquendieu, Joseph, Paris, France, assignor to J. Lesquendieu Inc., New York, N. Y. Box for salve or cream. 1,643,815; Sept. 27. Lesquendieu, Joseph, Paris, France, assignor to J. Lesquendieu Inc., New York, N. Y. Box for salve or cream. 1,643,895; Sept. 27.
Less Carload Lots Company, The. (See Smith, Alfred H., assignor).

Less Carload Lots Company, The. (See Smith, Alfred H., assignor.).

Lessard, Joseph. (See Lévesque, L. J., and Lessard.)

Lessard, Nosl. (See Vallat, André, assignor.).

Lessler, Lew W., Johnson City, assignor to Ansco Photoproducts. Inc., Binghamton, N. Y. Camera-front catch.

1.637,225; July 26.

Lessler, Lew W., Johnson City, and C. A. Bornmann, assignors to Ansco Photoproducts, Inc., Binghamton, N. Y. Film-winding mechanism for cameras. 1,542,2818; Vallation of Cameras. 1,5

Sept. 20.
Lesson, Isadore, also known as Isidore L. Lesavoy,
Apparel. 1,649,711; Nov. 15.
Lester, John M., Bronxville, N. X. Mop and duster.
1,634,807, July 5.
Li634,807, July 5.
Princeton, Ky. Backband hook.
1618,838; Feb. 22.
Lester, William H., assignor to Illinois Watch Case Company, Eigin, Ill. Case holder. 1,642,161; Sept. 13.
Le Tourneau, Robert G., Stockton, Calif. Scarifier.
1,623,317; Apr. 5.

Le Tourneu, Robert G., Stockton, Cant. Scarmer. 1,623,317; Apr. 5.
Lettré, Philip H., North Attleboro, Mass. Line-splicing device. 1,622,324; Mar. 29.
Letzau, Fred A., Lansing, Mich. Door holder. 1,628,502; May 10.
Letz Manufacturing Company, The. (See Holland-Letz, Lohn assirger.)

May 10.

Letz Manufacturing Company, The. (See Holland-Letz,
John, assignor.)

Leu, Frederick, Carmel, N. Y. Sand-blasting machine,
1,637,196; July 26.

Leu, Jacob J., Belmond, Iowa. Fishhook. 1,613,113;
Jan. 4.

Leucls, Friedrich, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Antispasmodic, 1,640,506; Aug. 30,

Leuchtenberg, William, (See Rinder, Emil, assignor.)

Leuchtenberg, William, J. New York, N. Y. Removing,
May 17.

Lauchter, Pichard L. (See Pileoret, L. and Lauchter).

nydfogen suppatee from coat or water gaste. Apozoouch May 17.

Leuchter, Richard L. (See Rinberget, J. and Louchter.)

Leuchter, Richard L. (See Rinberget, J. and Louchter.)

Leute, Grey G. (See Steves J. and Louchter.)

Leute, Karl M., Detroit, Mich., assignor to Steiner Sales

Company. Salt Lake City, Utah. Towel cabinet.

1,622,226; Mar. 22.

Le Valley, John, Painted Post, N. Y., assignor to Inger
soll-Rand Company, Jersey City, N. J. Unloading valve.

Le Valley, John. Painted Post, N. Y., assignor to Inger
soll-Rand Company, Jersey City, N. J. Air-compressor

valve. 1,634,949: July 5.

Le Valley, John. Painted Post, N. Y., assignor to Inger
soll-Rand Company, Jersey City, N. J. Free-air un
soll-Rand Company, Jersey City, N. J. Free-air un
rankents, to The Adams & Westlake Company, Chicago,

Ill. Sash construction. 1,637,865; Aug. 2.

Le Van Horning, Harry, assignor to Waukesha Motor

Company, Waukesha, Wis. Condenser structure.

Le Van Hording, Assan, Wis. Condenses.
Company, Waukesha, Wis. Condenses.
1.651,786; Dec. 6.
L.617,127; Feb. 8.
L.617,127; Feb. 8.
Levedahl, Asel, Aurora, assignor to Independent Pneumatic Tool Company, Chicago, III. Chisel retainer for riveting hammers. 1.613,399; Jan. 4.
Levene, Albert H., assignor to Levene Steel Products Concoration, Newark, N. J. Library shelf. 1.617,685; Feb. 16.

Levenson, Adolph, New York, N. Y. Coupling member for lubricating devices. 1,652-771; July 12. Leveque, Bernard T. Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,617,338; Feb. 15.

Levering, James F., Atlantic City, N. Y., assignor of one-bail to V. C. Farnet, Valley Falls, Kans. Compound vacuum cotton gin. 1646,660; Oct. 18. Levering, James H., Los Angeles, Calif. Externally re-enforced construction and making the same. 1.643,275; Sept. 20. Levernier, Martin W., Winnetka, Ill. Soap dispenser. Des. 73,185; Aug. 2.

Levesque. Joseph. Nashua, N. II. Shock absorber 1,622,503; May 10.

Lévesque, Louis J., and J. Lessard, assignors to Le Chaufinge Electrique Ideal Limitee, Bagotville, Quebec, Grander Lamitee, Bagotville, Quebec, Levett, Thomas, New York, N. Y.

Levid, Albert D., et al. (See Gottlieb, Abraham, assignor.) Levick, Howard R., Fr., Lexington, Ky. Arch support. 1,651,285; Nov. 29.

Levick, Howard R., Fr., Lexington, Ky. Arch support. 1,651,285; Nov. 29.

Des. 74,016; Dec. 6.

Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Cool-mining apparatus. Levin, Nils D., assignor to The Jeffrey Manufacturing (ompany, Columbus, Ohio. Cool-mining apparatus. 1,638,744; Aug. 9.

Levin, Nils D., assignor to The Jeffrey Manufacturing (ompany, Columbus, Ohio. Cool-mining apparatus. 1,639,741; Aug. 23.

Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Method and machine for loading coal. 1,645,663; Oct. 18.

Levine, Abraham, Elizabeth, N. J., assignor to Presto Feb. 15.

Levine, Hyman, Englewood, Colo. Anatomical restrainments.

Feb. 15 Levine, 1

Lock Corporation New York, N. Y. Lock. Des. 72,023: Feb. 15.
Levine, Hyman, Englewood, Colo. Anatomical restraining appliance. 1,623,125; Apr. 5.
Levine, Hyman, Deliver, Colo., assignor to Ingersoll-Rand Leving, May 20 City, N. J. Fluid-actuated engine. 1,630,653; May 21 City, N. J. Fluid-actuated engine. 1,630,653; May 21 Chicago, Ill., assignor to Hamilton-Ross Pactories, Inc. Loop for lighting faxtures or similar articles. Des. 73,928; Nov. 22.
Levinson, Irwin E., Chicago, Ill., assignor to Hamilton-Ross Pactories, Inc. Loop for lighting faxtures or similar articles. Des. 73,927; Nov. 22.
Levinson, Irwin E., Chicago, Ill., assignor to Hamilton-Ross Factories, Inc. Loop for lighting faxtures or similar articles. Des. 73,928; Nov. 22.
Levinson, Irwin E., Chicago, Ill., assignor to Hamilton-Ross Factories, Inc. Loop for lighting faxtures or similar articles. Des. 73,928; Nov. 22.
Levinson, Joseph H., New York, N. Y. Latch. 1,647,921; Nov. 1.
Levinson, Joseph H., New York, N. Y. Latch. 1,647,921; Nov. 1.
Levinson, Joseph H., New York, N. Y. Latch. 1,647,921; Nov. 1.

Levis, John H., jr., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Manual telephone system. 1,614,449; Jan. 11.

Levis, John H., jr., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone system. 1,641,225; Sept. 6.

Levis, Robert S. (See Dake, C. W., and Levis.)

Levitan, Morris, New York, N. Y. Seroll arm for electric-lighting fixtures. Des. 71,804; Jan. 4.

Levitan, Morris, New York, N. Y. Electric-lighting fixture Levitan, Morris, New York, N. Y. Electric-lighting fixture. Des. 71,806; Jan. 4.

Levitan, Morris, New York, N. Y. Electric-lighting fixture. Des. 72,375; Apr. 5.

Levitta, Samuel, Brooklyn, assignor to United Metal Hose Company, Inc., New York, N. Y. Pipe coupling. 1,637,701; Aug. 2.

Levitt, Samuel, Brooklyn, assignor to United Metal Hose Company, Inc., New York, N. Y. Fipe coupling. 1.637,701; Aug. 2. Levkoff, David, assignor to E. J. Levkoff, Augusta, Ga. Garment protector. 1.643,077; Sept. 20. Levkoff, Evelyn J. (See Levkoff, David, assignor.) Levy, Abraham L., Portland, Oreg. Lock. 1,653,187; Dec. 20.

Levy, Benjamin F. (See Peterson, Martin T., assignor.) Levy, Bernard, Philadelphia, Pa., assignor to The Key-stone Watch Case Co., Riverside, N. J. Watchease, Dex 72.024; Frb. 15. Levy, Edward, New York, N. Y. Diving armor. 1,643.667; Sept. 27.

Sept. 27.
Levy, Edward J., assignor to The Bishop & Babcock Manufacturing Company, Cleveland, Ohio, Thermostat, 1,644,552; Oct. 4.
Levy, Gaston J., assignor to Hollywood Chemical Company, Los Angeles, Calif. Recovering metals from solutions, 1,624,172; Apr. 12.

Levy, Harry, South Portland, assignor to The New England Guild, Portland, Me. Machine for hooking rugs and the like, 1.616.454; Feb. 8.
Levy, Barry, Chicago, Ill. Bathtub cover. 1,638.346;

and the like. L436,454; Feb. 8.
Levy, Brrye (Friego, III. Balthub cover. 1,638,346;
May 4, 1927.
Levy, Harry Brooklyn, N.Y. Small-batch-mixing apparaLevy, Henry, Brooklyn, N.Y. Small-batch-mixing apparaLevy, Henry, Brooklyn, N.Y. Chandelier or article of
similar nature. Des. 73,571; Oct. 4.
Levy, Isaac, Brooklyn, N.Y. Lighting faxture back plate
or analogous article. Des. 73,572; Oct. 4.
Levy, Levy, M. (See Lewis, B. H., and Levy,
Levy, Levy,

Lévy, Marcel, assignor to "Prodor" Fabrique de Produits Organiques S. A., Geneva, Switzerland. Bituminous concete and like composition. Re16,821, Dec. 20. Levy, Marcel, Geneva, Switzerland, assignor to The In-dicentification of the Production of the Indi-persion of the Indiana, Removing coloring matters and other impurities from solutions. 1,615,091; Jan. 18. Levy, Marcel, assignor to "Prodor" Fabrique de Produits Organiques S. A., Canton of Geneva, Switzerland. Mold-lang of pipes and like hollow articles. 1,622,325; Levy, Robert, Berlin, Germany. Lamp shade. 1,634,545; July 5.

Levy, Robert, Berlin, Germany, July 5. Levy, Samuel S., Boston, Mass. Window shade. 1,620,159;

July S. Levy, Samuel S., Boston, Mass. Wilnute Mar. 8.
Levy, Solomon J., San Francisco, Calif. Automobile trunk rack. Des. 72.025; Feb. 15.
Levy & Westwood Machinery Company. (See Westwood, Louis J., assignor.)
Levy, Albert F., Baker, Oreg. Tire tool. 1,619,426;
Mor. J. City, Nebr. Pocket for

Louis J., assignot.)
Lew, Albert F., Baker, Oreg. Tire tool. 1,619,426.
Mar. 1.
Lew, Albert F., Baker, Oreg. Tire tool. 1,619,426.
Mar. 2.
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Mar. 2.
Mar. 3.
Mar. 3.
Mar. 4.
Mar. 2.
Mar. 4.
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signor.)
Lewers, George R., Brooklyn, assignor to General Chemical
Company, New York, N. Y. Electrode. 1,634,372;

Company, New York, N. Y. Electrode. 1,634.372; July 5.

Lewetzki. Otto, Detroit, Mich. Boat-propelling device. 1,633.397; June 28.

Lewin, Arthur, assigner to Kupfer Bros. Co., New York, Lewin, Arthur, assignor of one-helf to W. Lewin, St. Louis, Mo. Smelting furnace. 1,646.574; Aug. 30.

Lewin, Tanner, assignor of one-helf to W. Lewin, St. Louis, Mo. Smelting furnace. 1,646.574; Aug. 30.

Lewin, William. (See Lewin, Tanne, assignor).

Lewington, Guy A. R., and G. A. Smith, Los Angeles, Calif. Orchard heater. 1,641.540; Sept. 6.

Lewinnek, Georg, Berlin, Germany, assignor to General Electric Company. Ventilation of dynamo-electric machines. 1,645.664; Oct. 11.

Lewis, Albert J., Burr Oak, Mich. Wire-splicing tool or wrench. 1,637.226; July 26.

Lewis, Alfred E., Camperdown, New South Wales, Australia, Electric water heater of the storage type. 1,622.951; Mar. 29.

Lewis, Arthur J., Stratford, assignor to The, Braid

Lewis, Arthur J., Stratford, assignor to The Britd Machine Company, Bridgeport, Conn. Vertical former and stripper, 1.613,281; Jan. 4. Lewis, Arthur J., Stratford, assignor to The Baird Ma-chine Company, Bridgeport, Conn. Metal cutting or working device. 1,650,841; Nov. 29. Lewis, Ben F., Olga, Fla. Bung-plug lock. 1,636,641; July 19. Lewis, Bungth B., Indiananolis, Ind. and J. M. Lewis, Bungth B. Indiananolis, Ind. and J. M. Lewis, Bungth B. Indiananolis, Ind. and J. M. Lewis, Bungth B.

Lewis, Ben F., Olga, Fia. Bung-plug lock. 1,000,041: July 18.

Lew York, N. Y., assignors to Lewis Novelty Manufacturing Company, Indianapolis, Ind. and L. Lew, Lewis Charles W., Portsmouth, N. H. Combined whip weight and buffer. 1,625,952; Apr. 19.

Lewis, Claude A., Houston, Tex., assignor to American Window Company. Combined swinging and sliding window, 1,617,123; Feb. 8.

Lewis, Claude A., assignor of Maerican Window Company. Window I,633,789. June 28.

Lewis, Claude A., Houston, Tex., assignor to American Window Company. Window. 1,641,390; Sept. 6.

Lewis, Claude A., Houston, Tex., assignor to American Window Company. Window. 1,641,390; Sept. 6.

Lewis, Claude A., Houston, Tex., assignor to American Window Company. Window and stille. 1,641,391; Sept. 6.

Sept. 6.
Lewis, Claude L., assignor of one-third to G. W. Street and one-third to J. Walker, Omaha, Nebr. Water heater, 1.635.003; July 5.
L.631.636; Jule T. Cobbry, Conn. Variable condenser. Lewis, Edward, and H. Lewis, Chleago, Ill. Headlight-control switch. 1.629.397; May 17.
Lewis, Edward D., Elinira, N. Y. Oli-burning apparatus. 1.620.111; Mar. 8.
Sept. 1.8.
Sept. 1.8.
Sept. 1.8.

Sept.

Lewis, Driest F., assignor to V. Lewis, Cambridge, Iowa-Lewis, Driester, 1615-589; Jan. 25, Lewis, Felix, St. Petersburg, Fla. Hair-bobbing device. 1,639,804; Aug. 23. Lewis, Forest J., Cleveland, Ohio. Apparatus for drilling wells. 1,041,176; Sept. 6.

Lewis Foundry & Machine Company. (See Lucas, John, assignor.)
Lewis Foundry & Machine Company. (See Schraishuhn, Theodore A., assignor.)
Lewis, Frank D., Denv. Colo. Centrifugal amalgamator and concentrator. 1.623,421; Apr. 5.
1.619,141; Mar. 1.
Lewis, Fred K., and C. R. Allen, assignors to The Ashtabula Bow Socket Company, Ashtabula, Ohio. Top for vehicles and the like. 1.628,892; May 17.
Lewis, Fred K., and L. R. Rottl, assignors to The Ashtabula Bow Socket Company, Ashtabula, Ohio. Top for vehicles and the like. 1.628,892; May 17.
Lewis, Fred K., and L. R. Rottl, assignors to The Ashtabula Bow Socket Company, Ashtabula, Ohio. Lewis, Fred K., and W. V. Thompson, Hamilton, Ohio. Level indicator. 1,652,023; Dec. 6.
Lewis, George T., Mayheld, Ky. Rerailer. 1,615,638; Lewis, George W., Oilton, Okla. Vulcanizer. 1,631,042; May 31.
Lewis, George W., Oilton, Okla. Vulcanizer. 1,631,042; May 31.
Lewis, Hannah, New York, N. Y. Smock. 1,633,447; Lewis, Harry A., Norristown, Pa. Method of and apparatus for grinding commutator brushes. 1,614,005; Jan. 11.
Lewis, Harry A., Norristown, Pa. Method of and apparatus for grinding commutator brushes. 1,614,005; Jan. 11.
Lewis, Harry F., Hamden, assignor to National Anline & Chemicai Company, New Haven, Conn. Cementing machine. Lewis, Harry F., Burlain, assignor to National Anline & Chemicai Company, Lew York, N. Y. Manufacture of oxidation products of acenaphthen. 1,649,833; Nov. 22. Lewis Foundry & Machine Company. (See Lucas, John,

of oxidation products of acenaphthene. 1,649,833; Nov. 22.
Lewis, Henry J., Johannesburg, Transvaal, South Africa. Combined switch and lightning crester. 1,630,954; May 31.
Lewis Javisble Stitch Machine Co. (See Moulton, Harley C., assignor.)
Lewis, Jacob D., Yonkers, and A. Pinto, New York, N. Y., assignors to Oils Elevator Company, Jersey City, N. J. Electric safety apparatus. 1,646,028; Oct. 18.
Lewis, James C. (See Boyd, R., Nitardy, and Lewis, John E. (See Lory, R., J., assignor.)
Lewis, John E. (See Guarnerl, Stephen J., assignor.)
Lewis, John D. (See Guarnerl, Stephen J., assignor.)
Lewis, John D., Tillamook, Oreg. Rodent fran, 1,050,455; Nov. 22.

Lewis, John P., Tillamook, Oreg. Rodent trap. 1,650,455; Nov. 22.

Lewis, Joseph W., Jr., assignor to The Atlantic Refining Company, Philadelphia, Pa. Method of and apparatus for treating petroleum. 1,636,520; July 19.

Lewis, Leonerib B., and F. H. Elisworth, assignors to Lewis, Kennerib B., and F. H. Elisworth, assignors to Revise the Parameter of Wire drawing dies. 1,635,945; July 12.

Lewis, Leo P., and W. Morgenthaler, Hallsville, Mo. Marker. 1,635,089; July 5.

Lewis, Leo L., Plainfield, assignor to Carrier Engineering Corporation, Newark, N. J. Method of and apparatus for cooling and ventilating. Reif-6d1; May 3.

Lewis, Leonard, New York, N. Y. Built-in fire-extinguisher holder. 1,648,615; Nov. 8.

Lewis, Leony M., Ardmore, Pa. Dry-pipe-valve acceletwis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway, Lowd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Amplifying apparatus. 1,636,693; July 26.

Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Amplifying apparatus. 1,636,693; July 26.

Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Amplifying apparatus. 1,636,693; July 26.

Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Amplifying apparatus. 1,636,693; July 26.

Lewis, Lloyd V., Edgewood Borough, assignor to The De signal for alignal Company, Swissvale, Pa. Addible signal for alignal Company, Swissvale, Pa. Addible signal Company, Swissvale, Pa. Addible signal for alignal Company, Swissvale, Pa.

Sept. 6.
Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1.642.073; Sept. 13.
Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-train-braking apparatus. 1.647.834; Nov. 1.
Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-train-braking apparatus. 1.652.836; Dec. 13.
Lewis, Lloyd V., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1.652.836; Dec. 20.
Lewis, Marthew M., assignor of one-half to E. C. Stenzer, Shenandoah, Iowa. Foot scraper for autos. 1.652.312; Dec. 13.
Lewis, Morgan J., Massillon, Ohio. Garage-door opener. 1.653.862; Dec. 27.

Look, Sor. 1 Dec. 27. Hainfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam-boiler feed. 1,632 201; June 14. Lewis, Nathan E., Plainfield, N. J., and D. W. Williams, New Brighton, Staten Island, N. X., assignors to The Babcock & Wilcox Company, Bayonne, N. J. Furnace, 1,622,595; Mar. 29.

Lewis Novelty Manufacturing Company. (See Lewis, B. B., and Levy, assignors.)

Lewis, Oscar J., Canton, Ill. Cultivator attachment. 1,639,777; Aug. 23.

Lewis, Owen L., Canton, Ill. Cultivator attachment. Lewis, Owen L., Sasignor, by mess assignments, to The Lewis, Owen L., Sasignor, by mess assignments, to The Conster-wagon body. 1,642,691; Sept. 20.

Lewis, Reiser, Sasignor, Lewis, Calif. Tool for flaring holes. 1,648,602; Oct. 18.

Lewis, Richard B., Risworth, Nehr. Vehicle attached Lewis, Richard B., Riverdale, Md. Selective four-wheel drive and steering and brake mechanism for automobies. 1,630,854; May 31.

Lewis, Richard H., Riverdale, Md. Selective four-wheel drive and steering and brake mechanism for automobies. 1,61,2121; Mar. 1.

Lewis, Richard H., Riverdale, Md. Selective four-wheel drive and steering and brake mechanism for automobies. 1,61,2121; Mar. 1.

Lewis, Robert B., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Hardness-testing Machine Company, Philadelphia, Pa. Hardness-testing Machine Company, Philadelphia, Pa. Dynamic ductlity-testing machine. 1,632,714; Dec. 27.

Lewis, Robert B., Philadelphia, Pa. Dynamic ductlity-testing machine. 1,632,714; Dec. 27.

Lewis, Robert B., Philadelphia, Pa. Dynamic ductlity-testing machine. 1,632,714; Dec. 27.

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Lewis, Robert B., Philadelphia, Pa. Dynamic ductlity-testing machine. 1,632,714; Dec. 27.

Lewis, Robert B., Philadelphia, Pa. Dynamic ductlity-testing machine. 1,632,714; Dec. 27.

Lewis, Robert B., Chicago, Ill. Heating and ventilating device. 1,640,331; Aug. 28.

Lewis, Stephen,

development Company. (See Lovejoy, Ralph M., assignor.)
Lewis, Stephen, Martins Ferry, Ohio. Shock absorber for vehicles. 1,620,112; Mar. 8.
Lewis, Ted A., assignor to Ted Lewis & Co., Denton. Tex. Gas burner. 1,616,862; Feb. 8.
Lewis, Ted A., assignor to Ted Lewis & Co., Denton. Tex. Gas burner. 1,616,862; Feb. 8.
Lewis, Ted. & Co. (See Lewis, Ted A., assignor.)
Lewis, Ted. & Co. (See Lewis, Ted A., assignor.)
Lewis, Thomas J., New York, N. Y. Display apparatus. 1,625,235; Oct. 11.
Lewis, Thomas J., New York, N. Y. Hand bag for ladies. 1,617,855; Feb. 15.
Lewis, Thomas J., New York, N. Y. Combination display and vanity case. 1,638,638; Aug. 9.
Lewis, Thomas J., New York, N. Y. Combination display and vanity case. 1,638,636; Aug. 9.
Lewis, Thomas J., New York, N. Y. Compact press and making compacts. 1,638,696; Aug. 9.
Lewis, Monnas J., New York, N. Y. Cleansing-cream Lewis, Viola. (See Lewis, Ernest F., assignor.)
Lewis, Watter W., San Francisco, Calif. Display rack. 1,637,578; Aug. 2.
Lewis, Watter W., and J. R. Samas, Hosston, Tex. Cov. Matter W., and J. R. Samas, Hosston, Tex. Cov. Matter W., and J. R. Samas, Hosston, Tex. Cov. Matter W., and J. R. Samas, Hosston, Tex. Cov. Matter W., and J. R. Samas, Hosston, Tex. Cov. Matter W., and Mass. Maintacture of Standard Development Company, Distillation apparatus. 1,620,346; Apr. 26.
Lewis, Warren K. (See Loomis, N. E., and Lewis.)
Lewis, Wilbur S., S., develand, Ohio. Clamping device. 1,627,942; May 3.
Lewis, Wilbur S., Cleveland, Ohio. Heater-supporting Lewis, Wilbur S., assignor to The Le Mur Company, Cleveland, Ohio. The Lewis, Wilbur S., assignor to The Le Mur Company, Cleveland, Ohio. The Lewis, Wilbur S., assignor to The Le Mur Company, Cleveland, Ohio. The Lewis, Wilbur S., assignor to The Lewis Wilbur S., assignor to The Lewis Wilbur S., assignor to The

ing 1647,965; Nov. 1.
Lewis, Wilbur S., assignor to The Le Mur Company, Cleveland, Ohio. Tube for permanent waving. 1,637,147;
Zuly 26.
Leleviand, Ohio. Hair-waving curier rod. 1,642,450;
Sact. 120.

72.25; Mar. 15.
Lewis, William H., New York, N. Y. Tobacco pipe.
1.621.890; Mar. 22.
Lewis, William J., Syracuse, N. Y. Power press irener.
1.639.440; Aug. 16.
Lewis, William N., assignor to Sebring Manufacturing
Corporation, Sebring, Ohio, Making decorated chinaware, 1.641.820; Sept. 6.

Lewis, William T., Racine, Wis., and M. M. Eells, Chicago III., assignors to Western Coll & Electric Co. Endiocabinet. Des. 73,186; Aug. 2.
Lewis, William W., New Milicape, R., assignor to Dairy-Review of the College tham.)

(Hallier, Leslie H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rusber boot. 1,626,417; Apr. 26.
L'Hollier, Leslie H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Form-fitting boot. 1,643,125; Sept. 20.
Labo, Siveri, Irene, S. Duk. Speed-regulating device for the feeding attachments for thrashing machine. 1,617,129; Feb. 8.

Liais, Lucien, Paris, France, Manufacture of agglomerated fuel. 1,630,062; May 21.
Libbey, Edwin S. (See Libbey, Harry S., assignor.)
Libbey Glass Company, The. (See Abelt, Frint, assignor.)
Libbey Glass Manufacturing Company, The. (See Kadow,

Libbey Glass Manufacturing Company, The. (See Radow, August, assignor.)
Libbey Glass Manufacturing Company, The. (See Parker, Alval C., assignor.)
Libbey Glass Manufacturing Company, The. (See Ratner, Richard I., assignor to E. S. Libbey, Arlington Mass. Combined glareshield and bracket therefor. Des. 73,187; Aug. 2.
Libbey-Owens Sheet Glass Company. (See Blackshere, L. D., and Drake, assignors.)
Libbey-Owens Sheet Glass Company, The. (See Blair, James C., assignor).
Libbey-Owens Sheet Glass Company, The. (See Brown, Wilbur F., assignor.)
Libbey-Owens Sheet Glass Company, The. (See Brown, Wilbur F., assignor.) Joseph P., assignor. Libbey-Owens Sheet Glass Company, The. (See Crowley-Joseph P., assignor.)
Libbey-Owens Sheet Glass Company, The, (See Drake, John L., assignor.)
Libbey-Owens Sheet Glass Company, (See Ferugren, Enoch T., assignor.)
Libbey-Owens Sheet Glass Company, (See Fowle, Assignor.)

Arthur E., assignor.) Libbey-Owens Sheet Glass Company, The. (See Fraser.

Frank, assignor.)
Libbey-Owens Sheet Glass Company, The. (See Gibson, Willam A., assignor.)
Libbey-Owens Sheet Glass Company. (See Henderson.

William A., assignor.)
Libbey-Owens Sheet Glass Company, The. (See Mambourg, Nestor, assignor.)
Libbey-Owens Sheet Glass Company, The. (See Mambourg, Nestor, assignor.)
Libbey-Owens Sheet Glass Company, The. (See McKinley, Order of Sheet Glass Company, The. (See McKinley, Order of Sheet Glass Company, The. (See McKinley, Losein, Assignor.)
Libbey-Owens Sheet Glass Company, The. (See Owens, Michael J., assignor.)
Libbey-Owens Sheet Glass Company, The. (See Reece, Joseph A., assignor.)
Libbey-Owens Sheet Glass Company, The. (See Rhoades, W. A. and Kincaid, assignors.)
Libbey Frank, Los Angeles, Calif. Making plates for multicoler printing, 1,642,451; Sept. 13.
Libby, Hollis W. (See Farmer, C. D., and Libby, Libby, McNeill & Libby, Calibby, McNeill & Libby, Calibby, McNeill & Libby, Calibby, And Libby, The Company, Thrust bearing, 1,626,470; Apr. 26.

Liberman, Charles, New York, N. Y. Shoe-raising-plat form device 1.630,191; May 24. Liberman Manufacturing Company. (See Loewy, Aaron

E., assignor.) Liberty Development Company, The. (See Griese, Elmer

Liberty Bernanden Company, Are.
Liberty, Tosoph, Hartford, Conn. Geometrical instrument. 1622,158; Mar. 22.
Liberty, Machine Tool Company The. (See Johannes
meyer, Charles G., assignor.)
Liberty National Bank, trustee. (See Davis, Ernest,

assignor.)

assignor.)
Liberty Systems Corporation. (See Watters, L. A., Lloyd, and Reller, assignors)
Lib., John J., San Francisco, Calif. Electric heater and stove. 1.621,171; Mar. 15.
Libi., John J., San Francisco, Calif. Safety razor. 1.652,154; Dec. 6.
Lichfield, Edgar C., and V. Speer, Cedar Falls. Iowa, and C. C. Hermann, Moline, Ill., assignors to H. L. Litchfield, Cedar Falls. Iowa. Variable cam for fertilizer distributors and the libridge of the control of the libridge of the control of the libridge of the control of the libridge of the l

Lichte, Hugo. (See Hahnemann, W., Wilckens, and Lichte.)

Lichtet, Ilugo. (See Hahnemann, W., Wilckens, and Lichte.)
Lichtenberg, Erich H., Milwaukee, Wis. Snow-removing matchine. L015-401, Jan. 25.
Lichtenberg, Erich H., assignor, by mesne assignments, nism for tractors. 1,826,680, May 3.
Lichtenberg, Erich H., assignor to Koebring Company, Milwaukee, Wis.
Milwaukee, Wis.
Water-measuring controller for mixers. 1,649,603; Nov. 15.
Lichtenberg, William, assignor to New Jersey Chain Corporation, Newark, N. J. Bracelet. 1,630,955; May 31.
Lichtenstein, Edmund, assignor to Deutsche Masseimenburund Vertriebs-Gesellschaft m. b. II., Berlin, Ger-Lichtenstein, Edmund, assignor to Deutsche Masseimenburund Vertriebs-Gesellschaft m. b. II., Berlin, Germany, Duplicator. 1,636,780; July 26.
Lichtenstein, Edmund, assignor to the firm: Deutsche Masseimenburu und Vertriebs-Gesellschaft m. b. III., Berlin, Germany, Duplicator. 1,636,780; July 26.
Lichtenstein, Edmund, assignor to the firm: Deutsche Masseimenburu und Vertriebs-Gesellschaft m. b. III., Berlin, Gerlin, Germany, Flexible printing sheet. 1,644,597; Oct. 4.
Lient unstein. Edmund, assignor to Deutsche Masselinenburund Vertriebs-Gesellschaft m. b. III., Berlin, Gerlin, Germany, Flexible printing sheet. 1,644,597; Oct. 4.

Oct. 4.
Licentenstein, Edmund, assignor to Deutsche Masebinenbau- und Vertti-bs-Gesellschaft m. b. II., Bernin, Germany, Duplicating apparatus, 1651,924; Dec. 6.
Lichtenstein, Harry R., assignor to M. Lichtenstein,
Bro., New York, N. Y. Button and fastener therefor
LGE,000; Mar., F., New York, N. Y. Demonstratine
device, 1632,502; June 14.
Lichtenstein, M., & Bro. (See Lichtenstein, Harry R.,
assignor.)

device. 1.632.302; June 14.
Lichtenstein. M., & Bro. (See Lichtenstein, Harry R., assignor.)
Lichtev. Malvin, assignor to himself and L. Jacobs. partners, trading as Stickless Fan Company. New York.
Lichtev. Malvin, assignor to himself and L. Jacobs. partners, trading as Stickless Fan Company. New York.
N. Y. Delivery chute for use with cutting dies.
1,618.453; Feb. 22.
Lichterann. Charles, Pittston. Pa. Washing machine.
1,622,227; Mar. 22.
Lichter Man. Charles, Pittston. Pa. Washing machine.
1,622,227; Mar. 22.
Lichty Norman A. and C. L. Ostrander, assignors to Lichty Metal Products Company. (See Lichty, N. A., Lichty, Norman A., and C. L. Ostrander, assignor.)
Lichty, Norman A., and C. L. Ostrander, assignors to Lichty Metal Products Company, Waterloo, Iowa.
Litake ventilator. 1,618.897; Jan. 11.
Licity, Norman A., and C. L. Ostrander, assignors to Lichty Metal Products Company, Waterloo, Iowa.
Litakeventilator. 1,618.897; Jan. 14.
Lichty, Norman A., and C. L. Ostrander, assignors to Lichty Metal Products Company, Waterloo, Iowa.
Lickert, William J. (See Rest), 7, 11, and Lickert, J. Liddical, Robert P. F. New York, N. Y., assignor to Motor Improvements, Inc., Newark, N. J. Lubricating system. 1,618.467; Jan. 4.
Liddena, Kichard T. (See Abrams, H. J., Liddicoat, and Stevens), Manufacturing Company, (See Dickinson, Idaes Manufacturing Company, (See Dickinson, Idaes), Manufacturing Company, Company, Company, Manufacturing Company, Lidseen, J. J. Lidder, Manufacturing Company, Lidseen, J. J. Lidoen Mrg. Corporation. (See Lighthart, Charles H. assignor.)
Lidseen, Gustave, Chicago, III. Pump-feed oil can.

ddoen MR. Carpendago. Hh. Pump-feed oil can. Assignor.] dseen, Gustave, Chicago, Hh. Pump-feed oil can. 1,621,891; Mart. 22. dseen, Gustave, Chicago, Hh. Oil can. 1,641,088; 1.641.088:

1,621,891; Mar. 22.
Lidseen, Gustave, Chicago, Ill. Oll can. 1,641,088; Aug. 30.
Lebeck, Harry, Swarthmore, Pa., assignor to Scott Paper Company. Device for making rolls of paper, 1,633,595; Lebeck, Harry, Swarthmore, Pa., assignor to Scott Paper Company. Device for making rolls of paper, 1,633,595; Lebecherg, Arthur J., assignor to The Warner Elevator Manufacturing Company. Cincinnati, Ohio. Material Controller, 1615,619; Jan. 18.
Lebenberg, Arthur J., assignor to The Warner Elevator Manufacturing Company. Cincinnati, Ohio. Elevator Manufacturing Company. Cincinnati, Ohio. Elevator leveling control. 1,626,291; Apr. 26.
Lebermore, Lebenberg, Arthur J., assignor to The Warner Elevator Lebenberg, Arthur J., assignor to The Chemitz, assignors to Hosenberg, Lebenberg, Lebenberg, Cermany. Knitting machine. 1,643,249; Sept. 20.
Lebermore, Lebenberg, Maryonne, N. J. Lamp. Des. 72,214; Mar. 13.
Lebert, Richard, and W. Fischer, assignors to Good-event Cerman R., and R. Lebeck, R. Lebe

Liebrich, John E., Indianapolis, Ind. Automobile signal accessory, 1,637,528; Aug. 2.

Lied, Ernat F., Omaha, Nebr. Golf club. 1,648,354; Nov. 8.

Liedler, Ludwig, Modling, near Vienna, Austria. Apparatus for use in erecting walls of blocks, bricks, or the like, 1,658,863; Dec. 27.

Lienhard, Leon V. (See Snodgrass, Joseph E., assignor.). Lienhard, Lichard E., Nowington, assignor to The Taplin Manufacturing Company, New Britain, Com. Egg Liening, Henry A., Detroit, Mich. Combined drinking fountain and animal trough, 1,632,842; June 21.

Liepold, Leo, Heron Lake, Minn. Gate, 1,636,571; July 19.

Lieske, Rudolf, Leverkusen, A. Thauss, Cologne-Deutz,

Llepold, Leo, Heron Lake, Minn, Gate, 1,638,671; July 19.

Lesske, Rudolf, Leverkusen, A. Thauss, Cologne-Deutz, and W. Bonrath, Leverkusen, near Cologne, Germany, York, N. Y. Dusting powder deberent to plants, 1,610,323; Feb. 1.

Llesske, Rudolf, Leverkusen, near Cologne, W. Schulemann, Volwinkel, near Elberfeld, and W. Bonrath, Leverkusen, near Cologne, Oremany, Assignors, by mesne assignments, to Winthrop Chemical Company, New States, 1,640,740; M. W. Bonrath, Leverkusen, near Cologne, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, New Germany, assignors, by mesne assignments to Winthrop Chemical Company, New Llesske, Rudolf, and W. Bonrath, Leverkusen, near Cologne, Germany, assignors, by mesne assignments to Winthrop Chemical Company Inc., New York, N. Y. Copper derivatives for combating animal and plant pests. 1,649,538; Nov. 15.

Liesske, Rudolf, and W. Bonrath, Leverkusen, near Cologne, Germany, assignors, by mesne assignments to Winthrop Chemical Company Inc., New York, N. Y. Copper derivatives for combating animal and plant pests. 1,649,538; Nov. 15.

Liesske, Paris, France, Adjustable-delivery ink container for rotary duplicators. 1,633,596; June 28.

Lifshitz, Alex M., Brooklyn, N. Y. Electrical attachment for musical instruments. 1,646,661; Oct. 18.

Lifton, Samuel H., Brooklyn, N. Y. Brief case. 1,633,991;

latisatiz, Alex M., Brooklyn, N. Y. Electrical Attachment for musical instruments: 1,645,051; Oct. 13.

June 28.

June 28.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Pulverizing machine. 1,622,368; Mar. 22.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Pulverizing machine. 1,623,553; Apr. 19.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Pulverizing machine. 1,625,553; Apr. 19.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Pulverizing machine. 1,625,553; Apr. 19.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Loading apparatus. 1,633,346; Aug. 16.

Light, Agron, Chicago, Ill. Separable fastener. 1,613,665; Jan. 11.

Lightfoot, Candie B., Esset Orange, N. J. Drip pan for food choppers. 1,637,866; Aug. 2.

Lightfoot, Caddie B., Esset Orange, N. J. Drip pan for food choppers. 1,637,866; Aug. 2.

Lightfoot, Caddie B., Esset Orange, N. J. Separable fastener through the for winding resistance coils. 1,627,188; May. 3.

Lightfoot, Edwin N., assignor to The Cutter-Hammer Mfg. Co., Milwaukee, Wis. Electrically-heated device and manufacture thereof. 1,617,489; Peb. 15.

Lightfoot, Edwin N., assignor to The Cutter-Hammer Mfg. Co., Milwaukee, Wis. Michine for winding resistance coils. 1,627,188; May. 3.

Lightfoot, Edwin N., assignor to The Cutter-Hammer Mfg. Co., Milwaukee, Wis. Michine for winding resistance coils. 1,627,188; May. 3.

Lightfoot, Edwin N., assignor to The Cutter-Hammer Mfg. Co., Milwaukee, Wis. Michine for winding resistance coils. 1,627,188; May. 3.

Lightfoot, Edwin N., assignor to The Cutter-Hammer Mfg. Co., Milwaukee, Wis. Separable food of the food

Jan. 11. Lightolier Company. (See Dahl. Thure, assignor.) Lightship Board Company. (See Scheffey, George B., assignor.)

assignor.)
Lightship Cloth Board Corporation. (See Smith, Harry B., assignor.)
Lightship Cloth Board Corporation. (See Smith, Harry B., assignor.)
Lightship Cloth Corporation Country Country

Many 1./.
Liles, Thomas O., Tyler, assignor of three-eighths to D. C.
Matthews and four-eighths to B. H. Ashb, Dallas, Tex.
1.637.637; Aug. 2.
Lilicateld, Julius D., Kew Gardens, Long Island, N. Y.
High-racum device for heating bodies. 1,616,812;

Feb. 8.

Lillenfeld, Leon, Vienna, Austria. Fluorescent oll and making same. 1,625,415; Apr. 19.

Lillenfeld, Leon, Vienna, Austria. Plastic and making same. 1,025,416; Apr. 19.

Lillenfeld, Leon, Vienna, Austria. Cellulose compound and making same. 1,642,587; Sept. 13.

Lillenfeld, Leon, Vienna, Austria. Manufacture of artificial materials. 1,642,588; Sept. 13.

Lillential, George W. New York, assignor to Wireless Radio Corporation, Froother, N. Y. Combined ash and pipe tray. Des. 74,017; Dec. 6.

Lilja, Andrew, Belvidere, S. Dak. Jar opener. 1,615,196;

Jan. 18. Jan. 18. Liljebladh. Eric H., Gottenborg Sweden. Sheet-separating device for paper-feeding machines. 1,635,626; July 12. Liljegren, Karl F., Donna, Tex. Water gate. 1,624,748;

device for paper-actuals and the control of scale in boilers. 1,628,163; May 10.

Lilleston, Horace J., assignor to The Parafine Companies, Inc., San Francisco, Calif. Budget box. 1,648,648; Nov. 8.

Nov. 8.

Clarence E., Kansas City, Mo. Oil refiner for the control of the co

Nov. 8.

Lilley, Clarence E., Kansas City, Mo. Oll refiner for internal-combustion engines. 1,624,957; Apr. 19.

Lilltord, Henry, New York, N. Y. Tooth-paste holder. 1,652,087; June 14.

Linguistic Lilley, Lilley,

Lilly, Eli, and Company. (See Shonle, Horace A., assignor.)

signor.)
Lilly, Eli, and Company. (See Van Scoyoc, G., Wehrbein, and Shonle, assignors). Billy and Company. Indianapolls, Lilly, Ell. assignor to Billy and Company. Indianapolls, Lilly, Ell. assignor to Billy and Company. Indianapolls, 1625.035; Apr. 19.
Lilly, Thomas F. Memphis, Tenn. Hydraulic power-transmission mechanism. 1,645.261; Oct. 11.
Lilly, William J., Tacoma, Wash, and H. H. Logan, Chienzo, Ill. Hoist tortrol. 1,624.260; Apr. 12.
Lilly, William J., Tacoma, Wash, and H. H. Logan, Chienzo, Ill. Hoist tortrol. 1,642.261; Apr. 12.

Lilly, Win-Chicago, Apr. 12.

Apr. 12.
Limbers, Don R., Nutter Fort, W. Va. Brake for sleds.
1.614.137; Jun. 11.
Limont, Alexander W., Bridgeport, Conn. Making valve stems. Rel6.619; May 10.
Limont, Alexander W., Bridgeport, Conn. Making valve stems. Rel6.620; May 10.
Limont, Alexander W., Bridgeport, Conn. Making valve stems. Rel6.620; Sept. 6.
Limont, Alexander W., Bridgeport, Conn. Making valve stems. Rel6.730; Sept. 6.
Limont, Alexander W., Bridgeport, assignor to The Norwalk Company, South Norwalk, Conn. Multistage Limpatcher, Richard. (See Grin, A. and Limpächer.)
Lingatcher, Richard. (See Grin, A. and Limpächer.)
Lingatcher, Frederick W., and T. M. Bruback, Dubois, Pa.
Soot cleaner for botilers. 1.616.586; Feb. 8.
Lincicome, Ashury, Wichita, Kans. Automobile traffic signal. 1.615.949; Feb. 1.
Lincoln Electric Company, The. (See Lincoln, James F., assignor.)

assignor.) Lincoln, Elmer W., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system. 1,629,280; May 17. Lincoln, James R., assignor to The Lincoln Electric Company, Cleyland, Ohlo. End frame ring for motors. 1,629,576; May 24. Lincoln, James F., assignor to The Lincoln Electric Company, Cleyland, Ohlo. Frame for dynamo-electric machines. 1,629,577; May 24. Lincoln, John C., East Cleyland, Ohlo. Dynamo-electric machine. 1,621,8692; Teb. 22. Lincoln, John C., East Cleyland, Ohlo. Dynamo-electric machine. 1,613,692; Teb. 22. Lincoln, John C., East Cleyland, Ohlo. Dynamo-electric machine. 1,613,692; Teb. 22. Lincoln, John C., East Cleyland, Ohlo. Spinor Signor.) signor.)

Lincoln Manufacturing Company. (See Aspinwall, Robert S., assignor.)
Lincoln Meter Company. (See Paine, Louis A., assignor.)
Lincoln Meter Company, The. (See Paine, Louis A.,

Lincoln Meter Company, Limited, The. (See Lines, Stanley L. B., assignor.)
Lincoln Meter Company Limited, The. (See Paine, Louis

A., assignor.)
Lincoln Motor Company. (See Litle, Thomas J., jr., as-

Lincoln Pulp and Paper Company. (See Maclachlan, Kellogg S., assignor.) Lincoln Rubber Key Company. (See Easterlin, Douglas

L. assignor.) Lincoln Scale Corporation. (See Kennedy, Homer, as-Lincoln Scale Corporation. (See Rennedy, Homer, assignor.)
Lincoln, William A., et al. (See Pratt, Glenn, assignor.)
Lincoln Scale Corporation. (See Abolin, Harry T., as-

signor.)

Lind. Edward J., Emporia, Kans. Liquid-dispensing ma-chine. 1.654.004; Dec. 27. Lind. Frederick A., assignor to The Goodyear Tire & Rubber Company, Akron. Obto. Tire holder. 1,620.478; Mar. 8.

Lind, Gue W., Newark, N. J. Water-level indicator and recorder, 1,641,293 - Sept. 6, Lind, Mathilde and W. C., New Orleans, La. Button, 1,623,647; Apr. 5, Lind, Sebert A., Alameda, Calif. Tool. 1,623,689; Apr. 6.

Lind, Sven G. (See Kullgren, C. F., and Lind, Lind, Werner C. (See Lind, Mathilde and W. C.)

Lindblad, Nils, Stockholm, Sweden, assignor to Slemens & Halske Aktiongesellschaft, Slemensstadt, near Berlin, Germany. Thermoelectrical measuring arrangement.

Lindblad, Nils, Stockholm, Sweden, assignor to Siemens & Haiske Aktiongesellschaft, Siemensstadt, near Berlin, Germany. Thermoelectrical measuring arrangement. 1,643,668; Sept. 27.
Lindblom, William E. assignor to Simmons Company, Konoska, Wis, Method of and apparatus for shaping Methods, Wis, Method of and apparatus for shaping brake-staff mechanism. 1,618,089; Feb. 15.
Lindburg, Joseph, Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting ma-Lindburg, Joseph, Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Copy-holding device for typewriting machines. 1,615,639; Jan. 25.
Lindburg, Joseph, Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting ma-Lindburg, Joseph, Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting mallindburg, Joseph, Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting maratus for workbenches. 1,624,107 ; Apr. 12.
Lindburg, Joseph, Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Typewriting mallinde Air Products Company, The, et al. (See Bucknam, James H., assignor).
Linde Air Products Company, The, (See Bucknam, Worthy C., assignor).

assignor.)

Linde Air Froducts Company, The. (See Carter, Glenn O., assignor.)

Linde, Andrew H., assignor to The Hess-Bright Manufacturing Company, Philadelphia, Pa. Cage for ball bearings. 1,638,537; Aug. 9.

Linde, Edward, Philadelphia, Pa. Cage for ball bearings. 1,638,538; Aug. 9.

Linder, Edward, Philadelphia, Pa. Cage for ball bearings. 1,638,538; Aug. 9.

Linde, John A., Brooklyn, N. Y. Orthodontic band test lenses. 1,647,922; Nov. 1.

Linde, John A., Brooklyn, N. Y. Orthodontic band Lindeken, August T., assignor to American Manufacturing Company, Los Angeles, Calif. Locking hinge. 1,613,338; Jan. 11.

Lindeman, Jesse G., Yakima, Wash. Ditching machine. 1,622,303; Jun. 14. Hoverson Company. (See Lindeman, W. C., and Rutenber, assignors.)

Lindemann, V. C., and Rutenber, assignors.)

Lindemann, A. J., & Hoverson Company. (See Rutenber, Edwin A., assignor).

Lindemann, Frederick W., St. Paul, Minn. Steam John. Lindemann, Joseph S., New York, N. Y. Bottle. Des. 73,138; July 26.

Lindemann, Marvic C., assignor to Bay View Furniture Cett. 1,625,476; Apr. 19.

Lindemann, Marvic C., assignor to Bay View Furniture Cett. 1,625,476; Apr. 19.

Lindemann, Marvic C., assignor to Bay View Furniture Cett. 1,625,476; Apr. 19.

Lindemann, Marvic C., assignor to Bay View Furniture Cett. 1,625,476; Apr. 19.

Lindemann, Marvic C., assignor to Bay View Furniture Cett. 1,625,476; Apr. 19.

Lindemann, Marvic C., assignor to Bay View Furniture Cett. 1,625,476; Apr. 19.

Lindemann, Marvic C., and E. A. Rutenber, assignors to

Lindemann, Os 72.109; Mar. 8. Lindemann, Walter C., and E. A. Rutenber, assignors to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Thermostatic device. 1.653.602; Dec. 20. Lindemon, William H. (See Cuthbert, W. R., and Linde-

mon.)

Lindemon, William H. (See Cuthbert, W. R., and Lindemon.)

Lindemuth, William E., assignor to The Todd Company, Kanasa City, Mo. Adjustable leg for tubs or the like, 1,621,260; Mar. 15.

Linden, Carl E., and G. H. Langen, assignors to The Cincinnati Planer Company, Cincinnati, Ohio. Safety locking device for the shifting mechanism of metal Cincinnati Planer Company, Cincinnati, Ohio. Traverse mechanism. 1,620,082; May 17.

Linden, Carl E., and G. H. Langen, assignors to The Cincinnati Planer Company, Cincinnati, Ohio. Traverse mechanism. 1,620,082; May 17.

Lindenberg, Henry A., Fergus Falls, Minn. Iceless icecream packer. 1,643,816; Sept. 27.

Lindenberg, Theodore, Columbus, Ohio. Reproducer for radio receiving apparatus. 1,636,940; July 26.

Explosion engine with four or more working cylinders. 1,634,249; June 28.

Linder, Oscar B. (See Hardund, Axel, assignor.)

Linderman, Bert A., New York, N. Y., assignor to Linderman, Bert A., New York, N. Y., assignor to Museron Machine. Company. Dovetailing machine. 1,651,897; Dec. 6.

Linderman & Co. (See Linderman, Bert A., assignor, by messne assignments to American Meter Company, New York, N. Y., assignor by Messne assignments to American Meter Company, New York, N. Y., Specific-gravity-determining apparatus. Charless, assignor to Lincernational Harvester Company, Chicago, Ill. Subsoiler. 1,651,031; Nov. 29.

Lindgren, Hans O., Stockholm, Sweden, assignor, by messne assignments, to The De Laval Soparator Company, New assignates, to Capany, New Speciassignments, to The De Laval Soparator Company, New Speciassignments, t

Nov. 29.
Lindgren, Hans O., Stockholm, Sweden, assignor, by mesne assignments, to The De Laval Separator Company, New York, N. Y. Apparatus for cleaning bowls of centrifugal separators. 1,644,385; Oct. 4.
Lindgren, Hugo T., Moline, Ill., assignor, by mesne assignments to Moline Implement Company. Beet puller, 1,623,737; Apr. 5.

Lindgren, Waldemar L., assignor to A. A. Norton, trustee, Chicago, Ill. Brush mounting for vacuum cleaners, etc. 1,629,801; May 24.
Lindgren, Waldemar L., assignor to A. A. Norton, trustee, Chicago, Ill. Brush mounting for vacuum cleaners, etc. 1,629,802; May 24.
Lindh, Carl R., et al. (See Madsen, Gustav N., assignor, Lindhard, Povi T., Brooklyn, assignor to F. L. Smidth A. V. Liner for tube mills, etc. 1,631,971; June 4.
Lindhard, Povi T., Brooklyn, assignor to F. L. Smidth & Co. New York, N. Y. Liner for tube mills, 1,633,972; June 14.
Lindhard, Povi T., Brooklyn, assignor to F. L. Smidth & Co. New York, N. Y. Rotary kiln and cooler. Lindhard, Arthur C., Springfield, Mass. Guiding attachment for reamers, 1,626,244; Apr. 26.
Lindley, Lowell F., Chicago, Ill. Roofing, 1,650,285; Nov. 22.
Lindley, Stacey B., assignor to Indiana Canning Machin-

Lindey, Stacey B., assignor to Indiana Cauning Machinety Company, Indianapolis, Ind. Mixing and straining machine. 1,618,988; Mar. 1.

Lindley, Stacey B., assignor to Indiana Cauning Machinety Company, Indianapolis, Ind. Turnover table for vegetables and truits. 1,620,217; Mar. 8.

Lindley, Stacey B., assignor to Indiana Canning Machinety Company, Indianapolis, Ind. Grading table for Vegetables and Iruits. 1,620,217; Mar. 8.

Lindley, Stacey B., assignor to Indiana Canning Machinety Company, Indianapolis, Ind. Grading table for Lindler, Arthur C. E. (See Bergstein, S. and Lindler) Lindner, Werner, Beuthen, Germany. Blasting-bore closure. 1,642,116; Sept. 13.

Lindquist, Birger W. (See Henmes, R. M., and Lindquist, Birger W. (See Henmes, R. M., and Lindquist, Birger W.)

quist.)
Lindquist, David L. Hartsdale, N. Y., E. L. Dunn, East
Orange, N. J. and D. C. Linson, Yonkers, N. Y., as
Orange, N. J. and D. C. Linson, Yonkers, N. Y., as
Electromagnetic switch. 1,646,629; Oct. 18. y., N. J.
Lindquist, David N. (See Peurson, A., and Lindquist,
Lindquist, Edward. (See Di Martino, C., and Lindquist,
Lindquist, Ernest W., Helsingfors, Finland. Rotary
screen for screening pulp and paper stock. 1,027,655;

Lindquist, Ernest W., Helsingfors, Finland. Rotary screen for screening pulp and paper stock. 1,627,655; May 10. Lindquist, Philip W., Seattle, Wasb. Fish-cleaning apparatus. 1,624,173; Apr. 12. Lindroth, Alfred L., Attleboro Falls, Mass. Gem setting. 1,654,335; Dec. 27. Lindsay, David, Louisville, Ky. Locomotive-whistle amplifier. 1,650,326; Nov. 22. Lindsay, Donald E., Springfield, assignor to Murlin Manufacturing Company, Incorporated, Philadelphia, Pa. Lindeary, Donald E., Springfield, assignor to Murlin Manufacturing Company, Incorporated, Philadelphia, Pa. Lantern. Des. 73,931; Nov. 22. Lindsay, Donald E., Springfield, assignor to Murlin Manufacturing Company, Incorporated, Philadelphia, Pa. Bracket back for lighting fixtures. Des. 73,932; Nov. 22.

Nov. 22.
Nov. 22.
ndsay, Donald E., Springfield, assignor to Murlin Manufacturing Company, Incorporated. Philadelphia, Pa-Bracket back for lighting fixtures. Des. 73.933;

facturing Company, Incorporated, Philadelphia, Pa. Bracket back for lighting fixtures. Des. 73,933; Nov. 22. Lindsay, Donald E., Springfield, assignor to Murlin Manufacturing Company, Incorporated, Philadelphia, Pa. Lindsay, Donald E., Springfield, assignor to Murlin Manufacturing Company, Incorporated, Philadelphia, Pa. Bracket for lighting fixtures. Des. 73,935; Nov. 22. Lindsay, Donald E., Springfield, assignor to Murlin Manufacturing Company, Incorporated, Philadelphia, Pa. Bracket for lighting fixtures. Des. 73,935; Nov. 22. Lindsay, Donald E., Springfield, assignor to Murlin Manufacturing Company, Incorporated, Philadelphia, Pa. Lantern. Des. 73,937; Nov. 22. Lindsay, Frederick K., assignor to Murlin Manufacturing Company, Incorporated, Philadelphia, Pa. Lantern. Des. 73,937; Nov. 22. Lindsay, Frederick K., assignor to Arizona Minerals Corporation, St. Paul, Minn. Preparing a sase excludes the standard Steel Car Company, Pittsburgh, Pa. Bracket for radiators. 1649,355; Nov. 15. Lindsay, Harvey B., Oakland, Calif., assignor to Dry. Zero Corporation, Chicaco, Ill. Refrigerator-pipe insurants for producing bodies formed of separate fibers. 1.043,505; Sept. 27. Lindsay, Levyer, designor soil, Del. Method and apparatus for producing bodies formed of separate fibers. 1.043,505; Sept. 27. Lindsay, Lycurgus, Los Angeles. Colf. Device for aerating and fertilizing soil. 1,650,081; Nov. 22. Lindsay, Lycurgus, Los Angeles. Colf. Device for aerating and fertilizing soil. 1,650,081; Nov. 22. Lindsay, Lyun G. (See Houghland, A. C., and Lindsay, Lindsay, William G., Newy York, N. Y. Fluid-pressure-operated regulator. 1,619,351; Mat. 1. Lindsay, William G., Newark, N. J., assignor to The Cellulosis Composition and process. Lindsay, William G., Newark, N. J., assignor to The Cellulosis Composition. 1,620,977; Mar. 16.

Lindsay, William G., Newark. N. J., assignor to The Celluloid Company. Cellulose composition. 1,630,752;

Lindsay, William G., Newark, N. J., assignor to The Celluloid Company. Cellulois composition. 1,630,752; May 31.
Lindsey, Everett E. (See Atkins, D., jr., Anderson, and Lindsey, Federick C., Milwaukee, Wis. Heavy-oil vapor-lindsey, Federick C., Milwaukee, Wis. Heavy-oil vapor-lindsey, George C., Los Angeles, Calif., assignor of seven thirty-seconds to M. Gozzo, one-eighth to D. Eminger, six thirty-seconds to V. P. Hendrick, and nine thirty-seconds to R. Turner. Sounding board for radio receiving sets and phonographs. 1,633,944; June 28.
Lindsey, Benjamin F., Sounea, Calif. Jardniere or similar article. Des. 74,064; Dec. 13.
Lindsey, Benjamin F., Mansfield, Ohio. Swing stand. 1,622,281; May 17.
Lindster, Albert, Bronxville, N. Y. Lawn mower. Lindstrom, Albert F., Nutley, N. J., assignor to Westing-house Lamp Company. Coating composition. 1,613,757; Jan. 11.
Lindstrom, Albert F., Nutley, N. J., assignor to Westing-house Lamp Company. Coating articles. 1,613,758; Jan. 11.

Lindstrom, Andrew E., San Francisco, Calif. Apparatus for vacuumizing and sealing cans. 1,626,291; Apr. 26.

Apr. 26.
Lindström, Carl, Aktiengesellschaft. (See Holtz, Karl, assignor.)
Lindström, Frank L., assignor to The Lindström Tool & Toy Company, Bridgeport, Conn. Mechanical toy. 1,654,336; Dec. 27.
Lindström, Robert S., Chicago, Ill. Cement composition. 1,633,730; June 28.
Lindström, Lassignor, Company, The. (See Lindström, Lassignor.)
Line Material Company, (See Hendee, Lem E., assignor.)
Line Material Company. (See Hood, Samuel B., assignor.)

signor.) ne Material Company. (See Kyle, William D., assignor.)
ine Material Company. (See Steinmayer, Alwin G.,

Line Material Company. (See Withers, Frank P., as-Linebarger, Charles E., Chicago, Ill. Oil cup. 1,644,136; Oct. 4.

Linebarger, Charles E., Chicago, Ill. Oil cup. 1,644,137; Oct. 4. Linebarger, Charles E., Chicago, Ill. Oil cup. 1,644,138;

Linebarger, Charles E., Chicago, III. Oli cup. 1,644,138; Oct. 4.
Linebarger, Charles E., Chicago, III. Hydrometer.
1,648,412; Nov. 8.
Linebaugh, Edward R., Barberton, Ohio, assignor to The Diamond Match Company, Chicago, III. Scombined Philosophic Company, Chicago, III. Scombined Linebaugh, Edward R., River Falls, Wis. Vehicle signal. 1,025,733; Apr. 19.
Linendoll, Asa E., Norwalk, Ohio, Adjustable shell. 1,646,030; Oct. 18.
Lines, Grant, assignor of one-third to A. B. McKinney. For Match 1,646,030; Oct. 18.
Lines, Grant, assignor of the Linealn Meter Company Limited, Toronto, Ontario, Canada, Measuring, the flow of electric current in a three-wire circuit. 1,634,546; July 5.
Ling, Steve, Spotane, Wash. Carbon-removing implement. 1,634,545; Oct. 11.
Lineshafor Company, Springfield, Ohio, Insulating smoke pipes. 1,625,734; Apr. 19.
Link-Belt Company, (See Caldwell, Frank B., assignor.)
Link-Belt Company, (See Morehead, G. L., and O'Nell, Stephens, Company).

assignors.) assignors.)
Link-Reit Company. (See Oldroyd, Gerald J., assignor.)
Link-Beit Company. (See Pollak, Solomon, assignor.)
Link, Charles I. (See Kincade, Forrest J., assignor.)
Link, Charles W. (See Vanderverp, David E., assignor.)
Link, Rolls P., London, England, Press for printing, embossing, or the like, 1.635,132, July 5.
Link, Theodore A., Chicago, Ill. Football game, 1,023,138, May 17.

Link, Vincent, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,619.262; Mar. 1.
Link, Vincent, Detroit, Mich., assignor to The Studebaker
Corporation, South Bend, Ind. Brake. 1,619,579;

Mar. 1.

Ifink, Vincent, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Internal-combustion engine. 1,625,261; Apr. 19.

Link, Vincent, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Spring shackle. 1,638,587; Aug. 9.

Link, Vincent, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,638,588; Aug. 9.

Link, Vincent, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Clutch. 1,652,446; Dec. 13.

Corporation, South Bend, Ind. Clutch. 1,652,446; Dec. 13.
Linke, Oscar W. (See Stelert, A. F., and Linke.)
Linkey, Oscar W. (See Stelert, A. F., and Linke.)
Linkey, Charles M., Highbury, London. assignor to W. & T. Avery Limited, Birmingham, England. Method of and apparatus for testing the dynamic balance of Linkey, Charles M., 1634,428; July b.
Linkey, T. O., Salina, Kans. Extension rule. 1,629,820; May 24 (D., Salina, Kans. Extension rule. 1,629,820;

rotary bosies. 1,634,422; July 5.

Lum. Carl O_V Salina, Kans. Extension rule. 1,629,829;
May 24.

May 24.

May 24.

Lun. Carl O_V Salina, Kans. Extension rule. 1,629,829;
May 24.

Lin. Frank C., Lyun, Mass, assignor to General Electric Company. Bolt-type emergency governor. 1,637,909;
Aug. 2.

Lin., Robert, Chicago, Ill., assignor to W. A. Darrah, Amplifier or enunciator. 1,638,942; Aug. 16.

Linnebach, Adolph, Dresden, Germany, assignor to J. H.

Linnebach, H. Germany, Saling Company, New York, N. Y. Method of and apparatus for projecting images. 1,635,705; July 12.

Linner, Eugen, Budapest, Hungary, Bottle stopper. 1,614,311; Jan. 11.

Linograph Company, The. (See Petersen, Hans. assignor.)

Linoux, Manufacturing Company. (See Godfrey, Alfred A., assignor.)

Linoux, Lun, and J. Dethier, Brussels, Belgium, Pneumatic separator for spinning frames. 1,618,717; Sept. 27.

Linotype and Machinery Limited. (See Bower, W. M., Linotype and Machinery Limited. (See Bower, W. M.,

Sept. 27. Linotype and Machinery Limited. (See Bower, W. M., Burdon, and Stern, assignors.) Linotype and Machinery Limited. (See Field, Joseph G. W., assignor.)

Linotype and Machinery Limited. (See Goulding, Benja-Linotype and Machinery Limited. (See Jakeman, John W., assignor.) Linotype and Machinery Limited. (See Jakeman, John W., assignor.) Linotype and Machinery Limited. (See Parker, T. R. G., and Spence, assignors.)

Linotype and ancintery Limited. (See Shuttleworth, Linotype and Machinery Limited. (See Stern, C. L., Linotype and Machinery Limited. (See Stern, C. L., and Bugtler, assignors.)
Linotype and Machinery Limited. (See Stern, C. L., and Bugtler, assignors.)
Linquist, Richard A., Minneapolis, Minn. Transmission cover for Fords. 1,623,555; Apr. 19.
Linstad, Orto, Madison, Nebe. Automatic valve for water Linstow, Frederick N., assignor to A. Reyrolle & Company Limited, Hebburn-on-Tyne. England. Electric time-element device. 1,643,552; Sept. 27.
Lintern, William, Cleveland, Ohio. Vehicle ventilator. 1,624,263; Apr. 12.
Linwood, Louis, Sheby, Miss. Scale. 1,635,090; July 5.
Lion, Charles R., Los Angeles, Calif. Automatic sewer flusher. 1,642,659; Sept. 13.
Lion, Charles R., Los Angeles, Calif. Automatic sewer flusher. 1,642,659; Sept. 13.
Linother R. Los Angeles, Calif. Automatic sewer flusher. 1,642,659; Sept. 13.

assignor.)
Lion Electric Manufacturing Company. (See Krause, Arthur, assignor.)
Lion. Henry, Paris,
1.620.3817; Mar.,
1.

Grant Company, Inc., New York, N. Y. Cushion connection for vehicle construction. 1,636,099; July 19.
Lipetz, Alphonse, Saratoga Springs, N. Y. Motor-driving connection for electric locomotives. 1,652,2634; Dec. 20.
Lipham, Harvey J. Creamery, Pa. Concrete railroad ite. 1,622,259; Mar. 22.
Liphinski, Zenon A., San Francisco. Calif. Humidifier. 1,624,263; Apr. 12.
Lipman, Adolph, assignor to Venus Brasslere Co., Chica-Lipman, Adolph, assignor to Venus Brasslere Co., Chica-Lipman, Carl E. L., Beloit, Wis. Refrigerating apparatus. 1,624,639; Oct. 25.
Lipman, Carl E. L., assignor to Lipman Refrigerator Carand Manufacturing Company, Beloit, Wis. Belt tight-cner. 1,616,191; Peb. 1.
Lipman Refrigeration Company. (See Ireland, Ward S., assignor).

Lipman Kerngeration Company. See Periant. ward S., assignor, lot Car and Manufacturing Company. (See Lipman, Carl B. L., assignor, Lipp, Julius J., Chicago, Ill. Down indicator. 1.635.719; July 12.

July 12.

Lipp, Julius J., Chicago, III. Football-lineman's apparatus 1.645,797; Oct. 18.

Lunard J. German J. L., Darby, Pa. Sewing needle. 1.619,142; Mar. 1. Lippard. and Mullan.)

Lipper, Clarence, Philadelphia, Pa. Hat. 1,638,349;

Lapper, Charles M., assignor to Lipper Manufacturing Co. Lipper, Philadelphia, Pa. Textile fabric and making the same, 1,618,763; Feb. 22. Lipper Manufacturing Co. Inc. (See Lipper, Harry M.,

same, 1,618,7483; Feb. 22.

Isper Manufacturing Co. Inc. (See Lipper, Harry M., assignor, by mesne assignor.)

Lippert, Aloysius C., Kenosha, Wis., assignor, by mesne assignments, to The Norlipp Company, Chicago, Ill. Radiator cap. Des. 73,263; Aug; 16.

Lippert, Aloysius C., Kenosha, Wis., assignor, by mesne assignments, to The Norlipp Company, Chicago, Ill.

Lippert, Aloysius C., Kenosha, Wis., assignor to The Norlipp Company, Chicago, Ill. Locking cap for radiators. 1,630,269; May 31.

Lippert, Frederick A., Chicago, Ill. Furnace. 1,613,615; Jan. 11.

Lippert, Frederick A., Chicago, Ill. Furnace. 1,613,615;
Jan. 11.
Lippert, Leo H., Brookings, S. Dak. and R. Bergeson,
Chicago, Ill. Automatic pencil. 1,621,999; Mar. 22.
Lippert, Samuel, Garrield Heights, assignor to The Outoke Company, Cleveland, Ohio. Signal light for
Outlook Company, Cleveland, Ohio. Signal light for
Lippert, Samuel, Garrield Heights, Ohio, assignor to The
Outlook Company, Cleveland, Ohio. Signal light for
Lippert, Samuel, Garrield Heights, Ohio, assignor to The
Outlook Company, Leveland, Ohio. Mechanical movement and windshield-cleaning apparatus
involving the same. 1,641,302; Sept. 6.
Lippert, Walter E., Illon, N. Y., assignor to Remington
Arms Company, Inc. Automatic ribbon-reversing
mechanism for cash registers. 1,628,164; May 10.
Mechanical movement and windshield-cleaning apparatus
involving the same. 1,641,302; Sept. 6.
Lippert, Walter E., Illon, N. Y., assignor to Remington
Arms Company, Inc. Automatic ribbon-reversing
mechanism for cash registers. 1,628,164; May 10.
Mechanism for cash registers. 1,628,164; May 10.
Mechanism for Company, Cleveland, Ohio. 1,029,669; May 24.
Lippitt, F. G., et al. (See Kliewer, Edward A., assignor.)
Lippender, John J. (See Woll, John M., assignor.)
Lippender, David. (See Woll, John M., assignor.)
Lippender, David. (See Woll, John M., assignor.)
Lippender, Emanuel J., assignor of one-half to D. Lipschutz, Emanuel

signor.)
Lipschutz, Emanuel J., assignor of one-half to D. Lipschutz, Louisville, Ky. Adjustable-size cap. 1,652,145;

Dec. 6.
Lipschutz, Emanuel W., Brooklyn, N. Y. Pressure indicator. 1,637,421; Aug. 2.
Lipschutz. George, Philadelphia, Pa. Electric-light fixture. Des. 72,714: May 24.
Lipschutz. George, Philadelphia, Pa. Electric-light fixture. Des. 73,386: Aug. 30.
Lipschutz. George, Philadelphia, Pa. Electric-light fixture. Des. 73,706; Oct. 25.
Lipschutz. Wilham B., Washington, D. C. Steam engine. 1,630,707; May 21.
Lipschutz. Samuel, New York, N. Y. Sheet feeder. 1,630,707; May 21.
Lipschutz. Samuel, New York, N. Y. ssignor to Golden Lighting Fixture Co., Inc. Lighting fixture. Des. 73,002: July 5.
Lipsmeler, Occar. (See Hempen, F. J., and Lipsmeler.)
Lipsmeler, Occar. (See Hempen, F. J., and Lipsmeler.)
Liptkik Fire-Brick Arch Co. (See Liptak, Michael, assignor.)

Jirch Fire-Kriek Arch Company. (See Strachota, Iprik Fire-Kriek Arch Company.)

Jirch Kirch Kriek Arch Company. (See Strachota, Indiano Kriek Arch Company.)

Jirch Kirch Kirch Kriek Arch Company. (See Strachota, 1.635,551; July 12. Jirch Kirch Kirch Kriek Arch Company. (See Jest 20. Jirch Kirch Kriek Arch Co. Jirch Kirch Kriek Arch Co. Minneapolis, Minn. Baffle wall form. 1.646,096; Oct. 18. Jirch Kirch Kirch Kriek Kriek Arch Co., Minneapolis, Minn. Baffle wall for furnaces. 1.642,296; Sept. 20. Jirch Kirch Kriek Kri

signor.)
Liquid Dispensing Systems, Inc. (See Hawxhurst, John

J., assignor.)
Lisenby Manufacturing Company. (See Low, Charles L., assignor.)

Lisk, Farit C., Minneapelis, Minn. Trail chart. 1,618,839; Feb. 22.

Feb. 22.
Lissaner, Adolph W., and J. Credo, assignors to Louisville Drying Machinery Co. Inc., Louisville, Ky. Rotary coder. 1,647.815; Feb. 1, Coulsville, Ky. Lissel, Kyli C., assignor to Svenska Akticological Logg. Lissel, Kyli C., assignor to Svenska Akticological Logg. used in hydrostatic Jeas for halancing the pressure. 1,644.782; Oct. 11.
List, Frank X., assignor to National Card Mountine Company, New York, N. Y. Display box. 1,622,284; Mar. 29.

Lister, Anson T., Wichita, Kans. Electric bed warmer, 1,622,326; Mar. 29. Lister, Herbert, Montreal, Quebec, Cunada. Hair comb. 1,632,238; June 14. Lister, James F., and H. W. Smallwood, Birmingham, assignors to Veritys Limited, London, England. Automatically oscillating electric fan. 1,617,258; Feb. 8. Lister, James R., Clinton, Mass, assignor to Roubalk Michael Comparation, Comparation, N. Y. Weaving. 1,643,517; Listing, Friedrich W. O. (See Boelkow, F. E., and Listing.)

ting.) sto Pencil Corporation. (See Wehn, Charles E., assto redsam.

signor). Liston. William. (See Mable, Paul S., assignor.). Litchfield, Bdgar C., et al. (See Litchfield, B. C., Speer, and Hermann, assignoris). Litchfield, Henry L., et al. (See Litchfield, E. C., Speer, and Hermann, assignoris). See Litchfield, E. C., Speer, and Hermann, assignoris. Newtonville, Mass. Wrench. 1.637,778; Aug. W., Newtonville, Mass. Wrench. Litchfield, Isaac W., Boston, Mass., assignor to Bemis Bro. Bag Co., New York, N. Y. Method of and machine for closing flexible containers, 1,653.05; Dec. 20. Litchfield, Isaac W., Boston, Mass., assignor to Bemis anism. 1,653.062; Dec. 20. N. Y. Stapling mechalism of the containers, N. Y. Stapling mechalism. 1,653.062; Dec. 20. Litchfield Shuttle Company. (See Cheney, G. M., and Clarke, assignors.)

Clarke, assignors.) Lite-Rays Cooker Corporation, The. (See Smith, John

E., assignor.) Lithander, Nelson P., Brandon, Manitoba, Canada. Re-tary engine. 1,629.580; May 24. Litho Etching Corporation. (See Monahan, James B.,

assignor.) Lithoprintex Corporation. (See Darby, J., and Jones,

Lithoprintex Corporation. (See Jones, Harry C., assignor.) Litle, Thomas J., jr., Detroit, Mich., assignor, by mesne assignments, to Lincoln Motor Company. Hydrocarbon vaporizing device for starting motors. 1,640,902;

vaporizing device for scatters, Aug. 30.
Litle, Thomas J., jr., assignor, by mesne assignments, to H. H. Emmons, Detroit, Mich. Oil-purifying device. 1.646,298; Oct. 18.
Little, Nelson, Brooklyn, N. Y. Molding machine. 1.623,257; Apr. 5.
Little, Nelson, Brookline, and C. E. Carpenter, Melrose, assignors to Arthur D. Little, Inc., Boston, Mass. Paper manufacture. 1.624,492; Apr. 12.
Little, Arthur D., Inc. (See Little, A. D., and Carpenter, assignors.)

Arthur D., Inc. (See Stevenson, Earl P., as-

signor.)
Little Bear Specialties Company. (See Anderson, Victor T., assignor.)
Little, Daniel G., Hartley, Iowa. Portable lifter for bee-hives. 1,622,201; Mar. 22.
Little, Daniel G., Wilkinsburg, Pr., assignor to Westing-house Electric & Manufacturing Company. Wireless Little, Donald G., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. Carrier-current signaling system. 1,640,550; Aug. 30.
Little, Donald G., Wilkinsburg, Pa., assignor to Westing-house Electric & Manufacturing Company. Radio sending system. 1,643,781; Sept. 27.
Little, Donald G., Wilkinsburg, Pa., assignors to Westing-house Electric & Manufacturing Company. Radio sending Company. Rectifier protective system. 1,645,287; Oct. 11.

Oct. 11.
Little, Edwin G., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyale, Pa. Railway skate-operating apparatus, 1.641,178; Sent. 6.
Little, George M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermo-house Electric Research of the Company of the Co

Little, George P. Clevelend Heletas, Ohio, Acoustic wall construction, 1,633,796; July 12, 13, Coustic wall construction, 1,633,796; July 12, 13, Cheda, San Little, Harry C. Latticpin, assignor to H. R. Cheda, San Little, John S., La Grance, H., assignor to Western Electric Company, Incorporated New York, N. Y. Method and apparatus for coating cores, 1,615,390; Jan. 25, Little, John S., La Grange, Ell., assignor to Western Electric Company, Incorporated New York, N. Y. Machine for forming sheets of pulpous material, 1,615,391; Jun. 25.

Jan. 25.
Little, John S., La Grange, Ill., assignor to Western Electric Company. Incorporated. New York, N. Y. Method of and apparatus for making fibrous articles. Little, John S. La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating cores, 1,615,293; Jan. 25.
Little, John S., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for conting cores. 1,615,394; Jan. 25.

Little, John S., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparitus for coating cores. 1,615,395, Jan. 25 Little, Lillian A. (See Bowen, Philip A., assignor.) Little, Lillian A. (See Bowen, Philip A., assignor.) Little, Lillian A. (See Bowen, Philip A., assignor.) Little, Rail Mathew, University Piace, Nebr. Lock nut. 1,64,821, Sept. Mount Vernon, N. Y. Automobile tumper, 1,616,695; Feb. 8.
Little Red Wagon Mfg. Co., The. (See Thomas, Arthur C., assignor.)

C. assignor.)
Little, Robert H., Ritta, Fla. Dispensing device.
1,623,690; Apr. 5.
Little, Thomas P., assignor to The Fisk Rubber Company,
Chicopee Falls, Mass. Holding device. 1,640,967;

Little, Thomas P., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Holding device. 1,646,967; Oct. 25.
Little, Thomas P., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Wind-up for sheet-rubber stock. Little, William F., assignor to The Upjohn Company, Kalamazoo, Mich. Manufacturing effervescent alkall compounds, 1,616,567; Feb. 8.
Little, William F., Yonkers, assignor to Electrical Testing Laboratories, New York, N. Y. Reflection gauge. Little, William M., and J. L. Sherman, Norphlet, Ark. Oil-separating apparatus. 1,623,691; Apr. 5.
Little, William M., and J. L. Sherman, Norphlet, Ark. Coll-separating apparatus. 1,623,691; Apr. 5.
Little, William M., and J. L. Sherman, Norphlet, Ark. Separator. 1,626,246; Apr. 26.
Little, William M., and J. L. Sherman, Norphlet, Ark. Little, William M., and J. L. Sherman, Norphlet, Ark. Little, William M., and J. L. Sherman, Norphlet, Ark. Little, William M., and J. L. Sherman, Norphlet, Ark. Little, William M., and J. L. Sherman, Norphlet, Ark. Little, William M., and J. L. Sherman, Norphlet, Ark. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Lake. Little, William M., and J. L. Sherman, Norphlet, Ark. Little, William M., and J. L. Sherman, Norphlet, Ark. Little, William M., and J. L. Sherman, N

Littledeld, Roy, Exira, Iowa. Cart structure. 1,617,644; Feb. 15.
Littleford, John S., jr., Fort Thomas, Ky. Indoor game. 1,627,517; May 3.
Littleford, Thomas E., Lookout, W. Va. Mine door. Littlefon, Thomas E., Lookout, W. Va. Mine door. Littlefon, Jesse. T. assignor to Corning Glass Works, Corning, N. Y. Spark plug. 1,635,186; July 12.
Littlefon, Jesse. T. assignor to Commercial Solvents Littlefon, Levier. H. Brooklyn, N. Y. Shee heel. 1,644,784; Oct. 11.
Littlefon, Levier. H. Harts, Ind. Synthetic resin and its manufacture. 1,618,290; Feb. 22.
Litton, Clyde T. Inglewood, Calif. Rotary valve timer. 1,650,082; Nov. 22.
Litton, Clyde T. Inglewood, Calif. Rotary valve timer. 1,650,082; Nov. 22.
Live Leather Products, Inc. (See Martin, Horace J., assignot. Prank E. jr., Grand Rapids, Mich. Grease Liversjond, Gerald R. (See Nixon, J. D., and Livergood.) Livergood, Gerald R. (Houston, Tex. Drill-stem clamp. 1,637,383; Aug. 2.
Liversidge, Horace P., Bala, assignor to Electrical Development and Machine Company, Philadelphia, Pa. Insulator manufacture. 1,653,487; Dec. 20.
Livesay, Robert C., assignor to Deere & Company, Moline, Ill. Harvester packer support. 1,650,638; Nov. 22.
Liversidge, Horace P., Bala, assignor to Slectrical Development and Machine Company, Philadelphia, Pa. Insulator manufacture. 1,653,487; Dec. 20.
Liversidge, Horace P., Bala, assignor to Electrical Development and Sacture. 1,653,487; Dec. 20.
Liversidge, Horace P., Bala, assignor to Slectrical Sacture. 1,654,687; Dec. 20.
Liversidge, Horace P., Bala, Sasignor to Slectrical Development and Sacture. 1,653,487; Dec. 20.
Liversidge, Horace P., Bala, Sasignor to Slectrical Sacture. 1,654,687; Dec. 20.
Liversidge, Horace P., Bala, Sasignor to Slectrical Dec. 20.
Liversidge, Horace P., Bala, Sasignor to

assignor.)
Livignano. Daniel. Cleveland, Ohio. Arch support.
1,646,920; Oct. 25.
Livingood. Benjimin S., assignor to Livingood Manufac1,622,327; Mar. 29.
Livingood. Jesse F., West Finley, Pa. Pulley and ball
thrust berring. 1,649,712; Nov. 15.
Livingood Manufacturing Corporation. (See Livingood,
Benjimin S., assignor; Csee Livingston, Albert E. (See Livingston, Walter, and
Livingston, Chaptes E. Manufacturing the Corporation of the Corporation

Livingston, Albert E. (See Livingston, Waiter, and Lingston, Charles M., Mohroe, Lowa. Chain guide for Livingston, Charles W., Monroe, Lowa. Chain guide for Livingston, Charles W., Coon Rapids, assignor of one-half to L. L. Etner, Glidden, Iowa. Grain shocker. 1,639,632; Aug. 16.
Livingston, Premont P., Denver, Colo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Retaining-valve device. 1,626,618; May 3.
Livingston, Fremont P., Denver, Colo., issignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automotive brake. 1,650,286; Nov. 22.
L. 1,623,192; Apr. 5., Anoka, Minn. Measuring device. Livingston, John P., Clyde, N. Y. Tractor hitch. 1,622,328; Mar. 29.
Livingston, John W., Hamburg, and I. P. Kyrides, Buffalo, N. Y. Manufacture of nitrobenzene. 1,638,045; Aug. 9.

N. 1. Manufacture of nitrobenzene. 1,638,045; Aug. 9. Livingston, Ruel C., Glenwood, Ga. Plow. 1,616,324; Feb. 1. Livingston, Walter. (See Nowka, A., and Livingston.)

Livingston, Waiter and A. E., Hastings, Nebr. Inner receptacle for hearses, 1,628,893; May 17.
Lyungberg, Karl J., Stockholm, Sweden. Building reenforced concrete structures. 1,641,641; Sept. 6, Lyungkull, Rolf, assignor to Harnischteger Corporation, Milwauke, Wis. Excavator crane. 1,625,859; Apr. 26, Lyungström, Bertil A. (See Ljungström, Bertil A. (See Ljungström, Bertil A.

Ljungström, Bertil A. (See Ljungström, Birger and B. A.)
Ljungström Birger and B. A., Stockholm, Sweden; said
B. A. Ljungström assignor to said B. Ljungström.
Air heater and operating same, 1,649,605; Nov. 15.
Ljungström, Fredrik, Lidingo-Brevik, Sweden, assignor to
Aktiebolaget Ljungströms Angturbin. Reversing device for toothed gearing, 1,614,208; Jan. 11.
Ljungström, Bredrik, assignor to Aktiebolaget Ljungströms Angturbin, Lidingo-Brevik, Sweden, Reversing
ströms Angturbin, Lidingo-Brevik, sasignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden.
Turbine-driven locomotive and similar vehicle, 1,632,707;
June 14.

Turbine-dr June 14. Ljungström,

Fredrik, Lidingo-Brevik, and I. Broberg, assignors to Aktiebolaget Ljungströms Stockholm, Sweden. Air-cooled condenser. Skursatra, Angturbin, Stockno. 1,636,521; July 19. Fredrik, Fredrik,

Angturbin, Stockholm, Sweden, Al-cooled condenser, 1,636,521; July 19.

Ljungström, Fredrik, Lidingo-Brevik, and N. F. F. Andersson, assignors to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden, Regenerative air and Ljungströms Angturbin, Stockholm, Sweden, Regenerative air and Ljungströms Angturbin, Lidingo-Brevik, Sweden. Turbine aggregate. 1,638,944; Aug. 16.

Ljungström, Fredrik, assignor to Aktiebolaget Ljungströms Angturbin, Lidingo-Brevik, sweden. Turbine aggregate. 1,638,944; Aug. 16.

Ljungström, Fredrik, Lidingo-Brevik, and Isidor Broberg, Skarsatra, Lidingon, assignors to Aktiebolaget driven locomotive provided with mechanical-power transmission. 1,642,987; Sept. 20.

Ljungström, Fredrik, Lidingo-Brevik Ormbunken, E. O. Eriksson, Lidingo-Brevik Tallhyddan, and I. Broberg, Skarsatra, Lidingon, assignors to Aktiebolaget Ljungström, Fredrik, Lidingo-Brevik Condenser plant for locomotives. 1,646,650; Oct. 25.

Ljungström, Fredrik, Lidingo-Brevik, ussignor to Aktiebolaget Ljungström Angturbin, Stockholm, Sweden. Regenerative heit-exchange device. 1,652,025; Dec. 6.

Ljungström, Fredrik, Lidingo-Brevik, ussignor to Aktiebolaget Ljungström angturbin, Stockholm, Sweden. Regenerative air or gas preheater. 1,654,249; Dec. 27.

Ljungström, Walfried, Mattors, Sweden. Machine for placing, pressing, and drying end caps on paper rolla. 1,640,240; Sept. 13.

Liedo, Vincent, Marseile, France. Continually-working materials. 1,644,412; Oct. 25.

Lieo, Alberto, and C. Baradat, Barcelona, Spain, said Baradat assignor to said Lieo. Engine-cylinder structure. 1,624,002; Apr. 12. C. Pederson, Syracuse. Liedo, Vincent, Marseile. Brance. Continually-working and polyne gene caps on paper rolla. 1,651,412; Nov. 25.

Lieo, Alberto, and C. Baradat, Barcelona, Spain, said Baradat assignor to said Lieo. Engine-cylinder structure. 1,624,002; Apr. 12. C. Pederson, Syracuse. 1,652,402; Apr. 12. C. Pederson, Syracuse. 1,652,402; Apr. 12. C. Pederson, Syracuse. 1,653,433; Nov. 15.

Lloyd, Burt E., Montelair, N. J., assignor to Voi

Incorporate to the control of the co

Samuel F. (See Watters, L. A., Lloyd, and tellier.)
Lloyd, Thomas W., Cleveland, Ohio. Method, apparatus, and blank for making piston rings. 1,648,665; Feb. 22.
Lloyd, W. Il, S., Co. (See Labram, Afred, assignatus), Lloyd, William. (See Hall, C. H., and Lloyd).
Lloyd william. (See Hall, C. H., and Lloyd). signor 'Loan, Walter G. (See Norden, F. F., and Loan.)
Lobbey, Fred T., St. Louis, Mo., assignor to Sullivan Machinery Company. Mining mechanism. 1,653,111;

Dec. 20. Lobdell Car Wheel Company. (See Stuart, Joseph, as-Lobdell-Emery Mfg. Co., The. (See Jones, Adolph G., as-

signor.)
Lobdell-Emery Manufacturing Company. (See Miller,
Ivan, assignor.)

Lobell, Victor T. (See Hamborg, E., and Lobdell, Lobel, Fritz, Breslau, Germany, Friction coupling, 1,638,773; Aug. 9.
Lobeck, Ingerinus E., Appam, N. Dak. Clothes basket, 1640,280; Aug. 23.
Lober, George H., Toledo, Ohio, assignor to The Beck-Frost Corporation, Detroit, Mich. Radiator. 1,644,685;

Loberg, John J., Breckenridge, Minn. Exhibitor for rugs and the like. 1,616,588; Feb. 8.
Lobit, Jean M., Brooklyn, N. Y. Flue. 1,626,002; Lobit, Jean M., Brooklyn, N. Y. Filter. 1,640,198; Aug. 23. Lobit, Jean M., Brooklyn, N. Y. Keyboard. 1,641,543;

Lobit, Jean M., Brooklyn, N. Y. Keyboard. 1,641,543; Sept. 6, Lobit, Jean M., Staten Island, N. Y. Space band. 1,626,003; Apr. 20. Lobit, Jean M., N. Y. Assembling machine. 1,641,542; Sept. 6, Lobi, Frederick, Middleboro, Mass. Stopper or closure for containers. 1,640,598; Aug. 30. Lobi, Frederick, Middleboro, Mass. Stopper for containers. 1,650,760; Nov. 29. Liniers. 1,650,760; Nov. 29. Lances. 1,650,760; Nov. 29. Lan

Lobnitz & Company Limited. (See Bedgood, Hubert O., assignor.)

Lochen, Frank J., Chicago, Ill. Baffle plate for boiler flues. 1.612.936; Jan. 4.

Lochen, Frank J., Chicago, Ill. Baffle plate for boiler flues. 1.612.936; Jan. 4.

Lochen, Frank J., Chicago, Ill. Baffle plate for boiler flues. 1.612.038; Jan. 4.

Lochen, Frank J., Chicago, Ill. Baffle plate for oil heaters. 1.624.718; Jan. 4.

Locker, Lockard, David J. and D. E., Toledo, Ohin. Scaffold bracket. 1.629.718; May 24.

Locke, Albert R., Chicago, Ill. Selective circuit system and remote control. 1.638.774; Aug. 9.

Locke, Arthur, Tacoma, Wash. Drain-pipe cleaner. Locke, Edward E., assignor, by mesue assignments, to The Watson Experimental Laboratory Company, Dayton. Ohio. Countries scale. 1.625.126; Apr. 19.

Locke, Ernest P., Boston, Mass. Window wiper. 1.630.778; Aug. 23.

Locke, Fred M., Victor. N. V. Glass. 1.626.04; Apr. 24.

Locke, George A., Glen Cove, assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system. 1.613.956; Jan. 11.

Locke, George A., Glen Cove, assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system. 1.630.758; Jan. 11.

Insulator Corporation, (See Goddard, Walter T.,

Locke Insulator Corporation. (See Gouverneur, Mihor Locker Insulator Corporation. (See Gouverneur, Mihor Locker Insulator Corporation. (See Gouverneur, Minor F. H., assignor.)

Locke Insulator Corporation. (See Hawley, Kent A., as-

Locke Insulator Corporation. (See Osborne, David H., as-

locke insulator corpe signor.) Lock-Em-All Mfg. Co., The. (See Thilbert, Napoleon R.) Locken, John. Comstock, Minn. Commutator reamer, 1,651,286; Nov. 29.

1,651,286; Nov. 29.

Lockenvitz, Edward W., Bloomington, Ill. Self-cleaning spark plug. 1,645,708; Oct. 18.

Locker, Lando, and O. M. Frazier, Hoisington, Kans. Soft-drink refrigerator. 1,638,402; Aug. 9.

Lockett, Ralph G., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for motor-driven apparatus. 1,638,860; Aug. 16.

Lockett, Ralph G., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for motor-driven devices. 1,638,861; Aug. 16.

Lockhart, James A., Revere, Mass. Automatic shut-off. 1.640,947; Aug. 30. Lockhart, Luther B., Atlanta, Ga., assignor to Standard Oil Company, Whiting, Ind., Lubricant for automotive engines. 1.639,447; Aug. 36. Lock, Jack. Lowell, Mass. Balancing bobbins and the like. 1.627,518; May 3. Lock, John E., Lawell, Mass. Traffic signal for vehicles. 1.631,140; June 7.

Lock, Michael, Berlin, assignor to Gesellschaft für Draht-lose Telegraphie m. b. Il., Berlin, Germany. Artrange-ment for coubling high-frequency apparatus to power-transmission inces. 1,645,536; Oct. 18. Lockport Cotton Batting Co. (See Rogers, Edward A., as-

signor.)
Lock-Notu Check Company. (See Rider, Granville S.
assignor.)
Lockwood, Aleatha H., Hartford, Conn. Maternity corset. 1,620,264; Mar. S.
Lockwood, Alvah M., et al. (See Malone, Adolph W.,
assignor.)
Lockwood, Cecil C., et al. (See Lockwood, Virgil, as-

Cecil C., et al. (See Lockwood, Virgil, as-

signor.)
Lockwood, Dudley A., Ragan, Nebr. Check valve.
1,647,873; Nov. 1.
Lockwood, Bdna E., Kansas City, Mo. Floor-polishing
machine. 1,628,742; May 3.
Lockwood, Edward A., Zanesield, Ohio. Railroad tie.
1,627,738; May 10.
Lockwood, Edwin, et al. (See Lockwood, Virgil, as-

1,627,788; May 10.
Lockwood, Zdwin, et al. (See Lockwood, Virgil, assignor.)
Lockwood, Frank L., Washington, D. C. Coin-actuated locking device for telephones. 1,614,677; Jan. 18.
Lockwood, Harry A., assignor to The Lockwood Manufacturing Company, Cincinnati, Ohio. Baking pan.
1,623,692; Apr. 5.
Lockwood, James B. C. (See Dalin, D., and Lockwood, Lockwood, Joseph F., et al. (See Lockwood, Virgil, as-

signor.) ockwood & Lockwood. (See Shultz, Charles A., as-

signor.)
Lockwood Manufacturing Company, The. (See Lockwood, Harry A., assignor.)
Lockwood, Virgil. Blufton, assignor of one-half to E.
Lockwood, Virgil. Buffton, assignor of one-half to E.
Lockwood and J. P. Lockwood, Keystone; C. B. Dyson,
Petroleum, and C. C. Lockwood. Montpelier. Ind.
Clutch-holding device. 1.618.363 (Feb. 2)
Locomotive Feed Water Heater Company. (See Averill,
Earl A., assignor.)
Lockwitch Pirkox Company. (See Hawley, Charles G.,
Lockwitch Pirkox Company. (See Hawley, Charles G.,

Locomotive Firebox Company. (See Hawley, Charles Gr., assignor.)
Locomotive Firebox Company. (See Nicholson, John L., assignor.)
Pulverized Fuel Company. (See Caracristi, Wirdinius Z., assignor.)
Locomotive Stoker Company. (See Caps. W. T., and Mastin, assignors.)
Locomotive Stoker Company. (See Fahnestock, Adam B., arsignor.)
Locomotive Stoker Company. (See Lower, Nathan M., assignor.)

assignor.)
Locomotive Stoker Company.
Chalker, assignors.)
Locomotive Stoker Company. (See Lower, N. M., and

(See Turner, Edwin A., assignor.)
accomplice Terminal Improvement Company, The. (See

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Locke, Gunther, assignor to the Firm of Georg Wolf C. H. H. Berlin, Germany, Gastroscope. 1,632,612; Locke, Günther, assignor to the Firm of Georg Wolf G. m. b. H., Berlin, Germany, Device for examining tubes and cavities in the body. 1,643,718; Sept. 27. Locke, Günther, assignor to the Firm of Georg Wolf G. m. b. H., Berlin, Germany, Device for light-treatment of tubes and cavities in the body. 1,643,719; Locke, Myrtle A. (See Eklund, K., and Locke). Locffler, William, Sheboygan, Wis. Mortising machine. 1,623,623; Dec. 13. Washington, D. C. Combined tool. 1,632,722; Dec. 13. Geoffler, Experience of Christonsen, H. E., and Lochnis.) Locht, Leelle K., and E. J. Kind, fr., assignors to Frank E. Best, Inc., Scattle, Wash. Key-bitting machine. 1,615,020; Jan. 18.

Loening, Grover C., New York, N. Y. Amphibian airplane. 1,617,816; Feb. 15.

Loepfe, Charles M., assignor to Cottonwood Fiber Company, St. Louis, Mo. Oil burner. 1,621,731; Mar. 22.

Loesinger. All M., assignor to Cottonwood Fiber Company, St. Louis, Mo. Oil burner. 1,621,731; Mar. 22.

Loesinger. All M., assignor to General Fire Extinguisher Company, Providence, R. I. Fire-protective General Green Extinguisher Company, Providence, R. I. Hyggometer, humidity regulator, and the like. 1,635,374; July 19.

Loepsinger, Albert J., assignor to General Fire Extinguisher Company, Providence, R. I. Hunger for wall Loepsinger, Albert J., assignor to General Fire Extinguisher Company, Providence, R. I. Dry-pipe-sprinkler system. 1,644,534; Oct. 4.

Loesche, Hugo G. (See Douglas, R., and Loesch.) Loesche, Hugo G. (See Douglas, R., and Loesch.) Loesche, Fred H., et al. (See Fisher, Charles, assignor, Loesch, Alcholas, Richmond Hill, assignor to American Can Company, New York. N. Y. Sripper device for perforating punches. 1,631,823; June 7.

Loetscher Emil C., Dubque, Iowa. Disappearing stairway. 1,614,006; Jan. 11

Loetscher Emil C., Dubque, Iowa. Disappearing stairway. 1,614,006; Jan. 11

Loetscher Emil C., Dubque, Iowa. Disappearing stairway. 1,614,006; Jan. 11

Loetscher Emil C., Dubque, Iowa. Disappearing stairway. 1,614,006; Jan. 11

Loetscher Lemil C., Dubque, Iowa. Disappearing stairway. 1,614,006; Jan. 11

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Loetscher Lemil C., Dubque, Iowa. Disappearing stairway. 1,614,006; Jan. 11

Loets

Manufacturing Company, Cleveland, Ohlo. Cleening bottles. 1,642,419; Sept. 13.

Lowe, Hermann. (See Bergmann, M., Immendörfer, and Loewe, Hermann. (See Bergmann, M., Immendörfer, and Loewe, Stepmund, Berlin, Germany, assignor to Radio Corporation of America. Wireless receiving apparatus. Loewe, Siegmund, Berlin, Germany, assignor to Westing-bouse Electric & Manufacturing Company. Device for altering the wave length. 1,643,782; Sept. 27.

Loewe, Siegmund, Berlin, Germany, assignor to Westing-house Electric & Manufacturing Company. Oscillation generator. 1,641,122; Nov. 15.

Loewe, Siegmund, Berlin, Germany, assignor to Westing-house Electric & Manufacturing Company. Oscillation generator. 1,641,122; Nov. 15.

Loewe, Siegmund, Berlin, Germany, assignor to Westing-house Electric & Manufacturing Company. Device for starting intensifiers and oscillators. 1,634,295; Loewe, Siegmund, Berlin, Germany, assignor to Westing-house Electric & Manufacturing Company. Device for starting intensifiers and oscillators. 1,634,295; Loewe, Siegmund, Berlin, Germany, assignor to Westing-house Electric & Manufacturing Company. Device for starting intensifiers and oscillators. 1,634,295; Loewe, Siegmund, Berlin, Germany, assignor to Westing-house Electric & Manufacturing Company. Device for starting intensifiers and oscillators. 1,634,295; Loewenbach, Erwin B., Milwaukee, Wis. Manifold sheet. 1,619,522; Mar. 1.

Loewenbach, Erwin B., Milwaukee, Wis. Manifold sheet. 1,619,522; Mar. 1.

Loewenbach, Erwin B., Milwaukee, Wis. Manifold sheet. 1,619,522; Mar. 1.

Loewenbach, Erwin B., Milwaukee, Wis. Manifold sheet. 1,619,522; Mar. 1.

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Loewenbach, Erwin B., Milwaukee, Wis. Minifold sheet. 1,619,522; Mar. 1.

Loewenbach, Erwin B., Milwaukee, Wis. Minifold sheet. 1,619,522; Mar. 1.

Loewenbach, Erwin B., Milwaukee, Wis. Mini

Loeweinherz. Siegnund, and M. Stockmayer, Rerlin, assignors to Patent-Trenhund-Gesellschaft für Elektriche Glühlampen m. b. H., Ehrenbergstrasse, Berlin, Germannen auch eine Greiffling drawing dies. 1,629,220; May 17.
Loewer, Ernest F., Goodwin, Ark. Cover fastener. 1,045,987; Feb. 1.
Loewy, Aaron E., Philadelphia, Pa., assignor to Liberman Manufacturing Company. Automatic controlling mechanism. 1,628,889; May have the search of the

Loftus, Thomas L., assignor to E. V. Timm, Denver, Colo. Excavating machines. 1,619,875; Mar. 8.
Colo. Excavating machines. 1,619,875; Mar. 8.
Logan, Benjamin J. (See Ovren, John E., assignor.)
Logan, Charles W. (See Markel, J., and Logan.)
Logan, Charles W. (See More, N. Y. Electric-light fature. Des. 7, 1883; Feb. 8.
Logan, Charles W., Kenmore, N. Y., assignor, by mesne assignments, to Markel Electric Products, Inc., Buffalo, N. Y. (See Markel Electric Products, Inc., Buffalo, N. Y. (See Markel Electric Products, Inc., Buffalo, N. Y. Arm for electric light faxtures. Des. 7, 2, 30; Apr. 5.
Logan, Charles W., Kenmore, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y. Medallion for chander for the state of t

signor.)
Logstiidt, Richard, Berlin-Schoneberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, Highspeed circuit Interrupter. 1,649,034; Nov. 15.
Lowert St. 1998, St

facture of very hard metalic ulloys.

Dec. 6.
Lohman, William H., Wilmington, Del., assignor to General Chemical Company, New York, N. Y. Carboy package. 1,641,179; Sept. 6.
Lohöfer, Wilhelm, Leipsic, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Photographic film. 1.631,421; June 7.
Loiacono, John. (See Sesto, A., and Lotacono,) Loken, Truis, Kenosha, Wis, assignor to Austin Machingham, Alley Chem. Webster, Wildom, Minn. Attrition mill. 1.631,422; June 7.
Lolli, Guido, Chicago, Ill. Extensible fender. 1.632,979; June 21.

Loken. Webster, windom, Ainn. Attrition min.
1,631,422; June 7.
Lollidado, Chicago, III. Extensible fender. 1,632,979;
Lollidado, Chicago, III. Extensible vehicle fender.
1,632,980; June 21.
Lollis, Benjamin F., Berwyn, III. Armature mounting.
1,617,856; Feb. 15.
1,622,981; June 24.
Lomar, Louis L., Houston, Pa. Chain conveyer.
1,622,981; Mar. 15.
Lomar, Louis L., Houston, Tex. Shock absorber.
Lomar, Gold T., New York, N. Y. Geographical educational game apparatus. 1,633,464; Dec. 20.
Lomax, Charence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telephone system. 1,615,305; Jan. 26.
Lomax, Clarence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telephone system. 1,632,109; June 14.
Lomax, Clarence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telephone system. 1,632,009; June 14.
Lomax, Clarence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Telephone system. 1,638,116; June 2007, by mesne assignments, to Automatic Electric Inc., Chicago, III. Telephone system. 1,641,931; Sept. 6.
Lomax, Charence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Telephone system. 1,641,931; Sept. 6.
Lomax, Charence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Telephone system. 1,641,931; Sept. 6.
Lomax, Charence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Telephone system. 1,641,931; Sept. 6.
Lomax, Charence E., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Telephone system. 1,641,931; Sept. 6.
Lomax, Charence E., assignor, by mesne assignments, to Automatic Electric Inc., Chic

Lomax, Frank B., Chicago, Ill. Sirup maker. 1,649,834;

Nov. 22.
Lomax, John L., assignor of one-half to H. L. Oswald
and C. Patton, Colorado Springs, Colo. Actuating device for wire-push-release cameras, 1,621,551; Mar. 22.
Lombard, Homer W., assignor to Art Metal Construction
Company, Jamestown, N. Y. Mop mold for librarystack construction. 1,626,043; Apr. 26.
Lombard, Samuel W., assignor to Lombard Traction
Engine Co., Waterville, Me. Clutch. 1,617,717;
Feb. 15.

Feb. 15.
Lombard, Samuel W., assignor to Lombard Traction gine Co., Waterville, Me. Snowplow. 1,624, action En-1,624,839; gine Co., waterville, Me. Snowplow. 1,022,009; Apr. 12. Lombard Traction Engine Co. (See Lombard, Samuel W.,

Lombard Traction Engine Co. (See Lombard, Samuel W., assignor), Givtor E., Bluefield, W. Va. Smoke separator. Lombard, 96; Feb. 18 Fooklyn, N. Y. Knitting machine. 1,650,083; Nov. 22. Lommer, Wilhelm, Wlesdorf, near Cologne-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort, Germany. Manometer. 1,642,615; Sept.

Frankfort, Germany. Manometer. 1,642,615; Sept. 13.
Lomshakoff. Alexis S., Prague, Czechoslovakia. Fire grate. 1,625,556; Apr. 19. Mich. Window control and allencer. 1,642,162; Sept. 13.
London, David. Baltimore, Md. Clothes hamper. 1,625,668; Apr. 19.
London, David. Baltimore, Md. Hanger for wardrobe bags. 1,638,945; Aug. 16.
bags. 1,638,945; Aug. 16.
bags. 1,638,945; Aug. 17.
bags. 1,638,948; Aug. 17.
bags. 1,638,948; Dec. 13.
London, William J. A., Hartford, Conn., assignor to International Combustion Engineering Corporation. Pulverizing apparatus. 1,641,445; Sept. 6.
Lonet, Thomas, Oakland. Calif. Automobile signal-lamp casing. Des. 72,774; May 31.
Long, Albert E., assignor to Stromberg Electric Company, Chicago, III. Time-controlled mechanism. 1,650,994; Long. Albatin M., Marshall, Mo., assignor to United Shoe

Nov. 29.
ong, Austin M., Marshall, Mo., assignor to United Shoe
Machinery Corporation, Paterson, N. J. Tack-supplying mechanism. 1,624.958; Apr. 19.
ong-Bell Lumber Company, The. (See Huffman,

Machinery Corporation, Paterson, on Ing mechanism. 1.824,958; Apr. 19.
Long-Bell Lumber Company, The. (See Huffman, Charles A., assignor).
Long, Bernard, Paris, France, assignor to Société Annyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Circy, Paris, France. Glass and making the same. 1,533.534; June 21.
Long, Beryl C. (See Hallar, F., and Long.)
Long, Corporation of the Crawford, McGregor and short lasts. 1,647,969. Nov. Machine for hollowing short lasts. 1,647,969. Nov. A. B., Long, and Sohn, Long, Cornelia T. (See Taylor, A. B., Long, and Sohn, Long, Cornelia T., Winston-Salem, N. C., and A. C. Sohn, Pittsburgh, Pa., assignors to Taylor-Long Company, Charlotte, N. C. Bottle. Des. 72,483; Apr. 19. Long Electric Sign Company. (See Long, John E., assignor.)

Soun, Catsourge, P.L. assignors to Autor-Long ComLong Slearlotts, N. C. Bottle. Des. 72,483; Apr. 19signor.) Long Carlotte, Des. 72,483; Apr. 19signor.) Long, Elmer C., Quincy, Ill., assignor, by mesne assignoments, to Security Trust Company. Detroit, Mich.
Piston. 1631,592; June 7.

Long, Elmer R., Fuente, Call. Portable hand puller for
Long, Elmer R., Fuente, Call. Portable hand puller for
Long, Engene M., Hew York, N. Y. Amusement apparatus. 1,619,580; Mar. 1.
Long, Eugene M., Port Washington, N. Y. Schsorts
sharpener. 1,619,581; Mar. 1.
Long, Eugene M., Port Washington, N. Y. Key holder.
1,619,582; Mar. 1.
Long, Eugene M., Port Washington, N. Y. Key holder.
1,619,582; Mar. 1.
Long, Eugene M., Port Washington, N. Y. Semiautomatic electric stock heater for bolt-heading machines. 1,649,412; Nov. 15.
Long, George C., Brooklyn, N. Y. Coupling. 1,634,153;
June 28.
Long, George F., New York, assignor, by mesne assignments, to Stoiner Electric Corporation, Long Island
City, N. Y. Dashboard control. 1,631,277; June 7.
Long, George H., Lankershim, Callf. Jumping device.
1,633,350; Aug. 9.
Long, Henry N., Roanoke, Va., assignor to W. K. Queon,
Needbam Heights, Mass. Ratchet flange setter.
1,638,350; June 28.
Long, Henry N., Roanoke, Va., assignor to W. K. Queon,
Needbam Heights, Mass. Ratchet flange setter.
1,638,359; June 28.
Long, Henry N., Roanoke, Va., assignor to W. K. Queon,
Needbam Heights, Mass. Ratchet flange setter.
1,638,359; June 28.
Long, Henry N., Roanoke, Va., assignor to W. K. Queon,
Needbam Heights, Mass. Ratchet flange setter.
1,638,359; June 28.
Long, Henry N., Roanoke, Va., assignor to W. K. Queon,
Needbam Heights, Mass. Ratchet flange setter.
1,638,359; June 28.
Long, Henry N., Roanoke, Va., assignor, N. Y.
Barometer, Des. 72,324; Mar. 29.

Long, Herbert, Walthamstow, London, England. assignor to Taylor Instrument Companies, Rochester, N. Y. Barometer, Des. 72,715; May 24. Long, Jackson E., Marshall, Mo. Drain tube. 1,642,819; Sept. 20.

Long, Jackson E., Marshall, Mo. Drain tube: 1,632,819; Sept. 20.
Long, James A., Reading, Pa. Method of and apparatus for manufacturing chamfered pipe and nipple blanks. 1,618,541; Feb. 22.
Long, John E., Zultinomah, Oreg. Electric sign. 1,608, John M., Zultinomah, Oreg. Electric sign. Long, John E., assignor to Long Electric Sign Company, Multinomah, Oreg. Electric-circuit-controlling apparatus. Re16,809; Dec. 6.
Long, John R., Tarentum, Pa. Insulating paper for electric wires and cables. 1,613,179; Jan. 4.
Long, John R., Tarentum, Pa. Paper-insulated electric conductor. 1,536,748; July 26.
Long, Mawrie B., Sant Trange, M. J., assignor to Westerm Electric Company, Incorporated, New York, N. Y. Carrier transmission system. 1,615,988; Feb. 1.
Long, Maurice B., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical testing system. 1,647,236; Nov. 1.
Long Sales Co. (See Long, S. B., and Pimm, assignors.)
Long, Sherman G., Peorla, Ill. Burner. 1,639,518; Aug. 20.

Long. Sherman G. Peoria, Ill. Burner. 1,639,b18; Aug. 16.
Long, Stephen B., and J. C. Pimm, assignors to Long
Sales Co., Inc., Syracuse, N. Y. Ice-cream mold.
1,615,641; Jan. 25.
Tent structure. 1,619,740; Mar. 1.
Long, Thomas J., and J. L. Tuttle, Wellington, Kans. Adjustable trunk-rack camping outfit. 1,633,820; Long. William B., assignor to Union Special Machine Chiefes. 1,625,616; Apr. 10.
Long, William F., assignor to Peerless Novelty Company, Grand Haven, Mich. Electric heater. 1,615,950; Feb. 1.

Long, William F., assignor to Peerless Novelty Company, Grand Haven, Mich. Electric heater. 1,615,550; Feb., Grand Haven, Mich. Electric heater. 1,615,550; Feb., Grand Haven, Milliam L. (See Scheffey, George R., assignor.) Long, William R., St. Louis, Mo. Glue. 1,633,840;

Long, William L. (See Scheffey, George B., assignor, Long, William R., St. Louis, Mo. Glue. 1,633,840; June 28.
Long. William T., Orting, Wash. Pruning implement. 1,650,948; Nov. 29.
Long Are Frederick an D., Yonkers, N. Y., assignor to monopolic to the control of the control

for (angerous bosses), and the like L614.795; Jan 18. Lookabaugh, Harry C., Watonga, Okla, Safety guard for dangerous highways and the like, L614.795; Jan, 18. Loom, Lay Patch Company. (See Hudgens, Albert C.,

assignor. Loomis, Allen, Elkbart, Ind. Octave-key mechanism. 1.616,662; Feb. 8.
Loomis, Chauncey C., Yonkers, N. Y., and H. W. Banks 3d, Noroton, Conn., assignors to The Heven Corporation, New York, N. Y. Footwear, 1.850,948; Aug. 80.
Loomis, Chauncey C., Yonkers, and H. E. Stump, Broaklyn, N. Y., assignors, by meson assignments, to The Heven Corporation. Manufacture of molded articles from latex, 1.634,248; July Y., assignor to Reming-Loomis, Crawford C., Hillon, N. Y., assignor to Reming-Loomis, Crawford C., Hilo, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1.628,348; Nay 10.
Arms Company, Inc. Firearms. 1.638,351; Aug. 9.

Loomis, Crawford C., Hion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,646,699; Oct. 25. Loomis, Everts, G., Newark, N. J. Block press. 1,640,949; Aug. 30. Loomis, Frank R., Mapleton, Minn. Tire lock. 1,642,589;

Sept. 18.
Loomis, Rerold S. Wilkinsburg, assignor to The Union tich & Signal Compan, Swisavate, Pa. Railway braking apparatus. 1,643,669; Sept. 27.
Loomis, Howard S., Kasson, Minn. Governor. 1,623,193; Apr. 5.
Loomis, Nathaniel E. (See Howard, F. A., and Loomis, Nethaniel E., Elizabeth, N. J., and W. K. Lewis, Newton, Mass, assignors to Standard Development Co. Fractional distillation. 1,546,619; Oct. 25.
Loomis, Nathaniel E. (See Clark, E. M., Loomis, and Loomis, Opmond F. Relmontage, and Loomis, Compond F. Relmontage, and Loomis, Opmond F. Relmontage, and Loomis, Opmontage, Loomis, Opmonta

Loomis, Nathaniel B. (See Clark, E. M., Loomis, and Howard).
Loomis, Ornond E., Belmont, assignor to Darlo Company, June 28.
Loomis, Virgil V., assignor to United States Glass Company, Pittsburgh, Pa. Goblet. Des. 72,102; Mar. 15.
Loomis, Virgil V., assignor to United States Glass Company, Pittsburgh, Pa. Goblet. Des. 72,210; Mar. 15.
Loomis, Virgil V., Pittsburgh, Pa., assignor to United States Glass Company, Long Island City, N. Y. Food product. 1,649,921; Oct. 25, 1927.
Loose Seat Valve Company, (See Wilson, Wylie G., assignor.)
Loose Wiles Biscuit Company. (See Loose, Kenneth D., assignor.)

Loose Wiles assignor.)

Loose Wiles Biscuit Company. (See Loose, Kenneth D., assignor.)

Looser, Joseph. (See Mnrwedel, J. E., and Looser.)

Loper, Jay Loose, Loose,

Louber, Charles, Louisville, Ky. Key case. 1,621,795; Mar. 22.
Lorber, Charles, Louisville, Ky. Key holder. 1,621,796; Mar. 22.
Lorber, Charles, Louisville, Ky. Key case. 1,621,797; Mar. 22.
Lorber, Charles, Louisville, Ky. Key case. 1,623,627; Lorber, Charles, Louisville, Ky. Combination key case. 1,645,709; Oct. 18.
Lorber, Charles, Louisville, Ky. Pocket-key case. 1,646,485; Oct. 25.
Lorch, Ernest P., Brooklyn, N. Y. Gear-shift mechanism. Lord. Chester, E., assignor to Endicott Johnson Corporation, Endicott, N. Y. Boot. Des. 73,044; July 12.
Lord, Prancis L., Newark, N. J., assignor to The Lord Laboratories, Inc., New York, N. Y. Mounting means for radio receiving sets. 1,640,200; Aug. 23.
Lord, Fred W., assignor to The Oakes Manufacturing Company, Tipton, Ind. Poultry feeder, 1,652,788; Lord, Bred W., assignor to The Oakes Manufacturing Company, Tipton, Ind. Incubator, 1,648,735; Nov. 8.
Lord, Hruf G., Peire, Pa. Resilient wheel, 1,627,789; Lord, Hugh C., Erie, Pa. Joint, 1,652,175; Dec. 13.
Lord, Lupth C., Erie, Pa. Joint, 1,652,175; Dec. 13.
Lord, Lupth C., Erie, Pa. Joint, 1,652,175; Dec. 13.
Lord, Lupth C., Erie, Pa. Joint, 1,652,175; Dec. 13.
Lord, William D., Hartford, Conn. Cover device.

Lord Laboratories, inc., The.

Lord Laboratories, inc., The.

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Lord William D., Hartford, Conn. Cover device.

Lord William S., Evanston, and O. C. Ashley, Chicago, Heights, assignors to Williamson Candy Company, Chicago, Ill. Candy confection and making the same.

Lorentzen, Hans K., New York, N. Y. Dimmer. 1,645,654;

Oct. 18.

Lorenza, Adolph G., Little Rock, AFR. Combined licenses, and identification-card holder. 1,633,414;

June 21.

Lorenza, C., Aktiengesellschaft. (See Gerth, F., and Fisscher, assignors.)

Lorenza, C., Aktiengesellschaft. (See Gerth, Felix, assignors.)

Lorenza, C., Aktiengesellschaft. (See Hersen, K., and June 12. Aktiengesellschaft. (See Hersen, K., and Hirschberg, assignors.)
Jorenz, C., Aktiengesellschaft. (See Herzog, Robert, assignor.)

Lorenz, C., Aktiengesellschaft. (See Schmidt, Karl, assignor.) Lorenz, C., Aktiengesellschaft. (See Vopel, Johannes, as-

Signor.)
Lorenz, C., Aktiengescilschaft. (See Vopel, Johannes, assignor.)
Signor.)
Lorenz, C., Aktiengescilschaft. (See Vopel, Johannes, assignor.)
Wis. Automatic pin trimmer. 1,616,909; Feb. 8.
Lorenz, Charles D., El Paso, Tex. Razor case. 1,616,336; Jan. 25.
Lorenz, Charles F., East Orange, N. J., assignor to Westinghouse Lamp Company. Intermittent glow lamp. 1,617,065; Feb. 8.
Lorenz, Charles F., East Orange, N. J., assignor to Westinghouse Lamp Company. Luminous electrode discharge lamp. 1,643,126; Sept. 20.
Lorenz, Charles F., East Orange, N. J., assignor to Westinghouse Lamp Company. Manufacture of incandescent lamps. 1,647,139; Nov. 1.
Lorenz, Charles F., East Orange, N. J., assignor to Westinghouse Lamp Company. Are incandescent lamps. Lorenz, Charles F., East Orange, N. J., assignor to Westinghouse Lamp Company. Incandescent electric lamp. 1,658,365; Dec. 20.
Lorenz, Charles F., East Orange, N. J., assignor to Mestinghouse Lamp Company. Incandescent electric lamp. 1,658,365; Dec. 20.
Lorenz, Charles F., East Orange, N. J., assignor to Mestinghouse Lamp Company. Incandescent electric lamp. 1,616,814; Feb. 8.

Lorenz, Charles F., Bast Orange, N. J., assignor to Westinghouse Lamp Company. Incandescent electric lamp.
1.653,365; Dec. 20.
Lorenz, Chester W., Minneapolis, Minn. Trunk.
Lorenz, Edward H., West Hartford, assignor to HartfordEmpire Company, Hartford, Conn. Ware-transferring
mechanism. 1,642,421; Sept. 13.
Lorenz, Edward H., West Hartford, assignor to HartfordEmpire Company, Hartford, Conn. Glass-blowing machine. 1,647,532; Nost Hartford, and J. Davis, East
Hartford, assignors to Hartford-Empire Company, Hartford, Conn. Glassware-transferring device. 1,637,492;
Lorenz, Enak D. (Sea Morin, P., and Lorenz, Oron. Glassware-transferring device. 1,637,492;
Lorenz, Rudolf, Essen, assignor to Fried. Krupp Aktiengesellschaft. Essen-on-the-Rubr, Germany. Surface condenser. 1,631,141; June 7.
Lorenz, William A., assignor to The Otaka Fabric Company, West Hartford, Conn. Barrel-lining machine.
1,653,434; Dec. 20.
Lorenz, William A., assignor to The Otaka Fabric Company, West Hartford, Conn. Barrel-lining machine.
1,653,435; Dec. 20.
Lorenz, Oseph, Morgantown, W. va. Emergency brake.
1,650,456; Nov. 22.
Lorenze, Christian, Berlin, Germany, assignor to Lerenzen-Turbinen Aktlengesellschaft, Bern. Switzerland.
Chornenz, Christian, 1,650,633. Nov. 42.
Lorenze, Christian, Assignor).
Lorenze, Turbinen Aktlengesellschaft, Bern. Switzerland.
Chornenze, George W., Troy, and J. McVicker, Chillieothe.
Chornen, Lorenze, Lorenze,

signor.)
Lorraine, David G., Los Angeles, Calif. Vaive. 1,615,462;
Jan. 25.
Lorraine, David G., Los Angeles, Calif. Oil and gas
separator. 1,620,771; Mar. 15.
Lorraine Control of the Control of the Control
of Casings. 1,615,306; Jan. 25.
Lorraine Metal Manufacturing Company. (See Kövats.
John, assignor.)
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Lorraine Metal Manufacturing Company. (See Kövats.
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for motion-picture machines.

Lose, James, Bordentown, N. J. Window box. 1,653,775;

Dec. 27.

Dec. 27.

Lose, James, Bordentown, N. J. Window box. 1,653,775;

Dec. 27.

Lose, J. Sand, R. Lose, L. Lose

Loth, William A., assignor to Société Industrielle des Pro-cedes W. A. Loth, Faris, France. System of navigation and plant for carrying it out. 1615/712; Jan. 25. des device for rapidly solving ordinary problems of astro-nomic parigation. 1,625,369; Apr. 19. Lothrop, Marcus T., assignor to The Timken Roller Bear-ing Company, Canton, Ohio. Makine cages for roller Lothrop. J. 18, Deption, Ohio. Golf green. 1,638,862; Jan. 20, 18, Lothrop. 1,638,862;

bearings. 1,645,866; Oct. 18.
Lott, Louis J. P., Bayton, Ohio. Golf green. 1,638,862;
Lott. Louis J. P., Carlyton, Ohio. Golf green. 1,638,589; July 5.
Lottman, Edward J., assignor of one-half to W. B.
Bassett, Cincinnati, Ohio. Thread-feeding attachment for knitting machines. 1,627,534; May 3.
Lotz, Alfred F. C., assignor to Electrical Engineers. 1,622,479; Apr. 19.
Lotz, Alfred F. C., assignor to Electrical Engineers Equipment Company, Chicago, Ill. Switch and fuse. 1,622,413; May 10.
Lotz, Alfred F. C., assignor to Electrical Engineers Equipment Company, Chicago, Ill. Rheostat. Lotz, Alfred F. C., assignor to Electrical Engineers Equipment Company, Chicago, Ill. Switch-operating mechanism. 1,648,553; Nov. 8.
Lotz, Eiston A. (See Murphy, J. H., and Lotz.)
Lotz, George, St. Johns, Ohjo. Fence guard. 1,630,441; May 3.

Lotz, George, St. Johns, Ohjo. Fence guard. 1,639,441; May 31. Lotz, May 31, 216. Lotz, May 31, 216. Lotz, Wilsiam A., assignor to The T & L Co., Inc., Newark, N. J. Bag-handle connection. 1,621,076; Mar. 15. Lotze, William I., Inglewood, Calif. Stress-breaking attachment for teeth. 1,645,436; Oct. 11. Loucks, Albert H., assignor to Marion Machine, Foundry & Supply Co., Marion, Ind. Soct blower. 1,653,220; Dec. 20.

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Inc. Cleveland,
Charles F., assignor to Holorib, Inc. Cleveland,
Charles Clamping device 1,636,139; Aug. 46.

Loud, George A., assignor to Loud Slide Vaive Engine
Co., Fitchburg, Mass. Valve for internal-combustion
engines. 1,652,437; Dec. 13.
Loud Slide Vaive Engine Co. (See Loud, George A.,

oud Sand Assignor.)
assignor.)
and, William C., assignor to Glassmobile Company,
Detroit, Mich. Automobile curtain. 1,652,447;

Lond, William C., assignor to Gassanoute Company, Detroit, Mich. Automobile curtain. 1,625,447; Dec. 13; Louden Machinery Company. (See Evans, F. J., and Hansen, assignors.) Louden Machinery Company, The. (See Hassler, Paul M., assignor.)
Louden Machinery Company, The. (See Lesher, Charles

O., assignor.)
Louden Machinery Company, The. (See Louden, Robert B., assignor.) Louden Machinery Company, The. (See Northmore, Robert

S., assignor.)
Louden Machinery Company, The. (See Specht, Walter E., assignor.)
Louden Machinery Company, The. (See Strahan, James

E., assignor.)
Louden Machinery Company, The. (See Strahan, James Louden Machinery Company, The. (See Strahan, James Louden Machinery Company, Be, Fairfield, Iowa. Panel for animal pens. 1,629,719; May 24
Louden, Robert B., assignor to The Louden Machinery Company, Fairfield, Iowa. Panel for animal pens. 1,625,61889 July 19.
Licotal Machinery, 1,625,638; Apr. 19.
Louder, Earl A., New York, assignor, by mesne assignments, to Boyce and Veeder Co. Inc., Long Island City, N. Y. Pressure Indicator for fire extinguishers and the Company of the Company, Montclair, N. J. Synthetic resincus product and making same. 1,648,862; Nov. 8.
Lougovoy, Boris N., assignor to Ellis-Foster Company, Montclair, N. J. Synthetic resincus product and making same. 1,648,862; Nov. 8.
Lougheid, Machiner Machiner, 1,648,670; Sept. 27.
Loughridge, Matthew H., Bogota, N. J. Motlon-picture device. 1,643,670; Sept. 27.
Lougheid, Malcolm, Detroit, Mich., assignor, by mesne

Loughbedge, Matthew H., trustee. (Holliday, John S., Loughbed, Malcolm, Detroit, Mich., assignor, by mesne assignments, to Hydraulic Brake Company, Los Angeles, Calif. Hose fitting. 1,620,114; Mar. 8. Loughead, Malcolm, Detroit, Mich., assignor, by mesne assignments, to Hydraulic Brake Company, Los Angeles, Calif. Braking apparatus. Rel6,761; Oct. 4. Lougheed, Aaron, Port Arthur, Ontario, Canada. Differential cirve. 1,622,624; Apr. 19. Lougheed, Calif. Los Angeles, Calif. Distilling oil shale, 1,631,637; June 7. Loughridge, Matthew H., Bogota, N. J. Block system. 1,617,402; Feb. 15. Loughridge, Matthew H., Bogota, N. J. Cab-signal and train-control system. 1,622,285; Mar. 29. Loughridge, Matthew H., Bogota, N. J. Valve for refrigerating apparatus. 1,625,324; Apr. 19.

Loughridge, Matthew H., Bogota, N. J. Railway signal and train-control systems. 1,627,665; May 10. Loughridge, Matthew H., Bogota, N. J. Railway-traffic-controlling system. 1,627,566; May 10. Loughridge, Matthew H., Bogota, N. J. Railway-traffic-controlling system and apparatus. 1,627,567; May 10. Loughridge, Matthew H., Bogota, N. J., assignor of one-half to H. W. Dyer, New York, N. Y. Automobile bumper. 1,618,455; Feb. S. Balland. Cake stand and Louis, Martin, Kiel, assignor to Fried Krupp Germanis-werft Aktiengesellschaft, Kiel-Gaarden, Germany. Pump. 1,649,356; Nov. 15. Louisof, Felix, assignor to Vacuum Pulp Products Corporation, New York, N. Y. Pulp-molding apparatus. 1,616,226; Feb. 1. Louisof, Felix, assignor to Yacuum Pulp Products Corporation, New York, N. Y. Pulp-molding apparatus. 1,616,226; Feb. 1.

1.616,226; Feb. 1.

Louisot, Felix, assignor to Vacuum Pulp Products Corporation, New York, N. Y. Pulp-molding machine. 1,621,598; Mar. 22.

Louisville Drying Machinery Co. Inc. (See Lissauer, A. W., and Credo, assignors to Mammioze Vennoteschap Lourens, Cornells, assignor to Namiloze Vennoteschap (Grenzi Norit Company, Limited, Amsterdam, Netherlands, Treating liquids. 1,634,154; June 28.

Louth, Herbert, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, Ironing machine. 1,642,038; Sept. 13.

Louthan, William B., East Liverpool, Ohlo. Electric heat-Louthan, William E., East Liverpool, Ohlo. Die and ejector for making clay heating elements. 1,648,649; Nov. 8.

Lourel, Cyrus H., South Orange, assignor to The National Lock Washer Company, Newark, N. J. Spring washer, 1,614,232; Jnn. 4.

Louw, Wolsey N. C., New Modder, Transvaal, South Africa. Seam-scape device for cooking utensits and the like 1,638,589; Aug. Dr. Cooking utensits and the like 1,638,589; Aug. Dr. Cooking utensits and the like 1,638,589; Springer Cooking utensits and Lovasza, Jose Von Kirdly, P., and Lovasza, Lovasza, Jose Von Kirdly, P., and Lovasz, Lovasza, Lovasza,

Love, Ben F. (See Smith, John B., assignor.) Love, Herbert. (See Petrie, Alexander T., assignor.) Love, Jess, et al. (See Gregory, B., and Mitchell, as-

signors.)
Love, Joseph E. (See Brown, W. W., and Love.)
Love, Thomas H., Cincinnati, Ohio. Receptacle for carrying infants. 1,625,038; Apr. 19.
Love, William H. (See Matthews, H. E., Love, and

Ryder.)

Ryder.)
Lovejoy, Clinton C., Long Island City, N. Y. Automobile senaphore signal. 16:29,400; May 17.
Lovejoy Development Corporation. (See Lovejoy, Dimmitt R., assignor to Lovejoy Development Corporation, New York, N. Y. Combined A battery trickle charger and B supply. 16:23:628; Apr. 5.
Lovejoy Dimmitt R., assignor to Lovejoy Development Corporation, New York, N. Y. 10:20 (20) Development Corporation, New York, N. Y. Tuned radiofrequency circuits. 1,650.898; Nov. 29.
Lovejoy, Rajhb M., Boston, Mass. Spring-shackle control of the corporation of the corporati

circuits. 1.650.898; Nov. 29.
Lovejoy, Ralph M., Boston, Mass. Spring-shackle construction for vehicles. 1.614.480; Jan. 18.
Lovejoy, Ralph M., Boston, Mass. Torque-absorbing spring construction for vehicles. 1.623.422; Apr. 5.
Lovejoy, Ralph M., Boston, Mass. Spring suspension for vehicles. 1.647.009; Oct. 25.
Lovejoy, Ralph M., Boston, Mass. Spring suspension for vehicles. 1.649.835; Nov. 22.
Lovejoy, Ralph M., Merediih. N. H. Rotary valve mechanism. 1.619.621; Mar. 11.
Loveloy, Ralph M., Boston, assignor to Lewis-Shepard Company, Watertown, Mass. Standard locking mechanism for hoisting machines. 1.626.141; Apr. 26.
Lovekin, Luther D., Wynnewood, Pa. Automatic sbutoff valve. 1.628.675; May 17.
Lovell Manufacturing Company. (See Gehrlein, Vincent assignor.)

Lovell Manufacturing Company. (See Rathers, John J., assignor.) Lovell Manufacturing Company. (See Robertson, Wil-

Ham, assignor.)
Lovell, Ralph L. (See Burlingham, W., and Lovell.)
Lovell, Ralph L. (See Burlingham, W., and Lovell.)
Lovell, Stalley P., Breckton, Mass. Stiffener for boots
and shoes and compound used therein. 1,629,110;
May 17.

Lovell, Stanley P., Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on shoes. 1.635.627; July 12. Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Automatic compensating chuck. 1.617.403; Feb. 15. Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Taper-turning attachment. 1.635.285; July 12.

Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Overhead tool attachment for lathes. 1.647,308; Nov. L. Overhead tool attachment for lathes. 1.647,308; Nov. L. Overlead tool attachment for lathes. 1.647,308; Nov. L. Overlead tool attachment for lathes. 1.647,308; Nov. L. Overlead tool attachment for lather or overhead transporter system. 1,637,308; July 26. Loverlead transporter system. 1,637,308; July 26. Lovert, Helonia R. (See Smith, R. B., and Lovern.) Lovett, George A., assignor to General Motors Corporative Control of the Control of t

Ceder Bluff, Va. Train-pipe coupler, Apr. 19.
Lowe, W. H., et al. (See Boedker, Harry, assignor.) Lowe, William S., Chirago, Ill. Apparatus for making paper pulp. 1,610,839; Jan. 11.
Lowell, William, Maplewood, N. J., assignor to The Nieblo Mfg. Co. Inc., New York, N. Y. Golfing tee. 1,650,141;

Nov. 22. Lowell-Wintsch Automatic Train Control. (See Rose, James A., assignor.) Lowenfeld, Henry, Paris, France. Syringe. 1,643,744; Sept. 27.

Sept. 27.
Lowenstein, Fritz, deceased, New York, N. Y.; J. C. Walt, administrator, assignor, by mesne assignments, to Radio Corporation of America. Wireless telegraph apparatus. 1,618,017; Feb. 15.
Lowenstein, Fritz, deceased, Rockway Park, N. Y.; J. C. Walter, Fritz, deceased, Rockway Park, N. Y.; Singments, to Radio Corporation of America. Transmitter apparatus. 1,618,018; Feb. 15.
Lowenstein, Harry F., and E. E. Clement, assignors to E. F. Colluday, Washington, D. C. Radio receiving apparatus, Religions; Apr. 28.
Lowenstein, Religions, Apr. 28.
Lowenstein, M., & Sons, Inc. (See Mack, Joseph H., assignor).

signor.)
Lowenstein, Samuel. Oakland, assignor to H. Lowenstein, San Francisco, Calif. Bedpan. 1,642,255; Sept. 13.
Lower, Melvin S., assignor to The Sun Rubber Company, Barberton, Ohio. Manufacturing fabric-covered cushions. 1,645,248; Oct. 11.
Lower, Melvin S., assignor to The Sun Rubber Company, Barberton, Ohio. Making compound sponge rubber and fabric articles. 1,645,644; Oct. 18.
Lower, Melvin S., assignor to The Sun Rubber Company, Combined stoker and feed-water pump. 1,614,528; Jan. 18.
Lower, Nathan M., Pittsburgh, P.a., assignor to Locomotive Stoker Company, Locomotive Stoker, 1,634,467; July 5.

July 5

Lower, Nathan M., Pittsburgh, Pa., assignor to Locomotive Stoker Company, Locomotive stoker, 1,637,491; Aug. 2.
Lower, Nathan M., assignor to Locomotive Stoker Company, Pittsburgh, Pa., Steam engine, 1,643,671; Sept. 27.
Lower, Nathan M., Pittsburgh, Pa., assignor to Locomotive Stoker Company, Locomotive Stoker, 1,652,028; Dec. 6.

Lower, Natian M., and A. R. Chalker, Pittsburgh, Pa., assignors to Locometive Stoker Company. Distributor tube for stokers. 1.642.076: Sept. 13.

Lowers, Perv O., Fredonia, Kans. Shade and curtain hanger. 1.635.20; Aug. 16.

Lowinser, Bucene. New York, N. Y. Illuminated sign. 1.634.337; Dec. 27.

Lowman, John W., Chattanooga, Tenn. Paint composition. 1,625,815; Apr. 26.

Lowry, Charles A., Shaker Heights, and F. H. Abel, East Cleveland, Ohio. Tile wall or floor. 1,637,580; Aug. 2.

Lowry, George A. (See Grant, J. A., and Lowry, Charles A., Shaker Heights, and Lowry, George A. (See Grant, J. A., and Lowry, George, Charles A., Shaker Heights, Charles A., Cha

signor.)
Lox Seal Corporation, The. (See Kondolf, Henry E., as-

Lox Seal Corporation, Lee, signor: Joye S. Paris, France. Tire-pressure gauge. Loy, Ggrego S. Paris, France. Tire-pressure gauge. Loy, James W., assignor of one-third to F. M. Fishback. Long Beach, Calif. Air pump. 1,625,417; Apr. 19. Loy, James W., assignor of one-half to F. M. Fishback. Long Beach, Calif. Rotary disk drill. 1,646,620; Long Beach, Calif. Rotary disk drill. 1,6

Loy, James W., assignor of one-third to F. a., and consulting to Long Beach, Calif. Air pump. 1,625,417; Jpp. 19.
Loy, James W., assignor of one-half to F. M. Fishback, Long Beach, Calif. Rotary disk drill. 1,646,620; Oct. 25.
Lote Beach, Calif. Rotary disk drill. 1,646,620; Oct. 25.
Lote Beach, Calif. Rotary disk drill. 1,646,620; Oct. 25.
Loberger, Broken Bow, Nebr. Steering by driving means for vehicles. 1,623,292; Apr. 5.
Lubberger, Fritz, Berlin-Schmargendorf, assignor to Bornes, Fritz, Berlin-Schmargendorf, assignor to Rotary and Germany & Attomatic telephone system. 1,632,240; June 14.
Lubberger, Fritz, Berlin-Schmargendorf, and E. Hahn, Charlottenburg, assignors to Siemens & Haiske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin-Schmargendorf, and E. Hahn, Charlottenburg, assignors to Siemens & Haiske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin-June 14.
Lubb, Henry, College Point, assignor to Radio Motion Picture Phon. Corp., Long Island City, N. Y. Motor-Lubowsky, Simon J., Brooklyn, N. Y., assignor to Metal & Thermit Corporation, Catreert, N. J. Transforming itlanium-dioxide or rutile and a product thereof. 1,640,952; Aug. 30, Lubrano, Gluseppe, New York, N. Y. Tea-making spoon Lucarelle, Joseph M., and V. L. Frykman, assignors to Dictaphone Corporation. Bridgeport, Conn. Powertransmitting device. 1,624,174; Apr. 12.
Lucarelle, Joseph M., assignor to Dictaphone Corporation. Nov. 22, Lucarelle, Joseph M., assignor to Dictaphone Corporation. Rotard Britannical Corporation. Catreer, 1,632,029; Lucarelle, Joseph M., assignor to Dictaphone Corporation. Rotard Britannical Corporation. Catreer, 1,632,029; Lucarelle, Joseph M., Conn. Pomenanism. 1,632,029; Lucarelle, Joseph M., Conn. P

n. Bridgeport, Com. v. 22.
v. 22.
relle, Joseph M., assignor to Dictaphone Corporation, relle, Joseph M., Control mechanism. 1,652,029;

Bridgeport,

Briegort, Colin. Control mechanism. 1,602,628, Lucas, Anton, Kansas City, Mo. Purifying iron scale. 1,631,423; June 7. Lucas, Anton, Kansas City, Mo. Producing welding metal. 1,637,619; Aug. 2. Lucas, Christian J., and A. G. Ponce, Brackenridge, Pa., Lucas, Daniel. (See Darby, J. K., and Lucas). Lucas, Francis F., East Orange, N. J. Developing container. 1,615,880; Feb. J., 1,615,880; Feb. Lucas, Francis F., East Orange, N. J. Photomicrographic Lucas, Francis F., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Alloys, 1,628,990; May 17. Lucas, George P., Jersev City, N. J. Centrifugal bam-

loys. 1,628,990; May 17.

Lucas, George P., Jersey City, N. J. Centrifugal hammer. 1,630 021; May 24.

Lucas-Girardville, Paul N., Paris, France, Method and apparatus for the storage and the transportation of gas. 1,651,521; Dec. Gewis Foundry & Machine Company, Pittsburgh, Pa. Shearing and forging press. 1,638,403; Aug. 9.

Lucas. John F., Kinsman, Ohlo. Hoisting device. 1,616,830; Feb. L. Camble Charles B. assignor; D. Lucas-Lamborn Loom Corporation, New York, N. Y. Loom. 1,623,258; Apr. 5.

Lucas Jonathan, Savannah, Ga., assignor to Lucas-Lamborn Loom Corporation. New York, N. Y. Shuttle mechanism for looms. 1,624,108; Apr. 12. Lucas, Jonathan, Savannah, Ga., assignor to Lucas-Lamborn Loom Corporation, New York, N. Y. Tension device for looms. 1,625,039; Apr. 19.

Lucas, Jonathan, assignor to Lucas-Lamborn Loom Corporation, New York, N. Y. Bobbin-feeding mechanism for looms. 1,631,628; June 7.

Lucas, Jonathan, Savannah, Ga. assignor to Lucas-Lamborn Loom Corporation, W. Y. X. Y. Tension Loom Corporation, Sav. Y. X. Y. Tension Loom Corporation, Sav. Y. X. Y. Tension Corporation, Sav. Y. X. Y. X. Lucas, Jonathan, Savannah, Ga., assignor to Lucas Lamborn Loom Corp. New York, N. X. Bobbia for looms. 1,642,503; Sept. 13.

Lucas, Jonathan, Savannah, Ga., assignor to Lucas Lamborn Loom Corp. New York, N. X. Bobbia for looms. 1,642,503; Sept. 13.

Lucas, Jonathan, Savannah, Ga., assignor to Lucas-Lamborn Loom Corporation. (See Lucas, Jonathan, assignor.)

Lucas-Londorn Loom Corporation. (See Lucas, Jonathan, assignor.)

Lucas, Nomab E., Norwich, Conn. Bobbin. 1,631,043;
May 31.

Lucas, Nomab E., Norwich, Conn. Bobbin. 1,631,043;
May 31.

Lucas, Some L. Mestminster. England. Refining by directions of the Lucas, Control of the C

signor.) Luchkanich, Alexander. (See Luchkanich, Stephen and

Signor, Stephen and A., Maydeld, Pa. Car coupler. 1.613.115: Jan. 4. Luckanich, Stephen and A., Maydeld, Pa. Car coupler. 1.613.115: Jan. 4. Luckanich, Stephen and A., Maydeld, Pa. Car coupler. 1.634.805 July 5. Luckanich, Stephen and Machinery Corporation. New York, N. Y. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation. New York, N. Y. Internal-combustion engine. 1.613.825: Mar. S. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.626.292; Apr. 28. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Condensing Apparatus. 1.626.849; May 3. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.623.384; June 21. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.623.384; June 21. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.632.384; June 21. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.632.384; June 21. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.632.384; June 21. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.630.384; June 21. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.630.384; June 21. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.630.384; June 21. Luckac, Charles E., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Internal-combustion engine. 1.630.384; June 21. Luckac, William B., Wilmette, Ill. Bathtub wall and the pump and Machinery Corporation New York New Y

Decice for reducing the pHening of Ships.
Sept. 13.
Lucke, William E., Wilmette, III. Bathtub wall and
floor joint. 1.615.881; Peb. 1.
Luckett, Geo. B., and J. A. Johnson, Crawfordsville, Ind.
Refractory material suitable for coverings and forming
same. 1.643.988; Oct. 4.
Luckey, George P., Dayton, Ohio, Flow meter.
1.631.746; June 7.
Jackey, George P., Dayton, Ohio,
Latitude indicator
for aircraft. 1.639.229; Aug. 16.

Luckie, Alfred, and T. L. Mangum, Birmingham, Ala. Dial mechanism for automatic telephones. 1,639,891;

Dial mechanism for automatic telephones. Aug. 23.
Ludasy, Akos. Wilkinsburg, Pa. Hydrocraft. 1,630,623; May 31.
Ludeman, Edwin H. (See Ludeman, Oscar H. and E. H.)
Ludeman, Dear H., Glen Ridge, N. J., and E. H. Ludeman, Brooklyn, N. Y. Separator. 1,613,233; Jan. 4.
Luden, Wm. H., Inc. (See Weber, Walter S., assignor.)
Luder, Maude, Asbury Parik, N. J. Ankle brace.
1,624,266; Apr. 12.
Ludington Machine Co. (See Fefel, John E., assignor.)
Ludiow, David H., Easton, Pa. Wheel. 1,636,310;
Ludiow, David H., Easton, Pa.

Ludlow David H., Easton, Pa.

July 19.

Ludlow, David H., Easton, Pa.

July 19.

Ludlow, Frederick O., assigner to The Compound and
Ludlow, Frederick O., assigner to The Compound and
Ludlow, Thomas H., Rochester, N. Y., Conduct bushing
adapter, 1,632,243; June 21.

Ludlow, Typograph Company, (See Merrill, Philip P.,
Ludlow Typograph Company, (See Merrill, Philip P.,

Nov. 1.
Ludwig & Ludwig, Inc. (See Danly, Robert C., assignor. Nicholas U., assignor of one-third to G. W. Weyand, Euffalo, N. Y. Combined brick kiln and drier.
1.627,979; May 10.
Ludwig, William C. (See Carruth, H. P., and Ludwig.)
Ludwig, William C., Chillieothe, assignor to The Mead Pulp & Paper Company, Dayton, Ohio. Apparatus and method for packaging paper. 1.618,542 Feb. 22.
Ludwig, Carence C., Venice, Calif. Bag holder. 1.625,480; Apr. 19.
Ludy, Clarence C., Venice, Calif. Bag holder. 1.625,480; Apr. 19.
Ludy, George B., Cedar Rapids, lows. Locking open link. 1.947,190; Nov. 1.
Lueses, Henry W. (See Davis, C. H., and Lucck.)
Luedtke, Charles E., Chaffield, assignor of one-half to O. C. Genson, Minnespolis, Minn. Shears. 1.615,882;

Luedike, Henry W. (See Davis, C. H., and Lueck).
Luedike, Charlies E., Chaffield, assignor of one-half to O. The Charles of th

stgnors.)
Luftschiffbau Zennelin Gesellschaft mit beschrünkter Hattung. (See Diler, Ludwig, assignor.) mit beschrünkter Haftung. See Hilliegardt, Briefa assignor. Lattischiffbau Zennelin Gesellschaft mit beschrünkter Haftung. (See Hillettle, Karl. assignor.) hattische Karl. assignor.) mit beschränkter Haftung. (See Silettle, Karl. assignor.) mit beschränkter Haftung. (See Sehntzer, Reno. assignor.) Luftschiffban Zennelin Gesellschaft mit beschränkter Haftung. (See Siller, Karl. assignor.) Luciabuhl, Godefrow-Rodulhe Laussanne, Switzerland. Railway gulde. 1,642,616; Sept. 13.

Luhan, Joseph F. C., New York, N. Y. Sanitary dispenser for plastic materials. 1,613,761; Jan. 11. Luhr, Otto, Chicago, Ill. Refrigator car. 1,642,882; Sept. 20.

J., assignor. J. Lundblad, Emil O., Medford, Mass. Suction fastening de-vice 1,662,488; Dec. 13. Lundblad, Julius, Jelly, Calif. Fruit-picker's glove. 1,640,004; Aug. 23. Lundborg, Eror H., Stockholm, Sweden, assignor to Sven-ska Ackumulator Aktiebolaget Jungner. Fluid filter. 1,648,773; Nov. 8.

ska Ackumulator Aktiebolaget Jungner. Ffuld filter. 1,648,773; Nov. 8.

Lundegaard, Anders, M. P., Copenhagen, Denmark. Steam tumbe gland with more than one pipe connection of the control of the contro

Lundgren, Edwin, Frederick, Md., assignor to International Combustion Engineering Corporation, New Lundgren, Edwin, Frederick, Md., assignor to Combustion Engineering Corporation, New York, N. Y. Automatic Stoker. 1,636,375; July 19.
Lundgren, Edwin, Frederick, Md., assignor to Combustion Engineering Corporation, New York, N. Y. Stoker. Landgren, Edwin, Brederick, Md., assignor to Combustion Engineering Corporation, New York, N. Y. Stoker. Landgren, Fridoly H., Ingelstorp, Glemmingebro, assignor to Aktiebolaget Arkos, Lidkoping, Sweden. Speedometer-driving mechanism. 1,644,849; Nov. 8.
Lundgren, Lüskaf II. (See Cook. II. D., and Jundgren, Denging, Oskland, Califf. Method and apparatus for forming hollow ware. 1,631,496; June 7.
Lundgren, Jacob, assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Method and apparatus for weighing, 1,647,822, Nov. 1, F. McGhee, Moorestown, N. J., assignors to American Machinery Co., Inc., Philadelphia, Pa. Method and dispensing machine. 1,648,554; Nov. 8.
Lunduis, Eric R., assignor to MacDonald-Jensen Manufeb, Bar Co., Brooklyn, N. Y. Book holder, 1,616,630; Feb. Bernard H., Providence, R. I. Radlodetector.

factuding Co., Brooklyn, N. Y. Book holder. 1,610,000; factuding Co., Brooklyn, N. Y. Book holder. 1,610,000; factuding for the factuding for factuding factuding for factuding factuding for factuding factuding for factuding factudin

poration, Chicago, Ill. Flow-actuated device. 1,614,580; Jan. 18. Lundquist, Hans, assignor to United States Specialty Corporation. Chicago, Ill. Lace-threading machine. Corporation, Chicago, Ill. Lace-threading machine. Lundquist, Hans, assignor to United States Specialty Corporation, Chicago, Ill. Lace-threading machine. 1,627,611; May 10. Lundquist, Herman A., assignor of one-half to The Banding Manufacturing Company, Toocoldo, Ohio. Thrash-Lundquist, Halmars B., Youngstown, Ohio. List-removing apparatus. 1,641,978; Sept. 13. Lundquist, Halmars B., Youngstown, Ohio. List-removing apparatus. 1,641,978; Sept. 13. Lundquist, John A., New York, N. Y. Grating. Lundquist, John A., New York, N. Y. Grating. Lundsten, Olof, et al. (See Knistrom, Joseph, assignor.) Lundsten, Arthur G., Phillipsburg, assignor to Ingersoil-Rand Company, Jersey City, N. J. Fuel distributor for internal-combustion engines. 1,630,937; May 31. Lundy, Charles H., Wickham, W. Ya. Connecter for Lundy, Robert R., South Bend, Ind. Cross-word puzzle. 1,625,218; Apr. 19. L'Union Generale d'Electricite. (See Fallou, Jean G., assignor.)

Lunkenheimer Company, The. (See Hehemann, Frederick

Lunkenheimer Company, The. (See Hehemann, Frederick H., assignoct.)
Lunn, Brnest, assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill. Spot welding of aluminum. 1,618,764; Feb. 22.
Lunn, Jean, Montreal, Quebec, Canada. Skate. 1,650,222; Nov. 22.
Lunow, Fritz. (See Bennewitz, Johannes, assignor.)
Lunsford, Errell C., Shreveport, La. Brake-beam-supporting bolt. 1,646,587; Oct. 25.
Luntz, Louis J., Bell, Calif. Can opener. 1,650,842; Nov. 29.

Nov. 29.

Lung, Franz, New York, N. Y., assignor to Aero Toy & Manufacturing Co., Inc., New York, N. Y. Spinning toy. 1,634,486; June 21.

Lupier, James A., assignor to Worthington Pump and Maclinery Corporation, New York, N. Y. Oil-pump-defection of the Company of the Company Company of the Calistoga, Calif. Traffic signal for motor vehicles. 1,619,523; Mar. 1.

Lupo, Salvatore Q., New York, N. Y. Combined vanity compact and cigarette case. 1,614,374; Jan. 11.

Luppert, Valentine C., Williamsport, Pa., Leaf support. 1,651,825; Dec. 6.

Lassignor, New York, N. See Ferguson, Frank Luptors, David, Sons Company. (See Brogden, Joah, Junton's, David, Sons Company.

assignor.)

Lupton's, David, Sons Company. (See Ferguson, Frank C., assignor.)

Lurcott, Winfred N., Weehawken, N. J., assignor, by mesne assignments, to Orlplock, Inc., New York, N. Y. Wire-strappings and the property of the property of

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Lüschen, Fritz, Berlin-Sudende, and K. Küpfmüller, Berlin-Friedenau, assignors to Siemens & Halske Aktiengeseilschaft, Siemenstadt, near Berlin, Germany. Alternating-current telegraphy. 1,642,453; Sept. 13. Lüscher, Emil, assignor to the Society Elektrizlatswerk Lonza, Gampel and Basel, Switzerland. Manufacture of stabilized metaldebyde. 1,631,875; June 7,1200; Mar. 1.

Mar. 1. Luse, William J., New York, N. Y. Alarm system. Luse, Villiam J., New York, N. Y. Alarm system. Luse, Villiam J., Mar. 10, W. Sydney, New South Wales, Australia. Means for decanting liquids from metal containers. 1,617,066; Feb. S. Lusk, Charles S., Alfred Station, N. Y. Combined track level and gauge. 1,633,535; June 21. Lusk, Othello B. (See Penny, V. E., and Reinke, as-

Lusk, Othello B. (See Penny, V. E., and Reinke, assignors.)
Lusse Brothers. (See Lusse, Joseph and R., assignors)
Lusse, Joseph and R., assignors to Lusse Brothers, PhilaLusse, Robert. (See Lusse, Joseph and R.)
Lustig, Karel. (see Vesely, K., and Lustig.)
Luten, Daniel B., Indianapolis, Ind. Skew arch.
1,633,548; July 5.
Luten, Daniel B., Indianapolis, Ind. Expansion-joint
drain. 1,634,549; July 5.
Lutes, Charles S., Saskaton, Saskatchewan, Canada.
Olivative attachment for engine crank casings.
1,635,219 July 12.
Lutes, Charles S., Saskaton, Saskatchewan, Canada.
Clivative attachment for engine crank casings.
1,635,219 July 12.
Luten, Canada.
Luten, Luten,

Bayonne, N. J. Door-operating device. 1,636,674; July 19.
Luther, Martin P., assignor to Super-Safety Switch Company, Chicago, Ill. Blectric switch. 1,648,853; Nov. 8.
Luther, Martin P., assignor to Super-Safety Switch Company, Chicago, Ill. Electric switch. 1,648,854; Nov. 8.
Luther, Stephen G., Akron, Ohio. Rubber product and producing the same. 1,647,144; Nov. 1.
Luthy, Fred A., Jackson, Mich. Wheel puller. 1,639,140; Aug. 16.
Luthy, Joseph O., San Antonio, Tex. Battery connecter. 1,627,442 May 3.
Lutic Stanki, Thomas, Wayland, Mich. Sausage-stuffing machine. 1,636,424; July 19.
Lutschak, John, Milwaukee, Wis. Shade roller. 1,650,020; Nov. 22.
Lutischen, Ewald, Munich, Germany. Drying cylinder for

machine. 1,636,424; July 19.

Lutschak, John, Milwauke, Wis. Shade roller. 1,650,020; Nov. 22.

Lutschak, John, Milwauke, Wis. Shade roller. 1,650,020; Nov. 22.

Littschem. Ewald, Munich, Germany. Drying cylinder for machines and textile goods drying machines. 1,640,662; Aug. 30.

Lutter, Clements. (See Schranz, K., and Lutter.)

Lüttin, Karl, Basel, assignor to the society T. R. Geigy A. G., Basel, Switzerland. Dye solution. 1,655,628; July 12.

Lutton, Harry A. Jersey City, N. J. Combination suplements of the society of the society of the society of the society of the lutton, Harry A. Jersey City, N. J. Combination suplements of the society of the society of the lutton, William J. Faterson, N. J. Let-off mechanism for looms. 1,653,467; Aug. 9.

Littringhaus, Arthur, Mannheim, H. Neresheimer, Ludwigshafen-on-the-Rhine, and H. Wolff, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, Manulacture of condensation of the society of the benzanthrone Luttschiffbau Zeppelin Gesellschaft mit beachrinkter Haftung. (See Stahl, K., and Siller, assignors). Luttens, London, and R. O. Child, Harrow, England. Composition applicable for roofing, road surfacing, and other purposes. 1,641,637; Sept. 6.

Lutz, George H., Philadelphia, Pa. Cover-operating mechanism for garbage, ash wagons, and the like. 1,651,138; Nov. 29.

Lutz, Hans, Elmira, N. Y., assignor to The Willys-Overland Company, Toledo, Ohio. Grinding machine. 1,652,773 (Mannheim, 1641,282; Sept. 6.

Lutz, William C. (See Kreps, J. C., fr., Marsh, and Lutz.). Lutzler, Lutz

Luxion C. See Kright, J. C., et al. (See Jourdan, Roy E., as-Luxion) Dorothen E. Nashville, Tenn, assignor to Edison Electric Appliance Company, Incorporated, Chicago, Ill. Broiler pan. 1,650,634; Nov. 29.
Lux. Prederick. Waterbury, Conn. Desk clock. Des. 73,849; Nov. 15.
Luxiute Silk Products Co. (See Carlson, E. E., Costello, and Hellbronner, assignors.) Luxmore. William. Chicago, Ill. Windshield cleaner. 1,654,00X Dec. 27.
Luxioner. William. Chicago, Ill. Windshield cleaner. 1,654,00X Dec. 27.
Luxioner. Canasoldering machine. 1,631,424; June 7.
Luxiutes, Otto G. deceased, New York, N. Y.; H. M. Rid-der and G. A. Lanazka, administrators. Construction of pipes and the like. 1,643,021; Sept. 20. Lybarger, Donald F., Cleveland, Ohlo. Badge. Des. 71,875; Jan. 18.

Lybeck, Henry, et al. (See Skinner, Clarence L., assignor.)
Lyddane. Mortimer C., Yonkers, N. Y. Anchoring device.
Lyddane. Mariew C., and C. W. Morgan, Chicago, Ill.
Switchboard. 1.642.883; Sept. 20.
Lyhne, Andrew C., and C. W. Morgan, Chicago, Ill.
Switchboard. 1.642.883; Sept. 20.
Lyhne, Andrew S., Bridgeport, Conn. Vanity box.
1.015.588; Feb. 22.
Lyhne, Anker S., Bridgeport, Conn. Vanity box.
1.042.062; Sept. 20.
Lyhne, Anker S., Bridgeport, Conn. Vanity box.
1.042.062; Sept. 20.
Lyhne, Anker S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 6.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 6.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 6.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 6.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 6.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
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Lytins, Chirache S., Bridgeport, Conn. Vanity box.
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Lytins, Chirache S., Bridgeport, Conn. Vanity box.
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Lytins, Chirache S., Bridgeport, Conn. Vanity box.
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Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 6.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.722; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.732; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.732; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.732; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.732; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn. Vanity box.
1.051.732; Dec. 20.
Lytins, Chirache S., Bridgeport, Leaston, Chirache S., Bridgeport, Conn.
1.051.732; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn.
1.051.732; Dec. 20.
Lytins, Chirache S., Bridgeport, Conn.
1.051.732; Dec. 20.
Lytins, C

Lyman, Charles R., Center Feint, Iowa. Apparatus for controlling the air supply of carburctors. 1,628,566; May 10.
Lyman, Kenneth E., assignor to Bendix Brake Company. Chicago. III. Shaft support. 1,653,112; Dec. 20.
Chicago. III. Shaft support. 1,653,112; Dec. 20.
Company. Chicago. III. Cryptographic perforator. 1,646,969; Oct. 25.
Lynch, Charles W., Perry, Okla. Sand reel. 1,641,893; Sept. 6.
Lynch, Charles W., Perry, Okla., assignor to Picketing Lumber Company, Kansas City, Mo. Derrick-top assembly. 1,636,522; July 19.
Lynch, Charles W., Perry, Okla., assignor to Marion Machine Foundry & Supply Company, Marion, Ind. Key Julier. 1,636,522; July 19.
Lynch, Charles W., Perry, Okla., assignor to Marion Machine Foundry & Supply Company, Marion, Ind. Key Julier. 1,655,142; Dec. 27.
Lynch Franes I., And H. A. Mead, Turlock, Callf., assignors to Masterench Corporation. Wrench. 1,634,850; My. 21.
Lynch, Frank J., Huntington Park, Callf. Elevator. 1,648,650; Nov. 8.
Lynch Gos. E., Los Angeles, Callf. Safety device for motor of soph Horsebeards. N. Y. Producing molded objects of contrasting colors. 1,612,825; Jan. 4.
Lynch, Joseph, Perth Amboy, N. J. Cornice block. 1,635,83; July 12.
Lynch, Partick H. (See McKay, J. A., and Lynch, Lynch, William F., assignor to Peerless Tube Co., Bloomfeld, N. J. Feeding mechanism. 1,652,032; Dec. 6.
Lyndon, Rdward, New York, N. Y. Optical reflector. 1,600,635; Pr. 20.
Lynch, Partick H. (See McKay, J. A., and Lynch, Lynch, William F., assignor to Peerless Tube Co., Bloomfeld, N. J. Feeding mechanism. 1,652,032; Dec. 6.
Lyndon, Rdward, New York, N. Y. Optical reflector. 1,600,635; Pr. 20.
Lyndon, Rdward, New York, N. Y. Optical reflector. 1,600,635; Pr. 20.
Lyndon, Rdward, New York, N. Y. Optical reflector. 1,600,635; Pr. 20.
Lyndon, Rdward, New York, N. Y. Optical reflector. 1,600,635; Pr. 20.
Lyndon, Rdward, New York, N. Y. Optical reflector. 1,600,635; Pr. 20.
Lyndon, Rdward, New York, N. Y. Optical reflector. 1,600,635; Pr. 20.
Lyndon, Rdward, New York, N. Y. Optical reflector. 1,60

Lynn, Craig, Butler, Ind. Motor-driven saw. 1,622,120;

Lynn, Craig, Bilter, 1812.
Mar. 22.
Lynn, John P. (See Kaufmann, M. M., Lynn, and Dell.)
Lynn, John P., Chicago, Ill. Making pencil bodies and
the like. 1,638,002; Aug. 2.
Lynn, John W., assignor to H. D. Denny, London,
England. Device for removing kinks and the like from
flexible wires. 1,614,375; Jan. 11.
Lynn Last Company. (See Gerrish, Edward W., as-

flexible wires. 1,614 Lynn Last Company. signor.)

signor.)
Lynn, Robert C. (See Poster, Samuel P., assignor.)
Lynn, Thomas H., Williamsport. Pa. Tire carrier.
1,620,039; May 17.
Lyon, Frederic M., Pontiac, Ill. Safety key device.
1,622,733; Mar. 29.
Lyon, George A., Philadelphia, Pa. Automobile buffer and
attachment therefor. 1,626,347; Apr. 26.
Lyon, George A., Allenhurst, N. 3. Automobile buffer
Lyon & Healy, Inc. (See Arthur, Paul, assignor.)
Lyon & Healy, Inc. (See Jefferson, Benjamin H., assignor.)

signor?).
Lyon, Howard, assignor to Welsbach Company, Gloucester,
N. J. Broller burner, 1,614,746; Jan. 18.
Lyon, John S., assignor of one-half to J. Bartholomew.
Rochester, N. Y. Compact powder holder. 1,625,669;
Apr. 19.

Lyon, Joseph F., Fort Scott, Kans. Propelling device. 1.644.259; Oct. 4.
Lyon Metallic Manufacturing Company. (See Adler, John Lyon, Metallic Manufacturing Company. (See O'Connor, John B., assignor.)
Lyon, Norman W. (See Wentworth. E. F., and Lyon.)
Lyon, Ray B. (See Karling, C. A., and Howell, assignors.)
Lyon, Samuel V. (See Post, L. B., Lyon, and Blumenfeld.)

Lyons' California Glacé Fruit Company. (See Jacobs, Mrnest E., assignor.) Lyons, Earle K., assignor to Delaware Punch Company of America, San Antonio, Tex. Bottle. Des. 73.530;

Ernest E., assignor.)

Lyons, Earle K., assignor to Delaware Punch Company of America, San Antonio, Tex. Bottle. Des. 73.530; Sept. 27.

Lyons, Farle K., assignor to Delake, Davis & C.D. Detroit, Sept. 27.

Lyons, Feed D., Kanasa City, Mo, assignor to I. M. Lyons. Oil burner. 1,623,930; Apr. 5.

Lyons, George W., assignor to The Builders Iron Company, New Haven, Conn. Hatchway door. 1,647,836; Lyons, George W., assignor to The Builders Iron Company, New Haven, Conn. Hatchway door. 1,647,836; Lyons, Ford M. (See Lyons, Fred D., assignor.)

Lyons, Jordon T., Los Angeles, Calif. Dispensing device. 1,626,943; May S.

Lyons, Jordon T., Los Angeles, Calif. Dispensing device. 1,626,943; May S.

Lyons, J., and Company. (See Oliver, George W., assignor.)

Lyons, J., and Company. (See Oliver, George W., assignor.)

Lyons, J., and Company. (See Rivat, George, assignor.)

Lyons, Robert L., Waltham, Mass., assignor to Frederick Ostana Company, New York. N. Y. Button clamp. Lyons, Edmond H., Ventnor, N. J. Optical apparatus and using the same. 1,616,054; Feb. 1.

Lyth, John J., Valleyfield, Quebec, Canada. Apparatus for moire-finishing cloth. 1,635,031; July 5.

Lytton, Edward, London, England. Nail, screw nail, and the like. 1,631,044; May 31.

Lytton, Edward, London, England. Nail, screw nail, and the like. 1,648,855; Nov. 8.

Lytton, Walter, and P. E. Edelman, Chicago, Ill., assignors, by messe assignments, to said Lytton, Radio and phonograph combination switch. 1,649,716; Nov. 15.

Lytton, Walter, and P. P. E. Edelman, Chicago, Ill., assignor.)

M. J. B. (O. (See Burns, Wilfred E., assignor.)

M. J. B. (O. (See Gooden, Lead, and Burns, assignors.)

M. J. B. (O. (See Gooden, Lead, and Burns, assignors.)

M. J. B. (O. (See Gooden, Lead, and Burns, assignors.)

M. J. B. Corset Company. (See Gooden, Lead, L., assignor.)

M. J. S. Co. (see Burns, Wilfee D., assignor.)
M. H. Products Company. (See Brock, William R., assignor.)
M. S. Company. (See Nittel, Frederick W., assignor.)
M. S. Company. (See Nittel, Frederick W., assignor.)
Mang Gear Wheel and Machine Company. (See Mang, Max, Schwamendingen, assignor to Mang Gear Wheel and Machine Company, Ltd., Zurich, Switzerland. Gear grinder. 1,626,944; May 8.
Mang, Max, Schwamendingen, assignor to Mang Gear Land. Gear grinder. 1,626,945; May 3.
Mang, Max, Schwamendingen, assignor to Mang Gear Wheel and Machine Company, Ltd., Zurich, Switzerland. Spur-gear shaper. 1,645,106; Oct. 11.
Mannum, Anton A., et al. (See Mannum, Dedrick A., assignor.)
Mannum, Dedrick A., Hancock, Minn. Can washer.

Signot.)
Maanum, Dedrick A., Hancock, Minn. Can washer.
1.620,116; Mar. S., Assignor of one-fourth to A. A.
Mannum and one-fourth to T. A. Maanum, Minneapolis,
Minn. Valve for milk vats. 1,639,853; Aug. 23.
Mannum, Thor A., et al. (See Maanum, Dedrick A., assignot.)
Minns, A. R., Chemical Co. (See Glaze, Herbert L., assignot.)

Allands, A. K., Caemicai Co. (see Guze, nerpert L., as-Mans, Elov F., Long Branch, N. J. Grinding machine, 1,622,527; Mar. 29. Mas, Elov F., Cuyahoga Falls, Ohio. Railway-car-wheel construction. 1,648,413; Nov. 8. Mass, George H., Milwaukee, Wis. Carbonator. 1,630,575;

Maatschappij, N. V., Ago. (See Van der Werff, Auke H.,

Mantschappij, N. V., Ago. (See Van der Werff, Auke H.,

1858 (1977)

Matschappij, N. V., Ago. (See Van der Werff, Auke H.,

1858 (1978)

Mabee, Alexander C. (See Dienner, J. A., and Mabee.)

Mabee, Alexander C. (See Dienner, J. A., and Mabee.)

Mabee, Charles R., Butfalo, N. Y., assignor to Mabee

Patents Corporation, of Dover, Del. Manufacture of

livestock feeds. 1,615,024; Jan. Y., assignor to Mabee Pat
Mabee, Charles R., Butfalo, N. Y., assignor to Mabee Pat
Mabee, Elliott B., Brooklyn, N. Y. Illuminating device.

1,629,284; May 17.

Mabee Fatents Corporation. (See Mabee, Charles R.,

Mabee, William R., Newark, N. J. Central package wrap
ping station. 1,644,332; Oct. 4.

Mabie, Paul S., Detroit, Mich. Liquid-level indicator

1,617,819; Feb. 15.

Mabie, Paul S., Detroit, Mich. Liquid-level indicator

1,617,819; Feb. 15.

Mabie, Paul S., assignor of one-half to W. Liston, De
rroot, Mich. Liquid-level indicator. 1,620,823; Mat.

15.

Mabon, Merril, assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 71,876; Jan. 18.
Mabon, Merril, assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 71,877; Jan. 18.

Mabon, Merril, assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckie. Des. Mabon, Merril, assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 71,879; Jan. 18.

Mabon, Merril, assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 72,718; Mabon, Merril, assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 72,718; Maby, Frederick W., assignor to Royalty Holding Corporation, New York, N. Y. Starter for internal-combustion engines. 1,631,747; June 7.

Macchee, Edward L. and F. B., Hayward, Čalif. Brake Macchee, Edward L. and F. B., Hayward, Čalif. Brake Macchee, Edward L. and F. E., Macallen Company, The. (See McChee, Edward L. and F. E.) Macallen Company, The. (See McChee, Edward L. and F. E.) Macchine, David, Harrisburg, Pa., assignor to United Shoe Machinery Corporation, Paterson, N. J. Economizer for fastening-inserting machines. 1,643,369; Maccartney, Jack, and A. V. Hahn, Los Angeles, Callf. Acoustic horn. 1,625,252 jap. 19.

Macculay, Herman C., Rumford, Me. Steam trap. 1,631,867; June 7.

MacBenn, Thomas L. (See Herrick, Ernest A., and Machinery, Arthur J., Baltimore, Md. assignor, to Taulick).

Bean.)

Bean.)

Macbeth, Arthur L., Baltimore, Md., assignor to Daylight

Motion Picture Co., Washington, D. C. Projection
screen. 1,628,414; May 10. inappam, assignor to The
Macbeth, Dridington, Limited, Regents Park, Loudon, England. Machine for making pneumatic-tire covers and casings. 1,613,519; Jan. 4.

Macbeth, Colin, Four Oaks, and W. J. Dexter, Erdington, Birmingham, England, assignors to Dunlon Tire
and Rubber Corporation of America, Buffalo. N. Y.
Freparing rubber-coated fabrics. 1,617,340; Feb. 15.
J. assignor, Glass Company. (See Baumann, Christy
J. assignor.)

assignor.)
Macbeth-Evans Glass Company. (See Worcester, Evan R.,

assignor.)

assignor.)

Macbeth, George D., Pittsburgh, Pa. Automobile headlight lens. Des. 72,066; Feb. 22.

MacBride, James A., Kearny, and A. E. Peyser, Perth

Amboy, N. J. Machine for squeegeeing, mounting, and
drying photographic prints. 1,640,131; Aug. 23.

MacCallum Decorative Corporation. (See Goldman, M.

S., and Huttig, assignors.)

MacCammond-Alexander Corporation. (See Boyle, Ed
ward, assignor).

macchammond-Alexander Corporation. (See Boyle, Ed-ward, assignor.) Macchiarella, Joseph, Paterson, N. J. Shuttle guard for looms. 1,636,377; July 19. MacClatchie, John W. (See Erwin, W. C., and Sweet, assignors.)

Aucticatenie, John W. (See Erwin, W. C., and Sweet, assignors, John W., Compton, Calif. Pipe stopper. 1,616,978; Feb. S., Compton, Calif. Deep-well-pump-MacClatchie, John W., Compton, Calif. Deep-well-pump-MacClatchie, John W., Compton, Calif. Well-drilling apparatus. 1,633,945; June 28.

MacCordy, Charles A., Albany, assignor to MacCordy Master-Check Corporation, Syracuse, N. Y. Protecting checks. 1,622,329; Mar. 29.

MacCordy Master-Check Corporation. (See MacCordy, Charles A., assignor), MacCormac, Rockwell M., Kansas City, Mo. Garment MacCondid. App. 35. Great Neck, N. Y., assignor, by mesne assignments, to Spicer Manufacturing Corporation, South Plainfield, N. J. Flexible torque-transmitting member. 1,647,114; Oct, 25.

MacDonald, Arthur E., London, England. Spark plus. 1,647,099; Oct. 25.

1.647,099; Oct. 29.

MacDonald, Charles D., Fullerton, Calif. Convertible bed and trunk. 1.619,393; Mar. 1.

1.640,416; Aug. 30.

MacDonald, Frank J., Akron, Ohlo, assignor to The B. F. Goodrich Company, New York, N. Y. Method and apparatus for cutting blanks from sheet material. 1,616,732; Feb. 8.

1,616,732; Feb. 8.

MacDonald, Frank J., Akron, Ohio, assignor to The B. F.
Goodrich Company, New Xork, N. Y. Method of and
apparatus for making and applying markers for rubber
MacDonald, Frank J., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Apparatus for
making rubber footwear. 1,629,920; May 24.

MacDonald, Frederick D., Milwaukee, Wis. Floral support. 1,629,112; May 17.

MacDonald, Hugh. (See MacDonald, William and H.)
MacDonald, Hugh. (See MacDonald, William and H.)

MacDonald, James M. East Orange, N. J. Conteiner
MacDonald, James M. East Orange, N. J. Conteiner

MacDonald, James M., East Orange, N. J. Container, 1,516,596; Feb. 8. MacDonald, James M., East Orange, N. J. Container, 1,628,793; May 17. Macdonald-Jensen Manufacturing Co. (See Lundius, Eric

R., assignor.)

MacDonald, Joel W., Little Rock, Ark., assigner to W. L. Rucker. Los Angeles, Calif. Process and apparatus for manufacturing amorphous carbon, etc. 1,626,418;

Apr. 26.

MacDonald, John O., Dundas, Ontario, Canada, assignor to Niles-Bement-Pond Company, New York, N. Y. Turt tool post for car-wheel lathes. 1,650,718; Nov. 29.

MacDonald, John W., administrator. (See Scott, Annie A. E. H., P. R., and E. M.)

MacDonald, Kenneth, fr., Los Angeles, Calif. Garage clevator. 1,639,230; Aug. 16.

Thompson Large S., and J. E. Small, assignors to Thompson Large S., and J. E. Small, assignors to July 12.

MacDonald. Proc. Shoc Co., Brockton, Mass. 1,635,852; July 12.

July 12.

MacDonald, Lawrence C., Alamosa, Colo. Corner plate.
1,622,656; Mar. 29.

Macdonald, Lester S., Beverly, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. Finishing machine. 1,644,931; Oct. 11.

MacDonald, Margaret B., assignor to University of
Tennessee, Knoxville, Tenn. Removal of undesirable
foreign flavors and odors from milk, cream, and other
milk products. 1,644,842; Oct. 181, N. Y. Shield for
the protection of valuables during transfer. 1,647,572;
Nov. 1.

MacDonald, William, and H., Inverness, Scotland. Waving of hair. i,630,396; May 31.

MacDonald, William W. (See Reach, M. B., and MacDonald, William W. (See Reach, M. B., and Mac-

Donald.)

MacDougald, Snow F., Isle Maligne, Quebec, Canada. Sand valve for locomotives. 1,622,657; Mar. 29.

MacDougald, Alexander, Baker, Orec. Adjustable supporting means for display containers. 1,616,980; Feb. 8.

MacDougall, Alexander, Baker, Orec. Display container. 1,641,283; Sept. 6.

MacDougall, Charles B., Seattle, Wash. Lighting bowl.

MacDougall, Harold, Maplewood, N. J. Nall buffer. 1,643,164; Sept. 20.

MacDougall, Harold, Maplewood, N. J., Nall buffer. 1,643,164; Sept. 20.

MacDougall, Harry W., East Orange, N. J., assignor to W. G. Kendall, Newark, N. J., Vanity case. 1,616,381; Feb. 1.

MacDougall, Harry W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, Switches. 1,617,405; Feb. 15.

MacDow, John W., Newark, N. J. Loud speaker. Des. 72,559; May 3.

MacDowell, Francis M., Fanwood, N. J., assignor to

72,559; May 3.

MacDowell, Francis M., Fanwood, N. J., assignor to Fower Specialty Company, New York, N. Y. Superheater boiler. 1,627,918; May 10.

MacDowell, John A., St. Louis, Mo. Baffle wall tool. 1,616,458; Feb. 8.

MacDowell, John A., St. Louis, Mo. Tool for placing clearance wrappers on boiler tubes. 1,643,922; Sent. 20.

MacEwen, Stuart R., Toronto, Ontario, Canada. Preparation of solutions of derivatives of dioxydaminoarseno-to-benzen 1,618,184,184.

MacParlant. 1,626,946; May 3.

MacParlant Company, Philadelphia, Pa. Radio system. 1,639,042; Aug. 16.

MacParland, Allis M., Wilkinsburg, Pa., assignor to West-MacParland, Allis M., Wilkinsburg, Pa., assignor to West-

1,639,032; Aug. 10.

MacFarland, Allis M., Wilkinsburg, Pa., assignor to WestInghouse Electric & Manufacturing Company. Surporting electrical conductors. 1,664,338; Dec. 27.

MacFarland, John B., Vancouver, Editish Columbia,
Canada Aeroplane. 1,654,005; Dec. 27.

MacFarlane, George E., Wilkes-Barre, Pa. Lubricating,
and projecting means for spinning mechanisms.

Macfarlane, Reginald. (See Weinaug, E., and Macfarlane).

signor.)

MacGlashan, Lee J., Motley, Minn. Ignition switch and
safety device. 1.614,376; Jan. 11.

MacGregor, James B., Kaansa City, Mo. Apparatus for
permanently waving or curling hair. 1,617,260; Feb. 8.

MacGregor, Peter G., Pequannock, N. J., assignor to Pyrene Manufacturing Company. Newark, N. J. Fire extinguisher. 1.628,255; May 10.

MacGregor, Peter G., Pequannock, N. J., assignor to
fyrene Matter G., 180,3555; July 12.

MacGregor, Peter G., Pequannock, assignor to Pyrene
Manufacturing Company, Newark, N. J. Fire extinguisher. 1,653,865; Dec. 27.

MacGregor, Wallace F., assignor to J. I. Case Threshing Machine Company, Racine, Wis. Combination harvester Mansher. 15:15:334; Jun. 25.

MacMacGregor, Wallace F., assignor to J. I. Case Threshing Machine Company, Racine, Wis. Combination harvester thrasher. 1.627,535; May 3.

MacGregor, Wallace F., Racine, Wis., assignor to J. I. Case Threshing Machine Company, Racine, Wis. Combination harvester thrasher. 1.632,746; June 14.

Mach, Charles J., Millin Township, Allegheny County, Ta. Morting-target game. 1.640,54; Aug. 30.

Machary, Frank, South Greensburg, Pa. Locking mechanism for sliding car doors. 1,628,167; May 10.

Machin, Frank R., London, England. Variable electric Machin, John S., Raveliff, London, assignor to Batger & Company, Limited, London, England. Toy bomb. 1,650,762; Nov. 29.

Machiet, Kaymond R., New York, N. Y. Manufacture of business selectrical discharge tubes. 1,618,767; Machiett, Raymond R., New York, N. Y. Manufacture of business selectrical discharge tubes. 1,618,767; Machiett, Raymond R., assignor to Rainbow Light, Inc.

Machlett, Raymond R., New York, N. Y. Manufacture of huminous electrical discharge tubes. J.618,767; Fib. 22.

New York, N. Y. Neon tube. J.628,269; May 10.

Machon, Rene A., West Hazleton, Pn. Heddle for jacquard weaving. 1,648,139; Nov. 8.

Machowicz, Helen, Brooklyn, N. Y. Support for window shades and curtains. 1,649,717; Nov. 15.

Machris, Victor A. (See Reyer, John A., See Standard Corporation of America. 1,621,4482; Jan. 18.

Machode, John F., Philadelphia, Pa. Pressure lubricator. 1,634,109; June 28.

Machode, John F., Philadelphia, Pa. Pressure lubricator. 1,634,109; June 28.

Machode, John F., Philadelphia, Pa. Pressure lubricator. 1,634,109; June 28.

Machode, John F., Philadelphia, Pa. Pressure lubricator. 1,634,109; June 28.

Machode, John F., Philadelphia, Pa. Pressure lubricator. 1,634,109; June 28.

Machode, John F., Philadelphia, Pa. Pressure lubricator. 1,634,109; June 28.

Machode, John F., Philadelphia, Pa. Pressure lubricator. Machiosh, Charles A., Spencerport, N. Y. Implement for removing covers or closures. 1,636,504; Dec. 20,248; App. 5.

Mack, Joseph H., Passaic, N. J., assignor to M. Lowenser, John J. J., New York, N. Y. Printed fabricators and the seed of the philadelphia, Pa. Pressure lubricators and the seed of the philadelphia, Pa. Pressure lubricators and philadelphia, Pa. Pressure lubricators and philadelphia, Pa. Pressure lubricators, July 19.

Mack, Perry E., assignor, by mesne assignments, to Briggs & Stratton Corporation, Milwavakee, Wis. Gasmack, Richard, Berlin-Tempelhof, Germany, 1,636,676; July 19.

Mack, William H. (See Knapp, Charles P., assignor, Mack, William H. (See Knapp, Charles P., assignor, N. A., assignors to General Electric Company, Electron-discharge device and operating the same, 1,648,648; Nov. 8.

Nov. 8.
Mackay, Henry S., London, England. Roasting metallic ores. 1,647.050; Oct. 25.
MacKay, John, Audubon, N. J., assignor to Thomas Savill's Sons, Philadlephia, Pa. Faucet. 1,653,639; ores. 1,647,050; Oct. 25.

MacKay, John, Audubon, N. J., assignor to Thomas Savill's Sons, Philadlephia, Pa. Faucet. 1,653,639; Dec. 27.

MacKay, John F., Lancaster, Pa. Egg tray for incubators. 1,632,239; June 14.

MacKay, John F., Lancaster, Pa. Egg tray for incubators. 1,648,186; Nov. 8.

1,648,186; Nov. 8.

1,633,119; June 21.

MacKay, Philip A., assignor to National Metal and Chemidakay.

A. D. S. J. 19 (1982) A. Assignor to National Metal and Chemi-cal Bank Limited, London, England. Production of titanium oxide. 1.613.234; Jan. 4. MacKaye, Henry D. (See Melkle, G. S., and MacKaye.) Mackenzie, Aleck. (See Dent, L. M. E., Mackenzie, and White.)

sie. Alexander S., assignor to Clayton Gin Com-Company, Houston, Tex. Fastener. 1,617,818:

Press Company, Houston, Tex. Fastener. 1,617,818; Feb. 15.

MacKenzie, Donald, East Orange, N. J., assignor to Western Efectric Company, Incorporated, New York, N. T.

Telephone-exchange system. 1,650,763; Nov. 29.

Mackenzie, Fred L. (See Goddu, C., and Entertail).

Mackenzie, Fred L. (See Goddu, C., and Entertail).

Mackenzie, Fred L. (See Goddu, C., and J. Making siness and innersole therefor. 1,638,946; Aug. 16.

Mackenzie, Fred L., Beverly, and G. Goddu, Winchester, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Fastening-inserting machine. 1,655,640; Dec. 27.

MacKenzie, Frederick J., Trenton, N. J. Hydraulie brake mechanism. 1,620,115; Mar. S.

MacKenzie, George W. (See Woodruff, F., and MacKenzie, George W. (See Woodruff, F., and MacKenzie,

Kenzie.)
MacKenzie, George W., Beaver, Pa. Llquid-dispensing apparatus.
1.613,711; Jan. 11.
MacKenzie. George W., Beaver, assignor to Correct Measure Company. Rochester, Pa. Llquid-dispensing apparatus. 1,617,631; Feb. 15.

MacKenzie, George W., Beaver, assignor to Correct Measure Company, Rochester, Pa. Liquid-measuring tank. 1,641,541; June 7.

MacKenzie, George W., Beaver, Pa., assignor to Correct Measures. 2537 June 7.

Mackenzie, George W., Beaver, Pa. Liquid-dispensing Measures. 1,837,620 Control Pa. Liquid-dispensing Measures. 1,837,620 Control Pa. Liquid-dispensing Measures. 1,837,620 Measures. 1,837,620 Measures. 1,837,620; Aug. 2.

Mackenzie, Fhilip, San Francisco, Calif. Grease gun. Mackenzie, Philip, San Francisco, Calif. Clutch mechanism for a constant-mesh gear transmission. 1,638,590; Aug. 9.

nism for a constant-mesn gent and a larger a

Mackie-Lovejoy Manufacturing Co. (See Walker, William

Macki-Lovejoy Manutacut.mg.

H. assignor.)
Mackie, Peter H., Clinton, Wash. Automatic rotary pulverizing cultivator. 1,641.393; Sept. 6.
MacKinnon, John R., Boston, Mass. Saliva ejector. 1,620,773; Mar. 15.
Mackinnon, Neil G., Los Angeles, Calif. Combined table and camp kit. 1,646.922; Oct. 25.
Mackintosh, John, and Sons, Limited. (See Bradwell,

and camp kit. 1,646,922; Oct. 25.
Mackintosh, John, and Sons, Limited. (See Bradwell, Harry, assignor.)
Mackintosh, William B. (See Anthony, W. C., and Mackintosh, William B.

Harry, assignor.)

Mackintosh, William B. (See Anthony, W. C., and MackMackinesh, William B. (See Anthony, W. C., and MackMacLaren Electric Appliance Corporation, The. (See
MacLaren, Frederick B., Jamaica, assignor to The MacLaren Electric Appliance Corporation, New York, N. Y.

MacLaren, Frederick B., Jamaica, assignor to The MacLaren Electric Appliance Corporation, New York, N. Y.

MacLachlan, William F., Chicago, Ill. Antithumb-sucking device 1,652,567; Dec. 13.

Mackley, Alfred H. (See Curtis, A. H., Wright, and
Mackley, See. W., Antita, Iowa. Osteopathic operating
Macklin, 1526,091; Apr. 26.

Macklin, Justin W. Lakewood, assignor to The American
Multigraph Company, Cleveland, Ohlo. Printing-strip
mounting. 1,649,060; Nov. 15.

MacLachlan, Kellogg S., St. Catharines, Ontario, assignor
to Lincoln Full and Paper Company, Limited, Merrit
On Lincoln Full and Paper Company, Limited, Merrit
MacLagan, Hector P., assignor to McIntosh Electrical
Corporation, Chicago, Ill. Foot switch. 1,625,481;
Apr. 19. Mred A. Peston Mass Apparating for forme.

MacLaren, 1, 200 P. P. assignor to McIntosh Electrical Corporation, Chicago, Ill. Foot switch. 1,625,481; Apr. 19.

MacLaren, Alfred A., Boston, Mass. Apparatus for forming articles from sheets of material. 1,619,210; Mar. 1.

MacLaren, Fred B. (See Braselton, C. H., and MacLaren, 1)

MacLaren, Fred B. (See Braselton, C. H., and MacLaren, 1)

MacLaren, James G., assignor to The Lamson Company. Preumatic-dispatch carrier. 1,613,471; Jan. 4.

Maclaren, James G., assignor to The Lamson Company. Syracuse, N. Y. Carrier-distributing apparatus. 1,618,365; Jan. 4.

MacLaren, James G., assignor to The Lamson Company. Preumatic-dispatch-tube apparatus. 1,618,990; Feb. 1.

MacLaren, James G., assignor to The Lamson Company, Syracuse, N. Y. Power-control apparatus for pneumatic-despatch systems. 1,625,993; Apr. 2,000.

MacLaren, James G., assignor to The Lamson Company, Syracuse, N. Y. Power-control apparatus for pneumatic-despatch systems. 1,625,993; Apr. 2,000.

MacLaren, James G., assignor to The Lamson Company, Syracuse, N. Y. Power-controller, 1,637,414; July 26.

MacLaren, James G., assignor to The Lamson Company, Syracuse, N. Y. Power-controller, 1,637,6414; July 26.

MacLaren, James G., assignor to The Lamson Company, Syracuse, N. Y. Power-controller, 1,637,6414; July 26.

MacLaren, James G., assignor to The Lamson Company, Syracuse, N. Y. Power-controller, 1,638,6414; July 26.

MacLaren, John, M. (See Engendabl, H. L., and MacLean, Doughas, J. West Hill, Ontario, Canada, Auto-Lean, John, Pueblo, Colo. Loose-leaf binder.

MacMillan, Campbell, Schenectady, N. Y., assignor to General Electric Company. Alternating-current com-mutator machines. 1,622,596; Mar. 29. MacMillan, Harry, Philadelphia, Pa. Tank lever. mutator machines, Avenue MacMillan, Harry, Philadelphia, Pa. Tank 1. (1.21.122); Mar. 15. MacMillan, Harry, Philadelphia, Pa. Lavatory fixture. 1.642.256; Sept. 13. MacMullen, William, fr. (See McDonald, I. P., and MacMullen, William, fr. (See McDonald, I. P., and

MacMillan, Batry, Philadelphia, Pa. Lavatory fixture.
1,642,256; Sept. 13.
MacMillen, William, fr. (See McDonald, I. P., and
MacMillen, William, fr. (See McDonald, I. P., and
MacMillen, William, fr. (See McDonald, I. P., and
MacMillen, Robert B., Niagara Falls, assignor to The
Mathleson Alkail Works, New York, N. Y. Manufacture
MacMillin, Robert B., Niagara Falls, assignor to The
Mathleson Alkail Works, New York, N. Y. Manufacture of hypochlorites 1,632,484; June 14.
MacMillin, Robert B., Niagara Falls, assignor to The
Mathleson Alkail Works, New York, N. Y. Manufacture of hypochlorites 1,632,484; June 14.
MacMillin, Robert B., Niagara Falls, assignor to The
Mathleson Alkail Works, New York, N. Y. Manufacture of hypochlorites 1,632,484; June 14.
MacMillin, Robert B., Niagara Falls, assignor to The
Mathleson Alkail Works, New York, N. Y. ManufacFalls, assignors to The Mathleson Alkail Works, Inc.,
New York, N. Y. Manufacture of alcohols. 1,641,544;
Sept. 6.
MacMurch, John A.: Riddey Park, Pa., assignor to Westinghouse Electric 4,635,285; Oct. 11.
MacNail, John B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Throttachment for shotguns. 1,612,877; Jan. 4.
MacNellil, John B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. ThrotHing device. 1,645,285; Oct. 11.
MacNicl, Elmo P., Memphis, Tenn. Illuminated sign.
1,643,506; Sept. 27.
MacNutt, Barry, Gloucester, Mass. Recording scale.
1,629,221: May 17.
MacOmber, Herbert H., assignor to Flint & Walling Mfg.
MacOmber, Herbert H., assignor to Flint & Walling Mfg.
Co., Kendallville, Ind. Pumping installation.
1,649,171: Nov. 15.
Macomber, Stanley, Massillon, Ohlo. Structural unit.
1,661,663; Feb. 8.
Macomber, Stanley, Massillon, Ohlo. Structural unit.
1,661,062; Nov. 29.
Macomber, Stanley, Massillon, ossignor to The Macomber,
Stanley, Massillon, Ohlo. Structural unit.
1,651,062; Nov. 29.
Macomber, Stanley, Massillon, assignor to The Macomber,
Stanley, Massillon, Stanley of Macomber, Stanley, M

Macomber Steel Company, The. (See Macomber, Stanley, assignor.), Macon, Cyrene M., Dallas, Tex. Dishwasher. 1,631,045; Macon, Theodore K., and J. A. Pozera, Zeigler, Ill. Cigar-tip cutter and cigar box. 1,627,799; May 10. MacPherson, Earle S., assignor to Hupp Motor Car Corporation, Detroit, Mich. Poppet valve. 1,616,538; Feb. 8.

Feb. 8.

MacPherson, Earle S., assignor to Hupp Motor Car Corporation, Detroit, Mich. Pump. 1,639,779: Aug. 23.

MacPherson, John H., McKeesport, Pa. Vehicle lamp. 1,641,041; Aug. 30.

MacPherson, John L., Glasgow, Scotland, and B. N. Sorensen, New York, N. Y. Electric valve-operating gear. 1,618,937; Feb. 22.

MacPherson, Thomas G., et al. (See Kaser, Walter I., assignor).

MacQuarric Archibald E., Minneapolis, Minn. Educa-MacRae, Duncan, East Orange, N. J., assignor to Westinghouse Lamp Company. Incandescent electric lamp. 1,624,109; Apr. 15.

MacRae, Duncan, East Orange, and H. K. Richardson, Newark, N. J., assignors to Westinghouse Lamp Company. Getter and the application thereof. 1,623,351; Apr. 5.

Apr. 9.

MacReady, George A., Bakersfield, Calif. Making production tests in well drilling. Re16,563; Mar. 1.

MacVey, Gertrude, N. Y. Cigarette box. 1,619,622;

Mar. 1.

Mar.

MacVlear, James L., Newport News, Va. Aircraft design. 1,627,856; May 10.
Macy, Alfred J., assignor to Macy Art Process Corporation, Chicago, Ill. Advertising display. 1,614,748; Jan. 18.

Macy, Alfred J., assignor, by mesne assignments, to The Pro-Tex Corporation, Chicago, III. Automatic releas-ing mechanism for locks. 1,827,189; May 3. Macy Art Process Corporation. (See Macy, Alfred J., assignor.)

assignor.)
Macy. Frank, Converse, Ind. Packing. 1,627,791;
May 10.
May 10.
Macy. Frank, Converse, Ind. Serving dish. 1,650,457;
Nov. 22.
Macy. Frederick S., Brooklyn, N. Y. Antidiabetic substance. 1,626,044; Apr. 25.
Macy. R. H., & Co. (See Timpson, Thomas W., assignor.)

Madala Anthony S. (See Williamson, Russell B., as-

Madala, Anthony S. (See Williamson, Russell B., assignor.)

Milliams. Incorporated. New York, N. Y. Safety
device for knitting machines. 1,639,522; Aug. 16.

Madden, Bernard J., Duluth, Minn. Box for pouring
steel ingots. 1,633,992; June 28.

Madden, Charles A., Brookiyn, N. Y. Game apparatus.
1,619,270; Feb. 1.

Madden, Charles A., Brookiyn, N. Y. Game apparatus.
1,619,270; Feb. 1.

Madden, Harry D., Newark, N. J., assignor to Westinghouse Lamp Company. Method and machine for electric welding. 1,613,937; Jan. 11.

Madden, Harry D., Newark, N. J., assignor to Westinghouse Lamp Company. Machine for deforming glass
articles. 1,626,638; May 3.

Madden, Harry D., Newark, N. J., assignor to Westinghouse Lamp Company. Actionatic soldering machine
for lamp bases. 1,631,399; Dec. 6.

Madden, Harry D., Newark, and J. J. Higgins, East
Orange, N. J., assignors to Westinghouse Lamp Company.

Automatic cut-tube-sorting machine. 1,623,352;
Apr. 5.

pany. Apr. 5.

Modden, Harry D., Newark, and J. J. Higgins, East Orange, N. J., assignors to Westinghouse Lamp Com-pany. Glass-rod-cutting machine. 1,026,851; May 3. Modden, Harry D., Newark, and J. J. Higgins, East Orange, N. J., assignors to Westinghouse Lamp Com-pany. Tipping torch for exhaust machines. 1,047,644;

Orange Tipping torch for example of the pany. Tipping torch for example of the Nov. 1, James P., Bethlehem, Pa. Eutralnment gearing. 1,633,185; June 21.
Madden, John, Detroit, Mich. Lock nut. 1,627,745;
Madden, John, Detroit, Mich. Lock nut. 1,627,745; Madden, May 10

adden, Timothy, Egg Harbor, Wis. Harrow. 1,646,549;

Oct. 25.

Madden, Willie A., Palacios, Tex. Piston-ring tool. 1,645,200; Oct. 11.

Madder, Harold E., Sharon, Pa., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Shock-absorbing mechanism. 1,443,053; Sept. 20.

Maddox, John W., Marion, Md. Agricultural machine.

Ohio. Shock-absorbing mechanism. 1,643,053; Sept. 20.
Maddox, John W., Marion, Md. Agricultural machine. 1,643,625; Sept. 27.
Maddox, Notiey, Los Angeles, Calif. Adjustable sawing machine. 1,620,370; Mar. 8.
Maddox, Notiey, Los Angeles, Calif. Adjustable borling Minderell. 1,620,371 Mineapolis, Minn. Heat-generating apparatus. 1,616,271; Feb. 1.
Mader, David C., St. Louis, Mo. Game apparatus. 1,622,330; Mar. 29.
Mader, Joseph, assignor, by mesne assignments, to New Heeman Tractor Company, Minneapolis, Minn. Traction-machine hitch for seeders. 1,635,821; June 28.
Mader, Graniche Hitch for seeders. 1,635,821; June 28.
Mader, Otto. assignor to H. Junkers, Dessau, Germany. Scavenging pump of internal-combustion engines. 1,629,878; May 24.
Madeg, Francis D., Sound Beach, Conn. Spring cover. 1,625,861; Apr. 5.
Madison, John H., assignor of one-half to R. Frick, Burliggor, Towa. Brake shoe. 1,644,598; Oct. 4.
Madison, John H., assignor of one-half to R. Frick, Burliggor, Towa. Brake shoe. 1,644,598; Oct. 4.
Madison, John Killing, Corporation. (See Coles, Wilfred G., assignor.)

Madison-Kipp Corporation. (See Korsmo, Torbjorn C.,

Madison-Kipp Corporation. (See Korsmo, Torbjorn C., assignor.)
Madison Silo Company. (See Woody, Clyde C., assignor.)
Madison Tool and Stamping Works. (See Kelley, Victor H., assignor.)
Madiand, Gabriel, and W. W. Darrow, assignors to Camel Company, Chicago, III. Door operating and sealing mechanism. 1,654,180; Dec. 27. Gathmys Research Corporative Company, Chicago, III. See Madiorsky, Saudu L., assignor Gathmys Research Corporative Corporation of pure Chicago, 181, 283; Seot. Gathmys Research Corporation of pure Chicago, 181, 283; Seot. Gathmys Research Corporation Corporati

fell.)

Madsen, Fred T., Maywood, Ill., assignor, by mesue assignments, to Automatic Electric Inc., Chicago, Ill.
Telephone system, 1,629-516; May 24.
Madsen, Fred T., Forest Park, assignor, by mesue assignments, to Automatic Electric Inc., Chicago, Ill.
1,640,085; Aug. 23.
Madsen, Fred T., Forest Park, assignor, by mesue assignments, to Automatic Electric Inc., Chicago, Ill.
signments, to Automatic Electric Inc., Chicago, Ill.
Madsen, Gustav N., assignor of one-third to C. R. Lindh and one-third to E. B. Gustafson, Minneapolis, Minn.
Electric water heater, 1,620,117; Mar. 8.
Madsen, Gustav N., Minneapolis, Minn.
Local Electric Water heater, 1,620,117; Mar. 8.
Madsen, Gustav N., Minneapolis, Minn.
Madsen, Gustav N., Minneapolis, Minn.
Madsen, Gustav N., Minneapolis, Minn.
Madsen, Mads H., Kimballton, Iowa, Hay-handling apMadsen, Mads H., Kimballton, Iowa, Hay-handling ap-

Madsen, Martin, Monterey Park, Calif. Sucker-red clamp. 1,617,532; Feb. 15.

Madsen, Martin, Monterey Park, Calif. Sucker-red clamp. 1,617,532; Feb. 15.

Madsen, Martin, Monterey Park, Calif. Apparatus for sizing paring material, 1,617,919; Feb. 15.

Madsen, Norman, Michigan City, Ind., assignor to Sullivan Machinery Company. Drilling apparatus. 1.627.291: May 3.

Matten, Company. Drilling apparatus, van Machinery Company. Drilling apparatus, van Machinery Company. Drilling apparatus, and the companies, Incorporated, Clinton, Iowa. Feeding machine. 1,622,836; Mar. 29. Madsen, Sern, assignor to Curtis Companies, Inc., Clinton, Iowa. Veoleman, Clinton, Iowa. Veoleman, Clinton, Iowa. Veoleman, Clinton, Iowa. Veoleman, Clinton, Chenton, Chent

Machen, Schy, assignment of Continues, 2010.

Madson, Ernest C. (See Andersen, F. C., Madson, and Chapman, Madson, Henry, Pelican Rapids, Minn. Power potato grader. 1617,645; Feb. 15.

Madson, Henry, Pelican Rapids, Minn. Power potato grader. 1617,645; Feb. 15.

Machier, Marchan, M

Magazine Repeating Razor Company. (See Schick, Jacob, assignor.)

Magee, Charles L., Washington, D. C. Lubricant-filling device. 1,650,021; Nov. 22.

Magee, Charles L., Washington, D. C. Lubricant-filling device. 1,650,021; Nov. 22.

Magee, Drine C. C., Chicago, III. Furnace grate. 1,651,131 pp. 20.

Magee, Drinest M., Providence, R. I. Textile fabric or similar article of manufacture. Des. 72,626; May 10.

Magee, Drine M., Providence, R. I. Textile fabric or similar article of manufacture. Des. 72,626; May 10.

Magee, William H., assignor to Fostoria Glass Company. Moundsylle, W. Va. Comfort. Des. 72,862; June 14.

Magee, William H., assignor to Fostoria Glass Company. Moundsylle, W. Va. Comfort. Des. 72,862; June 14.

Magee, William H., assignor to Fostoria Glass Company. Moundsylle, W. Va. Comfort. Des. 72,862; June 14.

Maggio, Frank, Philadelphia, Pa. Radiocabinet. Des. Maggio, Salvorce, Pittsburgh, Pa. Trolley harp and contact device. 1,642,257; Sept. 13.

Maggiore, Luigi, Sassari, Italy, assignor to the Firm: Carl Zeiss, Jena, Germany. Device for determining the field of vision. 1,618,291; Feb. 22.

Maggli, Charles E., assignor to The Aluminum Company of America, Cleveland, Ohlo. Mold Tor casting metals.

signor.)
Magino, James J. (See Emery, I. S., and Magina,)
Magino, James J. (See Emery, I. S., and Magina,)
Maginois, Michael F., Philadelphia, Pa. Artificial fuel
and miking same. 1,615.463; Jan. 25.
Maginnis, William J., assignor to Royal Electrotype Company, Philadelphia, Pa. Incorporating engraved plates
with electros in a solid plate. 1,643.390; Sept. 27.
Magiri, P. H., Foundry and Furnace Works. (See Latts,
William H., assignor.)
Magirans, C. D., Aktiengesellschaft. (See Mattes, Hermann, assignor.)
Magirus, C. D., A.-G. (See Mayer, Fritz, assignor.)
Magirus, C. D., A.-G. (See Mayer, Fritz, assignor.)
Magirus, C. D., A.-G. (See Mayer, Fritz, assignor.)
Magirahin, Horace B., Klngston, Mass. Cranberry-barvesting apparatus. 1,629,831; May 24.
Magilano, Thomas. River Forest, Ill. Coffee maker.
1,638,013; Aug. 9.

Magnano Corporation. (See Magnano, Sebastiano, as-Magnano Corporation, signor: 5 Magnano Corporation, signori, Schustiano, assignor: 6 Magnano Corporation, Magnano Cosposition, assignor for Magnano Corporation, Lawrence, Mass. Strand-manipulating device, 1,650,287; Nov. 22.

Magnano Company, The. (See Lougheed, Victor, as.

Magnavox Company, The. (See Metcalf, Herbert E., assignor.)
Magnavox Company, The. (See Pridham, E. S., and Jensen, assignors.)
Magnavox Company, The. (See Schoenfeld, Joseph, as-

Magnavox Company, The. (See Summers, Frank E., as-

signor.) Magnet-Werk G. m. b. H. Eisenach Spezialfabrik für Elektromagnet-Apparate. (See Bing, Julius, assignor.) Magnet-Werk G. m. b. H. Eisenach Spezialfabrik für Elektromagnet Apparate. (See Philipp, Richard, as-

signor.) Magnetic Manufacturing Co. (See Bethke, John P., as-

signor.)

signor

Magnus Elmer G. and H. C. Dosch, assignor; to Indi-widualizing Company of Illinois, Chicago, Ill. Slug holder, 1,627,398; May 3. Magnus Fruit Products Co. (See Leibing, William E., assignor). Magnussen, Erik, assignor to Gorham Mfg. Co., Provi-dence, R. E. Covered dish. Des. 72,776; May 31. dence, R. I. Loving cup. Des. 72,868; June 14. Magnussen, Erik, assignor to Gorham Mfg. Co., Provi-dence, R. I. Loving cup. Des. 73,003; July 5. Magnussen, Erik, assignor to Gorham Mfg. Co., Provi-dence, R. I. Table centerpiece. Des. 73,093; July 19. Magnussen, John A., Tacoma, Wash. Locomotive main-dence, R. I. Table centerpiece. Des. 73,093; July 19. Magnussen, John A., Tacoma, Wash. Locomotive main-ular cellulose. 1,625,549; May 10. Magon Car Corporation. (See Magor, Robert J., as-signor).

Augor Car Corporation. (see augor, Robert J., as-Man, Robert J. (See Cartzdafner, Roy E., assignor.) Magor, Robert J., Montreal, Quebec, Canada, assignor to Magor Car Corporation, New York, N. Y. Combined draft-hook bar and step for freight cars. 1,613,180; Jan. 4.

Grant-Book and and step for freight cars. 1,015,100; Magor Car Corporation, New York, N. Y. Partition end for freight cars. 1,627,989; May 10.

Magor, Robert J., Montreal, Quebec, Canada, assignor to Magor Car Corporation, New York, N. Y. Corner post for freight cars. 1,027,981; May 10.

Magor, Robert J., Montreal, Cuebec, Canada, assignor to Magor, Robert J., Montreal, Cuebec, Canada, assignor to care car. 1,640,785; Aug. 30,000; N. Y. Partitioniess cane car. 1,620,785; Aug. 30,000; N. Y. Partitioniess care care care climates de Lafarge et du Teil, Le Viviers (Ardeche, France, Treatment of slags by fuids under description of the care of th

Mař. 29.
Maher, Joseph A., Stockton, Ill. Rail-repairing device.
1,620,906; Mar. 15.
Maher, William J., Woonsocket, R. I. Presser member for flyer machines.
1,621,848; Mar. 22.
Mar. 22.
Maler, Brust, Neenah, and H. A. Rothchild, Appleton, assignors to Kimberly-Clark Company, Neenah, Wis. Preparing stuff for paper making.
1,650,062; Nov. 22.
Mahler, John J. New York, and H. D. Webb. Rochester, N. Y., assignors to United Shoe Machinery Corporations.
Manufacture of shoes.
1,640,062; Anufacture of shoes.
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Aug. 30.

Mahlier, Paul, assignor to Darco Sales Corporation, New York, N. Y. Reactivating purifying agents. 1,617,533; Feb. 15.

Mahloy, Charles, Roanoke, Va. Letter scale. 1,641,596; Sept. 6.
Se

Mahon, Thomas C., Vancouver, British Columbia, and J. E. Harrison, Victoria, British Columbia, Canada. Switch I, 1830/109; May 31.

Mahoney, Anna B., Vacaville, Celif. Shoulder strap holder for armyli shields. 1641,004; Aug. 30.

Mahoney, Clarence L., Washington, D. C. Toilet-seat cover. 1,643,413; Sept. 27.

Mahoney, David J., Bayoune, N. J. Marine toilet, 1,650,370; Nov. 22.

Mahoney, Frank D., San Anselmo, Calif. Apparatus for Mahoney, Frank J., Satleoy, Calif. Reversible-draft, individual-bin circulating apparatus. 1,621,594; Mar. 22.

Minory, John P., assigner of one-half to M. J. Donobner, Amsteedam, N. K. Cuttain hanger, 1,554,22; Dec. 27. Mahoney, Miyles, Montreal, Quebec, Canada. Locomotive boiler. 1,629,720; May 24. Mahr, George, jr. (See Eggers, W. M., and Mahr.) Mahr, Hermann W. (See Calcott, W. S., Hitch, and

Mahr, George, It. (See Calcott, W. S., Hitch, and Mahr.)
Mahr., Harnann W. (See Calcott, W. S., Hitch, and Mahr.)
Mahr., Julius A., assignor to Cozy Baby Carriage. Co.,
Minneapolis, Minn. Twin baby carriage. 1,617,215;
Feb. 8.
Mahr Manufacturing Company. (See Anderson, Hilder
A sasignor.)

Minneapolis, Minn. Twin baby carriage. 1,637,215; Feb. Mannafacturing Company. (See Anderson, Hilder A. essignor.)
Maickel, Joseph, Butte, Mont. Demountable-drill-bit grinder. 1,622,933; May 10.
Maider, Martha M., Akron. Ohio. Shoulder-strap fastener. 1,620,372; Mar. St. Gener. 1,620,473; Mar. St. Louis, Mo. Fastening device. 1,620,413; May 17.
Maile. Carrie A., Tulsa, Okla. Apple and pear corer. 1,639,523; Aug. 16.
Mailer, Gener. 1,630,623; Aug. 16.
Mailer, Gener. 1,630,600; May 24.
Mailey, Roy D., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Circuit connecter. 1,638,123; Aug. 3.
Mailer, Gener. 1,630,600; May 24.
Mailey, Roy D., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Circuit connecter. 1,638,123; Aug. 3.
Mar. Gener. 1,630,600; May 24.
Mailey, Roy D., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Circuit connecter. 1,638,123; Aug. 3.
Mar. Gener. 1,630,600; May 24.
Mailey, Roy D., East Orange, Assignor to Maimin, David S., New York, N. Y., assignor to H. Maimin, Company Incorporated. Cloth-cutting machine. 1,646,031; Oct. 18.
Maimin, David S., New York, N. Y., assignor to Maimin Speed Control Corporation. (See Maimin, David S., assignor.)
Maimin, Beed Control Corporation. (See Maimin, Hy-Maimin Eastener.)

William, assignor.)
Maimin Speed Control Corporation. (See Maimin, Hy-

Annual Speed Control Corporation. (See Maimin, Hyman, assignor.)
Main, Frank L., Birmingham, Mich., assignor to General
Motors Corporation. Detroit, Mich. Pneumatic tire.
1,640,844; Aug. 30.
Main, J. F., et al. (See Butterbaugh, Ralph B., assignor).

signor.)
Maine, James. (See Engle, Andrew, assignor.)
Maine, James. (See Engle, Andrew, assignor.)
Maingonnat. Engène, Parls, France. Closing of Jars, bottles, or the like. 1.613.472; Jan. 4.
Mainland, John and S. C. Nyberg, assignors to The Advance-Rumely Company. La Porte, Ind. Feeding device for trasting machines. 1.614.964; Jan. 18.
G., assignor.)
Maise, Herman C., assignor to Briggs Manufacturing Company, Detroit, Mich. Window frame. 1.624.608; Apr. 12.
Maise, Herman C., assignor to Briggs Manufacturing Company, Detroit, Mich. Jiz. 1.1624.609; Apr. 12.

Apr. 12:
Maise, Herman C., assignor to Briggs Manufacturing
Company, Detroit, Mich. Jig. 1.624.609; Apr. 12.
Maise, Herman C., assignor to Briggs Manufacturing
Company, Detroit, Mich. Support for door bumpers.
1.624.600; Apr. 13.
Company, C. assignor to Briggs Manufacturing
Company, Detroit, Mich. Door bumper. 1.627,190;
May 3.

May 3. Maise. Herman

May 2
Mates Herman C. assignor to Briggs Manufacturing
Company, Detroit, Mich. Cowl ventilator. 1,632,796;
June 21.
Maitland, Charles L., Jasper, Ontario. Canada. Elevating and supporting bracket. 1,649,837; Nov. 22.
Maitre, Alcide H., and V. H. G. Martin, Rouen, France,
reation. 1,628,507; May 10.
Maiwurm, Paul, San Diego, Calif. Beverage dispenser.
1,632,468; June 14.
Majestl, Walter, Hoboken, N. J. Reed trimmer.
1,632,604; July 5.
Majestle Company, The. (See Redrup, William D., asagnon.)

Majestic Machine & Tool Co. (See Kasdan, N., and lack, assignors.) tic Manufacturing Company. (See Morley, Guilford

M. S. assistion. Specialties, Inc. (See Kasdan, N., and M. Strieberger Metallic Meta

Distillation of evaporation of municipal plan 18.

Maker, John A., Duluth, Minn. Humidifier. 1,644,787; Oct. 11.

Maki, Elmer G., Virginia, Minn. Piston-ring remover and applier. 1,651,462; Dec. 6.

Makin, John S., Philadelphia, Pa. Automatic humidifier. 1,620,373; Mar. 8.

Makowski, John F., Stockton, Calif., assignor, by mesne assignments, to Fire Froof Wall Company, Reno, Nev. Latting structure for plaster walls. Rei6,831; Dec. 27.

Dec. 27.

Makowski, John F., Stockton, Calif., assignor, by mesne assignments, to Fire Proof Wall Company, Reno, Nev. Mounting lathing structures for plaster walls. 1,619,947; Mar. 8.

Makowski, John F., Stockton, Calif., assignor, by mesne assignments, to Fire Proof Wall Company, Reno, Nev. Wall construction. 1,627,943; May 10.

Makowski, John F., Stockton, Calif., assignor, by mesne assignments, to Fire Froof Wall Company, Reno, Nev. assignments, to Fire Froof Wall Company, Reno, Nev. May 13; Corge, Massilion, Ohio. Bicycle. 1,630,442; May 31.

Many S. J. Mary B., Keene, N. H. Propelling mecha-lism. 1,617,261; Feb. 8.
Malaval, Pierre, and R. P. E. Paquelier, Paris. France. Renovation of worn gun barrels and improvements in gun barrels. 1,635,721; July 12.
Malcher, Otto, Chicago, Ill. Computer. 1,622,916; Malcher, Otto, Chicago, Ill. Computer. 1,622,916;

Malcher, Mar. 29 Malcom, Nov. 22 Robert, Chicago, Ill. Goggles, 1,649,838;

Malcom, Robert, Chicago, Ill. Goggles, 1,649,838;
Nov. 22.

Malcom, Goscoe C., Wichita, Kans. Thermal switch.

Malcolm, Samuel W., Jacksonville, Fla. Electric water
heater. 1,618,101; Feb. 15.

Malcolmson Engineering and Machine Corporation. (See
Komarek, Gustav, assignor.).

Maley, Frank T., and E. A. Doddy, Perth, Western Australia. Australia. Telephone. 1,617,216; Feb. 8.

Maley, Frank T., and E. A. Doddy, Perth, Western Australia. Australia. Telephone. 1,617,216; Feb. 8.

Malke, Sven, Milwaukee, Wils. Radiator. 1,627,914;
May 10.

Malke, Sven, Milwaukee, Wils. Testing and defining machine. 1,628,168; May 10.

Malkin, Advaham, Detroit, Mich. Coin-controlled machine.

Malkin, Bernard A., Lachine, Quebec, Canada. Drive for
paper-making machines. 1,616,382; Feb. 1.

Malkin, Bernard A., Lachine, Quebec, Canada. Driving
mechanism for paper-drying machines. 1,616,383;
Feb. 1.

mechanism for paper-drying machines. 1,616,383; Feb. 1.

Malladar, Herbert J., Watford, England. Manufacture of cellulose acetate. 1,652,573; Dec. 13.

Mallard, Logan L., Norfolk, Va. Clock. Des. 73,387; Aug. 30.

Mallard, Logan L., Norfolk, Va. Toy lighthouse. Mallard, Logan L., Norfolk, Va. Walking top. 1,630,348; May. 31.

Mallard, Logan L., Norfolk, Va. Walking top. 1,630,348; May. 31.

Mallert, Charles S., and W. J. Aldis, Toronto, Ontario, Canada, assignor to General Bicetric Company. Electric key societ. 1,625,415; May. 10.

Mallett, Charles S., and W. J. Aldis, Toronto, Ontario, Canada, assignor to General Bicetric Company. Electric key societ. 1,625,415; May. 10.

Mallett, Charles S., and W. J. Aldis, Toronto, Ontario, Canada, assignor to General Bicetric Company. Electric key societ. 1,625,415; May. 10.

Mallett, Lyle, Los Angeles, Calif. Spring clip. 1,617,070; Feb. 8.

Malligan, Joseph, Point Marion, Pa. Transmission

Refo. S. Joseph. Point Marion, Pa. Transmission Mailian, 1619 883; Mar S. Mailinson, Archibald, Montreal, Quebec, Canada. Feed mechanism in a vegetable-packaging machine. 1.648,336; Nov. 8. Mailinson, H. R., & Co. (See Heinke, Alfred J., as-

Mallinson, H. R., & Co. Inc. (See Heinke, Alfred J.,

· assignor.)
Mallinson, H. R., Co. Inc. (See Podhradsky, Zdenko,

Mallinson. H. R., Co. Inc. (See Podhradsky, Zdenko, assignor.)
Mallon, Charles, New York, N. Y. Window-cleaner's safety device. 1,650,371; Nov. 22.
Mallory, Aaron L., St. Petersburg, Fla. Eyeshade. Mallory, Benjamin F., St. Petersburg, Fla. Smoking-pipe holder. 1,636,378; July 19.
Mallory, Benjamin E., St. Petersburg, Fla. Smoking-pipe holder. 1,636,378; July 19.
Mallory, Edward B., Tenaßy, N. J., and A. Roth, Pitts-Mallory, Edward B., Tenaßy, N. J., and A. Roth, Pitts-May 10.
Mallory, Edward B., Tenaßy, N. J., and A. Roth, Pitts-May 10.
Mallory, Edward B., Tenaßy, N. J., and A. Roth, Pitts-Hurgh, Pla., assignors to Westinghouse Electric & Many-fecturing Company, Radiocabinet. Des. 72,628; May 10.
Mallory, Edward B., Tenaßy, N. J., and A. Roth, Pitts-Hurgh, Pla., assignors to Westinghouse Electric & Many-fecturing Company, Radiocabinet. Des. 72,628; May 10.

Mallory, Edward B., Tenafly, N. J., and A. Roth, Pitts-burgh, Pa., assignors to Westinghouse Electric & Manu-facturing Company. Radiocabinet. Des. 72,629; (See Mallory, Marion,

allory Electric Corporation. assignor.)
Mallory, George P., assignor to Sanitary Products Corporation of America, Philadelphia, Pa. Apparatus for forming articles from paper or similar material.
1.628.257; May 10.

forming articles from paper or similar material. 1.628.257; May 10. Mallory, Harry C., Bellport, N. Y., assignor, by mesue assignments, to American Radiator Company, Chicago, Il. Making expansible collapsible elements. 1,615.591;

Jan. 25.
Mallory, Harry C., Bellport, N. Y., assignor, by mesne
assignments, to American Radiator Company, Chicago,
Ill. Making expansible collapsible elements. 1,617,491;

Feb. 15.

Mallory, Harry C., Bellport, N. Y., assignor, by messe assignments, to American Radiator Company, Chicago.

11. Producing expansible collapsible elements.

Mallory, Br., 196. 16.

Mallory, Br., 196. 16.

Mallory, Marry C., deceased, by S. R. Mallory, administratrix, Bellport, N. Y., Expansible collapsible element.

1,624,348; Apr. 12.

Mallory, Harry C., deceased, by S. R. Mallory, administratrix, Bellport, N. Y.; said Harry C. Mallory assignor, by messa easignments, to American Radiator Company, Chicago, Ill. Expansible collapsible element. 1,630;742;

Mallory, Harry C., deceased, New York, N. Y.; S. B.

Mallory, Harry C., deceased, New York, N. Y.; S. B.

Chicago III. Expansible-collapsible element, 1,639,742;
May 1.

May 2.

May 2.

May 3.

May 3.

May 4.

May 5.

May 5.

May 6.

May 70tk, N. Y.; S. R.

Mallory, administratirk, Valve mechanism for enginecooling systems. 1,641,341; Sept. 6.

Mallory, Harry C., deceased, S. R. Mallory, administratrix, Bellport, N. Y. Thermostatic valve mechanism.
1,644,748; Oct. II.

May 6.

May 7.

May 8.

May 9.

Ma

Mallory, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,167; Mar. 8.

Mallork, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,164; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace tray cover or the like. Des. 72,164; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace tray cover or the like. Des. 72,164; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace tray cover or the like. Des. 72,164; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace tray cover or the like. Des. 72,166; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace tray cover or the like. Des. 72,166; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,167; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,169; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,167; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,174; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,174; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,175; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,175; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,175; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,175; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,175; Mar. 8.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,219; Mar. 15.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,220; Mar. 15.

Mallouk, Salim N., Brooklyn, N. Y. Lace mat or the like. Des. 72,221; Mar. 15.

Mallouk, Salim N., Brooklyn, N. Y. Lace cover or similar article. Des. 72,221; Mar. 15.

Mallouk, Salim N., Brooklyn, N. Y. Lace cover or similar article. Des. 72,221; Mar. 15.

Mallouk, Salim N., Brooklyn, N. Y. Lace cover or similar article. Des. 72,221; Mar. 15.

Mallouk, Salim N., Brooklyn, N. Y. Lace cover or similar article. Des. 72,221; Mar. 15.

Mallouk, Salim N., Brooklyn, N. Y. Lace cover or similar article. Des. 7

Mallouk, Salim N., Brooklyn, N. Y. Lace cover or similar article. Des. 72,232; Mar. 15.
Mallouk, Salim N., Brooklyn, N. Y. Lace cover or similar article. Des. 72,233; Mar. 15.
Mallouk, Salim N., Brooklyn, N. Y. Lace cover or similar article.
Des. 72,235; Mar. 15.
Mallouk, Salim N., Brooklyn, N. Y. Lace scarf or the like. Des. 72,235; Mar. 15.
Mallouk, Salim N., Brooklyn, N. Y. Lace scarf or the like. Des. 72,235; Mar. 15.
Mallouk, Salim N., Brooklyn, N. Y. Lace scarf or the Mike. Des. 72,237; Mar. 12.
Mallouk, Salim N., Brooklyn, N. Y. Lace scarf or the like. Des. 72,270; Mar. 22.
Mallouk, Salim N., Brooklyn, N. Y. Lace scarf or the like. Des. 72,271; Mar. 22.
Mallouk, Salim N., Brooklyn, N. Y. Lace scarf or the like. Des. 72,271; Mar. 22.
Mallouk, Salim N., Brooklyn, N. Y. Lace scarf or the table cover or the like. Des. 73,045; July 12.
Mallouk, Salim N., Brooklyn, N. Y. Embroidered cloth table cover or the like. Des. 73,045; July 12.
Mallouk, John J. (See Fagan, J. T., and Malloy.)
Malloux, William W., San Pedro, Calif. Golf court. 1,262,263 Apr. 13.

1.625,265; Apr. 19. Saa Fedro, Callf. Golf court.
Malluk, Assad M., assignor to Yankee Lock Corporation,
New York, N. Y. Lockable cover for automobile fuel
tanks. 1,624,840; Apr. 12.
Malm, Carl J., assignor to Eastman Kodak Company,
Rochester, N. Y. Making cellulose esters of organic
tric Company, Incorporated, New York, N. Y. Adhesive
compound. 1,654,297; Dec. 27.
Malm. Henry, New York, N. Y. Propeller. 1,634,329;
July 5.
Malm. Henry, New York, N. Y. Propeller. 1,634,329;

Malm, Henry, New York, N. Y. Propeller. 1,634,330; July 5. Malm, John A., Denver, Colo. Reversing oll clutch. Re-16,688; July 5. Malm, John A., Denver, Colo. Oil clutch. 1,622,955; Mar. 20.

Malm, John A., Denver, Colo. Combined oil clutch and hub for wheels. 1,622,956; Mar. 29. Malm, Walter R., San Francisco, Calif. Luggage carrier. 1,624,493; Apr. 12.

1,624,493; Apr. 12.

Malm William, New Orleans, La. Safety device for motion-picture-projecting machines. 1,628,258; May 10.

Maimberg, Carl J., G. Surahammar, and J. G. Holanström, Saltsjo-Storangen, Sweden. Apparatus for determining the percentage of carbon in a specimen of of iron or steel. 1,626,005; Apr. 26.

Malme, Gustave A., Racine, Wis., assignor to E. N. Lodge, Columbus Obio. Mount for photographs and the like. 162,074, Maint., Minn. Car-tilting mechanism. 1,629,721; May 24.

Maimgren, Edward A., Duluth, Minn. Plant service car. 1,632,240; June 14.

Malmogies, Adolph K., South Bellingham, Wash, assignor.

mism. 1.629.721; May 24.

Malmgren Edward A., Duluth, Minn. Plant service car. 1.632.240; June 14.

Malmgren; Edward A., Duluth, Minn. Plant service car. 1.632.240; June 14.

Malmguist, Adolph K., South Bellingham, Wash., assignor. by mesne assignments, to Thermokept Corporation, New York, N. Y. Caming apparatus. 1.643.990; Oct. 4.

Malmattom, Varino W., Bayonne, N. J. Pump, compressor, Malotay, Francis X., Upper Saddle River, N. J., assignor to International Banding Machine Company. Cigarbanding machine. 1.616.539; Feb. 8.

Malocsay, Francis X., Upper Saddle River, N. J., assignor to International Banding Machine Company. Feeding device. 1.627.732; May 10.

Malocsay, Francis X., Upper Saddle River, N. J., assignor to International Banding Machine Company. Automatic feeding mechanism. 1.627.793; May 10.

Malocsay, Francis X., Upper Saddle River, N. J., assignor to International Banding Machine Company. Cigar-banding machine. 1.627.794; May 10.

Malocsay, Francis X., Upper Saddle River, N. J., assignor to International Banding Machine Company. Adjusting mechanism. 1.634.718; July 5.

Malocsay, Francis X., assignor to International Banding Machine Company, New York, N. Y. Cigar-banding machine. 1.627.748; May 10.

Malocsay, Francis X., assignor to International Banding Machine Company, New York, N. Y. Cigar-banding machine. 1,633.641; Dec. 27.

Malocsay, Francis X., assignor to International Banding Machine Company, New York, N. Y. Cigar-banding machine. 1,635.645; Dec. 27.

Malocsay, Francis X., assignor to International Banding Machine Company, New York, N. Y. Cigar-banding machine. 1,635.645; Dec. 27.

Malocsay, Francis X., upper Saddle River, N. J., assignor to International Banding Machine Company, New York, N. Y. Cigar-band-feeding mechanism. 1,635.645; Dec. 27.

Malocsay, Francis X., upper Saddle River, N. J., assignor to International Banding Machine Company, New York, N. Y. Cigar-banding mechanism. 1,635.645; Dec. 27.

Malocsay, Francis X., Upper Saddle River, N. J., assignor to International Banding Mac

Malone, Adolph W., Fillmore, Utah, assignor of one-third to A. H. Vestal, Anderson, Ind., and one-third to A. M. Lockwood, Houston, Tex. Metal pole. Relf,684; July 19. Malone, Adolph W., Fillmore, Utah, assignor of one-half to A. H. Vestal, Anderson, Ind. Metal pole. 1,617,282; Malone, Adolph W., Hillmore, Utah, assignor of one-half Malone, Adolph W. Fillmore, Utah, assignor of one-half

Feb. 8.

Malone, Adolph W., Fillmore, Utah, assignor of one-half to A. H. Vestal, Anderson, Ind. Golf-stick carrier, 1,621,329; Mar. 15.

Malone, Adolph W., Fillmore, Utah, assignor of one-third to A. H. Vestal, Anderson, Ind., and one-third to A. M. Lockwood, Houston, Tex. Metal pole. 1,637,259; July 28.

Lockwood, Houston, Tex. Metal pole. 1,537,201; July 26.
Malone, Krank J., assignor to The Ingersol Milling Machine, Brank J., assignor to The Ingersol Milling Machine for desemine billets. 1,625,127; Apr. 10.
Malone, James G., and J. A. Dormer, Detroit, Mich. Rock or ore crushing machine. 1,630,194; May 24.
Malone, Patrick E., Kellogg, Idabo. Filler cap. 1,622,695; Mar. 20.
Maloney, Edward H., et al. (See Wagoner, John E., as-Maloney, Bdward J., Long Island City, N. Y. Motorized handsaw. 1,620,374; Mar. 8.
Maloney, Michael D., Honoibul, Hawail. Shaft-finishing tool. 1,652,868; Dec. 13.
Malott, George H., Leamington, Ontario, Canada. Growing tobacco. 1,632,241; June 14.
Malott, George H., Leamington, Ontario, Canada. Growing tobacco. 1,632,241; June 14.
Malott, Bespara L., Salt Lake City, Utah, assignor, by messe assignments, to Trico Products Corporation, Buffalo, N. Y. Windshield cleaner. 1,649,643; Sept. 6.
Malott, Jubert G., La Salle, N. Y. Lock. 1,644,022; Malbty, Frederick V., Bradford, Pa. Tradfie, signal, Malbty, Frederick V., Bradford, Pa. Tradfie, signal, Malbty. Buffalo, N. Y. Windsnield C. C. Y. Lock. 1044,022, Malouf, Jubert G., La Salle, N. Y. Lock. 1044,022, Malouf, Jubert G., La Salle, N. Y. Lock. 1044,022, Malouf, Jeffedrick Y., Bradford, Pa. Traffic signal. 1,648,491; Nov. 8. Mambourg, Nestor, Lancaster, assignor to The Libbey-Owens Sheet Glass Company, Toledo, Olido. Sheet-drawing apparatus. 1,641,594; Sept. 6. Mamen, Trygve, et al. See Knote, Karl R., assignor, 1,262,644; July 19. Mammen, Lawrence W., Chicago, Ill. Ornamental light. 1,632,797; June 21. Mamml, Frank, Brooklyn, N. Y. Radlator faceplate. Des. 7,2717; May 24. Manassero, Gluseppe, Bronx, N. Y. Antifreezing water leater for internal-combustion motors. 1,632,658; June 14.

June 14.

Mancha Storage Battery Locomotive Company. (See Stottz, Charles E., assignor.)

Mancha Storage Battery Locomotive Company. (See Teipel, J., and Exner, assignors.)

Manche Storage Battery Locomotive Company. (See Teipel, J., and Exner, assignors.)

Manchester, Adam, Central Bridge, N. Y. Crank holder. 1,615,592; Jan. 25.

Manchester, Adam, Central Bridge, N. Y. Combustioners, to The Ayling & Reichart Company, Toledo, Ohio. Manchester, Clyde C., assignor, by mesne assignments, to The Ayling & Reichart Company, Toledo, Ohio. Manchester, Clyde C., Toledo, Ohio, assignor to Industrial Research Corporation, Toledo, Ohio. Air cleaner. 1,625,816; Apr. 26.

Manchester, Clyde C., assignor to The Ayling & Reichert Company, Toledo, Ohio. Method and machine for separating flanged nested stampings. 1,652,786; Dec. 13.

Dec. 13.

Mandalian, Sahatiel G., North Attleboro, Mass. Metallic mesh fabric. Des. 72.325; Mar. 29.

Mandalian, Sahatiel G., North Attleboro, Mass. Metallic mesh fabric. Des. 74.115; Dec. 20.

Mandalian, Sahatiel G., North Attleboro, Mass. Metallic mesh fabric. Des. 74.115; Dec. 20.

Manderbach, Charles E., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Packing receptacle. 1,627.613; May 10.

Mandl, Karl F. (See Karabin, M., Skoczlek, and Mandl.) Mandl, Sigmund, assignor to Husky Wrench Company, Milwaukec, Wis. Wrench. 1,614,030; Jan. 11.

Mandl, Sigmund, assignor to Husky Wrench. Co., Milwand, Mandl. Mew York, N. Y. Life-saving device. 1,631,279; June 7.

Mandy, Louis. (See Mandy, James, assignor.)

Manuel Louis. (See Mandy, James, assigner.)
Manuel Louis. (See Mandy, James, assigner.)
Manuels. Geerge, Harrisburg, Pa. Pneumatic shoe sole.
1.630.381; Aug. 16.
Maneyal, Rex W., Frankfort, Kans. Attaching means for box lids. 1.648.357; Nov. 8.
Maney, Thomas, Louisville, Ky. Guard-rail fastening.
1.638.739; Aug. 9.
Mancy, Thomas, Louisville, Ky. Guard-rail fastening.
1.639.524; Aug. 16.
Mange, Frédéric, Paris, France. Device for magazining match sitches for their transfer to finishing stages.
Mange, Frédéric, Paris, France, Match-sitck conveying apparatus for use in connection with the manufacture of matches. 1.617.646; Feb. 15.
Mangels, Edward T. E., and E. G. Mangels, Davenport, Iowa. Dining cabinet. 1.639.141; Aug. 16.

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Mangels, Erwin G. (See Mangels, Edward T. E. and Mangianeli, Francesco, Corleone, Haly, Dovice for pro-Mangianeli, Francesco, Corleone, Haly, Dovice for pro-Mangianeli, Abrchum F. Akron, Ohlo. Dust collector. 1.628,852; May 3. Mangold, Bans, Furth, Bayaria, Germany. Toy figure. 1.614,007; Jan. 11. Mangold, William B., Chicago, Ill., assignor to Vortex Mig. Co. Cup dispenser. 1.622,507; Mar. 29. Mangum, Tyler L. (See Luckle, A., and Mangum.) Manhattan Electrical Supply Company. (See Hendry, Manhattan Electrical Supply Company. (See Jancke, Benno F., assignor.)

Annhittin Electrical Supply Company. (See Jancke. Botho F. esstrical Supply Company. (See Jancke. Monhitthe-Rome Company. (See Sisbower, G. F., and Pittoni, assignors.)
Manhattan Rubber Mfg. Company, The. (See Snyder, Harry V. N. assignor.)
Manierre, George, Milwaukee, Wis. Car loader.
1,626,947; May S.
Manierre, George, Milwaukee, Wis. Unloader for railway Manierre, George Milwaukee, Wis. Unloader for railway Minnifold Company, The. (See Mayer, George A., assignor.)
Manifold Impressions Corporation.

Manifold Impressions Corporation. (See Armistead, Hubert M., assignor.)
Manison, Grant N., and I. E. Colvin, assignors to The Plaudier Company, Rochester, N. Y. Outlet valve. 1.654.298; Dec. 27.
Manifowo Ship Fullding Corporation. (See Kane, Edmund J., assignor.)
Mund J., assignor.)
M., assignor. Building Corporation. (See Moore, Roy St., assignor.)

S., assignor.)

S., assignor.)
Manix, Edward T., Lynn, Mass. Abdominal supporter.
1.618,712; 5an. 11.
Manker, Forrest W., Jackson Heights, assignor to Surface
Combustion Company, New York, N. Y. Wire-heating
oven. 1,615.593; Jan. 25.
Manker, Forrest W., Jackson Heights, assignor to Surface
Combination Company, New York, N. Y. Enamelling
furnace and preparing the same. 1,648,001; Nov. 8.
Mankin, Lynn S. (See Shaffer, J. C., and Mankin.)
Manley, Frederick T. (See Holmes, R. C., Manley, and
Bebluner.)

Behimer.)
Manley, Frederick T., Houston, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Apparatus for the distillation of oll. 1,640,202; Aug. 23.
Manley, Lewis M., Dallas, Tex. Piston. 1,614,799;
Jan. 18.

Mann. Cat. B. (See Phillips, F. H., and Mann.)
Mann. Charles W. See Sanford, Lynn H., assignor.)
Mann. Charles W. Methuen, Mass. Transmission band.
1,613,713: Jan. 11.
Mann. George, assignor, by mesne assignments, to Reynolds Spring Company, Jackson, Mich. Electric switch.
1,630,434; May 31.
Mann. George, & Company. (See Wright, Fred W., asMann. George, & Company. (See Wright, Fred W., as-

ignor.) nn. George, signor.)
Mann, George, and Company Limited. (See Walters,
George H., assignor.)
Mann, George, and Company Limited, et al. (See Wright,
Fred W., assignor.)

Mann, Horace, Albuquerque, N. Mex. Tire. Des. 73,004;
Mann, Horace, Albuquerque, New Mex. Tire. Des. 73,506; Sept. 20.
Mann, Horace, Albuquerque, New Mex. Tire. Des. 73,507; Sept. 20.

73.507; Sept. 20.

Mann. John J. and W. J., Oakland. Calif., and M. H.
Van Coeverden, San Marcial, N. Mex. Wave motor.
1,624,349; Apr. 12.

Mann. Kellogg, Derby, N. Y. Incinerator. 1,654,339;
Dec. 27.

Mann. Leslie, Springfield, Mass. Projector. 1,645,108;
Oct. 11.

Oct. 11.

Mann, Matthew D., jr., Roselle, and H. M. Welr, Newark, N. J. Contact apparatus. 1,624,703; Apr. 12.

Mann, Matthew D., jr., Roselle, N. J., assignor to S. B. Hunt, trustee, Mount Kisco, N. Y. Apparatus for the treatment of gases with liquids. 1,654,181; Dec. 27.

Mann, Oswald W., Montreal, Quebec, Canada. Table Mann, Cowald W., Montreal, Quebec, Canada. Table Mann, Etchard B., Now Prighton, N. Y. Thermometer. Des. 72,067; Feb. 22.

Mann, Richard E., New Brighton, N. Y. Thermometer. Des. 72,379; Apr. 5.

Mann, Robert C., assignor of one-half to P. B. Behr, St. Louis, Mo. Electric therapeutic device. 1,634,373; July 5.

July 5.

Mann. Seward W., 8881910.

Pittsburgh, Pa. Direct-current-genes.
1.645.149; Oct. 11.

Mann. Seward W., assignor to H. Kleinbans Company.

Pittsburgh, Pa. Apparatus for controlling the flow
of current from direct-current generators. 1.645.150;

Constitution of the controlling of the flow of current from direct-current generators. 1.645.150;

Constitution of the controlling of the controlling

Feb. 22. inn, William J. (See Mann, John J. and W. J., and

Van Coeverden.) Manuel, Elise, San Francisco, Calif. Doll. Des. 72,380; Apr. 5.

Mannes, Leopold D., New York, N. Y., and L. Godowsky, Jr., Los Angeles, Calif. Method and apparatus for producing colored motion nictures. J.619,494, Mar. 8. Mannhardt, Rudolf T., White Plains, and A. B. Hitzel, Jamaica, N. Y., assignors to Gilman Fanfold Corporation, Ltd., Toronto, Canada. Aligning and registering device for billing innehines. J.(21.265; Mar.) Mannick, Andrew, Braddock, Pa. Aeropiane. J.(548,518; Nov. 8.

Nov. 8.

Manning, Leon, Cuba, N. Y. Window-sash frame and other frame. 1,651.899; Dec. 6.

Manning Manufacturing Company. (See Kendall, Ira H., assignor.)

assignor.)
Manning Manufacturing Company, The. (See Manning, Roy A., assignor.)
Manning, Margia. (See Metzger, C. E., and Manning,)
Manning, Maxwell & Moore, Inc. (See Baker, Hubert E., assignor.)
Manning, Maxwell & Moore, Inc. (See Moore, George E., assignor.)

assignor.)

Manning, Maxwell & Moore, Inc. (See Moore, George E., assignor.)

Manning, Maxwell & Moore, Inc. (See Weisiger, Jesse W., assignor.)

Manning, Maxwell & Moore, Inc. (See Weisiger, Jesse W., assignor.)

Manning, Mort M., Mexia, Tex. Ball-unseating device in line valves. 1,648,318; Sept. 27.

Manning, Robert M., Mexia, Tex. Oil tank. 1,647,874; Nov. 1.

Manning, Robert M., Mexia, Tex. Oil tank. 1,647,874; Nov. 1.

Manning, Grap A., Rutland, assignor to The Manning Manufacturing Company, Rutland, Vt. Milk filter. 1,627,795; May 10.

Mannin, Rudolf, Karlsbad, Czechoslovakia, X-ray screen for taking skiagrams. 1,633,706; June 28.

Manns, Thomas F., Newark, Del. Specific-gravity balance. 1,643,433; Sept. 27.

Manodorff, Woldemar, Charlottensburg, Germany. Potato-peeling machine. 1,637,530; Aug. 2.

Manotaky, John, assignor to Youngstown Pressed Steel Company, Warren, Ohio. Stop device. 1,642,422; Sept. 13.

Manott, Harry, and J. H. McGrath, Melbourne, Victoria, Australia. Combination bed and couch. 1,637,493; Manott, Hurry, Nev Nork, N. V. Peccarting, celluloid.

Aug. 2. Manovill, Hugo, New York, N. Y. Decorating celluloid article and decorated celluloid article. 1,636,523:

article and decorated celluloid article. 1,636,523-July 19.
Manrock, Frank J., Newark, N. J. Gravity table 1,623,427; Apr. 5.
Mansbendel, Fritz P., Brooklyn, N. Y., assignor, by mesne assignments, to The Sunfast Hats, Incorporated, Danbury, Conn. Fur-weighing machine. 1,623,629; Apr. 5.
Mansbendel, Fritz P., Brooklyn, N. J., assignor to Siemens, J. C. Mansberg, Paul, Berlin-Charlottenburg, assignor to Siemens & Halske Aktlengesellschaft, Siemensstadt, near Berlin, Germany, Machine for recording time. 1,640,955; Aug. 30.

Aug. 30.

Mansfield, Arthur, Eureka, Kans. Adjustable sawing machine. 1644.887. Oct. 11.

1648. Oct. 11.

1648

signor.)

Mansfield Tire & Rubber Co. (See Ober, Philip H., assignor.)
Mansilla, Prudencia G., et al. (See Echaniz, J. L., and Mansilla, assignors to M. A. Manson, New York, Manson, Donald L., assignor to M. A. Manson, New York, Manson, Mary A. (See Manson, Donald L. assignor, Manson, Ray H., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Variable condenser. 1,632,487; June 14.

Manson, Ray H., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Variable condenser. 1,632,634; June 14.

Manson, Ray H., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Variables, Manson, Ray H., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Vacuum tube socket. 1,642,684; Sept. 20.

Manss, Walter A., assignor to E. I. du Pont de Nemours & Company, Wilminton, Del, Producing Indophenol Edward Mansur, Clarence W. (See Guay, E. J., and Mansur, Gate. 1,614,583; Jan. 18.

Mansur, Clarence W. (See Guay, E. J., and Mansur, Clarence W. (See Guay, E. J., and Mansur, Charge device. 1,647,233; Nov. 1.

Manthorne, William H., Bayshore, N. Y., assignor to Bell Telephone Laboratorles, Incorporated. Electron-discharge device. 1,647,233; Nov. 1.

Mantle Gregory D., assignor to Mantle Engineering Company. Mantle Engineering Company.

Mantle, Gregory D., assignor. Mantle, Gregory D., Mantle, Gregory D., assignor to Mantle Engineering Company, Pittsburgh, Pa. Glass furnace. 1,639,657; Aug. 23.

Auk. 20.

Mantle Limp Company of America, The. (See Davis, Cortland W., assignor.)

Manuel, Charles J., and W. H. Lentz, Sellersville, Pa., assignors to United States Gauge Company, New York, N. Y. Thermometer, 1.635.680; July 12.

Manuel, Thomas D., Beliville, South Africa. Fuel filler for tanks. 1,631.642; June 7.

Manufacturas de Corcho, S. A. (See Vincke, Enrique,

assignor.)
Manufacturing Improvement Corporation, (See Brown, C.A. and Esselin, assignors.)
G. A. and Esselin, assignors.)
Michael I., assignoring Company, The. (See Riley, Michael I., assignor)
Manville, Keith E., Brooklyn, assignor to International Motor Company, New York, N. Y. Valve for internatcombustion motors. 1,614,749; Jan. 18.
Manville, Keith R., assignor to International Motor Company, New York, N. Y. Vibration dampener. 1,641,230; Sept. 6.

Manville, Keith B., assignor to International Motor Company, New York, N. Y. Vibration dampener. I,641,230; Sept. 6.

Manwarig, Albert H., Noble, Pa. Hydraulic clutch. Manwarig, Manwarig

Maraso, Fred, Jonet, III. Wrapping machine. 1,041,042; Aug. 30.
Marathon Company. (See Wojciechowski, Frank M., as signor.) Frank G. and M. P., Cleveland, Ohio. Washing machine and wringer. 1,054,182; Dec. 27.
Marbach, Martha P. (See Marbach, Frank G. and M. P.) Marbelic Corporation of America. (See Barkschat,

Marbeltic Corporation of America. (See Barkschaf, Henry, assignor.)
Marble, Charles C., Bradenton, Fla. Vulcanizer. 1,640,281; Jug. 2.
Marbury, Ralph E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,635,634. Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,635,556; July 12.
Marbury, Ralph E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Testing apparations. 1,635,536; Dec. 13.
Marbury, Ralph E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Grid paparations. 1,635,636; Dec. 13.
Marbury, Barbary, Marbury, M

Marcalus, Nicholas, (See Randouph, C. F., and Marcalus, Nicholas, Plainfield, N. J. Winding machine. 1,628,322; May 10. Plainfield, N. J. Web-winding machine. 1,628,322; May 10. Marcalus, Nicholas, Plainfield, N. J., assignor to Niles-Bement-Pond Company, New York, N. Y. Frog and switch planer. 1,619,355; Mar. 1.

Marcalus, Nicholas, assignor to Automatic Paper Machinery Company, Inc., Plainfield, N. J. Box for paper 1630,495; May 31.

Marcalus, Nicholas, assignor to Automatic Paper Machinery Company, Inc., Plainfield, N. J. Box for paper 1630,495; May 31.

Marcal, François R., Brooklyn, N. Y. Curling fron. 1,628,433; Mar. 29.

Marcel, François R., Brooklyn, N. Y. Curling pin for Marcal, François R., Brooklyn, N. Y. Curling pin for Marcal, François R., Brooklyn, N. Y. Curling pin for Marcal, François R., Brooklyn, N. Y. Apparatus for waving half, 1,643,783; Sept. 27.

Marcell, François R., Brooklyn, N. Y. Apparatus for waving balf, 1,643,783; Sept. 27.

Marcell, Lawrence P., South Porcupine, Canada. Lubri-

Marcell, Lawrence P., South Porcupine, Canada. Lubricator for compressed-air machines. 1,615,594; Jan. 25. March, Albert T. (See Walker, H. G., and March, March, Carl, Chicago, Ill. Handle support. 1,613,667; Jan. 11.

March, Carl, Chicago, Ill. Cap stone for porches, 1,621,799; Mar. 22.
March, Carl, Chicago, Ill. Twine holder. 1,626,545; Apr. 26.
March, Carl, Chicago, Ill. Trap. 1,629,402; May 17.
March, Carl, Chicago, Ill. Toothpick holder. 1,635,947; July 12.

March, Carl, Chicago, Ill. Match-box holder. 1,637,260;

March, Carl, Chicago, Ill. Match-box holder. 1,637,260; July 26.

March, George B., Muskegon, Mich. Screen for nozzles. 1,617,858; Peb. 15.

Marchant Calculating Machine Company. (See Johnston, Clarence L., assignor.) See Gardiner, William B., as-Marchetti, Paul, San Francisco, Calif. Motor. 1,624,260; Apr. 12.

Marchetti, Paul, San Francisco, Calif. Engine. 1,664,378; Dec. 27.

Marchetti, Paul, San Francisco, Calif. Engine. 1,664,378; Dec. 27.

Marchetti, Paul, San Francisco, Calif. Engine. 1,664,378; Dec. 27.

Marchott, Lewis, Medford, assignor, by mesne assignments, to Heaney Mfg. Co., Boston, Mass. Dispensing device. 1,637,961; July. 2.

Marconi, Charles, Brooklyn, N. Y. Bed-spring brace. 1,640,956; Aug. 30.

Marcott, Gluseppe, Genoa, Italy. Photo-printing press. Marcott, Gluseppe, Genoa, Italy. Photo-printing press. Marcott, William T., assignor; Wash. Signaling device. Marcott, William T., assignor; Wash. Signaling device. Marcott, William T., assignor, Marcott, William T., assignor to Marcott Auto Signal Company. Clgar and cigarette lighter. Des. 73,856; Nov. 15.

Marcum, Arthur I., Oakland, Calif., assignor to E. Winship, Mascon, Ga. Drive mechanism for multiwheelers. 1633,114; Dec. 20.

Marcott, Barnellon, Calif., Vehicle axie, 1,653,114; Dec. 20.

Marcus, Benjamin, H., Brooklyn, N. Y. Combined buckle

1.644.023; Oct. 4.

Marcum, Arthur I., Oakland, assignor to Emory WinBir, San Francisco, Calif. Vehicle axle. 1,653,114;
Darcus, Benjamin H., Brooklyn, N. Y. Combined buckle
and purse. 1,625.040; Apr. 19.
Marcus, Benjamin H., Brooklyn, N. Y. Concealed hookand-eye tape. 1,648,736; Nov. 5.
Marcus, Charles, New York, N. Y., assignor of one-third to
R. P. Lansing, Montclait, N. J., and one-third to II. D.
Church, Fairfield, Conn. Shock absorber for vehicles.
1,644,438; Oct. 4.
Marcus, Charles L., New York, N. Y. Lip-stick holder.
Marcus, Charles L., New York, N. Y. Vanity case.
1,622,463; Mar. 29.

Marcus, Charles L., New York, N. Y. Vanity case.
1,641,961; Sept. 13.
Marcus, Charles L., New York, N. Y. Vanity case.
1,641,961; Sept. 13.
Marcus, Hanry C., San Francisco, and W. Fourness, OakMarcus, Hearly C., San Francisco, and W. Fourness, OakMarcus, Henry C., San Francisco, and W. Fourness, Oak-

Marcus, Hascal, Brooklyn, N. Y. Bird cage. 1,632,380; June 14.

Marcus, Henry C., San Francisco, and W. Fourness, Oakland, Calif. Compressor. 1,631,425; June 7.

Marcus, Jacob. (See Freydberg, A., and Marcus.)

Marcus, Lewis A., New York, N. Y. Receptacle. 1,634,876; July 5.

Marcus, Myron, Los Angeles, Calif. Speed indicator. 1,642,617; Sept. 13.

Marcus, Event 13.

Marcus, Myron, Los Angeles, Calif. Speed indicator. 1,634,807; Sup. 1,1830 July 1,1830 July

port for portieres, curtains, and the like. 1,621,639; Mar. 2,10h W. (See Rentschler, H. C., and Marden.) Marden, John W., East Orange, N. J., assignor to Westinghouse Lamp Company. Metallurgical method. 1,646,734; Oct. 25.

Marden, John W., East Orange, N. J., assignor to Westinghouse Lamp Company. Production of rare metals and all John W., East Orange, N. J., assignors to Westinghouse Lamp Company. Clean-up and activation by misch metal and the rare-earth metals. 1,653,366; Dec. 20.

Marden, John W., East Orange, and T. P. Thomas and J. E. Conley, Bloomfield, N. J., assignors to Westinghouse Lamp Company. Misch-metal Marden, John W., East Orange, and T. P. Thomas and J. E. Conley, Bloomfield, N. J., assignors to Westinghouse Lamp Company. Activation by means of hydrogen-free, carbon-bearing gas. 1,629,685; May 3.

Marden, John W., East Orange, and T. P. Thomas and J. E. Conley, Bloomfield, N. J., assignors to Westinghouse Lamp Company. Activation by means of hydrogen-free, carbon-bearing gas. 1,629,685; May 3.

Marden, William L., Elmburst, assignor to Neptune Meter Company, New York, N. Y., Meter- 1,617,407; Feb. 15.

Marden, William L. Elmburst, assignor to Neptune Meter Company, New York, N. Y. Alarm register for meters. 1,617,408; Feb. 15. N. Y. Alarm register for meters. Marden, William L., Elmburst, assignor to Neptune Meter Company, New York, N. Y. Water meter. 1,632,554; June 14.

Marden. William L. Elmburst, assignor to Neptune Meter Company, New York, N. Y. Stuffing box. 1.649.314; Nov. 15. Marechal Ruchon & Company Limited. (See Dravers, Louis A., assignor.)

Marengo, Natallo G., Buenos Aires, Argentina. Barrier or fence against locusts. 1,641,769; Sept. 6. Maretta Hollow Ware and Enameting Company. (See Hussel. John W. Assignor.)

Hussel. John W. Assignor. And Company. (See Etablissements Fathe Frères. Paris, France. Antistatic photographic film. 1,635,681; July 12. Margerison, W. H. & A. E., & Co. (See Clarke, René, sissignor.)

Margerison, W. H. & A. E., & Co. (See Elliott, ElizaMargerison, W. H. & A. E., & Co. (See Elliott, ElizaBargerison, W. H. & A. E., & Co. (See Heitland, Wilmot E., assignor.)

Margerison, W. H. & A. E., & Co. (See Reiss, Winold, as-

Margerison, W. H. & A. E., & Co. (See Wilson, Edward

Margerison, W. H. & A. E., & Co. (See Wilson, Edward A., assignor.)

Margetson, Oliver, and P. G. Robinson, London, England. Locomotive. 1,637,952; Aug. 2.

Margiloff, Henry, Brooklyn, N. Y. Electric-lighting time clock. 1,614,377; Jun. 11.

Margolin, Hyman, New York, N. Y. Hand bag. Des. Margolin, Mordicha, New York, N. Y. Waistband for trousers and making the same. 1,614,965; Jan. 18.

Margolith, Mordicha, New York, N. Y. Wending machine. 1,630,195; May 24.

Margolith, Mordicha, New York, N. Y. Vending machine. 1,630,195; May 24.

Margulis, Peter H., New York, N. Y. Overshoe. 1,654,986; Dec. 27.

Marietta, Alphonso H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Bead-building machine. Marietta Manufacturing Company, The. (See Burgess, Martin L., assignor.)

Marin, Manufacturing Company, The. (See Burgess, Martin L., assignor.)

Marinett, Edward G., Riverside, R. I. Shoe-closure attachment. 1,648,651; Nov. 29.

Marinott, Edward G., Riverside, R. I. Shoe-closure Advance, Trancesco, assignor to S. Sept. 20.

Mariolle, August, Oakland, Calif., and G. and R. Mariolle, New York, N. Y. Curtain sign exhibitor. 1,617,307; Feb. 8.

Mariolle, August and G., Oakland, Calif., and R. Mariolle, August and G., Oakland, Calif., and R. Mariolle, August and G., Oakland, Calif., and R. Mariolle.

Mariolle, August and G., Oakland, Calif., and R. Mariolle, New York, N. Y. Sign-changing exhibitor. 1,617,308; Feb. 8.

Feb. 8.
Mariolle, Gaston. (See Mariolle, August, G., and R.)
Mariolle, Raymond. (See Mariolle, August, G., and R.)
Marion, Frank, assignor of one-half to E. L. Scott, Barre,
Yt. 0il-burner system and apparatus. 1,617,647;

Marion, Frank, assignor or Yet. Oll-burner system and apparatus.
Yet. Oll-burner system and Supply Company, The.
(See Cook, William A., assignor.)
Marion Machine, Foundry & Supply Co. (See Loucks, Albert H., assignor.)
Marion Machine, Foundry & Supply Company. (See Lynch, Charles W., assignor.)
Lynch, Charles W., assignor.)
Marion Machine, Foundry & Supply Company. (See Supply Company the Cook, assignors.)
Marion Machine, Foundry & Supply Company. (See Supply Company the Cook, assignors.)
Marion Steam Shovel Company, The. (See Shrock, Rollo L., assignor.)

Marion Steam Snowel Company, The. (See Sarrock, Romo L., assignor.)

Marion Steam Snowel Company, The Company of the Company o

Mark, Frank R., Los Angeles, Calif. Valve. 1,637,154;

July 26.

Mark, Ovid E., San Diego, Calif. Automatic power-transmission control mechanism. 1,634,504; July 5.

Markatos, Spiros C., New York, N. Y. Iron-supporting plate for hot-water boilers. Rel6,608; May 3.

Markatos, Spiros C., New York, N. Y. Supporting means for dry rooms. 1,637,261; July 26.

Markatos, Spiros C., New York, N. Y. Attachment for hot-water boilers. 1,646,008; Ort. N. Combined dry room and iron heater 1,651,463; Dec. G.

Markel Electric Products, Inc. (See Logan, Charles W., assignor).

assignor. Markel Electric Products Inc. (See Markel, J., and Logan, assignors.)
Markel Electric Products, Inc. (See Yokel, Frank, as-

Misser, merich I., New Haven, Conn. Refactor attachment for vehicle headlights. 1.644.686; Oct. 1. Markel, Joseph. Buffalo, and C. W. Logan, Kennore, assignors to Markel Blectric Products Inc. Buffalo, N. Y. Electric-light fixture. 1.653.810; Dec. 27. Markel Lighting Pitments, Inc. (See Logan, Charles W.,

assignor.) Markel, Orville, Markem Machi Drville. (See Cannon, M. P., and Ma Machine Company. (See Putnam,

Marker, John. (See Cottrell, J., and Marker.)
Markert, Franz, Lindenrull-Glogau, Germany, assignor to
Mount Clemens Potterv Company, Mount Clemens,
Mich. Plate or similar article. Des. 73,176; Mar. 8.
Markey, George T., assignor to James Mannifecturing
Company, Frot Atkinson, Wis. Brooder coop.
1,652,629; Dec. 13.

Markham Air Rifle Company. (See Roe, Ernest S., as-

Markham Air Rifle Company. (See Roe, Ernest S., asaignor.), Charles M., Indianapolis, Ind. Adjustable
shore. 1,651,610; Dec. 6.
Markland, Wyllis H., Altoona, Pa., assignor to W. H.
Foster, New York, N. Y.
Surfacing macbine.
1,613,181; Jan. 4.
Markle, George, assignor to The Ruddy Manufacturing
Company, Limited, Brantford, Chanda. Wire queen
Marklein, Otto. (See Shadbolf, W. O., and Marklein)
Marklein, John, Forreston, Ill. Automatic weighing machine.
1,644,260; Oct. 4.
Marko, Paul M. (See Rixdorff, Ragnar J., assignor.)
Marko, Paul M. Brooklyn, N. Y. Storage-battery attachMarkon, Paul M. Gee Rixdorff, Ragnar J., assignor.)
Marko, Paul M. See Steen, I., Roth, and Markowitz.)
Marka, Saugust, Carteret, N. J., assignor to United States
Metals Refining Company. Magnesite refractory and
making the same. 1,616,055; Feb. 1.
Marks, August, Carteret, S., Jangeselte refractory and
making the same. 1,616,055; Feb. 1.
Marks, Hayust, Carteret, assignor to United States Metals
Refining Company, Middlesex County, N. J. Diburned
Marks, Heyert E., Glen Orborne, Pa. Roof structure.
Re16,798; Nov. 2.
Marks, Herbert E., Gen Orborne, Pa. Roof structure.
Re16,798; Nov. 2.
Marks, Isidore, Dorchester, Mass. Clapper noise-producing toy or analogous article. Des. 73,762; Nov. 1.
Marks, Isidore, Dorchester, Mass. Toy. 1,641,789;
Nov. 1.
Marks, Isidore, Dorchester, Mass. Toy. 1,647,789;
Nov. 1.
Marks, Isidore, Dorchester, Assignor to Keystone Mfg.
Carter Marks. Metals.

Nov. I.
Marks, Isidore, Dorchester, assignor to Keystone Mfg.
Co., Boston, Mass. Pumping-engine truck. 1,640,417;
Aug. 30.
Marks, Maurice, et al. (See Langan, William B., assignor.

signor.)
Marks, Roy C., Moorpark, Calif. Queen-bee shipping and
introducing cage. 1,652,539; Dec. 13.
Marks, Samuel I., assignor to Zenith Radio Corporation,
Chicago, Ill. Cabinet. 1,617,452; Feb. 15.
Marksman, Frederick L. (See Ryan, E. A., and Marks

man.)

Marisman, Frederick L. (See Ryan, E. A., and Marksman.)

Marland, Arthur, assignor to John Wood Manufacturing Company, Conshohocken, Pa. Manual holder for arc company, Conshohocken, Pa. Manual holder for arc typewriters. 1.637,884, Jun. 2016. Copy holder for typewriters. 1.637,884, Jun. 2016. Copy holder for typewriters. 1.637,884, Jun. 2016. Space-band-releasing means for typographical assembling machines. 1.651,213; Nov. 29. Marlatt, George E., Pasadena, Calif. Typographical slug-distribution of the company, Rochester, N. Y. Dental X-ray-film package. 1.631,497; June 7. Marles, Henry, London, England. Steering gent. 1.642,164; Sept. 13. Marles, Henry, assignor to Gemmer Manufacturing Committee of the company of the

signor.)
Marlowe, Daulel J., Woburn, Mass., assignor to The Babcock Printing Press Manufacturing Company, MeeLondon, Conn. Preparing make-ready on cutting and
creasing presses. 1.615,026; Jan. 18.
Marlsdale, George, Cinchinati, Ohio. Planter and fertilizee-distributing device. 1.620,907; Mar. 15.
Marnigaat, Henri, administrator. (See Wever, Fritz.)
Manufacture of the straight of faits, France. Hostery
Get 11.

machine Oct. 11.

Oct. 11.

Maroney, Maurice, McLeansbore, Ill. Double-garage-door-operating mechanism. 1.648-555; Nov. 8.

Marosky, Joseph. (See McWilliams, J. L., and Marosky,)

Maroney, Joseph. (See McWilliams, J. L., and Marosky,)

Maroney, J. (See McWilliams, J. L., and Marosky,)

Marquardt, Prederick C., Milwaukee, Wis. Crib latch.

1.622,387; Mar. 29.

Marquardt, Frederick C., Milwaukee, Wis. Ded bettom.

1.628-817; Apr. 26.

Milwaukee, Wis. Ded bettom.

Marquette Manutacturing Company. (See Nison, Leonard D., assignor.).

and D., assignor.). Assignor to The Filsk Rubber Company.

Chicagoe Falls, Mass. Stripping device, 1,612,455; Sept. 13.

Marquette Tool & Manufacturing Company. (See Glasner, R. W., and Nilson, assignors.)

Marquette Tool & Manufacturing Co. (See Rode, Fred-rich J., assignor.) Marquette, William V. B., New York, N. Y. Internal-combustion engine. 1,645,959; Oct. 18. Marquis, Macelle M., New York, N. Y. and Marquis, Marquis, Marcelle M., New York, N. Y. assignor to 1,649,315; New 15. Inc. Lady's undergarment.

Tamila Corpet IG. Inc. Ladys undergare to tamila Corpet IG. Inc. Ladys undergarent. Mayunis, Theophile J., and J. S. Perrault, Nashua, N. H. Meat-grinder head. 1,654,425; Dec. 27. Marr, Earl, assignor to Marr Oil Heat Machine Corporation, Minneapolis, Minn. Oil burner. 1,640,418; Aug-

Marr Oil Heat Machine Corporation. (See Marr, Earl,

Anciens Latorissements Fathe Freres, Paris, Frânce. Electric lamp for cinematographic apparatus. 1,625,619; Apr. 19.

Apr. 19.

Marrison, Warren A., Bloomfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical generator. 1,627,619; 10.

Marrison, Warren A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical generator. 1,647,645; Nov. 1.

Marsac, Gerald. (See Schitz, John, assignor.)

Marsat, Antolne J. B., Verrieres-le-Bulsson, France. Capor socket for incandescent electric lamps and the like. 1,630,126; May 24.

Marschalk, Charles H., Paris, France. Manufacture of Latorista. Charles H., Paris, France. Black sulphurized naphthol dyes. 1,641,182; Sept. 6.

Marschalk, Iranz. (See Daimler, K., Marschall, and Baile.)

Marschall, Ludwig, Brooklyn, N. Y. Aeroplane. 1,617,264;

Marschall, Ludwig, Brooklyn, N. Y. Aeroplane. 1,617,264; Feb. 8.
Marschall, Ludwig, Brooklyn, assignor of one-fourth to
O. Zander, New York, N. Y. Aeroplane. 1,617,268;

Adriechar, Judwig, Howk, assignor to A. Borsig G. m. b. H.,
G. Zandeer, New York, N. Y. Aeroplane. 1,617,263;
O. Zandeer, New York, N. Y. Aeroplane. 1,617,263;
Marscheider, Karl, assignor to Dependable Auto Parts
Company, Los Angeles, Calif. Vending machine.
1,617,341; Feb. 15.
Marsden, John E. (See Milliken, John A., assignor.)
Marsden, John E., Philadelphia, Pa. Electric sadiron.
1,615,464; Jan. 25.
Apr. 12.
Marsden, John E., Philadelphia, Pa. Electric bread
Marsden, John E., Philadelphia, Pa. Electric stadiron.
1,637,135; July 26.
Marsden, John E., Philadelphia, Pa. Electric sadiron.
1,644,139; Oct. 4.
Marsden, John E., Philadelphia, Pa. Electric sadiron.
1,644,139; Oct. 4.
Marsek, Frederick A., assignor to Kolmar Laboratories,
Milwaukee, Wis. Combined face powder and skin
bleach. 1,620,269; Mar. 8.
Marsene Products Company. (See Kratz, Edouard M.,
assignor.)

Ausrene Products Company. (See Kratz, Edouard M., assignor.)
Marsh, Alexander, and S. A. Anderson, Flemington, Mo. Coal carrier for tenders. 1,614,797; Jan. 18.
Marsh, Esil A., assignor to J. F. Elam Sales Service, Inc. Chicago, Ill. Machine for feeding and packing pulverulent material. 1,618,459; Feb. 22.
Marsh, 19.
Marsh, Harry V., Chicago, Ill. Placard. 1,653,188; Dec. 20.
Marsh, Howard F.

Dec. 20.

Marsh, Howard E., Lompoc, Calif. Windshield wiper. 1,633,597; June 28.

Marsh, Howard E., Lompoc, Calif. Self-feeding carburetor. 1,640,044; Aug. 25.

Or. 1,840,044; Aug. 25.

Marsh, Jassignors of one-sixth to Y. B. Lee, Santa Barbara, Calif., and one-sixth to J. H. Lee, Grand Junction, Colo. Oil-shale apparatus. 1,619,525; Mar. 1.

Marsh, Jas. P., and Company. (See Harrison, Amos, 488 [2007.) tion, Colo. University of the Marsh, Jas. P., and Company. (See Harrison, Amosassignor.)
Marsh, Jas. P., & Company. (See Thompson, Orville Marsh, Jas. P. & Company. (See Thompson, Orville Marsh, Jas. P. & Company. (See Thompson, Orville Marsh, Massignor, Osaid Dufresne, Fisherman's batt trap and carrier. 1,620,617; Mar. 8.
Marsh, Mchael A., St. Paul, Minn. Sectional concrete ash receptacle. 1,620,670; Mar. 15.
Marsh, Robert G., Detroit, Mich. Ice-box construction. 1,631,494; Aug. 2.
Marsh, Tombert G., Detroit, Mich. Ice-box construction. 1,651,925; Dec. 6a. Bottle-washing machine. 1,651,925; Dec. 6a. Bottle-washing machine. 1,651,925; Dec. 6a. Bottle-washing machine. 1,651,926; Dec. 6a. Bottle-washing machine. 1,651,

Marsh, William B. (See Updegrove, A. J., and Marsh.) Marsh, William G., Toronto, Ontarlo, Canada. Auxiliary air control for gasoline engines. 1,619,082; Mar. 1. Marsh, William J., et al. (See Marvin, Samuel W., as-

asignor)

Marsball, Andrew J., assignor of one-balf to G. W.
Mitchell, Harrisburg, Ill. Electric shot-firing device.
1,644,843; Oct. 11.

Marsball, Charles C. (See Cobs, C., and Marsball, Marsball, Charles C., Glodo, Ohio. Propeller. 1,622,835;
Mar. 29.

Marsball, Charles O., assignor to Toledo Scale Company,
Toledo, Ohio. Weighing scale. 1,622,041; Mar. 22.

Marsball, Charles O., See Hampton, A., and Marsball.)

Marsball, David O., assignor to Mound City Wood Hea.

1,642,055; Oct. 18.

Marsball, David O., St. Louis, Mo., assignor, by meaning.

Marsball, David O., St. Louis, Mo., assignor, by meanshing.

Marsball, David O., St. Louis, Mo., assignor, by meanshing.

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Marsball, David O., St. Louis, Mo., assignor, by meanshing.

Marsball, David O., St. Louis, Mo., assignor, by meanshing.

Nov. 1.
Marshall, Ellsworth G. (See Caswell, R. G., and Marshall.) Marshall Field & Company. (See Bezark, Joseph. as-

Marshall Field & Company. (See Bezark, Joseph. assignor.)
Marshall, Francis C., Green Bay, Wis. Excavating machine. 1,623,194; Apr. 5.
Marshall, Frank B., Kinsley, Kans. Sunshade for autoMarshall, Frank B., Kinsley, L. Ct. 25.
Marshall, George F., and C. W. Vogt, Tampa, Fla. Juice
extractor. 1,643,819; Sept. 27.
Marshall, George F., and C. W. Vogt, Tampa, Fla. Juice
extractor. 1,643,619; Sept. 27.
Marshall, Holmes, Cleveland Heights, Ohio. Safety-deposit-locking device. 1,618,460; Feb. 22.
Marshall, James F., Swampscott, assignor to J. J. GroGreen S. Company, Lynn, Mass. Shoe-shank stiffener.
Marshall, John. Swarthmore, Pa., assignor to E. I. du
Pont de Nemours & Company, Wilmington, Del. Lowdensity dynamite. 1,614,447; Jan. 11.
Marshall, John C., San Francisco, Calif. Electrical apparatus. 1,637,262; July 26.
Marshall, Joseph B. (See Thompson, L., and Marshall.)
Marshall, Joseph B. (See Thompson, L., and Marshall.)
Marshall, Joseph B. (See Thompson, L., Resignor), Reman Nathyan N.

Marshall, Joses S., et al. (See Delker, William L., assignol.) Norman, Nashua, N. H., assignor to Remingmachine. 1,623,965; Apr. 12.

Marshall, Russell A., Duquesne, Pa. Nonskidding device.
1,618,938; Feb. 22.

Marshall, Romas C., Mount Savage, Md. Tire. Des.
72,484; Apr. 19.

Marshall, Thomas C., Mount Savage, Md. Tire. Des.
Marshall, Thomas C., Mount Savage, Md. Making tire
casings. 1,629,517; May 24.

Marshall, Walter D., assignor to Eastman Kodak Company, Rochester, N. Y. Film-looping device for motionpicture processing machines. 1,645,916; Oct. 18.

Marshall-Wells Company. (See Hokanson, Martin, assignor.)

Marshall, William, assignor to Briggs Manufacturing Company, Detroit, Mich. Weather strip. 1,613,044; Jan. 4.

Marshall, William, assignor to Briggs Marsfacturing Company, Detroit, Mich. Hinge support. 1,622,598; Mar. 29.
Marshall, William, assignor to Briggs Manufacturing Company, Detroit, Mich. Pilers, 1,624,556; Apr. 12.
Marshall, William, assignor to Briggs Manufacturing Company, Detroit, Mich. Molding Strip. 1,627,915; 10

Company, Detroit, Mich. Moiding strip. 1,627,815; May 10.

Marshall, William, assignor to Briggs Manufacturing Company, Detroit Mich. Boor-window finish-strip assembly, 1,630,544; May 31.

Marshall, William, assignor to Briggs Manufacturing Company, Detroit, Mich. Hinge construction. 1,638,007; July 19.

Marshall, William, assignor to Briggs Manufacturing Company, Detroit, Mich. Briggs Manufacturing Company, Detroit Mich. Deck-lid construction. 1,648,607; Nov. 15.

Marshall, William, assignor to Briggs Manufacturing Company, Detroit Mich. Hinge construction for Marshall, William, and F. Kiehler, assignors to Briggs Manufacturing Company, Detroit, Mich. Dorlock. 1,616,439; Feb. 8.

Manufacturing Company, Detroit, Mich. Dorlock. 1,616,439; Feb. 8.

Manufacturing Company, Detroit, Mich. Dorlock. 1,616,439; Feb. 8.

Marshall, William, and F. Kiehler, assignors to Briggs Manufacturing Company, Derver, Colo. Dipping container for explosive cartridges. 1,630,406; May 31.

Marshalltown Sheet Metal Works. (See Bettenga, Creno F., assignor.)

P., assignor.) Maršík, Augustin, Prague, Czechoslovakia. Direction-indicating device especially for vehicles. 1,623,880;

Apr. 5.
Marsland, Roland. (See Cares, H. F., and Marsland.)

Marsland. Roland, Essington, Pa., assignor to Westinghouse Electric and Manufacturing Company. Turbine blading. 1,638,639, Aug. 9.
Marston, Gordon S., Westin Cet. 25.
Marston, Horace A., Sutton, England. Rotary drying apparatus, 1,649,839; Nov. 22.
Mart, Leon T., Kansas City, Mo., assignor to Yarnall-Waring Company, Philadelphia, Pa. Spray pond T. 1,614,430; Jan. 11.
Martel, Edgar J., Laconia, N. H. Automobile lock.

Martel, Eggar J., Laconia, N. H. Automobile lock. 1,016,592; Feb. 8.

Martel, Eggar J., Laconia, N. H. Automobile lock. 1,646,797; Oct. 25.

Martelli, Joseph, Vinciand, N. J. Composition for toy Marten Length, Vincian J. (2007), 100 July 1,000 July 1,00

Mar. 1.

Martin, Albert, New York, N. Y. Ornamenting foodstuffs, 1,624,670; Apr. 12.

Martin, Albert, New York, N. Y. Ornamenting foodstuffs, 1,624,670; Apr. 12.

Martin, Alfred, M., Chicago, Ill. Loose-leaf-binder, 1,618,769; Feb. 22.

Martin, Alfred, M., Chicago, Ill. Loose-leaf-binder, 1,618,770; Feb. 22.

Martin, Alfred, M., Chicago, Ill. Loose-leaf-binder, 1,618,770; Feb. 22.

Martin, Alide, M. (See Martin, George W., assignor,) Martin, Alphones, assignor of fitty-one one-hundredths to M. Katzman, Ogdensburg, N. Y. Electric water heater, 1,621,800; Apr. 2,621,800; Mar. 22.

Martin, Alphones, assignor of fifty-one one-hundredths to M. Katzman, Ogdensburg, N. Y. Combined water beater and sterilizing apparatus. 1,619,146; Mar. 1.

Martin, Alphones, assignor of fifty-one one-hundredths to M. Katzman, Ogdensburg, N. Y. Electric water heater, 1,621,800; Mar. 22.

Martin, Antonio S., Schenectady, N. Y. Knee-operated throftle-valve-controlling means. 1,627,102; May 3, Martin, Bernard, et al. (See Hubbard, Lloyd B., assignor).

signor.)

signor.)
Martin, Bethel J., San Francisco, Calif. Pneumatic steering device for vehicles. 1,627,568; May 10.
Martin, C. Lester. (See De Neen, Albert W. assignor.)
Martin, Carl C., Neihart, Mont. Internal-combustion engine. 1,648,141; Nov. 3.
Martin, Carl, Kearny, N. J., assignor to General Electric Company. Scaling-off device. 1,631,378; June 7.
Morthrup. Company. Philadelpin. 2.
responsive apparatus. 1,643,582; Sept. 27.
Martin, Charles B., Canton, Ohio. Match box. 1,646,300; Oct. 18.

Oct. 18.

Martin, Garles E., Paulsboro, N. J., assignor to Vacuum Oil Company, New York, N. Y. Sealing machine for containers or the like 1,631,748; June 7.

Martin, Charles E., Paulsboro, N. J., assignor to Vacuum Oil Company, New York, N. Y. Applying and securing machines for container closures. 1,632,903; Dec. 13.

Martin, Charles H., assignor of one-half to A. Frediani, Los Angeles, Calif. Ruling machine. 1,646,206; Oct. 18. Los A

Martin, Charles L. (See Vaughn, John H., assignor.)
Martin-Copeland Company. (See Abbott, Carl M., as-

signor.)
Martin-Copeland Co. (See Dorsey, Arthur, assignor.)
Martin-Copeland Company. (See Pendleton, Pyam L., as-

signor.)
Martin, D. E. (See Martin, Delbert, assignor.)
Martin, Daniel H., Los Angeles, Calif. Power-transmitting mechanism. 1,629,618; May 24estal. 1,636,966;
July 26.
Martin, Darius V., Wildwood, N. J. Pedestal. 1,636,966;
July 26.
Morth Platte, Nebr. Radius-rod connection. 1,652,248;
The 13.

Martin, De Loss K. (See Espenschied, L., and Martin.) Martin, Dorr R., Detroit, Mich. Oil burner. 1,651,139;

Martin, Earl L. New York, N. Y. Water-level-controlling means. 1,619,356; Mar. 1.

Martin, Earl L., New York, N. Y. Forming news and tabloid sections from a continuous web. 1,625,862; Apr. 26.

Apr. 26.

Martin, Earl L., assignor to C. L. Brown, Mignet Fu-

Apr. 26.

Martin, Earl L., assignor to C. L. Brown, Miami, Fla.

Automobile suspension. 1,631,108; May 31.

Martin, Earl L., assignor to C. L. Brown, Miami, Fla.

Accelerating alternating-current motor. 1,630,142;

Martin, Eathel E., Indianapolis, and H. W. Dietrich, Noblesville, assignors to J. I. Holcomb Mfg. Co., Indianapolis, Ind. Solidified deodorant and insecticide. Martin, Edgar I., Lascassas, Tenn. Automobile operating gate. 1,653,716; Dec. 27.
Martin, Edgar W., et al., trustees. (See Pendleton, Pyam L., assignor.)
Martin, Edgar W., et al., trustees. (See Pendleton, Pyam L., assignor.)
Martin, Edgar W., et al., trustees. (See Pendleton, Pyam L., assignor.)
Martin, Fred N. (See Willson, Russell A., assignor.)
Martin, Frederick H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Overshoe. 1,631,749; June 7.
Martin, Frederick H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Overshoe. 1,631,749; June 7.
Martin, Frederick H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Hand roller. 1,637,450; Aug. 2.
Martin, Frederick H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Hand roller. 1,637,450; Aug. 2.
Martin, Frederick H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Shoe. 1,642,737; Sept. 100.
Martin, Frederick W., Brooklyn, N. Y., assignor to Martin, Fred

Martin, Frederick II., Akron, Onto, assignor of Sept. 20.

Goodrich Company, New York, N. Y. Shoe. 1,642,737; Sept. 20.

Martin, Frederick W., Brocklyn, N. Y., assignor to Franklin Railway Supply Company. Lubricator. 1,020,4479; Mar. 8. Bronxyllle, N. Y., assignor to Mranklin Railway Supply Company. Locomotive-booster apparatus. 1,643,398; Sept. 27.

Martin, George C., Los Angeles, Calif. Packer head for pipe-molding machines. 1,616,816; Feb. 8.

Martin, George C., Los Angeles, Calif. Pipe-making ma-Martin, George C., Los Angeles, Calif. Forming pipe. 1,623,219; June 21.

Martin, George C., Los Angeles, Calif. Forming pipe. 1,633,219; June 21.

Martin, George C., Los Angeles, Calif. Forming pipe. 1,633,263; July 26.

Martin, George H., Warm Springs, Mont. Spring wheel. 1,637,263; July 26.

Martin, George H., Warm Springs, Mont. Spring wheel. 1,637,268; July 27.

Martin, George W., Tulsa, Okia, assignor of one-half to A. M. Martin, Los Angeles, Calif. Wire stretcher. 1,553,866; Dec. 27.

Martin, Gles W. O., West Medford, assignor to American Shoe Machinery Company, East Boston, Mass. Pressure tempering. 1,613,621; Jan. Baston, Marrin, Gles W. O., West Medford, assignor to American Shoe Machinery Company, East Boston, Mass. Pressure tempering. 1,613,621; Jan. Baston, Massignor Spring Marrin, Harold, Portsmouth, England, Fluid-pressure-Marrin, Harold, Portsmouth, Pagland, Fluid-pressure-Marrin, Harold, Portsmouth, Pagland, Fluid-pressure-Marrin, Harold,

Company, and Boston, Mass.

Martin, Grempering. (6.08,21), and Boston, Mass.

Martin, Harold, Portsmouth, England. Fluid-pressureoperated means for indicating the quantity and specific
gravity of the liquid contents of tanks. 1,622,794;

Martin, Harold S. (See Gell, P. V. W., Gould, Hampton,
and Martin,)

Martin, Harrison. S. (See Dippel, William T., assignor.)

Martin, Harry C., assignor to The Carboroundum Commaterial, and making the same. 1,622,644;

Martin, Herman F., Sulphur, Okla. Valve-spring lifter,
1,634,670; Oct. 4. Middlesboro, Ky. Woven strap for
Martin, Horace E., Athens, Ga. Wagon. 1,617,131;

Feb. 8.

Martin, Horace E., Athens, Ga. Wagon. 1,617,131;

Feb. 8.

Martin, Horace J., Brookline, assignor, by mesne as-

Martin, Horace J., Brookline, assignor, by mesne as signments, to Live Leather Products, Inc., Cambridge, Martin, Horace J., Brookline, assignor, by mesne basign-ments, to Live Leather Products, Inc., Cambridge, Mass. Elastic strapping. 1,620,162; Mar. 8. Martin, Jacob F., assignor to The Bellevue Manufacturing Company, Bellevue, Ohio. Luggage carrier. 1,634,599;

July 5.

Martin, Jacob N. (See Martin, Albert W. and J. N.)

Martin, James V., Garden City, N. Y. Aeroplane-wing

structure. 1,627,191; May 3.

Martin, James V., Garden City, N. Y. Craft-propulsion

Martin, James W., Garden City, N. Y. Craft-propulsion

Martin, James W., Milwaukee, assignor to Joannes Bros.

Company, Green Bay, Wis. Collapsible container.

1,615,465; Jan. 25.

Martin, Jesse C., Jr., San Francisco, Calif. Brick die.

Martin, Jesse C., Jr., San Francisco, Calif. Brick die.

Martin, John, Amorita, Okla. Brake for cream separators.

1,642,997; Sept. 20.

Martin, John, Amorita, Okla. Brake for cream separators.

1,642,997; Sept. 20.

Martin, John Parkersburg, W. Va. Bricklayer's hammer. 1.648,616; Nov. 8. Martin John H. Central Park, N. Y. Carroting fur. Martin, John H. Central Park, N. Y. Preparation of fur for shrinking and felting. 1,630.664; May 31. Martin, Julius W., administrator. (See Perry, Napoleon J.)

Martin, Kenneth B., Springfield, Mo. Swimming device. 1.647.875; Nov. 1. Martin, L. Wynne, et al. (See Tuholske, Joseph. assignor.)

Martin, Laurence C., et al, trustees. (See Pendleton, Pyam L., assignor.)
Martin, Le Roy, Oklahoma City, Okla. Battery connection for motor vehicles. 1,648,617; Nov. 8.
Martin, Louis, Muncy, Pa. Snowplow. 1,634,673; tion for motor vehicles. 1,648,617; Nov. 8.
Martin, Louis, Muncy, Pa. Snowplow. 1,634,673;
July 5.
Martin, Lucian T., et al., trustees. (See Rogers, Harry R., Martin, Lician T., et al., Truscees. (see August) suscepting assignor.)
Martin, Mark H., Baltimore, Md., assignor to The Symington Company, New York, N. Y. Side frame.
1.644,071; Oct. 4.
Martin, Morris, Los Angeles, Calif. Automatic cigarette case. 1.616,864; Feb. 8.
Martin, Otis M., and C. M. Webster, Detroit, Mich. Coloring letters or figures impressed in metal tags, badges, etc. 1.640,187; Aug. 30.
Martin-Parry Corporation. (See Weaver, Harry A., assignor.) Martin, Sidney A. (See Bucchel, E. B., and Martin, Sidney B., (See Bucchel, E. B.).

Martin, Richard H., assignor to Norton Company, Worcester, Mass. Silicon-carbide article and making same. 1,63,918; Dec. 27.

Martin, Robert, Fort Francis, Ontario, Canada. Machine for collecting bugs. 1,627,736; May 10.

Martin, Robert E., et al. (See Hunt, John D., assignor.) Martin, Sidney A. (See Bucchel, E. E., and Martin, Norto Co., Dainer, Colo. Ditching plow. 1,648,236; Martin, Söndey A. (See Busenes, 2- Martin, Sotot O., Lamar, Colo. Ditching plow. 1,648,236; Nov. 8.
Martin, Talbot G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic tele-Martin, Talbot G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telepione systems. 1,640,551; Aug. 30.
Martin, Talbot G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telepione systems. 1,650,895; Nov. 23.
Martin, Talbot G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telepilone system. 1,650,895; Nov. 23.
Martin, Talbot G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic telepilone system. 1,650,895; Nov. 23.
Martin, Tobles W., Charlotte, N. C., Carpenter's tape. 1,643,166; Sept. 20.
Martin, Velore H. G. (See Maltre, A. H., and Martin.)
Martin, Wallace I., Chicago, III., assignor to Western Bartin, Wallace I., Chicago, III., assignor to Western Chicago, III., assignor to Western Chicago, III., Toronto, Ontario, Canada. Shade holder for electric-lamp sockets. 1,614,794; Apr. 12.
Martin, William C., Milwaukee, Wis. Manufacturing chine for assembling parts or elements of fabricated articles. 1,639,700; Aug. 23.
Martin, William A., Toronto, Ontario, Canada. Shade William C., Chicago, Ill. Tire. 1,632,489; June 14.
Martin, William C., Chicago, Ill. Tire. 1,632,489; June 14.
Martin, William C., Chicago, Ill. Tire. 1,632,489; June 14.
Martin, William C., Chicago, Ill. Tire. 1,632,489; June 14.
Martin, William E., Gee Tibbens, Samuel K., assignor.) Martin, William F., Gee Tibbens, Samuel K., assignor.) Martin, William H., Chappaqua, N. Y., assignor to American Telephone and Telegraph Company. Cone loud-speaker diaphragm. 1,626,743; May 3. assignor to American Telephone and Telegraph Company. Cone loud-speaker diaphragm. 1,626,743; May 3. assignor to Ann. Chilliam H., Chappaqua, N. Y., assignor to Martin, William H., Ellishing, Netherlands. Exhaust and like Silencer. 1,641,394; Sept. 6.
Martin, William H., and L. Mikie. Monongahela, Pa. 1,630,024; May 24.
Martindale, Andrew, Los Angeles, Calif. Apparatus for modding plastic blocks. 1,637,438; Aug. 2.
Martindale, Charles A., assignor to The Reliable Machine Congrap, Andeson, Ind. Blettic door opener. Congrap, Andeson, Ind. Blettic door opener. Martine, John C., New York, N. Y. Coin holder. 1,615,642; Jan. 25.
Martinetto, Vitorlo, Turin, Italy. Asynchronous maduratines, Gabriel, New York, N. Y. Golf-ball packing. 1,655,223; Nov. 22.
Martinetto, Fidous, Jan. 11.
Martinetto, Gabriel, New York, N. Y. Golf-ball packing. 1,655,223; Nov. 22.
Martinetto, Jan. 19.
Martine, John P., El Campo, Tex. Burglar alarm. 1,655,223; Nov. 22.
Martinetto, Heldon, Jan. 11.
Martines, John P., El Campo, Tex. Burglar alarm. 1,655,223; Nov. 22.
Martine, John P., El Campo, Tex. Burglar alarm. 1,650,223; Nov. 22.
Martine, John P., El Campo, Tex. Burglar alarm. 1,650,223; Nov. 22.
Martinetto, William P., El Campo, Tex. Burglar alarm. 1,650,223; Nov. 22.
Martinetto, Martinetto, Mart

Marton, Charles T., Rochester, N. Y. Sign holder. 1,846,414; Oct. 25.
Martus, Martin L., Woodbury, and E. H. Becker and J. G. Ross, Waterbury, Conn., Battery holding and carry-water and the state of t assignor.)
Marvel Carbureter Company. (See Wright, Rea P., assignor.)
Marvel Company, The. (See Weir, Roy W., assignor.)
Marvel Equipment Company, The. (See Opitz, William
H., assignor.)
Marvel Equipment Company. (See Spaeth, Charles, assignor.)
Marvel Oil Tool Company. (See Hazard, Merlin C., assignor.)
Dain B. Davton, Ohio, Multiple-point plug. signor.)
Marvel Orin E., Dayton, Ohio. Multiple-point plug. 1163,716; Dec 27.

1163,716; Dec 27.

1163,716; Dec 27.

1163,716; Dec 27.

Marvin, Samuel W., Cambridge, assignor of one-third to W. J. Marsh, Stow, and one-third to C. G. Wells, Boston Marvin, Samuel W., Cambridge, assignor of one-third to W. J. Marsh, Stow, and one-third to C. G. Wells, Boston Marsh, Stow, and one-third to C. G. Wells, Boston Marsh, Stow, and one-third to C. G. Wells, Boston Marsh, Stow, and State of the Marsh, and Marsh, Stow, and State of the Marsh, and Marvel, Orin E., Dayton, Ohio. Multiple-point plug. 1,653,776; Dec. 27.
Marvin, Benjamin, et al. (See Pfister, John R., as-Marx, Louis, Brooklyn, N. Y. Mechanically-operated toy. 1,625.326; Apr. 19.

Marx, Louis, Brooklyn, N. Y. Roundabout toy. 1,630,091; Marx, Louis, Brooklyn, N. Y. Roundabout toy. 1,630,091; May 24,0016. Brooklyn, N. Y. Toy roundabout Marx, Louis, Brooklyn, N. Y. Tigure wheeled toy. 1,653,717; Dec. 27. Marx, Louis, & Company, (See Esser, Peter, assignor.) Marx, Richard, Philadelphia, Pa. Loom. 1,618,848; Feb. 22. Feb. 22.
Marx, Richard, Philadelphía, Pa. Cutting attachment for looms. 1,642,428; Sept. 13.
Marx, Stephen J. (See Friedlaender, I. L., and Marx.)
Maryland Baking Co. (See Buhse, Maximilian E., assignor.)
Maryland Baking Co. (See Buhse, Maximilian E. asW. W., assignors.)
Mas, George N., Washington, D. C. Bottle. Des. 71,919;
Jan. 25. Jan. 25.

Mas, George N., Washington, D. C. Bottle. Des. 71,920; Jan. 25.
Mas, George N., Washington, D. C. Bottle. Des. 72.954;
June 28.
Washington, D. C. Bottle. Des. 72.955; June 28.

Mas, George N., Washington, D. C. Bottle. Des. 72.955;
June 28.

Mas, George N., Washington, D. C. Bottle. Des. 72.956;
June 28.

Mas, George N., Washington, D. C. Bottle. Des. 72,957; June 28. as, George N., Washington, D. C. Bottle. Des. 72,958; June 28. as, George N., Washington, D. C. Bottle. Des. 72,959; June 28. George N., Washington, D. C. Bottle. Des. 72,960; June 28. as, George N., Washington, D. C. Bottle. Des. 72,960; June 28. June 28. Mas June 28. As, George N., Washington, D. C. Bottle. Des. 72,962; June 28. As, George N., Washington, D. C. Bottle. Des. 72,963; Mas June 28. Mas, George N., Washington, D. C. Bottle. Des. 74,066; Dec. 13.

Mas, George N., Washington, D. C. Bottle. Des. 74,087;

Dec. 13.

Mas, George N., Washington, D. C. Bottle. Des. 74,068; Dec. 13. as, George N., Washington, D. C. Bottle. Des. 74,069; Mas,

Dec. 13.

Maschinenbau-Aktiengesellsehaft vorm. Starke & Hoffmann. (See Schlagenhauft, Karl, assignor.)

Maschinenfabrik Augsburg-Nuernberg A. G. (See Jagschitz, Konrad, assignor.)

Maschinenfabrik - Augsburg-Nuernberg Aktiengesellschaft.

Gee Fischer, Hans, assignor.)

Maschinenfabrik Augsburg-Nuernberg Aktiengesellschaft.

Maschinenfabrik Aügsburg-Nuernberg Aktiengsseinschatt, tSee Horn, Leonhard, assignor.) Maschinenfabrik - Augsburg - Nuernberg Aktiengeselschaft. (See Kolmer, W., and Wirschinger, assignors.) Maschinenfabrik Augsburg-Nuernberg Aktiengeselschaft. (See Riehm, Wihledm, assignor). Maschinenfabrik G. Haushert, B. Hinselmann & Co. Gesellschaft mit beschrankter Haftung. (See Jasper, Maschinenfabrik Kappel A.-G. (See Hadam, Max, assignor).

signor.)

Maschinenfabrik Moenus Aktien-Gesellschaft. (See Bohacek, Bruno P., assignor.) Maschinenfabrik Rüti. (See Senn, Caspar, assignor.) Maschinenfabrik Walter & Kuffer. (See Walter A., and Kuttruf, assignors.) Maschinenfabrik Zell J. Krückels. (See Krückels, Joseph,

Maschinenfabrik Zeil J. Krückels. (See Krückels, Joseph, assignor).

Mascho, James A., Dallas, Tex. Fusible boiler-check plug.

1.640,611; Aug. 30.

Mascolo, Aniello, Waterbury, Conn. Flying toy.

1.620,14; May J. East Orange, N. J. Automobile bumper and clamp. 1,613,668; Jan. 11.

Masc, Roscoe P., Wilkinsburg, Pa. Method of and apparatus for quantitative determination of gas.

1.634,631; July 5.

Mascrang, John B. Belleville, Ill. Mail-box signal.

Mascharing, John B. Belleville, Ill. Katlenges-lischaft, Chemnitz, Saxouy. Production of rib-top fabrics and mechanism for use in producing the same. 1,646,301; Oct. 18.

mechanism for use in producing the same. 1,000,301; Oct. 18.

Masney, Thomas C., Boston, Mass. Tobacco pipe. Mass. 275; July 5.

10.001, Arthur C., Hawthorne, N. J. Fabric-slitting machine. 1,648,1837; Nov. 1.

Mason, Au & Magenheimer Confectionery Manufacturing mechanism. 1,649,172; Nov. 15.

Mason, Au & Magenheimer Confectionery Manufacturing Company. See Belcher, Lesle, assignor. Journal Company. See Belcher, Lesle, assignor. Mason, Charles W., Olaa, Hawall. Bagasse board and Mason, Frank B., New Forvidence, assignor of one-fourth to E. A. Unrer, Scotch Phains, one-fourth to E. A. Mason, Frank B., New York, N. Y. Oil-testing apparatus for motor vehicles. 1,830,067; May 24.

Mason, Freeman D., assignor to The Bridgewater Machine Company, Akron, Ohio. Collapsible drum. 1,634,951; July 5.

July 5.

Mason, Freeman D., assignor to The Bridgewater Machine Company, Akrou, Ohio, Trimmer for strip material.

Mason, Freeman D. assignor to The Bridgewater Machine Company, Akron, Ohlo. Trimmer for strip material. 1.642.998; Sept. 20. Mason, Harry L. (See Redheffer, C. R., and Mason.) Mason, Harry L. (See Redheffer, C. R., and Mason.) Mason, Henry L., Asheville, N. C. Electric speed control for motor vehicles. 1.627.985; May 10., Mason, Howard, Framingham, and W. Blarnut Engineering Company, Dorchester, Mass. Grinding mechanism. 1.624.494; Apr. 12. Mason, Leon O., assignor of one-half to A. Willock, Los Angeles, Calif. Camp table. 1.626.293; Apr. 26. Mason, Max. (See Hayes, H. C. and Mason.) Mason, Ralph K., assignor to The Trumbull-Vanderpoel Engineering Company, Bantan, Conf. Rect. & Manufacturing Company, Bantan, Conf. Cot. 25. Mason, Kichard C., Tulsa, Okla. Power transmission.

Mason, Richard C., Tulsa, Okla. Power transmission. 1,619,876; Mar. 8.

Mason, Roger, Westfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Gummed-Mason, Seward, Helen, Mont. Ore stampling machine. 1.646,032; Oct. 18.
Mason, Sumer R., Wilmette, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Process of and apparatus for cleaning metal. 1,625,484;

Apr. 19.

Mason, Sumner R., Wilmette, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Buffing and cleaning of metal parts. 1,582,909; June 21.

Mason, Thomas S., and E. L. Yungk, Hartford, Conn. Container. 1,627,042; May 23.

Mason, William D. Richmond, assignor, by mesne assignments, to Standard Oil Company of California, Sar Francisco, Calif. Petroleum distillation. 1,618,991;

Feb. 1.

Mason, William P., New Mile End, South Australia, assignor of one-half to N. S. Spencer, Adelaide, Australia, Hydraulic shock absorber for motor vehicles. 1,638,777;

Aug. 9.
Masonic History Company. (See Burrell, Walter C.,

Masonic History Company, assignor, assignor, Massacese, Vincenzo, New York, N. Y. Cushion-spring connection. 1,622,202; Mar. 22.

Massarella, John, Chacimati, Obio. Confectionery-coating machine. 1,639,263; Aug. 16.

Massey, Alexander J., Los Angeles, Calif. Traffic signal. 1,640,845; Aug. 30.

Massay, Cecil, Litchfield, Ill. Burial casket. 1,636,237; Cap. Massay, Cecil, Litchfield, Ill. Surial casket. 1,636,237; Aug. 30.

July 19.

Massey Concrete Products Corporation. (See McDaniel, William L., assignor)

William L., assignor)

Wynnewood, assignor of one-half to The Philadelphia Tabloid Pullishing Company, Philadelphia, Pa. Puzzle. 1.642,424; Sept. 13.

Massey-Harris Company, (See Verity, W. J. and Van Sickle, assignors.)

Massey-Harris Harvester Company. (See Baseman, Massey-Harris Harvester)

Massey-Harris Company. (See Verity, W. J. and Van Sickle, assignors.)
Massey-Harris Harvester Company. (See Baseman, Ernest, assignor.)
Massey-Harris Harvester Company. (See Baseman, Ernest, assignor.)
Webicle. 1,621,942; Mar. 22
Massey, Orren I, assignor of one-half to S. Williams, Elk City, Okla. Clothing and package carrier. 1,631,643; June 7.
Massey, Orren I, assignor of one-half to S. Williams, Elk City, Okla. Clothing and package carrier. 1,631,643; June 7.
Massello, Thomas K. Brakpan, Transvaal, South Africa.
Oil separator. 1,627,569; May 10.
Massillo, Charles A., Millcreek Township, Eric County, assignor to The Criswold Manufactring Company, Massing, Charles A., Millcreek Township, Eric County, assignor to The Criswold Manufactring Company, Massingham, Henry R. La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for serving material upon a core. 1,629,168; May 17.
Massolle, Joseph (See Yogt, H., Engl, and Massolle, Massolle, Joseph (See Yogt, H., Engl, and Massolle, Massolle, Joseph, See Hogt, H., Engl, and Massolle, Massolle, Joseph, and J. Engl, Berlin-Grunewald, and H. Vogt, Eerlin-Wilmersdorf, Germany, assignors to Tri-Ergon Linjited, Zurich, Switzerland, Amplifier. 1,630,733; May 31.
Massolle, Joseph, and J. Engl, Berlin-Grunewald, and H. Vogt, Eerlin-Wilmersdorf, Germany, assignors to Tri-Ergon Linjited, Zurich, Switzerland, Amplifier. 1,630,733; May 31.
Massolle, Joseph, and J. Engl, Berlin-Grunewald, and H. Vogt, Eerlin-Wilmersdorf, Germany, assignors to Tri-Brune Willerland, Glow-discharge Masson, Frank, San Francisco, Calif. Suction head. 1,637,265; July 26.
Masson, Louis E., New Orleans, La. Sample holder for cloth boards. 1,641,857; Sept. 6.
Masson, Louis E., New Orleans, La. Sample holder for cloth boards. 1,641,857; Sept. 6.
Masson, Louis E., New Orleans, La. Sample holder for cloth boards. 1,641,857; Sept. 6.
Masson, Louis E., New Orleans, La. Sample holder for cloth boards. 1,642,657; Sept. 6.
Masson, Louis E., New Orleans, La. Sam

assignor.) Master, Alb Albert, Park Ridge, Ill. Ball-bearing mounting.

aster, Albert, Later 1,626,092; Apr. 26, aster Domestic Refrigerating Company. (See Strong,

Master Domestic Kerrigerating Company. (See Street, Archie H., assignor.)
Master Lock Company. (See Soref, Harry, assignor.)
Master Metal Products, Inc. (See Geibel, John F., as-

signor.)
Master Package Corporation, The. (See Hulbert, Edwin assignor.)

Asster Woodworker Manufacturing Co., et al. (See Gries, Lester M., assignor.) Masterbilt Motor Company. (See Edman, John, as-

Masterench Corporation. (See Lynch, E. E., and Mead,

Masterench Corporation. (See Lynch, E. E., and Mead, assignors, Masters, Frank E., and W. A. Hussey; said Hussey assignor to C. A. Mechling, Tulsa, Okia. Headrest. 1.625,267; Apr. 19.
Masters, John H., assignor to The Valle-Kimes Company, Dayton, Ohio. Water-supply system and valve therefor. 1.631,142; June; T. Masters, W. A., et al. (See Shay, Harry E., assignor.) Masters, Willium T., Khedive, assignor of one-half t. S. A. Hoge, Rices Landing, Pa. Rail Joint. 1,649,316; Nov. 16.

Mastin, Herbert G. See Capps, W. T., and Mastin, Maston, Edward E. Chicago, Ill., assignor to Mid-West ping cases. 1,825,627, Apr. 19 acting unit for shipping cases. 1,825,627, Apr. 19 (See Caruso, Romeo O., assignor.)

Mastrona, Daniei, et al. (See Caruso, Romeo U., assignor, nol. Saviour. New York, N. Y. Luggage carMastron 16,16,682; Feb. 8.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Combined radiator and hood
for motor vehicles. Des. 72,104; Mar. 1.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Cushion connection for vehicle
construction. 1,613,763; Jan. 11.
Masury, Alfred F., assignor to International Motor
Company, New York, N. Y. Sectional vehicle body.
1,623,673; Mar. 2.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Cushion connection for vehicle construction. 1,624,676; Mar. 22.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Spring suspension. 1,621,677;
Mar. 22.
Masury, Alfred F., assignor to International Motor ComMasury, Alfred F., assignor to International Motor ComMasury, Alfred F., assignor to International Motor ComMasury, Alfred F., assignor to International Motor Com-

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Spring suspension, 1,621,677; Mair. 22.

Mair. 22.

Mair. 23.

Mair. 24.

Mair. 25.

Mair. 25.

Mair. 26.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Window. 1,627,918; May 10.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Seat. 1,637,789; Aug. 2.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Seat. 1,637,789; Aug. 2.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Vibration dampener. 1,040,788; Aug. 30.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Actuating mechanism for Masury, Alfred F., and E. C. Fink, assignors to The Rubber Shock Insulator Company, Inc., New York, N. Y. Shock-insulated rail track, 1,619,928; Mar. 1.

Masury, Alfred F., and C. Freesch, assignors to International Motor Company, New York, N. Y. Aleccoled drive for vehicles. 1,631,975; June 14.

Masury, Alfred F., and C. Freesch, assignors to International Motor Company, New York, N. Y. Lubri-Masury, Alfred F., and C. Freesch, assignors to International Motor Company, New York, N. Y. Lubri-Masury, Alfred F., and C. Freesch, assignors to International Motor Company, New York, N. Y. Lubri-Masury, Alfred F., and C. Freesch, assignors to International Motor Company, New York, N. Y. Lubri-Masury, Alfred F., and C. Freesch, assignors to International Motor Company, New York, N. Y. Universal Masury, Alfred F., and C. Freesch, assignors to International Motor Company, New York, N. Y. Universal Masury, Alfred F., and A. H. Leipert, assignors to International Motor Company, New York, N. Y. Universal Masury, Alfred F., New York, M. P. Universal Masury, Alfred F., New York, M. A. Lubri-Masury, Alfred F., and A. H. Leipert, assignors to International Motor Company, New York, N. Y. Universal Masury, Alfred F., New York, N. Y. Universal John. 1,648,649,740,740, N. Y. States Masury, Alfred F., New York, N. Y. Molding apparatus. 4,6

Oct. 18.
Masztics, Alexander, New York, N. Y. Molding apparatus. 1,651,215; Nov. 29.
Matchette, Frank J., New York, N. Y. Apparatus for propagation of culture germs. 1,618,461; Feb. 22.
Matcer, F. W., & Co. (See Polm, R. H., and Poblimann, Matcher, F. W., & Co. (see Poblimann, William F., assignor, F. W., & Co. (see Poblimann, William F., assignor, F. W., & Co.)

ateer, F. assignor.)

assignor.)
Materny, Otto, Bethlehem, Pa. Revenue,
1,629,350; May 17.
Mathe, John M. (See Mathe, Kennedy M. and J. M.)
Mathe, Kennedy M. and J. M., Hammond, Ind. Ore concentrator. 1,638,364; Aug. 16.
Mather, Alorizo C., Chicago, Ill. Uncoupling link for Mather, Alorizo C., Chicago, Ill. Car roof. 1,650,949; Moy. 29.
Mather, Greig, R., London, England. Garment-cutting whether, Greig, 2004. Sent. 20.

Nov. 29.
Mither Greig R., London, England. Garment-cutting Mather & Platt Limited. (See Taylor, John, assignor.) Mathers, Kenneth A., Haskins, Iowa. Amusement device. 1,625,375; July 12.
Mathes, Guy, Van Nuys, Calif. Clamp. 1,613,354; Jan. 4.

Mathes, John A., San Diego, Calif. Kerosene vaporizer.
1,624,270; Apr. 12.
Mathes, Hohert C., Wyoming, N. J., assignor by mesne assignments to Western Electric Company, Incorporated Methods, Methods, Mohert C., Wyoming, N. J., assignor to Western Blectric Company, Incorporated, New York, N. Y. Signaling. 1,681,376; June 14.
Mathes, Robert C., Wyoming, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron-discharge device. 1,640,462; Aug. 30.
Methods of the Company, Incorporated, New York, N. Y. Apr. 1,925, 268; Apr

Mathes, V

Apr. 19.
Matheson, Andrew A. Denver, Colo. Sugar-beet-seed dropper. 1,638,948; Aug. 9.
Matheson, Duayne L., Cedar City, Utab. Automatic film rewinder. 1,658,944; Dec. 27.

Matheson, Frederick J., Newark, N. J. Hair-tinting device. 1,637,761; Aug. 2
Matheson, Howard W., assignor to Canadian Electro
Products Company, Limited, Montreal, Quebec, Canada.
Composition for use in the manufacture of or for use
as varnishes and the like and making the same.
1,655,899; Nov. 22.
Matheson, Howard M., Montreal, Quebec, Canada, asMaking condensation products. 1,653,802; Dec. 20.
Matheson, Howard W., Montreal, and K. G. Blaikie,
Shawinigan Falls, assignors to Canadian Electro Products
Company, Limited, Montreal, Quebec, Canada.
Manufacture of lactic-acid esters. 1,650,905; Nov. 28.
Mathews, Fred. (See Strid, Sven J., assignor.)
Sept. 18. Bohert F. Newark N. J. assignor to The
Sept. 18. Bohert F. Newark N. J. assignor to The

I.620,271; Mar. 8.
Mathews, Fred, Chicago, Ill. Gearing. I,642,120;
Sept. 13.
Mathews, Robert F. Newark, N. J. assignor to The
Mathews, Ashthews Co., New York, N. Y.
Combination
lamp and globe. Des. 73,665; Oct. 18.
Mathews, Kopert F., Newark, N. J., assignor to The
Heather-Mathews Co., New York, N. Y. Table lamp.
Des. 27,866; Oct. 18.
Machine and Manufacturing Company, Greensboro, N.
C. Wood-saw attachment for automobiles. Re16,815;
Dec. 13.
Mathewson, Paul, New York, N. Y. Making foot molds.

Mathewson, Paul, New York, N. Y. Making foot molds. 1,642,930; Sept. 20. Mathewson, Paul, Durham, Conn. Desk tray. 1,645,151;

Mathey Louis C., Nashville, Tenn. Strain-applying device for fishing rods. 1.613,522; Jan. 4.

Mathey Louis C., Nashville, Tenn. Strain-applying device for fishing rods. 1.613,522; Jan. 4.

Mathey, Louis C., Nashville, Tenn. Strain-applying device for fishing rods. 1.618,302; Feb. 22.

Mathey, Louis C., Nashville, Tenn. Fishing hook. 1.619,147; Marl. Assignor to Siemens & Halske Attengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Automatic telephone switching system. 1,647,966; Nov. 1.

Mathiasen, Georg E., Copenhagen, Denmark. Ironing machine. 1,649,357; Nov. 15.

Mathiesen, Marius, assignor to Mathiesen Sandberg Company, Cheago, Ill. Collapsible loop aerial. 1,614,434; Mathiesen Sandberg Company. (See Mathiesen, Marius, assignor).

assignor.)
Mathieson Alkali Works, The. (See Brooks, Benjamin T., assignor.)

Mathieson Alkali Works, The. (See Evans, George S., assignor.) Mathieson Alkali Works, The. (See Goodwin, Camillo J.,

Mathieson Alkali Works, The. (See Goodwin, Camillo J., assignor.)
Mathieson Alkali Works, Inc., The. (See Guyer, J. A., and Taylor, assignors.)
Mathieson Alkali Works, Inc., The. (See MacMullin, Robert B., assignor.)
Mathieson Alkali Works, Inc., The. (See MacMullin, Robert B., assignor.)
Mathieson Alkali Works, Inc., The. (See MacMullin, R. Mathieson Alkali Works, Inc., The. (See MacMullin, R. Mathieson Alkali Works, Inc., The. (See Mauran, Max, assignor.)
Mathieson Alkali Works, The. (See Parker, Harrison Mathieson Alkali Works, The.)

assignor.)
Mathleson Alkali Works, The. (See Parker, Harrison
O. assignor.)
Mathicson Alkali Works, Inc., The. (See Taylor, Maurice
C., assignor.)

Mathies of Airan Works, Inc., The.

C., assignor), W., (See Kraue, A.R., and Mathieu, Mathieu, Frederick W., (See Kraue, A.R., and Mathieu, Garpiec. 1,624,144; ADr. 12.

Mathis, Frederick W., Lynchburg, Va., assignor to Draper Corporation, Hopedale, Mass. Shuttle-feeler thread parter and clamp. 1626,546; Apr. 26.

Mathis, William E., Bikhart, Ind. Cable construction. Mathouser, Charles B., and F. A. Leui, Comstock, Nebr. Automatic oiler. 1,612,976; Jan. 4.

Mathisko, Steve. (See Gatfal, George, assignor.)

Mathouser, Charles B., and F. A. Leui, Comstock, Nebr. Automatic oiler. 1,612,976; Jan. 4.

Matinsko, Steve. (See Gatfal, George, assignor.)

Mathock, Adelside C., Miami, Fla. Artificial flower.

Mathock, Chauneey, Brooklyn, N. Y., assignor to Monroe-Louisian Carbon Company, Monroe, La. Curbon black Indick, Chauneey, Brooklyn, N. X., assignor to Monroe-Louisian Carbon Company, Monroe, La. Curbon black 1,617,071; Feb. 8.

Matlock, Chauneey, Brooklyn, N. Y., assignor to Monroe-Louisian Carbon Company, Monroe, La. Curbon black 1,617,071; Feb. 8.

Matlock, Chauneey, Brooklyn, N. Y., assignor to Monroe-Louisian Carbon Company, Monroe, La. Curbon black 1,617,071; Feb. 8.

Matlock, Chauneey, Brooklyn, N. Y., assignor to Monroe-Louisian Carbon Company, Monroe, La. Process and apparatus for producing carbon black. 1,617,072; Mathesk Chauneey, Revoklyn, N. Y. assignor to Monroe-Louisian Carbon Company, Monroe, La. Process and apparatus for producing carbon black. 1,617,072; Mathesk Chauneey, New York, N. Y. assignor to Monroe-Louisian Carbon Company, Monroe, La. (Process and apparatus for producing carbon black. 1,617,072; Mathesk Chauneey, New York, N. Y. assignor to Monroe-Louisian Carbon Company, Monroe, La. (Process and apparatus for producing carbon black. 1,617,072; Mathesk Chauneey, New York, N. Y. assignor to Monroe-Louisian Carbon Company, Monroe, La. (Process and apparatus for producing carbon black. 1,617,072; Mathesk Chauneey, Revoklyn, N. Y. assignor to Monroe-Louisian Carbon Company, Monroe, La. (Process

Matlock, Chauncey, New York, N. Y., assignor to Monroe Louisiana Carbon Company, Monroe, La. Apparatus for separating particles from gases at high temperatures. 1,617,073; Feb. 8.
Matlock, Chauncey, New York, N. Y., assignor to Monroe Louisiana Carbon Company, Monroe, La. Process and apparatus for producing carbon black. 1,617,074; Feb. 8.

Matson, Carl A., Lynnfield, Mass., assignor to Shoe Lace Company, Ltd., Providence, R. I. Lace-tipping machine, 1,613,715; Jan. 11.

Matson, Carl A., Lynnfield, Mass., assignor, by mesne assignments, to Shoe Lace Company, Ltd., Providence, R. I. Tipping laceings., 1,613,640; Jan. 1,700; Jan. 1,620,610; Apr. 12.

Matson, Marcus E., New York, N. Y. Automatic safety appliance for gas burners, 1,640,045; Aug. 23.

1,624,610; Apr. 12.

Matson, Taylor, Philadelphia, Pa. Boiler. 1,653,640; Dec. 27.

Matson, Taylor, Philadelphia, ra.
Dec. 27.
Matsushita, Gentaro, Selma, Calif. Automatic fire extinguisher. 1,625,036; Apr. 19.
Mattatuck Manufacturing Company, The. (See Raeburn, within assignor.)

thinguisher. 1,625,086; Apr. 19.
Mattatuck Manufacturing Company, The. (See Raeburn, William, assignor.)
Matte, Andrew L., Beoklyn, N. Y., assignor to American Matte, Andrew L., Beoklyn, N. Y., assignor to Carbonizing Steading apparatus. 1,645,607; Oct. 18.
Mattei, Diego, and A. Mazza, assignors to "Effernit," Pletra Artificiale, Societa Anonima, Genoa, Italy. Apparatus for the manufacture of tubes of cement asbestos or similar substances. 1,627,104; May 3.
Mattenklodt, Karl, and H. Schramm. assignors to Duisburger-Kupferbutte, Duisburg, Germany. Recovery of copper, sinc, and other metals from solutions containing the state of the substances. 1,627,104; May 3.
Matter, Albert J., Chicago, Ill. Automobile directionindicating lens. Des. 7,1943; Feb. 1.
Mattern, George W., assignor to The Crawford, McGregor and Canby Company, Dayton, Ohio. Golf cib. 1,620,118; Mar. 8.
Mattern, Phil J., and H. N. Walker, assignors of one third to E. C. Ballman, Oclweln, Iowa. Baseball game. Mattern, Willip S. Mattern, Phil J., and P. Walker, Assignors of one third to E. C. Ballman, Oclweln, Iowa. Baseball game. Mattern, Willip S. Mattern, Phil J., and C. D. Magirus Aktlengesell-

11.034.296 July 5.
11.034.296 July 5.
11.034.296 July 5.
11.034.296 July 6.
11.034.19 William J., Lewistown, Pa. Pipe. 1,627,707 July 1.
11.034.19 William J., Lewistown, Pa. Pipe. 1,627,707 July 26.
11.034.19 July 26.
11.0

Matthes, Samuel S, assignor to The Ohio Erass Company, Mansfield, Ohio. Conductor support. 1,623,694; Apr. 5.

Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Conductor support. 1,633,867; Matthew Green, Detroit, E. M. Jones, Adrian, and H. H. Willard, Ann Arbor, assignors to Parker Rust-Proof Company, Detroit, Mich. Rustproofing. 1,651,694; Dec. 6.

Matthews, Algernon W., Haverhill, Mass, assignor to United Shoe Machinery Corporation, Paterson, N. J. Motthews, Cariton T., assignor of one-half to H. K. Matthews, Green Bay, Wis. Tie plate. 1,620,908; Mar. 15.

Matthews, Duke C., et al. (See Liles, Thomas O., as-

signor.)
Matthews, Edgar M., Jamaica, N. Y., and J. A. Carr, East
Orange, N. J., assignors to American Telephone and
Telegraph Company. Deflection dynamometer,
1,831,143; June 7.
Matthews, Fred T., Brisbane, Australia. Device for
use in transmitting signals in connection with fire
and burglar alarm systems and the like. 1,565,143;

Matthews, Harold K. (See Matthews, Carlton T., as-

Assigner, Matthews, James H. (See Ecke, W. R., and Matthews, Matthews, James H., (See Ehrlen, H. W., and Matthews, Matthews, James H., assignor to Jas. H. Matthews & Co., Pittsburgh, Pa. Embossing, Rel6,718; Aug. 23. Matthews, Jas. H. & Co. (See Matthews, James H., assignor.)

Matthews Jas. H. & Company. (See Ecke, W. R., and Matthews, Jas. H. & Company. (See Ecke, W. R., and

signor.)
Matthews, Jas. H., & Company. (See Ecke, W. R., and Matthews, assignors.)
Matthews, Jas. H. & Company. (See Wade, H. R., and Harley, assignors.)

Matthews, Joseph L., Highland Park, N. J., assignor to International Motor Company, New York, N. Y. Lathe attachment for turning irregular profiles. 1,646,758;

Oct. 25. Oct. 25. Matthews, Joseph M., assignor to Glorient, Inc. New York, N. Y. Dre composition, 1,630.624; May 31. Matthews, Joseph W., Menard, Tex. Gate. 1,615,095 Jan. 18.

Kinchen N., Cleveland,

Signof.). Matthiessen, Paul, and A. D. Möller, Hamburg, Germany. Matthiessen, Paul, and A. D. Möller, Hamburg, Germany. Matthies, Royal, Betülchem, Pat. Repairing broken metallic structures. Rel.6,509; Apr. 19; Mattice, Royal, Betülchem, Pa. Welding tool. 1,632,411; June 14.

Mattice, Royal, Bethlehem, Pa. Connecting metallic elements. 1,634,674; July 5. Mattice, Royal, Bethlehem, Pa. Electric welding. 1,634,675; July 5. Mattice, Royal, Bethlehem, Pa. Repairing cracked or broken structures by welding. 1,650,144; Nov. 22. Mattice, Royal, Philadelphia, Pa. Truck for supporting from the partial property of the property of

F., assignor.)
Mattingly, Charles F., assignor to Mattingly Automatic
Valve Co., St. Louis, Mo. Hydraulic brake. 1,625,418;

Valve Co., St. Louis, Mo. Hydraulic brake. 1,625,418; Apr. 19.
Mattison. Hans S., La Crosse, Wis., assignor to Nestern Froducts Company, Minneapolis, Minn. Heating system for intake manifolds and circuits for same. 1,632,139; June 14.
Mattison Machine Works. (See Medholdt, Louis T., assignor.)

Mattison, Richard V., Ambler, Pa., assignor to Ambler Abestos Company, Method and apparatus for producing plastic articles. 1e23.631. Ambler, Pa. assignor to Ambler Abestos Company, Method and apparatus for producing plastic articles. 1e23.631. Ambler, Ernest, Brussels, assignor to Fabrique Nationale d'Armes de Guerre, Societe Anonyme, Herstallez-Liege, Belgium. Firing socket or cup for grenades. 1,622,160; Mar. 22.

Mattson, Gustave W. Chicago, Ill. Wire twisting and cutting tool. 1,641.822; Sept. 6.

Mattson, John B., Boston, Mass. Fountain-pen holder. 1,612,532; J. and Mattson, John B., Boston, Mass. Fountain-pen holder. 1,612,632; J. and Mattson, John B., Boston, Mass. House, John Mattson, Paul O., Denver, Colo. Folding easel. 1,625,904; Apr. 26.

Matzelle Ferdinand, Saginaw, Mich. Cereal food prod. Matzelle Ferdinand, Saginaw, Mich. Cereal food prod.

Apr. 26.

Matzelle, Ferdinand, Saginaw, Mich. Cereal food product, 1,643,507; Sept. 27.

Matzka, Wincenty, Mount Vernon, N. Y. Displaying and dispensing apparatus for beverages, 1,654,379; Dec. 27.

Mau, Edward A., New Haven, assignor to Rockhestos Products Corporation, New Haven, Conn. Insulated-conductor terminal, 1,645,539; Oct. 18.

and Cohen.)

Mauborgne, Joseph O., and G. Hill, Washington, D. C. Wave meter, 1,632,982; June 21.

Mauch, Vollein, Les Angeles, Calif. Powder feeder, 1,630,958; May 31.

Mauch, Villein, Les Angeles, Calif. Powder feeder, Mauck, Victor, Norristown, assignor to John Wood Manufacturing Company, Conshebocken, Pa. Making cans, 1,654,135; Dec. 27.

Maudsley, Richard T., Quinton, Birmingham, assignor to Packards & James Fison (Thetford) Ltd., Ipswich, England. Sulphuric acid chamber. 1,627,943; May 3. Mäucier, Wilhelm, Barmen, Germany, Lacquering or varnishing appartus. 1,613,235; Jan. 4. May 1,632,45; Jan. 4. Jan. 1,649,24; Oct. 25. Frescott, Ariz. Discrict switch. Maul, Fians, Pasing, near Munich, Germany. Pneumatic tire. 1,630,535; May 31. May 1,525; Apr. 26. Jan. 4. Jan. 26. Jan. 27. Jan. 28. Jan. 2

6. d, Thomas N., as-Maunsell, Leslie signor.)

Maunsell, Lesile B. (See Drummond, Thomas N., asMaunal, Eugene L. New York, N. Y. Dyeing silk.
1,635,761; July 12.
Maupin Automotive Corporation. (See Maupin, Edward
II., assignor.)
Mappin, Edward H., Dallas, Tex., assignor to Maupin Automotive Corporation. Internal-combustion engine.
Maupin, Edward H., Dallas, Tex., assignor to Maupin Automotive Corporation. Internal-combustion engine.
Maupin, Everett N., Fallon, Nev. Lead-in connection.
1,642,618; Sept. 13.
Maupin, Graves R., assignor to The J. Faessler Manufacturing Company, Moberly, Mo. Method of and apparatus for finishing cylindrical bearing surfaces. 1,619,479;
Mar. I.
May. Niagara Falls, assignor to The Mathieson
Alknii Works, Inc., New York, N. Y. Gas-absorption
apparatus. 1,619,430; Mar. I.
Maurer, Alvin F., et al. (See Gerau, George B., assignor.)
Maurer, Conrad B. and H. P., Philadelphia, Pa. Sceneryforming paper. 1,650,372; Nov. 22.
Maurer, Howard F. (See Maurer, Conrad B. and H. P.,
Maurer, Howard P. (See Maurer, Conrad B. and H. P.,
Maurer, Howard P. (See Maurer, Conrad B. and H. P.,
Maurer, Howard P. (See Maurer, Conrad B. and H. P.,
Maurer, Johann A., Breslau, assignor to Maurer-TextiiMaschinen G. m. b. H., Konstanin-Schnierstrasse,
Breslau-Carlowitz, Prusia, Germany, Pump for viscous
Maurer, John F., Jr., Woodeliff, N. J. Crate. 1,635,133;
July 5.
Maurer, Louis A., Irvington, N. J., assignor to General
Filectric Company. Sealing-off torch. 1,631,379;

Maurer, Louis A., Irvington, N. J., assignor to General Electric Company. Sealing-off torch, 1,631,379;

Mauter, Louis A., Irvington, N. J., assignor to General Electric Company. Sealing-off torch. 1,631,379;
Mauter, Max, and E. Haschek, Klosterneuburg, Austria, assignors to C. P. Goerz Optische Anstalt Aktiengesell-schaft, Akteiova Spoleenest K. P. Goerzoptickyustay, Pressburg, Czechoslovakita. Receiving and sending directional sound rays. 1,645,588; Nov. T. Gechoslovakita. Drafting instrument. 1,625,735; Apr. 19.
Maurer, Oscar V., East Cleveland, Ohio. Incandescent lamp. 1,630,128; May 24.
Maurer, Oswald H., Flushing, assignor to Western Electric Company, Incorporated, New York, N. Y. Terminal Maurer, Otto J. (See Hohl, J. and Maurer,)
Maurer, Otto J. (See Hohl, J. and Maurer,)
Maurer, Grussell L., Indianapolis, Ind., assignor of one-half to E. A. Maurer, Mechanically interconnecting separate telephone systems. 1,630,538; May 31.
Mauriell, Ralph, Oceanport, N. J. Scalp-treatment hot-water cap. 1,630,625; May 31.
Mauro, Louis, Beaver Falls, Pa. Belt buckle. 1,636,379;
July 19.
Maur, Pressperify Commany, Ur. Syragese, N. V.

July 19.

Maury, Alfred D., Ilion, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Spring-pad construction. 1,630,665; May 31.

Maus, Frank, San Francisco, assignor to Johnson Washer Company, Oakland, Calif. Diving mechanism for washing machines. 1,641,770; Sept. 6.

Maus, Harry F., and D. M. Lamson, Lima, Ohlo, assignors 1,645,608; Oct. 136.

Mauser, Alfons, Cologne-Marlenburg, Germany. Closure for receptacles. 1,617,076; Feb. 8.

Mauser, Alfons, Cologne-Marlenburg, Germany. Forming cover-holding ring seats for containers. 1,624,496; Apr. 12.

Ann. C. Cologne-Marienburg, Germany, Process and apparatus for increasing the strength of articles. 1,622,259; May 10.

Mauser, Alfons, Cologne-Marienburg, Germany, Process and apparatus for increasing the strength of articles. 1,622,259; May 10.

Mauser, Alfons, Cologne-Marienburg, Germany, Closure for vessels. 1,632,031; June 14.

Mauser, Alfons, Cologne-Marienburg, Germany, Metalworking machine. 1,651,146; Nov. 29.

Mauss, Wilhelm, Durban, Natal, South Africa. Balancing single acting pistons. 1,627,638; May 10.

Mauss, Wilhelm, Durban, Natal, South Africa. Cakensing arten of the process of the cologness of t

Oct. 25.

Mauss, Wilhelm, Durban, Natal, South Africa. Jacketing arrangement for internal-combustion engines. 1,633,718; Dec. 27.

Mauss, Wilhelm, Durban, Natal, South Africa. Thermodynamic pumping apparatus. 1,653,719; Dec. 27.

Mauthe, James L., Elyria, Olio. Spiasher plate for blast furnaces. 1,640,663; Aug. 30.

Mavrogenis, Aristote, Milwaukee, Wis. Electron-discharge device. 1,616,614; Feb. 8.

Mavrogenis, Aristote, Milwaukee, Wis. Electron-discharge device. 1,616,614; Feb. 8.

Mavrogenis, Aristote, Milwaukee, Wis. Electron-discharge for the company, The. (See Brenzinger, Julius, assignor.)

Max Ams Machine Company, The. (See Brenzinger, J., Max Ams Rachine Company, The. (See Brenzinger, J., Maxey, Robert E. L., New York, N. Y. Tie and fastening. 1,644,934; Oct. 11.

Maxey, Thomas J., Minmi Shores, Fla. Combination cigarette and match-box container. 1,639,461; Aug. 16.

Maxingld, Joseph P., Wyoming, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Sound-recording method. 1,637,082; July 26.

Maxim, Hiram P., assignor to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,637,382; Aug. 2.

Maxim, Hiram P., assignor to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,637,385; Aug. 2.

Maxim, Hiram P., assignor to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,637,082; Aug. 2.

Maxim, Hiram P., assignor to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,637,082; Aug. 2.

Maxim, Hiram P., assignor to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,637,082; Aug. 2.

Maxim Silencer Company, The. (See Maxim, Hiram P., assignor,)

Maxmor Corporation. (See Moore, Atlington, assignor.)

assignor.)

assignor.

assignor.

Marner George E., West End, N. J. Apparatus for piling sheets of paper. Rel6,779; Nov. 1.

Maxner, George E., Somerville, Mass. Apparatus for piling sheets of paper. Rel6,779; Nov. 1.

Maxner, George E., Somerville, Mass. Apparatus for piling sheets of paper. 1,623,195; Apr. 5.

Maxon, Glenway, Jr., Milwaukee, Wis. Finishing machine for concrete roads. 1,619,083; Mar. 1.

Maxson, Charles B., assignor of one-half to J. W. Maxson, Westerly, R. I. Feeding and cutting mechanism. 1,631,266; July 26.

Maxson, Julian. (See Maxson, Charles B., assignor.)

Maxson, Louis A., Claremont, N. H., assignor to Sullivan Machinery Company. Feeding mechanism. 1,614,088; Jan. 11.

Machinery Company. Feeding mechanism. 1,614,088; Jan. 11.

Masson, Rolland H., assignor, by mesne assignments, to The Burdick Corporation, Milton, Wis. Therapeutic appliance. 1,638,553; Aug. 9.

Maxwell, Colin J. E., Montreal, assignor to Quinlan, Robertson & Janin Limited, Montreal, Quebec, Canada. Clamping device for moids. 1,645,609; Oct. 18.

Maxwell, Frank D., Bolse, Idaho. Hat. 1,625,670; Mayell, George B., Potosi, Mo. Governor for power at tachments. 1,627,660; May 10.

Maxwell, George H. (See Westhaver, Norman J., assignor.)

Maxwell, George H. (See Westhaver, Norman J., 48-8ignor.)

Maxwell, James D., Brooklyn, N. Y. Valve. 1,613,183; Jan. 4.

Maxwell, James D., Brooklyn, N. Y. Vaive. 1,613,183; Jan. 4.

Maxwell, James D., Brooklyn, N. Y. Pump packing. Maxwell, Letory, Harold, London, England, assignor to The Graesser Monsanto Chemical Works Limited, Rusbon, North Wales. Exterminating injurious forms of life and composition therefor. 1,613,402; Jan. 4 Maxwell C., assignor to The Yale and Towne Lock. 1,637,93; Aug. Stamford, Conn. Cylinder Maxwell, Mayer K., Butte, Mont. Electrical fixture. 1,620,909; Mar. 15.

Maxwell, Haymond F., Long Beach, assignor of one-half to C. C. Hosmer, Huntington Beach, Calif. Liner Maxwell, Raymond F., Long Beach, assignor of one-half to C. C. Hosmer, Huntington Beach, Calif. Vaivesseat and liner puller. 1,630,024; Nov. 22.

Maxwell, Raymond F., Long Beach, assignor of one-half to C. C. Hosmer, Huntington Beach, Calif. Vaivesseat and liner puller. 1,630,024; Nov. 22.

Maxwell, Rupert G., Oakland, Calif. Egg beater. 1,616,347; Feb. 8.

Maxwell, Rupert, Chicago, Ill. Slug-dispensing cablact. May, Adam J., assignor to Ritter Dental Manufacturing Co., Rochester, N. Y. Dental chair, 1,642,258; Sept. 13.

May, Charles J., Mishawaka, Ind. Jar holder. 1,620,272; Mar. 8.

May, Cha Mar. 8.

May, David T., Port Washington, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wire-spileing machine, 1,645,152; Oct. 11.

May, Bnoch A., Jackson, Miss. Computing gauge or scale for gasoline-station pumps. 1,642,031; Sept. 20.

May, Frederick T., Montciatr, N. J., assignor to Westing-house Lamp Company. Stamp-laking device for etching machines. 1,647,646; Nov. 1.

May, George, 010 City, La. Stop signal for automobiles.

May, Gerald M., Derroit, Mich. Checkbook. 1,646,033; Oct. 18.

May, Gera Oct. 18.

Oct. 18.

May, Hans W., Kansas City, Mo. Sound-producing device 1,655,221; Dec. 20.

Deconomy Vaporiser Company, Kansas City, 410. Fuel vaporiser for internalcombustion engines, 1,624,271; Apr. 12.

May, Horace B., Washington, D. C. Lubricating device.
1,647,924; Nov. 1.

May Horiery Mills. (See Perry, Napoleon J., assignor.)

May Hosiery Mills. (See Smith, William L., jr., as-Mag, John C., Augusta, Ga. Bottle Des. 72,630; May 10. May, John W., Kirklyn, Pa. Anchor footing for steel towers. 1,647,925; Nov. 1. May, John W., Cambridge, assignor to May Universal Last Corporation, Boston, Mass. Last. 1,653,965; Dec. 27.

Dec. 27.

May, John
Last Cor
27. ohn W., Belmont, assignor to May Universal Corporation, Boston, Mass. Last. 1.654.007; Dec. 27.

Dec. 27.

May, John W., assignor to May Universal Last Corporation, Boston, Mass. Last. 1,654,008; Dec. 27.

May, Joseph, Frankfort-on-the-Main, Germany. Apparatus for observing the variation of the sole-treading the surface of the sole-treading the surface of the sole-treading the surface of the sole-treading the sole-treading the sole treading to the sole treading treading to the sole treading tre

May, N. E. (See Patus, A., and Nagy, assignors.) May. Otto, Newark, N. J. Drawing sheet 1,649.841; Nov. 22. metal.

May, Utto, Newark, N. J. Drawing sneet active 1,649,841; Nov. 22.

May Universal Last Corporation. (See May, John W., assignor of me-half to the state of the sta

Jan. 18:

Mayer, George A., Lakewood, assignor to The Manifold Company, Cleveland, Ohio. Printing apparatus. 1.646.034; Oct. 18:
Mayer, Gustavo, Booklyn, N. Y. Electrical illuminated the control of the

Apr. 5.

Mayer, Josef, Karlsbad, Czechoslovakia. Permanent-hair-waving appliance. 1,619,794; Mar. 1.

Mayer, Josef, Karlsbad, Czechoslovakia. Hair-waving appliance and method. 1,622,957; Mar. 29.

Mar. 8.

Mar. 9.

Mar. 1,620,273;

Mayer, L. Dec. 27.

Mayer, Leo, Boston, Mass. Shelving. 1,654,183; Dec. 27.

Mayer, Leon, Chicago, Ill. Bill fold or similar article. Des. 72,486; Apr. 19.

Mayer, Leon, Chicago, Ill. Key case. 1646,827; Oct. 25.

Mayer, Max. (See Wohl, M. J. and Mayer.)

Mayer, Gear G., Chicago, Ill. Machine for linking sausages. 1,645,610; Oct. 18.

Mayer, Roar G., Chicago, Ill. Machine for linking sausages. 1,645,610; Oct. 18.

Mayer, May

Mayer, William G. Pittsburgh, Pa. Shock-absorbing means, 1.653.580; Dec. 20.
Mayers, Honce C. Clevcland, Ohio, assignor of one-half to L. F. Montgomery, Portland, Ind. Automatic arch support for shoes. 1.652.034; Dec. 6.
Mayers, Stanley G. Chicago, Ill. Educational board. 1.618.952; Feb. 22. iclosero, assignor of seven-twentieths and squeeze. 1.634.253; July 19.
Mayers, Wilbur S., assignor to Monongah Glass Company, Fairmont, W. Va. Apparatus for handling glassware. 1.650.900; Nov. 29.

Mayhew, James E., Brooklyn, N. Y. Confectionery container. 1,613,282; Jan. 4.
Mayhew, James E., Brooklyn, N. Y. Garment hanger.
1,619,742; Mar. 1.
Mayhew Steel Products Company. (See Carlson, Frederick O., assignor.)
Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Lens cutters. 1,614,078; Jan. 11.

pany, S Jan. 11.

Jan. 11.

Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Edging machine. 1,618,958;
Mar. 1.

Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Lens cutter. 1,621,331;
Mar. 18.

Max. 10.

Maynard, Albert E., assignor to American Optical Company, Soutabridge, Mass. Surfacing-machine sphale attachment. 1,634,922; July 5.

Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Lens measure. 1,637,024;

attachment. 1,634,952; July 5.
Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Lens measure. 1,637,024;
Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Lens-edging machine. 1,651,532; Dec. 6.
Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Geinding stone. 1,651,533;
Maynard, Arthur H., Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me. Stapling machine or tacker. 1,634,840; July 5.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Method and apparatus for forming bead whres. 1,615,669; Jan. 25.
Fisk Rubber Company, Chicopee Falls, Mass. Tube manufacture. 1,615,902; Feb. 1.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tube end beveling and scaling device. 1,642,456; Sept. 18.
Mubber Company, Chicopee Falls, Mass. Beveling the ends of liner tubes. 1,649,358; Nov. 15.
Maynard, Frederick F. (See Fitz Gerald, M. E. W., and Maynard, Howard E., Detrolt, assignor to Chrysler Cor-Maynard, Howard E., Detrolt, assignor to Chrysler Cor-Maynard, Howard E., Detrolt, assignor to Chrysler Cor-Maynard, Howard E., Detrolt, assignor to Chrysler Cor-

Maynard, Freetrick F. See Fitz Geraid, M. E. W., and Maynard, Howard E., Detroit, assignor to Chrysler Cortain. Highland Fark, Mich. Clutch plate. 1,613,669; Jan. 11.

Maynard, James W., Memphis, Tenn. Temperature indicator and time-indicating attachment therefor. 1,641,348; Sept. 6.

Maynes Corporation. (See Maynes, Hyla F., assignor.) Maynes, Hyla F., North Tonawanda, N. Y., assignor to Maynes, Corporation, Dover, Del. Amusement ride. Re.16,509; Mar. 8.

Maynes, Hyla F., Sorth Tonawanda, N. Y., assignor to Maynes, Hyla F., aton. Dover, Del. Drive for amusement rides. 1,627,192; May 3.

Mayo, Dana H., Detroit, Mich. Baffle for water-tube boilers. 1,634,077; June 28.

Mayo, Federick C. C. (See Hawes, A. B., Horton, and Mayo.)

Mayo. Lonnie M., Detroit, Mich, Air-propelled novelty

Mayo. Lonnie M. Detroit, Mich. Air-propelled novelty device. 1,628,796; May 17. Mayorowitz, Maurice, New York, N. Y. Detachable-heel construction. 1,633,449; June 21. Mayoza, Nathan R., Memphis, Tenn. switch. 1,639,962; Aug. 23. Switch. 1,639,962; Aug. 23. Maytag Company, The. (See Snyder, Howard F., as-

maytag Company, The. (See Snyder, Howard F., as-signor.) Maywald, Frederick J., Rutherford, N. J. Combined hol-low rubber toy and sound-emission device. 1,616,664; Feb. 8.

Maywood Chemical Works. (See Weber, Friedrich W.,

Mewood Chemical Works. (See Weber, Friedrich W., Mrwood Chemical Works. (See Weber, Friedrich W., Mrwood Chemical Herry T., and L. Bever, Anderson, Ind. Planter attachment, 1.643,414; Sept. 27.

Mazza, Adolfo. (See Mattel, D., and Mazza.)

Mazzur, Frank A. (See Seaver, E., and Mazzur.)

Mazzur, Frank A. (See Seaver, E., and Mazzur.)

Mazzur, Mattle P., administratitx. (See Seaver, E., and McAdoo, William G., Los Angeles, Calif. Carrying and dispensing kit. 1.648,992: Nov. 15.

McAfee, Almer M., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pn. Distilling with aluminum chloride. 1,638,143; July 19.

McAlesvey, Grace A., Fonds du Lac, Wis. Apparatus for McAllaster, George R., Rechester, N. Y., Figure toy. 1,649,072; Nov. 15.

McAllister, Ellis H., Moorestown, N. J. Automatic valve adjuster and siencer. 1,624,497; Apr. 12.

McAllister, John E., Cleveland, Ohlo, Meter. 1,638,491; Nov. 8.

Nov. 8.

MeAndrew Michael J., Clarksburg, W. Va. Rall tie.
1.638,740; Aug. 9.
MeAnsh, Ryron A., Chicago, III. Collapsible spout.
1.631,051; June W., Chicago, III. Sprinkler. Des.
73,327; Aug. 23.
McAntle, Michael W., Chicago, III. Spray nozzle.
1.632,042; Apr. 10.
McArtle, Michael W., Chicago, III. Drying rack.
1.632,042; June 14.

McArdle, Michael W., Chicago, Ill. Vibrating cutter for sheep shears and the like. 1,644,140; Oct. 4. McArdle, Michael W., Chicago, Ill. Vibrating cutter for McArdle, Michael W., Chicago, Ill. Vibrating cutter for McArdle, Michael W., Chicago, Ill. Razor strop. 1,646,415; Oct. 25. McArdle, Michael W., Chicago, Ill. Razor strop. 1,652,176; Dec. 13. V. Chicago, Ill. Razor strop. 1,652,176; Dec. 13. V. Chicago, Ill. Razor strop. McArdle, Montroof E., Webster Groves, assignor to Hydratic Montroof E., Webster Groves, assignor to Hydratic Company. Heater for transformer Company. Heater for transformer oil. 1,634,719; July 5. Gary, Ind., assignor to American McArdle, Margle Grows, Gary, Ind., assignor to American of and apparatus for straightening annealing boxes. 1,647,706; Nov. 1. McArthur, Charles D., Pittsburgh, Pa. Concrete wall construction. 1,617,535; Feb. 15. McArthur, Charles D., Pittsburgh, Pa. Concrete wall construction. 1,617,535; Feb. 15. McArthur, Robert C., assignor to W. O. Fredrikson, A. E. Krieger, and R. C. McArthur, trustees, Salamanca, N. X., constituting McArthur Turnbuckle Company. Turnbuckle 1,625,318; Apr. 26. McArthur, Robert McAshland, Wibbur E., Reeds, Mo. Testing case for inner McAshland, Wibbur E., Reeds, Mo. Testing case for inner

McArthur Turnbuckie Company, teer metaling case for inner tubes or the like. 1,638,049; Aug. 9.

McAtree, John L., New York, N. Y., assignor, by mesne assignments, to Scovill Manufacturing Company, Waterbury, Conn. Yanity case. 1,633,865; Aug. 16.

Manufacturing Company, Waterbury, Conn. Yanity box. 1,639,001; Aug. 16.

McAuliff, Daniel J., Crooked Creek, Pa. Tractor plow. 1,652,869; Dec. 13.

McAvoy, John W., Bangor, North Wales. Wood-wind and like musical instrument. 1,643,463; Sept. 27.

McBean, Roy A. (See Tonguette, C. E., and McBean.) McBee Binder Company, The. (See McBee, Charles F., Sestjenne).

McBes, Charles F., assignor to The McBee Binder Com-puny, Attens, Ohio. Fling cabinet. 1,651,829; Dec. 6, McBee, Charles F., assignor to The McBee Binder Com-puny, Attens, Ohio. Filing cabinet. 1,651,829; Dec. 6, McBee, Charles F., assignor to The McBee Binder Com-pany, Athens, Ohio. Bookbinding machine. 1,652,724; Dec. 13.

McBea Harry B., St. Louis, Mo. Loose-leaf binder.
McBeary, Fred P., Warren, Ohio. Electric welding apparatus. 1,640,244; Aug. 23.
McBride, C. L., Mfg. Company, The. (See McBride, Charles L, fr., assignor to The C. L. McBride, McBride, Charles L, fr., assignor to The C. L. McBride, McBride, Charles L, fr., assignor to The C. L. McBride, Charles L, fr., assignor to The C. L. McBride, Charles L, fr., assignor to The C. L. McBride, McBride, Company, Toledo, Ohio. Gloves. 1,623,019;

Mar. 29.

McBride, Christopher G. (See Seiden, S., and McBride.)

McBride, David A., Elgin, Ill. Lawn-grooving machine.

1.644.068; Oct. 4.

McBride, Frank H., Blair, Nebr. Skid-chain fastene.

1.615.464; Feb. 1.

McBride, George A., Seattle, Wash. Composition for cheming and polishing glass. 1.643.251; Sept. 20.

McBride, Howard R., assignor to National Fruit Flavor Company, New Orleans, La. Bottle. Des. 74,117;

McBride, James, assignor to Jas. McBride Flooring Co., Inc., New York, N. Y. Parquetry and flooring. 1.649.842; Nov. 22. McBride, Jas., Flooring Co. (See McBride, James, as-signor.)

signor.)
McBride, John J., Bayonne, N. J., assignor to American
Car and Foundry Company, New York, N. X. Tankcar dome closure. 1,650,579; Nov. 22.
McBride, Samuel H., Siloam Springs, Ark. Meat redeerer, 1,639,854; Aug. 23.
McBrien, Roger W., Alton, III. Thermostically-operated
electric switch. 1,649,201; Oct. 11.
McBurney, F. A., et al., trustees. (See Cutler, William
McBurney, James R. Cambridge Ohio, Clove. 1,643,391;

C., assignor.)
McBurney, James R., Cambridge, Ohio. Glove. 1,643,391;
Sept. 27.

Sept. 27.

McBurney, Matthew R., Los Angeles, Calif. Treatment table. 1,628,369; May 10.

McBurney, Wilbur G., Altcona, Pa. Bottle stopper. 1,622,568; Mar. 29.

McCan, George S., assignor to Mine Safety Appliances proparatus. 1,625,419; Apr. 1,625,419; Apr. 200,400; Pa. Breathing apparatus. 1,625,419; Apr. 2,640,400; Pa. Breathing apparatus. 1,602,6419; Apr. 2,640,400; Pa. Breathing apparatus. 1,602,641; May 10.

McCaa, George S., assignor to Mine Safety Appliances Company, Pittsburgh, Pa. Breathing apparatus. L628,254; May 10. Brooklyn, and I. Schoenholz, Far New York, Statistics of McCabe, and Schoenholz, Inc. New York, Pand May, 1,624,612. Appliances to McCabe, 1,624,612. McCabe, Charles J., Brooklyn, and I. Schoenholz, Inc. New York, N. Y. Hand bag, 1,624,612. Apr. 12. McCabe, Edward B. (See Hiller, N. H., and McCabe.) McCabe, Edward B. (See Hiller, N. H., and McCabe.) McCabe, Edward B. (See Hiller, N. H., and McCabe.) McCabe, McCabe

McCabe, Ira E (See Armstrong, R. W., and McCabe.)
McCabe, Ira E. (See Mojé. H. A., and McCabe.)
McCabe, Ira E., Chicago, Ill. Mercury-tube switch.
1,614,621; Jan. 18.
McCabe, Ira E., Chicago, Ill. Pressure-actuated electric
control device. 1,636,191; July 19.
McCabe, Ira E., Chicago, Ill. Mercury-tube switch.
1,642,932; Sept. 20.
McCabe, Ira E., Chicago, Ill. Combined pressure and float
McCabe, Ira E., Chicago, Ill. Combined pressure and float
McCabe, Ira E., Chicago, Ill. Combined safety, spark, and
gas control. 1,648,391; Nov. 8.
McCabe, Ira E., Chicago, Ill. Safety switch mechanism.
1,648,390; Nov. 8.
McCabe, Ira E., Chicago, Ill. Pressure-operated circuit
closer. 1,648,341; Nov. 8.
McCabe Manufacturing Company. (See McCabe, Hugh,
assignor.)

Closer. 1,048,414; Nov. S. McCabe, Hugh, McCabe and Schoenholz, Inc. (See McCabe, C. J., and Schoenholz, assignors.)
McCabe and Schoenholz, Inc. (See McCabe, C. J., and Schoenholz, assignors.)
McCabe, Thomas, Arnold Borough, Pa. Plate-lifting mechanisms for rolling mills. 1,620,032; Mar. S. McCaffery, Thomas F., Ir., Colorado Springs, Colo. Drawing Instrument. 1,619,427; Mar. 1.
1,642,165; Sept. 13. McCaffrey, Edward R. R., Spokane, Wash. Flashing. 1,642,166; Sept. 13. McCaffrey, R. Wash. S. 1,642,166; Sept. 13. McCaffrey, R. James. (See Smith, William J., assignor.) McCaff., Thomas E., Chicago, Ill. Making flashings. 1,622,623; App. 50. McCair, Donald R., Helmetta Borough, N. J. Envelope. 1,645,148; Oct. 11. McCair, Elisworth L., Detroit, Mich. Knife. 1,651,141; Nov. 29. Albert G., assignor to Pines Manufacturing Commany, Chicago, Ill. Shutter annaratus for earlies.

1.645,148; Oct. 11.

McCain, Ellsworth L., Detroit, Mich. Knife. 1,651,141;

McCaile, Albert G., assignor to Pines Manufacturing Company, Chicago, Ill. Shutter apparatus for engine radiators. 1,614,076; Jan. 11.

McCail, Ciarence E., St. Augustine, Fia. Sash pulley. 1,637,267; July 26.

McCail, George, Woodside, assignor to International Motor Local Company, St. Augustine, Fia. Sash pulley. 1,646,759; Oct. 25.

McCail, James H., Huntingdon, Tenn. Sanitary odorless toilet. 1,629,401; May 17.

McCail, Milliam H., Philadelphia, Pa. Knife sharpener. 1,625,219; Apr. 19.

McCail, James H., Huntingdon, Tenn. Sanitary odorless toilet. 1,629,401; May 17.

McCail, William H., Philadelphia, Pa. Knife sharpener. 1,625,219; Apr. 19.

McCaillum, Alexander J., Little Falls, N. Y. Hose or socks. 1,820,160; Mar. 8.

McCaillum, Alexander J., Little Falls, N. Y. Hose or socks. 1,820,160; Mar. 8.

McCaillum, James R., assignor to Climax Engineering Co., Clinton, Jowa. Force-feed lubrication from compressor McCaillum, John. Wabridge, Ohto. Remote control device for railroad cars. 1,629,286; May 17.

McCanny, John. Wabridge, Ohto. Remote control device for railroad cars. 1,629,286; May 17.

McCanny, John. Wabridge, Ohto. Dam and headgate. 1,645,913; Oct. 18.

McCaillum, John. Wabridge, Ohto. Dam and headgate. 1,645,913; Oct. 18.

McCanne, Hugh L., Southgate, Ky. Display case for advertisements. Des. 2,2676; May 17.

McCann, Clyde F., and R. A. Berrenberg, San Francisco, Cailf., assignors to Panama Lamp & Commercial Company, John J., Chicago, Ill. Prayer rail. 1,612,871; Jan. 4.

McCann, Leland R., Hawthorne, N. J., assignor to American Can Company, New York, N. Y. Process and applean Can Can Company, New York, N. Y. Process and applean Can Can Company, New York, N. Y. Process and applean Can Can Company, New York, N. Y. Process and applean Can Can Company, New York, N. Y. Process and applean Can Can Company, New York, N. Y. Process and applean Can Can Company, New York, N. Y. Process and applean Can Can Company, New York, N. Y. Proc

McCann, Harry P. (See Harrison, James M., assignor.) McCann, John J., Chicago, Ill. Prayer rail. 1,612,871; Jan. 4. McCann, Leland R., Hawthorne, N. J. assignor to American Can Company, New York, N. Y. Process and applications of the Cann, Leland R., Hawthorne, N. J. assignor to American Company, Swissvale, Pa. Railway-traffic-controlling apparatus. Re16,371; Mar. 15. Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,616,536; Feb. 8. McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,622,469; Mar. Railway-traffic-controlling apparatus. 1,622,646; Mar. Railway-traffic-controlling apparatus. 1,622,646; Mar. Railway-traffic-controlling apparatus. 1,626,066; Apr. 26. McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,626,066; Apr. 26. McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,629,382; May 24. McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,629,382; May 24. McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,640,479; Aug. 30. McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,640,479; Aug. 30. McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,640,479; Aug. 30. McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,640,479; Aug. 30.

McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,643,344; Sept. 27.
McCann. Ronald A., assignor to The Union Switch &

apparatus. 1,643,344; Sept. 27.

McCann. Konaid A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,643,967; Nov. 22.

McCann. Ronaid A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,653,368; Dec. 20.

McCann, William G., et al. (See Barnett, John B., assignor.)

McCann, William G., et al. (See Barnett, John B., assignor.)

McCannon. Berty B., and J. A. McDougall, Grand Foyks, Chrisia Columbia, Canada. Dirigible headlight. McCardell, J. R., & Co. (See Baldwin, William M., assignor.)

signor.)

McCarey, Bernard S., Rome, N. Y. Ship construction.
1,651,926; Dec. 6.

McCarey, Bernard S., Rome, N. Y. Ship construction.
1,651,926; Dec. 6.

McCare, Henry L. (See Krook, Carl G., assignor.)

McCare, Henry L. (See Krook, Carl G., assignor.)

McCare, Lag., La

McCarthy, John A., St. Joseph, Mo. Shingle. 1,641,858; Sept. 6.

McCarthy, John A., St. Joseph, Mo. Roofing shingle. 1,648,852; Nov. 8.

McCarthy, John A., St. Joseph, Mo. Roofing shingle. 1,648,8592; Nov. 8.

McCarthy, John J., Delta, Colo. Pulverizing and mulching attachment. 1,616,599; Feb. 8.

McCarthy, John J., Delta, Colo. Pulverizing and mulching attachment. 1,616,599; Feb. 8.

McCarthy, John W., Lockport. N. Y., assignor, by mesne assignments, to Vortex Mfg. Co., Chicago, Ill. Cup dispenser. 1,623,353; Apr. 5.

McCarthy, Joseph A., Jamaica, N. Y. Extracting soot and McCarthy, Joseph A., Jamaica, N. Y. Extracting soot and McCarthy, Joseph A., Jamaica, N. Y. Extracting soot and McCarthy, Joseph A., assignor for one-third to W. Cleveland and one-third to P. Sawick, Utica, N. Y. Pistoning tool. 1,623,799; Apr. 5.

McCarthy, Justin, New York, N. Y. Chest protector. 1,645,995; Oct. 18.

McCarthy, Louis, assignor to The Macallen Company, Boston. Mass. Forming composite mica sheets. 1,622,795; Mar. 29.

McCarthy, William T., Chicago, Ill. Sinking pipes and facility of the McCarthy, Mars. 1,647,239; Nov. 1

McCarthy, William T., Chicago, Ill. Sinking pipes and article. Des. 72,020; Feb. 15.

McCarthy, William T., Chicago, Ill. Sinking pipes and article. Des. 72,020; Feb. 15.

McCarthy, William C., Chicago, Ill. Sinking pipes and article. Des. 72,020; Feb. 15.

McCarthy, Louis, Assignor to The Macallen Company, Combridge, Ohio. Salt and pepper shaker. Des. 78,707; Oct. 25.

McCarty, Elbert E., C. C. Dicus, and T. F. Langkop, Bunceton, assignors to O. B. Bradley, Elmo, Mo. Hog conditioner. 1,634,155; June 28.

McCarty, Richard J., Jr., Albany, N. Y., assignor, by mesne assignments, to Bethlehem Steel Company, Controlling the operation of booster motors or auxiliary propulsion units. 1,648,024; Nov. 8.

McCarty, Richard J., Jr., Albany, N. Y., assignor, by mesne assignments, to Bethlehem Steel Company, Controlling the operation of booster motors or auxiliary propulsion units. 1,648,024; Nov. 8.

McCarty, Richard J.

McCaskey Register Company, The. (See Swoboda, Conrad, McCaskey Register Company, The. (See Swoboda, Conrad,

assignor.)

McCasielli, Frankle L., Louisville, Ky. Pen and pencli holder. 1,623,966; Apr. 12.

holder. 1,623,966; Apr. 12.

McCathran, William R., Washington, D. C. Intermittent inductive train-control system. 1,643,655; Oct. 18.

McCauthran, William R., Washington, D. C. Intermittent inductive train-control system. 1,643,655; Oct. 18.

McCauchey, Gen F., assignor to Walker Manufacturing Company, Rache, Wis. Lifting fack. 1,653,720;

McCauchey, William J. C. C.

Dec. 27.

McCaughey, William J., Columbus, assignor to The Cleveland Trust Company, Cleveland, Ohio, Oxychiorle cement and making same. 1,634,505; July 5.

McCauley, Ernest G., Dayton, Ohio. Rudder-control mechanism. 1,650,636; Nov. 29.

McCauley, Reginald A., Dorchester, assignor to Samuel Ward Manufacturing Company, Boston, Mass. Coverling matchine. 1,640,903; Aug. 30.

Finning unit for Company, Ernest G., 1988, Coverling and Company, Ernest G., 1988, Coverling and Company, Ernest G., 200, Company, C

McChesney, John S., Chicago, Ill., assignor, by mesne assignments, to Cary Manufacturing Co., Brooklyn, N. Y. Package-banding machine, 1,560,844; Nov. 29.
McClaferty, E. A., Los Angeles, Calif. Adjustable washboard support. 1,633,638; June 7.
McClaferty, Harry J., assignor to Rockford Steel Furniture Company, Rockford, Ill. Refrigerator. 1,613,468;

Jan. 4

Jan. 4.

McClain, Douglas C. (See Hurley, Joseph M., assignor.)

McClain, Duglas O. (See Hurley, Joseph M., assignor.)

McClain, James C., Falls City, Yebr. Attachment for

McClain, John R., Wilkinsburg, Fa., assignor to Westing,

house Electric & Manufacturing Company. Shellaeviscosity tester. 1,637,381; Aug. 2.

McClain, Wade C., Little Rock, Art, Ark. Dentiphone

for phonographic use. 1,612,872; Jan. 4.

Mar. 1, Atthering, Chiengo, Jil. Hair carler. 1,619,743;

Mar. 1, Atthering, Chiengo, Jil. Hair carler.

Mar. 1. McClanahan, Fred C., et al. (See Bott, Wister P., as-

signor.)
McClary Manufacturing Company, The. (See Brand, Edward D., assignor.)
McClary Manufacturing Co., The. (See Gunn, John M.

assignor.) McClatchie, John M., assignor to The Borden Company, New York, N. Y. Manufacture of condensed liquid. 1,650,373; Nov. 22. MacClatchie, Stanley, Cambridge, Mass., assignor to The Apex Bleetrical Manufacturing Company, Cleveland, Olio. Vacuum-cleaner device. 1,633,598; June 28. McClatchy, John H. (See Hollister, Solomon C, as-Apex Electrical Manufacturing Company, Cleveaund, Olito, Vacuum-cleaner device, 1,633,098; June 28. McCleatchy, John H. (See Hollister, Solomon C., as-agair, Samuel N., Detroit, Mich. Clothes wringer. McGeary Hydraulic Brake Company. (See McCleary Hydraulic Brake Company). (See McCleary Hydraulic Brake Company, Hydraulic Brake Company, Roy E., assignor.) McCleary, Roy E., assignor to McCleary Hydraulic Brake Company, Seattle, Wash. Hydraulic brake McCleary, Roy E., assignor to McCleary Hydraulic Brake Company, Seattle, Wash. Hydraulic brake mechanism. 1,630,711; May 31. McCleary, Roy E., assignor of one-half to J. A. Desnoyers, Montreal, Quebec, Canada. Furnace-door moyers, Montreal, Quebec, Canada. Furnace-door McClelland, Charles R., East Lyme, and O. L. Seward. McClelland, Charles R., East Lyme, and O. L. Seward. McClelland, Charles R., East Lyme, and O. L. Seward. McClelland, Charles R., East Lyme, and O. L. Seward. McClelland, Bert, Sellersville, Pa., assignor to United States Gauge Company, Sellersville, Pa. Compound gauge. 1,028,163 May 10. McClelland, David H., Pittsburgh, Pa. Demountable tre rim. 1,643,672; Sept. 27. McClelland, William H., Huntingdon, assignor to Davis Brick Machinery Company, Montu Union, Pa. Hopper latch. 1,639,855; Aug. 23. McClentche, Robert, Frostburg, assignor to Kelly-Spring field Tire Company, Cumberland, Md. Grinding manuffeling McClintock, David L., Portland, Oreg. Power transmission for automobiles. 1,618,301; Feb. 22. McClintock, Corge C., San Diego, Calif. Sectional-map apparatus. 1,629,582; May 24. McClintock, C. B., Company. (See Adams, Thomas C., Segaro.)

McClintock, O. B., Company. (See Adams, Thomas C., assignor. O. B., Co. (See Adams, T. C., Noyes, and Lawrence, assignors.)
McClintock, O. B., Company. (See Jones, Earle M., as-

McClintock, O. B. Co. (See Lawrence, Edward (,, as-

signor.)
McClintock, Robert S., assignor of one-half to W. S.
McClintock, Marianna, Ark. Cotton chopper. 1,625.087;
Apr. 19. McClintock, William S. (See McClintock, Robert S., as-

McClintock, William Signor, McCloskey, Fred, Vallejo, Calif. Oll burner. 1,622,797; McCloskey, Paul J., Roselle, N. J. Mechanic's fishing tool. 1,619,744; Mar. 1. McClure, Elmer P., Western Springs, Ill., assignor to Aluminum Products Company. Cooking utensil.

1.619,744; Mar. 1.

McClure, Elmer P., Western Springs, Ill., assignor to Aluminum Products Company. Cooking utersil. 1.635,189; July 12.

McClure, Elmer P., Western Springs, assignor to Aluminum Products Company. La Grange, Ill. Heat-distributing plate for cooking utensils. 1,635,286; July 12.

McClure, Elmer P., assignor to Aluminum Products Company, La Grange, Ill. Coffeepot. 1,643.309; Sept. 27. McClure, Harry L., et al., trustees. (See Enell, Otto E.,

assignor. McClure, Raph R., assignor to J. H. Rosseter, San Francisco, Calif. Sircn. 1.618,210; Feb. 22.
McClure, William V., Elva, Manitoba, Canada. Well crib. 1.636,610; July 19.

McColl, Francis P., Ridgewood, N. J., assignor to Compact Coffee Carporation. Coffee tablet and making and college Carporation. Coffee tablet and making and college and the college of th

June 14.

McConkey, Montgomery W., Wilmette, assignor to Bendix
Brake Company, Chicago, Ill. Brake. 1,639,142;

Aug. 16.

McConkey, Montgomery W., assignor to Bendix Brake
Company, Chicago, Ill. Brake. 1,646,035; Oct. 18.

McConkey, Montgomery W., assignor to Bendix Brake
Company, Chicago, Ill. Brake. 1,651,142; Nov. 29.

McConkey, Montgomery W., Ferndale, and F. E. Jones,
assignors to General Motors Corporation, Detroit, Mich.,
Mofor vehicle. 1,638,554; Aug. 9.

McConnell, Charles F. (See Will. J. G., and McConnell.)
McConnell, James N., Upper Sandusky, Ohio. Burial
contest. 1,648,622 Nov. 3.

L646,623; Oct. 25.

McConville, James Montreal, Quebec, Canada. Wrench
adjustment. 1,621,123; Mar. 15.

McConway & Torley Company, The. (See George, Enoch.
17., assignor.)

fr., assignor.)
McConway & Torley Company, The. (See Kelso, William, assignor.)
McConway & Torley Company, The. (See McConway, William, fr., assignor.)

McConway & Torley Company, The. (See McConway, W., jr., and E. George jr., assignors.)
McConway & Torley Company, The. (See Regan, William

McConway & Toricy Company, The. (See Regan, William J., assignor to The McConway & Toricy Company, Pittsburgh, Pa. Railway draft appliance, 1617,404; Feb. 16, Pa. Railway draft appliance, 1617,404; Feb. 17, Railway draft appliance of the McConway, William, Jr., assignor to The McConway, Company, Pittsburgh, Pa. Draft yoke, 1,628,170; May 10. McConway, William Jr., assignor to McConway & Torley Company, Pittsburgh, Pa. Car coupler, 1,625,351; May 17.

Mey 17.

McConway, William, Jr., and E. George, Jr., assignors to The McConway & Torley Company, Pittsburgh, Pa. Car coupler, 1,647,302; Nov. 1.

McCord, Alvin C., Chicago, Ill. Truss member and making same, 1,615,307; Jan. 25.

McCord, Claude M., Richmond Heights, Mo. Bearing and bushing remover. 1,621,733; Mar. 22.

McCord, Claude M., Richmond Heights, Mo. Bearing and bushing remover. 1,621,734; Mar. 22.

McCord, Janet A., Heddsburg, Call, 134; Mar. 22.

McCord, Janet A., Heddsburg, Call, Scalp protector.

McCord Radiator & Mfg. Co. (See Bailey, C. B., McCord, and Wilkins, assignors.)

McCord Radiator & Mfg. Co. (See Grantier, Leslie V., assignor.)

McCord Radiator & Mfg. Co. (See Harris, Joseph D.,

assignor.)
McCord Radiator & Mfg. Co. (See Hawkins, B. H., and

Hansen, assignors.)
McCord Radiator & Mfg. Co. (See Hyde. Rollin M., as-

McCord Radiator & Mfg. Co. (See Reese, Daniel W., as-

signor.) McCord, William W. (See Balley, C. B., McCord, and Wilkins.)

McCormick, James C., Monroe, Wash. Cashier's cage. 1.621,124; Mar. 15. McCormick Bros. Company. (See Halvorsen, Axel I. S.,

assignor.)

McCormick, Edgar B. (See Zentz, James R., assignor.)
McCormick, Fowler, Chicago, Ill. Telegraphy.
1,627,444; May 3.
McCormick, Fowler, Chicago, Ill. Printing telegraphy.
1,627,445; May 3. H., Glen Ellyn, assignor to Edison
Electric Appliance Company, Incorporated, Chicago, Ill.
Electric heater. Des. 73,439; Sept. 13.
McCormick, Harold V., assignor to the Warner Elevator
Manufacturing Company, Cincinnatt, Ohio. Electrical
brake. 1,615,767; Jan. 25
Manufacturing Company, Cincinnatt, Ohio. Brake
Manufacturing Company, Cincinnatt, Ohio. Brake
mechanism. 1,637,025; July 26.

McCoy, Robert H., Sale McCoy, Robert H., Sale McCoy, Robert H., Sale McCoy, Robert H., Sale McCoy, William, Huntingdon, Pa. Lamp. Des. 73,094; McCoy, William, Huntingdon, Pa. Lamp. Des. 73,094; McCoy, William, Huntingdon, Pa. Lamp. Des. 73,094; McCoy, William, Huntingdon, Pa. Lamp.

Jan. 11.

McCoy, William, Huntingdon, Pa. Lamp. Des. 78,094;
July 19.

McCoy, William F., and P. W. Ripple, New Haven, Conn.
Slack adjuster. 1,652,677; Dec. 13.

McCracken, Charles C., Bradner, Ohio. Emergency ladder. 1,644,739; Oct. 11.

McCracken, Janna. (See Beaston, Greek P., assignor.)

McCracken, Robert M. (See Bartlett, F. A., and Davis, assignor.)

McCracken, Robert M. (See Bartlett, F. A., and Davis, assignors.)

McCrae, George, Brantford, Ontario, Canada, assignor, by meene assignments, to Fuller Lehigh Company. Cylindrical kiln. 1,649,600; Nov. 15.

McCrary, Sam H., assignor of one-half to W. A. Fowler, July 5.

McCrary, Samuel H., Knoxville, Tenn. Automatic drop bottom mine car. 1,647,876; Nov. 1.

McCray, Samuel H., Knoxville, Tenn. Automatic drop bottom mine car. 1,647,876; Nov. 1.

McCray, Charles A. Waynesboro, Va. Auto signal light. 1,661,534 Dr. 6.

1,661,534 Dr. 6.

McCray, Harold E., assignor to John Deere Tractor Company, Waterloo, Iowa. Internal-combustion engine. 1,625,043; Apr. 19.

McCray, Harold E., assignor to John Deere Tractor Company, Waterloo, Jowa. Internal-combustion engine. 1,628,737; Nov. 8.

McCray, Harold E., assignor to John Deere Tractor Company, Waterloo, Jowa. Internal-combustion engine. 1,628,737; Nov. 8.

McCray, Harold E., assignor to John Deere Tractor, Company, Waterloo, Jowa. Internal-combustion engine. 1,628,737; Nov. 8.

McCray, Benn, Arimpton, N. J. Receptacle. 1,638,755; Oct. 18.

McCray, Max A., Beaumont, Tex. Playground silds.

McCree, Edward Transconders, Tex. Playground slide, 1626,142; Apr. 26, assignor to The Racine Horseshoe Tire Company, Racine, Wis. Thre-finishing machine, 1,635,134; July 5. McCreery, James, & Company. (See Mason, Besse O., assignor.)

signor.)

McCrey, Harold E., Apollo, assignor to Pittsburgh Steel Drum Company. Pittsburgh, Pa. Shipping drum. McCrey, Harold E., A. E. Jesser, and A. B. Montzomery, assignors to Apollo Holding Corporation, Apollo, Pa. Roll heater. 1,619,303; Mar. 1. McCrillis, Joseph E., Kansas City, Mo., assignor to F. B. Leonard. Automobile steering stabilizer. 1,616,429; McCrystal, Robert C.

Reb. 1.

McCrystal, Robert C., assignor of one-half to H. D. Field,
Los Angeles, Calif. Dispensing carton. 1.632,412;
June 14.

June 14 June 14 June 14 June 14 June 15 June 15 June 16 June 17 June 1

22.

McCue, Harry J., assignor to The H. J. McCue Company, Cleveland, Obio. Carbonator. 1.642,739; Sept. 20. McCullers, Edgar W., Clayton, N. C. Dock. 1,464,364; Sept. 27, McCulloch, Alfred H. Boston, assignor of one-half to L. McCulloch, Springfield, Mass. Furnace-regulator unit, 1,615,021; Jan. McCulloch, James E., Kensington, Md. Aircraft. 1,633,636; Dec. 20.

McCulloch, James W., and R. E. Francis, Okmulgee, Okla. Device for preventing cavings. 1,645,766; Oct.

McCulloch, Laurence. (See McCulloch, Alfred H., as-

signor.)
McCulloch, Stewart B., Fullerton, assignor of one-fourth
to O. A. Burchard, one-fourth to C. A. Briggs, and
one-fourth to J. B. Golke, Los Angeles, Collf., Stamp
pad. 1,636,311; July 19.
McCullongh. Charles H., Visalla, assignor of one-half

turing Company, Chicago. Ill. Mining machine. 4 644 345: Oct. 4. cCully, Hiland E. (See Rowley, J. S., Riggles, and McCully, H

McCully, Hiland E. (See Rowley, J. S., Riggles, and McCully, Newton A., Anderson, S. C. Aerial landing harp for aeroplanes. 1,627,614; May 10.

McCumpsey, Joseph D., Altoona, Ps. Sanitary milk bottle. 1,618,989; Mar. I.

McCane, Herbert R., assignor to Decatur Brick Mfg. Co., Decatur, Ill. Brick machine. 1,626,619; May 3.

McCune, Herbert R., assignor to Decatur Brick Mfg. Co., Decatur, Ill. Brick machine. 1,626,619; May 3.

McCune, Milo, and C. L. Paulus, Dayton, Ohio. Cartridge rack. 1,634,953; July 5.

McCune, Milo, and C. L. Paulus, Dayton, Ohio. Cartridge rack. 1,634,953; July 5.

McCurdy, Ralph G., Englewood, N. J., assignor to American Herbert P., Pittsburgh, Pa., and F. W. Hochstetter, Dayton, Ohio, assignors to J. C. Trees, Pittsburgh, Pa. Nonglare attachment for headlight lamps. 1,617,292; Feb. S. Mappa, Oreg. Overhead conveyer. McCutchen, Brunson S., North Plainfield, N. J., assignor to American Telephone and Telegraph Company. Publicaddress system. 1,642,040; Sept. 13.

McCutchen, James B., Bakersfield, Calif. Automatic door closing and locking means. 1,621,847; May. 22.

McCutchen, James E., Van Wert, Ohio. Welt rasp. McCutchen, James E., Van Wert, Ohio. Welt rasp. McDate James E., Chicago, Ill. Memorization device.

signor.)

McDade, James E., Chicago, III. Memorization device. 1.641,982; Sept. 13. McDanal, Michael R., Denver, Colo. Method of and apparatus for producing bifocal lenses. 1,633,117;

apparatus for producing bifocal lenses. 1,633,117; June 21.

McDaniel, Albert R., Johnstown, Nebr. Pan lifter. 1,637,227; July 26.

McDaniel, Chenjel W. Portsmouth, N. H. Wrench mecha-McDaniel, John D. Vancouver, British Columbia, Canada. Protective alarm system. 1,650,288; Nov. 22.

McDaniel, John D. Vancouver, British Columbia, Canada. Protective alarm system. 1,650,288; Nov. 22.

McDaniel, Samuel, Knoxville, Tenn. Water key. 1,620,161; Mar. 8.

McDaniel, Thomas J. (See Nix, W. H., and McDaniel,) McDaniel, William L., Cincinnati, Ohio, assignor to Cribbing. 1,648,568; Nov. 8.

McDaniel, William L., Cincinnati, Ohio, assignor to Massey Concrete Products Corporation. Chicago, Ill. Cribbing. 1,648,557; Nov. 8.

McDaniel, William L., Cincinnati, Ohio, assignor to Massey Concrete Products Corporation. Chicago, Ill. Cribbing. 1,648,557; Nov. 8.

McDaniel, George W., New Orleans, La. Building block. 1,644,599; Oct. 4.

McDermott, George W., New Orleans, La. Building block. 1,644,599; Oct. 4.

McDermott, Frank M., Troy, N. Y. Collar button. 1,653,721; Dec. 27.

McDermott, Thomas S., assignor to Clark-Cutler-McDermott Co., Franklin, Mass. Felt fabric. 1,629,923; Mny 24.

McDermott, Thomas S., assignor to Clark-Cutler-McDermott, Co., Branklin, Mass. Making a pile fabric. 1.651,1355. Dec. 6. McDevitt, James B., Uhrichsville, Ohlo, Freight-handling equipment for motor trucks. 1,630,398; May 31. McDill, Rev. De Ore, Winter Haven, Fla. Preserving fruit. 1,630,129; May 24. McDonald, Alfred, et al. (See Stitt, Charles M., as-McDonald, Alfred, et al. (See Stitt, Charles M., as-

McDonald, Charles D., assignor to McDonald Machine Co., Chicago, Ill. Automatic die press. 1,633,340; June 21.

McDonald, Charles D., assignor to McDonald Machine Co., Chicago, Ill. Pneumatic control for batteries of auto-matic presses. 1,642,375; Sept. 13. McDonald, Charles D., Fullerton, Calif. Bed. 1,648,652;

McDonald, Charles D., Fullerton, Califf. Bed. 1,648,652; Nov. 8.

McDonald, Charles F., Davenport, Iowa. Mousetrap. 1,850,458; Nov. 22.

McDonald, Charles F., Davenport, Iowa. Mousetrap. 1,850,458; Nov. 22.

McDonald, Charles B., and A. E., Beyan, Akron. Ohio. Miller saring device. 1,654,299; Dec. 27.

McDonald, Charles R., and A. E., Beyan, Akron. Ohio. McDonald Charles R., and A. E., Beyan, Akron. Ohio. Liquid-dispensing apparatus. 1,651,612; Dec. 6.

McDonald David A., Chicago, III. Saxophone mouthpiece. 1,643,310; Sept. 27.

McDonald, Eugene G. (See Dudge. A. Y., and McDonald. Beugene G., South Bend, Ind., assignor to Bendis Brake Company, Chicago, III. Brake-operating mechanism. 1,644,480; Oct. 4.

McDonald, Eugene G., South Bend, Ind., assignor to Bendix Brake Company, Chicago, III. Brake-operating mechanism. 1,644,480; Oct. 4.

McDonald, Frank, Fr., and J. W. Prilick, Meridian, Miss. Testing apparatus. 1,617,214; Feb. 8.

McDonald, Frank, Fr., and J. W. Prilick, Meridian, Miss. Testing apparatus. 1,617,214; Feb. 8.

McDonald, Frank, Fr., and J. W. Prilick, Meridian, Miss. Testing apparatus. 1,617,214; Feb. 8.

McDonald, Gordon R., Schenectady, N. Y., assignor to General Electric Company. Automatic control equipment. 1,652,904; Dec. 13.

McDonald, Harry W., Minneapolis, assignor to Cedar Creek Ofl 8 Gas Co., Faribault, Minn. Well-drilling McDonald, Hugh, Linton, Iowa. Coal cbute. 1,633,341; June 21.

McDonald, Hugh, F., Burlingame, Calif. Key guide. 1,621,637, Mar. 22.

McDonald, Hugh, Clinton, Iowa. Coal chute. 1,633,341; June 21.

McDonald, Hugh, F., Burlingame, Calif. Key guide. 1,621,637; Mar. 22.

McDonald, Isabelle P., and W. MacMullen, Jr., assignors to F. A. Patrick & Co., Duluth, Minn. Garment. 1,621,631; June 14.

1,632,104; June 14.

1,632,104; June 14.

1,632,105; June 14.

1,632,105; June 14.

McDonald, John C., assignor of one-third to W. N. Westerlund. and twenty-six per cent to E. L. Corbett. New York, N. Y. Polyphase relay. 1,619,080; Mar. 1.

McDonald, John D., Winnipeg, Manitoba, Canada. Grate McDonald, John D., Winnipeg, Manitoba, Canada. Grate McDonald, John P., Austin, Tex. Expansion joint. 1,622,567; Apr. 19. Austin, Tex. Expansion joint. 1,622,557; Apr. 19. Austin, Tex. Expansion joint. 1,622,557; Apr. 19. Austin, Tex. Canada. Display McDonald, Lezile R., Montreal, Quebec, Canada. Austin McDonald, Lezile R., Montreal, Quebec, Canada. Austin McDonald, Lezile R., Wostmount, Ouebec, Canada. Austin Health of the McDonald, Lezile R., Westmount, Ouebec, Canada. Austin Health of the McDonald, Lezile R., Westmount, Ouebec, Canada. Austin Health of the McDonald, Lezile R., Westmount, Ouebec, Canada. Signors.)

McDonald M. J., Estate. (See Royer, R., and Sognis, assignors.)

McDonald Machine Co. (See McDonald, Charles D., assignors.)

signors.) McDonald Machine Co. (See McDonald, Charles D., as-

signor.)
McDonald, Malcolm, assignor to F McDonald, Orenco,
Oreg, Card index and file, 1.649.244; Nov. 15.
McDonald, Robert L. (See Edwards, A. A., and McDonald.)

Donald, McDonald Securities Co. (See McDonald, W. H., and Bessee, assignors.)

McDonald Theodore V., assignor to Epworth Manufacturing Company, Detroit, Mich. Axle and bearing arrangement. 1.617.293; Feb. S.

McDonald William H., Overton, Nev., Ditching machine. McDonald, William H., Overton, Nev., and F. F. Bessee, Los Angeles, Callf., assignors to McDonald Securities Co., Ltd. Advertising device. 1.641.684; Sept. 6.

McDonald, Ysabella D., Los Angeles, Callf. Auxiliary air inlet and mixing device 1.641.684; Sept. 6.

McDonald, Ysabella D., Los Angeles, Callf. Auxiliary air inlet and mixing device of motor vehicles. 1.643.355; Nov. S.

Los Angeles, Callf., assignor, by messe assignments to Shur-On Standard Onticsi Company, Inc., Geneva, N. Y. Ophthalmic mounting. 1.643.218; Sept. 20.

Geneva, N. F. Vices Sept. 20. McDonell, William E., and T. Leytham, Rochester, assignors, by mesne assignments, to Shur-On Standard Optical Company, Inc., Geneva, N. Y. Ophthalmic mounting, 1,048,219; Sept. 20.

McDonna, Francis A., Englevale, and R. E. Lloyd, Valley City, N. Dak. Scarifier and road planer. 1,638,866; Aug. 16.

Aug. 16.
McDonnell, George P., St. Louis, Mo., assignor to Economy
Fuse & Manufacturing Co., Chicago, Ill. Fuse.
800,205; Nor. 25.
McDonnell, Michael J. (See Duncan, Daniel E., as-

McDonnell, Stephen P., and P. A. Villars, Dallas, Tex. Timer for internal-combustion engines. 1,627,520;

Timer i May 3. McDonnell,

Mally miell, Vincent D., Chicago, III. Combined gas produced and holier, 1.647,738; Nov. 15.

McDonough, James, Montelair, N. J. Orthopedic shoe, 1,649,173; Nov. 15.

McDonough, John W., assignor to Hinsdale Manufacturing Company, Chicago, III.

Wench. 1,650,085;

McDougall Company. (See Himmelwright, Wallace G.,

McDougail Company. (See Himmelwright, Wallace G., assignor.)
McDougail, David. (See Melville, A., and McDougail.)
McDougail, Donald, Newark, W., J. Foot accelerator for McDougail, Newark, W., Ser, I., Foot accelerator for McDougail, John A. (See McCannon, B. B., and McDougail, John A. (See McCannon, B. B., and McDougail, John L. (See Johnson, W. V., and McDowell, John L. (See Johnson, W. V., and McDowell, Lamont A., assignor to Hupp Motor Car Company, Detroit, Mich. Front-seat support, 1,623,800; Apr. 6.

McDowell, La Mont A., assignor to Hupp Motor Car Corporation Detroit, 1,646,588; Oct 25. McDowell Manufacturing Company, The. (See McCoy, Harry E., assignor.) McDowell Manufacturing Company. (See Zabel, Charles,

McDowell Manufacturing Company. (See Zabel, Charles, assignor.)
McDowell, R. Dent. (See Reitz, Jacob J., assignor.)
McDowell, R. Dent. (See Reitz, Jacob J., assignor.)
McDowell, R. Dent. (See Reitz, Jacob J., assignor.)
McEldowney, Robert E., assignor to New Martinsville Glass Mfg. Co., New Martinsville, W. Va. Bottle stopper. Des. 71,807; Jan. 4.
McEldowney, Robert E., assignor to New Martinsville Glass Mg. Co., New Martinsville, W. Va. Combination Glass Mg. Co., New Martinsville, W. Va. Combination Martinsville, W. Va. C

Mar. 22.

McElhaney, Frank, Morgantown, W. Va. Aeroplane.
1,620,368; Mar. 8.

McElligott, Michael C., Preston, Ontario, Canada, assignor to The Cleveland Fare Box Company, Cleveland, Ohio. Fare box 1,628,508; May 10.

McElney, William A., Westfield, Mass. Advertising device. 1,618,599; Feb. 22.

McElroy, Charles W., Philadelphia, Pa. Attachment for suxphones, 1,620,564; Mar. 8.

McElvain, Howard C. (See McElvain, Howard J. and H.C.)

McElvain, Howard J. and H. C., Portland, Oreg. Retort. 1,642.457; Sept. 13. McElwain, James, assignor of one-half to J. E. Wright, sr., Wheeling, W. Va. Method of and apparatus for indicat-ing the amount of liquid in a supply tank. 1,620,606;

McElwain, W. H., Company. (See Holden, Luman, as-

signor.) McElwee, Clayton R. (See Whisler, J. C., and McElwee.) McElwee. Winfred. (See Arbogast, William H., as-

McEiwee, wintred. (see Arogast, william h., as-signor.) McElyea, Harley B., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Bank and trunk to the multipling system. J. (363.115; June 21. McElyea, 1997) McGardinery, 1637, 387; Auc. 2. McElyea, Amby, Westfield, Mc. Cultivator. 1,637,122; Jule 20.

July 26.

McEntee, Bernard C., and L. H. Constant, Wichita Falls,
Tex. Shoe tongue and fastener. 1,622,143; Apr. 12.

McEntee, James, Rochester, N. Y. Direction signal for
McEnter, Lange, Rochester, N. Y. Direction signal for
McEntric, Kenneth S., Kansas City, Mo. Regulator for
timpleces. 1,615,951; Feb. 1.

McEvoy, Joseph H., Jr., Houston, Tex. Sand tester for
well strathers. 1,613,499. Jan. 4.

McEvoy, Joseph H., Jr., Houston, Tex. Wash plug.
1,630,666; May 21.

1.630,666; May 31.

McFvoy, Joseph H., iv., Houston, Tex. Making strainer plugs. 1.632,000; June 14.

McEvoy, Joseph H., ir., Houston, Tex. Forming slotted screen pipe. 1.652,208; Dec. 13.

McEvoy, William L., Worcester, and A. Hubbard, Leominster, Mass. Light for transmission locks. 1,651,927; Dec. 6.

McEvoy, William L., Worcester, and A. Hubbard, Leominster, Mass. Light for transmission locks. 1,651,927; Dec. 6.

McEvoy, Charles F., assignor to H. D. Lathrop, Chicago, mism. 1,649,073; Nov. 15.

McEwen, Berton A. (See Johnston, Benjamin W., assignor).

McDwen, Berton A. (See Johnston, Benjamin W., as-signor.)
McEwen, Samuel, London, England, assignor to Inter-national Combustion Engineering Corporation, New York, N. Y. Method and apparatus for carbonization of subdivided fuel. 1648,856; Nov. 8. McPadden, Glenn E., Kansas City, Mo. Similar article. Des. 73,885; Aug. 30.

McFadden, Glenn E., Kansas City, Mo. Wall bracket back for an electric-lighting fixture or similar article. Des. 73,851; Nov. 16. McFadden, Glenn E., Kansas City, Mo. Electric-lighting wall fixture or similar article. Des. 73,852; Nov. 15. McFadden, Glenn E., Kansas City, Mo. Scroll arm for an electric-lighting fixture or similar article. Des. 73,853;

wall fixture or similar article. Des. 73,852; Nov. 15.
McFadden, Glenn E, Kanass City, Mo. Scroll arm for an electric-lighting fixture or similar article. Des. 73,853; Nov. 15.
McFadden, Glenn E, Kanass City, Mo. Decorative metal panel for an electric-lighting fixture or similar article. Des. 73,854; McFadden, Glenn E, Kanass City, Mo. Decorative metal panel for an electric-lighting fixture or similar article. Des. 73,855; Nov. 15.
McFadden, Glenn E, Kanass City, Mo. Wall bracket Des. 73,855; Nov. 15.
McFadden, Glenn E, Kanass City, Mo. Wall bracket panel for an electric-lighting fixture or similar article. Des. 73,857; Nov. 15.
McFadden, Glenn E, Kanass City, Mo. Decorative metal panel for an electric-lighting fixture or similar article. Des. 73,857; Nov. 16.
McFadden, Glenn E, Kanass City, Mo. Electric-lighting wall fixture or similar article. Des. 73,857; Nov. 15.
McFadden, Glenn E, Kanass City, Mo. Electric-lighting wall fixture or similar article. Des. 73,858; Nov. 15.
McFaddin, Harrison, D, East Orange, N. J. Lamp support. Des. 74,143; Dec. 27.
McFaddin, Harrison, D, East Orange, N. J. Lamp support. Des. 74,143; Dec. 27.
McFaddin, Harrison, D, East Orange, N. J. Lamp support. Des. 74,143; Dec. 27.
McFall, McDett J, Amberst, Mass. Leather-measuring machine. 1,619,143; Mar. 1.
McFall, Turlow E, Sparta, Mich. Piston packing. McFall, McDett J, Amberst, Mass. Leather-measuring machine. 1,619,263; Mar. 1.
McFalland, Alis M., Wilkinsburg, Pa., assignor to West-Genland, Alis M., Wilkinsburg, Pa., assignor to General Electric Company. Protective means for turbine bearings. 1,640,463; Aug. 30.
McFarland, Flow, McKell, Apr. 12.
McFarland, Flow, McKell, Apr. 12.
McFarland, Flow, McKell, Apr. 12.
McFarland, Flow, McKellon, Mo., Alleviator for hydraulic apparatus. 1,640,045; Aug. 20.
McFarland, Flow, McKellon, McChaller, McChaller, McGarland, McGaller, Least McChaller, McGarland, McGaller, Least McChaller, McGarland, McGaller, Least McGaller, McGaller, Least McGaller, McGaller, McGaller, McGaller, McGaller, McGaller, M taneously drying and polishing beans and the like. 1,645,440; Oct. 11.

1.645.446; Oct. 11.

McFarland, Joseph E., assignor of one-third to C. G. Somers. Burlington, N. C. Form-holding yoke, 1.632.141; June 14.

McFarland, Robert E., Cicero, III., assignor to Western Electric Company Incorporated, New York, N. Y. Cored McFarland, Robert E., Cicero, III., assignor to Western Electric Company, Incorporated, New York, N. Y. Braiding machine. 1,642,785; Sept. 20.

McFarland, William H. (See Glies, Henry G., assignor.) McFarland, William H. (See Glies, Henry G., assignor.) McFarland, W. D. (See Bildemelster, Carl J., assignor.) McFarland, W. D. (See Gildemelster, Carl J., assignor.) McFarland, W. D. (See Kimball, W. D., Rideout, and McFarland.)

ing molded May 24.

May 24.

McGavack, John, Jackson Heights, N. Y., assignor to Revere Rubber Company, Chelsen, Mass. Preparing rubber-containing plastics and products obtained thereby. 1.640,364; Aug. 30.

McGavack, John, Jackson Heights, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treat-McGavack, John Emburst, N. Y., assignor to The Revere Rubber Company, Chelsen, Mass. Preparing rubber-containing plastics and products obtained thereby. 1.640,363; Aug. 30.

McGee, Jesse E., Guntown, Miss. Automobile parcel hammock, 1.616,591; Feb. McGee, Jesse E., Guntown, Miss. Automobile parcel hammock. 1616,591; Feb. McGee, Daniel W. (See Roberts, Oren F., assignor.)

McGee, R General Richard R., Ballston Lake, N. Y., assignor to al Electric Company. Expulsion fuse. 1,635,049;

General Electric Company, Lagrana July 5.

McGee, Richard T., Wheeling, W. Va. Blank-casting machine. 1,648,415; Nov. 8.

McGee, William A., and J. E. O'Brien, Cleveland, Ohio. Flexhle connection. 1,564,300; Dec. 27.

McGeelin, Daniel J., West flazicton, Pa. Temporary pipe coupling. 1,627,044; May 3.

McGeehin, Daniel J., West Inzieton, Pa. Pipe scraper. 1,627,045; May 3.

McGeehin, Daniel J., West Hazleton, Pa. Hydraulic water-pine cleuner. 1,634,591; July 5.

1,627,045; May 3.

McGechin, Daniel J., West Hazleton, Pa. Hydraulic water-pipe cleaner. 1,634,591; July 5.

McGeorge, Herbert, Cleveland Heights, assignor to The Chandler & Price Company, Cleveland, Ohio. Inking mechanism for printing presses. 1,654,301; Dec. 27.

McGeough, Daniel H., Lakeview Park, Ontario, Canada. Chair, 1,647,926; Nov. 1.
McGlee, James F. (See Lundin, T. B., and McGhee.) McGiffert, John R., assignor to Clyde Iron Works, Duluth, Minn. Engine. 1,625,052; May 10.
McGiffert, John R., assignor to Clyde Iron Works, Duluth, Minn. Tractor skidder. 1,635,806; Aug. 23.
McGill, Arthur A., Wisner, Nebr. Pilers. 1,651,216; McGill, Chester T., assignor to Reiter Company, Eldin, Ili, Two-flow base-exchange water softener. 1,624,614; Apr. 12.

etill, George F., Marengo, assignor to McGill Metal Products Company, Chicago, Ill. Hand punch. cfdittr. Lec. 20.

1.655,051; Dec. 20. McGilton, James D. (See Williams, I. B., and McGilton.) McGilton, James B., Newark, N. J. Incandescent electric lamp. 1,650,289; Nov. 22. McGill Manufacturing Company. (See Despard, Victor

McGill Manufacturing Company. (See Gordon, David D.,

assignor.)
McGill Manufacturing Company, (See Urbahns, Allen G.,

McGill M Metal Products Company. (See Beck, Albert, assignor.)
McGill Metal Products Company. (See McGill, George

McGill Metal Products Company. (See McGill, George F., assignor.)
McGliley, George M., assignor to G. W. J. Murphy Company, Amesbury, Mass. Fastener. 1,652,576; Dec. 13.
McGinley, Peter, Newark, Ohio. Railway-rail joint. 1,640,791; Aug. 30.
McGilni, Patrick J., New York, N. Y. Valve. 1,633,488; June 21.

June 21.
McGinn, Satolli F. (See Mooney, William, assignor.)
McGinness, Joseph E., Pittsburgh, Pa. Golf-ball marker.
1,638,363; June 21.
McGinniess, John, Trinidad, Colo, assignor to McGinniess
Yelicle Wheel Company. Vehicle wheel. 1,638,741;

Vehicle Aug. 9.

McGinniess Vehicle Wheel Company. (See McGinniess,

McGinniess Vehicle Wheel Company. (See McGinniess, John, assignor.)
McGinnis, Crawford P., assignor to The Pyle-National Company, Chicago, Ill. Locomotive-headlight-focusing attachment and pilot light therefor. 1,648,955; Nov. 15.
Pyle-National Company, Chicago, Ill. Locomotive head-light and mounting therefor. 1,650,719; Nov. 29.
McGinnis, David R., Kalispell, Mont. Ellectric poultry perch. 1,621,424; Mar. 15.
McGinnis, David R., Kalispell, Mont. Heavy duty locomotive. 1,622,626; May 10.
Motive. 1,622,626; May 10.
Motive. 1,622,626; May 10.
Motive. 1,622,626; May 10.
Motive. 1,622,626; May 10.

McGinnis, John A. (See Davis, W. T., and McGinnis.)
McGinnis, William T., Princeville, Ill. Printing appliance,
1,651,143; Nov. 29.
McGinty, John J., New York, N. Y. Swing. 1,626,204;
Apr. 26.

Apr. 26.

McGlashan, Norman, New York, N. Y. Hair-cutting device, 1,634,788; July 5.

McGlocklin, Charles E., et al. (See Krum, John H., as-

McGlothern, John F., Scattle, Wash. Table. 1,645,336;

Oct. 11.

McGlynn, Frederick T., Jamaica, N. Y. Paster cutting and applying machine. 1,636,611; July 19.

McGonagle, Daniel, Everett, Mass. Conduit cleaner. 1,617,068; Feb. 8.

McGourty, Laurence O., New York, N. Y. Razor-blade holder. 1,648,618; Nov. 8.

McGovern, Bernard R., assignor to The Goodyear Tire & 11,648,618; Nov. 8.

McGowan, James, Jr., Merchantville, N. J., assignor to Campbell Soup Company. Cooking spaghettl and similar foods. 1,633,322; July 5.

McGowan, Patrick A., Williamsport, Pa. Brooder. 1,636,769; July 28.

Cumpbell Soup Company, Cooking spaghetti and similar foods, 1,634,332; July 5.
McGowan, Patrick A., Williamsport, Pa. Brooder, 1,636,749; July 26.
McGowan, Peter J., Hyde Park, assignor to Wellman Company, Medford, Mass. Sole-cutting machine, 1,645,441; Oct. 11.
McGowan, Thomas H., sr., Jewett City, Conn. assignor to Draper Corporation, Hopedale, Mass. Feeler mechanism, 1,651,114; Nov. 29.
McGowan, William L., Galt, Mo. Ironing board, 1,634,294; July 5.

McGrey, Aaron, Springville, Miss, Cotton-chopping ma-chine. 1,648,775; Nov. 8. McGregor, Alexander G., Warren, Ariz, Apparatus for transporting calcine from roaster furnaces and charg-ing same into reverberatory furnaces. Re16,685; July 19.

July 19.

McGregor, Alexander G., Warren, Ariz. Reverberatoryfurnace waste-heat boiler. 1,632,844; June 21.

McGregor, Donald B. (See McGregor, Herman C. and
D. B.)

McGregor, Donald B. (See McGregor, Herman C. and D. B.)
McGregor, Ernest F., Norwalk, Conn. Wick adjuster. 1,614,429; Jan. 11. T., Vancouver, British Columbia, McGregor, Ernest F., Vancouver, British Columbia, Waste paper. 1,640,612; Aug. 30.
McGregor, Gordon A., Stawell, Victoria, Anstralia. Wheel grip of farm tractors and other agricultural machinery. 1,644,536; Oct. 4.
McGregor, Herman C. and D. B., Berkeley, Calif. Demountable seat. 1,623,259; Apr. 5.
McGreyor, Jeremiah, Richmond Hill, assignor to Solidarity Watch Case Company, New York, N. Z. Article holder and case. 1,629,049; May 17.
McGrey, Jeremiah, Richmond Hill, N. Y., assignor to Solidarity Watch Case Company, New York, N. Z. Article holder and case. 1,629,040; May 17.
McGrey, Jeremiah, Richmond Hill, N. Y., assignor to Solidarity Watch Case Company, New York, N. Z. Pro-McGrey, Jeremiah, Richmond Hill, N. Y., assignor to Solidarity Watch Case Company, New York, N. Z. Pro-McGrey, Earl E., assignor to McGrew Machine Company, Lincoln, Nebr. Awning support. 1,621,941; Mar. 22.
McGrey Machine Company. (See McGrew, Earl E., assignor.)
McGuen, Felix J., Chicago, Ill. Water heater. 1,649,610; Nov. 15.
McGuen, McGrey Mass. Weel militer.

Nov. 15.

McGuckin, John J., assignor to Stevens Walden-Worcester, Incorporated, Worcester, Mass. Wheel puller, 16:43,896; Sept. 27. Gratton, assignor to Crompton Weller, Worcester, Mass. Auxiliary brake for Iooms. 1,633,644; June Jassignor to Grompton Stributing sand and the like. 1,623,743; Apr. 5.

McGuire, Hugh W. (See Cobb, William J., assignor, McGuire, Mr. J., assignor, Mr. J., assignor, Mr. J., assignor, Mr. Mr. J., assignor, Mr. J., assignor,

signor.)
McHenry, Samuel B., Bloomsburg, Pa. Broom. 1,647,927;
Nov. 1.

Nov. 1.

McHugh, Edward F., Kingston, Pa. Ventilating sash.
1.622,547; Apr. 26.

McHugh, Marion L., Wichita, Kans. Tent-pole shackle
ring. 1.622,600; Mar. 29.

McHugh, Philip M., Pelham Manor, assignor to The Dorr
McHugh, Philip M., Pelham Manor, assignor to The Dorr
McHany, William H. (See Mowles, Ceell A., assignor, McHraine, Cloyd A., Balboa Heights, Canal Zone. Golf
tee. 1.655.376; July 12.

McHwaine, John, Virden, III. Cushion tire. 1.625.558;
Apr. 19. Peter J. (See Forrester, John D., assignor, Apr. 19.

Apr. 19.
Melicerus, Peter J. (See Forrester, John D. assignor).
Melicerus, Peter J. Dallas, Tex. Grooving and redifferencent supporting device and process. 1,634,202;
July 5.
McInerney, Peter J., Dallas, Tex. Joint form. 1,634,263;
July 5.

McInerney, Peter J., Dallas, Tex. Treating asphaltic paving materials. 1,634,264, 3uly 5. McInerney, Thomas, Williamsport, Pa. Garage-door-actuating means. 1,634,564, 3uly 5. McIntre, Charles V. (See Knowles, A. S., and McIntire.) McIntoeh, Arthur M., Sydney, Australia. Making and molding hard porcelain. 1,637,245; May 3. McIntoeh, Charles J., Milwaukee, assignor to Federal Sasta. 1,643,436; Arg. Wukesha, Wis. Weiding steel Sasta. 1,643,436; Arg. McIntosh Electrical Corporation. (See MacLagan, Hector P., assignor.) McIntosh, James. (See Bennett, H. T., McIntosh, and McNelly).

Mclatosh, James, (See Bennett, H. T., McIntosh, and McNelly).

Mclatosh, James, Norristown, Pa., assignor to Diamond State Fibre Company, Bridgeport, Pa. Paper product McIntosh, James, Norristown, assignor to Diamond State Fibre Company, Bridgeport, Pa. Synthetic resin and making same. 1,642.079; Sept. 13. Norristown, Pa., assignors to Diamond State Fibre Company, Bridgeport, Pa. Synthetic resin and making same. 1,642.079; Sept. 13. Norristown, Pa., assignors to Diamond State Fibre Company, Elemert, Pa. Synthetic resin and McIntosh, James A., Detroit, Mich., assignor to The Lees-Bradner Company, Cleveland, Ohio. Gear-tooth gauge. 1,642.077; Sept. 13. McIntosh, Robert D., assignor to The Imperial Brass Anderson State Fibre Company, Chicago, Ill. Welding torch. 1,025.128; Apr. 19. McIntosh, Robert D., River Forest, assignor to The Imperial Brass Manufacturing Company, Chicago, Ill. Quickacting, shat-off valve for oil burners, etc. McIntosh, Robert L., Indiana Harbor, Ind., and G. Fox; said Fox assignor to Freyn Engineering Company, and Said McIntosh assignor to Inland Steel Company, Chicago, Ill. McHod and apparatus for heating rolls. said Fox assignor to Freyn Engineering Company, and said Molntosh assignor to Inland Steel Company, Chicago, III. Method and apparatus for heating rolls. Method and apparatus for heating rolls. Method Steel Company, Chicago, III. Heater for rolls. 1,644,695 (cd. 4. Methosh, Roger S., Hazard, Ky. Fluid-pressure brake. 1,644,565; Sept. 20. Methosh, Roye S., New York, assignor to J. E. Ogden, Methosh, Roy E., New York, assignor to J. E. Ogden, Methosh, Abe. Billings, Mont. Pireproof composition. 1,628,171; May 10. Methytre, Alban H., Winchester, Va. Fruit-grading machine. 1,627,246; May 3. Methytre, Elmer L., Detroit, Mcd., assignor.) Methytre, Elmer L., Detroit, Mcd., assignor. Methytre, Elmer L., Detroit, Mcd., assignor concentration of one-half to Swinfen Bramley-Moore, New York, N. Y. Grinding, refining, and mixing machine. 1,638,355; Aug. 9. Methytre, Mae. (See Fotheringham, T. B., and McIntered Patrick J., Detroit, Mich., assignor to Wol.

1,638,355; Aug. 9.

McIntyre, Mac. (See Fotheringham, T. B., and McIntyre, Mac. (See Fotheringham, T. B., and McIntyre, Mac. (See Fotheringham, T. B., and McIntyre, Patrick J., Detroit, Mich., assignor to Weller, Patrick J., Detroit, Mich., assignor to Weller, McIntyre, Royal A., and A. D. Hastings, West Tulsa, Okla. Tank valve. 1,621,638; Mar. 22.

McIntyre, Sydney S., Sedro Woolley, Wash. Gas-engine-driven hoist. 1,649,908; Nov. 22.

McIntyre, Sydney S., Sedro Woolley, Wash. Gas-engine-driven hoist. 1,649,908; Nov. 22.

McKale, George W., Elsmore Township, Allen County, Kans. Bearing for connecting rods and for other flatts of machinery. 1,643,012; Oct. 13.

McKale, George W., Elsmore Township, Allen County, Kans. Bearing for connecting rods and for other flatts of machinery. 1,643,012; Oct. 13.

McKale, George W., Elsmore Township, Allen County, Kans. Bearing for connecting rods and for other flatts of machinery. 1,643,012; Oct. 13.

McKay, Francis, assignor to Mercantile Trust Company of Canada. Limited, In Trust, Hamilton, Ontario, Canada. Telegraph receiver. 1,650,997; Nov. 29.

McKay, John A., Manufacturing Company, The. (See McKay, John A., and P. H. Lynch, assignors to The John A. McKay Manufacturing Company, Inc., Dunn, N. C. Lock for the wheeled arles of stalk cutters and other McKay, John A., and P. H. Lynch, assignors to The John A. McKay Manufacturing Company, Inc., Dunn, N. C. Stalk cutter, 1,628,730; May 17.

McKay, John A., and P. H. Lynch, assignors to The John A. McKay Manufacturing Company, Inc., Dunn, N. C. Stalk cutter, 1,628,730; May 17.

McKay, John A., and P. H. Lynch, assignors to The John A. McKay Manufacturing Company, Inc., Dunn, N. C. Stalk cutter, 1,628,730; May 17.

McKay, John A., and P. H. Lynch, assignors to The John A. McKay Manufacturing Company, Inc., Dunn, N. C. Stalk cutter, 1,628,730; May 17.

McKay, John A., and P. H. Lynch, assignors to The John A. McKay Manufacturing Company, Inc., Dunn, N. C. Stalk cutter, 1,628,730; May 17.

McKay, John A., and P. H. Lynch, assignor

1.648.316; Nov. 8, McKay, William A., et al. (See Palmer, Harry A., arsignor.) McKay, William A., Bloomfield, and C. C. Colby, Newark, N. J., assignors to Westinghouse Lamp Company. Nonarcing electric lamp. 1.647,647; Nov. 1. McKean, John O., assignor to Foster Machine Company. Mar. Ed., Mass. Winding machine. 1,620,267; Mar. Ed., Mass. Winding machine. 1,620,267; McKean, John O., assignor to Foster Machine Company. Westfield, Mass. Creel. 1,623,546; Apr. 5.

McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Winding machine. 1,647,534; Nov. 1. McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Wound package and producing the same. 1,647,535; Nov. 1. McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Self-driven device for automatically untwisting yann to remove the kinks therefrom. 1,650,901; Nov. 29. McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Fower-driven device for automatically Westfield, Mass. Fower-driven device for automatically 1,650,902; Nov. 29. Or remove the kinks therefrom. 1,650,902; Nov. 29. McKee, Arthur G., & Company, (See Irwin, John P., assignor.) McKee, Arthur G., Cleveland, Ohio. Distributor-driving McKee, Arthur G., Cleveland, Ohio. Distributor-driving

1,650,902; Nov. 29.

McKee, Arthur G., & Company. (See Irwin, John P., designor.)

McKee, Arthur G., Cleveland, Ohio. Distributor-driving mechanism for blast-furnace stacks. 1,622,461; McKee, Benjamin F., Arma, Kans. Engine valve. 1,633,450; June 21.

McKee, Benjamin F., Arma, Kans. Engine valve. 1,633,450; June 21.

McKee, Benjamin F., Arma, Kans. Engine valve. 1,638,450; June 21.

McKee, James, Chester, assignor to Sun Oil Company. Philadelphia, Pa. Making grease. 1,619,352; Mar. L. McKee, James, Chester, assignor to Sun Oil Company. Philadelphia, Pa. Making grease. 1,619,352; Mar. L. McKee, Neal T., Bronxville, N. Y. Locomotive. 1,636,781; McKee, Neal T., Bronxville, N. Y. Locomotive. 1,636,781; McKee, Neal T., Mount Vernon, assignor to The Superheater Company, New York, N. Y. Exhaust-steam injector. 1,618,135; Feb. 15.

McKee, Neal T., Mount Vernon, assignor to The Superheater Company, New York, N. Y. Forging machine. McKee, Neal T., Bronxville, assignor to The Superheater Company, New York, N. Y. Ford-water-heater arrangement. 1,630,400; May 31.

McKee, Man T., Bronxville, assignor to The Superheater Company, New York, N. Y. Fed-water-heater arrangement. 1,630,400; May 31.

McKee, Man T., Bronxville, assignor to The Superheater Company, New York, N. Y. Fed-water-heater arrangement. 1,630,30; June York, N. Y. Making organic peroxides. 1,614,037; Jan. 11.

McKee, Raiph H., New York, N. Y. Making organic phates. 1,641,005; Aug. 30.

McKee, Samuel M., Cumberland, Md. Piston-ring applier. 1,650,652; McKee, Samuel M., Cumberland, Md. Piston-ring applier. 1,650,672; Mill. J. Detroit, Mich. Display cabinet. 1,650,672; Mill. J. Detroit, Mich. Display cabinet. 1,650,681; Lee 20.

McKee, Sansuel M., Cumberland, Md. Piston-ring applier. 1,650,681; McKee,

McKellar, Archie, Gaussa, July 5, McKellar, Harry R., San Francisco, Calif. Key. 1.653,581; Dec. 20. McKellar, John F., St. Paul, Minn. Glare shield. 1,653,651; Dec. 27. McKendrick, Percy F. (See De La Mare, Thomas, as-

signor.)

McKenna, Alexander G., Washington, D. C., assignor to
Pomona Manufacturing Company, Pomona, Calil.
Bearling for turbine-pump shafts. 1,464.624; Oct. 25.

McKenna Brass & Manufacturing Company Inc. (See
Shields, Patrick W., assignor.)

McKenna Brass and Manufacturing Company. (See
Shields, P. W., and De Markus, assignors.)

McKenna-Horix Manufacturing Company. (See Hallwood,
Nathan A., assignor.)

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May 24.

Mississipport to The Mississipport of The Mississipport of The Mississipport of The United Hississipport of The Mississipport of The Mississipport

facture and truing of built-up wheels, 1,637,345;
Aug. 2, 50hn, Quincry, Mass. Three mounting and deMcKeenie, John, Quincry, Mass. Three mounting and demount of the mount of the mount

McKeown, William C., assignor to Modern Household Appliance Company, Baltimore, Md. Liquid-fuel gas rauge. 1,653,867; Dec. 27.

McKerahan, George, Jet-operated air compressor. 1,652,177; Dec. 13. McKesson, Elmer I., Toledo, Ohio, Mask. 1,632,449;

June 14.
McKesson, Elmer I., assignor to The Vocophone Company, Toledo, Obio. Breathing and vocal attachment. 1633.705. June 28.
McKesson, William C., Chicago, Ill. Settling tank. 1,632.036. Dec. 6. Warwangle, Ro. Shop. 1630.132.

1,652,036; Dec. 6.

McKibben, Robert E., Warrendale, Pa. Shoe. 1,620,612;

Michael W., assignor to A. C. Spark Plug Michael Company, Filit, Mich. Filter. 1,651,400; Dec. 6. McKinley, Thomas C. (See Rhoades, W. A., and McKinley, Thomas C., at. al. (See Ward, Andrew W.,

McKinley, Thomas C., et al. (See Ward, Andrew W., assignor.) McKinley, Thomas C., Charleston, W. Va., assignor.) McKinley, Thomas C., Charleston, W. Va., assignor. Deforming sheet glass. 1646,488, Oct. Zon. Forming sheet glass. 1646,488, Oct. Zon. McKinney, Carlos J., Detroit, Mich., assignor to The Republic Rubber Company, Youngstown, Ohio. Runway for windows. 1,634,878; July 5. McKinney, Edward H., Salina, Kans. Fluid-power trans-McKinney, Edward H., Salina, Kans. Hydraulic clutch transmission. 1,636,700; July 26. McKinney, Francis B., Baldwin Township, Allegheny County, assignor to Auto Brakeometer Corporation, Township, Allegheny County, London McKinney, Human P., Jr., assignor to McKinney Manufacturing Company, Pittaburgh, Pa. Hinge, 1,618,544;

Dec. 24. cKinney, James P., jr., assignor to McKinney Manu-facturing Company, Pittsburgh, Pa. Hinge. 1,618,544;

Feb. 22.

McKinney Manufacturing Company. (See McKinney, James P., Jr., assignor.)

McKinnie, Beverly R., et al. (See Snodgrass, Joseph C., assignor.)

McKinnon Dash Company. (See Armstrong, Wesley J., Assignor.)

assignor.)

McKinnon Dash Company. (See Armstrong, Wesley J.,
nssignor.)

McKinnon, John W. (See Dimelow, Thomas E., assignor.)

McKinnon, John W. (See Dimelow, Thomas E., assignor.)

McKinnon, John W. (See Dimelow, Thomas E., assignor.)

McKinstry, 1648,493; Nov. 9.

McKinstry, Arthur L., Southbridge, Mass., assignor, by
mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y. Making ophthalmic mountings.
1,636,335; July 19.

McKissick, William H., Tulsa, Okla. Safety sheave block.
1,635,567; June 21.

McKissick, William H., Tulsa, Okla. Safety sheave block.
1,650,903; Nov. 29.

McKissick, William H., Tulsa, Okla. Safety sheave block.
1,650,903; Nov. 29.

McKissick, William H., Tulsa, Okla. Safety sheave block.
1,650,903; Nov. 29.

McKitsick, William H., Tulsa, Okla. Safety sheave block.
1,650,903; Nov. 29.

McKitsick, William H., Tulsa, Okla. Safety sheave block.
1,650,903; Nov. 29.

McKitsick, William H., Tulsa, Okla. Safety sheave block.
1,650,903; Nov. 29.

McKittrick, Donald S. (See Humphrey, C. W., and
McKittrick.)

McKittrick, McKittrick McKittrick, George, Independence, Kans. Ladle. 1,612,826; Jan. 4.

Jan. 4.

McKnight, John P., Revere, Mass. Apparatus for molding cementitious material. 1,625,486; Apr. 19.

McKone, Leo J., Minneapolis, Minn. Connecting-rod structure. 1,643,720; Sept. 27.

McKown, Frederick W., Englewood, and E. Dietze, Westfield, N. J., assignors to American Telephone and 1,624,056; Apr. 12.

McKown, Frederick W., Englewood, and E. Dietze, Westfield, N. J., assignors to American Telephone and Teleph

Dec. 27.

McLachlan, Colin D., Glasgow, Scotland. Bont raising and lowering gear. 1,616,436; Feb. 8.

McLain, Edgar W. Higginsville, Mo. Pan scraper, 1,646,303; Oct. 18.

McLain, I.E. (See Broad, William, assignor.)

McLain, II.E. (See Broad, William, assignor.)

McLaih, Robert E., and O. D. Daniel, Denver, Colo. Audible indicator and meter for gasoline pumps. 1,647,806;

Nov. 1.

McLaine, Claude I., Boston, assignor to Seal-Kap Company, Natick, Mass. Closure for containers. 1,619,264;

Mat. 1. McLaine, William L., Los Angeles, and W. L. Borough, Fullerton, Catt. Lubricating stuffing box. 1,630,444; McLailen, Rob R., Oak Park, Ill. Corrective device, 1,536,101; July 19. McLane, Lutrence S. (See Conant, E. T., and McLane, McLaren Automobile Signal Company. (See McLaren, Peter, assignor.)

McLaren, Peter, Whittier, Calif., assignor to McLaren Automobile Signal Company. Drill-collar protector. 1,613,039; Jan. 4. McLaren, Robert L., et al. (See Giancola, Nicholas, assignor.)

McLarty, Edward, sr., and S. L. Blankenship, Los Angeles, Calif. Universal radio and direct-service system. Calif. Universal radio and direct-service system. 1,631,690; June 7. McLarty, Gordon, Rochester, N. Y. Apparatus for applying nonslipping material to floor coverings. 1,625,863;

Apr. 26.
McLauchlin, James, Dolton, assignor to Richard Fitz-gerald, Chicago, Ill. Baking brick. 1,631,144;

McLauchlin, James, Dolton, assignor to Richard Fitzgerald, Chicago, Ill. Baking brick. 1,631,144;
McLauchlin, Allen W., River Falls, Wis. Motor brace.
1,640,062; Oct. 18:
1,640,062; Oc

binder. 1,643,417; Nov. 8.

McLaughlin, Bverett E. (See Naujoks, W., and McLaughlin).

Francis P. Pittsburgh, Pa. Mattress-adJusting apparatus, Toxon-40; Aug. 16.

Justing apparatus, Toxon-40; Aug. 16.

McLaughlin, Frank, Toxon-40; Aug. 16.

McLaughlin, Frank, Toxon-40; Aug. 16.

McLaughlin, Frank, Toxon-40; Aug. 16.

McLaughlin, Fensk, Toxon-40; Aug. 16.

McLaughlin, George E. (See Brophy, J. J., and McMcLaughlin, George E., Peabody, Mass., assignor to The
Turner Tanning Machinery Company, Portland, Me.
McLaughlin, John J., assignor to H. L. Warner, BrookLyn, N. Turnstlle. 1,632,950; Aug. 16.

McLaughlin, John J., assignor to H. L. Warner, BrookLyn, N. Turnstlle. 1,623,444,440.

Safety blasting cartridge. 1,642,341; Sept. 13.

McLaughlin, Parick T., and W. Anderson, Miaml, Okla.

Bottle-exchange receptacle for containing milk bottles.

1,642,999; Sept. 20.

McLaughlin, Wallace D., and D. J. Wilkens, Fulton. Ill.

Toy. 1,646,791; Oct. 25.

McLaughlin, Wallace D., and D. J. Wilkens, Fulton. Ill.

Toy. 1,646,791; Oct. 25.

McLaughlin, Wallace D., and D. J. Wilkens, Fulton. Ill.

Toy. 1,646,791; Oct. 25.

McLaughlin, Wharton B., deceased, New York, N. Y.; C. B.

McLaughlin, Wharton B., deceased, New York, N. Y.; C. B. McLaughlin, administratrix. Producing dry milk.

1,616,631; Feb. 8.

McLaughlin, Wharton B., deceased, New York, N. Y.; C. B. McLaughlin, administratrix. Method and manifecture of fruit preserves. 1,634,295; July 5.

McLaughlin, Wharton B., assignor to The Barkelew Elec
tric switch. 1,649,480; Nov. 15.

McLaughlin, William T., Boston, Mass. Shoe and heel

McLaughlin, William T., Boston, Mass. Shoe and heel

McLaughlin, William T., Boston, Mass. Shoe and heal

1.62.2.2.1. William T., Indianapous, McLaughlin, William T., Boston, Mass. Shoe and heel McLaughlin, William T., Boston, Mass. Shoe and heel and arch supporter therefor. 1,648,907; Nov. 15. McLaurin, Arthur A. (See Hartvig, J. A., and McMcLaurin, Arthur A. (See Hartvig, J. A., and McMcLaurin, Arthur A.)

McLaurin-Jones Co. (See McLaurin, William W., as-

signor.) William W., Brookfield, Mass. Coated paper and coating paper 1,619,027; Mor. 1.
McLaurin, William W., assignor to McLaurin-Jones Co., Brookfield, Mass. Strip gummed paper and making the same. 1,619,081; Mar. 1.
McLaurin, George T., Company. (See Dodd, John W.,

McLauthlin, George T., Company, (See McLauthlin, M. B., and Dodd, assignors.)
McLouthlin, Martin B., Madden, and J. W. Dodd, Quincy, assignors to George T. McLauthlin Company, Boston, Mass. Elevator hoist. 1,650,936; Nov. 29.
McLearird, Edgar G. and J. C., Nashville, Ark. Insert for timers. 1,635,992; July 5.
McLearird, John C. (See McLearird, Edgar G. and J. C.)
McLenird, John C. (See McLearird, Edgar G. and J. C.)
McLenird, John C. Hulledelphia, Fa. Chaff. Des.
T5,531; Sept. 27.

73.531, Sept. 27.

Wicken, Churies, Berkeley, Calif. Washing machine. 1.641.334; Sept. 6.

McLean, Charence G., Winchester, Mass. Reflecting indicator. 1.622,958; Mar. 29.

McLean, Embury, Brooklyn, assistnor to The Eugineer Company, New York, N. Y. Regulator or controller. 1,653,438; Dec. 20.

McLean, Grant. (See Laurency, Guillaume C. assignor.) McLean, James S., Albuquerque, assignor of forty-nine per cent to R. F. Johnston, Albuquerque, N. Mex. Signal. 1,632,934; Sept. 20.

McLean, Philip S., et al. (See Stoll, H. C., and Schroder, assignors.)

McLellan, James II., Vancouver, British Columbia, Canada. Driak-dispensing machine. 1434,036; June 28.
McLellan, Joseph R., assignor of one-half to H. F. HoffApr. 19. Hollan, Sasignor of one-half to H. F. HoffApr. 19. Hollan, Sasignor of one-half to H. F. HoffApr. 19. Hollan, Sasignor of one-half to H. F. HoffApr. 19. Hollan, Sasignor of one-half to H. F. HoffApr. 19. Holland Sasignor of the Health of the Columbus, Ca. Check attachment for looms. 1,633,452; June 21.
McLeod, John A. Memphis, Tennod, Ind. Steel McLeod, John A. Memphis, Tenn. Scutching fibrous plants. 1,627,919; May 10.
McLeod, John A. Memphis, Tenn. Scutching fibrous plants. 1,627,919; May 10.
McLeod, John E., Washington, Kans. Locking device for motor vehicles. 1,645,914; Oct. 18.
McLoughlin, Francis J., Brooklyn, N. Y. Turnstile. 1,637,918; Feb. 15.
McLoughlin, Fatrick, Worcester, Mass. Snap hook. 1,651,652, Nov. 29.
McLoughlin, Fatrick, See Beash, L. F., and McMahon, McMahon, J. F., et al. (See Jones, Winfield S., assignor, McMahon, John, Rotkohu, West Port, New Zealand, Brake for railway vehicles. 1,615,502; Feb. 8.
McMahon, Nathan A., Durand, Wis. Strainer. 1,630,198; McMahon, Nathan A., Durand, Wis. Strainer. 1,630,198; McMahon, Nathan F., Riverside, Calif. Noiseless elevator safety stop. 1,620,033; Mar. 8.
McMahon, William F., Riverside, Calif. Nonshrinkage McMahon, William F., Riverside, Calif. Division-head propelling screen. 1,642,122; Sept. 13.
McMahon, William F., Riverside, Calif. Division-head propelling screen. 1,642,122; Sept. 13.
McMahon, William F., Riverside, Calif. Pump piston. McMahon, William F., Riversid

July 26. cManaman, Patrick and J. Namet, Cleveland, Ohio. Combined signal casing and tag holder. Des. 73,141;

Combined signal casing and tag holder. Des. 73,141; July 26.

McManamar, Charles A., Beckley, W. Va. Strip. 1622,968 Mar. 29.

1622,968 Mar. 28.

1622,968 Mar. 29.

McManus, Charles D., New York, N. Y. Amusement device. 1,622,877; Mar. 29.

McManus, Charles D., New York, N. Y. Cushion material for bottle closures. 1,632,841; Aug. 9.

McManus, Joseph H., Power, Mont. Folding bed for automobiles. 1,622,462 Mar. 29.

McManus, Doseph H., Power, Mont. Folding bed for automobiles. 1,622,462 Mar. 29.

McManus, Dy mesne assignments, to Scott and Williams, Inc., New York, N. Y. Stocking and the like and funishing the same. 1,616,557; Feb. 8.

McMaster, David, Scattle, Wash. Machine for applying McMaster, Flossie M., San Jose, Calif. Hair-marceling device. 1,635,683; July 12.

McMatth, A. G. et al. (See Everts, Walter W., assignor.) McMenamin, Joseph, Philadelphia, Pa. Keyless lock. 1,618,641; Feb. 22.

McMatth, A. G. et al. (See Everts, Walter W., Refining Process Co., Inc., New York, N. Y. Refining hydrocarbon oils. 1,641,564; Sept. 6.

McMillan, Albert M., Riverdale, Md. Printing-press chase. 1,624,751; Apr. 12.

McMillan Book Company. (See Sterling, Harry C., as-McMillan) (Study B., (See, Car, F. P., and McMiller)

signor.)

McMillan, Claude R. (See Cain, E. R., and McMillan, McMillan, Edward H. Oakland, Calif. Quick-action clamp. 1.619.144; Mar. 1.

McMillan, Edward H., Oakland, Calif. Combination tandem concrete-mixing machine. 1,619.145; Mar. 1.

McMillan, Howard O., Minneapolis, Minn. Gauge device. Re16,529; Jan. 11.

McMillan, Howard O., Minneapolis, Minn. Clamp for concrete-column forms. Re16,736; Sept. 13.

Concrete column forms. Re16,736; Sept. 13.

McMillan, Howard O., Minneapolis, Minn. Column clamp with castings. 1,636,143; July 19.

McMillan, Howard O., Minneapolis, Minn. Column clamp with castings. 1,636,143; July 19.

McMillan, Howard O., Minneapolis, Minn. Column clamp with castings. 1,636,143; July 19.

McMillan, Hugh P., assignor to Samuel H. Dell & Co., Iuc., Baltimore, Md. Manufacturing brushes. 1,619,428; Mar. 1.

Inc., Barting. 1, 1,619,428; Mar. 1.

1.619,428; Mar. 1.

McMillan, John L., Syracuse, N. Y. Loose-leaf binder.
1.640,087; Aug. 23.

McMillan, Luther B., Larchmont, assignor to Johns-Manville Corporation, New York, N. Y. Insulation construction. 1.654,137; Dec. 27.

McMillen, Albert K., assignor to Central Tube Company,
Pittsburgh, Pa. Roll-dif plate. 1.640,957; Aug. 30.

McMiller, Benjamin G., Kansas City, Mo. Metallic cofAllondon, 1.622,629; Mar. 29.

McMillan, John E., assignor to Peerless Mannfacturing
Company, Louisville, Ky. Fireplace heater. Des.
2.167; Mar &
Company, Louisville, Ky. Heater, Des. 72,177; Mar &
Company, Louisville, Ky. Heater, Des. 72,177; Mar &

cMinn, John E., assignor to Peerless Manufacturing Company, Louisville, Ky. Heater. Des. 72.177; Mar. 8.

McMinn, John E., assignor to Peerless Manufacturing Company, Louisville, Ky. Heater. Des. 72,560; May 3.

McMorran, Edward E. (See Le Gaucear, Jacques, as-

signor.)
McMullen Fire Extinguisher Company. (See McMullen, Ralph W., assignor.)
McMullen, George B., assignor to Sanitary Nursing Bottle Company, Inc., Philadelphia, Pa. Nursing bottle. 1,639,096; Jung. 16,630,196; Jung. Company, Inc., Philadelphia, Pa. Nursing bottle. 1,630,196; Jung. Company, Inc., Philadelphia, Pa. Uncoupling device, 1,637,198; July 26, McMullen, John, Buffalo, N. Y. Hopper-car door. 1,638,126; Jung. 9.

McMullen, John, Buffalo, N. Y. Hopper-car door. 1.638.125; Aug. 9.

McMullen, John, Buffalo, N. Y. Wall structure for rativacy cars. 1,639.264; Aug. 16.

McMullen, John, Buffalo, N. Y. Car-brake device. 1,641.983; Sept. 13.

McMullen, Joseph B., Washington, D. C., assignor of one-third to R. T. Naylor and one-third to J. K. E. Diffenderfier, Baitlmore, Md. Compressor. 1,614,481; Jan. 18.

McMullen, Alph W., Detroit, Mich., assignor to McMullen, Erlagh, 18.

McMullen, State Company. Pump-gun fire extensive the property of the property of

McMurray, Alexander, Auburn, Sydney, New South Wales Australia. Electric truncheon torch. 1,637,650

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Ang. 2.

McMurtery, Elisha L., Rison, Ark. Shank and edge trimmer. 1,646.654; 0ct. 25.

McMurtery, Elisha L., Rison, Ark. Sole-edge burnisher. Value of the control of t

Signor. Homer E., Englewood, Mo., assignor to himself as trustee. Thre-pressure tester. 1,618,211, Feb. 22.
McNaught, Norris F. (See Bishop, S. H., and McNaught.)

Naught.)

McNaughton, Allan F., Toronto, Ontarlo, Canada. Rotary
washing machine. 1,642,122; Sept. 13.

McNaughton, Bart, H., Maryville, Tenn. Collapsible tube.
1,626,127,121.

McNeely, Earl Z., Waldron, Ind., assignor of one-fourth
to E. W. Crosby, Greensburg, Ind. Corn husker.
1,636,380; July 19.

McNeely, Fred W., Evansville, Ind. Grease gun.
1,625,319; Apr. 26.

McNeely, Signal, Apr. 26.

McNeely, Signal, Apr. 26.

McNeely, Signal, Apr. 26.

McNeel, Grease gun.

1,625,319; Apr. 26.

McNeel Boiler Company, The. (See Riddle, Carlton, assignor.)

McNell, John W., and J. Michelsen, Wistaria, British Columbia, Canada. Calk attachment for boots. 1,631.877; June 7. McNelly, Thomas M. (See Bennett, H. T., McIntosh, and McNelly).

McNerney, Bernard L., Minneapolis, Minn. Wrench. 1,625,559; Apr. 19.
McNerney, John H., et al., administrators. (See Owens, Michael J.)
McNichol, John E., et al., administrators. (See Owens, Michael J.)
McNichol, Theodore W. (See Caville, John E., assignor)
Bortle Machine Corporation, Limited, London, England, Machine for making bottles or other articles of ginss. 1,626,548; Apr. 26.
McNuity, Fatrick, Norwood, Mass. Water fire box. 1,617,817; Feb. 13.
McNuity, Entrick, Norwood, Mass. Water fire box. 1,617,817; Feb. 13.
McNuity, Entrick, Norwood, Mass. Water fire box. 1,617,817; Feb. 13.
McNuity, Feb. 13.
McNuity, McN

Mosin John Glendele, Calif. Shoulder-strap retainer. 1548.773; Nov. 8.

McPartlin. Stephen E. Chicago, III. Latch mechanism. 1,530,093; May 24.

McPhail, Ewen, Missoula, Mont. Luggage carrier. 1,620,218; Mar. 8.

McPhee, William F., Chicago, Ill. Boller construction. 1,621,374; Mar. 15. McPhee, William F., Chicago, Ill. Boller for hot-water McPherson. Charles, assignor to Friction Power Corporation Limited, Montreal, Quebec, Canada. Power-transmitting device. 1,633,143; Aug. 16. McPherson, Charles, assignor, by mesue assignments, to Friction Power Corporation Limited, Montreal, Quebec, Scandard, Power Corporation Limited, Montreal, Quebec, Scandard, Power Corporation Limited, Montreal, Quebec, Scandard, Priction deriving mechanism. 1,647,442; Nov. 1.

Nov. 1.

McPherson, Charles, assignor, by mesne assignments, to Friction Fower corporation Limited, Montreat, Quebec, Canada. Fower transmission. 1,647,418; Nov. 1.

McPherson, Charles, assignor, by mesne assignments, to Friction Fower Corporation Limited, Montreat, Quebec, Canada. Fower-transmitting device. 1,447,457; Nov. 1.

McPherson, Charles, assignor, by mesne assignments, to Friction Fower Corporation Limited, Montreat, Quebec, Canada. Fower-transmitting device. 1,549,611;

Nov. 15.

McPherson, bound, and F. E. Schultz, New York, assistions to Keyroid Cement Block Co., Inc., Corona, 1,635,093; july 5.

McPherson, Harry L., Memphis, Tenn, assignor to A. Schrader's & Son, Incorporated, Brookiya, N. Y. Combination dust cup and the gauge, 1,626,294; Apr. 26.

McPherson, James O. (See Pearce, L. M., and McPherson, James O. (See Pearce, L. M., and

son.)

McQunid, Howard S., assignor to The Grasselli Chemical
Company, Cheveland, Ohio. Production of barium
silicofluoride. 1,648,143; Nov. 8.

McQunide, Arthur W., Chicago, Ill. Dishwashing machine. 1,654,466; Dec. 27.

McQuarrie, Thomas, et al. (See Hansen, John, assignor.)
McQuinn, Thomas II, Preston, Melbourne, assignor of twothirds to H, M. Sargood, Toorak, Victoria, Australia.
Electric water heater. 1,624,843; Apr. 12.

McQuiston, Frank L., Redondo, Calif. Water wheel.
1,645,996; Oct. 18.

Kledric water heater, 1,624,848; Apr. 12.

McQuiston, Frank L., Redondo, Calif. Water wheel.
1,645,996; Oct. 18.

McQuown, William K., Brooklyn, N. Y. Steering wheel.
1,649,359; Nov. 15.

McRae, Duncan, Bast Orange, N. J., assignor to Westlanguage and the many state of the steering wheel.
1,624,692; May 3.

McRae, George H., Manchester, Ga., assignor to Draper
Corporation, Hopedale, Alass. Filling attachment for
Jaoms. 1,639,659; Aug. 23.

McRae, William A., Brechin, Ontario, Canada. Liquidlevel indicator. 1,626,686; May 3.

McSheen, Edward W., Schenettady, N. Y., assignor to
General Electric Company. Cable-retaining shroud.
McSheerry, James, assignor to M. McSherry, St. Paul,
Minn. Life preserver. 1,618,481; Feb. 22.

McSherry, Joseph. (See Gilleland, Edgar B., assignor.)
McTarnahan, John T., Inc. (See McLarnahan, John T.,
1888, 280; Object, Chicaga III. assignor. 1896, Cingle.

assignor.)
McTavish, Robert, Chicago, Ill., assignor to The Cincinnati Butchers' Supply Company, Cincinnati, Ohio.
Rendering fat-bearing animal material. 1,654,506;

Dec. 27. — Crighe, Arthur D., Trenton Junction, N. J. Window ventilator for automobiles and the like. 1,628,053;

venilator for automobiles and the like. 1,628,053; May 10.
McTyre, George H., Daingerfield, Tex. Fertilizer distributor. 1,627,798; May 10.
McTyre, George H., Daingerfield, Tex. Fertilizer distributor. 1,627,798; May 10.
McYoker, Emery M., Milwaukee, Wis. Rail anticreeper. 1,635,377; July 12.
McYoker, James. (See Lorimer, G. W., and McVicker.) McYox, Vincen F., Molle, Ala. Combined cylinder cock McYox, Vincen F., Molle, Ala. Combined cylinder cock McWaid, Ralph A., Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for testing the viscosity of matter. 1,614,565; Jan. 18.
McWane, Arthur T., Birmingham, Ala. Window guard. 1,633,482; July 5.
McWane, Arthur T., Birmingham, Ala. Window guard. 1,633,482; July 5.
McWane, Arthur T., Birmingham, Ala. Window guard. 1,633,482; July 5.
McWane, James R., Birmingham, Ala. Pipe joint. 1,633,643; July 5.
McWane, James R., Birmingham, Ala. Pipe joint. 1,643,640; Proc C. Ridgewood, N. J. Wall construction.

McWaine, James R., Birmingiam, Ala. Pipe Joint. 1,648,464; Nov. 8.
McWaine, Robert C., Ridgewood, N. J. Wall construction. 1,649,461; Nov. 15.
McWhirter, John S. (See Farmer, C. C., and McWhirter.)
McWhirter, Robert B., Marietta, Ohio. Exerciser swing. 1,645,458; Oct. 18.
McWhirter, Ernest H. (See Bennett, A. A., and Mc-

McWhorter, Ernest H. (See Bennett, A. A., and McWhorter, Douglas, Dunedin Otago, New Zealand, Signal device for motor cars and the like. 1,635,630; July 12.
McWilliams, Arthur C., Chicago, III., assignor to Westinghouse Electric & Manufacturing Company, Metering panel board. 1,643,784; Sept. 2.
McWilliams, Janes A., Chicago, Ill. Foldable square. 1,616,407; Feb. 8.

McWilliams, Joseph E., Perryton, Tex. Pliers. 1,647,878;

McWilliams, Joseph E., Perryton, Tex. Pliers. 1,647,878; McWilliams, Joseph L., and J. Marosky, San Francisco, Calif. Floor-inlying device. 1,623,882; Apr. 5.

Calif. Floor-inlying device. 1,623,882; Apr. 6.

Calif. Floor-inlying device. 1,623,950; Pec. 13.

Meacham, Benjamin E., Lorain, Omo, assignor to American Stove Company, St. Louis, Mo. Thermostatic Renaminary, St. Louis, Mo. Thermostatic Renaminary, Sci. Louis, Mo. Thermostatic Renaminary, Sci. Louis, Mo. Leg attachment for stoves. 1,648,717; Nov. Leg attachment for stoves. 1,648,717; Nov. Leg attachment for stoves. 1,648,717; Nov. Mar. 15.

Meacham, Frederick C., Garden City, N. Y. Device for inducating time. 1,620,899; Mar. 15.

Meach Edward C., Elkhart, Ind. Combined fishing-tackle box and line winder and drier. 1,653,783; July 12.

Mead, Edward D., Caldwell, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electronignetic device. 1,632,899; Dec. 15.

Mead, Hong, S. Fire extinguisser. 1,638,050; Aug. 9.

Mead, George J., Chicago, Ill., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Apparatus for Mead, Hone A. (See Lynch, E. E., and Mead.)

Mead, John C., Palmyra, Mo. Hair-curing fron. 1,650,952; Nov. 29.

Mead Phys & Paper Company, The. (See Carruth, H. P., and Lord, Renament of the Company, The. (See Heisel, Raiph Mead, Holm & Paper Company, The. (See Ludwig, William C., assignor.)

Mead Puip & Paper Company, The. (See Heisel, Haiph E., assignor.)
Mead Puip & Paper Company, The. (See Ludwig, William L., assignor.)
Mead Puip & Paper Company, The. (See Ludwig, William L., assignor.)
Mead Puip & Rookiyn, N. Y., assignor to Mergensthaler Linotype Company. Mold for slug-casting machines. 1,626,854; May 3.

alead, William A., Los Angeles, Calif. Rat guard. 1,641,363; Sept. 6.
Mead. 1,621,863; Sept. 6.
Mead. Helena, Mont. Chain fastener. 1,048,965; Sept. 6.
Mead. Leslie E., Detroit, Mich. Electric game. 1,648,965; Nov. 15.
Mead. Leslie E., Detroit, Mich. Electric game. 1,648,965; Nov. 16.
Mead. Peter F., United States Anny, Washington, D. C. Mead. Peter F., United States Anny, Washington, D. C. Mead. Peter F., United States Anny, Washington, D. C. Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automatic electric welding machine. 1,635,762; July 12.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Electric welding machine. 1,635,762; July 12.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Electric welding machine. 1,635,710; Oct. 18.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Electric welding machine. 1,645,710; Oct. 18.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Electric welding machine. 1,645,710; Oct. 18.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Electric welding machine. 1,645,710; Oct. 18.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Electric welding machine. 1,645,710; Oct. 18.
Meadowcroft, W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Electric welding machine. 1,645,710; Oct. 18.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Electric welding machine. 1,645,710; Oct. 18.
Meadowcroft, Joseph M., assignor

Mears, Lucien, tern. 1,647 McKittrick, Calif. Universal angle pat-

1,647,707; Nov. 1. graph Company, The. (See Hosch, Greene C., Measuregraph Measuregraph Company, The. (See Turner, Douglas, assignor.)

Measuregraph Company, The. (See Wheeler, John L., assignor.)

assignor.)
Medanical Appliances Co., The. (See Brown, Ray W. assignor.)
Medanical Appliance Company. (See Wheeler, J. L., Reed, and Meccano Company. (See Horlub, Frank, assignor.)
Mechanical Appliance Company. (See Winton, John R., assignor.)
Mechanical Appliances Co., The. (See Brown, Ray W. assignor.)

Mechanical Engineering Corporation. (See Sheffield, W. K., and Hotton, assignors.)

Mechanical Rubber Company, The. (See Hubbard, Cecil R., assignors.)

Mechanical Rubber Company, The. (See Kent, W. J., Martin, and Kochan, assignors.)

Mechanical Rubber Company, The. (See Kent, William J., assignors.)

Mechanical Rubber Company, The.

J. assignor.)

Mechanical Rubber Company, The.

Germany, Galvanometer. 1,616,764; Feb. 8.

Mechau, Robert, assignor to the Firm of Carl Zeiss, Jena, Germany. Receiver for heat signs. 1,639,411; Aug. 16. Mechau, Robert, assignor to the Firm of Carl Zeiss, Jena, Germany. Indicator for heat rays. 1,639,412; Aug. 16. Mechille, Enest F. Washington, D. C. Draft rigging. Mechille, Enest F. Washington, D. C. Draft rigging. Mechille, Fidels M., Wichita, Kans. Safety cap for oil wells. 1,632,661; June 14. Mechille, C. A. (See Masters, F. E., and Hussey.) Mechille, Fidels M., Wichita, Kans. Safety cap for oil wells. 1,632,661; June 14. Mechille, William W., Butler, Pa. Metal railroad tie. 1,640,841; Aug. 30. Mechille, Fidels M., Wichita, Kans. Safety cap for oil wells. 1,632,661; June 14. Mechille, A. (See Albach, Frank, assignor.) Medealf, Lee A., Fairgrove, Mich. Sorting machine. 1,636,471; July 19. Medders. Thomas G., Lamesa, Tex. Cotton cleaner. Medearis, Columbus L., Shreveport, La. Gun barrel. 1,636,712; July 19. Medders. Columbus L., Shreveport, La. Gun barrel. 1,628,896; May 17. Meden, Elof H., Short Hills, assignor to American Gasaccumulator Company, Elizabeth, N. J. Combined signaling and advertising device. 1,522,759; Mar. 20. Meder. Arthur, Carlstadt, N. J., assignor to Norma-Hoffmann Bearings Corporation, New York, N. Y. Textile spindle. 1,630,712; May 31. Meder. Arthur, Carlstadt, N. J., assignor to Norma-Hoffmann Bearings Corporation, New York, N. Y. Meder, Robert E., Milwaukee, Wis. Photographic enlarging apparatus. 1,641,346; Sept. 6. Mederer, Max, Bloemfontein, South Africa. Sanatorium. 1,645,641; Oct. 18. Medholdt, Louis T., assignor to Mattison Machine Works, Medick, Frank C., Columbus, Ohio. Photograph mount. 1,625,641; Oct. 28. Medick, Frank C., Columbus, Ohio. Photograph mount. 1,654,647; Dec. 27. Mediock, Jack, Grandfield, Okla. Bag rack. 1,642,619; Sept. 8. Medick, Frank C., Columbus, Ohio. Photograph mount. 1,654,647; Dec. 27. Mediock, Jack, Grandfield, Okla. Bag rack. 1,642,619; Sept. 8. Medick, Frank C., Columbus, Ohio. Photograph mount. 1,654,647; Dec. 27. Mediock, Jack, Grandfield,

Meehan, Charles W., Pittsburgh, Pa. Lamp. 1,639,701; Meehan, 22.
Meehan, George F., Far Rockaway, and A. L. Kennedy, assignors, by meane assignments, to Kel-Pinstic Corporation, New York, N. Y. Vegetable sen-growth derivative and preparation thereof. 1,633,262; June 21, Meehan, Paul A., assignor to American Dressler Tunnel Silms, Inc., Cleveland, Ohio. Kiln car. 1,641,185;

tenan, Kiins, Inc., Cleveland, Unio.

Kiins, Inc., Cleveland, Unio.

Kiins, Paul A., assignor to American Dressler Tunnel, cellular, Paul A., assignor to American Dressler Tunnel, Cleveland, Ohio.

Kiins, Inc., Cleveland, Ohio.

Sept. 6.

Sept. 6.

Mechan, Paul A. assignor to American Dressler

Kilns, Inc., Cleveland, Ohio. Tunnel kiln. 1,6

Oct. 18.

Oct. 18.

Oct. 18.

Mechan, Paul A., assignor to American Dressler Tunnel Kilns, Inc., Cleveland, Ohio. Tunnel kiln. 1,646,254; Oct. 18.

Get. 18. Ceverand, Onto. Hander Mill. 1,090,207, Meck. James W., Staines, England. Hair comb. Leg. 1425; Mar. 15. Meck. John B. and C. F. Hayse, Portland, Oreg. Miter box for power-driven saws. 1,645,589; Oct. 25. Meck. Marcellus W., Arcadia, Calif. Animal-tatoo-marking instrument. 1,630,303; May 31. Meck. Marcellus W., Arcadia, Calif. Fur-pelt stretcher. 1,635,557; July 12. Meck. Sterner S., Philadelphia, Pa. Annealing copper articles. 1,647,859; Feb. 15. Meck. Theorem C. Philadelphia, Pa. Annealing copper articles. 1,647,859; Feb. 15. Meck. Sterner S., Philadelphia, Pa. Annealing copper articles. 1,647,859; Feb. 15. Meck. Sterner S., Philadelphia, Pa. Annealing copper articles. 1,647,859; Feb. 15. Meck. Sterner S., Philadelphia, Pa. Annealing copper articles. 1,647,859; Feb. 15. May 19. Mecker John L., 1648,266; Mar. 1, May 17. Meese, James. (See Clark, J., Smith, and Meese, 1)

May 17.

Meese, James. (See Clark, J., Smith, and Meese,)
Megathlin, Jesse L., Miami, Fla. Emergency boiler-tube
plug. 1,613,523; Jan. 4.
Meggenhofen, Charles W., Indianapolis, Ind. Vessel
emptylns or diling appliance. 1,643,025; Sept. 20.
Megle, Jesse J., and E. V., Pepper, Los Angeles, Calif.
Megnin, George W., Jenedale, N. J. Accelerator cushion.
1,630,139; May 24.
Megown, Charles C., Los Angeles, Calif. Sun visor for
motor vehicles. 1,640,088; Aug. 23.

Mehlin, Charles, Fort Lee, N. J. Piano construction. 1,628,172; May 10.

Melline. Emile, Hollywood, assignor to Evans Brake & Supply Co., Los Angeles, Calif. Tractor brake. 1,638,337; Aug. 8.

1,638,337; Aug. 8.

Meler, Airi W., Long Beach, Calif., assignor of one-half to G. F. Carson, Los Angeles, Calif. Self-adjustable universal-joint casing. 1,643,723; Sept. 27.

Meler, Charles J., Louisville, Ky. Soldering flux. 1,642,834; Sept. 20.

Meler, Milton, Newark, N. J., assignor to Meyer & Gross. Meler, Milton, Newark, N. J., assignor to Signode System, Inc. Seal. 1,647,241; Nov. 1.

Meier, William J., Lansing, Mich. Chimney. 1,627,105; May 3.

Meter, Samuel S., Chicago, Jian, assignor to Signode SysMeter, William J., Lansing, Mich. Chimney. 1,627,105;
May S.
Meiers, Paul D., Taccoma, Wash. Attachable fiexible
upper eyelid for dolls. 1,648,418; Nov. 8.
Meighan, Charles M., Tarboro, N. C. Flush tank.
1,613,670; Jan. 11.
Molisher of the Company of the Company

Feb. 8.

Meller, Ludolf, and H. Scholler, Munich, Germany. The production of glucose from material containing cellulose. 1,641,771; Sept. 6.

Mellink, Charles F., Toledo, Ohlo. Locking device for safes. 1,619,676; Mar. 1.

Mellink, Charles F., Toledo, Ohlo. Lock. 1,620,775; Mar. 1.

Mellink, Charles F., Toledo, Ohlo. Lock. 1,620,775; Mar. 1.

Mellink, Thomas G., assignor to The Holtzer-Cabot. 1.

Melling, Thomas G., assignor to The Holtzer-Cabot. 1,642,377; Sept. 18.

Melingast, Rudolf, and M. Mugdan, assignors to Consortium für Elektrochemische Industrie, Munich, Germany, Manufacturing acetic anhydride. 1,636,701; July 26. tium t many,

Meisekothen, Edwin E., assignor to French Battery Company, Madison, Wis. Dry battery, 1,613,227; Jan. 4. Meisekothen, Edwin E., assignor to French Battery Company, Madison, Wis. Dry-battery construction, 1,636,478; July 19.

Melsekothen, Edwin E., assignor to French Battery Company, Madison, Wis. Dry-battery construction, Pany, Madison, Wis. Dry-battery construction, Melsel, Benjamin W. (See Kendall, A. B., and Meisel), Melssner, Alexander, Berlin, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, Valve generator arrangement, 1,621,992; Mar. 22.

Mar. 22.

Meissner, Alexander, assignor to Gesellschaft für Draht-Meissner, Alexander, Gesellschaft für Draht-Meissner, Alexander, Gesellschaft für Draht-Meissner, Alexander, assignor to Gesellschaft für Draht-

Mar. 22.

Meissner, Alexander, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Circuit
arrangement for multiplex communication. 1,626,856;

May 3.

May 3.

May 3.

May 3.

Meissner, Alexander, assignor to Gesellschaft für Draht.

bose Telegraphie m. b. H. Hallesches, Berlin, Germany.

Receiving arrangements for wireless telegraphy.

1.628,676; May 17.

Meissner, Alexander, assignor to Gesellschaft fur Draht
lose Telegraphie m. b. H., Berlin, Germany. Arrange
ment for suppressing idle current in radiotransmitters.

1.630,349; May 31.

Meissner, Alexander, assignor to Gesellschaft für

Drahtlose Telegraphie m. b. H., Berlin, Germany. Ar
rangement for converting accounts energy into elec
Turbine-blade lashing. 1.618,292; Feb. 22.

Meister, Albert R., Sacramento, Calif. Flexible four
wheeled driving truck. 1.634,430; July 5.

Meister, E. G. K., et al. See Stransky, Emil, assignor,

Meister, E. G. K., et al. See Stransky, Emil, assignor,

Meister, E. G. K., et al. See Stransky, Emil, assignor,

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Meister, E. G. K., et al. See Stransky, Emil, assignor,

Meister, E. G. K., et al. See Stransky, Emil, assignor,

Meister, E. G. K., et al. See S

burg.

burg.)

Melamid, Mellach, Freiburg, Germany. Condensation product and making same. 1,648,858; Nov. 8.

Melang, Ot. A., Seattle, Wash. Stave-finishing machine. Melanowski, Leo, assignor to The Union Trust Company, operating trustee, Cleveland. Ohio. Power-transmitting mechanism. 1,612,566; Jan. 4.

Melanowski, Leo, Cleveland, Ohio, assignor to E. Durell, J. 1918, J. Fower-transmitting mechanism. 1,611,627; Jan. 5.

Melanowski, Leo, assignor to The Union Trust Company, Cleveland, Ohio. Power-transmitting mechanism. 1,611,265; Feb. 8.

Melanowski, Leo, assignor to The Union Trust Company, Cleveland, Ohio. Power-transmitting mechanism. 1,611,265; Feb. 8.

Melanowski, Leo, assignor to The Union Trust Company, Operating Trustee, Cleveland, Ohio. Motor vehicle. Melberg, Ernest, Norway, Iowa. Fastener. 1,636,824; July 26.

Melby, Charles J. Eversty, Web.

Melby, Charles J., Everett, Wash. Shingle-planing ma-chine. 1,634,789; July 5.

Melcher, Irving W., Portland, assignor of one-half to T. C. Ware, South Portland, Me. Combined switch-box and vacuum-line-seal mechanism for vacuum cleaning Melcher, Lee W., West De Pere, Wis. Merry-go-round. Melcher, Lee W., West De Pere, Wis. Controlling mechanism for variable-speed transmissions, 1,629,804; May 24. Melcher, Lee W., West De Pere, Wis. Controlling mechanism for variable-speed transmissions, 1,629,804; May 24. Melcher, Lee W., West De Pere, Wis. Transmission gearing, 1,641,167; Sept. 6.

Melcher, Lee W., West De Pere, Wis. Transmission gearing. 1,641,187; Sept. 6.
Melco Engineering Corporation. (See Meyers, Sidney E., Melco Engineering Corporation.)
Melco Engineering Corporation. (See Meyers, Sidney E., Melco Engineering Corporation.)
Melco Melco

July 5.

Mellins Food Company of North America. (See Bunker, Carl H., assignor.). Mellish, Ada R. (See Rockwood, Walter W., assignor.) Mellish, Ada R. (See Rockwood, Walter W., assignor.) Mellish, Ada R. (See Rockwood, Walter W., assignor.) Mellior, Robert W., New York, N. Y. Mason's scale. 1.653.016: Dec. 20.

Mellin Robert W., New York, N. Y. Moson's scale. 1.653.016: Dec. 20.

Melniker, Abraham, and S. Calmanson, Brooklyn, N. Y. Collapsible baby carriage. 1.631.498; June 7.

Melniker, Abraham, Brooklyn, N. Y. Holder. 1.653.652; Dec. 27.

Meloy, John M. (See Galloway R. M., Bockhoff, and

Moloy, John M. (See Galloway, R. M., Bockhoff, and Meloy.)
Meloy.)
Melson, George A. (See Frontz. Robert O., assignor.)
Melton, Frank J., Clayton, N. Mex. Gravity dump body for trucks or wagons. 1,631,751; June 7.
Melton, Fink M., Memphis, Tex. Cotton harvester and Moltzer. Abe, New York, N. Y.
1,637,083; July 26.
Meltzer, Hyman, Brooklyn, N. Y. Method and apparatus for manufacturing frame parts. 1,634,750; Jan. 18.
Meltzer, Hyman, Brooklyn, N. Y. Method and apparatus for manufacturing frame parts. 1,634,750; Jan. 18.
Melville, Alexander, and D. McDougall, Glasgow, Scotiand. Machinery for bending metallic rods, wires, or the like. 1,619,951; Mar. 8.
Melville, Clyde E., and A. C. Peterson, Sacramento, Calif.; said 67, even assignote to said Melville. Oil dis-Molvin, Frank E., et al. (See Edgar, G. B., and Melvin, assignors.)

Melvin, Laighton R. (See Edgar, G. B., and Melvin.) Melvin, Paul A., Chicago, Ill. Clamp for concrete forms. 1.616.469; Feb. 8. Melvin, Robert A., et al. (See Edgar, G. B., and Melvin,

assignors.)
Melzer, Otto. (See Wahl, J., and Melzer.)
Memmler, Arthur H., Sacramento, Calif. Drawing file
holder. 1,652,370; Dec. 13.
Ménard, Gédéon, Varennes, Quebec, Canada. Game.
1,017,266; Feb. S.
Menchen, Joseph, Summit, N. J. Portable fastening device. 1,627,7709; May 10.
Mencher, Maurice, New York, N. Y. Safety razor.
1,642,1745; C.C. Canapy. The (See Klein, Stanley, as-

Mendel-Drucker Company, The. (See Klein, Stanley, as-

signor. William, Beverly, assignor to S. A. Neldich, Mendel, William, Beverly, assignor to S. A. Neldich, Edgewater Park, N. J. Manufacture of filaments and films from viscose. 1,614,481; Jan. 11.

Mendel, William, Beverly, assignor to S. A. Neidich, Edgewater Park, N. J. Dyeing filaments and films formed from viscose. 1,633,220; June 21.

Mendel. William, Beverly, assignor to S. A. Neidich, Franciscose, 1,633,220; June 21.

Mendel, William, Beverly, assignor to S. A. Neidich, Edgewater Park, N. J. Manufacture of artificial silk. from viscose. 1,646,625; oct. 25.

Mendelson, Louis R., assignor to Tb. Hotstream Heater Louis R., assignor to Tb. Mendelson, Louis R., assignor to Tb. Mendes, H., & Company. (See Fox, Julius A., assignor) Mendez, Ciro F., Mexico City, Mexico, assignor to I. S. Cooper, Los Angeles, Calif. Spring wheel. 1,625,270; Apr. 19.

Mendez, Guadalupe, Dawson, N. Mex. Radio tube socket. 1,637,684; July 26.

Mendolagolitia, Jose, New York, N. Y. Necktie hanger. Mendisabl., Alberto, Buenos Airea, Argentina. Automatic valve and float for drinking trougbs and the like. 1,616,431; Mar. 1.

Mendoca, Jion C., New Bedford, Mass. Safety device. 1,645,738; Dec. 13.

Mendoca, Mordecai. (See Perkin, W. H., Fyfe, and Mendocas, Mendocas, Mendocas, Salvador, Los Angeles, Calif. Combined street-

1,652,788; Dec. 13.

Mendoza, Mordecai. (See Perkin, W. H., Fyfe, and
Mendoza, Mordecai. (See Perkin, W. H., Fyfe, and
Mendoza, Salvador, Los Angeles, Calif. Combined streetcurbing structure and advertising means. 1,648,459;
Morofee, Elmer, assignor of one-half to W. H. Goodlive,
Zanesville, Ohlo. Closure connecting and locking arrangement for milk cans. 1,617,560; Feb. 15,
Menefee Foundry Co., The. (See Menefee, James W., agefener.)

signor.)

Menefee, Gus, Atlanta, Ga. Boat retaining and releasing device. 1,625,736; Apr. 19.

Menefee, James W., assignor to The Menefee Foundry Co., Fort Wayne, Ind. Mangle. 1,652,315; Dec. 18.

Menge, Sidney L., New Orleans, La. Rotary pump. 1,630,130; May 24.

Menges, Henry, Richmond Hill, N. Y. Fastener for fabrics. 1,634,622; July 5.

Menkin, Max, New York, N. Y. Button-assembling dies. 1,648,495; Nov. 8.

Menne, William, Unon City, N. J. Preserver Jar. Menne, William, Unon City, N. J. Preserver Jar. 1,530,629; May 31.

Menningen, Sam, Lincoln Park, Mich. Window jack. 1,530,629; May 31.

Menningen, Adolph C., West Allis, assignor to Kochring Company, Milwaukee, Wis. Multiplane shoe, 1,614,531; Jan. 18.

Menningen, Adolph C., assignor to Kochring Company, Milwaukee, Wis. Multiplane shoe, 1,614,531; Jan. 18.

Menningen, Adolph C., assignor to Koehring Company, Milwaukee, Wis. Automatic power-discharge chute. 1,648,144; Nov. 8.

Millweintee Wile Automatic power-discharge chute. 1,648,144; Nov. 8.

Menschel, Reinhold, Berlin, Germany, Swimming and running shoe. 1,627,521; May 3.

Mensforth, Holberty, Bowdon, and F. A. Cowell, Sale, England, assignors, by mesne assignments, to Westinghouse Electric and Manufacturing Company. Apparatus for determining the accuracy of gears and hobst England, assignors, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Grinding apparatus for hobs. 1,616,655; Feb. 1.

Mensing, Karl, assignor to the Firm Quarzlampental States of the States of th

1.626.865; May 3.

Mercantile Trust Company of California, executor. (See Myers, Mark C., assignor.)

Mercantile Trust Company of Canada, Limited, In Trust, (See McKay, Francis, assignor.)

Mercator. (See Hamilton, G. M., and Webb, assignors.)

Mercer, Alvis, et al. (See Smith, Lawrence F., assignor.)

Mercer, Harry, McDonald, Ohlo. Rolling-mill guide, 1.620.686; Mar. 8.

Mercer, Henry H., Claremont, N. H., assignor to Sullivan Machinery Company, Steam-generating apparatus. 1,620.696; May 8.

Mercer, Henry H., Claremont, N. H., assignor to Sullivan Machinery Company. Oil-burning device. 1,631,688;

Mercer, Henry R., Chremont, N. H., asseption of Smiral Mercer, Henry S. (See Waters, Victor J., assignor.) Mercer, Henry S. (See Waters, Victor J., assignor.) Mercer, Richard, Harrow, and F. Tench, West Norwood, London, England, assignors, by mesne assignments, to Automatic System. J. (Si., 201.) Dec. 11. Manual to automatic system. J. (Si., 201.) Dec. Mercher, Green Composition, Detroit, Mich. Spare-tire carlier for vehicle. 1,650,765; Nov. 29. Merchen, Glen G., Spokane, Wash. Freed regulator. J. (Si., 201.) Apr. 12. Preumatic suspension fed by compressed air. J. (648.908; Nov. 15. Mercke, Edward E., Brunswick, Md. Fred-water heater. J. (52., 207.) Dec. Preumatic suspension fed by compressed air. J. (648.908; Nov. 15. Merckle, Edward E., Brunswick, Md. Fred-water heater. J. (52., 207.) Dec. (Merco. Nordstrom Valve Company. (See Nordstrom, Valve J., assignor.)

Merco Nordstrom Vaive Company. (See Nordstrom, Sven J., assignor, by mesne assignments, to Ready Apron Company, Chicago, Ill. Apron. 1,643,311; Sept. 21.

Mercury Manufacturing Company. (See Childress, William C., assignor.)

Mercury Manufacturing Company. (See Odiorne, William H., assignor.)

Mercury Millis, Limited. (See Clarke, Edgar W., assignor.)

mercury Mills, Limited. (See Carre, Joger W., as ### Signor Fred, Vancouver, Wash. Tool for inserting and removing bearing sleeves. 1,619,625; Mar. 1. Merdian. Fred. Vancouver, Wash. Tool for removing and inserting bearing sleeves and bearings. 1,641,895; Sept. 6.

Sept. 6.
Meredith, Grover. (See Meredith, James O. and G.)
Meredith, Harry R., et al. (See Murphy, Robert N.,
Meredith, James O. and G., Marion, Ind. Anchoring device. 1,628,550; May 10.
Meredith, Robert M. (See Blackley, W. R., and Meredith,
Meredith, Sherman C., Burlingame, and N. N. T. Nyborg,
Modesto, Calif. Manufacturing lactose. 1,626,867;

Modesto, Calif. Manufacturing lactose. 1,626,857; May 3, Merensky, Felix, Leavenworth, Kans. Ruling machine. 1,634,850; July 5.

Merensky, Felix, Leavenworth, Kans., assignor of fifty per cent to G. Merensky, Detroit, Mch. Case for cigarette papers. 1,637,229; July 26.

Merensky, George. (See Merensky, Felix, assignor.)

Mergenthaler Linotype Company. (See Ackerman, William, assignor.)

Mergenthaler Linotype Company. (See Beadle, George W., assignor.)

Mergenthaler Linotype Company. (See Chalfonte, Albert L., assignor.)

Mergenthaler Linotype Company. (See Hochull, Henry Mergenthaler Linotype Company. (See Hochull, Henry Mergenthaler Linotype Company. (See Hochull, Henry Mergenthaler Linotype Company. (See Hochull, Henry

bert L. assignor.)
Mergenthaler Linotype Company. (See Hochuli, Henry R., assignor.)
Mergenthaler Linotype Company. (See Kennedy, David S., assignor.)
Mergenthaler Linotype Company. (See Kohn, Samuel,

assignor.)
Mergenthaler Linotype Company. (See McNamara, James G., assignor.)
Mergenthaler Linotype Company. (See Mead, Richard

R., assignor.)
Mergenthaler Linotype Company. (See Muchleisen, Carl,

assignor.)
Mergenthaler Linotype Company. (See Remas, Isidore T., assignor.)
Mergenthaler Linotype Company. (See Rogers, John R.,

assignor.) Mergenthaler Linotype Company. (See Rousseau, Joseph

L., assignor.)
Mergott, J. E., Co. (See Hiering, William C., assignor.)
Mergott, J. E., Co. (See Hiering, W. C., and Walter, as-

signors.) Meriam Company. (See Price, H. W., and Meriam, as-

Meriam Company. (See Price, H. W., and Meriam, assignors.)
Meriam, Jeseph B. (See Price, H. W., and Meriam.)
Meriam, Jeseph B. (See Price, H. W., and Meriam.)
Meriam, Jeseph B. (See Price, H. W., and Meriam.)
Meriam, Jeseph B. (See Price, H. W., and Jeseph B. (See Price, H. W., and Jeseph B. (See Price, H. W., and Jeseph B. (See Price, H. W., L., assignors to The International Nickel Company,
New York, N. X. Alioy. 1.620, 248; Apr. 26.
Merit Underwear Company. (See Williams, Edward T.,
Meric, André N., assignor to Pathé Cinéma Anciens

assignor.)

Merle André N., assignor to Pathé Cinéma Anciens Etablissements Pathé Fréres, Paris, France. Attaching motion-picture films to winding cores. 1,628,416; May 10.

Merle, José, Buenos Aires, Argentina, Centrifugal casting apparatus. 1,651,288; Nov. 29.

Merlis, Ira, assignor to Kelvin Engineering Co., Inc., New York, N. Y. Evaporator. 1,622,918; Mar. 29.

Merlis, Ira, assignor to Kelvin Engineering Co. Loc., New York, N. Y. Evaporator. 1,632,9013; Mar. 29.

Merlonetti. Giulo, Wedvin Engineering Co. Loc., New Losson Co., Aug. 2, Merlonetti. Giulo, Wedvin Engineering Co. Loc., New Merlonetti. Giulo, Wedvin Engineering Co. Loc., New Merlonetti. Giulo, Wedvin Engineering Co. Loc., New Merlonetti. Giulo, Wedvin Merlonetti. Merlonetti. Giulo, Wedvin Merlonetti. Merlonetti. Merlonetti. Giulo, Wedvin Merlonetti. Merlonetti.

Merola, Gaetano, et al. (See Luther, John A., assignor.)
Merrell, William S., Company, The. (See Mills, Clarence
A., assignor.)

Merriam, Henry F., West Orange, N. J., assignor to General Chemical Company, New York, N. Y. Sulphur burner. 1,629,352; May 17.

burner. 1,629,352; May 17.

Merrick, Eldridge G., Schenectady, N. Y., assignor to General Electric Company, Grounding arrangement. 1,648,694; Nov. 8.

Merrick, Frank W., Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Leather-edge-finishing machine. 1,621,515; Mar. 22.

Merrick, Herbert L., Passaic, N. J. Weighing mechanism. 1,616,503; Feb. 8.

Rassic, N. J. Material-feeding means. 1,641,448; Sept. 6.

Merrick, Herbert L., Passaic, N. J. Weighing mechanism. 1,652,178; Dec. 13.

Merrick, Leslie E. (See Christiansen, H. A., and Merrick, Leslie E. (See Christiansen, H. A., and Merrick).

Merrick Scale Mfg. Company. (See Hebden, Frank, assignor.)

Merrick Scale Mfg. Company. (See Hebden, Frank, assignor.)

Merrill, Ayres P., Natchez, Miss. Gate. 1,630,200;

May 24.

Merrill Brothers. (See Merrill, Whitney, assignor.)

Merrill, Charles F., assignor to Draper Corporation,

Hopedale. Mass. Spinning ring and traveler.

Merrill Company, The. (See Mills, L. D., and Crowe

assignors.)

Merrill, Frank W., Fort Wayne, Ind., assignor to General

Electric Company. Synchronous induction motor.

1,613,771; Feb. 22.

Merrill, George F., Ware, Mass. Repacking valves.

1,631,025; July 26.

Merrill, Goorge F., Ware, Mass. Repacking valves.

1,637,025; July 26.

Merrill, John R., Paris France. Pocket outfit for the

Merrill, John R., Paris France.

Merrill, John R., Paris France, Ind., Metal vase or re
ceptacle. 1,646,037; Feb. 13.

Merrill, John R., Paris France, Ill. Shortening mixer.

1,631,308; Jan. 25.

Merrill, John R., Strance, Ill. Shortening mixer,

1,611,308; Jan. 25.

Merrill, John R., Strance, Ill. Shortening mixer,

1,611,309; July 26.

Merrill, John R., Strance, Ill. Shortening mixer,

1,611,309; July 26.

Merrill, John R., Strance, Ill. Shortening mixer,

1,611,309; July 26.

Merrill, Philip P., Evanston, assignor to Ludlow Typo
graph Company, Chicago, Ill. Printing art. 1,641,772;

Sept. 6.

Merrill, Philip P., Evanston, assignor to Ludlow Typo
graph Company, Chicago, Ill. Printing member.

1,643,591; Aug. 9.

Merrill-Soule Company. (See Fleming, Raphael S., as
signor.)

Merrill-Soule Company. (See Hawley, William G., as-

Merrill-Soule Company. (See Hawley, William G., as-

Merrill. Soule Company. (See Hawley, William G., assignor.)
Merrill, Warren C., Alameda, Calif. Electric heating element. 1,643,673; Sept. 27.
Merrill, Whitney, Brooklyn, assignor to Merrill Brothers, Maspeth, Long Island, N. Y. Drop hammer. 1,636,426; July 19.
Merrill, Whitney, Schenectady, N. Y., assignor to General Electric Company. Segregated drive for paper machines and the like. 1,651,412; Jan. 11.
Merrill, Electric Company. Automatic load equalization. 1,631,752; June 7.
Merrill, William F., assignor to The Lamson Company, Syracuse, N. Y. Detachable carrier head. 1,651,333; Nov. 29.
Merriman. Thomas C., Tunstall. England, assignor to Merriman.

Nov. 29.

Merriman, Thomas C., Tunstall, England, assignor to William S. Pitcairn Corporation, New York, N. Y. Plate or similar article, Des. 72,524; Apr. 26.

Merritt, Arthur A., Edgewood, R. I., assignor to Willow & Gibbs Sewing Machine Co., New York, N. Y. Sewing machine. 1,628,173; May 10.

Merritt Engineering & Sales Company. (See Merritt, Ericsson H., assignor, Merritt, Ericsson H., assignor to Merritt Engineering & Sales Company, Inc., Lockport, N. Y. Lathe. (See Scofield, L. M., and Thomas, assignors).

signors.)
Merrow. Joseph M., assignor to The Merrow Machine
Company, Hartford, Conn. Sewing-machine guide.
1.649.360; Nov. 15.
Merrow Machine Company, The. (See Merrow, Joseph
M., assignor.)

M., assignor.)

Merseburger, Gustave J., Woodside, N. Y. Two-faced doll. 1,618,772; Feb. 22.

Merseles, Henry R., assignor to H. E. Merseles, Bronzville, N. Y. Washing machine. 1,620,671; Mar. 15.

Merseles, Herbert B. (See Merseles, Henry R., assignor.)

Merselon, Alfred V., Schenectady, N. Y., assignor to General Electric Company. Electric Electric Company.

Med-0461; Aug. 30.

Merselon, Raiph D., New York, N. Y. Manufacture of Cletrodes for electrolytic apparatus. 1,617163; Feb. 8.

Mershon, Raiph D., New York, N. Y. Excitation of electrolytic condensers. 1,620,119; Mar. 8.

Merten, Arthur. (See Langenbeck, B., and Merten.)

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Merten, Arthur J., Colorado Springs, Colo. Wheel puller. 1,654,008; Dec. 27.

1,654,008; Dec. 27.

1,644,936; Oct. 11.

Mertens, Robert, Olpe, assignor to Industriebedarf G. m.

b. H., Weidenau-Sieg, Germany. Linen boller. 1,622,260; Mar. 22.

Mertzanoff, André M., assignor to American Radiator Company. New York, N. Y. Parlor-heater casing. 1,622,632.

Mertzanoff, André M., assignor to American Radiator Company, New York, N. Y. Parlor-heater casing. 1,625,632.

Mertzanoff, André M., New York, N. Y., assignor to American Radiator Company, New York, N. Y. Parlor-heater casing. Des. 73,533; Sept. 27.

Mertzanoff, André M., New York, N. Y., assignor to American Radiator Company, Chicago, Ill. Bolier Jacket. 1,649,317; Nov. 15.

Merwin, George S., San Francisco, Calif. Liquid saving. brakes. 1,640,531; Nov. 15.

Mery R., George, Fergus Falls, Minn. Lubricating-oil can. 1,640,511; Jug. 30.

Meiz & McLellan. (See Bottomley, W. T., and Weeks, assignors.)

Merz & McLeran (See Browner, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Clutch. 1,638,542; Aug. 9. Meschenmoser, Julia J., executrix. (See Meschenmoser, William F.)

Meschemmoser, Juna J., executix. (See Meschemmoser, William F.)

Meschemmoser, executix; said William F. Meschemmoser, executix; said William F. Meschemmoser assignor to Russell & Stoll Company, New York, N. Y. Casing for electrical fittings. 1,622,383; Mar. 29.

Mescher, Henry J., Dayton, Ohio. Support for spotlights. 1,649,175; Nov. 15.

Meserole, Milton D., assignor to The Hayes-Meserole Manufacturing Co., Inc., Milford, Conn. Hair curler. 1,622,660 Mar. 29.

Milford, assignor to The Ansonia Newty Company, Ansonia, Conn. Pencil sharpener. 1,635,974; July 12.

Mesinger, Henry, New York, N. Y. Saddle. 1,648,055; Nov. 8.

Mesker, Berngrd T. (See Mester, Lebana) Barbaner.

1.635,974; July 12.

Mesinger, Henry, New York, N. Y. Saddle. 1,648,055; Mesker, Bernard T. (See Mesker, John and B. T.).

Mesker Borthers Iron Company. (See Mesker, John and B. T., assignors.)

Mesker, John and B. T., assignors to Mesker Brothers Iron Company, St. Louis, Mo. Window construction.

Mess. Fred F. Farmington, Minn. Hayrack ladder. 1,616,461; Feb. S.

Messenger, Jack E., Des Moines, Iowa. Foot accelerator. 1,622,222; May 17.

Messenger, Otis G., Blizabeth, N. J., assignor to Standard Dessenger, Otis G., Blizabeth, N. J., assignor to Standard Jepsenger, Otis G., Blizabeth, N. J., assignor to Standard Messer, Cold.; Apr. 5.

Messer, Adolf, Frankfort-on-the-Main, Germany. Acetylene generator. 1,613,184; Jan. 4.

Messer, Edward, Pittsburgh, Pa. Candy-jar holder. 1,625,205; Apr. 26.

Messer, Edward, Pittsburgh, Pa. Candy-jar holder. 1,625,205; Apr. 26.

Messer, Charles, Brentwood, N. Y. Combined watch case and appendage. Des. 73,095; July 19.

Messick, Charles, Brentwood, N. Y. Combined watch case and appendage. Des. 73,095; July 19.

Messinger, George E., New York, N. Y. Composition of messick, George E., New York, N. Y. Combined watch messinger, George M., Morganza, Pa., assignor.)

Messinger, George M., Morganza, Pa., assignor of one-half to H. A. Roat, Manchester, N. Y. Minnow box. Messinger.)

Messler, Clinton S., assignor to The Green Fuel Economizer Company, Betcon, N. Y. Automatic safety system for vessels containing liquid under pressure. 1,627,399; May 3. Messner, Arthur C. (See Young, Frank G., jr., assignor.) Messner, John, Calumet, Mich. Traction shoe. 1,625,519; May 24.

May 24.

Messtorff, Gerhard, Spandau, near Berlin, assignor to the Firm Dr. Erich F. Huth G. m. b. H.. Berlin, Germany. Vacuum-tube radiotransmitter. 1.626,744; May 3.

Mesterton, Kuno W., Rye, N. Y. Massage device. 1.650,528; Nov. 22.

Meston, James R., and D. E. Erickson, Seattle, Wash., assignors to Todd Shipyards Corporation, New York, N. Y. Oil and water separator. 1.648,558, Nov. 4.

Mestor of the demonstration of the Shipser Sh

D., assignor.)
Metal Forms Corporation. (See Moss, R. M., and Pulis,

assignors.) Metal Forms Corporation. (See Trester, Herault A., as-

signor.)
Metallbank und Metallurgische Gesellschaft Aktiengesell-schaft. (See Obertel, Rudolf, assignor.)

Metallstanzwerk G. m. b. H. (See Krain, Georg, as-Metal Novelty Corporation. (See De Cesare, Matteo, assignor.) Metal Office Furniture Company. (See Wege, Peter M.,

Metal Package Corporation of New York. (See Anthony, Metal Products Company. (See Cocks, Harry J., assignor.)
Metal Products Company. (See Pierce, Harrie C.,
Metal Protection Corporation. (See Pierce, Harrie C.,

Metal Protection Corporation, there below, assignor.)
Metal Specialties Manufacturing Company, (See Berg, John, assignor.)
Metal Specialties Manufacturing Company, (See Hermann, Wolfgang, assignor.)
Metals Protection Corporation. (See Humphries, Chad II.,

assignor.)
Metals Recovery Company. (See Bragg, Gilbert A., as signor.) Metals Recovery Company. (See Sayre, Ralph E., as

signor.)
etal Textile Corporation. (See Kingman, Russell B., & Thermit Corporation. (See Lubowsky, Simon J.,

assignor.)
Metal & Thermit Corporation. (See Schultz, Hermann, assignor.) Metal & Thermit Corporation. (See Taurman, Alphonso,

assignor.)
Metal Ware Corporation. (See Koenig, Remus, assignor.)
Metalweld Service Corporation. (See Occhsle, Joseph S.,

Metailweld Service Corporation. tese deciding, to-eparassignor.

Metcaif, Edwin M., assignor of one-half to E. M. Sparks,
Kansas City, Mo. Railway crossing. 1,613,236;
Metcaif, Henry W., Honolulu, Hawaii. Window shade.
1,616,385; Feb. 1.

Metcaif, Herbert E., San Leandro, assignor to The
Magnavox Company, Oakland, Calif. Vacuum tube.
1,629,868; May 3.

San Leandro, assignor to The MagMetcaif, Herbert E., San Leandro, assignor to The
Magnavox Company, Oakland, Calif. Vacuum tube.
1,639,239; July 19.

Metcaif, Herbert E., San Leandro, assignor to The Magnavox Company, Oakland, Calif. Vacuum tube.
1,646,029; Oct. 25.

Metcalf, Herbert E., San Lendro, assignor to The Magnavo Company, Oakland, Callf. Vacuum tube. 1.646.026; Oct. 25.

Mctcalf, Herbert E., assignor to The Magnavox Company, Oakland, Callf. Exhausting thermionic tubes and like devices. 1.651.065; Nov. 29.

Mctcalf, Robert, and M. Jones, Hazard, Ky. Hopper Metcalf, Robert, and M. Jones, Hazard, Ky. Hopper Metcalf, Oohn, sr., Vestaberg, Pa. Miner's battery-carrying device. 1.653.682; Dec. 20.

Mctcalfe, Ohn, sr., Vestaberg, Pa. Miner's battery-carrying device. 1.653.582; Dec. 20.

Mctcalfe, Virgil E., Delidas, Oriente, Cuba. Centrifugal Metcalfe, Virgil E., and F. Mallen, jr., Delicias, Cuba. Flow meter. 1.644.99; Nov. S.

Meter Service Corporation. (See Alcazar, Alcides M., assignor).

Meter Service Corporation. (See Alcazar, Alcides M., assignor).
Metherd, Gilbert E., Indianapolls, Ind. Direction indicettor. 1,646,159,00-E.
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Methot, John A., assignor to B. Josephs and J. H. Corash, Worcester, Mass. Small hand bag. Des. 72,178;

Worrester, Australian Mar. 8. Mar. Mar. 8. Merhudy, Eugene R., St. Louis, Mo. Gas range. Des. 73.708; Oct. 25. Metropolitan-Columbia Mfg. Co. (See Hurd, John F.,

Metropolitan-Columbia Mfg. Co. (See Knieriem, John, Metropolitan Electric Mfg. Co., et al. (See Hartmann, Paul, assignor.)
Metropolitan Electric Mfg. Co., et al. (See Hartmann, Paul, assignor.)
Metropolitan Lamp Co. Inc. (See Sheiner, Philip, as-

Metropolitan Sewing Machine Corporation. (See Wels, Metropolitan Sewing Machine Corporation. (See Hinton, Norman P., assignor.)
Metropolitan Victors Electrical Company. (See Hinton, Norman P., assignor.)
Metropolitan-Victors Electrical Company Limited. (See Robinson, Ernost Y., assignor.)
Metropolitan-Victors Electrical Company Limited. (See Robinson, Ernost Y., assignor.)
Metropolitan-Victors Electrical Company Limited. (See Robinson, Ernost Y., assignor.)
Metters, Gordon J. Wayville, and K. W. Nolan, St. 1.618,900; Mar. 1.618,900; Mar. 1.618,900; Mar. 1.618,900; Mar. 1.618,900; Mar. 1.621,850; Mar. 22.
Mettler, John W., East Millstone, N. J., and H. L. Davis, Martinsburg, W. Va., assignors to The Intervoven Mills, Inc., Aley Brunswick, N. J. Circular-Ruiting machiner, Alexandria, Mettler, Josef, assignor to the Firm Landis & Gyr A. G., Zug, Switzerland. Coln device for prepayment meters. 1,626,143; Apr. 26.
Metiler, Margaret C., née Cabezola, et al., executrices. (See Cabezola, Euseblo F.)

Metz, Alexander E., Teaneck, N. J. Scaffold bracket. 1,626,745; May 3.

Metz, Gustave P., Brooklyn, N. Y. Medicinal agent adapted for glandular therapy. 1,640,709; Aug. 30.

Metz, H. A., Laboratories, Inc. (See Dublin, Harry E., assignors.)

Metz, H. A., Laboratories, Inc. (See Dublin, H. E., and Coritt, assignors.)

Metz, H. A., Laboratories, Inc. (See Funk, C., and Dublin, assignors.)

Metz, H. A., Laboratories, Inc. (See Funk, C., and Dublin, designors.)

Metz, John, Jamaica, assignor to Keen Waving Company, Inc., New York, N. Y. Curling stick. 1,633,812; Dec. 27.

Metz, Samuel T., Jamatea, N. Y., assignor to Treo Com-Mand Company, Jersey City, N. J. Compressor unloader. 1,612,933; Jan. 4.

Metzgar, Chester W., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor unloader. 1,612,933; Jan. 4.

Metzgar, Chester W., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor unleader. 1,612,933; Jan. 4.

Metzgar, Chester W., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor unleader. 1,612,933; Jan. 4.

Metzgar, Carl, and E. Luetschen, Munich, Germany. Condenser, 1,649,482; Nov. 15.

Metzger, Claude W., Los Angeles, Calif. assignor, by Metzger, Claude W., and M. Manning, Houston, Tex. Nov. 22.

Metzger, Claude W., Los Angeles, Calif., assignor, by mesue assignments to Consolidated Machine Tool Corporation of America. Milling cutter. 1,650,290; Nov. 22.

Metzger, Claude W., and M. Manning, Houston, Tex. Metzger, Constance I., administratrix. (See Wood, E. K., and Metzger.) Metzger, John. (See Wood, E. K., and Metzger.) Metzger, John. (See Wood, E. K., and Metzger.) Metzger, Myer, Chicago, Ill. Tire-display holder. 1,640,792; Aug. 30.

Metzner, Albert W. (See Sherman, J. Q., and Metzner.) Metzger, Myer, Chicago, Ill. Tire-display holder. 1,640,792; Aug. 30.

Metzner, Albert W. (See Sherman, J. Q., and Metzner.) Metzger, Myer, Chicago, Ill. Tire-display holder. 1,640,792; Aug. 30.

Metzner, Robert B., Wheeling, W. Va. Mining machine. 1,642,021; Sept. 20.

Meuer, George J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric connecters. 1,646,037; Oct. 18.

Meunier, Gharles, Great Neck, N. Y. Gutter hanger. Re16,622; May 10.

Meunier, Charles, Great Neck, N. Y. Gutter hanger. 1,630,961; May 31.

Mexter, Eurst, St. Louis, Mo. Transformer. 1,653,504; Mexter, Eurst, St. Louis, Mo. Transformer. 1

Dec. 20 Earl J. Los Angeles, Calif. Wall lighting fix-ley beg. Earl J. Los Angeles, Calif. Wall lighting fix-Meyer, Adolph, assignor of one-half to H. A. Elfdain, Woodhaven, N. Y. Foot rest for motor vehicles, 1,613,227; Jan. 4. Meyer, Adolph F., St. Paul, Minn. Governor. 1,648,419;

Nov. 8.

Meyer, Alcid A., Minneapolis, Minn. Newspaper-vending machine. 1.645,442; Oct. 11.

Meyer, Alfred G. and W., Chicago, Ill. Dirigible head-light. 1.615,129; Jan. 18.

Meyer, Alfred G. and W., Chicago, Ill. Dirigible head-light. 1.615,129; Jan. 18.

Meyer Charles E., 1.636,479; July 19.

Meyer, Charles E., Johannesburg, Transval, South Africa. Trentment of zinc gold silmes and apparatus therefor. 1,622,960; Mar. 29.

Meyer, Charles L., assignor to Concrete Engineering Company, Omaha, Nebr. Column clamp. 1,634,111; June 28.

Company, June 28.

Company, Omaha, Nebr. Column clamp. 1,634,111; June 28.

Meyer, Dirk, Pekin, assignor to The Meyer Furnace Company, Peoria, III. Smoke-pipe connection for furnaces. Moyer, Emile. New York, N. Y. Woven fabric. Des. Meyer, Emile. New York, N. Y. Woven fabric. Des. Meyer, Erwin C. C. (See Stoll, K., and Meyer.) Meyer, Frank J. (See Stoll, K., and Meyer.) Meyer, Frank J. (See Baer, Abraham L., assignor.) Meyer, Frank J. (See Baer, Abraham L., assignor.) Meyer, Frank J. (See Baer, Abraham L., assignor.) Meyer, Frank W., assignor to The Oshkosh Wis. Combined hat and shoe drawer. 1.636,702; July 26.

Meyer, Frank W., assignor to The Oshkosh Trunk Company, Oshkosh, Wis. Combined hat and shoe drawer. 1.636,702; July 26.

Meyer, Fred. (See Fischer, Joseph, assignor.) Meyer, Frederick C., Brooklyn, N. Y. Bar for gultars. 1,618,844; Feb. 22.

Meyer, Frederick H., assignor to Leftelt Iron Works. Grand Rapids, Mich. Conveyer. 1,615,027; Jun. 18.

Meyer, Frederick H., assignor to The Cutler-Hammer The Company, The. (See Boesch, Jacob J., assignor). Meyer Furnace Company, The. (See Meyer, Dick, assignor).

Meyer, Geo. J., Manufacturing Company. (See Meyer, George L. N., assignor.) Meyer, George L. N., assignor to Geo. J. Meyer Manufacturing Company, Milwaulkee, Wis. Lubricating apparatus. 1658,017: Dec. 20.

Meyer & Gross. (See Meler, Milton, assignor.) Meyer, Merry Ken (See Riey, L. G., Meyer, Johnston, and

facturing Company, Milwaukee, Wis. Lubricating apparatus, 1,653,017; Dec. 20.

Meyer & Gross. (See Meier, Milton, assignor.)

Meyer, Harry R. (See Riley, L. G., Meyer, Johnston, and

van Nieukerken.)

Meyer, Harry R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Connecter.

1,630,401; May 31.

Meyer, Harry R., Wilkinsburg, Pa., assignor to Westingliouse Electric & Manufacturing Company. Control apparatus. 1,654,602; Dec. 27.

Meyer, Henry A., assignor to The Wolf Machine Company.

Meyer, Henry A., assignor to The Wolf Machine Company, Cincinati, Ohio. Carcass cutter. 1,614,610;

Feb. 15.

Meyer, Henry A., assignor to The Wolf Machine ComPet. 15.

Meyer, Henry A., assignor to The Wolf Machine ComMeyer, Henry A., assignor to The Wolf Machine ComPet. 15.

Dec. 27.

Meyer, Joseph E., Woodside, assignor to R. Hoe & Co., Inc., New York, N. Y. Web-feeding mechanism. 1,630/13; Mag. (S. Bricson, Charles A., assignor.) Meyer, Oito C., Fort Wayne, Ind., assignor of one-half to F. C. Meyer, Sturgis, Mich. Auxiliary machining attachment for lathes. 1,614.432; Jan. 11.

Meyer, Otto W. (See Huber, William, assignor) of Meyer, Raymond B., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Frequency-control circuits. 1,631.43 [Dec. 10.1] The Court of the Co

Meyer, T English July 5.

Ventilator fastener (ally 19.

Meyer, Ulflas, Cologne-Mulheim, Germany. Diminishing the inductive disturbances in submarine telegraph cables. (See Beil, A., and Meyer.) (Illems and apparatus Guenthner, Kellkamp, Loncrete Bugineering in clamp. 1,634,111;

Meyer, William, Chicago, Ill. Heater for curling irons in clamp. 1,634,111;

Meyer, William, Chicago, Ill. Battery case. 1,647,141;

Nov. Ill. Meyer, Chicago, Ill. Saip-treatment dever. (Nov. Ill. Heater for curling irons in clamp. 1,634,111;

Meyer, William, Chicago, Ill. Battery case. 1,647,141;

Nov. Ill. Meyer, Chicago, Ill. Saipprograms of the properties of the

Meyercord, George R. Chicago, Ill., assignor to Haskelite Manufacturing Corporation. Ply-netal panel and wall constructed of the same. 1,630,857; May 10, Meyercord, George R., Chicago, Ill., assignor to Haskelite Manufacturing Corporation. Corner formation in metal-sheathed construction material. 1,630,858;

May 31.

Meyercord, George R., Chicago, Ill., assignor to Haskelite
Manufacturing Corporation. Wall safe or vault.
1.652.987; Dec. 13.

Meyercord, George R., Chicago, Ill., assignor to Haskelite.
Manufacturing Corporation. Sealed joint between end
and side walls of structures. 1,654.188; Pec. 27.

Meyering, Bernard H., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic film package.
1.623.486; Apr. 5.

Meyers, Catmon A., assignor to The Firestone Tire and
Rubber Company, Akron, Ohio. Tension apparatus for
Calenders. 164.433; Jan. 11.

Meyers, Carmon A., assignor to The Firestone Tire and
Rubber Company, Akron, Ohio. Tension apparatus for
Calenders. 164.433; Jan. 11.

Meyers Cameras and other instruments. 1,618,773;
Feb. 22.

Meyers, George F., New York, N. Y. Vehicle raising apparatus. 1,653,813; Dec. 27, Meyers, George W., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Door-operating engine and safety system. 1,653,667; May 31.

Meyers, George W., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Electrome-chanical door engine and unitary push control. 1,631,959; Jec. 6.
Meyers, Herbert R., Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, III. Treating atunite.

1.651,959; Dec. 6.

Meyers, Herbert H., Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, Ill. Treating alunite. 1,613,238; Jan. 4.

Meyers, Herbert H., Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, Ill. Manufacture of disodium phosphate. 1,648,666; Nov. 8.

Meyers, Joseph J. R., Newark, N. J. Floor and celling construction. 1,615,096; Jan. 18.

Meyers, Julius R., Evanston, Ill., assignor of one-half to C. A. Straubel Company, Green Bay, Wis. Apparatus for pressing cheese. 1,625,129; Apr. 19.

Meyers, Julius R., Evanston, Ill., assignor to C. A. Straubel Company, Green Bay, Wis. Miking, curing and shipping cheese in metal bandages. 1,625,130; Apr. 19.

Meyers, Linda H. (See Sergel, R. F., and Meyers.)
Meyers, Louls, & Son, Inc. (See Meyers, Wallace E., assignor.)
Meyers, Mearl C., Los Angeles, Calif. Water filter.
1,645,712; Oct., 18.

signor.)

Meyers, Mearl C., Los Angeles, Calit. water Meyers, Mearl C., Los Angeles, Calit. water L. (1645,712; Oct. 18.

Meyers, Otto B., Quakertown, Pa. Automatic reed-saving device. L. (635,051; July 5.

Meyers, Kory J., Hollywood, and M. Schlosberg, Los Angeles, Meyers, Los Angeles, Los

Display strand. 1,643,05; Oct. 18.7, Boston, Mass. Meyerson, Max, New York, N. Y. Card holder. 1,619,827; Mar. 8. Meyfarth, Gottlich, Geneva, assignor of one-half to the Firm: Société Anonyme des Afeliers de Sécheron, pneumatically-operated switches. 1,637,139; July 26. Meyrowitz, Benjamin, New York, N. Y. Automobile traffic-signaling apparatus. 1,627,645; May 3. Megger, Robert, assignor to the Firm: Paul Lechler, Stattgart, Germany. Coating gasometers. 1,630,202; Megger, Robert assignor to the Firm: Paul Lechler, Stattgart, Germany. Coating gasometers. 1,630,202; Megger, Robert assignor to the Megger. Robert ass

Stuttgart, Ge. 1,641,089; zeger, Robert, assignor to P. Lechler, Stumany. Sealing materials for gasometers.

Aug. 20 George, Washington, D. C. Bottle. Des. Mexacra, Egisto. Gse Morettl, C. P., and Mezzera, Mamil Radio Corporation Company, The. (See Pettt, William H., assignor.) Mica Insulator Company. (See Coffey, Joseph M., as-

Michaud, Elsear, Indianapolis, Ind., assignor to E. L. Dayton, Detroit, Mich. Burner apparatus, 1,629,722: May 24.
May 24.
Michel, Clarence A., assignor to The Guide Motor Lamp Manufacturing Company, Cleveland, Ohio. Automobile lamp lens. 1,615,648: Jan. 25.
Michel. Clarence A., assignor to The Guide Motor Lamp manufacturing Company, Cleveland, Ohio. Hondings, 1,643,665: Sept. 27.
Michel, Clarence A., assignor to The Guide Motor Lamp Manufacturing Company, Cleveland, Ohio. Headlight, 1,643,466: Sept. 27.
Michel, Hermann, Holstein, Germany, assignor to Centra Handels. & Industrie A.-G., Chur, Switzerland. Rotary Holdings, American State of Company, Cleveland, Ohio. Michelin, André J., Paris, France. Tire. Des. 72,212; Mar. 15.
Michelin, André J., Paris, France. Tire. Des. 72,218;

Michelin, André J., Paris, France. Tire. Des. 72.218; Mar. 15.

Michelin, André J., Paris, France. Manufacturing seam-less rims and wheel disks. 1,623,883; Apr. 5.

Michelin, André J., Paris, France. Vehicle wheel.
1,635,894; July 12.
Michelin, André J., Paris, France. Vehicle wheel.
1,635,895; July 12.
Michelin, André J., Paris, France. Vehicle wheel.
1,635,895; July 12.
Michelin, André J., Paris, France, assignor to Michelin et Cle., Clermont-Ferrand, France. Vehicle wheel.
Michelin, André J., assignor to Michelin et Cle., Clermont-Ferrand, France. Deep rim for pneumatic tires.
1,652,146, Dec. 6.
Michelin, André J., Paris, assignor to Michelin et Cle., Clermont-Ferrand, France. Deep rim for pneumatic tires.
1,654,807, Paris, assignor to Michelin et Cle., Clermont-Ferrand, France. Securing tires on rims.
1,654,880; Dec. 27.
Michelin, André J., Paris, assignor to Michelin et Cle., Clermont-Ferrand, France. Securing tires on rims.
1,654,880; Dec. 27.
Michelin, Anthony G. M., Melbourne, Victoria, Australia.
Azle lubricuting device. 1,617,689; Feb. 15.
Michell, Anthony G. M., assignor to Crankless Engines.
Michell, Anthony G. M., assignor to Crankless Engines.
Limited, Melbourne, Victoria, Australia. Crankless
mechanism. 1,613,116; Jan. 4.
Michell, Anthony G. M., assignor to Crankless Engines.
Limited, Melbourne, Victoria, Australia. Crankless
mechanism. 1,613,116; Jan. 4.
Michell, Anthony G. M., assignor to Crankless Engines.
Limited, Melbourne, Victoria, Australia. Alr cooling of the cylinders and platous and other working parts of internal-combustion engines, compressors, and the like. 1,621,948; Mar. 22.
Michelsen, John, Vancouver, British Columbia, Canada.
Clarkless, John, Vancouver, British Co

Switzerland. Encettreat
May 31.
Mleka, Ferdinand. Nashville, Tenn. Compression feeding
Mleka, Ferdinand. Nashville, Tenn.
Mlekalsen, Canne. H. Tetonia, assignor to Mickelsen.
Patents Co. Inc., Driggs, Idaho. Gambrel. 1,636,312;
July 19.
Mickelsen Patents Co. Inc. (See Mickelsen, Canute H.,

July 19, 2 tents Co. Inc. (See Mickelsen, Canute H., assignor) Bric H., and E. K. Skonberg, Brooklyn, N. Y. Liquid-dispensing device. 1,632,614; June 14. Mickey, Bruce D., Schenectady, N. Y. assignor to General Electric Company. Ward-Leonard drive. 1,615,643; Jan. 25.
Mickey, Edward T., Winston-Salem, N. C. Ironing board. 1,639,304; Auz. 16.
Mickleborough, May E., Brooklyn, N. Y. Lingerie-fastening device. 1,635,333; July 12.
Mickler, Raymond Y., Jacksonville, Fla., assignor to Mickler, Raymond Y., Jacksonville, Fla., assignor to Mickler, Raymond Harbon Ock. 1,643,380; Sept. 27.
Micon, David, Benton Harbon Ock. 1,643,380; Sept. 27.
Micon, David, Benton Harbon Ock. 1,645,380; Willam J., assignor.)

Micro Machine Company. (See Yerk, H. H., and Baum-

Assignor.

Assignor.

Assignors.

Assignors.

Assignors.

Middendorf.

David L., assignor to The Federal Glass

Company.

Columbus.

Middendorf.

David L., assignor to The Federal Glass

Company.

Columbus.

Middendorf.

David L., assignor to The Federal Glass

Company.

Company.

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Middendorf.

Midditon, Charies U., Sr. (see Scully, George L., as-signor.)
Midditon. Frank L., Darlen, Ga. Domestic steam-gen-erating apparatus. 1.621.736; Mar. 22;
Midditon, George R., Tampa, Fis. Silp-cover fastener. 1.619.265; Mar. 1.
Midditon, John H. (See Jones E. P., and Middleton.)
Midditon, John H. (See Whitaker, C. L., and Mid-

Midgley, Albert H., Uzbridge, England. Loud speaker and other sound-receiving, sound-reproducing, or sound-transmitting apparatus. 1,615,644; Jan. 25. Midgley, Joseph, Brainerd, assignor of one-third to J. L. Chesebrough, Duluth, Minn., and one-third to T. L. B. Chesebrough, Chicago, Ill. Shackle bolt. 1,622,668;

R. Chesebrough, Chicago, III. Shackle bolt. 1,632,663; June 14. Midgley, Roy A., Mount Dora, Fla. Cam shaft. 1,651,402; Dec. 6. Midgley, Tromas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tre mold. 1,615,470; Jan. 28. Midgley, Thomas, Hampden, assignor to The Fisk Rubber L. 616,471; Jan. 28. L. 616,471; Jan. 28. Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire mold. 1,615,472; Jan. 25.

The mount of the mount of the mount of the first state and and making the same, Left-square, Lef

Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire mold. 1,615,474; Jan. 25.
Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Calender. 1,615,476; Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Making tire casings. 1,624,615; Apr. 12.
Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Beveling and sealing Company, Chicopee Falls, Mass. Beveling and sealing Clamp. 1,624,617; Apr. 12.
Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Beveling and sealing clamp. 1,624,617; Apr. 12.
Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire construction. 1,627,789; May In., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Pulley-band-tire construction. 1,633,422; June 21.
Midgley, Thomas, Ir., (See Kettering, C. F., and Midgley), Midgley, Thomas, Ir., Dayton, Ohio, assignor, by messe assignments, to General Motors Corporation, Detroit, Mich. Making organic lead compounds. 1,622,228; Midland Company, The. (See Nourse, Clair P., assignor). Company, The. (See Nourse, Clair P., as-

signor.)
Midland Metal Manufacturing Company. (See Buckles, E. C., Henri, and Clow, assignors.)
Midland Steel Products Company, The, et al. (See Putnam, Alden L., assignor.)
Mid-States Gummad Paper Company. (See Huempfner, Ferdinand W., assignor.)
Mid-States Gummad Paper Company. (See Huempfner, Ferdinand W., assignor.)
Mid-States Gummad Paper Company. (See Huempfner, I.627,355; May 3.
Midulla, Benjamin, Wilkinsburg, Pa. Electric water Leater. I.627,355; May 3.
Mid-West Filters, Incorporated. (See Carlstedt, Ragnar, assignor.)
Mid-West Box Company. (See Fairchild, Walter H., Mid-West Box Company. (See Heinrichs, Berg, assignor.)
Mid-West Box Company. (See Maston, Edward E., assignor.)

signor.)
Midwest Cabinet Company, The. (See Burke, Edwin, as-

Midwest Cabinet Company, The. (See Burke, Edwin, assignor.)
Midwest Steel & Supply Co. Inc. (See Goodloe, Alfred M., assignor.)
Midech, Otto.
Micch, Otto.
Micch, Otto.
Micch, Otto.
Micch, Otto.
Michle Printing Press & Manufacturing Company. (See Blaine Otseph R., assignor).
Michle Printing Press & Manufacturing Company. (See Jacobson, Arthur G., assignor).
Michle Printing Press & Manufacturing Company. (See Zimmlewicz, Anthony, assignor).
Michle, Robert E., Jr., assignor to The Bell & Howell Company Chicago, Ill. Reel. 1,619,952; Mar. 8.
Micle, Raiph J., New York, N. Y. Dispensing device. 1,650,459; Nov. 22.
Michle, William A., Bancroft, Nebr. Tire spreader. 1,622,661; Mar. 29.
Micsaer, Martin D., Oakland, Calif. Davenport.
Micsaer, Martin D., Oakland, Calif. Davenport.
Micsaer, Martin D., Oakland, Calif. Davenport.
Micsaer, Benjamin F., Chicago, Ill. Radio communication device. 1,622,389; Mar. 29.
Micsaer, Benjamin F., South Orange, N. J., Sound-ampilying device. 1,623,684; Apr. 5.
Michael, Arnold, Brooklyn, N. Y. Electrical flag.
Midlaccio, Arnold, Brooklyn, N. Y. Electrical flag.

Mifsud, Jose L. (See Schauman, K. U., Yancey, and Mifsud.)
Mighlaccio, Arnold, Brooklyn, N. Y. Electrical flag. 1,640,282; Aug. 23.
Mignogne, Francesco, Greensburg, Pa. Automatic trainstopping device, 1,644,346; Oct. 4.
Miguet, Paul L. J., assignor to Societe Electrometallurgique de Montricher, St.-Julien-de-Maurienne, France. Open electric furnace. 1,654,189; Dec. 27.
Mihaily, Joseph, Washington, D. C. Photographic camera. 1,642,935; Sept. 20.

Mik, Johann, assignor, by mesne assignments, to J. Modern, Vienna, Austria. Walking toy. 1,649,910; Nov. 22.

Mikaelson, Erik W., Easton, Pa., assignor to Treadwell Engineering Company. Die head. 1,618,668; Feb. 22.

Mikeels, Martin A., assignor to A. O. Smith Corporation, Milwaukee, Wis. Quick-detachable dam for the molds of centrifugal casting machines. 1,643,253; Sept. 20.

Mikile, Louis. (See Martin, W. P., and Mikile, Mikile, Louis. (See Martin, V. P., and Mikile, Miki

1.620,383; Mar. 5.
Millam, William A., Seymour, Tex. Swing. 1,040,40.
Oct. 18.
Millam, William A., Mount Vernon, Ohio. Rotary computer that the computer of th

Mes. Balsche F., Hobatt, Oaks. Integrate. 1,035,057, Miles, Poterick H., and J. D. Switzer. Portland, Oreg. Mes. Profeder. J. and D. C. Thomppel, assignors to Automotive Devices, Inc., Newark, N. J. Relay for electric systems. 1,622,042; Mar. 22.
Miles, George A., Seattle, Wash. Lawn-mower sharpener. 1,617,536; Feb. 15.
Miles, Grace B. (See Miles, Milo T. and G. B.)
Miles, James C. (See Seebach, Kurt L., assignor.)
Miles, James C. (See Teare, Albert R., assignor.)
Miles, James C. (See Teare, Albert R., assignor.)
Miles, Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)
Miles, Orville L. (See Jensen, J. C., and Miles.)

18.

18. Milette, William J., Winnipeg, Manitoba, Canada. File clip. 1,644,198; Oct. 4. Miley, William J. J., Providence, R. I. Antiskid device. 1,643,167; Sept. 20. Burkburnett, Tex. Retread mold. 1,643,499; Sept. 6. Burkburnett, Tex. Retread mold. 1,643,499; Sept. 6. See Perry, H. A., and Milinare.) Milita, Abert R. (See Graham, Elmer R., assignor.) Milk Bottle Crate Company. (See Foremau, Amos La, assignor.)

assignor.)

assignor.)
Milker, Herbert, Queens, N. Y., assignor to American
Schaeffer & Budenberg Corporation. Temperature-coatrol system 1,630,755; May 31.
Millar, Garrett V., Fort Worth, Tex. Milk cooler.
1,632,494; June 14.
Millar, James C., De Pere, Wis. Oll burner. 1,622,963;
Mar. 29.

Millar, John R., assignor to California Cotton Milla Company, Oakland, Calif. Padding material. 1,650,086; Nov. 22.
Millar, Margaret B., South Orange, N. J. Sleeping bag. 1,653,415; Dec. 27.
Millar, William H., Toronto, Kans. Collar pad. 1,653,415; Dec. 27.
May 24.
May 24.
Millard, Paragraph Collar Pad. 1,630,204; Millard, Pag. 1,630,204; Millar

May 24.

Millard, Raymond B., assignor to Southwestern Engineering Corporation. Los Angeles, Calif. Condenser. 1,618,701; Feb. 8.

Millauro, Orazio, London, England. Window latch. 1,636,762; July 26.

Milleman, Alfred, Swissyale. Pa. Attachment for combination squares. 1,617,453; Feb. 15.

Millen, Stanley S., assignor of one-half to M. M. Mummert, Los Angeles, Calif. Polishing mitt. 1,643,722; Sept. 27.

Miller, Adolph. Kirkwood, Mo. Storage battery. 1,613,617; Jan. 11.

Miller, Adolph, Kirkwood, Mo. Chair. 1,620,630; May 24.

May 24.

Miller, Adolph H., Minneapolis, Minn. Ash-sifting shovel.

1.619,265; Mar. 1. Nassignor to A. N. Miller Co., Milwaukee,
Miller, Albert B., Nassignor to A. N. Miller Co., Milwaukee,
Miller, B. Miller, Miller, Miller, Green Bay, Wis.
Gas heater. 1.623,487; Apr. 5.

Miller, Albert E., assignor to Sinclair Refining Company,
Chicago, Dict. Exalling crude oil and residuals.

Miller, Albert L., & Miller, Miller, Albert L., State Co., State Co., State Co., Miller, Albert L., State Co., State Co., State Co., State Co., State Co., State Co., Miller, Albert L., State Co., Stat

Miller, Albert W., Nokomis, Ill. Wire-erimping tool. 1,619,084; Mar. 1. Miller, Alfred, Dessau in Anhalt, assignor to I. G. Far-benindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Making photographic copies by reversal. 1,632,740; June 14.

Miller, Alfred, Dessau in Anhalt, assignor to I. G. Farbenindustrie Aktiengeselischaft, Frankfort-on-the-Main, Germany. Photographic copying by the reflection method. 1645,112; Oct. 11.
Miller, Alfred E. Kansas City, Mo. Educational device.
Miller, Anthony P. (See Ferry, J. V., and Miller, Anthony P. (See Ferry, J. V., and Miller, Anthony P. (See Ferry, J. V., and Mriler, Anthony Mriler, Antho

Aug. 9.

Miller, Arthur E., Sacramento, Calif. Automaticallyvariable crank motion. 1.622,919; Mar. 29.

Miller, Arthur E., Sacramento, Calif. Signal switch.

Miller, Arthur E., Sacramento, Calif. Signal switch.

Miller, Bothur H., Oakland, Calif. Garment hanger.

1.652,879; Dec. 13.

Miller, Arthur N., Henryetta, Okla. Standing valve.

1.622,679; Apr. 26.

Miller Beauty Mirror Company. (See Miller, William

E., assignor.) Chicago III. Monthpiece for reed in.

E., assignor.) Miller, Benjamin, Chicago, Ill., Mouthpiece for reed in-struments. 1,615,649; Jan. 25. Miller, Carl &, Alvarado, Minn. Combined ladder and board. 1,615,715; Jan. 25. Miller, Chaules, Long Island City, N. Y. Rotary drier.

board. 1,615,715; Jan. 25.

Miller, Charles, Long Island City, N. Y. Rotary drier. 1,637,831; Aug. 2.

Miller, Charles, Long Island City, N. Y. Shoe last. 1,652,286; Dec. 13.

Miller, Charles C., Fort Wayne, Ind. Display carton. 1,620,673; Mar. 15.

Miller, Charles E., McSherrystown. Pa. Package. 1,631,048; May 31.

Miller, Charles E. Detroit, Mich. Sugar gauge.

Miller, Charles E., McSherrystown. Pa. Package.
1,631,042; May 31.
Miller S. Charles E. Detroit, Mich. Sugar gauge.
Miller, Charles E. (See Osborne, R., and Miller.)
Miller, Charles F., Moore, Pa., assignor to Westinghouse
Electric & Manufacturing Company. Lower ram for
stokers. 1,616,865; Feb. 8.
Miller, Charles F., Moore, Pa., assignor to Westinghouse
Electric and Manufacturing Company. Air-control
means for mechanical stokers. 1,620,672; Mar. 15.
Miller, Charles F., Moore, Pa., assignor to Westinghouse
Electric and Manufacturing Company. Mechanical
Miller, Charles F., Moore, Pa., assignor to Westinghouse
Electric and Manufacturing Company. Mechanical
Miller, Charles F., Corr. Rapids, Iowa. Mold box for
butter and the like. 1,643,508; Sept. 27.
Miller, Charles H., San Jose, Calif. Clock. 1,650,878;
Nov. 29.
Miller, Charles J. (See Thomson, C. H., Cummiskey,
Miller, and Jones).

Nov. 29.

Miller, Charles J. (See Thomson, C. H., Cummiskey, Miller, and Jones.)

Miller, Charles R., Wilkinsburg Borough, Pa. Guard-rail structure for railways. 1,660,953; Nov. 29.

Miller, Charles W., Long Beach, Calif. Window. 1,162,364; Jan. 4.

Miller, Chyle M., Madison, Ind. Welding-rod holder. 1,622,435; Mar. 22.

Miller, Chylan M., Madison, Ind. Welding-rod holder. 1,622,435; Mar. 22.

Miller Company, The. (See Doane, Leroy C., assignor.)
Miller Company, The. (See Roby, Sheldon S., assignor.)
Miller Company, The. (See Runge, Richard M., as-

Miller Company, The. (See West, Otto, assignor.) Miller Company, The. (See Wolter, Herman H., as-

Miller, Daniel D., assignor to Western Electric Company, Incorporated, New York, N. Y. Switching device, 1,628,991; May 17. Miller, Daniel D., assignor to Western Electric Company, Incorporated, New York, N. Y. Kelay, 1,641,285;

Sept.

Sept. 6.

Miller, Danlel D., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic device. 1,652,490; Dec. 13.

Miller, Daniel D., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic relay.

Miller, David, Los Angeles, Calif. Quick-closure ball cock. 1,616,698; Feb. 8.

Miller, Dora S., Los Angeles, Calif. Automobile body. Des. 72,561; May 3.

Miller, Edward, New York, N. Y. Fishing-tackle case.

Miller, Edward, Lossignor to St. Louis Screw Company, St. Louis, Mo. Metal-heating apparatus. 1,652,371; Dec. 13.

Dec. 13.
Miller, Elias N., Amarillo, Tex. Die mechanism
1.646.850; Oct. 25.
Miller, Ernest B., assignor to The Silica Gel Corporation,
Baitimore, Md. Obtaining sweet doctor test. 1,647,459;

Nov. 1.

Nov. 1.

Miller, Erwin E., Fullerton, Calif. Expansible packing.
1.613,355; Jan. 4.

Miller, Erwin E., Fullerton, Calif. Expansible packer
for pinners. 1,622,043; Mnr. 22.

1.621,547; Sept. Miller, Expansible packing.
1.641,547; Sept. Miller, Escek C., Newark, N. J. Signalling-mechanism circuit closer for vehicles. 1,652,443; Dec. 13.

Miller, Ferdinand, Plainfield, N. J., assignor to NilesBement-fond Company. New York, N. Y. Power-transmission unit. 1,634,376; July 6.

Miller, Francis H. (See Laing, William V., assignor.)

Miller, Frank A., assignor to San Francisco-Sacramento Raifroad Co., Oakland, Calif. Signaling system. 1,630,962; May 31.

Miller, Frank B., Norwalk, Ohio. Toy or article of similar nature. Des. 73,534; Sept. 27.

Miller, Frank E., Boston, Mass. Condiment shaker. 1,640,005; Aug. 23.

Miller, Frank E., and R. M. Lacey, assignors to Frank E. Miller, Frank E., Boston, Mass. Condiment shaker. 1,640,005; Aug. 23.

Miller, Frank E., and R. M. Lacey, assignors to Frank E. Miller, Frank E., Edd J. Sept. 13.

Miller, Frank E., Edd J. Sept. 13.

Miller, Frank P., Chicago, Ill. Accessory container for railway use. 1,620,376; Mar. 8.

Miller, Frank R., assignor to The Graham Glass Company, Evansville, Ind. Bottle. Des. 73,234; Aug. 9.

Miller, Frank R., assignor to The Graham Glass Company, Evansville, Ind. Bottle. Des. 73,234; Aug. 9.

Miller, Frank R., assignor to The Graham Glass Company, Evansville, Ind. Bottle. Des. 73,573; Oct. 4.

Miller, Frank R., assignor to The Graham Glass Company, Evansville, Ind. Bottle. Des. 73,573; Oct. 4.

Miller, Frederic R., Jersey City, N. J., assignor to Artcolor Motion Picture Company, New York, N. Y. Apparatus for printing motion-picture films. 1,634,297; July 5.

Miller, Frederic R., Scottdale, Pa. Controller. 1,634,000; Sept. 20.

Miller, Frederick B., Scottdale, Pa. Controller. 1,613,745; Mar. 26,500; App. 26.

Miller, Frederick B., Scottdale, Pa. Controller. 1,614,000; Oct. 4.

Miller, George A., Tamaroa, Ill. Poultry roost. 1,643,079; Miller, George E., (See Blomquist, H. F., and Mil

Company, Decatur, Ill. Lighting bracket. Des. 73,618; Oct. 11.

Miller, George L., assignor, by mesne assignments, No. The Timken Roller Bearing Company, Canton, Ohio. Die. 1,625,131; Apr. 19.

Miller, George L., assignor to The Timken Roller Bearing Company, Canton, Ohio. Antifriction bearing drive and hanger box. 1,522,439; June 14.

Miller, George W., Waynesville, N. C. Mechanically-operated figure toy. 1,635,948; July 12.

Miller & Goldsmith. (See Goldsmith, Elmer P., assignor.)

signor.)

Miller, Gordan, Moneta, Calif. Automobile signal.

1,652,039; Dec. 6.

Miller, Grace V., San Francisco, Calif. Hanger for ear clamps. 1,620,674; Mar. 15.

Miller, Grart H., New York, N. V. Method of and apparatus for treating beet carcasses. 1,614,312; Jan. 11.

Miller, Grover C., Los Angeles, Calif. Machine for treat
Miller, H. Fancont. 1,636,828,900,900; Sidney L., assignor.)

Miller, H. Fincont. Scompany, The. (See Broadfield,
Ward H., assignor.)

Miller, Hanbal E., Charlotte, N. C. Cutlery. 1,630,627;
May 31.

Miller, Harmon J., Defiance, Ohio. Device for lining.

May 31.

Miller, Harmon J., Deflance, Ohio. Device for lining railway tracks. 1.618,019; Feb. 15.

Miller, Hardld G., Homer, assignor to The Brewer-Titch ener Corporation, Cortland, N. Y. Collapsible vehicle top. 1.626,551; Apr. 2.

Miller, Harry, (See Swingley, C. W., and Miller.) Miller, Harry, (See Swingley, C. W., and Miller, Harry A. Los Angeles, Calif. Drive mechanism for withcles. 1.648,361; Nov. 1814. Drive mechanism for withcles. 1.648,361; Nov. 1814. Drive mechanism for pany, Youngstown, Ohio. Power hammer. 1.633,3985; June 28.

Miller, Harry H., assignor to Miller-Smythe Electric Company, Youngstown, Ohio. Power hammer. 1.634,623; July 5.

Miller, Harry H., assignor to Miller-Smytne Electric Com-pany, Youngstow, Ohio. Power hammer. 1,534,023; July 5. Miller, Henry, Grafton, W. Va. Violin mandolin. 1,635,429; July 12. Miller, Henry, assignor to American Can Company. San Francisco, Calif. Attachment for handles. 1,617,493; Feb. 15.

Miller, Henry, assignor to American Can Company. San Francisco, Califf. Apparatus for attachine handles to cleat plates. 1,642,458; Sept. 13.
Miller, Henry, Newurk, assignor to Hazeltine Corporation, Jersey City, N. J. Electron-emitting cathode and preparing the same. 1,640,710; Aug. 30.
Miller, Henry C., deceased; First Wisconsin Trust Company, executor, Milwaukee, Wis. Temporary binder. 1,631,649; May 31.

Miller, Henry C., deceased; First Wisconsin Trust Company, executor, Milwaukee, Wis. Unit for holding the leaves in visible record systems. 1,634,965; July 5.
Miller, Henry C., deceased, Milwaukee, Wis., First Wisconsin Trust Company, Milwaukee, executor. Loose-leaf Miller, Henry C., deceased; First Wisconsin Trust Company, Milwaukee, Wis., executor. Sheet inserter. 1,640,132; Aug. 23.
Miller, Henry C., Witerford, N. Y. Forming stitched Miller, Henry C., Witerford, N. Y. Auxiliary locomotive. 1,647,469; Nov. 1.
Miller, Henry C., Weterford, N. Y. Auxiliary locomotive. 1,647,669; Nov. 1.

1,647,460; Nov. 1.

Miller, Henry H., River Edge, N. J. Shovel. 1,645,656;
Oct. 18.

Miller, Herry J. (See Buell. O. D., and Miller.)

Miller, Herman. (See Glaudel, George, assignor.)

Miller, Herman. (See Glaudel, George, assignor.)

Miller, Herman. (See Glaudel, George, assignor.)

Operated figure toy. 1,616,462; Feb. 8.

Miller Improved Gas Engine Company, The. (See Watts, Elmer A., assignor.)

Miller, Ingle W., and L. E. Miller, Darke County, Ohlo. Cultivator. 1,638,463; Aug. 16.

Miller, Isidor, Union City, 15.

Miller, Isidor, Union City, 16.

Miller, Java, Onaway, assignor to Lobdell-Emery Manufacturing Company, (See Miller, Roy G., assignor.)

Miller, Jacob C., Milwankee, Wis. Cushioned valve tap
Miller, Jacob C., Milwankee, Wis. Cushioned valve tap
Miller, Jacob C., assignor to A. O. Smith Corporation, Miller, James M., Washington, D. C. Airplane. 1,650,964; Nov. 29.

Miller, James M., Perry, Okla. Underreamer. 1,654,468; Miler, James M., Perry, Okla. Underreamer. 1,654,468; Miler, James S., Bedford, Ind. Clutch. 1,647,879; Miler, Jane R., Los Angeles, Callf. Necklace or similar Miller, Jane R., Los Angeles, Callf. Necklace or similar Miller, Jane R., Los Angeles, Callf. Necklace or similar

Dec. 27.

Miller, James S., Bedford, Ind. Clutch. 1,647,879;
Miller, Jame R., Los Angeles, Calif. Necklace or similar article. Des. 72,150; Mar. 8.

Miller, Jame R., Los Angeles, Calif. Necklace or similar article. Des. 72,150; Mar. 8.

Miller, Josse F., assignor of one-half to J. H. Thatcher, Houma, La. Expansive drill bit for cable tools and the like. 1,637,268; July 26.

Miller, John, Jr., Belott, Wis., assignor to Charles H. Besly and Company, Chicago, Ill. Grinding machine. Miller, John A., Homewood, Ill. Pleasure-railway structure. 1,613,118; Jan. 4.

Miller, John A., Homewood, Ill. Pleasure-railway structure. 1,629,520; May 24.

Miller, John A., Homewood, Ill. Roof structure. 1,642,522; Oct. 11.

Miller, John A., Homewood, Ill. Brake mechanism and the Miller, John A., Home Crawford, assignor of one-half to G. N. Conrad, Harrisonburg, Va. Speed governor. 1,639,265; Aug. 16.

Miller, John C., Chicago, Ill. Necktie holder. Des. 73,798; Nov. 8.

Miller, John C., and R., H. Fayfield, assignors to Fayfield-

73,798; Nov. 8.

Miller, John C., and R. H. Fayfield, assignors to Fayfield Knoli Company, Buffalo, N. Y. Tie device for snow states and the like. 1,612,874; Jan. 4.

Miller, John D., Newton, N. C. Collapsible tube closure. Miller, John H., Risman, N. C. Collapsible tube closure. Miller, John H., Risman, New York, N. Y. Manufacture of prepared roofings. 1,636,750; July 28.

Miller, John H., Risma Sun, Ohio. Concrete-block machine. 1,636,102; July 19.

Miller, John J. A., Denver, Colo. Carburetor. 1,640,711; Aug. 30.

Miller, John M. assignon to Alexandre.

Miller, John J. A., Denver, Colo. Carburetor. 1,640,711; Aug. 30.
Miller, John M., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving system. 1,639,414; Aug. 16.
Miller, John O., Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Wilmington, Del. Game-table cushion. 1,613,463; Juy. 31.
Assignor to The Barber Asphalt Company, Philadelphia, Pa. Waterproof fabric and its manufacture. 1,640,795; Aug. 30.
Miller, John S., jr., Rahway, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa. Plastic floor and Dearing therefor. 1,640,795; Aug. 30.
Miller, John T., and M. Hanley, Chicago, Ill. Circuit controller, 1,622,044; Mar. 22.
Miller, John T., and M. Hanley, Chicago, Ill. Circuit controller, 1,622,044; Mar. 22.
Miller, John T., and M. Hanley, Chicago, Ill. Circuit controlling mechanism. 1,624,059; Apr. 12.
Miller, John T., and M. Hanley, Chicago, Ill. Circuit controlling mechanism. 1,624,059; Apr. 12.
Miller, John T., and M. Hanley, Chicago, Ill. Circuit controlling mechanism. 1,624,059; Apr. 12.
Miller, John T., and M. Hanley, Chicago, Ill. Circuit controlling mechanism. 1,624,059; Apr. 12.
Miller, Joseph W., and M. Hanley, Chicago, Ill. Circuit controlling mechanism. 1,624,059; Apr. 12.
Miller, Joseph W., and M. Hanley, Chicago, Ill. Circuit controlling mechanism. 1,624,069; Apr. 12.
Miller, Joseph W., assignor to Draper Corporation, Hopedale, Mass. Bobbin-clutching means for rotatable spindles. 1,647,109; Oct. 25.

Miller, Joseph H., Harrisburg, Tex. Dispensing can. 1, 1638,773; Aug. 9.

Miller, Joseph M. (See Ball, Joseph S., assignor.)

Miller, Joseph N. (See Stoffel, Martin, assignor.)

Miller, Joseph N. (See Stoffel, Martin, assignor.)

Miller, Joseph N. (See Stoffel, Martin, assignor.)

Miller, Kinney I., Lancaster, Mo. Feeder shipping box for chicks, etc. 1, 1632,033; June 14.

1, 1642,504; Sept. 13.

Miller, Lawrence P., Philadelphia, Pa. Resillent wheel.

1, 1640,613; Aug. 30.

Miller, Levier, Lynn, Mass., assignor to General Electric Company. Molding stillea. 1, 1628,417; May 10.

Miller, Levi B., Lynn, Mass., assignor to General Electric Company. Producing vitreous stillea. 1, 1628,408; May 10.

Miller, Levi B., Lynn, Mass., assignor to General Electric Company. Producing vitreous stillea. 1, 1628,408; May 10.

Miller, Martin, J., Alhambra, Calif. Baby chair for automobiles. 1, 1629, 534; May 24.

Miller, Martin, J., Alhambra, Calif. Baby chair for baking crusts. 1, 1641,090; Aug. 30.

Miller, Mart, See Miller, Ingle W. and L. E.)

Miller, Mart, See Miller, Walter M., assignor.)

Miller, Max C., Cumberland Hill, assignor to Jenckes Knitting Machine Company, Pawtuckef, R. 1. Driving mechanism for knitting machines. 1, 1612, 360; Mar. 1.

Miller, Max C., Cumberland Hill, R. I., assignor of two machines. 1, 1622, 249; Mar. 22.

Miller, Max C., Cumberland Hill, R. I., assignor of two games of the stilling machines. 1, 1618, 161

kler.)

Miller, Robert J., Oakland, Calif. Wall-louver-ventilator installation. 1.613,047; Jan. 4.

Miller, Roy G., assignor to J. W. Miller Company. Rockford. 111. Egg-turning device for incubators. 1,617,920; Peb. 15.

Miller, Roy J., Milwaukee, Wis. Dispensing receptacle. 1,642,425; Sept. 13.

Miller, Roy J., Crafton, Pa. Electromagnetic element. 1,648,469; Nov. 8.

Miller Rubber Company, The. (See Balch, Burdge M., assignor.)

assignor.) Miller Rubber Company, The. (See Brundage, James W.,

assignor.)
Miller Rubber Company, The. (See Bulley, George w., assignor.)
Miller Rubber Company, The. (See Collins, Arthur, as-

Miller Rubber Company, The. (See Fenton, Frank, assignor.) Miller Rubber Company, The. (See Griffiths, Richard T., Rubber Company, The. (See Hensel, Winfield L., assignor.)
Miller Rubber Company, The. (See Lehr, John, assign
Miller Rubber Company, The. (See Steele, Charles

assignor.)
Miller Rubber Company, The. (See Steele, C. W., and Griffiths, assignors.)
Miller Rubber Company. (See Warner, Raymond M., assignor.)
Miller Rubber Company, The. (See Weimer, Roy B., assignor.) Miller Safe Company. (See Le Compte, O. P., and Cahn,

assignors. Miller, Samuel C., Louisville, Ky. Bottle. Des. 73,096; July 19. Mille ler, Samuel L., Chicago, Ill. Contact device. ,632,709; June 14. ler, Saw-Trimmer Company. (See Belluche, Frank R.,

assignor.)
Miller Saw-Trimmer Company. (See Smith, Walter H.,
assignor.)
Miller-Smythe Electric Company. (See Miller, Harry H., assignor.)

assignor.)

Miller, Stephen J., Danbury, Conn. Hat-brim-plating machine. 1618,212; Feb. 22.

Miller, Ted, Encinitas. Calif.
Automobile locking apparatus. 1,628,469; May 10.

May 10.

May 10.

Miller, Theodore A. (See Fleiter, A. J., and Miller.)

Miller, Theodore A. (See Dewey, B., and Miller.)

Miller, Thomas D., Clarksville, Md. Shingle. 1,645,767; Oct. 18.

Oct. 18.

Miller, Thomas S., South Orange, N. J. Winding engine. 1,622,554; Mar. 22.

Miller, Thomas S., South Orange, N. J. Engine. 1,634,912; July 5.

Miller, Thomas W., Ashland, Ohlo. Golf ball and making the same. 1,622,601; Mar. 29.

Miller, Thomas W., assignor to The Faultless Rubber Company, Ashland, Ohlo. Vulcanising rubber and the like. 1,647,541; Feb. Miller, Thomas W., assignor to The Faultless Rubber Company, Ashland, Ohlo. Pencil holder. 1,647,536; Nov. 1.

Company, Ashland, Ohlo. Pencil holder. 1,637,536; Nov. 1.

Miller, Thomas W., assignor to The Faultless Rubber Company, Ashland, Ohlo. Ornamented rubber article.

1,640,770; Nov. 15.

1,640,770; Nov. 16.

Miller, Thomas W., assignor to The Faultless Rubber Company, Ashland, Ohlo. Toy. 1,651,962; Dec. 6.

Miller, Thomas W., assignor to The Faultless Rubber Company, Ashland, Ohlo. Toy. 1,651,962; Dec. 6.

Miller, Turner, Fayetteville, Ark. Oiling device.

Miller, Turner, Fayetteville, Ark. Oiling device.

Miller, Turner, Fayetteville, Ohlo. Heating apparatus, 1,635,379; July 12.

Miller, Walace W., assignor to Silmo Chemical Company, Inc., Vincland, N. J. Producing fish-oil powder.

1,622,399; Mar 29.

Miller, Walace W., Gedar Falls, assignor to M. Miller, Walter M., Cedar Falls, Iowa. Piston-valve oiler. 1,650,291; Nov. 22.

Miller, Walter M., Cedar Falls, Iowa. Piston-valve oiler. 1,650,291; Nov. 22.

Miller, William, Blair, Nebr. Boat, 1,635,854; July 12.

1,634,390; Oct. 4.

Miller, William, Manchester, England. Apparatus for storing or storing and filing tallors' patterns and the like. 1,652,450; Dec. 13.

Miller, William A., Pittsburgh, Pa. Silica-brick gun.

1,617,993; Ireh. 1,5

Miller, William A., Pittsburgh, Pa. Intermittent grip mechanism for rotary conveyers, 1,627,046; May 3. Miller, William C., assignor to The Interstate Folding Box Company, Middletown, Ohio. Paper folding box. 1,614,206; Jan. 11. Miller, William E., Mullan, Idaho, assignor to Miller Beauty Mirror Company. Adjustable mirror. 1,633,120; June 21.

June 21.

Miller, William G., assignor to The R. C. Mahon Company, Detroit, Mich. Elevator door. 1,624,964; Apr. 19.

Miller, William J. (See Cary, W. E., and Miller.)

Miller, William J. (See Perkins, Charles W., assignor.)

Miller, William J., Saginaw, Mich. Truck. 1,621,555;

Mar. 22.

Miller, William J., assignor of one-third to G. B. Creed, Logansport, Ind. Nalling machine. 1,613,473; Jan. 4.

Miller, William J., Swissyale, Pa., assignor to Hartforducing molecular mo

Miller, William J., Swissvale Borough, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Process and apparatus for feeding glass, 1,628,324; May 10. Miller, William J., Swissvale Borough, assignor, by mesue assignments, to William J. Miller, Inc., Swissvale, Pa. Glass-fabricating apparatus. 1,629,455; May 17.

Miller, William J., Swissvale, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for pro-ducing mold charges of molten glass. 1,642,966; Sept. 20.

Sept. 20.

New York of the Company Hartford, Com. Apparatus for producing moid charges of moiten glass. 1,642,967; Sept. 20.

Sept. 20.
Miller, William J., Swissvale, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for pro-ducing mold charges of molten glass. 1,642,968;

Empire conditions of montes and segment of ducing mold charges of montes. Sept. 20.

Sept. 20.

Miller, William J., Swissyale Borough, Pa., assignor to Miller, William J., Swissyale Borough, Pa., assignor to Miller, William J., assignor to the feeding glass. 1,651,036: Nov. 29.

Miller, William J., Inc. (See Miller, William J., assignor to the molecular transfer of the molecular

miller, William J., Inc. (See Miller, William Willer, William V., Signor.)
Miller, William L., St. Paul, Minn. Radio tuning device.
1.631,380; June 7.
Hitsburgh Pa., assignor to WestingBoose Electric & Manufacturing Company. Apparatus
Boose Electric & Manufacturing Company.
Hiller & William C. Detroit, Mich.
Miller & William R. H., et al. (See Dobbins, George R.,
Boose Electric & Manufacturing Company.)

Naw York, N. Y., assignor to The
Strain reStrain re-

Mass. Connecting Ink. 1, 635,039; June 21.
Miller, William R. H., et al. (See Dobbins, George R.,
Miller, William W., New York, N. Y., assignor to The
Cutler-Hammer Mig. Co., Milwaukee, Wis. Strain relief for terminal connections of electrical devices.
1,646,038; Oct. 18.
Milholand, James H., assignor to John S. Clement
Company, Inc., Philadelphia, Pa. Floor wazer.
Company, Inc., Philadelphia, Pa. Floor wazer.
Hall-Marvin Safe Company, New York, N. Y. Safe
vault. 1,642,552; Sept. 13.
Millice, Paul S., Hamilton, Ohio, assignor to Herring-HallMarvin Safe Company, New York, N. Y. CombinationMillice, Patent Holding Co. Inc. (See Allatt, Thomas,
assignor.)
Millice, Frank A. and J. A., Los Angeles, Calif. Process
of and apparatus for refining petroleum. 1,620,163;
Mar. 8.

Millitt, Frank A. and J. A., Los Angeles, Calif. Adinterpretation of an apparatus for refining petroscut.

Mill. Frank A. and J. A., Los Angeles, Calif. Adinstable weir. 1,620,164; Mars.

Millift, Frank A. and J. A., Los Angeles, Calif. Vaporiser.
1,644,937; Oct. 11.

Millift, John A. (See Millift, Frank A. and J. A.)

Milligan, Andrew J., Hoopeston, Ill. Broom holder.

Milligan, Archibaid, Hamilton, Ontario, Canada, assignor
to Skelton Shovel Co. Inc. Making shovels. 1,616,273;

Web. 1.

to Skelton Shovel Co. Inc. Making snoves. 1, Nan, 210, Feb. 1. Milligan, Charles H., Wyoming, Ohio. Recovery of sodium compounds from waste sulphite liquors. 1, 1652, 725; Dec. 18. E. Los Angeles, Calif. Pad for Milligan, George R. E. Los Angeles, Calif. Pad for Milligan, John F. (See Christianson, A. W., and Milligan, John F. (See Christianson, A. W., and Milligan, John F.)

hernia trusses. 1,650,641; Nov. 29.
Milligan, John F. (See Christianson, A. W., and Millgan.)
Milligan, Lowell H., and C. H. Quick assignors to Norton
Company Worcester. Mass. Abusive article and
Milligan, Lowell H., and C. H. Quick assignors to Norton
Company Worcester. Mass.
Milligan, Robert J., assignor to The Goodyear Tire &
Rubber Company, Akron, Ohlo. Tube-splicing mandrel.
1,616,981; Feb. 8.
Milligan, Seaton K., assignor to Amalgamated Roofing
Company, Chicago, Ill. Roofing. 1,629,287; May 17.
Milliken, John A., Ambler Pa., assignor to J. E. Marsden,
Teb. 15.
Milliken, John A., Ambler, assignor to J. E. Marsden,
Philadelphia, Pa. Method of and apparatus for severing plastic material. 1,617,861; Feb. 15.
Milliken, John A., Ambler, assignor to J. E. Marsden,
July 12.
Milliken, John A., Beg Harbor City, N. J., assignor to
J. E. Marsden, Mount Airy, Philadelphia, Pa. Glasscutting machine. 1,650,375; Nov. 22.
Millis, Linn W., Kansas City, Mo. Haeter. 1,634,265;
Mills, Linn W., Kansas City, Mo. Haeter. 1,634,265;
Mills, Bertic E., Oak Park, assignor to Mills Novelty
Company, Chicago, Ill. Controlling tension and tremolo effects. 1,621,125; Mar. 16.
Mils, Bertic E., Oak Park, assignor to Mills Novelty
Company, Chicago, Ill. Controlling tension and tremolo effects. 1,621,125; Mar. 16.
Mils, Bertic E., Oak Park, assignor to Mills Novelty
Company, Chicago, Ill. Controlling tension and tremolo effects. 1,621,126; Mar. 16.
Mils, Chester B., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y., Electromagnetic power-transe

Mar. 15.
Mills, Chester B., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Electromagnetic power-transmitting means. 1,633,454; June 21.
Mills, Clarence A., assignor to The William S. Merrell Company, Mar. 23.
Mills, Clarence A., assignor to The William S. Merrell Company, Mar. 23.
Mills, Edward, assignor to Whitin Machine Works, Whit-insville, Mass. Attachment for cotton Impers. 1,628,797; May 17.
Mills, Engant R., and C. J. Hazelton, Worcester, Mass. Making fabric for corsets, bandeaux, brassières, and the like. 1,617,604; Feb. 15.

Mills, Fred L., Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill. Vending-machine casing. Des. 13,153; No. Cak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill. Fortune-teiling-machine casing. Des. 13,764; Nov. 1. Mills, Fred L., assignor to Mills Novelty Company, Chicago, Ill. Combined vending machine and game. Lifeth 0,225; Nov. 22, 1,050,025; Nov. 22, 1,050,025; Nov. 22, 1,050,025; Nov. 22, 1,050,025; Nov. 24, 1,050,025; Nov. 25, 1,0

1.050.026; Nov. 22.
Mills, Henry C., Cleveland, Ohio. Sash frame. 1,621,332;
Mar. 15.
Mills, Herbert, San Antonio, Tex. Railway crossing.
Mills, Herbert, San Antonio, Tex. Railway crossing.
Mills, Herbert S., Oak Park, assignor to Mills Novelty
Company, Chicago, Ill. Tremolo device for viol machines. 1,621,127; Mar. 15.
Mills, John, Wyoming, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Wavetransmission control circuit. 1,613,240; Jan. 4.
Mills, John, Wyoming, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Steen for 10cation of a source of sound vibrations. 1,628,992; May 17.
Mills, John, Wyoming, S. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Recording and reproducing system. 1,647,242; Nov. 1.
Mills, John M., Lancaster, Tex. Agricultural implement.
Mills, John M. and K. R., Tiskilwa, Ill. Garment fastener. 1,612,385; Jan. 4.
Mills, Joseph, Coalhurst, Alberta, Canada. Pump. 1,619,149; Mar. 1.
Mills, Kate R. (See Mills, John M. and K. R.)

Mills, Kate R. (See Mills, John M. and K. R.)
Mills, Louis D., Redwood City, and T. B. Crowe, Palo
Alto, assignors to The Merrill Company, San Francisco, Calif. Apparatus for precipitating and filtering.
1,634,720; July 5.
Mills, Mortimer B. Chicago, III. Toy race course.
1,626,420; Apr. 26.
Mills Novelty Company. (See Mills, Bertie E., assignor.)

Milis Novelty Company. (See Mills, Bertle E., assignor.)
Mills Novelty Company. (See Mills, Fred L., assignor.)
Mills Novelty Company. (See Mills, Fred L., assignor.)
Mills Oscar L., Los Angeles, Calif. Welding rod.
Mills, Oscar L., Los Angeles, Calif. Welding rod.
Mills, Rohn H., East Orange, N. J., assignor to Western
Electric Company, Incorporated, New York, N. Y.
Selective signaling circuits. 1,616,192; Feb. 1.
Mills, Rondal V. A., Sandy Spring, Mch. Bammer or the
Hike. 1,628,897; May 17.
Mills, Rondal V. A., Sandy Spring, Md., assignor to P. Q.
Nice, Washington, D. C. Electrochemical means for
preventing corrosion. 1,646,735; Oct. 25.
Mills, Roy, Clarkville, Tenn. Stave-jointing machine.
1,645,920; Oct. 18.
Mills, Walls, May Spring, D. C. Average-speed-reMills, Roy, Clarkville, Tenn. Stave-jointing machine.
1,645,920; Oct. 18.
Mills, Wallace C., assignor to J. L. Clark Manufacturing
Co., Rockford, Ill. Receptacle closure. 1,620,825;
Mar. 15.
Mills, William Painesville, Ohlo. Cultivator. 1,648,738;
Nov. St.

Mills, William L. (See Pratt, L. S., Weltz, and Mills.)
Mills, William L. (See Pratt, L. S., Weltz, and Mills.)
Mills, William L. (See Pratt, L. S., Weltz, and Mills.)
Mills, William L., Compton, Calif. Drilling bit.
1,645,962; Oct. 18.
Millsap, David L., Powersville, Mo. Gambrel. 1,636,751;
July 28.

Millspaugh, William H., assignor to The Paper and Textile Machinery Co., Sandusky, Ohio. Breast roll for paper machines and the like. 1,653,817; Dec. 27.
Millville Manufacturing Company. (See Jones, Aaron R.,

assignor.)
Millville Manufacturing Company. (See Skedgell, David

Millville Manufacturing Company. (See Skedgell, David B., assignor.) Marquette, Mich. Automobile ladder. Millward, George. S. Marquette, Mich. Automobile ladder. Millmoe, Michael J., assignor to F. B. Redington Company, Chicago, Ill. Folding and filling mechanism for verapping machines. 1,621,516; Mar. 22. Milmoe, Michael J., assignor to F. B. Redington Company, Chicago, Ill. Blank-feeding mechanism. 1,627,920; Milmoe, Michael J.

May 10.

Milmoe, Michael J., assignor to F. B. Redington Company, Chicago, Ill. Apparatus for assembling articles to be packed. 1,628,596; May 10.

to be packed. 1,623,596; May 10.

Mine, William, Barre, Vt. Stone-polishing wheel.
1,651,217; Nov. 29.

Milson, Ohn R., Mausfield, Mass., assignor.)

Milson, John R., Mausfield, Mass., assignor.

Milson, John R., Mausfield, Mass., assignor of one-fourth
to C. E. Milson, Providence, R. I. Oiler for spinning
machines. 1,622,488; Apr. 19.

Milton, John R., Mausfield, Mass., assignor to western Electric Company, Incorporated, New York, N. Y.
Adjusting electrical inductances. 1,615,130; Jan. 18.

Milton, John L., Louisville, Ky. Alr cleaner and humdifier. 1,616,593; Feb. 8.

Milton, John L., Louisville, Ky. Internal-combustionengine equipment. 1,616,594; Feb. 8.

Milton, John L., Louisville, Ky. Oscillating device.
1,625,132; Apr. 19.

72535—P—92

Milton, Melvin L., Denver, Colo. Submerged pumping unit. 1,624,423; Apr. 12.
Milton, Robert L., St. Paul, Minn. Automatic brake control. 1,646,306; Oct. 18.
Milwaukee Air Power Pump Company. (See Rogers, Homer S., assignor.)
Milwaukee Brass Manufacturing Company. (See Van Eweyk, William F., assignor.)
Milwaukee Gas Specialty Company. (See Claus, Emil L. Milwaukee ass Specialty Company. (See Leins, Oscar J., assignor.)

assignor.)

Milwaukee Gas Specialty Company. (See Spahr, Otto,

assignor.) (See Akers, E., Mims, Moutray, and Miller.)

Miller.)

Minaeff, Michael G., New York, assignor, by mesne assignments, to The Larvex Corporation, Brooklyn, N. Y.

Mothproofing composition. 1,634,791; July 5,

Mothproofing composition. 1,634,792; July 5,

Mothproofing composition. 1,634,792; July 5,

Minaeff, Michael G., assignor, by mesne assignments, to

The Larvex Corporation, Brooklyn, N. Y.

Minaeff, Michael G., assignor, by mesne assignments, to

The Larvex Corporation, Brooklyn, N. Y.

Mothproofing. 1,634,793; July 5,

Larvey Corporation, Brooklyn, N. Y.

Mothproofing. 1,634,790;

July 5,

N. Y. Mothproofing. 1,634,790;

July 5,

tion, July 5.

Minaeff, Michael G., Brooklyn, and A. P. Sachs, New York, assignors, by meane assignments, to The Larvex Corporation, Brooklyn, N. Y. Mothproofed articles. Minard, Ernest B., Detroit, Mich. Shade guide. 1,632,742; June 14.
Minard, Ernest E., Detroit, Mich. Feed collet. 1,646,925; Oct. 25.

Minard, E Oct. 25. Ernest E., Detroit, Mich. Collet. 1,646,926;

Oct. 25.

Minch, Walter B., Jackson, assignor to General Motors Corporation, Detroit, Mich. Wheel. 1, 262, 355; Apr. 6. Mincher, Joseph F., Milwaukee, Wis, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Vulcanizing apparatus. 1, 621, 595; Mar. 22.

Minck, Faul, Petersdorf, Germany, Electrically-driven spinning centrifugal apparatus. 1, 641, 691; Aug. 30.

Mindlin, Samuel, New York, N. Y. Recorder for dial telephones. 1,647,142; Nov. 1.

Mine Appliances Company. (See Shanaberger, Carl V., assignor.)

signor.)

Mine Safety Appliances Company. (See McCaa, George

Mine Safety Appliances Company. (See McCaa, George S., assignor.)
Miner, Carl S., assignor to The Quaker Oats Company, Chicago, Ill. Synthetic perfume. 1,617,412; Feb. 15.
Miner, Carl S., Glencoe, and G. Steerup, Chicago, Ill., assignors to The Quaker Oats Company, Chicago, Ill., Assignors to The Quaker Oats Company, Chicago, Ill. Synthetic St. S. and O. C. Stanger, Chicago, assignors to Miner, Carl S., and O. C. Stanger, Chicago, assignors to 1,649,123; Nov. 15.
Miner, Clande G., Berkeley, Calif. Producing phosphorous nitride and certain readily-volatile halides. 1,634,795; July 5.

July 5.

July 5.

Miner, Claude G., Berkeley, Calif. Continuously producing phosphorous nitride and certain halides from raw materials. 1,634,796; July 5.

Miner. Claude G., Berkeley, assignor, by mesne assignments, to Anglo-California Trust Company, trustee, and fixed nitrogen. 1,631,544; June 7.

Miner, Daniel P. (See Priebe, E. B., and Miner.).

Miner, Edward G. (See Smith, A. H., and Miner.).

Miner, Harly G. (See Jenney, T., and Miner.).

Miner, Robert S., West Hartford, Conn., assignor, by Company. Circuit system for radio frequency currents. 1,630,859; May 31.

1,630,859; May 3
Miner, W. H., Inc.
Miner, W. H., Inc. (See Brenne, Arild M., assignor.)
(See Dath, Charles E., assignor.)
(See Dentier, Arnold E., assignor.)
(See Dorey, George B., assignor.)
(See Geiger, William A., assignor.)
(See Harris, Joseph, assignor.)
(See Harris, William S., assignor.)
(See Williams, Keith, assignor.)
(See Williams, Keith, assignor.)
(See Williams, Keith, assignor.)
(See William, Albert P., assignor.)
(See Dietrich, Frank and J., and

Inc. Miner, W Miner.) William

Miner.)
Mineral Separation North American Corporation. (See Keller, Cornelius H., assignor.)
Minerals Separation North American Corporation. (See Simpson, Tudor R., assignor.)
Minett, Wifrid T. (See Barelay, W. R., and Minett.)
Minett, Wifrid T. (See Barelay, W. R., and Minett.)
Minett, Wifrid T. (See Gouldbourn, J., and Minett.)
Minich, Frank W., Fort Washington, N. Y. Tilting-sash
Mindow, 1,621,831; Mar. 22.
Mindow, 1,621,831; Mar. 24. The American Foundry
Equipment Company, New York N. Y. Apparatus for cutting and mixing sand. 1,632,746; June 14.

72535-P-28

Minich, Verne E., New York, N. Y., and R. H. Moore, Chicago, Ill., assignors to The American Foundry Equipment Company, New York, N. X. Sand-treating machine. 1,647,243; Nov. 1.
Minier, William, Milo Township, Ill. Yieldable coupling. 1,629,641; May 17.
Minimax Utilities Corporation. (See Routson, Howard

Minimax Officials Corporations
W., assignor.)
Minister, Herbert F., Fernwood, Idaho. Swivel.
1,616,325; Feb. I.
Minneapolis Dredging Co. (See Casey, Vasco F., as-

signor.)
Minneapolis Heat Regulator Company. (See Denison, Frederick S., assignor.)
Minneapolis Knitting Works. (See Rambo, James H., as-

signor.)
Minnesota Mining & Manufacturing Company. (See Okie, Francis G., assignor.)
Minnesota Specialty Company, The. (See Wulfing, Daniel

Minnesoth Specialty Company, The. (See Wulfing, Daniel J., assignor.)
Minnesota Wax Paper & Envelope Co. (See Nienhauser, Bernard A., assignor.)
Minnich, Harry E., Three Oaks, Mich. Exercising device. 1,620,610; Mar. 1.
Minnich, Harry E., Three Oaks, Mich. Exercising device. 1,620,610; Mar. 1.
Minnich, Harry I., Basie, Basel, Switzerland. Preparation of solutions of compounds insoluble or sparingly soluble in water. 1,632,306; June 14.
Minnick, Howard W., McKeesport, Pa. Ash-spraying apparatus. 1,617,621; Feb. 10.
Minnick, Biythe J., and C. A. Campbell. Watertown, N. Y., said Campbell assignor to The New York Air Brake Com-Minnis, Henry M., assignor of one-third to E. A., Thomas and one-third to J. H. Finch, Wylie, Tex. Valve-acturating means for fire-extinguishing systems. 1,618,762; Feb. 22.
Minnis, Henry M., assignor of one-third to E. A., Thomas

Feb. 22.

Minuis, Henry M., assignor of one-third to E. A. Thomas and one-third to J. H. Flinch, Wylie, Tex. Automatic fire-sprinkler system. 1,637,621; Aug. 2.

Minot, Charles, Brooklyn, N. Y. Electric lamp. Des. Milliogue, Roland E., assignor of one-third to H. Vanderwerp, Manitowce, Wis. Agitator. 1,633.708; June 28.

Minor, Edward M., Los Angeles, Calif., assignor, by mesne assignments, of forty-nine per cent to W. B. Rardin, Eliuwood, Ohio. Garment hanger, 1,618,885; Feb. 22.

Minorsky, Nicolas, Philadelpia, Pa., assignor to General June 28. Company. System of motor control. 1,636,822; June 28.

Electric Company. System of motor control.

June 28

June

& Company Limited, Heodurin-On-lyne, Lingmind, Switching arrangement for electric substations. 1,633,490; June 21.

Minty, Robert F., Montreal, Quebec, Canada. Hair waver. 1,646,102; Oct. 18.

Minunno, Saverio, New York, N. Y. Hand fan. 1,632,556;

Minuno, Saverio, New York, N. Y. Hand tan. 1,622,506; June 14.

Minuth, Gustave W., assignor to M. I. Heldman, Chicago, Ill. Vncuum cleener, 1,621,596; Mar. 22.

Minuth, Wilhelm G., Celle, Germany, Sinking shaft and Minuth. Property of the control of the contro

Mironuck, Andrew, Max, N. Dak. Grain sifter. 1,623,356;

Apr. 5.

Apr. 5.

Mirosav, Samuel J., Dallas, Tex. Saving bank. 1,638,404; Aug. 9.

Mirra, Albert, Paris, France. Linking device. 1,642,969; Sept. 20.

Mirey, James. (See Coates, F., and Mirrey.)
Mirey, James. (See York, N. Y. Maulfold record book.
Miray, Blehard A., Syracuse, N. Y. Anchoring bolts.
1,629,880; May 24.
Miscamphell, Hugh, Duluth, Minn. Hydrator. 1,641,347; Miscampbell, Hugh, Duluth, Minn. Dust collector. 1,650,292; Nov. 22.

Misch, Augustus, New York, N. Y. Oil burner. 1,649,16; Feb. S. Misch, Augustus, New York, N. Y. Oil burner. 1,639,744; Aug. 25. Misch, augustus. (See Newsham, A. S., Viersen, and Aug. 20.
Misch, Gustav. (See Newsham, A. S., Viersen, and
Misch, Grank, and K. Roschitsch, Cleveland, Ohio,
Buffer or bumper for automobiles, 1,638,501; Aug. 9.
Misener & Irving Manufacturing Co. Inc. (See Misener,

Mesener & Irving Manufacturing Co. Inc. (See Misener, John I., assignor).

Misener, John I., assignor to Misener & Irving Manufacturing Co. Inc., Syracuse, N. Y. Woodworking tool. 1,615,818; Jan. 25.

Misnawaka Rubber and Woolen Manufacturing Company. (See Blair, George W., assignor.)

(See Blair, George W., assignor.)

Miskin, Arthur R., Ucon, Idaho. Road scraper. 1,627,857; May 10.

Miskin, Arthur R., Ucon, Idaho. Road scraper. 1,627,857; May 10.

Mislowitzer, Ernst, Berlin, Germany. Apparatus for measuring ion concentration. 1,648,739; Nov. 8.

Misner, Lawrence, Hoboken, N. J., assignor to Gurney Inbrictor. 1,614,844; Jan. 8.

Mississippi Glass Company. «See Kingsley, Charles B., assignor).

assignor.)
Mistretta, Antonio, New York, N. Y. Trimming device for embroidery machines. 1,620,378; Mar. 8.
Mitcham, Eldon H., Chariton, Iowa. Rotary-valve struc-Mitchell, Albert S., Tacoma. Wash. Cord holder. 1,645,250; Oct. 11.
Mitchell, Alfred H., deceased, Plumstead, by H. O. Burge, executor, Brentwood, assignor to Henry Simon Limited, Manchester, England. Pheumatic elevator. 1,624,424; Mitchell, Amos, Kirksville, Mo. Metallic railway tie.

Apr. 12.

Mitchell, Amos, Kirksville, Mo. Metallic railway tie.
1,620,730; Mar. 15.

Mitchell, Arthur L., Dallas, Tex. Automatic drain device.
1,630,628; May 31.
1,639,954; Aug. 23.

Mitchell, Arthur M., Washington, Cous. Cleansing milking-machine units. 1,613,857; Jan. 4.

Mitchell, Benjamin A. (See Kyle, G. R., and Mitchell, Mitchell, Benjamin A., Tompkinselle, N. Y. Vibrating.

Mitchell, Senjamin A., Tompkinselle, N. Y. Vibrating.

Mitchell, Senjamin A., Tompkinselle, N. Y. Vibrating.

Machinera Corporation. (See Mitchell, G. A., assignor, America Corporation.)

assignor.)
Mitchell Camera Corporation. (See Mitchell, George A.,

Mitchell Camera Corporation. (See Mitchell, George A., assignor.)
Mitchell, Charlie B., Los Angeles, Calif. Direction signal for motor vehicles. 1,620,379; Mar. 8.
Mitchell, Charlie B., Los Angeles, Calif. Door-holding device. 1,626,007; Apr. 26.
Mitchell, Clarence C. (See Gregory, E., and Mitchell.) Mitchell, Clifford E., assignor to Western Electric Compuny, Incorporated, New York, N. Y. Telephone transmitted. David W., Chicago, Ill. Book soap. 1,648,778; Nov. 8.
Mitchell, David W., and G. O. Roblinson, Port Daver, Mitchell, David W., and G. O. Roblinson, Port Daver.

mitter, 1,647,244; Nov. 1.

Mitchell, David W., Chieago, Ill. Book soap. 1,648,778; Nov. 8.

Mitchell, David W., Chieago, Ill. Book soap. 1,648,778; Nov. 8.

Mitchell, David W., Chieago, Ill. Book soap. 1,648,778; Nov. 8.

Mitchell, David W., Canada. Cone-making machine. Mitchell, Edward H., Quincy, Ill. Trap nest and front therefor. 1,637,005; July 26.

Mitchell, Edward H., Quincy, Ill. Trap nest and front therefor. 1,637,005; July 26.

Mitchell, Edward H., Gee Mitchell, Mark M., assignor.) Mitchell, Edward C., Greenville, Pa. Hopper-car door-distributed the like. Rel6,646; May 31.

Mitchell, Froyd A., Portland, Org. Tool for removing collars and the like. Rel6,646; May 31.

Mitchell, Frank B., Regina, Saskatchewan, Canada. Revolving store fixture. 1,635,334; July 12.

Mitchell, Frank E., Wilmington, Ill. Pocket attachment Mitchell, Fred C., executor. (See Dempsey, Thomas.) Mitchell, Frederick G., London, England. Unloading apparatus for rallway cars. 1,628,732; May 17.

Mitchell, Frederick G., London, England. Unloading apparatus for rallway cars. 1,628,732; May 17.

Mitchell, George A., Los Angeles, Callf., Assignor to Mitchell, George A., Los Angeles, Callf., Marry W., assignor, Jos. Angeles, Callf. Marry W., assignor, Son, Callf. Movement mechanism for cameras and the like. 1,635,639; Nov. 8.

Mitchell, George A., Huntington Fark, assignor to Mitchell Camera Corporation, Los Angeles, Callf. Viewing de-Mitchell, George A., Washington, D. C. Raflo receiver attachment for telephones. 1,622,335; Mar. 29.

Mitchell, George W. (See Marshall, Andrew J., assignor). Mitchell, George W. (See Marshall, Andrew J., assignor to U. S., assignor, 1,632,041; Aug. 9.

Mitchell, Harry W., assignor to G. F. Mitchell & Son. Cleveland, Ohlo. Washing mechane. 1,622,035; Mitchell, Harry W., assignor to G. F. Mitchell & Son. Cleveland, Ohlo. Washing mechane. 1,622,035; Mitchell, Harry W., assignor to G. F. Mitchell & Son. Cleveland, Ohlo. Washing mechane. 1,622,035; Mitchell, Harry W., assignor to G. F. Mitchell & Son. Cleveland,

May 24.
Mitchell, Harry W., assignor to G. F. Mitchell & Son, Cleveland, Ohio. Washer drive mechanism. 1,632,091;

Mitchell Manufacturing Company. (See Mitchell, William, assignor.)
Mitchell, Marion W., Akron, Ohlo, assignor to The Firestone Stee Products Company, Akron, Ohlo. Conveyer. 1,647,370; Nov. 1.
Mitchell, Mark M., assignor to E. J. Mitchell, Cleveland, Mitchell, Raymond H., Electrically-heated Wildhell, Raymond H., Danville, Va. Electrically-heated windshield wiper. 1,642,786; Sept. 20.
Mitchell, Raymond P., Danville, Va. Electrically-heated windshield wiper. 1,642,786; Sept. 20.
Mitchell, Reginald J., assignor to The Supermarine Aviation Works Limited, Southampton, England. Flying boat and like aircraft. 1,642,686; Sept. 20.
Mitchell, Robert B., Hillsdale, Mich. Dishwashing ma-Mitchell, Robert B., assignor to Union Steel Products Company, Albion, Mich. Display rack. 1,612,937; Jan. 4.

Jan. 4.

Mitchell, Robert C. (See Irvin, Russe J., assignor.)

Mitchell, Robert C., Mount Vernon, N. Y. Smoker's

stand. 1,046,099; Oct. 18.

Mitchell, Robert, Company Limited, The. (See Holland,

St. Clair C., assignor.)

Mitchell, Robert J., Salticore, Md. Z. B. Babbitt, and Z.

Mitchell, Robert J., Salticore, Md. Z. B. Babbitt, and Z.

Mitchell, Robert M. (See Johnson, A. L., and Mitchell, Robert M. (See Johnson, A. L., and Mitchell, Robert M., See Johnson, A. L., and Mitchell, Solver J. K.

Mitchell, Robert M., See Johnson, A. L., and Mitchell, Sidney W. J. Koll, Company, Chiego, H. Separating mechanism for corn

Mitchell, Sidney W. J. Koll, Company, Chiego, M. J. Koll, Colo.

Mitchell, Thomas A., assignor to L. M. Hughes, Denver, Colo. Treating alunite. 1,628,1744; May 10.

Mitchell, W. C., et al. (See Boone, D. C., and Burkett, assignors.) assignors.)

assignors.)

Mitchell, Walter A., Dundee, Scotland. Chain roller bearing and the like. 1,615,809; Jan. 25.

Mitchell, Walter C., St. Louis, Mo. Smoke consumer. 1,620,826; Mar. 15.

Mitchell, Walter E., Seattle, Wash. Short-turn device for motor vehicles. 1,632,665; June 14.

Mitchell, Walter J. (See Bjerke, Peter O., assignor.) Mitchell, Walter J. (See Bjerke, Peter O., assignor to Tiffany & Company, New York, N. X. Silver alloy and making Company, Milwaukee, Wis. Swing bob. 1,642,740; Sept. 20.

Mitchell, William A. Danison Tex. Friction dust frage.

Mitchell, William A., Denison, Tex. Friction draft gear. 1,644,391; Oct. 4. Denison, Tex., assignor to Universal Draft Gear Attachment Co., Chicago, Ill. Rallway truck. 1,563,548; Aug. 16.

Mitchell, William E., Anderson, Mo. Indicating device for visible gasoline tanks. 1,528,732; July 26. Mitchell, William F., Passaic, N. J. Locomotive-lubricator sight. 1,640,612; Aug. 30. Mitchell, William M., Grenada, Miss. Speed-change mechanism. 1,623,695; Apr. 5. Mitchell, Wildmir V., Brooklyn, assignor of thirty-three and one-third per cent to R. Vitolo and thirty-three and one-third per cent to R. Vitolo and thirty-three and one-third per cent to D. A. Rodionoff, New York, N. one-third per cent to D. A. Rodionoff, New 1,638,051; Aug. 9. Writing with scarculight beams.

Hoss, 191; Aug. 9.

Mitnick, Jacob J., and J. L. Silverstine, Chicago, Ill. Hub cap. 1,621,556; Mar. 22; Mittag, Paul T., Los Angeles, Calif. Exercising cot. 1,641,188; Sept. 6.

Mittelland Gummiwerke Aktiengesellschaft. (See Hergershausen, Katharina, assignor.) girrshausen, Katharina, assignor.) girrshausen William R., Gunchen, September 1, Laboratory Company, Dayton, Ohlo. Computing scale. 1,650,224; Nov. 22. Nov. 22

Mittendorf, William R., Cincinnati, assignor, by mesne as-asignments to The Watson Experimental Laboratory Company, Dayton, Ohio. Computing scale. 1,650,225;

Nov. 22.
Mittendorf, William R., Cincinnati, assignor, by messe as-asignments to The Watson Experimental Laboratory Company, Dayton, Ohio. Computing scale. 1,650,226; Nov. 22.

Company, Dayton, Ohio. Computing scale. 1,600,226; Nov. 22.

Mittendorf, William R., Cincinnati, assignor to The Watson Experimental Laboratory Company, Dayton, Ohio.

Mittendorf, William R., Cincinnati, assignor to the Watson Experimental Laboratory Company, Dayton, Ohio. Computing scale. 1,630,228; Nov. 22.

Mitting, George, E., Cleveland, Ohio. Metal keg. 1,648,859; Nov. 8.

Mitton, Robert E., Salt Lake City, Utah. Diaphragm Mitton, Robert E., Salt Lake City, Utah. Valve. 1,626,045; Apr. 26.

Mitton, Robert E., Salt Lake City, Utah. Piston valve for the control of duids. 1,638,405; Aug. 8.

Mitton, Robert E., Salt Lake City, Utah. Cylinder are compressor. 1,638,292; Dec. 27.

Mitton, Robert E., Salt Lake City, Utah. Cylinder are compressor. 1,638,292; Dec. 27.

Mitts, Philip S., assignor to Mitts & Merrill, Saginaw, Mich. Cutting machine. 1,613,048; Jan. 4.

Mitulski, John B., Detroit, Mich. Automatic water feed for hot-air-furnace humidors. 1,652,451; Dec. 13.

Mix, Edwin S., Rochester, N. V., assignor to Hickok Magnufacturing Company, Inc. Belt buckle. 1,635,135; With Edwin S., Rochester, N. V., assignor to Hickok Mich. Compressor. 1,688,2648; P. V. assignor to Hickok Mich. Compressor. 2, 1882, 1

July 5. July 5.

Mix, Edwin S., Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc. Belt and loop fastener used in connection with the same. 1,644.845; Oct. 11.

Mix, Gustave B. (See Lough, H. V., and Mix.)

Mix, William J. (See Mueller, R. H., and Mix.)

Miyasaki, Yuske, Kansas City, Mo. Hand-brake mechanism for railway cars. 1,624.95; Apr. 12.

Miyasaki, Yuske, Kansas City, Mo. Hand-brake mechanism for railroad cars. 1,625.76; Dec. 18.

Mizer, Fred M., assignor to The General Phonograph Mizer, Fred M., assignor to The General Phonograph Covernic Company, Blyria, Ohio, Lowspeed, June 7.

1,020,075; Mar. 15.

Moats, Allen A., Philadelphia, Fa. Curtain-draping device. 1,687,704; Aug. 2.

Moats, De Witt T., Columbus, Ohio. Attaching means, 1,627,802; May 10.

Mobley, Arthur M., Hawkinsville, Ga. Antirattler. 1,614,345; Jan. 18.

Mobley, George O., Hesth Springs, S. C. Combined state-may and leager sheet. 1,624,618; Apr. 12.

Model of the Columbia of

Mobley, George V 1,616,595; Feb. 8.

Mobley, James C., Des Moines, Iova Feed-chute plate Mobley, James C., Des Moines, Iova Feed-chute plate Jeff 1999; Ort. 3.

Mobley, Clewis K. assignor of one-haif to J. R. Littell, New York, N. Y. Applying liquid medicaments under pressure action. 1,614,532; Jan. 18.

Mobley, Ormonde O. (See Goulas, Henry, assignor.)

Moburg, Aimer L., Palms, Calif. Underground antenna. 1,638,699; Aug. 9.

Cutting and work-

Möbus, Wilhelm, Dusseldorf, Germany. Cutting and treating machine. 1,640,513; Aug. 30. Mock, Frank C., assignor to Stromberg Research poration, Chicago, Ill. Shock absorber. 1,650 Nov. 22.

Mock, Fanak C., C. J. Gustafson, and M. E. Chandler, company, company, chicked, company, chicked, company, chicked, chic

Mock, Hugo, New York, N. Y. Bill posting. 1,634,856; July 5, New York, N. Y. Fireless cooker. 1,647,742; Nov. 1.
Mock, Hugo, New York, N. Y. Method and means of embossing. 1,648,461; Nov. 8.
Mock, Hugo, New York, N. Y. Moth bag. 1,848,657; Nov. 8.
Mock, Hugo, New York, N. Y. Electric sign. 1,648,957; Nov. 15.

Mock. John F., Phillipsburg, assignor to Ingersoil-Rand Company, Jersey City, N. J. Centralizer for drill steels. 1,644,026; Oct. 4, Model Brasslere Co. (See Johnson, Augusta S., assignor.) Modern Foundry and Pattern Works. (See Cameto, Leon,

assignor.)
Modern Household Appliance Company. (See McKeown, William C., assignor.)
Modern, Julius. (See Mik, Johann, assignor.)
Modern, Julius. (See Mik, Johann, Crower C., assignor.)

Modern Unities Company, Signor.)
Modine, Arthur B., Racine, Wis, Maintaining the temperature of the fluid in circulating systems. 1,645,338; possible of the fluid in circulating systems. 1,645,238; Modilarz, Thomas, Hamtramck, Mich. Artificial Christmas tree. 1,654,427; Dec. 27.
Modilin, Clarence A., et al. (See Modilin, Frank E., as-

Modlin, Clarence A., et al. (See Modlin, Frank E., asModlin, Frank E., jr., et al. (See Modlin, Frank E., as-

mas tree, 1,634,427; Dec. 27.

Modlin, Clerence A., et al. (See Modlin, Frank E., assignor.)

Modlin, Frank E., jr., et al. (See Modlin, Frank E., assignor.)

Modlin, Frank E., jr., et al. (See Modlin, Frank E., assignor.)

Modlin, Frank E., jr., et al. (See Modlin, Frank E., assignor.)

Pank E., assignor of one-eighth to F. E. Modlin, Ganssa City, Mo., and three-eighths to D. L. Walker, Oklahoma City, Okin. Wrapping machine. 1,632,344; June 14.

Modra, William, and A. W. Meier, St. Louis, Mo. Siphon December of the like. 1,646,701; Oct. 25.

Moegelin, Erich, Moseen, Germany. One-way plow. 1,639,049; Aug. 16.

Moegelin, Erich, Moseen, Germany. One-way plow. 1,639,049; Aug. 16.

Moeller, Albert. (See Cornwell, V. O., and Moeller.)

Moeller, Albert. (See Cornwell, V. O., and Moeller.)

Moeller, May 16.

Moeller, May 16.

Moeller, Max E., Brooklyn, Sasignor to Slemens & Moeller, May 3.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,632,263; Aug. 16.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,269; June 7.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,269; June 7.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,265; June 7.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,265; June 7.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,265; June 7.

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Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,265; June 7.

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Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,265; June 7.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,265; June 7.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,630; June 7.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,630; June 7.

Moeller, Max E., Brooklyn, N. Y. Thermometer. 1,631,630; June 7.

Moeller, Max E., Brooklyn,

Mohawk Carpet Mills, Inc. (See Crossland, George, assignor.

Mohawk Corporation of Illinois. (See Chamberlain, Paul A., assignor.)
Mohawk Corporation of Illinois. (See De Mare, Douglas,

assignor.) Mohawk Electric Corporation, (See Chamberlain, Paul A., assignor.)
Mohawk Rubber Company, The. (See Moore, Howard P.,

Mohawk Textile Mills, Inc. (See Oberstebrink, August,

Monawk Texthe Mills, Inc. (See Obersteering, August, assignor).

Mohler, Charles M., Ypsilanti, Mich. Creeper for automobile mechanics. 1,649,721; Nov. 15.

Mohler, Thomas B., Burlingame, Calif. Fael and making Mohn, John, Detroit, Mich. Siphon starter and automatic shut-off. 1,623,260; Apr. 5.

Mohn, Rudolf, Sulgen, assignor to W. Müller, Thal Canton St. Gallen, Switzerland. Envelope-closing machine. 1,618,243; Jan. 4.

Mohn, Rudolf, Sulgen, assignor to W. Muller, Thal, St. Gallen, Switzerland. Machine for closing and sealing envelopes. 1,633,750; June 28.

Mohn, Rudolf, Sulgen, assignor to W. Muller, Thal, Canton, Carl A., Curtis, Ark. Mail crane. 1,625,272; Apr. 19.

Mohnkern, Carl A., Curtis, Ark. Mail crane. 1,625,272; Apr. 19.

Mohnkern, Carl A., Curtis, Ark. Pouch-holding clamp for mail cranes. 1,625,273; Apr. 19.

Mohnkern, Carl A., Curtis, Ark. Mail crane. 1,625,274; Apr. 19.

Mohnkern, Carl A., Curtis, Ark. Mail crane. 1,625,274; Apr. 19.

Mohnkern, Carl A., Curtis, Ark. Mail crane. 1,625,274; Apr. 19.

Mohnkern, Carl A., Curtis, Ark. Mail crane. 1,625,274; Apr. 19.

Mohnkern, Carl A., Curtis, Ark. Mail crane. 1,625,274; Apr. 19.

Mohn, Bernard A., New, York, N. Y., Machine for

Apr. 19.

Mohr, Bernard A., New York, N. Y. Machine for straightening and grooving cans. 1,621,079; Mar. 15.

Mohr, Franklin, New York, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated, Modulating system. 1,624,498; Apr. 12.

Mohr, George A., Detroit, Mich. Testing device for cored castings. 1,622,602; Mar. 29.

Mohr, George A., Detroit, Mich. Testing device for cored castings. 1,622,602; Mar. 29.

Mohr, Heinrich, Hagen, Germany, Suffer for railway Mohrin, Emil, Stuttgart-Degerloch, assignor to the Firm Möhrlin, Emil, Stuttgart-Degerloch, assignor to the Firm Möhrlin, Emil, Stuttgart-Degerloch, assignor to the Firm Möhrlin, Emil, Stuttgart-Degerloch, assignor to the Möhrlin, Emil, Geo Möhrlin, Emil, assignor.)

Möhrin, John D. H. (See Möhrlin, Emil, assignor.)

Möhrin, John D. H., Omaha, Nebr. Locomotive. 1,618,293; Feb. 22.

Mohun, John L., Omaha, Nebr. Dust guard for the

Feb. 22, Mohun, John L., Omaha, Nebr. Dust guard for the journal boxes of railway cars. 1,621,893; Mar. 22. Molr, William A., Halifax, Nova Scotia, Canada. Conditioning apparatus for chocolate and the like. 1,630,714; May 31.

thoning apparatus not concounter and the rise. Accounter May 31.

Moisan, Edmond, Paris, France. Forceps for use in the manufacture of plates used in dental prosthesis. 1,614,380; Jan. 11.

Moisselle, David B., Philadelphia, Pa. Rail joint. 1,628,387; Sept. 20.

1,626,384 Apr. 20.

1,626,387; Sept. 20.

Mola, Donato, Rome. Haly. Self-sucking silencer for motor cars generally. 1,651,465; Nov. 29.

Moland, William G., Philadelphia, Pa. Boot jack. 1,636,610; July 19.

Moland, William G., Philadelphia, Pa. Boot-tec. 1,636,381; Nov. 29.

Moland, William G., Philadelphia, Pa. Boot-tree. 1,636,3645; Nov. 29.

Moland, William G., Philadelphia, Pa. Boot-tree. 1,636,3645; June 28.

Molty, Edgar C., Brooklyn, assignor to Iron Products Corporation, New York, N. Y. Heater. 1,643,026; Sept. 20.

Moldenke, Richard, Watchung, N. J. Treating aluminous ores. 1,637,451; Aug. 2.

Mole, Peter, jr., Schencetady, N. Y., assignor to General Electric Company. Feed for arc lamps. 1,626,472; Apr. 26.

ores. 1,637,451; A
Mole, Peter, jr., Sche
Electric Company.
Apr. 26.

 Moler, Jesse R., Oakland, Calif.
 Water bag.
 1,629,723;

 May 24.
 Molic François F., Genoa, Italy.
 Separation of caramels.

 1,635,136; July 5.
 July 5.
 Molin, Louis A., New York, N. Y.
 Colloid mill.
 1,650,088;

 Nov. 22.
 Louis A., New York, N. Y.
 Louis A., New York, N. Y.
 Nov. 22.

NOV. 22.

Moline, Carl H., Waterloo, Iowa. Adjustable marking guide. 1,633,122; June 21.

Moline, Charles, Multnomah, Oreg. Plug. 1,653,724; Dec. 27.

Moline Implement Company. (See Corbin, Henry P., assignor

Moline Implement Company. (See Lindgren, Hugo T., assignor.)
oline Implement Company. (See Palmer Nathan W.,

oline Implement Company. (See Seaholm, John P., assignor.)

assignor.)

Moline Tool Company. (See Hunt, Wilson P., assignor.)

Molins, Walter E., London, England. Device for feeding

Molins, Walter E., London, England. Cigarette-making

Moline, Walter E., London, England. Cigarette-making

machine. 1,630,182; May 24.

Molins, Walter E., London, England. Machine for auto
matically cutting moving webs of paper or other ma
terials into sheets. 1,631,876; June f.

Molina, Walter E., Deptford, London, England. Mechanism for severing moving webs into lengths. 1,651,096; Nov. 29.

Molins, Walter E., Deptford, London, England. Printing machinery. 1,651,097; Nov. 29.

Molins, Walter E., London, England. Gumming device. Molins, Walter E., London, England. Machine for applying stamps, labels, and the like. 1,652,040; Dec. 6.

Molins, Walter E., Lopetford, London, England. Packing machinery. 1,652,871; Dec. 13.

Moling. George J. A., Loxana, III. Clothesline holder. Moll, Hermann, Rasselstein, near Neuwied, Germany. Arrangement of the gas and air passages in reverberatory furnaces. 1,653,405; Dec. 20.

Mollard, Thomas A., Oakland, assignor to Pacific Fire Extinguisher Soy, San Francisco, Calif. Signaling sys-Moller, Adolf D., (See Matthlessen, P., and Möller, Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.) Moller, Edward M. (See Benedict, H. A., and Moller.)

Möller, Fritz, assignor to Schloemann Aktlengesellschaft, Dusseldorf, Germany. Rolling mill. 1,628,175; May 10. Möller, Gustav, Dortmund, Germany. Sack closure. 1,622,772; Apr. 19. Sack closure. 19. Sack

Same. 1,635,100; Aug. 2.

Moloney, William. (See Jensen, A. C., Moloney, and Bilt-Moloney, William. (See Jensen, A. C., Moloney, and Bilt-Moloney, Donald P., assignor to Marvel Carburster Company, Flint, Mich. Automatic charge heating control for internal-combustion engines. 1,625,134; Apr. 19. Molony, Donald P., assignor to Marvel Carburster Company, Flint, Mich. Automatic charge-heating control for internal-combustion engines. 1,625,135; Apr. 19. Molony, Martin, San Francisco, Calif. High-frequency vestical electroide. 1,650,828; Mars. 1,625,135; Apr. 19. Molony, Martin, San Francisco, Calif. High-frequency vestical electroide. 1,650,828; Mars. 1,625,135; Apr. 19. Molony, Martin, San Francisco, Calif. High-frequency vestical electroide. 1,650,828; Mars. 1,652,817; June 14. Molony, Stuart B., Wellesley Hills, Mass., and Y. Nikaido, Bay City, Mich., assignors, by mesne assignments, to burgh. Pa. Rubber utleanization and product thereof. 1,632,636; June 14. Molony, Stuart B., Wellesley Hills, Mass., and Y. Nikaido, Bay City, Mich., assignors, by mesne assignments, to C. W. Brown, W. L. Clause, and E. Pitcairn, Pittsburgh. Pa. Rubber utleanization and product thereof. 1,632,636; June 14. Molony, Stuart B., Wellesley Hills, Mass., and Y. Nikaido, Bay City, Mich., assignors, by mesne assignments, to C. W. Brown, W. L. Clause, and E. Pitcairn, Pittsburgh, Pa. Rubber vulcanization and product thereof. Moltron, Ellon, et al., administrators. (See Moltrup, Stephen.)

Moltrup, Stephen, deceased, Beaver Falls, Pa., Ellan Moltrup, Stephen.)

Moltrup, J. T., et al., administrators. (See Moltrup, Stephen.) Moltrup, Stephen.) Moltrup, Stephen. Moltrup, administrators. Jack. 1,648,188; Nov. 8.

Nov. 8.

Molybdenum Corporation of America. (See Weitzenkorn, Joseph W., assignor.)

Molyneux, George E., Bayonne, assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe-tip machine. 1,644,938; Oct. 11.

Molyneux, George E., Bayonne, assignor to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for handling cloth blanks and the like. 1,649,319; Nov. 15.

Mombur, Georges, Versailles, France. Device for indicating speed, 1,647,115; Oct. 25.

Mombur, Georges, Versailles, France. Speed-indicating Shombur, Georges, Versailles, France.

Speed-indicating Mommesn, Ernst, executor. (See Carbone, Tito L.)

Monaco, Frederico, Cosenza, Italy, Guitar. 1,617,454; Feb. 15.

Feb. 15.

Monaghan, James F., Waltham, Mass. Apparatus and process for condensing soluble gases. 1,614,313; Jan. 11.

Monahan, James B., assignor to Litho Etching Corporation, New York, N. Y. Safety device for clutch mechanism. 1,625,045; Apr. 19.

Monahan, James B., assignor to Litho Etching Corporation, New York, N. Y. Safety device. 1,630,402; Monahan, Ormond B., Des Moines, Iowa. Agitator. 1,645,614; Oct. 18.

Monahan, R. H., et al. (See Auger, Joseph T., assignor.)

Monarch Brush Co., The. (See Nilsson, Freeman, assignor.) signor.)

onarch Machine and Manufacturing Company. (See Mathews, William P., assignor.)

Monarch Machine Tool Company, The. (See Whipp, Wendell E., assignor.)

Monarch Manufaring Works, Inc. (See Murphy, T. Monarch Marking System Company, The. (See Kohnle, Frederick, assignor.)

Monarch Marking System Company, The. (See Kohnle, Frederick, assignor.)

Monard, Marking System Company, The. (See Kohnle, Frederick, assignor.)

Monarque, Philip H., New York, N. Y. Display device. 1.651,536; Dec. 6.

Monckmeier, Gustav C., Chicago, Ill. Wear-compensating Monckmeier, Gustav C., Tipton, Iowa. Wear-compensating bolt, 1,627,401; May 3.

Monckmeier, Gustav C., Tipton, Iowa. Automatic thrust bearing. 1,646,416; Oct. 25.

Monckton, Charles E. (See Ball, Everett R., assignor.)

Moncreiffe, Malcolm, Big Horn, Wyo. Tractor. 1,624,110; Apr. 12.

Mondi, James V. (See Shaughnessy, John L., assignor.)

Money, Koland H. (See Hull, M., and Money.)

Moniette, Francis X., et al. (See La Roche, Olivier, assignor.)
Money, Koland H. (See Hull, M. R., and Money.)
Monfee, Andrew J. (See Sleeman, W. C., and Monfee.)
Monfies, Andrew J. (See Sleeman, W. C., and Monfee.)
Monfies, Sapoleon A., Haverhill, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. WoodMongelll, Glusseppe A., Ph. (1971, 574; Nov. 1.
Mongelll, Glusseppe A., Ph. (1971, 1972; Nov. 1.
Moniemer, Henry F., assignor to Campe Corporation,
New York, N. Y. Union suit, 1,638,592; Aug. 9.
Monica, Pasquale D., Harrison, N. Y. Doorbell and lightcontrol switch. 1,647,708; Nov. Curtain supporter.
1,631,219; June 7.
Monier, Hector. (See Dackmine, D., and Monier.)
Monier, Hector. (See Dackmine, D., and Monier.)
Monier, Hector. (See Martinson, Oscar J., assignor.)

signor.) Monitor Controller Company. (See Whittingham, George

Monitor Controller Company. (See Whittingham, George H., assignor.)

Monkhouse, Allan, Roseleigh, England, assignor to Westinghouse Electric & Manufacturing Company. Machine for wrapping bodies. 1,645,289; Oct. 11.

Monks, Charles H., Ridgewood, N. J. Mouthpiece attachment for telephones. 1,683,491; June 21.

Monnig, Hugo, Jeffersch, City, Mo. Time-recording indi-Microsoft and Company Lens Corporation. (See Arbuckle, Samuel F., assignor.)

Monogah Glass Company. (See Mayers, Wilbur S., assignor.)

assignor.

Monongah Glass Company. (See Mayers, Wilbur S., assignor.)

Monongah Glass Company. (See Mayers, Wilbur S., assignor to Window Glass Machine Company, Pittsburgh, Pa. Method and apparatus for annealing and cooling sheet glass. 1,641.896; Sept. 6. Monroe, Edward R., Bay City, Mich. Therapeutic chair. 1,645,339; Oct. 11.

Monroe Harry L., and W. Cramer, St. Louis, Mo. Supporting and concealing folding beds. 1,628,418; May 10.

Monroe, Kenneth P., Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Monroe Louis and Carbara (1,645,389; Oct. 11. Monroe Louislank Carbara, Williams (1,645,389; Oct. 11. Monroe Louislank Carbara, Williams, Del. Making tetra-alkyl lead. 1,645,389; Oct. 11. Monroe-Louislank Carbara, Williams, Del. Making tetra-alkyl lead. 1,645,389; Oct. 11. Monroe-Louislank Carbara, Company, Wilmington, Del. Making tetra-alkyl lead. 1,645,389; Oct. 11. Monroe-Louislank Carbara, Markan, Monroe-Louislank Carbara, Markan, Markan,

Making tetra-alkyl lead. 1,645,390; Oct. 11.

Monroe-Louislana Carbon Company. (See Matlock,
Chauncey, assignor.)

Monroe, William S., assignor to Sargent & Lundy, Chicago, Ill. Condenser-tube nipple and mounting.
1,640,576; Aug. 30.

Monsanto Chemical Works. (See Conover, Courtney,
assignor.)

assignon.)
Monson, Hugh J., Lakewood, assignor to The Guide Motor Lamp Manufacturing Company, Cleveland, Ohio. Lamp for motor vehicles. 1,613,8411 Jan. 11.
Monson, Martin B., Jefferson County, near Wheatridge, manufacturing Company, Denver. Colo. Tractor-supp Manufacturing Company, Denver. Colo. Tractor-supp Manufacturing Company, Ontage, Christopher F., assignor to Biue Island Specialty Co., Blue Island, Ill. Jacket-crown grinder. 1,614,144; Manufacturing Company, Montague, John H., Independence, Mo. Clamp. 1,648,695; Nov. 8.

Montag, Solomon. (See Sokol, A., and Montag.)
Montague, John H., Independence, Mo. Clamp. 1,648,895;
Nov. 8.
Montague Range and Furnace Co. (See Trolel, Arthur E., assignor.)
E., assignor. 1,617,022; Feb. 8.
Montan, Adolf, Montclair, assignor to Eastern Tool & Mrg. Co., Bloomfield, N. J. Silde. 1,643,746; Sept. 27.
Montan, Adolf, Montclair, assignor to Eastern Tool & Mrg. Co., Bloomfield, N. J. Silde. 1,643,747; Sept. 27.
Montan, Adolfh, Montclair, assignor to Eastern Tool & Mrg. Co., Bloomfield, N. J. Silde. 1,643,747; Sept. 27.
Montan, Adolph, Montclair, assignor to Eastern Tool & Mrg. Co., Bloomfield, N. J. Chap for fountain pens and clip therefor, 1,629,835; May 4.
Chip therefor,

Montelius, John E., Los Angeles, Calif. Aerial. 1,617,023;

netilet, Antonin, assignor to Société Anonyme Telegraphes Edouard Belin, Paris, France. Ele transmission arrangement. Rel. 773; Oct. 18. Intero, Carlos, Habana, Cuba. Aeroplane. 1,636, Montero, C July 19. 1.636.320:

July 19.

Monterubio, Taide, St. Louis, Mo. Tropical house.
1,620,776; Mar. 15.
Montfort, Adolph, Chicago, Ill. Stringed musical instrument. Des. 72,433; Apr. 12.
Montgomerle, John A., Glasgow, Scotland. Bituminous emulsion. 1,643,675; Sept. 27.
Montgomery, Alonzo B. (See McCrery, H. E., Jesser, and Montgomery).
Montgomery Bros. Inc. (See Montgomery, Hugh E., as-

Montgomery, Earl T. (See Jeffery, J. A., and Mont-

Montgomery, Esri T. (see Jenery, J. A., and Montgomery, Montgomery, Montgomery, Gustavus A., Titusville, Pa. Weight-Indicating device for well-drilling apparatus. 1,616,194; Feb. 1. Montgomery, Gustavus A., Titusville, Pa. Casing slip, 1,623,885; Apr. 5. Montgomery, Gustavus A., assignor to Titusville Forge Company, Titusville, Pa. Temper screw. 1,641,189;

Company, Titusville, Pa. Temper screw. 1,641,189; Sept. 6.

Montgomery, Gustavus A., Titusville, Pa., and D. L. Driscoil, Alhambra, Calit., assignors to Titusville Forge Company, Titusville, Pa. Controlling apparatus for Montgomery, Husley A., Highland Park, Mich. Making lubricanta. 1,617,455; Feb. 15.

Montgomery, Husley A., Highland Park, Mich. Making lubricants. 1,617,455; Feb. 15.

Montgomery, Husley A., Spotlight. 1,652,452; Dec. 13.

Montgomery, Knowlton D., Lansdale, Pa. Grease cup. Montgomery, Leon F. (See Mayers, Horace C., assignor.) Montgomery, Louis W., Indianapolis Ind. Camper's stove. 1,650,529; Nov. 22.

Montgomery Tool and Machinery Company, The. (See Dover, George W., assignor.)

Montgomery Ward & Company. Gee Robertson, Charles A., assignor.)

Montgomery Ward & Company. Gee Robertson, Charles A., assignor.)

Monthe, Williams. Les Trappe, Quebec, Canada. Incubator. 1,613,049; Jan. 4

Montsinger, Vincent M., Pittsfield, Mass., assignor to General Electric Company. Decorative lighting outfit. 1,637,046; July 26.

Montstream, John H., Hartford, Conn. Cutting tool. Monty, Henry J. (See Bumstead, R. W., and Robertson, assignors.)

Moody, Dan O., (See Ayery, C. W., and Moody.)

Monty, Helry 3, assignors, assignors, Moody, Dan O. (See Avery, C. W., and Moody, Joseph F., and V. L. Du Bois, assignors to A. H. Neilson, Tulsa, Okla. Safety hook. Rel6,613; May 3, Moody, Walter S., Pittsheid, Mass., assignor to General Electric Company. Electrical apparatus. 1,614,250; Neison.
Moody, Walter S., Pittsheur.
Dlectric Company. Electrical apparatus.
Jan. 11.
Moody, Walter S., Pittsfield, Mass., assignor to General
Moody, Walter S., Pittsfield Mass., assignor to General
Moody, Walter S., Pittsheur.

Plant Moody Market S., Pittsheur.

Plan

Mar. 29.

Moody, William O., La Grange, Ill. Driving box and spring saddle. 1,643,312; Sept. 27.

Mook, Clarence A., Erie, Pa. Sceuring tire-stem pads to tubes. 1,652,726; Dec. 13.

Moonny, Joseph G., Erie, Pa. Tire-molding apparatus. 1,649,843; Nov. 22.

Mill. 10,100 and 1,000 and 1,0

June 14.

Moon, Charles L., assignor to The Cecil R. Lambert Company Detroit. Mich. Rotary crossover switch. 1,652-568; Jun 14.

Moon, 167: Sept. 13.

Moon, John W., Lansdowne, Pa. Manufacturing metal tubing, 1,629,724; My 24.

Moon, John W., assignor to Fretz-Moon Tube Company, Butler, Pa. Apparatus for manufacturing continuous tubing from separate reels of skelp. 1,622,336; Mar. 29.

Mar. 29. Moon, Walter T., Baltimore, Md. Buckle holder. 1.616,866; Feb. 8. Moonbeam Manufacturing Company. (See David, Bruce

Moonbeam Manufacturing Company. (See David. Bruce W., assignor.)
Moone, Albert E. F., assignor to The Lebon Company, Chicago, Ill. Roofing. 1,623,127; Apr. 5.
Moone, Albert E. F., assignor of one-third to J. M. Coughlin, Chicago. Ill. Reel for electric conductors. 1,630,193; July 19.
Moone, Albert E. F., Chicago. Ill., assignor to The Lebon Company. Roofing. 1,646,551; Oct. 25.
Moone, Albert E. F., Issifiching mechanism for reels for Ill., assignor to The Lebon Company. Roofing. 1,646,551; Oct. 25.
Mooney, Ernest, Tork, England. Lubricating device for railway vehicle axless. 1,638,640; Aug. 9.

Mooney, Jerome H., New York, N. Y. Funnel. 1,651,963; Dec. 6.
Mooney, William, assignor of one-half to S. F. McGinn, Witterloo, Iowa. Combination heating apparatus. 1,621,640 Mar. 22.
Moore, Arisington, S. Witterland, Keyboard for key instruments, 1,618,546; Feb. 22.
Moor, Emmanuel, Mont Pelerin, Switzerland. Keyboard for key instruments and the second of the second for musical instruments. 1,618,547; Feb. 22.
Moore, Allibelle H., assignor of one-half to V. L. Philitan, 1,134,141; June 28.
Moore, Ambrose C., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake-beam support. 1,642,080; Sept. 13.
Moore, Ambrose C., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake-beam support. 1,644,081; C., assignor to Chicago Railway Equipment Company, Chicago, Ill. Connecting-rod safety loop. 1,644,481; Oct. 4.
Moore, Arlington, New York, N. Y. Infolding paper container bodies and the like. 1,627,049; May 3.
Moore, Arlington, New York, N. Y., assignor, bream assignments, to Maxmoor Corporation. Progressive. June 1.
Moore, Arlington, New York, N. Y., assignor to Moore assignments, to Maxmoor Corporation. Progressive. June 1.
Moore, Arlington, New York, N. Y., assignor to Moore and the second progressive assignments, to Maxmoor Corporation. Progressive. June 1.
Moore, Arlington, New York, N. Y., assignor to Moore ariging to Arlington, New York, N. Y., assignor to Moore ariging to Moore ariging to Moore ariging to Maxmoor Corporation. Progressive. June 1.
Moore, Arlington, New York, N. Y., assignor to Moore ariging to Maxmoor Corporation. Progressive. June 2.
Moore, Arlington, New York, N. Y., assignor to Moore ariging to Maxmoor Corporation. Progressive. June 2.
Moore, Arlington, New York, N. Y., assignor to Moore ariging to Maxmoor Corporation. Progressive. June 2.
Moore, Arlington, New York, N. Y., assignor to Moore ariging to Maxmoor Corporation. Progressive. June 2.
Moore, Arlington, New York, N. Y., assignor to Moore ariging the Maxmoor Corporation. Progressive. June 2.
Moore, Arlington, New

impulse internal-combustion engine. 1.833.885; June 21. Moore, Arlington, New York, N. Y., assignor to Moore Inventions Corporation, Worcester, Mass. Internal-combustion-regize decarboniher. 1.632,721. June 25. Haventons Corporation, Worcester, Mass. Process of and apparatus for making sanitary metal cans. 1,638,103; July 19. Moore, Arlington, New York, N. Y., assignor to Moore Inventions Corporation, Worcester, Mass. Combined and the company of the co

July 19.

Moore, Arlington, New York, N. Y., assignor to Moore Inventions Corporation, Worcester, Mass. Sanitary Moore, Arlington, Worcester, Mass. Sanitary Moore, Arlington, Wash (1997), 1997

May 3.

Moore, Arlington, Boston, Mass. Paper dish. 1,627,051;
May 3.

Moore, Arlington, assignor to Moore Inventions Corporation, Worcester, Mass. Gyral wheel. 1,625,327;

tion, w. Apr. 19.
Apr. Arlington, Corporat Apr. 19.

Moore, Arlington, Worcester, Mass., assignor to ClarkeMoore Corporation, Wilmington, Del. Paper container.
1,627,047; May 3.

Moore, Arlington, Worcester, Mass., assignor to Clarke1,627,048; May 3.

Moore, Benjamin F., Parkersburg, W. Va. Swinging
hook, 1,637,047; July 26.

Moore, Benton, assignor of one-half to J. F. Rogers,
Freener, 1,629,726, May 24.

Moore Brothers Company. (See Dibble, Claude M., assignor).

Moore Brothers Company.

Signor.)

Moore Bros. Co. (See Lurcott, Winfred N., assignor.)

Moore, Callie F., et al. (See Gallagher, George D., as-

Moore, Childe F., et al., Signor), Moore, Charles A., & C. Bryling cabinet. Winston-Salem, N. C. Drying cabinet. Sci. 2830; Dec. 18.

Moore, Charles A., & Paul, Minn. Combination refrigerator, heater, ventilator, and humidifier. 1,612,827;

Moore Charles A., St. Paul, Minn. Combination refrigerator, heater, ventilator, and humidifier. 1,612,827; Jnn. 4.

Moore, Charles A., St. Paul, Minn. Ventilating, heating, and humidifying appuratus. 1,643,345; Sept. 27.

Moore, Charles A., St. Paul, Minn. Temperature-changing and air-circulating appliance. 1,634,346; Sept. 1,644,073; Oct. 4.

Moore, Charles A., St. Paul, Minn. Atmospheric conditioner for rooms. 1,654,342; Dec. 27.

Moore, Charles A., St. Paul, Minn. Precooling structure. 1,654,348; Dec. 27.

Moore, Charles A., St. Paul, Minn. Precooling structure. 1,634,349; Dec. 27.

Moore, Charles A., St. Paul, Minn. Precooling structure. 1,634,349; Dec. 27.

Moore, Charles C., San Francisco, Calif. Sulphurkling, dehydrating, and desulphurking fruit. 1,633,923; June 28.

Activation of the control of the con

Moore, Charles R., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone transmitter, 1,628,898; May 17.

Moore, Charles R., Maplewood, N. J., and J. M., Hayward, New York, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., Double-diaphragm transmitter, 1,624,898; York, N. Y., Double-diaphragm transmitter, 1,624,624; Rapids, Ed., Double-diaphragm support, 1,640,664; Aug., 30.

Moore, Charles W., See Ryder, P. H., and Moore.)

Moore, Charles W., South Bend, Ind., assignor to Oliver Chilled Plow Works, Plow. 1,652,287; Dec. 13.

Moore, Chester M., Wakefield, Mass., assignor to Moore Shank Company, Everett, Mass. Shank stiffener.

Moore, Dorsey E., Bruceton, assignor of one-half to O. A. Harker, Jr., Puryear, Tenn. Fire-box arch. 1,641,043; Aug., 30.

Moore Dys Kiln Company. (See Bundrick, David D., as-

Aug. 30, Moore Dry Kiln Company. (See Bundrick, David D., assignor.)
Moore, Edgar D., Cleveland, Ohio. Automatic circuit

signor.)

Moore, Edgar D., Cleveland, Ohio. Automatic circuit breaker. 1,643,415; Sept. 27.

Moore, Edward C., Los Angeles, Calif. Ice card. 1,617,164; Feb. 8.

Moore, Elevent C., Los Angeles, Calif. Ice card. 1,617,164; Feb. 8.

Moore, England Desper Corporation, Hopedale, Mass. Clothguiding means for looms. 1,649,612; Nov. 15.

Moore, Frenest R., Gadsden, Ala. Revolving grate. 1,631,427; June 7.

Moore, F. Thomas. (See Rosenberg, A., and Ollinger, assignors.)

Moore, Francis J., Minneapolis, Minn. Roof jacket. 1,647,444; Nov. 1.

Moore, Francis K. (See Rodgers, T. T., Giblin, and Moore.)

Moore, Francis J.

1,621,412; Nov. 1.

Moore, Moore, North Tonawanda, N. Y. Method and machine for shredding wood. 1,623,261; Apr. 5.

Moore, Frank J., North Tonawanda, N. Y. Method and machine for shredding wood. 1,623,261; Apr. 5.

Moore, Frank J., North Tonawanda, N. Y. Wall board and forming the same. 1,644,109; Oct. 4.

Moore, Frank J., North Tonawanda, N. Y. Piston-ring compressor. 1,616,769; Jan. 25.

Moore, Frank S., Queens Village, N. Y. Lock clip for nipples. 1,645,963; Oct. 18.

Moore, Frank W., Redlands, Calif. Gas cock or valve. 1,652,926; May 24.

Moore, Fred E., Los Angeles, Calif. Furniture. 1,629,926; May 24.

Moore, George L., Os Angeles, Calif. Furniture. 1,629,926; May 24.

Moore, George A., Wilmington, N. C. Automatic cutoff and drainage valve. 1,627,762; May 3.

Moore, George L., Muskegon, Mich., assignor to Manning struction for cranes. 1,927,746; May 10.

Moore, George L., Bethlehem, Pa. Rail anchor. 1,620,727; May 3.

Moore, George L., Bethlehem, Pa. Rail anchor. 1,620,727; Mar. 3.

Strele Corporation. Rail anchor. 1,650,229; Nov. 2.

Moore, George T., See Rodgers, T. T., Giblin, and Moore, Moore, George T. See Rodgers, T. T., Giblin, and Moore, Harold J., assignor to The Russell Manufacturing Moore, G Moore.)

Moore, Harold J., assignor to The Russell Manufacturing Company, Middletown, Conn. Fabric. 1,622,250; Mar. 22.

Mar. 22.

Moore, Harry S., Atlantic City, N. J., assignor to Arlington Moore, New York, N. Y. Composite candy. 1,652,789; Dec. 13.

Moore, Harvey G., Buffalo, N. Y. Junction box for portable lights. 1,647,187; Nov. 1.

Moore, Henry N. (See Le Munyon, E. C., and Moore, Moore, Henry M. (See Le Munyon, E. C., and Moore, Los Angeles, Calif. Slush-pump piston. 1,646,827; Oct. 26.

Moore, Howard P., Cuyahoga Falls, assignor to The Moiawk Rubber Company, Akron, Ohio. Machine for removing air bags from tires. 1,631,281; June 7. Moore, Hugh K., assignor to Brown Company, Berlin, N. H., Producing calcium arsenate. 1,619,267; Mar. I. Moore Inventions Corporation. (See Moore Arlington,

assignor.)
Moore, Ira A., and T. M. Ely, Cedar Rapids, Iowa. Rail-way-crossing gate. 1.638,502; Aug. 9.
Moore, Isaac C., Cleo Springs, Okla. Drag. 1,641,348; Sept. 6.

Sept. 5.
Moore, Jacob L. (See Reichart, James H., assignor.)
Moore, Jacob L., Muncle, Ind. Bed. 1,624,965; Apr. 19.
Moore, James. (See Allan, H. L., and Moore, James S., assignor to The Edwin F. Guth Company, St. Louis, Mo. Lighting fature. Des. 72,908; pany, St June 21,

Moore, James W., and S. D. Moxley, assignors to American Cast Iron Pipe Company, Birmingham, Ala. Cupola charger. 1,647,648; Nov. 1.

Moore, John, Berkeley, Calif. Tollet-flushing means.

ean Cast Iron Pipe Company, Birmingham, Ala. Cupola charger. 1,637,648; Nov. 1.
Moore, John, Berkeley, Callf. Tollet-flushing means. 1,622,137; Mar. 22.
Moore, John A., Gervais, Oreg. Shock-absorbing snubbing device for vehicles. 1,615,993; Feb. 1.
Moore, John D., Massillon, Ohio. Spark-plug protector. 1,615,299; Jan. 25.

Moore, John E., Manchester, England. Spinning, twisting, cabling, and proofing of yarns. 1,647,303; Nov. I. Moore, John E., Blackburn, England. Apparatus for selecting and separating warp threads. 1,652,316; Dec. 13.

Moore, John L., Alexandria, Minn. Oar lock. 1,621,946; Mar. 22.

Moore, John R. (See Baker, H. G., and Moore.)

Mar. 22.

Moore, John R. (See Baker, H. G., and Moore.)

Moore, John S., Springfield, Mo. Signal box. Des. Moore, Karl W., Cynthiana, Ky. Tail-docking machine. 1,629,042; May 17.

Moore, Lee R., Kansas City, Mo. Tire patch. 1,624,619; Apr. 12.

Apr. 12.

Moore, Mary B., et al. (See Moore, Samuel M., assignor, Moore, Max J., Newark, N. J., assignor to W. H. Collins, Summit, N. J. Trap-nest attachment. 1,619,527; Mar. 1.

Merle M. (See Chappell, M. L., Davis, and

Moore, Merie M. (See Caspys), Moore, More, Mose, Moore, Parlie City, Oreg. Animal trap. 1.645,444; Oct. 11. Rail anchor. 1,613,404; Moore, Philip W., Hubbard Woods, assignor to The P & M Company, Chicago, Ill. Rail anchor. 1,613,404;

Jan. 4. Moore Press, Inc., The. signor.) (See Faulkner, David C., as-

signor.)
Moore, R. W., et al.
Moore, Raymond G., assignor to The Basslek Company,
Bridgeport, Conn. Latch. 1,632,707, May 31,
Moore, Raymond G., assignor to The Basslek Company,
Bridgeport, Conn. Automobile hood clamp. 1,637,530; Moore, Raymond Bridgeport, Conn.

Moore, Raymond G., assignor to The Bassick Company, Bridgepoort, Conn. Automobile hood clamp. 1,637,530; Aug. 2.

Moore, Raymond H. (See Beetham, M. F., and Moore.) Moore, Raymond H. (See Minich, V. E., and Moore.) Moore, Raymond H. (See Minich, V. E., and Moore.) Moore, Raymond H. (See Minich, V. E., and Moore.) Moore, Roscoe, assignor to Vulcan Iron Works, Wilkes-Barre, P.a. Brake engine. 1,613,474; Jan. 4.

Moore, Roscoe, assignor to Vulcan Iron Works, Wilkes-Barre, P.a. Brake engine. 1,613,474; Jan. 4.

Moore, Roswell A., and W. F. Murtha, assignors to Waterbury Buckle. Co., Waterbury, Conn. Buckle. Rel6,435; Sept. 22 Co., Waterbury, Conn. Buckle. Rel6,435; Sept. 24 Congran, J. Gorbann, and towoc, Wis. Automotive crane. 1,629,521; May 24.

Moore, Samuel, and F. O. Sheets, assignors of part interest to D. Serugss, C. Morgan, J. Gorbann, and R. Thompson, Fairmont, and H. L. Kuhn, Shinston, said Frairmont, W. M. Keener, F. (See Woore, Canada, W. M. Keener, F. (See Woore, Canada, W. M. Keener, Summer, and one-sixth to R. A. Welton, one-sixth to B. Sagers, Lawrenceville, Ill. Dancing figure toy. 1,622,655; Apr. 26.

Moore, Samuel M., assignor of one-sixth to W. J. Moore, Sumbank Company. (See Moore, Chester M., assignor, Moore, Shoe Company. The. (See Moore, Chester M., assignor, Moore, Shoe Company. The. (See Moore, Chester M., assignor, Moore, Shoe Company. The. (See Moore, Chester M., assignor, Moore, Shoe Company. The. (See Moore, Chester M., assignor, Moore, Shoe Company. The. (See Moore, Chester M., assignor, Moore, Ches

signor.) Moore Shoe Company, The. (See Rohrer, Arthur M., assignor.)
Moore & Steele Corporation. (See Moore, George L., as-

signor.)

Moore Theodore A. Davenport, Iowa. Floor-strip clipsetting device. 1,632,242; June 14.

Moore, Thomas F. Morris Plains, N. J. Well point.
1,648,587; Nov. 8.

Moore, Thomas J., McLean County, Ill. Gate-latching
mechanism. 1,630,146; Nov. 22.

Moore, Thomas W., Dallas, Tex. Motor-vehicle luggage
carrier. 1,646,163; Oct. 18.

Moore, Tom. Cinclinnati, Ohio. Rectifying radio shield.
1,641,395; Sept. 6.

Moore, Tom, Chichmath, Ohio. Rectitying radio shield. 1,641,395; Sept. 6.

Moore, Ward H., Des Moines, Iowa. Wood-turning lathe. Moore, William D., Birmingham, Ala., assignor to Sand Spun Patents Corporation, Wilmington, Del. Centrifugal pipe head core. 1,613,899; Jan. 11.

Moore, William D., Birmingham, Ala., assignor to Sand Spun Patents Corporation, Wilmington, Del. Making Spun Patents Corporation, Wilmington, Del. Making Spun Patents Corporation, Wilmington, Del. Charging device for tilting moids. 1,620,831; Mar. 15.

Moore, William D., Birmingham, Ala., assignor to Sand Spun Patents Corporation, Wilmington, Del. Charging device for tilting moids. 1,620,831; Mar. 15.

Moore, William D., Birmingham, Ala., assignor to Sand Spun Patents Corporation, Wilmington, Del. Moid Spun Patents Corporation, Wilmington, Del. Moid Moore, William D., Birmingham, Ala., assignors to Sand Spun Patents Corporation, Wilmington, Del. Moid Moore, William D., New York, N. Y. Method of and apparatus for centrifugally casting metal bodies.

Moore, William D., and W. Morgan, Birmingham, Ala, assignor, by mesne assignments, to Sand Spun Patents Corporation, New York, N. Y. Method of and apparatus for centrifugally casting metal bodies. 1,620,830; Mar. 15.

Moore, William J., et al. (See Moore, Samuel M., assignor.)

Moore, William J. P., New York, N. Y. Interlock for pneumatic-tire casings, inner tubes, and wheel rims. 1,645,921; Oct. 18.

Moore, William M., Palmerston North, New Zealand. Draw-off appliance for liquid containers. 1,618,720; Feb. 22.

Moore, William N., Abilene, Tex. Casing puller. 1,621,947; Mar. 22.

Moore, William T., Peoria, III. Terminal puller. 1,615,717; Jan. 25.

Moores, Aeolian E., Dallas, Tex. Gas stove. Re16,530;

Moores, A Jan. 11

Moores, Acolian E., Dallas, Tex. Gas stove. Re16,530; Jan. 11.

Jan. 11.

Moores, Carles F. (See Ryder, C. D. and Moores.)

Moores, Carles F. (See Ryder, C. D. and Moores.)

Moores, Carles F. (See Ryder, C. D. and Moores.)

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehiele. 1,620,373; Mar. 15.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Carburetor. 1,645,341; Oct. 11.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,645,342; Oct. 11.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,645,342; Oct. 11.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,645,342; Oct. 11.

Moorhouse, Alfred, assignor to Packard Motor Car Com-pany, Detroit, Mich. Motor vehicle. 1,647,838; Nov. 1. Moorhouse, Alfred, assignor to Packard Motor Car Com-pany, Detroit, Mich. Motor vehicle. 1,647,839; pany, Nov. 1.

Moorman, Charles L., Chicago, Ill. Brake mechanism for railway cars. 1,639,806; Aug. 16. Moorman Mfg. Co. (See Miner, C. S., and Stanger, as-

Moram, Mg. Co. (See Miner, C. S., and Stanger, asasignors.)
Moramal Mg. Co. (See Miner, C. S., and Stanger, asasignors.)
Mose, L. O., et al. (See Rufty, Verdie C., assignor.)
Morabito, Luigi, Fort Chester, N. Y. Gas burner for
heating purposes. 1,636,634; July 19.
Moran, Frank B., Dallas, Tex. Driving shield. 1,643,509;
Moran, George R., Sandusky, Ohlo. Bearing for railroad
trucks and similar structures. 1,635,685; July 12.
Moran, John G., Brooklyn, assignor to A. Kimball Company, New York, N. Y. Marking tleket, 1,640,006;
Aug. 23.
Moran, Lavence, Chicago, Ill. Adjustable droplight-cord
Moran, May, Westmount, Quebec, Canada. Sewing-machine attachment, 1,635,3115; Dec. 20.
Moran, Robert B., and A. F. Spengler, assignors to
Spengler Core Drilling Company, Los Angeles, Calif.
Rotary core drill. 1,626,249; Apr. 26.
Moran, Robert C., Woodbury, N. J., assignor to E. I. du
Pont de Nemours & Company, Wilmington, Del. Nitroglucoside explosive. 1,630,573; May 31.
Moran, Nobert C., Woodbury, N. J., assignor to E. I. du
Pont de Nemours & Company, Wilmington, Del. Nitroglucoside explosive. 1,630,573; May 31.
Moran, Robert C., Woodbury, N. J., assignor to E. I. du
Pont de Nemours & Company, Wilmington, Del. Nitroglucoside explosive. 1,630,573; May 31.
Moran Robert C., Woodbury, N. J., assignor to E. I. du
Pont de Nemours & Company, Wilmington, Del. Nitroglucoside explosive. 1,630,578; May 31.
Moran, Stanislaus J. (See Knapp, Sydney H., assignor.)
Morants, Sam. (See Brown, W., and Morano,)
Moratta, Mathew M., Princeton, Ind. Plston ring.
1,627,107; May 3.
Moravec, John, Vancouver, Britlsh Columbia, Canada,
Log-barkhing apparatus. 1,619,161; Mar. 1.

1,627,107; May 5.

Moravec, John, Vancouver, British Columbia, Canada, Log-barking apparatus. 1,619,151; Mar. 1.

Moravec, John, Vancouver, British Columbia, Canada, Paper-making machine. 1,640,007; Aug. 23.

Moravec, Joseph E. (See Vorel, Frank, assignor). Moravec, Joseph E. (See Vorel, Frank, assignor). Mording, Rajh, assignor to The Relay Automatic Telephone Company, Limited, London, England. Automatic and semi-automatic telephone system. 1,622,206;

Apr. 26.

Apr. 26.

Mordt. Erik J., Evanston, Ill. Jumping rope. Des. 73,755; Nov. 1.

Moreau, Henri, Parls, France. Apparatus for central heating. 1,629,043; May 17.

Moreau, Jean, Noyellessau-12.

Moreau, Jean, Noyellessau-12.

Moreavorit, Frederick L., Syracuse, N. Y. Cut-glass bowl. Des. 74,019; Dec. 6.

Morchead, George L., and F. S. O'Nell, Indianapolis, Ind. assignors to Link-Belt Company, Chicago, Ill. Steel conveyer chain and link. 1,638,267; Aug. 8.

Morehouse, Ed. askinov to E. A. Ballou & Co., Inc., 73,536; Sept. 27.

Morehouse, Eugen, assignor to B. A. Ballou & Co., Inc., Morehouse, Eugene assignor to B. A. Ballou & Co., Inc., Morehouse, Eugene assignor to B. A. Ballou & Co., Inc., Morehouse, Eugene assignor to B. A. Ballou & Co., Inc.,

73,335; Sept. 27.

Morehouse, Eugene, assignor to B. A. Ballou & Co., Inc., Providence, R. I. Clasp. 1,615,476; Jan. 25.

Morehouse, Eugene, assignor to B. A. Ballou & Co., Inc., Providence, R. I. Forming the body member of a safety catch. 1,635,188; July 12.

Morehouse, Frank B., and F. Haase, San Francisco, Calif., assignors to Trayway Mfg. Co. Washing machine. 1,627,053; May.

Morehouse, Harold E. (See Angle, G. D., and Morehouse, Harold E.

Morehouse, Harold E., Dayton, Ohio. Aircraft engine. 1,627,108; May 3. Morehouse, Samuel C. New Haven, Conn. Sleeping mat. Moreland, George E., assignor to Western Drop Forge Company, Los Angeles, Calif. Sucker-rod centralizer. 1,614,881; Jan. 11. Moreland, Lester Ar. assignor to The de Laski & Thropp Ble core and chuck. 1,633,263; June 7, Local Collapsible core and chuck. 1,633,263; June 7, Local Collapsible core and chuck. 1,633,263; June 7, Local Sam, Gaston, Orge, Animal trap. 1,630,768; May 10. Morell, Sam, Gaston, Orge, Animal trap. 1,630,768; May 10. Morell, Sam, Gaston, Orge, Animal trap. 1,630,768; May 10. Morell, Jan de D., San Francisco, Calif. Reversible comb. 1,624,755; Apr. 12. Morent, Clearles, John, Botoline, Mass. Angle dividers or Moreschad, John, Brotoline, Mass. Angle dividers or Moreschad, John, Brotoline, Mass. Angle dividers or Moretti, Cosimo P., and E. Mezzera, Leavenworth, Kans. Belt. 1,629,363; Ang. 16. Morecy, Frank A. (See Poeton, L., and Morey, Pank A. (See Poeton, L., and Morey, Pank A. (See Poeton, L., and Morey, Morey, Morell, More, June B. E. (See Hason, Roy E., assignor, Moreal, John F., Springfield, Ohio, Chuck. 1,631,499; Morgal, John F., Springfield, Ohio, Morgal, John F., Springfield, Ohio, Chuck. 1,631,499; Morgal, John F., Springfield, Ohi

Signor.)
Morgan, Arthur L., Montreal, Quebec, Canada. Chain grate for furnaces. 1,631,282; June 7.
Morgan, Benjamin, Shadyside, Ohio. Automobile head-light. 1,647,011; Oct. 25.
Morgan Blodgett Morgan, Inc. (See Morgan, Porter S.,

signo

assignor.)
Morgan, Bruce F., Seattle, Wash. Mechanically-operated figure toy. 1,647,537; Nov. 1.
Morgan Canning Company, The. (See Eddington, William R., assignor.)
Morgan, Charles F., Jackson, Tenn. Grain door. 1,638,503; Aug. 9.
Morgan, Charles W., Youngstown, Ohio. Electrical heat-the company of the co

Morgan Construction Company. (See George, Jerome R., assignor.) Morgan Construction Company. (See Isley, George H.,

Morgan Construction Company. (See Keller, Alfred R., assignor.)

Morgan Construction Company. (See Lewis, K. B., and Ellsworth, assignors.)

and Ellsworth, assignors.)
Morgan Construction Company. (See Sheperdson, John
W., assignor.)
W., assignor.)
W., assignor.)
Morgan, Daniel H. (See Swanson, A. E., and Morgan.)
Morgan, Daniel H. (See Adams, A. S., and Morgan.)
Morgan, Edmund C., deceased, New York, N. X.; O. E.
Morgan, executrix. Mining machine. 1,637,531;

Morgan, executrix. Mining machine. 1,637,531;
Aug. 2. Morgan, Edmund C., deceased, New York, N. Y.; O. E. Morgan, executrix. Mining and loading machine. 1,637,733; Aug. 2.
Morgan, executrix. Mining machine. 1,639,050; Aug. 16.
Morgan, executrix. Mining machine. 1,639,050; Aug. 16.
Morgan, executrix. Mining apparatus. 1,642,885;
Suba. Edmund C., deceased, O. E. Morgan, executrix. Mining apparatus. 1,642,885;
Suba. Edmund C., deceased; O. E. Morgan, executrix.

Sept. 20.
Morgan, Edmund C., deceased; O. E. Morgan, executrix,
New York, N. Y. Coal-mine roof-supporting mechanism
and operating the same. 1,846,417; Oct. 25.
Morgan, Edmund C., deceased, New York, N. Y.; O. E.
Morgan, executrix. Drilling apparatus. 1,648,911;
Nov. 22.
Morgan, executrix. Drilling apparatus. 1,648,911;
Nov. 22.
Mining and loading machine. 1,650,027;
Nov. 22.
Mining and loading machine. 1,650,027;
Nov. 22.

N. Y. Mining and loading machine. 1,650,027;
Nov. 22.
Morgan, Fully G. Filsushing, N. Y. Electric screw-drivMorgan, Emerson E. Yonkers, and W. H. Day, New
Rochelle, N. Y. Lip stick. 1,631,283; June 7.
Morgan, Everett C. and J. E., Camden, and G. P. Pinzka,
Mantina, N. J. Leather-glazing machine. 1,654,428;
Dec. 27.

Morgan, Evor P., et al. (See Anthony, Daniel L., assignor), George S., Toledo, Ohio, Removing deterrent saits from pickling liquids. 1,628,623; May 3. Morgan, Harry D., and F. P. Bushey, San Francisco, Calif.; said Bushey assignor to said Morgan, Dosage spoon. 1,619,878; Mar. 8.

Morgan, Harry J. (See Poindexter, R. W., jr., and Morgan, Howard H., Hollywood, Calif. Mechanical toy. 1,623,886; Apr. 5.

Morgan, Harry J.

Morgan, Howard H., Hollywood, Calif. Mechanical toy.

J. 622,586 Apr. 5.

J. 622,586 Apr. 5.

J. 622,586 Apr. 6.

J. 622,586 Apr. 6.

Pittsburgh Pa. Back-draft damper. 1,652,790; Dec. 13.

Morgan, J. Scott. (See Morgan, Ira D., assignor.)

Morgan, John A., Machinery Company. (See Morgan, John A., Massignor.)

Morgan, John A., assignor to The John A. Morgan Machinery Company. Los Angeles, Calif. Pump.

J. 636,826; July 26.

Morgan, John A., assignor to The John A. Morgan Machinery Company, Los Angeles, Calif. Pump.

J. 632,317; Dec. 13.

Morgan, John A., Machinery Company, The. (See Morgan, John A., Machinery Company, Los Angeles, Calif. Pump.

J. 632,317; Dec. 18.

Morgan, John A., Machinery Company, The. (See Morgan, John A., Bachinery Company, Los Angeles, Calif. Pump.

J. 632,317; Dec. 18.

Morgan, John I., Farmville, N. C. Mattress. 1,644,600; Oct. 4, 10ct. 4, 10c

assignor.) A., Caccutrix. (See Morgan, Edmund C., Morgan, Philip. (See Holden, A. P., Morgan, and Williams.)

liams.)

Morgan, Porter S., Norwalk, Conn., assignor to Morgan Blodgett Morgan, Inc., New York, N. Y., Shock-absorbing mechanism. 1.616.540; Feb. 800.

Morgan, Ralph L. Worcester, assisted for py messe assigned to the control of th

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Susanna. (See Reynolds, W. B., and Jackson,

Dec. c. Morgan, Susanna. (See Reynolds, W. B., and Jackson, Assignors.)

Assignors. The control of the control

Morgan & Wright. (See Coffin, Joseph G., assignors.)
Morgan & Wright. (See Fisher, George F., assignor.)
Morgan & Wright. (See Hopkinson, E., and Coe, as-

signors.)
Morgan & Wright. (See Lough, H. V., and Mix, assignors.)
Morgan & Wright. (See Seiberling, George W., as-

signor.)
Morgenroth, Charles R. (See Morgenroth, Edwin and C.)
Morgenroth, Edwin L. Kewaskum, and C. R. Morgenroth,
Milwaukee, Wis. Quack-grass-root rake. 1,626,046;
Apr. 26.

Apr. 26.

Morgenstern & Brosseau, Inc. (See Borfuss, Maurice, assignor.)

Morgenthaler, William. (See Lewis, L. P., and Morgenthaler.)
Morl, Charles R., New York, N. Y. Basket. 1,628,176;
May 10.

Mori, Charles R., New York, N. Y. Basket. 1,628,176;
May 10. John H., Buffalo, N. Y., assignor to The Barparatus. 1,637,956; Aug. 2.
Morinaty, John J. (See Davis, Ralph C., assignor.)
Morichard, Jean H. A., Amsterdam, Netherlands. Device
for graphically indicating information on plans, maps,
Morimura Bross, Inc. (See Tomita, Ursasaburo, assignor.)
Morin, Charles A., Boston, Mass. Waterproofed insole.
Morin, Charles A., Boston, Mass. Waterproofed insole.
Morin, Charles A., Boston, Mass. Waterproofed insole.
Morin, George S., Minneapolls, Minn. Attachment for
shampoo boards. 1,617,637; Peb. 15.
Morin, Henry L., Springfield, Mass. Safety device for
feeding clothes to wringers. 1,651,615; Dec. 6.
Morin, Leon J., Tanuton, Mass. Amusement device.
Morin, Louis H., assignor to A. S. Phillips, New York,
N. Y. Machine for making pyjama frogs. 1,639,098;
Aug. 16.
Morin, Louis H., assignor to A. S. Phillips, New York,
N. Y. Machine for making pyjama frogs. 1,639,098;
Aug. 16.

Morin, Louis H., assignor to A. S. Phillips, New York, N. Y. Machine for making pyjama frogs. 1,633,996 Morin, Louis H., New York, N. Y., assignor to Doehler Die-Custing Company. Vending machine. 1,652,540; Die-13. Dec. 13.

Dec. 13.

Morin, Phyrne, and F. D. Lorenz, Burlingame, Calif.
Shipping box and holder for flowers and the like.
1,640,197, Aug. 30.
1,640,197, Aug. 30.
Philadelphia, Pa. Shock absorber.
Reid.582; Apr. 30.
Morisente, Frank J., and A. Schinkez, Detroit, Mich.
Assembling automobile springs. 1,652,791; Dec. 13.
Morison, George S., assignor to Morison Incorporated,
Pittsburgh, Fa. Ball transmission. 1,634,607; July 5.
Morison Incorporated. (See Morison, George S., assMorison Incorporated. (See Morison, George S., ass-

Pittsburgh, Pa. Ball. transmission. 1,634,507; July 5. Morison Incorporated. (See Morison, George S., assignor.) Morkrum-Kleinschmidt Corporation. (See Faller, E. A., and Kleinschmidt Corporation. Edward E., assignor.) Morkrum-Kleinschmidt Corporation. (See Kleinschmidt, L. and H. L., assignors.) Morkrum-Kleinschmidt Corporation. (See Krum, Charles L. and H. L., assignors.)

L., assignor.) Morkrum-Kleinschmidt Corporation. (See Nelson, Carl E.,

assignor.)
Morkrum-Kleinschmidt Corporation. (See Reiber, Albert H., assignor.)

Morlan, Ernest E., Los Angeles, Calif. Stencil dupli-cating device. 1,643,028; Sept. 20. Morland and Impey, Limited. (See Horsfield, Walter R.,

assignor.)
orley, Charles F. (See Fairchild, E. E., Adamson, and
Morley.)

Morley, Denys W., Victoria, Hongkong, assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,614,012; Jan. 11.

Morley, Earl M., Delta, Ohio, assignor to The Air-Scale Company, Toledo, Ohio. Air-pressure regulator. 1,626,618; June 14.

Morley, Earl M., Delta, Ohio, assignor to The Air-Scale Company, Toledo, Ohio. Tire-inflation mechanism. 1,632,619; June 14.

Morley, Earl M., Delta, assignor to The Air-Scale Company, Toledo, Ohio. Paeumatic-tire-charging equipment. 1,633,492; June 21.

Morley, Guilford S., University City, assignor to Majestic 1,626,647; Apr. 20.

Morley, Michael, Brooklyn, N. Y. Boller. 1,625,046; Apr. 19.

Morley, M Apr. 19.

Apr. 19.

Morlock, Heinrich, Pforzheim, Germany, Magazine pencil. 1.644,740; Oct. 11.

Moro Plow & Manufacturing Company, The. (See Monson, Martin B., assignor.)

son, Martin B., assignor.)

Morosca, Bruno, New Orleans, La. Faper winder.

1.652,041; Dec.

Moross, Joseph A., Detroit, Mich. Producing imitation
marble. 1.623,967; Apr. 12.

Morral, Samuel E. (See Morral, William W., assignor.)

Morral, William W., assignor of one-half to S. E. Morral,

Morral, William W., assignor of one-half to S. E. Morral,

Morral, William W., assignor of one-half to S. E. Morral,

Morral, Olio. Corr-husking machine. 1,628,232;

Maryal

May 10.

Morreall, Herbert W., Pine Grove, Pa. Furnace-door fastener. 1,642,621; Sept. 13. Morrell, Charles G., Oak Park, Ill. Bumper. 1,614,251; Jan. 11.

Morrell, Jacque C., Oak Park, III. Making covering material. 1,618,102; Feb. 15.

Morrell, Jacque C., assignor to Universal Oil Products Company, Chicago, III. Treatment of petroleum residue. 1,618,669; Feb. 22.

Morrell, Jacque C., and S. Comay, assignors to Universal Oil Products Company, Chicago, III. Purifying hydrolike bodies from cracked hydrocarbon products. 1,627,054; May 3.

Morrell, Jacque C., and G. Egloff, assignors to Universal Oll Products Company, Chicago, Ill. Obtaining resincarbon oils. 1,627,055; May 8.

Morrell Mills, Inc. (See Holmes, Benjamin, assignor.)

Morrill, Alfred R. (See Topham, L. B., and Morrill.)

Morrill, Alfred R., Beverly, Mass., assignor to United Shee Machinery Corporation, Patersson, N. J. Sewing machine. 1,635,856; July 12.

Morrill, Cherles H., Swampscott, Mass., assignor to United 1,627,661; May 1,000 portilon, Faterson, N. J. Last. 1,027,661; May 1,000 portilon, Faterson, N. J. Last. 1,000 portilon, N. J. Chicago, J. Morrill, William C., New York, N. Y. Liquid-soap dispenser. 1,647,285; Nov. 1.

Morrill, William W., and W. V., Spokane, Wash. Velocities

Worrill, William W., and W. V., Spokane, Wash. Velocipede. 1,632,092; June 14.
Morris, Adrian K., Atlanta, Ga. Face mask. 1,627,523;
May 3.

medel. 1,632,092; June 14.

Morris, Adrian K., Atlanta, Ga. Face mask. 1,627,523; May 3.

Morris, Alexander, and V. L. Morris, San Francisco, Calif. Set-shift parallel ruler. 1,633,493; June 21.

Morris, Alexander, and V. L. Morris, San Francisco, Calif. Set-shift parallel ruler. 1,633,493; June 21.

Morris, Calif. S., Brooklyn, N. Y. Faucet-bulb connection. 1,628,733; May 17.

Morris, Calif. E., Brooklyn, N. Y. Faucet-bulb connection. 1,628,733; May 17.

Morris, Charles E., Philadelphia, Pa. Toy wagon. 1,642,591; Sept. 13.

Morris, Calif. E., Betersburg, Fla. Traffic signal. 1,642,691; Sept. 25.

Morris, Garl V., Big Lake, Tex. Air washer for internal-combustion engines. 1,619,029; Mar. 1.

Morris, Garl V., Big Lake, Tex. Air washer for internal-combustion engines. 1,619,029; Mar. 1.

Morris, Garl V., Big Lake, Tex. Air washer for internal-combustion engines. 1,619,029; Mar. 1.

Morris, Gelward M., Rochester, N. Y. Lifting tongs. 1,627,524; May 3.

Morris, Fred C., San Francisco, Calif. Bushing for steering columns. 1,636,528; July 19.

Morris, George A., and C. S. Pallot, Port Haney, British 1,626,473; Apr. 26.

Morris, George A., and C. S. Pallot, Port Haney, British 1,626,473; Apr. 26.

Morris, George D., assignor to American use. Morris, George D., Sassignor to American Company, New Castle, Pa. Refractory body. 1,642,886; Sept. 20.

Morris, George D., Morris, Inc., Cleveland, Ohio. Kiln car. 1,642,938; Sept. 20.

Morris, George D., Missoula, Mont. Pet-cock and priming-cup cleaner. 1,638,264; June 21.

Morris, George T., Missoula, Mont. Pet-cock and priming-cup cleaner. 1,638,264; June 21.

Morris, George T., Missoula, Mont. Pet-cock and priming-cup cleaner. 1,638,264; June 21.

Morris, Herbert, South Valley, N. Y. Stone picker. 1,625,560; Apr. 19.

Morris, Herbert, South Valley, N. Y. Stone picker. 1,625,560; Apr. 19.

Morris, Howard H., Lakewood, assignor to Cord Tire Machine Company, Cleveland, Ohio. Apparatus for winderline Company, Cleveland, Ohio. Apparatus for winderline Company, Cleveland, Ohio. App

assignor.)
Morris, Howard A. (See Aldrich, J. P., and Morris.)
Morris, Howard I., Lakewood, assignor to Cord Tire Machine Company, Cleveland, Ohio. Apparatus for winding material. 1,624,272; Apr. 12.
Morris, Howard I., assignor to The Yoder-Morris Company, Cleveland, Ohio. Stripping machine. 1,650,147; Nov. 22.

Nov. 22.

Morris, Howard K. (See Wolfram, George H., assignor.)

Morris, I. P., Corporation, (See Larner, Chester W. assignor.)

Morris, James W., New Holland, Ohlo. Wire-fence guard.

1,644,846; Oct. 11.

Morris, John J., Auduban, N. J., and L. N. Gulick, Germore, Philadelphia, Pa. Internal-combustion engine. 1,651,147; Nov. 29.

Morris, John O., Washington, D. C., assignor to Eclipse Cigar Stemming Machinery Company. Tobacco-stemming machine. 1,621,238; Jan. 4.

Morris, Johy L., Crafton, Pa. Combination table and Morris, Johy L., Crafton, Pa. Combination table and Morris, Johy L., Crafton, Pa. Combination table and Morris, Johy L., Crafton, Pa. C., Chicago, III. Sound amplifier. 1,621,994; Mar. 22.

Morris, Leonard D., Chicago, III. Sound amplifier. Des.

Matte 28. Mart D., Chicago, Ill. Sound amplifier. Des. Mary Rew London, Conn. Savings bank. 1,653,633; Dec. 27. Morris, Mathias J., Lennox, S. Dak. Washing-maching stachment for purpose of making ice cream. 1,649,968;

Nov. 22

Merles Newton. Fond du Lac, Wis. Drain trap. 1,825,64; Apr. 19.
Morris, Perdvai S. Brooklyn. N. Y. Fountain pen and pendi. 1,622,710; June 14.
Morris, Raymond C., Kalamazoo, Mich. Garment fastener or pin. 1,618,384; Feb. 22. Fond du Lac, Wis. Drain trap.

Morris, Raymond L., assignor to Lewers & Cooke, Ltd.,
Honolulu, Hawaii. Building block. 1,634,157; June 28.
Morris, Robert W., Rosiyn, N. Y., assignor to American
Telephone & Telegraph Company. Ambulatory repeating system. 1,624,966; Apr. 19.
Morria, Roser M., Seattle, Wash. Self-serving-store equipMorris, Roser L., Seattle, Wash. Self-serving-store equipMorris, Roser L., Seattle, Wash. Self-serving-store equipMorris, Rose H., Tulsa, Okia. Self-locking liquid-level
gauge. 1,627,056; May 3.
Morris, Thomas W., Liverpool, England. Preservation
of bacon or ham. 1,627,667; May 3.
Morris, Thomas W., Liverpool, England. Preservation
of bacon or ham. 1,627,667; May 3.
Morris, Victoria L. (See Morris, Alexander and V. L.)
Morris, Victoria L. (See Morris, Alexander and V. L.)
Morris, Warren A., Wyoming, assignor to The Richardson Company, Lockland, Ohio. Carton. 1,630,497;
May 31. son Company, Lockland, Ohio. Carton. 1,630,497; May 31. Morris, Warren A., Cincinnati, assignor to The Richard-son Company, Lockland, Ohio. Carton. 1,654,140; Dec. 27.

son Company, Lockland, Ohio, Carton. 1,654,149; Dec. 27.

Morris, Wilfred, and C. Wyrostok, Trenton, N. J. Traffic ruide marker. 1,617,720; Feb. 15.

Morbid, H. Hadell, H. H. H. Hydraulic draft common to the company of the company of the company of the company of the company, Chile Reproduction of music. 1,623,968; Apr. 12.

Morrisey, George, Joliet, assignor of one-half to T. A. Banning, Jr., Wilmette, Ill. Internal-combustion engine. 1,649,246; Nov. 15.

Morrison, Andrew M., Dubuque, Iowa. Gate valve. 1634,274; No. 164,074; Norrison, Andrew M., Dubuque, Iowa. Crank-case and pit drainer. 1,651,616; Dec. 6.

Morrison, Benjamin R., Wilmington, N. C. Container for cosmetics and like materials. 1,650,028; Nov. 22.

Morrison, Benjamin R., Wilmington, N. C. Container for cosmetics and like materials. 1,650,028; Nov. 22.

Morrison, Brank B., assignor to The Power Manufacturals. 2,650,028; Nov. 23.

Morrison, George A., Fark Ridge, assignor to Torchweld Equipment Co., Chicago, Ill. Torch. 1,633,265; June 21.

Morrison, J. L., Company, The. (See Allen, Howard G.,

June 21.
Morrison, J. L., Company, The. (See Allen, Howard G.,

Morrison, J. L. Company, The. (See Allen, Howard G., assignor.)
Morrison, James, assignor to The Highland Body Manufacturing Company, Cincinnati, Ohio. Vehicle body
Morrison, Joe W., Washington, D. C., assignor to General Motors Corporation, Detroit, Mich. Engine-starting apparatus. 1,640,714; Aug. 30.
Morrison, Lewis E., Newark, N. J. Maited-milk dispenser.
1,671,922; Feb. 15.
Margert, administratrix. (See Morrison, William.)

Morrison, Max P. Worcester, Mass, assignor to The Morrison Steel and Wire Company of New Jersey, Aerial tramway bucket, 1852,200; Dec 13. Morrison, Montford, New York, Electrode and degaslifying the same, 1.615,994; Feh. 1. Morrison, Montford, Chicago, Ill. Electron-discharge apparatus, 1,616,702; Feb. 8. Morrison, Montford, Chicago, Ill. X-ray apparatus, 1,617,267; Feb. 8. Morrison, Montford, New York, N. Y. X-ray tube, 1,621,862; Mar. 22. Morrison, Montford, New York, N. Y. X-ray-tube radiator. Morrison, Montford, New York, N. Y. X-ray-tube radiator. Morrison, Montford, New York, N. Y. X-ray-tube, 1,639,464; Aug. 16. Morrison, Montford, New York, N. Y. X-ray apparatus, 1,628,678; May 17. Morrison, Montford, New York, N. Y. X-ray apparatus, 1,639,464; Aug. 16. Morrison, Peter E., Arlington, assignor to Henry Cole & Company, Boston, Mass. Electric-lamp socket, 1,685,688; July 12.

Morrison, Simon, Brooklyn, X. X.
Morrison, Shirley J., San Fernando, Calif., Mars.
Morrison, Robert A., and F. L. Oswald, Portland, Oreg.
Ironing board. 1, 266, 624; May S.
Morrison, Samuel E., Lynn, Mass. Gradometer.
1,620, 380; Mar. 8.
Morrison, Shirley J., San Fernando, Calif. Air-washer attachment. 1,613,337; Jan. 25.
Morrison, Simon, Brooklyn, X. X.
Morrison, Simon, Brooklyn, X. X.
Morrison, Theodore, S., Chicago, Ill., Davenport bed.
1,631,600; June 7.
Morrison, Walter L. (See Brant, Joseph S. assignor.)

Morrison, William, deceased, Chicago, III., M. Morrison, administratrix. Electrolytic rectifier. 1,647,648; Nov. 1. Morrison, William, deceased, Chicago, III., M. Morrison, administratrix. Electrolytic rectifier. 1,647,650; Nov. 1.

Nov. 1.

Morrison, William, assignor to Vesta Battery Corporation, Chicago, Ill. Battery grid. 1,650 530; Nov. 22.

Morrison, William A., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City. N. J. Safety device for oll-injection engines. 1,661,066; Nov. 29.

Morrison, William E., Granife City. Ill., assignor of one-half to I. R. Hurwitz. Window flastaener. 1,637,910;

nair to 1. K. Hurwitz. Window lastener. 1,634,810; Aug. 2. Morrow, Clarence H., assignor to The Hotstream Heater Company, Cleveland, Ohio. Thermostatically-controlled gas valve. 1,648,910; Nov. 15.

Morrow, Cornelius G., and S. H. Oakes, Thomasville, N. C. Combined wardrobe and dresser. Des. 72,718; May 24. Morrow, Dwight S., Milan, Ohio. Plural liquid-distribut-Morrow, Forrest i., Chicago, Ill. Automatic potato-chip machine. 1,629,355; May 17. Morrow, Frank C., Wellston, Ohio. Feeding apparatus. 1,652,250; Dec. 13. Morrow, Grant. (See Ramsey, Henry W., assignor.) Morrow, Grant. (See Ramsey, Henry W., assignor.) Morrow, Grant. (See Ramsey, Henry W., assignor.) Morrow, James B., Oakland, Calif. Pocket construction. 1,615,516; Jan. 28. Morrow, Louis, Ontario, Calif. Railway-track-crossing structure. 1,628,476; Apr. 20; Ctoria, Australia. Agricultural implement. 1,637,424; Aug. 2. Morse, Albert W., Long Island City, N. Y. Burner support. 1,628,470; May 10. Morse, Albert W., Long Island City, N. Y. Liquid and gas mixer. W. 25,285; May 17. Morse, Chair. Company. (See Morse, Frank L., assignor.) Morse, Chair Company. (See Morse, Frank L., assignor.) Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 33. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 31. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 32. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 32. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 32. Morse, Chyde S., De Kalb, Ill. Resilient tire. 1,630,350; May 32. Morse, Chyde S., De Kalb, I

Morse, Delbert F., Lakeport, N. H. Motor-driven shears, 1,642,259; Sept. 13.
Morse, Edgar, Rock Island, III. Lock nut. 1,629,726; May 24.
Morse, Edgar, Rock Island, III. Lock nut. 1,629,726; May 24.
Morse, Feward J. (See Dawson, Sidney, assignor: Norse Chain L. Ithaca, N. Y., assignor to Morse Chain Company, Power drive chain. 1,624,058; Apr. 12.
Morse, Frank L., ishaca, N. Y., assignor to Morse Chain Company, Drive chain. 1,634,334; July 5.
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Chain-adjusting device. 1,648,911; Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Chain-adjusting device. 1,651,831; Dec. 6.

Ithaca, N. Y. Chain-adjusting device. 1,651,831; Dec. 6.
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Drive chain. 1,651,832; Dec. 6.
Mey Chain. 1,621,632; Mar. 29.
Morse, Lawrence H., assignor to The American Multigraph Company, Cleveland, Ohio. Paper-feeding mechanism. 1,621,678; Mar. 22.
Morse, Lawrence H., Steveland, Ohio. Addressing machine. 1,627,662; May 10.
Morse, Lawrence H., Cleveland, Ohio, Addressing machine. 1,627,663; May 10.
Morse, Lawrence H., Cleveland, Ohio, assignor to The American Multigraph Company. Printing machine with Changeable form. 1,627,663; May 10.
Morse, Lawrence H., assignor to The American Multigraph Company. Cleveland, Ohio. Printing press. 1,638,543; Aug. 9.
Morse, Lawrence H., assignor to The American Multigraph Company. Cleveland, Ohio. Printing press. 1,638,544; Aug. 9.
Morse, Lawrence H., assignor to The American Multigraph Company. Cleveland, Ohio. Printing press. 1,638,544; Aug. 9.
Morse, Lawrence H., Seignor to The American Multigraph Company. Cleveland, Ohio. Printing press. 1,638,544; Aug. 9.
Morse, Caradia, Ohio, Paper detector for printing machines. 1,640,366; Aug. 9.
Morse, Ora A. (See Blackden, Perry D., assignor). Ohorse, Caradia, N. Y., assignor to Cantilever Corporation. Shoe-fitting device. 1,644,075; Oct. 4.

Oct. 4.

Oct. 4.

Morse, Robert V., Ithaca, N. Y. Electromagnetic brake. 1,629,084; May 17.

Morse, Tally W., New York, N. Y. Transfer sheet. 1,629,981; Mar. 15.

Morse, William J., Attleboro, Mass. Belt buckle. 1,619,195; Feb. 1.

Morse, Helliam J., Electromagnetic Harry Morser & Company William J., London, England. Earpiece for sound receivers. 1,615,028; Jan. 18.

Morser, Harry, & Company (Wireless) Limited. (See Morser, Harry, assignor.)

Morshead, Howard, and H. H. Wigglesworth, assignor to The Philadelphia Drying Machinery Company. Philadel-Mortag, Edward H. assignor to Kochring Company. Milwaukee, Wis. Extension side loader. 1,617,820; Feb. 15.

Feb. 15.

Morten, Joseph, Jr., Hartington, Nebr., Mail-box support. 1,645.768; Oct. 18.

Morten, Louis G., Jersey City, N. J. Tennis racket. 1,521,746; Mar. 22.

Mortensen, 18.

Mortensen, 1

Dec. 13.

Morter, Harvey B. Ainsworth, Nebr. Prairie-fire fighter. 1,629,644 May 17.
Morthland, George W., Lead, S. Dak. Ore-grinding machine. 1,620,276; Mar. 8.
Mortimer, Albert, Chicago, Ill. Money tray for bankers and the like 1,649,528; Mar. 1.

Mortimer, John N., Lakewood, assignor to The Central Brass Manufacturing Company, Cleveland, Ohio, Valve for plumbing fixtures. 1,630,351; May 31.

Mortimer, John N., Lakewood, assignor to The Central Brass Manufacturing Company, Cleveland, Ohio, Waste valve for bathtubs and lavatories. 1,630,352; May 31.

Mortimer, John N., Lakewood, assignor to The Central Brass Manufacturing Company, Cleveland, Ohio, Waste valve for bathtubs and lavatories. 1,630,352; May 31.

Mortimer, Brother M., Poliadelphia, Pa. Roller clutch. 1,634,202; June 28.

Mortimer, Stockton H., Philadelphia, Pa. Roller clutch. 1,634,202; June 28.

Mortimer, Stockton H., Philadelphia, Pa. Roller clutch. 1,634,202; June 28.

Morton, Alexander, Glen Ridge, N. J. Audion-bulb socket. 1,649,968; Nov. 22.

Morton, Alexander, Glen Ridge, N. J. Audion-bulb socket. 1,649,968; Nov. 22.

Morton, Alexander K., and J. A. Halloran, South Norwalk, Sasignors to The Norwalk Lock Company, Norwalk, Conn. Hotel lock. 1,628,264; May 10.

Morton, Charles, Pawtucket, R. I. Spinning frame. 1,640,715; Aug. 30.

Morton, Charles, Pawtucket, R. I. Spinning frame. 1,619,985; Mar. S.

Morton, Charles A. assignor to Western Electric Company, Incorporated, New York, N. Y. Automatic telephone system. 1,632,205; June 14.

Morton, Charles P., Clincinnati, Ohio, Last lathe. 1,630,304; May 31.

Morton, Harry D., New York, N. Y., assignor to Automatic Arc Welding Company, Detroit, Mich. Arc-welding system. 1,632,708; Mar. S.

Morton, Harry D., New York, N. Y., Automatic electricare welding device and operating the same. 1,634,624; July 5.

Morton, Harry D., New York, N. Y., assignor to Automatic Arc Welding Company, Detroit, Mich. Electricare Electricare welding device and operating the same. 1,634,624; July 5.

are welding device and operating the same. 1,034,024; Morton, Harry D., New York, N. Y., assignor to Automatic Are Welding Company, Detroit, Mich. Electric-are welding, 1,648,560; Nov. 8.

Morton, Harry D., New York, N. Y., assignor to Automatic Are Welding Company, Detroit, Mich. Apparatus for a revelding, 1,648,561; Nov. 8.

Morton, Harry D., New York, N. Y., assignor to Automatic Are Welding company, Detroit, Mich. Electric-are welding control method and means. 1,648,562; Nov. 8.

Morton, Harry D., New York, N. Y., assignor to Automatic Are Welding Company, Detroit, Mich. Electric-are welding apparatus. 1,648,663; Nov. 8.

Morton, Harry U., Chicago, III, assignor to Morton Manu-1,623,648; Apr. 26.

Morton, Laszlo, (See Nagy, Louis, assignor.)

Morton Machine Works. (See Brown, Oscar, assignor.)

Morton Manufacturing Co. (See Morton, Harry U., assignor)

signor.)
Marshall

signor.)
Morton, Marshall J., Stockton, Calif. Grease-dispensing device, 1,652,318; Dec. 13.
Morton, Raibh H., Weymouth, Mass. Bowling game apparatus. 1,650,029; Nov. 25.
1,623,802; Apr. 5.
Morton, Thomas, Moseley. England. Stud-and-socket-type fastening. 1,631,850; June 7.
Morton, William A., assignor to The Amsler-Morton Company, Pittsburgh, Pa. Recuperator. 1,619,747; Mar. 1.
Company, Pittsburgh, Fa. Recuperator. 1,602,210; Dec. 13.

Dec. 13. orton, William P. (See Green, T. L., Morton, and

Mosaic Tile Company, The. (See Jordan, Roy E., as-signor.) Moscate, Oct. 18. Guy, Salamanca, N. Y. Tire alarm. 1,646,164;

Moscatte, Guy, Salamanca, N. Y. Tire alarm. 1,646,164; Oct. 18.

Moschel, Wilhelm, and P. Siedler, Grleshelm-on-the-Main, assignors to the Firm I. G. Farbeindustric Aktiengesell-schaft, Frankfort-on-the-Main, Germany. Desiccation Moschi, Annio, Brookles. 1,650,531; Nov. 22.

Moschi, Annio, Brookles. 1,651,928; Dec. 6.

Moschi, Janio, Brookles. 1,651,928; Dec. 6.

Moscovitz, Samuel H., New Haven, Conn. Clock-spring Moscovitz, Samuel H., New Haven, Conn. Clock-spring Moscovitz, Samuel H., New Haven, Conn. Clock-spring Moscovitz, Benjamin, Brooklyn, N. Y. Undergarment. 1,618,991; Mar. 1.

Moscrip, L. S., et al. (See Benson, Samuel C., assignor; D. C., Cheago, III., assignor to The Studebaker Cap ornament. Des. 72,132; Mar. 8.

Moscbach Electric & Supply Company. (See Schenk, Eduard, assignor). Pittsburgh, Pa. Terminal structure Moschach, Karl J., 1534,678; http://dx.doi.org/10.1016/j.1016

Moseley, James F., Manchester, England. Detersive compound. 1,627,446; May 8.
Moseley, Leroy M. (See Joyner, George F., assignor.)
Moseley, William S. (See Bergendahl, O. E., and Rimel, assignors: Mosen, Carl, and W. J. Coleman, Bend. Oreg. Transfer table for sawmills. 1,629,225; May 17.
Moser, Alexander, Bayside, N. Y. Umbrella. 1,613,287;
Moser, Alexander, Bayside, N. Y. Umbrella. 1,613,287;
Moser, Alexander, Bayside, N. Y. Authorities.

Jan. 4.
Moser, Alexander, Bayside, N. Y. Automatic valve.
1,626,147; Apr. 26.
Moser, Felix, Holland, Mich. Wrench for screw-top jars.
1,631,659; June 7.
Moser, Otto, Mainz-Mombach, assignor to Verein für Chemische Industrie Aktiengeselischaft, Frankfort-on-the-Main, Germany. Extracting of gualacol. 1,501,507;

Dec. 6. oser, William A., St. Louis, Mo. Clamp. 1,615,338;

Dec. 6.
Moser, William A., St. Louis, Mo. Clamp. 1,615,338;
Jan. 25,
Moses, Abram, Baltimore, Md. Draft-actuated circulating
pump and indicator. 1,622,662; Mar. 22.
Apparatus for
Moses, Ashleigh S., New York, N. Y.
Apparatus for
Moses, Samund Q. (See Iserman, S., Vernet, and

Mosses, Edmund Q. (Ste. Mosses), Mosses, Edmund Q., New York, N. Y., G. E. Terwilliger, deceased (L. E. M. Terwilliger, executrix), Newark, and W. P. Hammond, Passale, N. J. Indicating device. 1,621,995; Mar. 22.

Mosses, Wade, Cleveland, Ohio. Guard for poison bottles. 1,641,897; Sept. 6.

Mosseson, Sidney, Chicago, Ill. Picture frame. 1,649,415;

device. 1,020,2017 API. 20.

Mosier, Peter, Grand Rapids, Mich. Cart. 1,649,170;

Nov. 15.

Moskovics, F. E. (See Crawford, C. S., and Wall, asSignors.)

Key Crawford, C. S., and Crawford,

Signors.)

Moskovics, Frederic E. (See Bastlen, P., and Crawford, assignors.)
Moskovics, Fredric E., Indianapolis, Ind. Engine hood. Des. 72.677; May 17.
Mosler, Arthur R., New York, N. Y. Spark timer. 1,632,413; June 14.
Mosler Safe Company, The. (See Bartels, Carl, assignor.)
Mosler Safe Company, The. (See Bartels, C., and Goebel)

assignors.) Mosler Safe Company, The. (See Bates, Charles J., jr.,

moster Safe Company, The. (See Bellamore, David H., assignor.)
Moster Safe Company, The. (See Benham, Edgar M., osler Safe Company, The. (See Goldsmith, G. M., and Bartels, assignors)

Mosiler Safe Company, The. (See Benham, Edgar M, assignor.)
Mosiler Safe Company, The. (See Goldsmith, G. M., and Bartels, assignors.)
Moss, Arthur, assignor.)
Moss, Arthur, assignor.)
Moss, Arthur, assignor.)
Moss, Arthur, assignor.)
Moss, Charles M., Elitsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company, Automatic station. 1,649,038; Nov. 15.
Moss, Charles M., Pittsburgh, Pa., assignor to Westing-house Electric and Manufacturing Company, Automatic station. 1,649,038; Nov. 15.
Moss, Charles M., Pittsburgh, Pa., assignor to Westing-house Electric and Manufacturing Company, Automatic Dec. 27, transformer-switching system. 1,654,903; Dec. 27, Moss, David H., Brooklyn, assignor, by meene assignments, to Brandes Laboratories Inc., Nowalk, N. J.
Moss, David H., Brooklyn, assignor, by meene assignments, to Brandes Laboratories Inc., Novally, M. J., Phonograph attachment. 1,654,908; Nov. 22.
Moss, Fred J., assignor to Moss Brothers, Conneaut Lake, Pa. Septic tank. 1,638,869; Aug. 16.
Moss, Janse W. S. (See Kinsley, L., and Moss.)
Moss, Roy M., and O. B. Pulls, assignors to Metal Forms 1,615,178; Jan. 18.
Moss, Samuel, New York, N. Y. Display box. 1,641,861; Sept. 6.
Moss, Sanford A., Lynn, Mass., assignor to General Electric Company. Turbine rotor. 1,614,145; Jan. 11.
Moss, Sanford A., M. G. Robinson, Lynn, Mass., assignors to General Electric Company. Peed-water heater. 1,628,471; May 10.
Moss, Sanford A. and M. G. Robinson, Lynn, Mass, assignors to General Electric Company. Centrifugal pump and compressor. 1,617,133; Feb. 8.
Mosshach, Henry, Seattle, Wash. Gasoline gauge. 1,036,382; July 12, 241,101.
Mossberg, Frank, assignor to Mossberg Pressed Steel Corporation, Attleboro, Mass. Carrier for braiding machines. 1,630,669; May 81.

Mossberg, Frank, assignor to Mossberg Pressed Steel Corporation, Attleboro, Mass. Reel. 1,630,670;

Corporation, Attiebone, May 31.

Mossberg, Frank, Providence, R. I., assignor to Mossberg Pressed Steel Corporation, Attleboro, Mass, Carrier for braiding machines, 1,633,346; June 21.

Mossberg Pressed Steel Corporation. (See Mossberg, Frank, assignor.)

Mosser, Edward B., Trooper, Pa. Stocking. Des. 74,118; Dec. 20.

Dec. 20.

Mossbart, Donald J., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Stoker. 1,619,489; Mar. 1.

Mossman, Orren P., Eldora, Iowa, and F. R. Niven, Rockester, N. Y. Horseshoe. 1,646,627; Oct. 25.

Motherwell, Joseph W., Meirose, and H. S. Baker, Arlington, assignors to The Ashton Yuve Company, Cambridge Company, Cambridge Company, Cambridge Company, Cambridge Company, The. (See Faueric, Charles E., assignors).

Motobile Products Company, The. (See Pateric, Charles C., assignor.)

C., assignor.)

Motogram Corporation. (See Wilde, Francis E. J., assignor.

Motor Car Advertising Device Co. (See Dobrowsky, Emmanuel, assignor.)
Motor Improvements, Inc. (See Liddell, Robert P. F., assignor.) Motor Improvements, Inc. (See Ward, Marshall H., as-

signor.) Motor Industries, Inc. (See Bendix, Vincent, assignor.)
Motor Industries, Inc. (See La Brie, Ludger E., as-

signor.)
Motor Industries, Inc. (See White, D'Orsay M., assignor.)
Motor Patents Corporation. (See Hutchinson, Uriah, as-Motor Player Corporation, The. (See Hanson, Clinton

H., assignor.) Motor Products Corporation. (See Pritchard, William S.,

assignor.)
Motor Terminals Company. (See Bates, Albert H., as-Motor Terminals Company. (See Borkes, Francis W.,

dignor.) r Wheel Corporation. (See Forsyth, George H., as-Motor signor.) Motor Wheel Corporation. (See Huber, Matthew W.,

otor wheel Corporation et al. (See Putnam, Alden L., assignor.) otor Wheel Corporation. (See Winter, John R., as-Motor Motor

Mott. Darwin. (See Bianchard, E. H., and Mott.) Mottier, Walter F., El Campo, Tex. Hayrake. 1.623.062; Mottlan, August J., Pittsburgh, Pa., assignor to Westinghouse Blectric & Manufacturing Company. Thermostatic switch. 1,645,290; Oct. 11.
Mongey, Harry C., assignor to General Moiors Research Corporation. Dayton, Ohio. Uniting dissimilar metals. 1,644,741; Oct. 11.
Mongey, Harry C., assignor to General Motors Research Corporation, Dayton, Ohio. Bonding dissimilar metals. Corporation, Dayton, Ohio. Bonding dissimilar metals. 400 Mongin, Velerie J., Springfield, Mass. Hair-waving device. 1,622,798; Mar. 29.
Mould, Albert E., Toronto. Ontario, Canada. Vehicle signal. 1,651,618; Dec. 6.
Mould, James A., assignor to Evinude Motor Company, Milwaukee, Wis. Antititing lock for reversible out-Milwaukee, Wis. Antititing lock for reversible out-Moulthrop, Lembert H., South Norwalk, Conn. Fusing material and delivering the same. 1,652,691; Dec. 13.
Moulton, Harley C., Maplewood, Mo., assignor, by mesne assignments, to Lewis Invisible Stitch Machine Co. Garment and like article of Manufacture. Re16,686; July 19.

Moulton, Harold R. (See Tillyer, E. D., and Moulton.) Mound City Wood Heel & Mfg. Co. (See Marshall, David

O., assignor.) t. Carmel Mfg. Co., The. (See Goodman, Joseph, assignor.) Mount Clemens Pottery Company. (See Markert, Franz,

assignor.)
Mountford Bros. (See Mountford Sidney O., assignor.)
Mountford Bros., Sidney O., assignor to Mountford Bros., New-ark, N. J. Ring gauge. 1,634,378; July 5.

Mountford, William S., Dumont, N. J., assignor to W. Dubilier. New York, N. Y. Mousetrap, 1.630,241;

May 24.

Mourer, Sarah M., Philadelphia, Pa. Toy vehicle.
1,632,308; June 14.

Moushon, Richard S., Peoria Heights, assignor of onehaif to W. G. Hiller, Peoria, Ill. Fireworks holder.
1,634,232; June 28.

Moutler, Ernest A., Paris, France. Brake for railway
trains. 1,641,092; Aug. 30.

Moutray, Fred L. (See Akers, E., Mims, Moutray, and
Miller.)

Miller.)
Mowbray, James W., Windsor, Ontario, Canada, assignor,
by mesne assignments, to The Automotive Corporation,
Fort Wayne, Ind. Line-control tractor. 1,632,911;
June 21

Moutray, Free L. Usee Amers, E., Mills, Moutray, and Millers, James W., Windsor, Ontarlo, Canada, assignor, My messe assignments, to The Automotive Corporation, Fort Wayne, Ind. Line-control tractor. 1,632,911; June 21.

Mowbray, Robert T., Waterloo, Iowa, Road grader. 1,617,638; Feb. 15.

Mowbray, Robert T., Waterloo, Iowa, Road grader. 1,617,638; Feb. 16.

Mowbray, Robert T., Waterloo, Iowa, Road grader. 1,617,638; Feb. 16.

Mowbray, Robert T., Waterloo, Iowa, Road grader. 1,617,638; Feb. 16.

Mowbray, Control of the My messed of the My messe

tives, Mathony M., Woodbridge, N. J., assignor to The Roeselor & Hasslander Chomical Co., New York, N. Y. Producing aqueous solutions of free cynnamid. 1,622,731; Mar. 22, add, Garrett W., Chicago, Ill. Machine for making compacts, tablets, wafers, and the like. 1,629,860;

completes, taniets, waters, and the like. 1,526,800', Mdd. Garrett W., assignor of one-half to H. R. Baker, Chicago, III. Can-cover feeding and applying machinery. 1,648,003; Nov. 8. Muddiman, Ernest W. (See Davidson, W. B., Michie, and Muddiman).

Mudge, Charles A., Elizabeth, assignor to Electro Dynamic Company, Bayonne, N. J. Electrical machine,

Mudge, Charles A., Elizabeth, assignor to Electrical machine, 1.612,828; Jan. 4.

Muehlesen, Carl, Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Transtaler Linotype Company, Brooklyn, N. Y. Transtaler Linotype Company, Brooklyn, N. Y. Transtaler, Carl, Ectlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Transferring the matrices from the first elevator to the accompany and the casting machine, 1,645,618; Oct. 18.

Muchlelsen, Carl, Berlin, Germany, assignor to Mergen-thalier Linotype Company, Brooklyn, N. Y. Slug-eject-ing mechanism for matrix-composing and line-casting mechanism. 1.049,844; Nov. 22. Muchleman, Henry J. Hamiton, Ontarlo, Canada. Machine, J. Carlo, L. Hamiton, Ontarlo, Canada. Machine, C. Peres, assignor to E. C. Gmelin, Chicago, III. Heater. 1,629,116; May 17. Muchlhanse, Gerhart F., Bartlett, Tex. Plow. 1,632,345; June 14.

Muehihause, Gerhart F., Bartlett, Tex. Plow. 1,632,345; June 14. Mueberger, Walter, Maplewood, N. J., assignot to Nathan Haberger, Company, Inc., New York, N. Y. Textile fabric and treating the same. 1,615,265; Jan. J. Mueller, Adolph, trustee. (See Hutlaway, Chester W., assignot.), trustee. (See Mueller, Lucien W., assignot.) and the same of the same

Mueller, Adolph, trustee.
R. H., assignors.)
Mueller, Adolph, trustee.
(See Mueller, Lucien W. and
Rueller, Adolph, trustee.

signors.)
Mueller, Adolph, trustee.
mann, assignors.)
Mueller, Adolph, trustee.
(See Mueller, P., and Schuermann, assignors.)
Mueller, Adolph, trustee.
(See Mueller, R., and Mix, as-

Adolph, trustee. (See Mueller, Robert H., as-

Mueller, Ad signors.) Mueller, Ad signor.) Mueller, Ad assignor. Adolph, trustee. (See Wagenseller, Charles N., Adolph, trustee. (See Wilkins, James M., as-

assignor.)

Mueller, Adolph, trustee. (See Wilkins, James M., assignor.)

Mueller, Adolph, trustee. (See Wilkins, J. M., and Rohr.)

Mueller, Adolph, H. C., et al. (See Fassler, Feter, assignor.)

Mueller Birnss Foundry Company. (See Granade, Fred C., assignor.)

Mueller Birnss Foundry Company. (See Granade, Fred C., assignor.)

Mueller, Charles C., Jr. (See Mueller, Elsie A. and C. C., Jf.)

Mueller, Charles W., Jersey City, N. J. Bird perch. 1912; 448; May 3.

Mueller, Edward H., Pittston, Pa. Device for candling eggs. 1638,870; Aug. 16.

Mueller, Elsie A., Chestertown, N. Y., and C. C. Mueller, Jr., Newark, N. J. Tire patch. 1,629,289; May 17.

Mueller, Emil C., Jr. (See Curran, S. T., and Mueller, Mueller, Emil C., Jr. (See Curran, S. T., and Mueller, Mueller, Emil C., Jr., Elizabeth, And S. T. Curran, Mountain Lakes, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Call indicator. 1,632,093; June 14.

Mueller, Emil L., Jr., Feeding mechanism. 1,637,833; Mueller, Enst. (See Ritter, George, assignor)

Aug. 2. Ernst. (See Ritter, George, assignor.)
weller, Franst, Brooklyn, N. Y. Toy, 1484 530; Oct. 25.
Mueller, Godfrey. (See Gradolph, W. F., and Mueller,
Mueller, Herman G., assignor to Skinner Engine Company, Erie, Pa. Steam engine. 1,650,642; Nov. 29.
Mueller, Herman G., assignor to Skinner Engine Company, Erie, Pa. Steam engine. 1,650,643; Nov. 29.
Mueller, Hilmar, Trenton, N. J. Lawn. 1,616,947;

pany, Eure, ren.
Mueller, Hilmar, Trenton, N. J.
Mueller, John (See Lasker, W. W., and Mueller.)
Mueller, John G., Dayton, Ohlo, Rail brace. 1,631,325;
June 7.
Mueller, John G., C. A., and H. M. Granzow, Dayton,
Ohlo. Lubricating cup. 1,621,129; Mar. 15.
Mueller, Lucien W., assignor to Adolph Mueller, trustee,
Mueller, Lucien W., assignor to Adolph Mueller, trustee,
Mueller, Lucien W., assignor to Adolph Mueller, trustee,
Mueller, Lucien W., assignor to Adolph Mueller,
Decatur, III. Valve for built-in plumbing fixtures.

Mueller, John G., C. A., and H. M. Granzow, Dayton, Ohio. Lubricating gup. 1,621,129; Mar. 1; trustee, Mueller; Lucien W., assignor to Adolph Mueller; trustee, 1,637,230; July 26.

Mueller, Lucien W. and R. H., assignors to A. Mueller, trustee, Decatur, III. Bath or basin outlet-valve mechanism. 1,647,188; Nov. 1.

Mueller, Moritz L., Sassignor Heatingwest Blower Kiin Company, Fortland, Org. Drying system for kilns. 1,621,333; Mar. 13.

Mueller, Moritz L., Seattle, Wash, assignor to Northwest Blower Kiin Company, Fortland, Org. Drying system. 1,624,754; Apr. 12.

Mueller, Onto L. (See Mueller, Rudolph and O. L.)

Mueller, Philip, Decatur, III., and C. A. Hill. Fort Huron, Mill. High-pressure gas valve and shipping plug. 1,636,965; July 19.

Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, assignors to A. Mueller, Philip, and A. C. Schuermann, decased, Muel

Mueller, Rudolph and O. L., Chicago, Ill. Trap. 1,638,545; Aug. 9.
Muend, Charles J., Philadelphia, Pa., assignor to Haines, Jones & Cadbury Company, Valve construction. 1,619,748; Mar. I.
Muenzenmsyer, Henry, Junction City, Kans. Service bin. Multiy, Glenn, Cleveland Heights, Ohio. Hydropneumatic controller for water systems. 1,628,265; May 10.
Mugdan, Martin, (See Meingast, R., and Mugdan.) Mugdan, Martin, and J. Wimmer, assignors to Consortium für Elektrochemische Industrie, Munich, Germany. Hyeparation of methyl formate. 1,642,689; Sept. 20.
bender, Ocisnitz 1 Vyti, Saxony. Automatically manufacturing knotted or tufted carpets. 1,615,029; Jan. 18.

Incturing Entered of the State of the State of S

I.612.982; Jan. 4.

Muhleman & Kayhoe, Incorporated. (See Beale, Frank A., assignor.)

Muhleda, S. C. Scarsdale, N. Y. Baffle wall.

Muhledd, John E. Scarsdale, N. Y. Locomotive frame. 1,630,901; May 31.

Muhledd, John E., Scarsdale, N. Y. Locomotive frame. 1,630,901; May 31.

Muhledd, John E., Scarsdale, N. Y., and A. G. Sandman, Baltimore, Md. Steam locomotive. 1,627,402; May 3.

Muhch, Ida M., Rock Port, Mo. Jelly strainer.

Muir, Chomas R., Sunnyside, Wash. Potato-sorting table. 1,650,532; Nov. 22.

Muir, Wellington W., Lockport, N. Y. Cooling system. Mir, Wellington W., Lockport, N. Y. Cooling system for internal-combustion engines. 1,623,503; Apr. 5.

Muir, Wellington W., Lockport, N. Y. Cooling system for internal-combustion engines. 1,623,504; Apr. 5.

Muir, Wellington W., Lockport, N. Y. Cooling system. Mirk, Wellington W., Lockport, N. Y. Cooling system. 1,630,069; May 24.

Muir, Wellington W., Lockport, N. Y. Piston 1,634,037; Mur. 28.

Muir, Wellington W., Lockport, N. Y. Piston 1,634,037; Mur. 28.

Muir, Wellington W., Lockport, N. Y. Piston 1,634,037; Muir, Wellington W., Lockport, N. Y. Piston 1,634,037; Muir, Wellington W., Lockport, N. Y. Cooling system.

1,630,070; May 2**.

Mulr, Wellington W., Lockport, N. Y. Cooling system
Mulr, Wellington W., Lockport, N. Y. Cooling system
Mulr, Wellington W., Lockport, N. Y. Cooling system
Mulr, Wellington W., Lockport, N. Y. Cooling internalcombustion engines. 1,632,475; Aug. 23.

Mulr, Wellington W., Lockport, N. Y. Variable-temperature cooling system for internal-combustion engines.
1,643,510; Sept. 27.

Mulr, Wellington W., Lockport, N. Y. Cooling system
Mulr, Wellington W., Lockport, N. Y. Cooling system
1,643,511; Sept. 27.

Mulr, Wellington W., Lockport, N. Y. Cooling system for internal-combustion engines. 1,649,247; Nov. 15.

Mulr, Wellington W., Lockport, N. Y. Automatic cooling
system. 1,649,248; Nov. 18.

Mulr, Wellington W., Lockport, N. Y. Automatic coling
system. 1,649,248; Nov. 18.

Mulr, Wellington W., Lockport, N. Y. Automatic coling
system. 1,649,248; Nov. 18.

Mulr, Wellington W., Lockport, N. Y. Automatic coling
system. 1,649,248; Nov. 18.

Mulr, Wellington W., Lockport, N. Y. Automatic coling
system. 1,649,48; Nov. 18.

Mulr, Wellington W., Lockport, N. Y. Automatic coling
system. 1,641,646; Dec. 6.

Mulconroy Company. (See Mulconroy, Joseph J., assignor.)

Mulconroy, Joseph J., Germantown, assignor to Mulconroy, Company, Inc., Philadelphia, Pa. Steam iron coupling and hose. 1,619,583; Mar. 1. Mulder, Jentje, Detroit, Mich. Timing device. 1,640,716; Aug. 30.

Aug. 30.

Muldoon, Bernard F., Mountain View, N. J., assignor to H. Hyman, Brooklyn, N. Y. Display stand or similar article. Des. 73,412; Sept. 6.

Mulford, Henry K., assignor to National Drug Co., Philadolphia, Pa. Hypodermic-solution container. 1,616,274;

M. Bord, Henry K., assignor to National Drug Co., Philadelphia, Pa. Combined stopper and bulb syringe. 1.634,267; Dec. 27, Mulherin, James A., assignor, by direct and mesne assignments, to H. Delkeskamp, St. Louis, Mo. Composition shoe beel and making the same. 1,414,583; sition shoe Jan. 18.

Jan. 18.
Mulhern, Frederick J., Troy, N. Y. Garbage receptacle.
1.645,897; Sept. 27.
Mulholland, James F., Columbus, Ohio. Toy balloon.
Des. 72,381; Apr. 5.
Mulholland, John Whitley Bay, Eugland. Incandescent
gas fre. 1,639,780; Aug. 23.
Mulholland, John B., and A. F. Borschel, Buffalo, N. Y.
Safety target attachment for air rifles. 1,625,956;
Apr. 26. Safety Apr. 26.

Apr. 20.

Mulholland, Vergil, West Hartford, assignor to HartfordEmpire Company, Hartford, Conn. Guidling device for
moiten glass. 1,619,482; Mar. 1.

Mulholland, Vergil, West Hartford, Conn., assignor to
Hartford-Empire Company, Hartford, Conn. Apparatus for annealing glassware. 1,622,663; Mar. 29.

Mulholland, Vergil, West Hartford, assignor to HartfordEmpire Company, Hartford, Conn. Method of and agparattus for conveying plastic glass. 1,635,693; Aug. 9.

Mulholland, Vergil, West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Liquid-fuel burner. 1,645,703; Oct. 25.
Mail Marting Martford, Conn. Liquid-fuel burner. 1,647,603; Oct. 25.
Mail Marting Mar

Mullan, Joseph E. (See Kitchel, R. R., and Mullan, J Mullaney, John F. Colorado Springs, Colo. Molding Mullen, C. H. F., Rontgerröhrenfabrik. (See Daumann, Wilhelm. assignor.) Mullen, Charles P., Conshohocken, Pa. Eaves-trough sup-port. 1,622,036; June 14. Mullen, Charles J. (See Murphy, F. K., Mullen, and Ret-

terer.)
Mullen, James, jr., Newark, N. J. Amusement device
1.655.921; Dec. 27.
Mullen, John E. 27.
Mullen, John E. Assignor of one1.613.187; Jan. 4.
Mullen, John E., assignor of one-balf to H. L. Judell &
Company, San Francisco, Calif. Show case.
1.613.188;
Jan. 4.

Jan. 4.

Mullen, Leo, and J. Jackevich, Collingdale, Pa. Life belt.
1.622,290; May 17.

Mullendore, Harvey, assignor to Perfection Biscuit Company, Fort Wayne, Ind. Packaging machine.
1.642,887; Sept. 20.

Mullens, Clarence E., Albany, N. Y. Bone clamp.
1.635,137; July 5.

Müller, Arthur H., Blankenese, near Hamburg, Germany.
Plant for towing vessels on inland waterways.
1.631,538; Dec. 6.

Muller, Arthur H., Blankenese, near Hamburg, Germany.
Plant for towing vessels on inland waterways.
1.644,847; Oct. 11.

Muller, Bruno. (See Jacobsohn, Isaak, assignor.)

Muller, Carl, Brooklyn, N. Y. Safety attachment for gas cocks. 1.651,038; Nov. 29.

Müller, Carl J. (See Thiess, K., Müller, Runne, and Schaeffer.)

Muller, Carl J. (See Thness, K., Muller, Runne, and Schaeffer) W. Hosterwitz, hear Dresdon, assignor to "Lifewrite" (Egarctten-Maschinen-Fabrik J. C. Müller "Lufewrite" (Egarctten-Maschinen-Fabrik J. C. Müller "Lufewrite") (Egarctten-Maschinen-Fabrik J. C. Müller Charles and "Lufewrite") (Egarctte machines. 1,645,067; Oct. 11.
Müller-Cunradi, Martin, Ludwigsbafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of iron carbonyl. 1,614,626; Jan 13.
Wilke, Mannheim, assignors to Badische Anilin- & Soda-Fabrik, Ludwigsbafen-on-Rhine, Germany. Manufacture of liquid fuell. 1,646,014; Oct. 18.
Muller, Erich. (See Müller, Karl, assignor.) Müller, Frank Berlin, Germany. Pur testing and cutting Müller, Ferdinand C. H., assignor to The Findlay Electric Porcelain Company, Findlay, Ohio. Press for forming plastic materials. 1,640,514; Aug. 30.
Muller, Frank G. D. (See Schmidt, G. C. and Muller, Muller, Frank) R., (See Muller, Franklyn R., assignor.)

assignor.)
Muller, Franklyn R., Lake Bluff, assignor to Franklyn R. Muller, Inc., Waukegan, Ill. Manufacturing mastic tile and the like. 1,681,284; June 7.
Müller, Fred W., Hooken, N. J., and E. H. Weatherhead, Cleveland Heights, assignors to The Bishop & Bebcock Company, Cleveland, Ohio. Bottle-filling machine. 1,614,485; Jan. 18.
Müller, Frederich, assignor to The Whitney Mfg. Co., Hartford, Conn. Chain and part therefor. 1,648,845;

Nov. 22.

Müller, Friederich, Elizabeth, N. J., assignor to Pratt & Whitney Company, New York, N. Y. Tool post. 1,622,652; May 8.

Müller, Friedrich, Vienna, Austria, Muitiple-cylinder Internal-combustion engine 1,613,618; Jan 11.

Company, 1,634,668; July 5.

Müller, Georg. Frankfort-on-the-Main, Germany, assignor to American Lurgi Copporation, New York, N. Y. Recovering adsorbed material Trom adsorptive material. Müller, Gustav W., Charlottenburg, Germany, assignor to General Electric Company. Control system, 1,614,146; Jan 11.

Jan. 11.

Jan. 11.

Müller, Gustav W., Charlottenburg, Germany, assignor to General Electric Company. Automatic substation. 1.614.147; Jan. 11.

Müller, Hans, Munich, Germany. Box for storing furs. Müller, Hermann, assignor to T. R. Geigy A. G., Basel, Switzerland. Printing paste and preparation thereof. 1.615.908; Feb. 1.

Müller, Jakob, Budesheim-Bingen, assignor of one-balf to V. Binsizza, lvingen, Germany. Railway signaling device. 1.617,208; Feb. 8.

Muller, John, Brooklyn, N. Y. Needle cam for flat-knitting machines. 1,613,050; Jan. 4.

Miller, Joseph, Dayton, N. J. Water regulator. 1,638,053; Aug. 9.

Miller, Karl, assignor to E. Muller, Kreiensen, Germany. Free-wheel device and back-pedal brake for cycles. 1,618,213; Feb. 22.

M. H. assignor. Muller, Couis E., Los Angeles, Calif. Electrode holder. 1,634,957; July 5.

Muller, Louis E., Los Angeles, Calif. Electrode holder. 1,634,957; July 5.

Muller, Choi, assignor of one-half to J. G. Kneher, Richmond Hill, N. Y. Banding machine. 1,640,465; Miller, Ctot A., Ambler, Pa. Plant support. 1,639,781; Aug. 23.

Muller, Faul F. W., Hoboken, N. J. Perfume dispenser.

mona 1111, N. T. Banung machine. 1,630,405;
Miller, Otto A., Ambler, Pa. Plant support. 1,639,781;
Aug. 23.
Muller, Paul F. W., Hoboken, N. J. Perfume dispenser.
1,644,482; Oct. 4.
Muller, Paul F. W., Hoboken, N. J. Perfume dispenser.
1,644,482; Oct. 4.
Muller, William, assignor to Sordead Electroquimica description of the sordead Electroquimica of Electroquimica of the sordead Electroquimica of Electroquimica

ullins, Robert T., Brooklyn, assignor to A. G. Spalding & Bros., New York, N. Y. Football helmet. 1,652,288; Dec. 13.

Mullins, Thomas E., et al. (See Mullins, Ed. and O. B.,

Mulling, Thomas E., et al. (See Mullins, Ed. and O. B., assignors, assignors, Mullor, Aivaro, Seeaux, France, and L. Carriol, Ghent, Belgium. Wetf-feeding device for weaving looms. 1,632,912; June 21.
Mulloy, William H., St. Louis, Mo. Safety fender for automobiles. 1,632,872; Duc. 1, automobiles. 1,632,872; Duc. 1, automobiles. 1,632,872; Duc. 1, Mining Company, Fortland, Me. Thawing ground. 1,614,013; Jan. 11.
Mulot, Marcel C. B., Paris, France. Shock-absorbing device for vehicles. 1,616,504; Feb. 8.
Mulroney Frank Mr., Fort Dodge, Iowa. Bow tie. Mulroney, John E., deceased, Chicago, Ill.; M. B. Mulroney, John E., deceased, Chicago, Ill.; M. B. Mulroney, John E., deceased, Chicago, Ill.; M. R. Mulroney, John E., deceased, Chicago, Ill.; M. B. Mulloney, John E., deceased, Chicago, Ill

Mulroney, John E., deceased, Chicago, Ill.; M. B. Mul-roney, executrix, assignor to E. M. Brückett and F. Brackett, copartners doing business as The Brackett Stripping Machine Company, Topeka, Kans. Paper-cutting machine. 1.653.304; Dec. 20. Mulroney, Margaret B., executrix. (See Mulroney, John Mulroney, Margaret B., executrix. (See Mulroney, John

Multipost Company. (See Schweiger, William F., assignor.) Multiposter Company. (See Schweiger, William F.,

assignor.)
Multi-Print System Co., The. (See Kimberly, Alfred K.,

Multisize Rotary Press Co. (See Wells, John H., as-signor.)

Multi Vane Construction Company. (See Bullard, Herbert

A., assignor.)
Muivehili, John D., Seattle, Wash. Golf tee guard.
1,616,059, Feb. 1.
Muivihili. Daniel C., Hannibal, Mo. Wheel-cleaning device, 1,623,187; Apr. 19.

Mumaw, John H., J. B. Schnieders, and W. G. Haas, assignors, by mesne assignments, to Universal Specialty Company, Dayton, Ohio. • Brush holder. 1,624,426 Apr. 12.

Mumbower, Leonard E. (See Abernethy, J. L., and Mum-

hower,)
Mumbrauer, William, New York, N. Y. Closure for peepholes and the like. 1,648,279; Nov. 8.
Mumford, Edward G., et al. (See Brooks, Roscoe A.,
assignor.)

Assignor. (See Mummert, Ervin S.,

assigno: Ervin S., assignor to Mummert-Dixon Com-pany, Hanover, Pa. Wire loom. 1,643,347; Sept. 27, Mummert, Harvey C., Hanmondsport, N. Y., assignor to Aerial Service Corporation. Wing skid. 1,613,842; Jan. 11.

to Aerial Service Corporation. Wing skid. 1,613,842: Jan. 11.

Nummert, Harvey C., Hammondsport, N. Y., assignor to Aerial Service Corporation. Aeroplane landing gear. 1,622,799; Mar. 29.

Munmert, Harvey C., Hammondsport, N. Y., assignor to Aerial Service Corporation. Airplane fuselage. Munmert, Harvey C., Hollis, and J. F. Meade, Freeport, assignors, by mesne assignments, to Curtiss Aeroplane and Motor Company, Inc., Garden City, N. Y. Temperature-regulating system for aeronautical motors. 1,623,128; Apr. 5.

Munmert, Harvey C., Hollis, and J. F. Meade, Freeport, assignors, by mesne assignments, to Curtiss Aeroplane plane radiator. 1,613,619; Jan. 11.

Mummert, Harvey C., and J. F. Meade, Hammondsport, N. Y., assignors to Aerial Service Corporation. Tall skid. 1,613,843; Jan. 11.

Mummert, M. A. (See Smith, Leonard, assignor.)

Mummert, M. A. (See Smith, Leonard, assignor.)

Munmert, Munrice M. (See Millen, Stanley S., assignor, 1,655,018; Dec. 20.

Munce, Robert. (See Smith, G. L., and Munce.)

Mundell, Herbert J., Summerville, Oreg. Aeroplane. 1,638,358; Aug. 9.

Mundell, James E. (See Bamber, J., and Mundell.)

Mundell, James E. (See Bamber, J., and Mundell.)

Mundell, James E. (See Bamber, J., and Mundell.)

Mundelf, James E. (See Bamber, J., and Mundell.)

Munder, Emil, Aachen, Germany, Fulled woven fabric.

Mundell, James I. (See Bamber, J., and Mundell, Mundet, L., & Son, Inc. (See Nueske, Julius, Jr., assignor.)
Munder, L., & Son, Inc. (See Nueske, Julius, Jr., assignor.)
Mundorf, Emil, Aachen, Germany. Fulled woven fabric.
1,615,517; Jan. 25.
Munger, Earl A., assignor to Acme Machine Products
Company, Kalamazoo, Mich. Punching machine.
1,621,130; Mar. 15.
Munger, Eugene, Birmigham, Ala., assignor to Continental Gin Company. Cotton-gin lint fine. 1,646,656;
Oct. 25.
Munger, Howard, assignor to The Bradley Motor Products Company, Fostoria, Ohio. Trunk rack. 1,613,406;
Jan. 4.

Munitex Corporation. (See Leemann, H., and Tagliani,

Munitex Corporation. (See Leemann, H., and Tagliani, assignors).

Munn, Ralph T., Meirose Highlands, Mass, Rim tool. Rel6,726; Aug. 30.

Munro, Alfred H., Regina, Saskatchewan, Canada. Power-transmission gear. 1,613,625; Jan. 4.

M. 1997. Sept. March 1997. (Sept. 1997.) (Sept. 1997

Munroe, Treadway B., assignor to Dahlberg & Co Inc., Chicago, Ill. Flooring material. 1,6

Minroc, Thicago, III. 1100 mg.
Apr. 26.
Apr. 26.
Munroc, Treadway B., assignor to Dahlberg & Company,
Inc., Chicago, III. Slitting sheet material. 1,625,622;
May 24.
May 24.
May 24.
May 24.
May 24.
May 25.
May 24.
May 24.

Murroe, Treadway B., assignor to Dahlberg & Company,
Inc. Chicago, III. Apparatus for slitting continuouslymoving material. 1,642,081; Sept. 13.
Munsch. Hans, Berlin, Germany. Loud-speaker casing,
Des. 7(3,938; Nov. 22.
Munsell, Alexander E. O., Baltimore, Md., and M. E.
Bond, Rochester, assignors to Munsell Color Company,
Incorporated, New York, N. Y. Color chart. 1,617,024;
Feb. 8.

Feb. 8.

Munsell, Color Company. (See Munsell, A. E. O., and Bond, assignors.)

Munsen, Oswald G. (See Helvig, G. O., and Munsen.)

Munsingwear Corporation, The. (See Chatfield, FrankIln, assignor.)

Munsingwear Corporation, The. (See Spilsbury, Beulah
G., assignor.)

Munson, Charles A., New Britain, Conn. Forming hinges.

1,620,633, Mar. 8. J., Los Angeles, Calif. Mechanical
Munson, Sweney, Scammon, Kans. Lubricator. 1,620,381;
Mar. 8.

Munters, Carl G. (See von Platen, B. C., and Munters.)

Munters, Carl G. (See von Platen, B. C., and Munters.)

Munters, Carl G., Dala-Jarna, and B. C. von Platen, Ystad, Sweden, assignors, by mesue assignments, to Electrolux Servel Corporation. Absorption refrigerating apparatus. 1,645,047; San Francisco, and one-third to J. P. Carr, Oakland, Calif. Composition for removing paint and varnish. 1,614,929; Jan. 18.
Munzner, Max, Jersey City, N. J., assignor to The Torsion Balance Company, New York, N. Y. Adjustable frame or truss for instruments of precision. 1,652,631; Dec. 13.

Murakami, Rin N., assignor to H. W. Bolens, Port Washington, Wis. Fuel economizer. 1,638,015; Aug. 9. Murch, John H., Portland, Oreg., assignor to American Can Company, New York, N. Y. Can. 1,616,665;

(See Burt, 1800) (See Burke, 1800) (Murdock, S. D. (See Burke, 1800) (See Burke, 180

Murlin, John R., Rochester, N. Y. Preparation of anti-diabetic material from pancreas. 1,646,553; Oct. 25. Murlin Manufacturing Company. (See Lindsay, Donald

Murlin Manufacturing Company. (See Linuxs), Donne, E., assignor.)
Murn, Basil J., Foley, Minn. Steering coupling for trailers. 1,644,264; Oct. 4.
Murnan, Frederick C., Frinceville, Ill. Adjustable cap. 1,651,923 Dec. (See Welch, P., and Murphy,)
Murphy, Cornelius G., Long Beach, Calif. Miner's hand tool. 1,640,089; Aug. 23.
Murphy, Daniel C., Scobey, Mont. Receptacle. 1,624,273;

urphy, D

Apr. 12.

Murphy, Daniel R., Newark, Ohio. Piston valve.
1,830,133; May 24.

Murphy, Daniel R., assignor of one-fourth to W. G.

Hanna, Newark, Ohio, and one-fourth to W. H. Truschel, Wheeling, W. Va. Reciprocating valve.
1,653,359; Dec. 20.

Murphy, Edward J., Framingham, Mass. Valve cap.
1,631,530; May 3. Schenectady, N. Y., assignor to General Electric Company, Arc lamp. 1,623,348; Apr. 5.

Murphy, Edwin J., and L. P. Hutt, Schenectady, N. Y.,
assignors to General Electric Company. Searchlight.
1,618,103; Feb. 15.

Murphy Eracis, Chicago, Ill. assignor to Western Elec-

assignor.)

Myphy George S., assignor
Des Moines, Iowa. Holding and Sary.
Des Moines, Iowa. Holding and Sary.
Myphy. Gerold H., Flushing, assignor to Underwood
Typewriter Company, New York, N. Y. Typewriting
machine. 1,623.063; Apr. 5.
Murphy, Gilbert and W. A. Simond, assignors to Acme
Knitting Machine & Needle Company, Franklin, N. Il.
Knitting hosiery. 1,626.049; Apr. 26.
Murphy, Gilbert O., and D. Wenham, Hamilton, New Zealand. Cutting blade of lawn mowers. 1,644,889;
Oct. 11.

Reading, Mass., assignor, by mesne Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to The Bassick Manufacturing Company, Chicago, Ill. Pressure lubricating system and ap-paratus. 1,637,326; July 26.

Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to The Bassick Manufacturing Company, Chicago, Ill. Lubricating apparatus. 1,647,538;

Nov. 5.

Nov. 5.

Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to The Bassick Manufacturing Company, Chicago, Ill. Lubricating system and apparatus. 1,649,177; Nov. 15.

Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to The Bassick Manufacturing Company, Chicago, Ill. Pressure inbricating system and apparatus. 1,651,218; Nov. 29.

Murphy, Ill. Pressure inbricating system and apparature, 1,651,218; Nov. 29.

Murphy, James J., assignor to Eagle Lock Co., Terryville, Conn. Cylinder lock. 1,629,172; May 17.

Murphy, James T., and E. J. Raney, assignors, by mesne assignments, of one-third to Chicago Mill and Lumber Company, Chicago, Ill. Beating engine. 1,614,486; Jan. 18.

Jan. 18. Murphy, John F., assignor to J. M. Robinson, Louisville, Ky. Portable bathroom. 1,682,668; June 14. Murphy, John H., and E. A. Lotz, St. Louis, Mo. Air lock. 1,686,572; July 19. Lock. 1,686,572; July 19. Lock. 1,686,572; July 19. Lock. 1,684,114; June 28. Murphy, Joseph E., et al. (See Hall, William, assignor.) Murphy, Joseph W. (See Cook, J. T., Jr., Murphy, Brusshiet, and Goldsmith). Ricking Relative property of the control of

much, and columnta.) Murphy, Morton, Indianapolls, Ind. Electric vulcanizer, 1,628,899; May 17. Murphy, Moyes J., San Leandro, Calif. Fuel-regulating apparatus for explosion engines. 1,615,996; Feb. 1. Murphy, Nicholas E., Wauwatosa, Wis. Switch lock,

Murphy, Morton, Indianapolls, Ind. Electric vulcanizer. 1,628,99; May 17.

Murphy, Moyes J., San Leandro, Calif. Fuel-regulating apparatus for explosion engines. 1,615,996; Feb. 1.

Murphy, Orville E., Seminole, assignor of forty-nine per cent to American Iron & Machine Works, Inc., Oklahoma City, Okia. Rotary well drill. 1,647,470; Nov. 1.

Murphy, P. H., Company. (See Bonsall, Charles D., as-Murphy, P. H., Company. (See Gilpin, Garth G., assignor).

Murphy, P. H., Company. (See Gilpin, Garth G., assignor).

Murphy, P. H., Company. (See Murphy, Walter P., assignor).

Murphy, P. H., Company. (See Murphy, Walter P., assignor).

Murphy, P. Eter S., Washington, D. C. Process and apparatus for producing continuous strip elements of printing forms. 1,614,626; Jan. 18.

Murphy, Peter S., Washington, D. C. Process and apparatus for producing continuous strip elements of printing forms. 1,614,626; Jan. 18.

Murphy, Ralph L., assignor of one-half to I. L. Robinson, Miera, New Mex. Wrench. 1,633,465; June 21.

Murphy, Robert N., assignor of twenty-eight and three-fourths per cent to H. Att Merechh, Ottawa. Ontatio, Murphy, Robert N., assignor in the Electrograph Company, Detroit, Mich. Printing press. 1,638,600; June 28.

Murphy, Thomas W., Delair, N. J., and W. Czarnecki, assignors to Monarch Manufacturing Works, Inc., Philadelphia, Pa. Spraying nozzle. 1,634,831; Dec. 27.

Murphy, Walter P. (See Goldinger, Carl M., assignor, Murphy, Walter P. (See Mollanger, Carl M., assignor, Murphy, Walter P. (See Mollanger, Carl M., assignor, Murphy, Walter P. (See Mollanger, Carl M., assignor, Murphy, Walter P., (See Mollanger, Carl M., assignor, Murphy, Walter P., (See Mollanger, Carl M., assignor, Murphy, Walter P., New York, N. Y. Sheet-metal car Goor, 1,633,191, July 12.

Company, Chicago, Ill. Railway-hopper-car door, 1,638,126; June 7.

Murphy, Walter P., New York, M. Y. Sheet-metal car Goor, 1,633,191, July 12.

Murphy, Walter P., New York, M. Y. Sheet-metal car Goor, 1,633,192; June 7.

Murphy, Walter P., New York, M. Y. Sh

signor.)
urray Company, The. (See Leech, I., and Bradley,

signor. Murray Company, The. (See Leech, I., and Bradley, assignors.)
Murray Company, and G., assignor to Bessemer Gas Engine Company, Grove City, Pa. Compressor. 1,630,799; May 31.
Murray, Ethelbert T. R. and L. E. R., Hertfordshire, England.
Hluminated indicating device. 1,648,768; Oct. 25.

Murray, Frank, Los Angeles, Calif. Newspaper-core-stripping machine. 1,640,090; Aug. 23.

Murray, Ross, Calif. Adjustable pulley-block hanger. 1,622,861; May 3.

Murray, Henry, Jorsey City, N. J. Combination plumb line and level. 1,635,851; Iuly 12.

International control of the control of the Temperature of the Tem Murray, J. L., et al. (See Shay, Harry E., assignor.)

Murray, Johnes R. (See Cleage, T. D., Smith, and MurMurray, John, London, England. Rotary printing machine, 1,613,542; Feb. 16.

Murray, John, London, England. Rounding books.
1,648,560; Nov. S.

Murray, John C., (See Lewis, W. S., and Murray)

Murray, John D., She Frandsco, Calif. Spray nozzle and
tip. 1,636,314; July 10.

Murray, John D., San Francisco, Calif. Air brush.
1,636,63,14; July 10.

Murray, John G. S., the Duke of Atholl, Dunkeld, Scotland. Enliding construction. 1,640,601; Aug. 23.

Murray, John G. S., the Duke of Atholl, Dunkeld, Scotland, Enliding construction. 1,640,601; Aug. 23.

Murray, John J., Yohkers, N. Y. Booklet, 1,640,245;
Aug. 23.

Murray, Joseph F., and J. Smith, Mayfield, Pa. Composition for preventing the accumulation of raindrops

Murray, Leland S., Yoba City, Calif. Fluid-pressure

transmission and brake structure. 1,615,341; Jan. 25.

Murray, Leland S., Yoba City, Calif. Fluid-pressure

transmission and brake structure. 1,615,341; Jan. 25.

Murray, Leland S., Woba City, Calif. Fluid-pressure

transmission and brake structure. 1,615,341; Jan. 25.

Murray, Richard, New York, N. Y. Clamp. 1,619,746;

Murray, Thomas E., (See Murray, Encland. Light-reflecting device or unit. 1,625,805; Apr. 26.

Murray, Thomas E., (See Hoffer, Le Roy H., assignor.)

Murray, Thomas E., (See Hoffer, Le Roy H., assignor.)

Murray, Thomas E., (See Hoffer, Le Roy H., assignor.)

Murray, Thomas E., (See Williams, Repbert H., assignor.) Murray, Thomas E., jr. (See Murray, Thomas E. and T. E., jr.)
Murray, Thomas E. (See Torchio, Philip, assignor.)
Murray, Thomas E. (See Williams, Herbert H., assignor.)
Murray, Thomas E. (See Woodrow, Harry R., assignor.)
Murray, Thomas E., Fr. Brooklyn, N. Y. Froducing certains, Thomas E., Brooklyn, N. Y. Electric fuse.
1.614,014; Jan. 11.
Murray, Thomas E., Brooklyn, N. Y. Withdrawing cores from molded conduits. 1.619,362; Mar. 1.
Murray, Thomas E., Brooklyn, N. Y. Furnace and cooling device. 1.623,764; Apr. 5.
Murray, Thomas E., Brooklyn, N. Y. Wheel and brake Murray, Thomas E., Brooklyn, N. Y. Radiator. 1,633,601; June 28.
Murray, Thomas E., Brooklyn, N. Y. Boiler. 1,633,671; June 28.
Murray, Thomas E., Brooklyn, N. Y. Boiler. 1,633,671; June 28.
Murray, Thomas E., Brooklyn, N. Y. Boiler. 1,633,674; June 28.
Murray, Thomas E., Brooklyn, N. Y. Wheel with Murray, Thomas E., Brooklyn, N. Y. Wheel with Murray, Thomas E., fr., Brooklyn, N. Y. Wheel with drum, 1,635,335; July 12.

Murray, Thomas E., Brooklyn, N. Y. Valve and the like and method of manufacture, 1,638,546; Aug. 9.

Murray, Thomas E., F., Brooklyn, N. Y. Electric welding.

Murray, Thomas E., F., Brooklyn, N. Y. Electric welding.

Murray, Thomas E., Brooklyn, N. Y. Flanged coupling, 1,648,026; Nov. 8.

Murray, Thomas E., New York, N. Y. Disk wheel.

1,614,567; Jan. 18.

Murray, Thomas E., Brooklyn, and J. H. Lawrence, New York, N. Y.; said Lawrence assignor to the said Murray, Thomas E., Brooklyn, and J. H. Lawrence, New York, N. Y.; said Lawrence assignor to the said Murray. Coal pulverizer and burner, 1,614,314; Jan. 11. Murray. Coal pulvorizer and burner. 1,614,514; Jan. 11.

Murray. Thomas E., and H. R. Woodrow, New York, N. Y.; said Woodrow assignor to said Murray. Are-welding machine. 1,636,104; July 19.

Machine. 1,636,104; July 19.

Machine. 1,636,104; July 19.

Murray. Vincent J., fr., Philadelphia, Pa. Nursing-bottle holder. 1,624,355; Apr. 12.

Murray, Walter. (See Riordan, J. P. P., and Murray, Wurray. William, Woodwaven, assignor to General Chemical Commany. New York, N. Y. Carboy bottle. 1,617,456; Feb. 16.

Murrle, William F. R., Hershey, Pa. Manufacturing white sugar. 1,615,846; Feb. 1. Murrll, Paul I., Plainfield, N. J., assignor to R. T. Vanderbilt Co., Inc., New York, N. X. Organic selenium compound and making the same . 1,622,634; Mar. compound and making the same. 1,622,534; Mar. 29.

Murrill, Paul I., Plainfield, N. J., assignor to R. T. Vanderbilt Co., Inc., New York, N. Y. Vulcanization process and product. 1,622,536; Mar. 29.

Marchay F. L. Faller, R. J. Sesgnor to R. T. Valler Elling, T. L. Faller, R. J. Sesgnor to R. T. Valler, P. J. Sesgnor to R. T. Valler, R. J. Sesgnor to R. T. J. Sesgnor to R. J. Sesgnor assignor, Musselman, Arthur W., Denver, Colo. Automatic rall-way gate. 1,654,010; Dec. 27.
Musselman, Joseph F., Bronxville, N. Y., and P. West, Newark, N. J., assignors, by mesne assignments, to Elliott Company, Pittsburgh, Pa. System for rendering liquids noncorrosive. 1,614,148; Jan. 11.
Musselman, Stanley B., Sarnia, Ontario, Canada. Indicator for setting steam-engine valves. 1,631,285; Mustain. John E. (See Sullins, H. L., and Mustain.) Muter, Leslie F., Chicago, Ili. Variable high-resistance element and making the same. 1,626,421; Apr. 26.
Muther, Lorenz. (See Lautenschlager, William F., assignor.) Mustain, John E. (See Sullins, H. L., and Mustain, Muter, Leslie F., Chicago, Ill. Variable high-resistance matter to the control of the cont Oakland, Calif. Fancy bandserchief. 1,550,030; Nov. 22.

Myers, George W., Philadelphia, Pa. Ratchet-wrench outfit. 1,644,347; Oct. 4.

Myers, Hubert A., Toledo, Ohio. Clutch device. Re16,565; Mar. I.

Myers, Hubert A., Toledo, Ohio. Candy confection. Des. 72,777; May 31.

Myers, Hubert A., assignor to The Myers Regulator Company, Toledo, Ohio. Automatle gear lock for window regulators. 1,636,105; July 19.
Myers, Hubert A., assignor to The Myers Regulator Company, Toledo, Ohio. Window regulator. 1,645,617;

pany, Cot. 18

Oct. 18.

Myers, Hubert A., assignor to The Myers Regulator Company, Toledo, Ohio. Clutch lock for window regulators. 1,652,654; Dec. 27.

Myers, Iden B., Kimball, S. Dak. Lister-cultivator hitch. 1,616,700; Feb. 8.

Myers, John, Oroville, Calif. Parking device for motor vehicles. 1,622,802; Mar. 29.

Myers, John S., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Gear Myers, John W., Quincy, Ill. Multiple hens' nest. 1,637,346; Aug. 2.

Myers, John W., Van Nuys, Calif. Gas brooder. 1,642,787; Sept. 20.

Myers, Joseph H., et al. (See Myers, Joseph W., assignor.)

signor.) Myers, Joseph W., et al. (See Myers, Joseph W., assignor.)

Myers, Joseph W., et al. (See Myers, Joseph W., assignor.)
Myers, Joseph W., Jackson, Mich. Suspension for vehicles. 1,641,640; Sept. 6.
Myers, Joseph W., assignor of one-third to J. H. Myers, Jackson, and one-third to A. J. Tuttie, Detroit, and Flatiron. 1,627,922; May 10.
Myers, Joseph W., assignor of one-third to J. H. Myers, Jackson, one-third to A. J. Tuttie, Detroit, and one-third to A. W. Myers and J. W. Myers, Jackson, Mich. Thermostatic apparatus. 1,634,876; July 5.
Myers, Joseph W., assignor of one-third to J. Tuttie, Detroit, and one-third to A. W. Myers and J. W. Myers, Jackson, one-third to A. J. Tuttie, Detroit, and one-third to A. W. and J. W. Myers, Jackson, one-third to A. J. Tuttie, Detroit, and one-third to A. W. and J. W. Myers, Jackson, Mich. Flatiron. 1,634,431; July 5.
Myers, Leo, Kirkwood, Mo. Nut-cracking machine. 1,052,918; Dec. 20.
Myers, Leo, Kirkwood, Mo. Nut-cracking machine. 1,1019,530; Mar. 1.
Myers, Lewis C., Freeport, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,624,635; May 8.
Myers, Lewis C., Freeport, and G. F. Handley, Glendale, assignors to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,035,431; July 12.
Myers, Lewis C., Freeport, and G. F. Handley, Glendale, assignors to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,048,531; July 12.
Myers, Marcus A., Gloversville, N. Y., assignor to Myers' Oct. 11.
Myers, Marcus A., assignor to Myers' Woolly Animals, Inc., Gloversville, N. Y. Purse, 1,638,594; Aug. 9.

Myers, Marcus A., assignor to Myers' Woolly Animals, Inc., Gloversyille, N. Y. Purse. 1,638,594; Aug. 9. Myers, Mark C., San Francisco, Cnilt; Mercantile Trust Company of California, executor. Surgical instrument. 1,621,212; Mar. 15.

Myers, Milton C., St. Joseph, Mo. Harrow. 1,629,356; May 17.

May 17.

Myers, Oren G., San Mateo, Calif. Thermostat switch.
1,642,742; Sept. 20.

Myers, Parke G., Cairo, assignor to The Automatic Signal
& Sign Company, Canton, Ohio. Danger signal.
1,615,310; Jan. 25.

Myers, Phillp A., assignor to The F. E. Myers & Bro.
Company, Ashland, Ohio. Pressure valve. 1,643,499;

Nov. 8.

Myers, Ralph E., East Orange, N. J., assignor to Westinghouse Lamp Company. Evacuated device and exhaust. 1,648,568; Nov. 15.

Myers, Richard T., Corvallis, Ores. Machine for the filling and settling of saws. 1,652,454; Dec. 13.

Myers, Richard T., Corvallis, Ores. Machine for the filling and settling of saws. 1,652,454; Dec. 13.

Myers, Robert C. Hutchinson, Kans. Spark plug. 1,623,452; Apr. 5.

Myers, Rufsdale, Pa. Rail joint. 1,622,238; Mar. 22.

Mars. Sees, Audistate, F.A. Kall John. 1,022,268, Mars. Waiter S., Portland, Oreg. Diamond gauge. 1,043,467; Sept. 27. Myers. Wayne B., and C. E. Young, Benton Harbor, Mich. Automatic paper feed. 1,653,305; Dec. 20. Myers, Wesley. (See Sheedy, J. M. and Myers.), Myers. William S., St. Petersburg, Fla. Line-chalking device. 1,052,711; June 14. Myers. William W., Stony Point, N. C. Meat tenderer. Myers, William W., Stony Point, N. C. Meat tenderer. Myers, William W., Stony Point, N. C. Meat tenderer. Myers, Wilson K., Portland, Oreg. Stock-food preparing and feeding apparatus. 1,651,725; Dec. 6. Myers Wintow sahes. 1,635,471; Aug. 9. Myers' Woolly Animals, Inc. (See Myers, Marcus A., as-fignor).

signor.)

Signor.)

Mylacus, Carl, Plettenberg, Germany, Adjustable support for branches, 1,618,716; Jan. 11.

Myllus, Walter G. (See Bradshaw, W. M., and Myllus.)

Myrberg, Sven O., East Providence, assignor to Providence Stock Company, Providence, R. I. Bracelet end hook, 1,654,844; Dec. 27.
Myrdal, John M., Trall, Ontarlo, Canada. Dowellng machine, 1,614,274; Apr. 12.
Myre, James H., Detroit, Mich. Silde game mechanism. 1,644,80; Oct. 11.
Myre, James H. Detroit, Mich. Platform release. Myrick, Raiph B., Montgomery, Ala. Display container. 1,638,208; Aug. 9.
Myrick, Raiph B., Montgomery, Ala. Display container. 1,638,208; Aug. 9.
Myrick B. A. (See Prat, Esteban M., assignor.)
Mystic Washer Company. (See Hegarty, Daniel A., assignor.)

signor.) D. Q. Specialty Corporation. (See Knorpp, Philip J., assignor.) N. I. C. E. Limited. (See Snow, Charles S. H., as-

assignor.)
N. I. C. E. Limited. (See Snow, Charles S. H., assignor.)
N. I. C. E. Antomobile. Polish Mfg. Co. (See Trout, N. Carles W., assignor.)
N. V. Constructie Atelier der Vorstenlanden. (See Jan Meesters, Abraham M., assignor.)
N. V. Industrie- en Handelmaatschappij v. H. Harms & Co. (See Ezendam, Jan H., assignor.)
N. V. Machina Maatschappij vor Handel en Industrie.
N. V. Machina Maatschappij vor Handel en Industrie.
N. V. Nederlandsche. Installatie Maatschappij Therma. (See Petersen, Alfred O. H., assignor.)
N. V. Philips' Gloeilampenfabrieken. (See Bouwers, Albert, assignor.)
N. V. Philips' Gloeilampenfabrieken. (See Jonas, Gott-Hell B., assignor.)
N. V. Philips' Gloeilampenfabrieken. (See Schoonenberg, Pancras, assignor.)
Nab, Julius, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor unloader.
1,623,489; Apr. 5.

Namlooze Vennotschap Algemeene Norit Maatschappij. (See Lourens, Cornelis, assignor.) Naamlooze Vennootschap de Vereenigde Ijzerfabrieken "de Vijf." (See Hofstede-Crull, Rento, W. H., as-

Maminosze Vennotschap Financieele Maatschappij "Driebergen." (See Hoistede-Cruil, Rento, W. H., assignor.)
Naminosze Vennotschap Financieele Maatschappij "Driebergen." (See Groenebaum, Wilhelm, assignor.)
Naminosze Vennotschap Finanzieele Maatschappij "Driebergen." (See Hose, Rudolf, assignor.)
Naminosze Vennotschap Kamatec. (See Stuivenberg. Cornelis H., assignor.)
Naminosze Vennotschap Kopergieterij, Appendage en Formatie en See Stuivenbergen. (See Dannell, Otto, assignor.)
Naminosze Vennotschap Machinerleen en Apparaten Fabrieken. (See Dannell, Otto, assignor.)
Naminosze Vennotschap Mederlansche Kunstzijdefabriek. (See Janseen, Hendrik J. J., assignor.)
Naminosze Vennotschap Nederlansche Kunstzijdefabriek. (See Kopergieterij, Assignor.)
Csee Van Diggelen, Johannes, C. M., assignor.)
Csee Van Diggelen, Johannes, C. M., assignor.)
Naminosze Vennotschap Philips' Gloeilampenfabrieken. (See Holst, G., and Bouwers, assignors).
Naminosze Vennotschap Philips' Gloeilampenfabrieken. (See Holst, G., and Bouwers, assignors).
Naminosze Vennotschap Philips' Gloeilampenfabrieken. (See Holst, G., and Bouwers, assignors).
Naminosze Vennotschap Philips' Gloeilampenfabrieken. (See Holst, G., and Bouwers, assignors).
Naminosze Vennotschap Philips' Gloeilampenfabrieken. (See Holst, G., and Bouwers, assignors).

Namlooze Vennootschap Philips' Gloeilampenfabricken. (See Schoonenberg, Pancras, assignor.)
Namlooze Vennootschap Vereenigde Touwfabricken. (See Hoos, Williem, assignor.)
Nabors, William C., Manefield, La. Winch attachment for automobile rear azies. 1,613,900; Jan. 11.
Nabow, David. (See Lee, W. S., Pfachler, and Nahom.)
1,624,756; Apr. 12.
Nacey, Harry M., Chicago, Ill. Automatic sprinkler head for sprinkling systems. 1,626,863; May 3.
Nachtigal, Daniel, Hibbing, Minn. Can opener. 1,618,304; Feb. 22.
Nadolieck, Malva New York, N. Y. Wreath. Des.
Nadolieck, Malva New York, N. Y. Wreath. Des.
Nadoveney, Charles, assignor of two-thirds to L. Borack, Bayonne, N. J. Coin-controlled vending machine. 1,625,138; Apr. 19.
Nacf, Ernest E., Parls, France, assignor to Tubize Artificial Silk Company of America. Producing alkali-metal sulphydrates, 1,638,106; July 19.
Nagal, Kivoshl, San Francisco, Calif. Sanitary fine-tooth comb. 1,643,512; Sept. 27.
Nagel, August, Stuttgart, Germany. Switch for electrical fuel-feeding apparatus, 1,637,425; Aug. 2.
Nagel, August, Stuttgart, Germany. Switch for electrical fuel-feeding apparatus for compressing loose material in Nagel-Chase M62; Kor, The.
Signor.)

Nagel-Chee Mfg. Co. (See Schultz, Edward, assignor.) Na. 1985. See Mfg. Co. (See Schultz, Edward, assignor.) Na. 1985. See Mfg. Co. (See Langan, William B., assignor.) Nagel, Robert, et al. (See Langan, William B., assignor.) Nagel, Theodore, Brooklyn, N. Y. Binding fuel material and producing same. 1,262,208; Apr. 26.

Nagel, Theodore, assignor to The Nagel-Chase Mfg. Co. Chicago, Ill. Yapor burner. 1,620,123: Mar. 8.
Nagel, W. G., Electric Company, The. (See Adams, H. E. and Decker, assignor.)
Nagel, W. G., Electric Company, The. (See Adams, H. E. and Decker, assignor.)
Nagel, W. G., Electric Company, The. (See Decker, See Nagel, W. G., Electric Company, The. (See Fentherstone, Edward B., assignor.)
Nagel, W. G., Electric Company, The. (See Fentherstone, Edward B., assignor.)
Nagin, Harry, Brooklyn, N. Y., assignor to the Grating Company of America, Pittsburgh, Pa. Connected bar structure. 1,631,691; June 7.
Nagin, Harry, Brooklyn, N. Y., assignor to America, Pittsburgh, Pa. Connected bar structure. 1,631,691; June 7.
Nagin, Harry, Brooklyn, N. Y., assignor to America, Pittsburgh, Pa. Connected bar structure. 1,631,691; June 7.
Nagie, Flopd A., Iowa City, Iowa. Flow-in-creasing attachment for culverts. 1,643,953; Oct. 4.
Nagy, Louis, See Patts and Asg. Dt. Morton, Hamilton, Ontario, Canada. Gravity table. 1,634,267; July 5.
Nagy, Louis, assignor of one-half to M. Daradics, Hamilton, Ontario, Canada. Multiple writing table. 1,652,792; Dec. 13.
Nahrstedt, Hermann. (See Mayer, S., and Nahrstedt).
Nahrstedt, Hermann. (See Mayer, S., and Nahrstedt).
Naismith, William G., assignor to The Denver Rock Drill Mfg. Co., Denver, Colo. Fluid-operated motor. 1,622,222; May 17.
Naismith, William G., assignor to The Denver Rock Drill Mfg. Co., Denver, Colo. Fluid-operated motor. 1,622,222; May 17.
Naismith, William G., assignor to The Denver Rock Drill Mfg. Co., Denver, Colo. Fluid-operated motor. 1,629,222; May 17.
Naismith, William G., assignor to Seimel Hara and Goshikariah Nakayama Kogsyo-Sho, Osaka, Japan.

Mar. 8.

Nakayama, Takasuke, assignor to Seimei Hara and Goshikaisha Nakayama Kegyo-Sho, Osaka, Japan. Rock drill. 1617,025; Feb. 8.

Nall, Torney G., and E. J. Beauvais, St. Paul, Minn. 31. Namet, Julius. (See McManaman, P., and Namet.) Namiot, Chrises B., New York, N. Y. Combined lamp stand and ash tray. Des. 73,668; Oct. 18.

Namiot, Charles B., New York, N. Y. Garter, 1,636,107; July 19.

Name, Sidney A. Canfield. Ark. Fine 1416,000. Nance, Sidney A., Canfield, Ark. Flue. Feb. 1. 1.615.909:

Nance, Sidney A., Canfield, Ark. Flue. 1,615,909; Feb. 1.

Nanfieldt, Ernest F., New Haven, Conn. Cleaning asbestos. 1,632,620; June 14.

Nangano, Joseph C., San Pedro, Calif. Oil indicator. Nangano, Joseph C., San Pedro, Calif. Oil indicator. Nanji, Dinshaw R., Birmingham, and F. J. Paton, Smethwick England. Manufacture of pectin products. 1,634,879; July 5.

Nanney, Casey. (See Reiter, J. M., Nanney, and Payne.) Nanni, Menotti, Tivoli, near Rome, Italy. Pneumatic Connecting device. 1,625,372 Apr. dime for inspecting a piece of tissue, measuring its length, and folding it. 1,624,060; Apr. 12.

Napier, Archibaid S., St. Paul, assignor to J. N. Collins Company, Minneapolis, Minn. Advertising and display carton. 1,636,066; July 19.

Napier Co., The. (See Ross, J., and Schuelke, assignors.) Napier Co., The. (See Schuelke, E. A., and Ross, assignors.) Son Limited. (See Napier, M. S., and Wilkinson, assignors.) Napier Co., The. (See Schuelke, E. A., and Ross, Aspier Co., The. (See Schuelke, E. A., and Ross, Aspier Co., The. (See Schuelke, E. A., and Ross, aspier Co., The. (See Schuelke, E. A., and Ross, aspier Co., The Co., and the C

Nash, George F., Santa Ana, Calif. Combination dolly and jack. 1,650,031; Nov. 22.
Nash, George W., Denver, Colo. Brake dressing compound and making same. 1,639,611; Aug. 16.
Nash, James O., Duke, Okia. Pump. 1,639,936; Aug. 23.
Nash, Mary B., Pasadena, Calif. Holder for containers.
Nash, Mary Col. 11,940,000; Nash Motors Company. (See Wahlberg, Nils E., assignor).

signor.)

Nash, Ralph, assignor to C. M. Lovsted, Seattle, Wash, doing business ats C. M. Lovsted & Co. Drawhead and coupling link, 1,656,533; Nov. 22.

Lova; said Nash assignor to said Von Spreecken. End gate. 1,632,747; June 14.

Nash, William C., Neenah, Wils. Antifrost vision glass. 1,638,505; Jaug. 9.

Nash, William H., Sault Ste. Marie, Ontario, Canada. Ross, William H., Sault Ste. Marie, Ontario, Canada. Feb. 8, attachment for Fordson tractors. 1,616,463; Feb. 8, attachment for Fordson tractors. 1,616,463; Feb. 8.

Feb. 8. Nashua Brass Company. (See Dennis, W. J., and Perry,

assignors.)

Nashua Gummed & Coated Paper Company. (See Carter,
Winthrop L., assignor.)

Nashua Gummed & Coated Paper Company. (See O'Clair,
Edward J., assignor.)

Nashua Gimmed & Costed Paper Company. (See O'Clair, Edward I, assignor.)
Nashua Manufacturing Company. (See Caffray, William E, assignor.)
Nashua Youngblood Company. (See Youngblood, Knowles, assignor.)
Naske, Carl, Berlin-Charlottenburg, Germany. Kiln for the burning of cement. 1,622,337; Mar. 29.
Nastasia, John. (See Nastasia, Romeo M., assignor.)
Nastasia, Gameo M., assignor of one-effith to J. Nastasia, John. (See Nastasia, Romeo M., assignor.)
Naternan, Henry C., Los Angeles, Calif. Resilient package-holding device. 1,625,275; Apr. 19.
Nathan, Albert F. (See De Leeuw, Adolph L., assignor.)
Nathan, Alfred, Leipzig, Germany. Treating cheap skins in Imitation of more expensive furs. 1,642,505; Sept. 13.

Nathan, Benjamin, New York, N. Y. Textile fabric. Des. 73,575; Oct. 4.
Nathan & Cohen Company. (See Muelberger, Walter, as-

Siguor.)
Nathan, Edwin B., Yonkers, N. Y. Receptacle.
1,629,837; May 24.
Nathan Manufacturing Company. (See Reynolds, H. W.,
Nathan, Samuel, assignors).
Nathan, Samuel, assignor of one-fourth to W. Klingstein
and one-fourth to D. Hart Los Angeles, Calif. Campstove burner. 1,640,148; Nov. 22.
Nathansohn, Alexander, Bad Harzburg, Germany. Producing lead compounds of chromic acids. 1,633,948;
June 28.

Nathanson, Matthew A., Boston, Mass. Mirror. 1.652.678; Dec. 13.
National Acme Company, The. (See Drissner, Alfred E., Assignor.)

National Acme Company, The. (See Wheeler, Earl H., assignor.)

National Airoil Burner Company. (See Straitz, John F.,

National Airoi Burner Company. (See Straitz, John F., assignor.)
National Aniline & Chemical Company. (See Churchman, John W., assignor.)
National Aniline & Chemical Co. (See Crowell, Joyce H., assignor.)
National Aniline & Chemical Co. (See Fiett, Lawrence H., assignor.)
National Aniline & Chemical Co. (See Flett, Lawrence H., assignor.)
National Aniline & Chemical Co. (See Leaming, Thomas H., assignor.)
National Aniline & Chemical Company. (See Lewis, National Aniline & Chemical Company. (See Nelson, National Aniline & Chemical Company. (See Nelson, National Aniline & Chemical Company. (See Nelson, R. A., and Prasi, assignors.)
National Aniline & Chemical Company. (See Nelson, R. A., and Prasi, assignors.)

P., assigner.)

National Aniline & Chemical Company. (See Rogers, Donald G., assignor.)
National Aniline & Chemical Co. (See Wait, Justin F., assignor.)

assignor.) National Aniline and Chemical Co. (See Wenker, Henry, assignor.) National Aniline & Chemical Company. (See Zeller, O., and Waldman, assignors.) National Assorting Company. (See Cox, George W., Jr.,

assignor.) National Auto Body Works. (See Stone, George W., as-

Signot.)

National Automatic Tool Company, The. (See Burton, Faul C., assignor.)

Robert M., assignor.)

Robert M., assignor.)

National Automatic Tool Co., The. (See Galloway, R. M., Bockhoff, and Meloy, assignors.)

National Automatic Tool Co., The. (See Peters, Frebert J., assignor.)

National Automatic Tool Company, The. (See Stickney, Charles A., assignor.)

National Biscuit Company. (See Taylor, George A., assignor.)
National Blank Book Company. (See Schade, John, assignor.) National Brake Company. (See Brewster, William D., assignor.)
National Brake and Electric Company. (See Aikman, ourton S., assignor.)
ilional Brake & Electric Company. (See Beimling, National William A., assignor.)
National Brass Company, The. (See Knapp, Edward L., assignor.)
National Brick Company. (See Weber, Clarence J., assignor.) National Bundle Tyer Company. (See Saxton, Albert H., assignor.)
National Carbon Company. (See Armstrong, George W., National Carbon Company. (See Birdsall, Charles G., assignor.) National Carbon Company. (See Briggs, Arthur J., assignor.) National Carbon Company. (See Heise, G. W., and Schumacher, assignors.)
National Carbon Company. (
son, and Chaney, assignors.)
National Carbon Company. (See Heise, G. W., Thomp-(See Hendry, William F., National Carbon Company. (See Holt, Francis A., assignor.) National Carbon Company. (See Hopkins, Nevil M., as-National Carbon Company.

Signor.)

Rosenhoffer, assignors.)

Rosenhoffer, assignors.)

Rosenhoffer, assignors.)

Rosenhoffer, assignors.)

Rosenhoffer, assignors.)

Rottonal Carbon Company.

Signor.)

Signor.)

(See Rosen, Charles, assignor.)

(See Rosen, Charles, assignor.)

(See Rosen, Charles, assignor.)

(See Rosen, Charles, assignor.) signor.)
National Carbon Company. (See Schumacher, Erwin A., National Carbon Company. (See Voorhees, Lee J., assignor.)
National Carbon Company. (See Wendel, Edmund, assignor.) National Card Mounting Company. (See List, Frank X., National Card Mounting Company. (See List, Frank X., assignor.)

National Carton Company. (See Yngve, Victor, assignor.)

National Cash Register Company, The. (See Block, Abraham, assignor.)

National Cash Register Company, The. (See Bowman, William W., assignor.)

National Cash Register Company, The. (See Brand, Samal Cash Register Company, The. (See Christian, R. A., and Gates, assignor.)

National Cash Register Company, The. (See Christian, R. A., and Gates, assignor.)

National Cash Register Company, The. (See Goldberg, Maximitian M., assignor.)

National Cash Register Company, The. (See Goldberg, Maximitian M., assignor.)

National Cash Register Company, The. (See Klosterman, Joseph J., assignor.)

National Cash Register Company, The. (See Kreider, Walter J., assignor.)

National Cash Register Company, The. (See Kubiman, Edward H., assignor.)

National Cash Register Company, The. (See Scott, H. B., Wildman, and Huey, assignors.)

National Cash Register Company, The. (See Shipley, National Cash Register Company, The. (See Von Pein, Edward J., assignor.)

siguor.)
National Concrete Metal Forms Corporation. (See Seelye,
Elwyn E., assignor.)
National Conveyor Company, The. (See Gerdeman,
Frank H., assignor.)
National Dump Car Company. (See Neikirk, John O.,
assignor.)
(See Neikirk, John O.,

National Dump Car Company. (See Renart, John C., assignor.)
National Electric Door Company. (See Petersen, William G., assignor.)
National Electric Manufacturing Company. (See Fox, National Electric Manufacturing Company. (See Fox, National Enameling and Stamping Company. (See Richman, Solomon, assignor.)
National Enameling and Stamping Co. Inc. (See Sladky, Alexander C. and J. assignors.)
National Engineeric Company. (See Bausman, Alonzo L., assignor.)

National Fire Proofing Company. (See Bevier, Philip H., assignor.) National Fire Proofing Company. (See Wallace, Robert

National Folding Box Company. (See Ryan, J. J., and Gaffney, assignors.)
National Form & Fixture Co. (See Glaberman, Harry, assignor.)

National Formetal Company, The. (See Raus, John, as-National Formetal Company, the Gee McBride, Howard E., assignor.)
National Fruit Jaice Extractor Company. (See Davis, Frederick B., assignor.)
National Fraphite Lubrication Company. (See Watres, Lewis S., assignor.)
National Graphite Lubrication Company. (See Watres, Lewis S., assignor.) National Grave Value Co., the Company assignor.)
National Gum Company. (See Blendow, A. W., and Blendermann, assignors.)
National Labeling Machine Company. (See Cereghino, Joseph A., assignor.)
National Lece & Embroidery Company. (See Schmid, Werner, assignor.)
National Lead Company. (See Behr, Gustave E., jr., assignor.) National Lead Company. (See Newnam, William E., assignor.)
National Lead Company. (See Walker, Edward C., as-National Lead Company. (See Walker, Edward C., assignor.)
National Lock Co. (See Aldeen, Gedor W., assignor.)
National Lock Co. (See Aldeen, Wihlelm G., assignor.)
National Lock Washer Company, The. (See Armstrong, John L., assignor.)
National Lock Washer Company, The. (See Loutrel, Cyrus H., assignor.)
National Machine Tool Co. (See Heinrich, R., and Kramer, assignors.)
National Machinery Co., The. (See Clouse, William L., assignor.) National Machinery Co., The. (See Clouse, William L., assignor.)

National Malleable and Steel Castings Company. (See Anliker, F. and Wittmer, assignors.)

Anliker, F. and Wittmer, assignors.)

National Malleable and Steel Castings Company. (See Backmore, W., Bazeley, and Robinson, assignors.)

National Malleable and Steel Castings Company. (See Buckius, Albert O., Fr., assignor.)

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National Malleable and Steel Castings Company. (See Robinson, David, assignor.)

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National Malleable and Steel Castings Company. (See Robinson, David, assignor.)

National Malleable and Steel Castings Company. (See Willison, John, assignor.)

National Malleable and Steel Castings Company. (See Willison, John, assignor.)

National Malleable and Steel Castings Company. (See Willison, John, assignor.)

National Malleable and Steel Castings Company. (See Willison, John, assignor.)

National Malleable and Steel Castings Company. (See Willison, John, assignor.) assignor.) National Manufacturing Company. (See Pemberton, Harold, assignor.)
National Manufacturing Company Inc. (See Ferris, Walton C., assignor.)
National Manufacturing Company of America. (See National Marking Machine Company. (See Faust, Alexander L., assignor.)
National Marking Machine Company. The. (See Osborne, R., and Miller, assignors.)
National Marking Machine Company. The (See Machael Marking Machine Company. (See Calderwood, Ray, Philip A., assignor.)

Ruph A., assignor.)
Hugh A., assignor. (See Calderwood, Hugh A., assignor.) Hugh A., assignor.)
National Metal Molding Company. (See Renshaw, Clarence, assignor.)
National Paper Box Company. (See Newton, Edwin H., National Paper Can Company, The (See Annen, James E., National Paper Products Company. (See Nelson, Clarence M., assignor.)
National Pneumatic Company. (See Conklin, Roscoe D., assignor.)
National Pneumatic Company. (See Dapron, Joseph M., assignor.) National Pneumatic Company. (See Forman, Paris R., assignor.) National Pneumatic Company, The. (See Hockley, Horace R., assignor.)
National Pneumatic Company. (See Meyers, George W., National Pneumatic Company. (See Quinn, James L., assignor.)
National Pneumatic Company. (See Rowntree, Harold, National Pneumatic Company. (See Rowntree, H., and Conklin, assignors.)
National Pole & Treating Company. (See Valentine, Robert D., assignor.)
National Products incorporated. (See Bossard, Theodore, National Products in National Products Incorporated. (See Hossard, Aucouste, Assignor.)
National Pump and Compressor Company. (See Wilson, Edward, assignor.)
National Recording Pump Company. (See Hatmaker, W. T., and Elekmeyer, assignors.)
National Recording Pump Company. The.
naker, W. T., and Elekmeyer, assignors.)

National Refining Company, The. (See Setzler, Horace National Reining Company.

B., assignor.)

National Refining Process Corporation. (See Kirkpatrick, William C., assignor.)

National Refrigerating Company. (See Ensign, Emory S., assignor.)

National Refrigerating Company. (See Johnson, Philip Massignor.) M., assignor.)
National Refrigerating Company. (See Keyes, Frederick G., assignor.) National Regulator Company. (See Larson, John M., as-National Safety Devices Company. (See Lamb, William G., assignor.)
National Safety Devices Company. (See Woodring, Alberto I., assignor.) National Satety Jewes Company, Detro I., assignor.) National Sales Company. (See Cowan, Frank, assignor.) National Screen & Manufacturing Company, The. (See Stickle, Frederick A., assignor.) National Screen Service, Inc. (See Reichmann, Willy, as-National Screen service, inc. (See Administrational Screen and Manufacturing Company, The. (See Tolin, Albert E., assignor.)
National Smeiting Company, The. (See Frost, John G. G., National Smelting Company, There (See Frieder, L. P., Huntley, and Hollas, assignors.)
National Spun Silk Co. (See Roe, E. O., and Frieder, assignors.)
National Standard Company. (See Hopkins, Arthur C., assignor.)
National Standard Company. (See Staley, Joseph H., National Standard Company. (See Staley, Joseph H., assignor.)
National Standard Threadless Coupling Corporation. (See Schawrow, Ralph, assignor.)
National Store Specialty Co., The. (See Henwood, Lloyd National Supply Company, The. (See Archer, Merton T., assignor.)
National Supply Company, The. (See Mahan, Joseph R., assignor.)
National Supply Company, The. (See Schwimmer, F. J., National Supply Company, The. (See Wright, Clyde S., assignor). National Supply Company, the. (See Wright, Ciyue S., National Supply Company of Delaware, The. (See Timbs, Edward, assignor.)
National Surety Company. (See Kirkegaard, Georg, assignor.)
National Tile Company, The. (See Jones, L. S., Fisher, and Henrikson, assignors.)
National Tool Company, The. (See Simmons, Oliver G., National Tool Company, The. assignor.)
National Tube Company. (See Bosle, J. P., and Telfer, assignors.) Assignors.)
National Tube Company. (See Burge, Alfred, assignor.)
National Tube Company. (See Cook, Howard D., as-National Tube Company. (See Cook, Howard D., assignor.)
National Tube Company. (See Webb, Samuel, assignor.)
Nations, Samuel O., Snyder, Tex. Casing for computing
devices. Des. 73.229; Aug. 23.
Naud, Jack. (See Mitchell, S. W., Naud, and Goldman.)
Naugatuck Chemical Company, The. (See Bradley, C. E.
Naugatuck Chemical Company, The. (See Gdwell, Sidney M., assignor.)
Naugatuck Chemical Company, The. (See Gibbons, Willis A., assignor.)
Naugatuck Chemical Company, The. (See Hopkinson, E.,
Saugatuck Chemical Company, The. (See McGavack,
John, assignors.)
Naugatuck Chemical Company, The. (See Smith, Omar
Naugatuck Chemical Company, The. (See Smith, Omar
Naugatuck Chemical Company, The. (See Smith, Omar
Naugatuck Chemical Company, The. (See Teague,
Merwyn C., assignor.)
Naugatuck Chemical Company, The. (See Teague,
Merwyn C., assignor.)
Naugatuck Chemical Company, The. (See Teague,
Merwyn C., assignor.)
Naugatuck Chemical Company, The. (See Teague,
Merwyn C., assignor.)
Naugatuck Chemical Company, The. (See Teague,
Merwyn C., assignor.)
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Merwyn C., assignor.)
Naugatuck Chemical Company, The. (See Teague,
Merwyn C., assignor.)
Naugatuck Chemical Company, The. (See Teague,
Merwyn C., assignor.)
Naugatuck Chemical Company, The. (See Teague,
Merwyn C., assignor, No. J. Envelope and making
same. 1,632,663; June 14.
Naugatuck Chemical Company, The. (See Smith, Omar
Naugatuck Chemical signor.) Calif. Oct. 18.

Oct. 18.

Naul, James M., Plainfield, assignor to The Singer Manufacturing Company, Blizabeth, N. J. Electric motor and transmitter unit. 1,652,319; Dec. 13.

Naul, James M., Plainfield, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Electric motor and transmitter unit. 1,652,492; Dec. 13.

Anumburg, Robert E., Winchester, Mass. Piece-up mechanism for textile machines. 1,625,954; May 3.

Nunton, William J. S. (See Cronshaw, C. J. T., and

Nauts, Frank A., assignor to Gendron Wheel Company, Toledo, Ohio. Scooter. 1,638,871; Aug. 16. Nava, Genaro M., New York, N. Y. Protractor and using same. 1,628,266; May 10.

Navarre, Placide, Paris, assignor to Société Fraisse
Freres, Cavalilon, and Société P. Navarre et Fils, Paris,
surc. 1,620,507; Mar. 8.
Navrogenis, Aristote, Milwaukee, Wis. Electron-discharge
device. 1,629,171; May 17.
Nawarynski, John, Cleveland, Ohlo. Antitheft alarm device. 1,635,178; Dec. 27.
Nawarynski, John, Cleveland, Ohlo. Antitheft alarm device. 1,635,178; Dec. 27.
Nawarise, Paris, Ladwigen, Sasuwein, Ladwigshafer-onthe-Rhine, assignors to I. G. Farbenindustrie Akttlengesellschaft, Frankfort-on-the-Main, Germany, Manufacture of vat dyestuffs. 1,633,997; June 28.
Nawlasky, Paul, Ludwigshafer-on-the-Rhine, O. Braunsdorf, and E. Holzapfel, Hochst-on-the-Main, Germany,
acignors by messe assignments, to Grassell Dyestuff
Congruent of the Conference of the Con Naylor, Norman C., Chicago, Ill. Journal box. 1,651,619; Dec. 6. Naylor, Oris M., Toledo, Ohio. Automatic reversible double-acting socket wrench. 1,613,328; Jan. 4. Naylor, Richard T., et al. (See McMullen, Joseph B., Naylor, Richards assignor.) Naylor, William E., London, England. Sound-box for gramophones and similar instruments. 1,634,380; July 5, Neahr, Jacob E., Hartsdale, N. Y. Match safe. 1,637,496; Aug. 2.

Neahr, Jacob E., Hartsdale, assignor to Underwood Type-writer Company, New York, N. Y. Typewriter stand. 1,622,196; Apr. 5.

Neal, Frank F., assignor of one-half to F. W. Neal, Chicago, Ill. Money-changer holder. 1,619,830; Mar. 8.

Neal, Frank III. (See Neal, Frank F., assignor.)

Neal, Franklin G. (See Wecker, Endolph, assignor.)

Neal, Franklin G. (See Welcker, Endolph, assignor.)

Neal, Franklin G., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Oil-burning furnace. 1,637,269; July 26.

Neal, Raiph J., Durham, N. C. Heating device for automobiles. 1,613,580; Jan. V. Heating device for automobiles. 1,613,580; Jan. J. Heating device for automobiles. 1,613,580; Jan. J. Heating device for automobiles. 1,618,580; Jan. J. Heating. 1,618,020; Feb. 15.

Neal, William P., Louisville, Ky. Costumer. Des. 73,576; Oct. 4.

Oct. 4.

Neal, Zearl E. (See Erickson, E. A., and Neal.)

Neale, Robert M. (See Nelson, Lewis D., assignor.)

Neale, Robert M., et al. (See Nelson, Lewis D., assignor.)

Neasham, John W., Des Moines, Iowa. Riner attachment for meat-slicing machines. 1,625,693; Apr. 26.

Neath, Jephthab, Staines, England. Construction of Neath, Jephthab, Staines, England. Construction of Neath, Jephthab, Pa. Stocking. Des. 72,302; Ma. 202. Mar. 22. Nebel, Ernst O., Philadelphia, Pa. Stocking. Des. 73,620; Oct. 11. Oct. 11.
Nebergall, Loran E., Denver, Colo. Drill collar for hydraulic rotary drills. 1,616,665; Feb. 8.
Neckles, George E., assignor of one-half to G. N. Calls, Zanesville, Ohio. Fowder dispenser. 1,635,139; July S. Medds, Merle L., Sandpoint, Idaho. Game. 1,713,526; Jan. 4.

Neebe, Lawrence L. Woodbury, N. J. Locomotive-cross-bead guide. 1,635,054; July 5. Neebe, Lawrence L., Woodbury, N. J., assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Loco-motive-driving mechanism. 1,646,210; Oct. 18. Neebel, Elmer, et al. (See Frambach, Mathew J., as-Neederman, Stephen A., assignor of forty per cent to H. M. Smith, Dallas, Tex. Novelty toothbrush. 1,619,212; Mar. 1.

Mar. I.

Mar. I.

Needham, William H., assignor to Crompton & Knowles
Loom Works, Worcester, Mass. Finger for loom
dobbies. 1,647,709; Nov. 1.

Needles, John W., assignor of one-half to M. M. House,
Kansas City, Mo. Dental grinding device and process.

Neef, Arthur R. St. Louis, Mo. Protecting attachment
Neef, Asthur R. St. Louis, Mo. Protecting attachment
Neelands, Abram R., and G. Damry, Doncaster, England.
Construction of concrete piles or foundation elements.
1,642,213; Sept. 13.

Neelands, Abram R., and G. Damry, Doncaster, England.
Construction of concrete piles or foundation elements.
1,642,213; Sept. 13.

Neelands, Abram R., and G. Damry, Doncaster, England.
Construction of concrete piles or foundation elements.
1,642,213; Sept. 13.

Neelands, William Leverkusen, T. Nocken, Wissoft, near
helm, Germany, assignors to Graselli Dyestuff Corporation, New York, N. Y. Chromiable brown disazo dyestuffs. 1,643,222; Sept. 20.

Neelmeler, Wilhelm, Leverkusen, near Cologne-on-theRhine, Germany, assignors to Graselli Dyestuff Corporation, New York, N. Y. Chromiable brown disazo dyestuffs. 1,643,222; Sept. 20.

Neelmeier, Wilhelm, Leverkusen, near Cologne, and T. Nocken, Wiesdorf, near Cologne, Germany, assignors to Grassell Dyestuff Corporation, New York, N. Y. Prepore Cologne, Cologne, Germany, assignors to the Neely, Kenneth D., Rising Star, Tex. Elevator for oil-well drilling stems. 1,637,270; July 26.
Neenan, Joseph M., Shreveport, La., assignor to The Libbey-Owens Sheet Glass Company, Toledo, Ohlo. Glass furnace. 1,641,598; Sept. 6.
Neen, Amy C., et al., executrices. (See Garber, Daniel

Neff, David, et al. (See Taylor, Charles W., assignor. Neff, John W., Easton, Pa. Safety paper. 1,652,0

Neir, John W., Easton, Pa. Saire; Dec. 6.

Neir, Joseph (See Abrams, S., and Neif.)

Neir, Joseph P., Bradford, Ohio, assignor of one-half to Neir, Joseph P., Bradford, Ohio, Merry-go-round. 1,652,993; Dec. 3.

Neir, William W. (See Neif, Joseph P., assignor.)

Negbaur, Harry, New York, N. X., assignor to E & J. Bass, Incorporated. Pocket flask. Des. 72,525; Apr. 26.

Negly, Laurel A., and P. S. Black, Fort Worth, Tex. Cereal beverage compound. 1,631,829; June 7.

Negly, Laurel A., and P. S. Black, Fort Worth, Tex. Proparing cereal beverage compounds. 1,631,830; June 7.

Cereal beverage compounds. 1,621,350; Sunet. 1. Regly, Laurel A., and P. S. Black, Fort Worth, Tex. Freparing cereal beverage compounds. 1,631,830; Neber, Noah N., Los Angeles, Calif. Manifold cut-off for internal-combustion engines. 1,624,275; Apr. 12. Nebr, Inc. (See Hatcher, Claud A., assignor.) Nebring, Paul. (See Witter, W., and Nehring.) Neidich, Samuel A. (See Mendel, William, assignor.) Neidich, Samuel A., Edgewater Park, N. J. Viscose-1,620,279; Mar. 8. Reg. 1,627,059; May. 3. Ribbon. 1,620,279; Mar. 8. Reg. N. J. Ribbon. Spool clutch. 1,620,279; Mar. 8. Reg. N. J. Ribbon. 1,636,573; July 19. Park, N. J. Renewing ink ribbon. 1,636,573; July 19. Park, N. J. Renewing ink ribbon. 1,636,573; July 19. Park, N. J. Braid hank winding mechanism. 1,641,268; Sept. 6. Neidich, Samuel A., Edgewater Park, N. J. Braid hank winding mechanism. 1,642,548; Sept. 6. Neidich, Samuel A., Edgewater Park, N. J. Forming colloid products. 1,643,080; Sept. 23. Neidich, Samuel A., Edgewater Park, N. J. Ink-ribbon winding mechanism. 1,643,543; Sept. 27. Neidich, Samuel A., Edgewater Park, N. J. Ink-ribbon. 1,651,404; Dec. 6. Neidich, Samuel A., Edgewater Park, N. J. Viscose fluctured in the second supplies of the seco

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July 26.

Neighbour, I.

Moline, Ill

bhour, I. & Company, Moline, Ill. Traction motor. 1,636,828; July 26.
Neighbour, Leonard B., assignor to Deere & Company, Moline, Ill. Manure sprender. 1,636,829; July 26.
Neighbour, Leonard B., assignor to Deere & Company, Neighbour, Leonard B., assignor to Deere & Company, Neighbour, Leonard B., assignor to Moline Indiana Car Company, Chicago, Ill. Car. 1,626,010: Apr. 26.
Neikirk, John O., Lombard, Ill., assignor to Wine Railway Appliance Co., Toledo, Ohio. Rail-way-door latch. 1,637,911; Aug. 2.
Neikirk, John O., Lombard, assignor to National Dump Car Company, Chicago, Ill. Door-control mechanism. 1,643,081; Sept. 20.
Neil, Alexander, S. Jones, and D. Neil, Barry Dock, Wales. 1,644,076; Oct. A. Company, Chicago, Ill. Door-control mechanism. 1,644,076; Oct. 4. Company, Chicago, Ill. Door-control mechanism. Neil, Alexander, S. Jones, and D. Neil, Barry Dock, Wales. 1,644,076; Oct. 4. Company, Hartford, Conn. Electric snap switch. 1,632,541; Dec. 13.
Neil, David. (See Neil, A., Jones, and Neil.)
Neil, James, Anniesland, Glasgow, Scotland. Exhaust silencer for internal-combustion engines. 1,638,780; Aug. 9.

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Nelian, John J., Cleveland, Ohio. Punch press. 1,639,100; Aug. 16. Nelisen, Emil J., assignor to Phenolic Products Cor-

Aug. 16.
Neilsen, Emil J., assignor to Phenolic Products Corporation, Rockford, Ill. Tollet-seat-hinge mounting. 1,633,281; June 21.
Neilsen, Karl P., Long Reach, Calif. Deep-well gas and oil separator. 1,628,900; May 17.
Neilsen, Karl P., Long Beach, Calif. Pump-plunger assembly. 1,628,901; May 17.
Neilsen, Karl P., Long Beach, Calif. Oil pump. 1,649,971; Nov. 22.

Neilson, Albert H. (See Moody, J. F., and Du Bois, as-

Neilson, Albert H., Gee Moody, J. F., and Du Bois, assignors.)
Neilson, Albert H., Tulsa, Okla.
1,622,537; Mar. 29.
Neilson, Albert H., Tulsa, Okla.
pumps, 1,624,798; Apr. 12.
Neilson, Albert H., Tulsa, Okla.
1,624,799; Apr. 12.
Neilson, Albert H., Tulsa, Okla.
Sucker-rod elevator.
1,624,799; Apr. 12.
Neilson, Albert H., Tulsa, Okla.
Neilson, Albert H., Tulsa, Okla.
Neilson, Albert H., Tulsa, Okla.
Clevis. 1,645,714;

Oct. 18.
Nellson, James P., sr., Tulsa, Okla. Combination releg and jack clamp. 1,626,864; May 3.
Nellson, Robert E., Tulsa, Okla. Safety hook. 1,626,865; May 3. Nellson, Robert E., Tulsa, Okla. Safety hook. 1,626,866; May 3.

Nellyon, Robert E., Tulsa, Okla. Safety hook. 1,626,866; May 3.
Nellson, Robert M., Montreal, Quebec, Canada. Matress case. 1,641,231; Sept. 6.
Nelman, Howard S., Brooklyn, N. Y. Filing device. 1,615,937; Feb. 1.
Nelman, Howard S., Brooklyn, N. Y. Filing device. 1,615,937; Feb. 1.
Nelman, Howard S., Brooklyn, N. Y. Filing device. 1,616,131; Nelman, New York, N. Y. Dump body. 1,615,131; Jan. 18.
Nelss, Oskar H. L., assignor to Elektrotrennmaschlmen Gesellschaft mit beschrinkter Haftung, Hamburg, Germany, New York, N. Y. Dump body. 1,615,131; Nelss, A. J., administrator. (See Philbin, Loren A.) Nelsz, Anthony J. (See Philbin, Loren A.) Nelsz, Anthony J.

Dec. 6.

bores of steels for rock-drilling purposes. 1,651,930; Dec. 6.
Nell, Gustave M., and W. G. Kale, assignors to The Cleveland Rock Drill Company, Cleveland, Ohio. Drillisteel retainer. 1,637,912; Aug. 2.
Nelleastein, Frederik J. (See Pataks, W. C. H., and Nelles, Russel) B., assignor to Reading Chain & Block Corporation, Reading, Pa. Adjustable end truck. 1,631,545; June 7.
Nelles, Winnad H. (See Kranz, Michael, assignor.) Nellis, Charles P., and A. W. Scott, assignors to The Inland Manufacturing Company, Dayton, Ohio. Steering the Manufacturing Company, Dayton, Ohio. Steering Nellis, Edwin L., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Manufacture of nitric acid. 1,635,949; July 12.
Nelson, A. L. (See Gammell, Clifton O., assignor.) Nelson, Abert, Chicago, Ill., assignor to The American Brake Shoe & Foundry Company, Wilmington, Del. Composition and making the same. 1,628,370; May 10. Nelson, Andrew F., Seattle, Was. Furnace. 1,616,196; Feb. 1.
Nelson, Arthur A., assignor of one-fourth to L. Palmer, Nelson, Arthur A., assignor of one-fourth to L. Palmer.

elson, Arthur A., assignor of one-fourth to L. Palmer, Burlington, Iowa. Door-control means. 1,639,747;

Burlington, Iowa. Door-control means. 1,639,747; Aug. 23.
Nelson, Arthur F., Minneapolis, Minn. Rope-securing device. 1,643,676; Sept. 27.
Nelson. Avid R., Mcdlapolis, Iowa. Jiffy-band tool. 1,648,004; Nov. 8.
Nelson, Avid R., Mcdlapolis, Iowa. Jiffy-band tool. 1,648,004; Nov. 8.
Nelson, Arthur G., Marchard L., Burgess, New York, Nelson, Aracl W., Chicago, Ill. Sanitary garbage container. 1,651,220; Nov. 29.
Nelson Rothers Co. (See Nelson, Harry B., assignor, Nelson, Carl E., Brocklyn, N. Y., assignor, by mesne assignments, to Morkum-Kleinschmidt Corporation. Chicago, Ill. Spacing mechanism for telegraph printers. 1,652,307; Dec. 13.
Nelson, Charles A., assignor to Savage Arms Corporation. Chicago, Ill. Spacing mechanism for telegraph printers. 1,652,307; Dec. 13.
Nelson, Charles A., assignor to Savage Arms Corporation. Victae, N. Y., Firearm. 1,628,788; May 17.
Nelson, Charles G., assignor to Zouri Drawn Metals Company. Clucago Heights, Ill. Metal window sash. 1,6449,914; Nov. 22.
Nelson, Charles G., assignor to Zouri Drawn Metals Company. Chicago Heights, Ill. Support for window pans. 1,340,915; Nov. 22.

Nelson, Mar. 1 Emil, Gary, Ind. Beam compass. 1,619,750:

Nelson, Emil A., Detroit, Mich. Welding. 1.624.501:

Oct. 25.

Nelson, Eric, Wilmington, Calif., assignor, by mesne assignments, to Pacific Door and Sash Company. Wall seat. 1.642,129; Sept. 13.

Nelson, Ernest B., Burchinal, Iowa. Cornerib construe-Nelson, Ernest B., Burchinal, Iowa. Cornerib construences of the season of the season

Dec. 20.

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Reson, Gordon W., Philadelphia, Pa. Newspaper-insertNeston, Gurdon W., Elifo. 1979.

Reson, Gurdon W., Elifo. 1979.

Reson, Gurdon W., Elifo. 1979.

Reson, Gurdon W., Cloquet, Minn. Disintegrator.

1.628.419; May 10.

Nelson, Gust W., Cloquet, Minn. Disintegrator.

1.628.419; May 10.

Nelson, Hans J., Palo Alto, Calif. Aeroplane. 1,635,897;

July 12.

Nelson, Harry B., assignor to Nelson Brothers Co.,

1.628.419.

Reson, Heber S., assignor to Nelson Brothers Co.,

1.628.419.

Reson, Heber S., assignor of one-fourth to R. M., Stewart,

Salt Lake City, Utah. Phonograph reproducer.

1.649.483; Nov. 15.

Nelson, Horace O. (See Stokes, Thomas J., assignor.)

Caster mounting. 1,614.894; Jan. 18.

Nelson, Ira I., Boston, Mass. Relief valve. 1,650,150;

Nov. 22.

Nelson, Ir Nov. 22.

Nov. 22.

Nelson, Jahez C., and P. E. Geldhof, assignors to Syracuse Washing Machine Corporation, Syracuse, N. Y.

Nelson, Jennie M. St. Paul, Minn. Hat bandeau.

1.637,126; July 26.

1.637,126; July 28.

Nelson, John. (See Glasner, R. W., and Nelson.)

Nelson, John. Blooming Prairie, Minn. Valve-spring compressor. 1,613,476; Jan. 4.

Nelson, John, Chicago, Ill. Power equalizer for power presses. 1,633,266; June 21. Cushioning means for Nelson, Johns, Chicago, Ill. Cushioning means for 1,683,267; June 21. Nelson, John, Chicago, Ill. Air compressor. 1,651,964; Dec. 6. Nelson, John, assignor to Automatic Electric Washer Co., Newton, Iowa. Hydrodisk for washing machines. 1,615,952; Feb. 1. Hydrodisk for washing machines. 1,615,952; Feb. 1. Hydrodisk for Washing Machines. 1,637,388; Aug. 2.

Newton, Iowa. Hydrodisk for washing machines. 1,615,922; Feb. J.
Nelson, John A., Bertrand, Nebr. Tongs. 1,637,388; Nelson, John E. (See Tanner, Inos B., assignor.)
Nelson, John E. (See Tanner, Inos B., assignor.)
Nelson, John H., Chicago, Ill., assignor to H. A. Douglas, Bronson, Mich. Locking mechanism. 1,622,732; Mar. 29.
Nelson, John H., Chicago, Ill., assignor, by mesne assignments, to Ecco Manufacturing Company. Timing switch. 1,626,475; Apr. 26.
Nelson, John H., Chicago, Ill., assignor to Caskey-Dupree Lawtich. 1,634,442; July, 5. Coldwater, Mich. Electric Witch. 1,634,642; July, 5. Coldwater, Mich. Electric Witch. 1,644,642; July, 5. Oldwater, Mich. Electric witch. 1,644,643; Aug. 30.
Nelson, John H., Chicago, Ill., assignor to H. A. Douglas, Bronson, Mich. Electric switch. 1,640,644; Aug. 30.
Nelson, John V., Maywood, assignor to F. K. Kras, Chi. Nelson, John V., Maywood, assignor to F. K. Kras, Chi.

May 81.

Nelson, John V., Maywood, assignor to F. K. Krag, Chicago, Ill. Swivel-head drill holder. 1,237,477, Apr. Rolson, Jons. Los Angeles, Calif. Automobile license plate and theft indicator. 1,629,939, May 24.

Nelson, Joseph E., & Sons. (See Tanner, Inos B., as-

signor.)
Nelson, Joseph F., Los Angeles, Calif. Filter. 1,619,584;

Nelson, Joseph H. (See Tweedale, E., and Nelson.)
Nelson, Joseph H. (See Tweedale, E., and Nelson.)
Nelson, Kari O., and H. J. Nunnemacher, Milwaukee,
Wis. Two-way valve. 1,640,093; Aug. 23.
Nelson, Kenneth R., Olney, III. Crank shaft. 1,651,465;
Dec. 6.
Leven, R. Peoria, III. Nozzle. 1,622,733:

Dec. 6.

Nelson, Lewen R., Peoria, Ill. Nozzle. 1,622,733;
Mar. 29.

Nelson R. Peoria, Ill. Sprinkler. 1,631,381;

Nelson, Lewen R., Peoria, Ill. Nozzle. 1,622,733; Mar. 29.
Nelson, Lewen R., Peoria, Ill. Sprinkler. 1,631,381; Nelson, Lewels D., Coldwater, Mich. Bag-filling machine. 1,628,269; May 10.
Nelson, Lewis D., Coldwater, assignor of one-half to R. M. Neale, Union City, Mich. Filling machine. 1,628,177; May 10.
Nelson, Lewis D. Coldwater, assignor of one-half to R. M. Neale, Union City, Mich. Weighing and filling machine. 1,628,173; May 10.
Nelson, Lewis D., Coldwater, assignor of one-half to R. M. Neale, Union City, Mich. Bag-filling machine. 1,628,179; May 10.
Nelson, Lewis D., Coldwater, assignor of two-thirds to R. M. Neale and W. M. Hatch, Union City, Mich. Filling Machine. 1,628,179; May 10.
Nelson, Lewis D., Coldwater, assignor of one-half to R. M. Neale, Union City, Mich. Filling machine. 1,628,268; May 10.
Nelson, Lewis D., Coldwater, assignor of one-half to R. M. Neale, Union City, Mich. Filling machine. 1,628,268; May 10.

M. Nenie, Union City, Mich. Filling machine. 1,628,268; May 10.
Nelson, Magda B., administratrix. (See Sundquist, Karl. A.)
Nelson, Martin L., Park Ridge, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Multioffice telephone system. 1,614,678; Jan. 18.
Nelson, Martin L., Park Ridge, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill.
Nelson, Martin L., Park Ridge, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill.
Nelson, Martin L., Park Ridge, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill.
Nelson, Mels H., Minneapolis, Minn. Shoe tread.
1,630,369; Dec. 20.
Nelson, Nels H., Minneapolis, Minn. Shoe tread.
1,630,369; Dec. 20.
Nelson, Nels H., Minneapolis, Minn. Vehicle signal. Des.
12,183; Mar. S.
Nelson, Nels J., Milwaukee, Wis., assignor to The Herschede Hall Clock Company, Clicinnati, Ohio. Clockcase. Des. 71,287; Mar. 29.
Nelson, Nels J., Milwaukee, Wis., assignor to The Herschede Hall Clock Company, Clicinnati, Ohio. Clockcase. Des. 72,327; Mar. 29.
Nelson, Nels J., Milwaukee, Wis., assignor to The Herschede Hall Clock Company, Clicinnati, Ohio. Clockcase. Des. 72,327; Mar. 29.
Nelson, Nels J., Milwaukee, Wis., assignor to The Herschede Hall Clock Company, Clicinnati, Ohio. Clockcase. Des. 72,327; Mar. 29.
Nelson, Nels M., and H. P., White Bird, Idaho. Portable
awwing machine. I,615,506; Feb. 8.
Nelson, Nelson L., et al. (See Corlew, C. M., and
Globm, assignors)
Nelson, Nelson L., et al. (See Corlew, C. M., and
Globm, assignors)
Nelson, Nelson L., et al. (See Corlew, C. M., and
Globm, assignors)
Nelson, Olie T., Waukegan, Ill. Mathode construction.
1,652,043; Dec. 8.
Nelson, Olie T., Waukegan, Ill. Mathode construction.
1,653,336; Dec. 20.
Nelson, Olie T., Waukegan, Ill. Mathode construction.
1,653,368; Dec. 20.
Nelson, Olie T., Waukegan, Ill. Mathode construction.
1,650,369; May 31.
Nelson, Olie T., Waukegan, Ill. Mathode co

Nelson, Paul A., assignor to The Denver Rock Drill Mannfacturing Company, Denver, Colo. Automatic lubricator. 1,650,091; Nov. 22.
Nelson, Paul D., and B. C. Lammers, Venango, Nebr. Haiter. 1,633,263; June 21.
Nelson, Ralph A., Buffalo, assignor to National Anlline & Chemical Company, Inc., New York, N. Y. Froduction of benzidine and derivatives. 1,635,123; June 21.
Nelson, Ralph A., and A. Frasil, Buffalo, assignors to National Anlline & Chemical Company, Inc., New York, O. Reduction of nitro compounds. 1,644,483; Oct. 4.

Nelson, Ralph A., and A. Prasil, Buffalo, assignors to National Anlline & Chemical Company, Inc., New York, N. Y. Reduction of nitro compounds. 1,644,484;

Oct. 4.
elson, Stanley F., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Telephone system. 1,620,733; Mar. 15.
elson, Sven T., Chicago, Ill., assignor to Sullivan Machinery Company. Forging machine. 1,614,040;

chinery Company. To the Jan. 11. Nelson, Sven T., Chicago, Ill., assignor to Sullivan Machinery Company. Compressor. 1,649,297; Nov. 15. Nelson, Sven T., Michigan City, Ind., assignor to Sullivan Machinery Company. Metal: working machine. 1,650,580; Nov. 22. Nelson, Sven T., Michigan City, Ind., assignor to Sullivan Machinery Company. Forging machine. 1,650,681; Nov. 29.

Nov. 22.
Nelson, Sven T., Michigan City, Ind., assignor to Sullivan Machinery Company. Forging machine. 1,650,582;
Nov. 22.
Nov. 22.
Michigan City, Ind., assignor to Sullivan Nov. 22. elson, Sven T., Michigan City, Ind., assignor to Sullivan Machinery Company. Forging machine. 1,650,583;

Nov. 22. Nelson, Sven T., Michigan City, Ind., assignor to Sullivan Machinery Company. Forging machine. 1,650,584;

Nov. 22.
Nelson, Theodore J., assignor to Colonial Lamp & Fixture
Works, Inc., Chicago, Ill. Lighting fixture. Des. 73,235;

Works, Inc., Chicago, Ill. Lighting fixture. Des. 73,235; Aug. 9.

Nelson, Verner A., Lynden, Wash. Hydraulic Clutch. 1,619,751; Mar. 1. Okland. Calif. Internal-combustion of the control of the control

Assignor.)
Nenninger, Lester F. (See Einstein, S., and Nenninger.)
Nenninger, Lester F., assignor to The Clincinnati Milling
Machine Company, Cincinnati, Ohio. Machine-tool
clutch. 1,625,738; Apr. 19.
Nenno, Herbert J., Rochester, N. Y. Distributing block.
1,618,021; Feb. 15.
Nenno, Herbert J., Rochester, N. Y. Distributing block.
1,638,551; Aug. 16.
Nenzel, George, Herischdorf, near Warmbrunn, Germany.
Apparatus for feeding mechanical grinding machines for
producing wood pulp. 1,652,044; Dec. 6.
Nenzel, Joseph F., Reno, Nev. Lamp. 1,619,218; Mar. 1.
Neptune Manufacturing Company. (See Wright, Oliver
Netter, Marche Welley, Marche William, Netter, Company).

S., assignor.)
Neptune Meter Company. (See Marden, William L., as-

signor.)

signor.)
Nerby, Edgar A., Milwauke, Wis. Animal trap.
1.620.777; Mar. 15.
Nercil, Dimer J. (See Emard, Wilfred O., assignor.)
Neresheimer, Heinrich. (See Lüttringhaus, A., Neresheimer, Heinrich. (See Lüttringhaus, A., Neresheimer, Heinrich. Ludwigsahafen-on-the-Min. as Trankfort-on-the-Min., Germany. Manufacture of isodibenzanthrones. 1.644.850; Oct. 11.
Neresheimer, Heinrich, Ludwigshafen-on-the-Rhine, and H. Emmer, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft. Frankfort-on-the-Min. Germany. Manufacture of henzanthrone derivatives containing Nerew, Morne, assignor to A. M. Werner, Hayden, Arls. Electrical water-heating unit. 1,648,588; Nov. 8.

Nerney, Edwin D., assignor to Bay State Optical Company, Attleboro, Mass. Eyeglass construction. 1,635,799; July 12.

Nerney, George E, Attleboro, Mass. Eyegiass frame.

Nerney, George E, Attleboro, assignor to Bay State Optical Company, Attleboro, Mass. Eyegiass frame.
Des. 73,097; July 19.
Nerney, George E, Attleboro, Mass., assignor to Bay
State Optical Company. Eyegiass construction.
1,618; 665; Jan. 11.

Nerney, George E., assignor to Bay State Optical Conpany, Attleboro, Mass. Eyeglass construction 1,614,848; Jan. 18.

Nerney, George E., assignor to Bay State Optical Conference of the Confere

assignor to Bay State Optical Com-y Mass. Eyeglass construction.

Nemory, George E., assignor to Bay State Optical Company, Attleboro, Mass. Eyeglass construction. 1,635,138; July 5
Nemey, George B., Attleboro, Mass. Eyeglass construction. 1,645,638; Oct. 18.
Nero, Arvid H., New Britain, assignor to The Arrow Electric Company, Hartford, Conn. Electric switch. 1,632,670; June 14.
Nero, Arvid H., New Britain, assignor to The Arrow Electric Company, Hartford, Conn. Switch handle. 1,637,913; Aug. 2.
Nero, Arvid H., New Britain, assignor to The Arrow Electric Company, Hartford, Conn. The Arrow Electric Conn. The A

Nero, Arvid H., New Britain, assignor to The Arrow Electric Company, Hartford, Conn. Electric switch, 1,645,333; Oct. 11. Nesbit, Arthur F., Wilkinsburg, Pa. Dust collector, 1,633,602; June 28. Nesbitt, John J., Inc. (See Henshall, Percival P., as-signor.)

Nesbitt, Milton H., Asheville, N. C. Electric drilling machine. 1,652,853; Dec. 13.
Nesbitt, Orville W., Chicago, III, Antiskid device for motor-vehicle wheels. 1,644,077; Oct. 4.
Nesdah, Ellert, Camden, N. J. System of ventilating and humidifying. 1,641,889; Sept. 6.
Nesgan Gompany. (See Olsen, Robert E., assembly

Nesmith, Mrs. Mary E., et al. (See Nesmith, Samuel D., assignor.)

Nesmith, Mrs. Mary E., et al. (See Nesmith, Samuel D., assignor.)

Nesmith, Samuel D., assignor of part interest to A. S. Bridges, J. B. Osborn, Mrs. K. Osborn, J. H. Bulmer, and Mrs. M. E. Nesmith, San Diego, Calif., R. Welles and R. R. Richardson, U. S. Navy, E. J. Caliahan, Guadaia-Jara, Mexico, and G. H. Schmidt, W. C. Stitt, F. F. Grant, H. M. Summis, P. J. Hartley, and R. C. Easom. Spridges, J. B. Osborn, Mrs. K. Osborn, J. H. Bulmer, and Mrs. M. E. Nesmith, San Diego, Calif., R. Welles, and Mrs. M. E. Nesmith, San Diego, Calif., R. Welles, and R. R. Richardson, U. S. Navy, E. J. Callahan, GuadaiaJara, Mexico, and G. H. Schmidt, W. C. Stitt, F. E. S. M. G. M. G. M. Schmidt, W. C. Stitt, E. S. M. G. M. G. M. Schmidt, W. C. Stitt, E. S. M. G. M. G. M. Schmidt, W. C. Stitt, E. S. M. G. M. G. M. Schmidt, W. C. Stitt, E. S. M. G. M. G. M. Schmidt, W. C. Stitt, E. S. M. G. M. G. M. Schmidt, W. C. Stitt, E. S. M. G. M. G. M. G. M. Schmidt, W. C. Stitt, E. S. M. G. M. G. M. G. M. Schmidt, W. C. Stitt, E. Sasom. Ellectric water heater, 1,640,647, Aug. 23. Nesmith, Samuel D., San Diego, Calif., assignor of part interest to G. H. Schmidt, W. C. Stitt, E. Essom. Ellectric water heater, 1,640,647, Aug. 23. Nesmith, Samuel D., San Diego, Calif., assignor of part interest to G. H. Schmidt, W. C. Stitt, F. F. Grant, H. M. Sammis, P. J. Hartley, and R. C. Easom. Electrically-operated water heater, 1,640,643, Aug. 23. Ness, Elling E., Wetaskiwin, Alberta, Canada. Battery terminal for upright posts, 1,614,382; Jan. 11. Ness, Marthi, Latouche, Alaska. Receptacle, 1,618,548; Feb. 22.

Feb. 22.

Ness, William H. C., Los Angeles, Calif. Fan or blower. 1,637,652; Aug. 2.

Nesseler, Karl P., Elizabeth, N. J. Musical instrument. 1,624,661; Apr. 12.

Nessler, Charles G., New York, N. Y. Apparatus for wav-Nessler, Charles G., New York, N. Y. Hair-waving device. 1,614,757; Jan. 18.

Nessler, Charles G., New York, N. Y. Hair-waving device. 1,614,758; Jan. 18.

Nessler, Charles G., New York, N. Y. Hair-waving device. 1,614,758; Jan. 18.

Nessler, Charles G., New York, N. Y. Hair-waving device. 1,614,758; Jan. 18.

Nessler, Charles G., New York, N. Y. Sand bag. 1,635,094; July 5.

Nestler, Nathan. (See Goldstein, Isldore M., assignor.)

Nestler, Nathan. (See Goldstein, Isidore M., assignor.) Nestle's Food Company. (See Garrett, Richard M., assignor.)

Nestor Manufacturing Company F. W. and Cumner. assignors.) Nestor. William E. (See Dally, C. A., and Nestor.) Neth, George J., assignor to The Egry Register Com-pany, Dayton, Ohlo. Autographic register. 1,615,953; Feb. 1.

Nethercut, Edgar S. (See Colman, Howard D., assignor.)

Netschert, Franz, Glendale, assignor to Technical Glass Company, Inc., Los Angeles, Calif. Lock spindle. 1,634,345; July 5. Nettenstrom, David, Chicago, Ill. Hydraulic brast. 1,635,383; July 12. Netter, Jacob, Pssignor to Theonett & Co., Chicago, Ill. Hydraulic brast. Hottle, Des. (2,434; Apr. 12. Nettles, Issac, Cleveland, Ohlo. Velocipede. 1,638,781; Nettlefon, Lawis E. Edgarand.

Nettleton, Lewis L. Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvaie, Pa. Adjusting electrical contacts. 1.634,831; July 5. The Methicing Lewis L. Edgewood Borough, assignor to The Nettleton, Lewis L. Edgewood Borough, assignor to The Waystraffie-controlling apparatus. 1.636,067; July 19. Nettleton, Lewis L., Edgewood Borough, and L. O. Grondahl, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvaie, Pa. Railway-traffie-controlling apparatus. 1,638,056; Aug. 9. Net, Joseph, Los Angeles, Calif. Signal faceplate. Des. 73,413; Sept. Los Angeles, Calif. Signal faceplate. Des. 74,413; Sept. Bayard, Nebr. Crust breaker. 1,639,307;

Neu. Peter, Bayard, Neur. UtdasAug. 16.
Neubert, Robert L., Superior, Wis. Door latch and
holder, 1.653.496; Dec. 20.
Neuenborf, Edward C., Wyandotte, Mich. Headlight
Neuenborf, Edward C., Wyandotte, Mich. Headlight
Neufang, Henry J., assignor of one-third to H. C. Hatch
and one-third to B. W. Hatch, Atlanta, N. Y. Coupling
device, 1.648.317; Nov. 8.
Neufald, Oscar, Union City, N. J. Brush. 1,652.834;
Neufald, Oscar, Union City, N. J. Brush. 1,652.834;

Neufeld. Uscar, Union Chy, ...
Dec. 13.
Neufeldt & Kuhnke Betreibsgesellschaft m. b. H. (See
Thoma, Hans, assignor).
Neufeldt & Kuhnke Betriebsgesellschaft m. b. H. (See
Wasserkammf, Frderlich R. assignor).
Neugebauer, Wilhelm. (See Schmidt, M. P., and Neugehange.)

buuer.)
Neuhengen. Alexander J., assignor to Wm. Glader Machine Works. Chicago, Ill. Metal-working machine.
1.647.653; Nov. 1.
Neuls, Joseph D., Los Angeles, Califf., assignor, by mesne
assignments, to California Cyanide Company. Incorporated. Apparatus for fumigating. 1,614,616;
Jan. 11.

Jan. 11.

Neuls, Joseph D., Los Angeles, Callf., assignor to Callfornia Cynnide Company, Inc. New York, N. Y.

Fumigating apparatus. 1,618,775; Feb. 22.

Neuman, George W., assignor, by mesne assignments, to

Wilson-Jones Company. Chicago, Ill. Loose-leaf binder. 1.614,080; Jan. 11.

Neuman, Joseb J. (See Andrews, N. R., and Neuman.)

Neumann. August, Keppen, Germany, assignor to J. Assicom, Fort Wayne, Ind. Floating alsgray Nov. 1.

Astrom. Fort Wayne, Ind. Floating filter. 1,647,809;

Nov. 1.

Nov. 1.

Neumann, Brüno, Nuremberg, Germany.

Appliance for
bodily exercise. 1,638,003; Aug. 2.

Cooking utensil with hinged and removable ild. 1,633,404; June 21.

Neumann, Fritz, assignor to Armaturen-& Maschinenfabrik

A-G. vorm. J. A. Hilpert, Nuremberg, Germany. Fire

pump. 1,636,382; July 19.

assignment of the cooking of the cooking the cooking

assignor.

Neumann, Bhoodore Le. Dayton, Ohio, assignor to The Channan, Theodore Le. Dayton, Change Tox for golf Clubs and the like 1,623,547; Apr. 5. Neumerkel, Gertrude, Mount Vernon, N. Y. Toothbrush, 1,645,965; Oct. 18. Neumerkel, Albert 18., Morris, Okla. Tubing cleaner. 139,660; Aug. 28.

meyer.)

Neuner. Frederick W. C. assignor, by mesne assignments, to Indiana Lamp Corporation, Connerville, Ind. Electric connecting socket. 1.630,272; May 31. Neuschotz, Robert A. New York, N. Y. Signaling mechanism. 1.640,286; Aug. 23.
Neussen, Zeter, Aachen, Germany. Heater. 1,640,287;

Neusser, Pe Aug. 23. Neuteboom, Boudewijn B. (See Taylor, C. H., and Neuteboom.)
Neutell, Emil S., Chicago, Ill. Game or puzzle. 1,639,893;
Aug. 23.
Neuzll, Emil S., Chicago, Ill. Game or puzzle. 1,639,894;

Aug. 23. Neva-Clog Products, Inc. (See Hubbard, Franklin G., assignor.)

Noven. Hippolyte, assignor to Y. de Paniagua, Paris, France. Apparatus for the solidification of liquid hydrocarbons. 1,636,644; July 19.
Novière, Louis A. Chateau de Mere, near Artaimes, Prance. Automatic fire-producing device. 1,627,923;

May 10.

Nevill, Phillip W., Perth, Western Australia, Australia, Manufacture of sponge iron.) 1,635,950; July 12.

Neville, John H., Walville, Wash. Cross arm. 1,648,462;

Nevills, John J., Sacramento, Calif., assignor to Libby McNeill & Libby, Chicago, Ill. Feeder. 1,624.175; Apr. 12.

72535—P-29

Nevin, Chester L., Honolulu, Hawaii. Fire extinguisher.
1.647(880): Nov. 1.
Nevin, George P., and J. Goodland, Jr., Butte, Mont.
Rock-drill bit. 1.652,578; Dec. 13.
Nevius, James R., assignor to The De Laski & Thropp
Circular Woven Tire Company, Trenton, N. J. Tire.
Des. 72,274; Mar. 22.
Nevius, John C., Trenton, N. J. Cable-clamping device for
Suurd ralis. 1.651,833; Dec. 68.
Nevius, John E., New York, N. Y. Locking device for
Nevius, John E., New York, N. Y. Locking device for
Nevius, John E., New York, N. Y. Locking device for
Nevius, John E., New York, N. Y. Locking device for
Nevotti, William M., Omaha, Nebr. Electrical hair waver.
1.643,168; Sept. 20.
New, Thomas E., assignor to The Teleforce Radio Laboratories Company, Cincinnati, Ohio. Radio apparatus.
1,650,032; Nov. 22.
Newark Concrete Pipe Co. (See Sherrerd, Francis II.,
assignor.)

assignor.)
Newark Gear Cutting Machine Co. (See Eberhardt,
Frank E., assignor.)
New Beeman Tractor Company. (See Donald, Forrest
V., assignor.)
New Beeman Tractor Company. (See Mader, Joseph.

V., assignor.)
New Beaman Tractor Company.
Assignor.)
Newbill, Willard D. (See Howeth, George O., assignor.)
Newbold, Robert, Brooklyn, N. Y. Cap and liner assembling machine. 1,648,779; Nov. S.
New Britain Machine Company, The.
(See Brown, Roert S., assignor.)
New Epitain Machine Company, The. (See Brown, Robert S., assignor.)

New Britain Machine Company, The. (See Brown, Ro-ert S., assignor.)
New Britain Machine Company, The. (See Brown, R. S. and Victory, assignors.)
Newburnger, Morton B. (See Gray, G. A., and Newburger, Newburn, Clarence, Electra, Tex. Sand-testing tool. 1,625,674; Apr. 19.
New Business Corporation. (See Halverson, H. J., and Youngstrom, assignors.)
New Business Corporation. (See Halverson, H. J., and Youngstrom, assignors.)
New Morting Machines Company. (See Morris, George D., assignors.)

New Castle Mcfractorles Company. (See Morris, George D., assignor.)
Newcomb, Alconzo D., Whitman, assignor to North Land Cedar Chest Company, Acushnet, Mass. Fastening derive for sealed containers. 1,639,661; Aug. 23.
Newcomb, Annette, Denver, Colo. Base for faggoles.
Newcomb, Harry B., et al. (See Savage, Basil H., assignor.)
Newcomb, William, New York, N. Y. Refrigerating apparatus. 1,650,230; Nov. 22.
Newcomer, Edward M., Newburg, Iowa. Flytrap. 1,630,951; July 12.
1,630,951; Ju

signor.)

New-Comer Trailer Mfg. Co. (See Culver, Lagar R., assignor.)

New Comer Trailer Mfg. Co. (See Culver, Lagar R., assignor.)

New Departure Manufacturing Company, The. (See Delayal-Crow, Thomas C., assignor.)

New Departure Manufacturing Co., The. (See Vuilleumier, Albert, assignor.)

Newdle, Korton A., assignor to The Colader Company, Columbus, Ohio. Loading machine. 1,627,247; May 3.

Newell, George T. J. Beverly, N. J., assignor to West, Company, Thermostat. 1,621,023; Mar. 16.

Newell, Howard J., and F. V. Fermoil, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Gauge. 1,648,500; Nov. 8.

Newell Mfg. Co. Inc., The. (See Acker, Aaron C., assignor).

Newell Norman A. (See Fetzer, K. M., and Newell.) Newell-Thompson Company, The. (See Reid, James S., as-

signor.)
Newell Thompson Mfg. Co., The. (See Reid, James S.,

Assignor.)
New England Enameling Company. (See Hoopes, Penrose R., assignor.)
New England Guild, The. (See Levy, Harry, assignor.)
New England Paper Box Company. (See Peirce, Clarence A., assignor.)

New England . A., assignor.)
New England Paper Box Company, The. (See Peirce, Clarence A., assignor.)
New England Wood Heel Co. (See Shaw, Wesley J., as-

signor.)

New Era Products Company. (See Mattison, Hans S., assignor.)

New Fara Products Company. (See Mattison, Hans S., assignor.)

New Favorite Manufacturing Company, The. (See Fraiger, Frank L., assignor.)

Newhall, Henry B. (See Karitzky, John, assignor.)

Newhall, Henry B. (See Pleister, Henry W., assignor.)

Newhall, Henry B., Plainfield, and H. W. Pleister, Westfield, N. J.; said Pleister assignor to said Newhall. Cabinet amplifier. 1.623,065; Apr. 5.

Newhall, Henry B., Corporation. (See Goewey, James E., assignor.)

Newhaus, Claus R., Benson, Nebr. Snowplow. 1,622,338; Mar. 29. New Haven Clock Co. (See Porter, Wilson E., assignor.) New Haven Clock Co., The. (See Porter, Wilson E., as-

Haven Clock Co. (See Whitehead, Richard H.,

New Haven Clock Co., The. (See Whitehead, R. H., and Porter, assignors.)

New Holland Machine Company. (See Fackler, John M.,

New Holland Machine Company. (See Fackler, John M., assignor.)
Newbouse, George A., assignor of one-balf to E. E. Frillaman, Yorktown, Ind. Cultivating implement. 1,643,898; Sept. 27.
Newbouse, Ray C., Chicago, Ill., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Comminuting mill. 1,629,982; Mar. 15.
Newbouse, Ray C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Fluid-pressive and Company, Milwaukee, Wis. Treating combustible material. 1,628,609; May 10.
Newbouse, Ray C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Treating Company, Milwaukee, Wis. Crusher. 1,641,776; Sept. 6.

Manufacturing Company, Milwaukee, Wis. Crusher, 1,641,776; Sept. 6.
Newhouse, Ray C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Roll grizzly.
Newhouse, Walter F., assignor to Saranac Automatic Machine Corporation, Benton Harbor, Mich. Machine for making baskets, 1,643,287; Sept. 20.
New Mica Spreader Co. (See Oppenheim, T. H., and Sellorst, assignors.).
Sellorst, assignors.)

assignor.) NewItt, Harry R. (See Herman, J., Allen, and NewItt.) New Jersey Chain Corporation. (See Lichtenfels, William, assignor.)
New Jersey Chain Corporation. (See Prestinari, Eugen,

New Jersey Chain Corporation. (See Prestinari, Eugen, assignor.)
New Jersey Machine Corporation. (See Feybusch, M., and Fleischer, assignors.)
New Jersey Zinc Company, The. (See Breyer, F. G., and Farber, assignor so.)
Newkirk, William B., Riverside, Ill., assignor to International Patents Development Company, Wilmington, Del. Manufacture of large-grained dextrose. 1,640,717; Aug. 30.
Newland, John D., Los Angeles, Calif. Combination lump at clock case. Des. 72,489; Apr. 13, Ombination Lump at clock case. Des. 72,489; Apr. 13, Combination Lump at clock case. Des. 72,489; Apr. 14, Ombination Lump at clock case. Des. 72,489; Apr. 14, Ombination Lump at clock case. Des. 72,489; Apr. 14, Ombination Lump at Company. (See Feddy, Albert H., assignor.)
Newman, A. L., Company. (See Newman, Almyr L., assignor.)

Newman, A. L., Company. (See Newman, Almyr L., assignor.) signor.)

Newman, Almyr L., Warwick, assignor, by mesne assignments, to A. L. Newman Company, Cranston, R. I. Plexible and expansible bracelet and the like, 1,645,394; Oct. 11.

Newman, Arthur, Los Angeles, Calif. Making fruit pudding and the like. 1,648,359; Nov. 8.

Newman, Charles, Newtown, New South Wales, Australia. Recillent wheel for motor and other vehicles. 1,616,506; Feb. 8.

Newman, Frances M., Whiteagle, Okla. Tie spacer.

1.615.600; Frances M., Whiteagle, Okin, The Mountain Frances M., Whiteagle, Okin, The Mountain St. 1.617,539; Feb. 15.
Newman, Herman F., Rosenburg, Tex. Pilers.
1.653,779; Dec. 27.
Newman, Hugo, New York, N. Y. Foldable supporting stand for optical projecting machines. 1,637,705; Aug. 2.

Newman, I., & Sons, Inc. (See Kispert, Joseph J., assignor.) Newman, Isidor, New York, N. Y. Key holder. 1,634,115; Newman, J June 28

June 28.

Newman, Jesse F., Los Angeles, Calif. Making a rice product. 1,631,145; June 7.

Newman, Nathan E., Bronxville, N. Y. Multiple scoring machine. 1,628,680; May 17.

Newman, Nathan E., Bronxville, N. Y. Plastic sheet or slab. 1,628,681; May 17.

Newman, Samuel. Cincinnati, Ohio. Suspender. 1,646,075; Cot. 25.

Newman, Samuel. Lamesa. Tex. Highway marker and sign. 1,649,249; Nov 15.

Newmark, Aaron S., Brooklyn, N. Y. Power-transmission device. 1,631,500; June 7.

New Martinsville Glass Mfg. Co. (See McEldowney, Robert E., assignor.)

Robert E., assignor.)
New Metal Products Company. (See Harford, Albert K.,

signor.) Metallurgy Limited. (See Ashcroft, Edgar A., as-Method Stove Company, The. (See Harter, Sher-

man, assignor.) New Method Stove Company, The. (See Hoffman, George

New Method Stove Company, The. (See Hoffman, George A., assignor)
Newmeyer, William L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic station. 1,626,688; May 3.
Newmeyer, William L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic station. 1,638,872; Aug. 16.
New Monarch Machine & Stamping Company. (See Anderson, Sigurd E., assignor).
Newnam, William E., Collinsville, Ill., assignor to Naman, William E., Collinsville, Ill., assignor to Naman, William E., Collinsville, Ill., assignor to Truck. 1,626,350; Apr. 26.
Newport Company, The. (See Adams, R., Davidson, and Gubelmann, assignor).
Newport Company, The. (See Gubelmann, Ivan, assignor).

Newport

Newport Company, The. (See Gubelmann, I., Weiland, and Stallman, assignors.) Newport Company, The. (See Oesch, Joseph B., as-

signor.) Newport Company, The. (See Ulich, L. H., and Goodrich,

Newport Company, The. (See Uesch, Joseph B., assignors.)

Resignors.)

Resignors.)

Rewport News Shipbuilding and Drydock Company.

(See Terry, Roger V., assignor.)

Newport News Shipbuilding & Dry Dock Company. (See
Heard, E. F., and Fitz Hugh, assignors.)

New Process Burner Corporation. (See Lundquist,
Newquist, Carl V. (See Noreen, G., and Newquist,)

Newquist, Carl V. (See Noreen, G., and Newquist,)

Newtock, Meyer, Philadelphia, Pa. Sesquicentennial

badge. Des. 71,847; Jan. 11.

Newsbaum, Frank J., Detroit, Mich., and J. M. Lonn, La

Porte, Ind., assignors to International Amusement Corporation, Detroit, Mich. Racing amusement device.

Lioso, A. L. (Langer, M.)

Lioso, A. L. (Langer, L.)

Lioso, A. (Langer, L.)

Lioso

ton.) Newton, Albert E., Providence, R. I. Lace. Des. 73,191; Aug. 2.

Newton, Albert E., Providence, R. I. Lace. Des. 73,191;
Aug. 2.

Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
71,923; Jan. 25.

Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
72,436; Apr. 12.

Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
72,436; Apr. 12.

Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
72,438; Apr. 12.

Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
72,438; Apr. 12.

Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
72,438; May 17.

Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
72,679; May 17.

Newton, Albert E., Providence, assignor to Rhode Island
Lace Works, Inc., West Barrington, R. I. Lace. Des.
72,679; May 17.

Newton, Albert E., Providence, assignor to The Rhode
Island Lace Works, Inc., West Barrington, R. I. Lace. Des.
72,679; May 17.

Newton, Albert E., Providence, assignor to The Rhode
Island Lace Works, Inc., West Barrington, R. I. Lace.
Des. 73,576; Nov. 1.

Newton, Albert E., Providence, assignor to The Rhode
Island Lace Works, Inc., West Barrington, R. I.
Lace.
Des. 73,576; Nov. 1.

Newton, Albert E., Providence, assignor to The Rhode
Island Lace Works, Inc., West Barrington, R. I.
Lace.
Des. 73,576; Nov. 1.

Newton, Albert E., Providence, assignor to The Rhode
Island Lace Works, Inc., West Barrington, R. I.
Lace.
Des. 73,576; Nov. 1.

Newton, Albert E., Providence, Resignor to The Rhode
Island Lace Works, Inc., West Barrington, R. I.
Lace.
Des. 73,576; Nov. 1.

Newton, Albert E., Providence, Resignor to The Rhode
Island Lace Works, Inc., West Barrington,

Newton, Damei L., Ruierton, Cath. Apparatus 107 Re-sorption and distilling of hydrocarbons. 1,628,055; May 10. Newton, Earle R., assignor to Curtis Gas Engine Cor-poration, New York, N. Y. Power plant. 1,634,797; July 5.

July 5.

Newton, Edward G., Pittsfield, Mass., assignor to General Electric Company, Reactance coll. 1,829,298; May 17.

Newton, Edwin E., Montreal, Quebec, Canada, assignor to Western Electric Company, Incorporated, New York, N. Y. Grid-winding machine. 1,632,095; June 14.

Newton, Edwin H., assignor to National Paper Box Company, Kanass City, Mo. Core for yara balls. 1,614,759; Jan. 18.

Newton, Frank H., assignor to Duplex Dilator Corporation, Los Angeles, Calif. Vaginal applicator. 1,636 482; July 318.

Newton, Frank H., Los Angeles, Calif. Shoe-shining ma-chine. 1.654.049; Dec. 276. Newton, George F., assignor to United States Fire Pro-tection Company, Providence, R. I. Automatic sprink-ler. 1,623,887; Apr. 5.

Newton, Harry B., assignor to Rockford Machine Tool Company, Rockford, III. Tool-feed mechanism. 1,618,463 Feb. 22.

1,618,463 Feb. 22.

1,618,463 Feb. 22.

1,621,463 Feb. 22.

1,621,463 Feb. 22.

1,622,463 Feb. 22.

1,623,463 Feb. 22.

1,624,663 Feb. 23.

1,624,663 Feb. 24.

1,624,663 Feb. 25.

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1,624,665

washer for brush-holder bracket arms. 1,632,096; washer for brush-holder bracket arms. 1,632,096; Newton, Richard T., New York, N. Y. Stabilizer. 1,616,327; Feb. 1.
Newton, William J., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Flush switch. 1,642,743; Sept. 20.
Newton, William R., Hillsboro, Tex. Cultivator attach-Newton, William R., 1,613,464; Feb. 22.
New Way Harvester Company. (See Christiansen, Christian, assignor.)
New Wilson Electrical Manufacturing Co. Ltd. (See Adolph, Carl F., assignor.)
New York Air Brake Company, The. (See Bickel, Henry F., assignor.)

New York Air Brake Company, The. (See Bickel, Henry F., assignor.)
New York Air Brake Company, The. (See Campbell, Charles A., assignor.)
New York Air Brake Company, The. (See Campbell, C. A., and Vroman, assignors.)
New York Air Brake Company, The. (See Minnier, B. J., New York Air Brake Company, The. (See Wroman, Erwin C., assignor.)
New York Air Brake Company, The. (See Wentworth, E. F., and Yyon, assignors).
New York Prick Handling Corporation. (See Fuller, Company, Erwin C., assignor).
New York Prick Handling Corporation. (See Wallace, William W., assignor).
New York Coil Company. (See Rhoades, Lewis T., assignor).

York Last Company. (See Becker, William P., as-

York Light Fixture Mfg. Co. (See Aglow, Harry, ew York Lighting Fixture Mfg. Co. (See Aglow, Harry,

assignor.)

ew York Merchandise Co. (See Tauber, Fred G., assignor.)

ew York Mills Corporation. (See Hamilton, Charles S.,

New York Mills Corporation. (See Leiper, John, as-assignor.)
New York Mills Corporation. (See Leiper, John, as-

New Lors Mills Corporation. (See Leiper, John, asNew York Wire & Spring Company. (See Wernig,
Frederick A., assignor.)
Ney, Andrew F., East Kew, assignor to Bryant and May
Proprietary Limited, Richmond, Australia. Match-boxfilling machine. 1,621,948; Mar. 22.
Neylon, Austin J., Portland, Oreg. Waffle Iron.
Nias, Henry, assignor to Public Service Cup Company,
Brooklyn, N. V. Dish holder. Des. 71,884; Jan. 18.
Mibs, Ernest, assignor to Electric Boat Company, New
London, Conn. Cylinder construction for internal-comLondon, Conn. Cylinder construction for internal-comMice, Bondon, C. 146,5077; Sept. 27. N. Goodfellow,
Philadelphia, Pa., trustee. Making ball cone elements.
1,630,715; May 31.
Nichol. Orr T., Omahn, Nebr., assignor to A. H. Becker,
Council Bluffs, Jowa. Governor for tractor engines.
Nichol. Thomas T.
(See Coville, John E., assignor).
Nichola, Charles W., Tarentum, Pa., assignor to W. P.,
Murphy, Chicago, Ill. Uncoupling lever. 1,626,956;
May 3. May

May 3.

Nicholas Copper Company. (See Hartley, H. J., Fowler, and Baird. assignors.)

Nicholas, Edward S., Roscoe, Ill. Concrete-building block. L629,860; May 24.

Nicholas Edward S., Lanark Ill. Mold for concrete Nicholas Dower Company. (See Unlemann, Theodore F., assignor).

assignor.) Nicholas, William, assignor to The Black Rock Manufacturing Company, Bridgeport, Conn. Rubber-tube trimming, wrapping, and rolling machine. 1,640,050;

Aug. 23

Nicholis, Gilbert E., Edgewood, assignor to The Swingrite Inchesia on Providence, R. I. Golf-club shaft. Nicholis, Gilbert E., Edgewood, assignor to The Swingrite Co., Inc., Providence, R. I. Golf-club shaft. 1,628,477; Apr. 26.

Humidifier .

Nichols, William H., Brooklyn, N. Y. Molding machine. 1,614,966; Jan. 18.
Nicholis, William H., Brooklyn, N. Y. Molding machine. 1,636,383; July 19.
Nicholis, William H., Brooklyn, N. Y. Sand mulling and aerating machine. 1,636,384; July 19.
Nichols, Aarou S. New York, N. Y. Humidifier. Nichols, Aarou S. New York, N. Y. Humidifier. 1,636,384; July 19.
Nichols, Aarou S. New York, N. Y. Humidifier. 1,643,085; July 26.
Nichols, Charles S. (See Bordan, W. M., and Nichols, Nichols, Edugene C. Sioux Falls, S. Dak. Game. Nichols, Edugene C. Sioux Falls, S. Dak. Game. Nichols, George B., Akron, Ohio, Swimming device. 1,616,954; Feb. 1.
Nichols, Gordon. (See Kesel, F., and Nichols.) Nichols, Gordon. (See Kesel, F., and Nichols.) Nichols, Gordon. (See Kesel, F., and Nichols.) Nichols, Guy, Mount Harris, Colo. Automobile chain tightener and fastener. 1,624,967; Apr. 19.
Nichols, Henry, New York, N. Y. Vehicle wheel. 1,645,395; Nichols, Henry, New York, N. Y. Vehicle wheel. 1,645,396; Ott. 11.
Nichols, Herbert A., Robstown, Tex. Oil-drum hoist and tilting frame. 1,641,985; Sept. 13.
Nichols, Horace E., Bullimore, Md., assignor of one-half or C. H. Chase, Detroit, Mich. Portable electrocardiograph. 1,647,711; Nov. 1.
Nichols, James B. (See Svedberg, T., and Nichols.) Nichols, John F., assignor to Crompton Company, Crompton, R. I. Pile fabric. Des. 72,440; Apr. 12.
Nichols, Leonard O., assignor to R. E. Denman, Kansas City, Mo. Cembination pin and clasp. 1,640,205; Aug. 23.

Nichols, Leonard O., assignor to R. E. Denman, Kansas City, Mo. Combination pin and clasp, 1,640,205; Aug. 23.

Nichols, Lewis P., Cleveland, Ohlo. Game board. Des. 71,924; Jan. 25.

Nichols, Louis C., Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Transformer easing, 1,620,983; Mar. 15.

Nichols, Marion F. (See Hunter, William K., assignor.)

Nichols, Marion F. (See Hunter, William K., assignor.)

Nichols, Jaul F., assignor to Sun Maid Raisin Growers of California, Fresno, Calif. Apparatus and method for Like. 1,623,263; Apr. 5.

Nichols, Samuel C., Waddington, N. Y. Sap evaporator. 1,614,016; Jan. 11.

Nichols, Watt M., Ranger, Tex. Oil tank. 1,631,051; May 31.

Nicholson, Clara S. (See Nicholson, Joshua B. and C. S.)

Nicholson, Clara S. (See Nicholson, Joshua B. and C. S.)
Nicholson, Flora M., Washington, D. C. Receptacle for tollet articles or similar article. Des. 72,719; May 24.
Nicholson, Frank H., Wilkinsburg, assignor to The Union Strain of the Company traffic-controlling apparatus. 1,618,441; Feb. 3.
Nicholson, Frank H., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,621,679; Mar. 22.
Nicholson, Frank H., Edgewood, Barganor to The Union Nicholson, Frank H., Ledgewood, Assiale, Pa. Railway-traffic-controlling apparatus. 1,632,037; June 14.
Nicholson, Frank H., Lewistown, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,632,037; June 14.
Nicholson, Gustavo, Aquino, Paraguay. Firearm.
Nicholson, Howard M., Pittsburgh, Pa. Check valve. 1,629,961; May 24.
Nicholson, Jacob P., Chicago, Ill. Vehicle washing pit. 1,633,280; June 21.
Nicholson, Jacob P., Chicago, Ill. Vehicle washing pit. 1,633,280; June 21.
Nicholson, John L., assignor to Locomotive Firebox Company, Limited, London, England, Bailway point, signal, and the like. 1,363,608; Juni 1,628,180; Micholson, John L., assignor to Locomotive Firebox Company, Chicago, Ill. Fire-arch construction. 1,628,180; The Propulse Controlled Company.

May 10.

Nicholson, John L., assignor to Locomotive Firebox Company, Chicago, III. Expansion and contraction anchorage for thermic siphons. 1,643,128; Sept. 20.

Nicholson, Joseph B., Stenbenville, Ohio. Apparatus for Stenbenville, Ohio. Apparatus for Nicholson, Joseph B., Stenbenville, Ohio. Apparatus for Stenbenville, Ohio. Nicholson, Stanley, Whiting, Ind., assignor to Standard Oli Company, Chicago, III. Candle. Des. 73,861; Ohio. Stanley W., assignor to The Duro Company, Toledo, Ohio. Window-controlling device. 1,619,633; Mar., Ohio. Window-controlling device. 1,619,633; Mar., Ohio. Stanley W., assignor to The Duro Company, Chicago, Stanley W., assignor to The Duro Company, Mar., Ohio. Window-controlling device. 1,619,633;

Mar. 1.

Nicholson, Stanley W., assignor to The Dura Company,
Toledo, Ohio, Mounting for window-control mechanism. 1,622,603; Mar. 29.

Nicholson, Stanley W., assignor to The Dura Company,
Toledo, Ohio, Handle assembly. 1,636,011; July 19.

Nicholson, Stanley W., assignor to The Dura Company,
Toledo, Ohio, Weather strip. 1,641,191; Sept. 6.

Nicholson, Stanley W., assignor to The Dura Company, Toledo, Ohio. Window-control mechanism. 1,644,485;

ment. 1,624,508; ABr. 12.
Nickerson, William E., Boston, Mass. Finder, 1,650,376;
Nov. 22.
Nickerson, William E., assignor to Gillette Safety Razor Company, Boston, Mass. Knife with detachable blade. 1,625,778; Apr. 19.
Nickerson, William H., Brookline, Mass. Foot bearing for shoes. 1,634,116; June 28.
Nickle, Elizabeth A., administratrix. (See Nickle, Samural I.)

Nickle,

uet I.)

Nickle, Samuel I., deceased, Flint, Mich.; E. A. Nickle, administratrix. Heat-delecting device for air registers, etc. 1,650,669; Nov. 22.

Nicklin, Geoffrey, Walsall, England. Tray purse, tobacco pouch, or the like. 1,630,446; May 31.

Nickolls, Edward O. (See Lees, John, assignor.)

Nicks, Ira G., assignor to The Joy Toy Manufacturing Company, Dever, Colo. Toy acoplane vehicle. 1,633,446; July 5.

Nickum, Walter D., Los Angeles, Calif. Brake. 1,640,367; Aug. 30.

Aug Aug. 30.
Micodemus, Otto. (See Ernst, O., and Nicodemus.)
Nicolai, Albert R., assignor of one-half to E. J. Kreuchauf,
Monroe, Mich. Door-holding device: 1,618,345;

Monroe, Mich. Door-holding device: 1,618,345; Feb. 22.
Nicolaus, Frederic G., Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo. Closed gas stove and valve therefor, 1,637,870; Aug. 2.
Nicol., Russell C., Wilmington, assignor of one-third to H. S. Benedict and one-third to J. W. Hadley, Los Angeles, Calif. Tank pump. 1,636,711; July 26.
Nicolopoolos, Gustave F. (See Reaves, W. A., and Nicolopoolos).

poolos.)
Nicolson, Alexander M., assignor to Western Electric
Company, Incorporated, New York, N. Y. Photic diaphragm. 1,624,357 Apr. 2, 1,624,367 Apr. 3, 1,624,367 Apr. 3,

6

Sept. 0.

Nicherding, Margaret H., administratrix. (See Nicherding, Frank. A.)

Nichlo Mfg. Co. Inc., The. (See Lowell, William, as-

Nieblo Mig. Co. Inc., The. (See Loweit, William, assignor.).
Niebuhr, William C., St. James, Minn. Separable ring.
1,638,209; Aug. 9.
Niece, Fred G., Cleveland, Ohio. Coil for wireless apparatus. 1,647,744; Nov. 1.
Nied, Frd A., Akron, Ohio, assignor to The B. F. GoodJacob March Company, New York, N. Y. Tire. Des. 72,720;
Alay 22.
Niederbayerische Celluloscwerke. (See Schneider, Adolf. assignor.)

May 24.
Niederbayerische Cellulosewerke. (See Schneider, Adolf. assignor.)
Niederbee, Gustave, and W. E. Lawrence, Brooklyn, N. Y. Limit governor for internal-combustion engines.
Niedereh, 2016. G. Hamilton, Ontario, Canada. Steneil for convex surfaces. 1,618,216; Feb. 22.
Niedere, John G. Hamilton, Ontario, Canada. Steneil device for electric-light bubs. 1,648,993; Nov. 15.
Niedergeases. Wilhelm, Scattle, Wash. Reversible proposing device. 1,622,103; Mar. 22.
Niederhauser, Charles. Woodhaven, N. Y. Liquid-dispensing device. 1,622,103; Mar. 22.
Niederhauser, Frederick C., and A. E. Sunderland, Roanoke, V.a., assignor to The Viscose Company, Marcus Hook, Fra. Manufacture of artificial slik and the like. Medical manufacture of artificial slik and the like. Niedermann, Robert, Bonndorf, assignor to M. Bebringer, Wellendingen, Baden, Germany. Apparatus for dental surgery. 1,614,760; Jan. 18.
Niegemann, George F. (See Erickson, Erick, assignor.)
Niehaus, Frank, Butler, Ill. Lime spreader. 1,643,748; Niehaus, Frank, Butler, Ill. Lime spreader. 1,643,748; Niehaus, Frank, Butler, Ill. Lime spreader. 1,643,748; Niehaus, George P., Seattle, Wash. Internal-combustion engine. 1,620,124; Mar. S.
Nielsen, Haus P., Allamed, assignor to Eames Company, San Francisco, Calif. Wheel. 1,636,483; July 19.

Nielsen, Heinrich V., Cardiff, Wales. Machine for filling bottles and other vessels. 1,652,994; Dec. 13. Nielsen, John. (See Gardner, E. B., Nielsen, and Gardbottles Nielsen. ner.)

Nets. Niels C., Ebeltoft, Denmark, Drying appara-letter, Niels C., Ebeltoft, Denmark, Drying appara-tion, New York, N. Y. Homogenizing procedure and apparatus therefor, 1,654,268; Dec. 27. Nelson, Tekla, et al. (See Uttenthal, Folmer S., as-

upparatus therefor. 1,654,268; bec. 27.

Niekun, Tek, et al. (See Uttenthal, Folmer S., assignor.)

Niemann, Erich, Charlottenburg-Berlin, Germany, assignor to A.-G. für Handels- und Industriewerte Glarus, Glarus, Switzerland. Safety device for absorption refrigerating machines. 1,653,337; July 12.

Niemann, Frank H., Philadelphia, Pa. Tremolo. 1,619,532; Mar. 1.

Niemann, George F., assignor to Benjamin Electric Mfg. Carlotte, 1,629,145; Aug. 16.

Niemann, George F., assignor to Benjamin Electric Mfg. Carlotte, 1,647,507; Nov. 1.

Niemeier, Walter, and T. Schult, St. Louis, Mo. Shoe. 1,647,507; Nov. 1.

Niemeyer, Alfred H., Chicago, Ill. Casket. 1,637,271; July 26.

Niemi, Andrew, Hancock, Mich. High shoe. 1,616,818; Feb. 8.

Ntemi Haac, Minneapolis, Minn. Scraper. 1,641,007; Aug. 30. Ntenhauser, Bernard A., assignor to Minnesota Wax Pa-per & Envelope Co., St. Paul, Minn. Tissue-paper package. 1,623,806; Apr. 5. Nter. Ecpust B., Belerfeld, Germany. Lamp. 1,649,178;

Nov. 15.

Niers, Joseph, Milwaukee, Wis. Adjustable window ventilator. 1,646,040; Oct. 18.

Nies, Frederick II., Brooklyn, N. Y. Artificial denture. 1.639,732; Aug. 23.

Niesen, Joseph II., Grafton, Wis. Washing machine. Nieukirk, Chiec. Union Mills, Ind. Surgical device. 1,617,961; Feb. 15.

Niewald, Walter C., Freedom, Mo. Locking device for demountable rims. 1,636,885; July 19.

Niggeler, Walter. (See Jonas, J., and Niggeler.) Nageler, Walter. (See Jonas, J., and Niggeler.) The Niguiting Lie Albert E., Whangarel, New Zeniand. Motoragiting and September 1, 11.

Nighting 1, Victor C. J., Heidelberg, near Melbourne, Mighting 1, Victor C. J., Heidelberg, near Melbourne,

Nightingall, Victor C. J., Heidelberg, near Melbourne, Victoria, Australia, Recording sound, 1.649.847;

Nov. 22

Nov. 22.

Nov. 22.

Nigro, Gactano, Thompsonville, Conn. Bumper for automobiles. 1.621.997; Mar. 22.

Nigro, Julia, Kanasa City, Mo. Embroidery-thread holder. 1.642.744; Sept. 20.

Nibeli, Homer Li, Los Angeles, Calif. Signal. 1.630.405; May 31.

Nibeli, Los Angeles, Calif. Mordant paste. 1.6447.539; Nov. 1.

Nikaido, Yasujuro. (See Molony, S. B., and Nikaido.)

Nikonow, John P., New York, N. Y. Electrically-operated ignition control. 1.630.629; May 31.

Niks, Nickolas J., Chillicothe, Ohio. Paper-making mechanism. 1.641.986; Sept. 13.

Niks, Nickolas J., Chillicothe, Ohio. Paper machine and Niks, Nickolas J., Chillicothe, Ohio. Paper machine and 1.613.285; Jan. 4.

Niks. Sept. 33.

Niksie, Elifa, Port Richmond, N. Y. Trolley-reel casing. 1.613.285; Jan. 4.

Niles-Bement-Pond Company. (See Cole, Lyndon C., assignor.)

assignor.) Niles-Bement-Pond Company. (See Deale, Robert C., assignor.)
Niles-Bement-Pond Company. (See Fullerton, Herbert S..

assignor.)
Niles-Bement-Pond Company.
Blood, and Rausch, assignors.
Niles-Bement-Pond Company. ((See Greenleaf, G. E. (See Macdonald, John O.,

assignor.) Niles-Bement-Pond Company. (See Marcalus, Nicholas,

assignor.)
Niles-Bement-Pond Company. (See Miller, Ferdinand, as-

Niles-Bement-Pond Company. (See Parkes, Albert W .. Niles-Bement-Pond Company. (See Randolph, Clifford F.,

assignor.)
Niles-Bement-Pond Company. (See Randolph, C. F., and Marcalus, assignors.)
Niles-Bement-Pond Company. (See Rausch, Roswell H.,

assignor.) Niles-Bement-Pond Company. (See Ricards, Charles L., assignor.)

assignor.)
iles. Frank and L., Santa Barbara. Cali
wall construction and making the same.
May 10. Calif. Bulant., 1,628,056; Niles, Harry F., Chicago, Ill. Package. 1,631,755;

Niles, Harry F., Chicago, III. Package. 1,081,700; June 7.
Niles, Jesse E., Pontiac, Mich. Attachment for internal-combustion engines. 1,621,376; Mar. 15.
Niles, Lester. (See Niles, Frank and L.)
Niles, Schuyler, Washougal, Wash. Gold separator. 1,646,309; Oct. 18.
Niles, Watter L. C., Saugus, assignor to Excel Shoe Form Company, Lynn, Mass. Shoe-display form. 1,628,734; May 17.

Nill, Edward A., and F. C. Acker, Cleveland, assignors of one-third to P. E. Selby, Portsmouth, and two-thirds to J. R. Dall, Norwalk, Ohio. Lubricant. 1,617,077; Feb. 8.

H., Machine Co., The. (See Olson, Mauritz,

Nilson, A. H., Machine Co., The. (See Olson, Mauritz, assignor.)
Nilson, Arthur R., Brooklyn, N. Y. Antenna device. 1,650,461; Nov. 22.
Nilson, John L., and J. F. Prince, Chicago, Ill. Automatic windshield cleaner. 1,627,989; May 10.
Nilson, John L., and J. F. Prince, Chicago, Ill. Automatic windshield cleaner. 1,627,989; May 10.
Nilson, Laris G., Hoboken, N. J., assignor of one-half to-anism. 1,654,089; Dec. 27.
Nilson, Leonard D., Wayzata, Minn. Lifting jack. 1,627,525; May 3.
Nilson, Leonard D., Wayzata, Assignor to Marquette Manufacturing Company, St. Paul, Minn. Lifting jack. 1,621,351; Sept. 6.
Nilson, Jeonard D., Wayzata, assignor to Marquette Manufacturing Company, St. Paul, Minn. Crane. 1,641,351; Sept. 6.
Nilson, Leonard D., Wayzata, assignor to Marquette Manufacturing Company, St. Paul, Minn. Crane. 1,643,348; Sept. 27.
Nilson, Leonard D., Wayzata, assignor to Marquette Manufacturing Company, St. Paul, Minn. Lifting jack. 1,652,455; Dec. 13.
Nilson, Leonard D., Wayzata, Seignor to Marquette Manufacturing Company, St. Paul, Minn. Lifting jack. 1,652,455; Dec. 13.
Nilson, Joseph G. (See Glasner, R. W., and Nilson.) Nilson, August L., Sodertalje, Sweden. Carburetor. 1,637,272; July 26.
Nilson, Freeman, assignor to The Monarch Brush Co., Troy, N. Y. Knot picking machine. 1,641,686;

Troy, Sept. 6.

Nilsson, Holger A. E., Ockelbo, Sweden. Conveying and piling apparatus. 1,639,435; Aug. 16.
Nilsson, Nils O., Worcester, Mass. Feed box. 1,638,270;

piling apparatus. 1,639,435; Aug. 10.
Nilsson, Nils O., Worcester, Mass. Feed box. 1,638,270;
Aug. 9.
Nims. Fayette, Montour Falls, N. Y. Snow shovel.
1,634,204; June 28.
Nims, Frank B. (See Nims, Voigt J. and F. B.)
Nims, Voigt J. and F. B., Stockton, Calif. Pumpshaftbearing structure. 1,649,320; Nov. 16.
Nims, Frank B. (See Rims, Voigt J. and Nimtz.)
Nim Step Hondred Walls Company. (See Behan,
Thomas W., assignor.)
Nirider, Fred A., Loogootee, Ill. Fertilizer distributor.
1,648,658; Nov. 8.
Nishi, Tsunegoro, Tokyo-Fu, Japan. Manufacturing wall
boards composed of rice hulls and plaster. 1,634,079;
June 28.
Nishi, Sukeljro, Osaka-Fu, Japan. Governor for phono-

June 28.

Nishida, Sukejiro, Osaka-Fu, Japan. Governor for phonographs. 1,630,630; May 31.

Nissen, Harry P., Osakiad, Calif. Sleeve-holder fas-Nissen, Harry P., Osakiad, Calif. Sleeve-holder fas-Nissen, Harry P., Osakiad, Calif. Fastener for sleeve holders. 1,643,627; Sept. 27.

Nissen, J. M. (See Cheatham, Chester W., assignor.)

Nissen, John P., Philadelphia, Pa. Sweater. 1,632,346; June 14.

June 14 in, Baltimore, Md. Candle cap. Des. 71,848;

Jan. 11. Nistler, Sebastian, Buffalo, N. Y. Infant's conveyance. 1,631.546; June 7. Nitardy, Ferdinand W. (See Boyd, R., Nitardy, and Lewis.)

Nitardy, Ferdinand W. Brooklyn, assignor to B. R. Squibb and Sons, New York, N. Y. Preservation of oils. 1,624.358; Apr. 12.
Nitardy, Ferdinand W., Brooklyn, assignor to E. R. Squibb and Sons, New York, N. Y. Preservation of ether. 1,632,302; June 14.
Bartlett, and F. F. Berg. Brooklyn, assignors to E. R. Squibb and Sons, New York, N. Y. Dreservation of ether. 1,632,302; June 14.
Brooklyn, assignors to E. R. Squibb and Sons, New York, N. Y. Dentifrice. 1,622,391; Mar. 29.
Nitardy, Otto J., Minneapolis, Minn. Wind motor, 1,631,067; Nov. 29.
Nitardy, Otto J., Minneapolis, Minn. Scarifier. Nov. 29.
Nitchie, Hubbard D., Cranford, N. J., assignor to The Watson-Stillman Co., New York, N. Y. Molding apparatus. 1,628,057; May 10.
Nitchie, John A., Elim Creefe, Nebr. Power-transmission Nitchie, Frederick W., Attleboro Falls, assignor to M S Company, Attleboro, Mass. Expansible bracelet. 1,630,236; May 24.

1,630,236; May 24.

Nittel, Frederick W., Attleboro Falls, assignor to M S Company, Attleboro, Mass. Hook. 1,637,315; July 26.

Loss, Say 1,111, 12.

Niven, Frank R. (See Mossman, O. P. and Niven.)

Niven, Harry A., Boston, Mass. Dispensing apparatus.

1,642,623; Sept. 13.

Nivison-Weiskopf Company. (See Edwards, Frank K.,

assignor.)

Nix, George E., Phil Campbell, Ala. Cultivator fender. 1,622,665; Mar. 29.
Nix, George E., Electra, Tex. Tongs and the like. 1,629,631; May 24.
Nix, Linnie D., Dallas, Tex. Game. 1,616,328; Feb. 1.

Nix, Neely, assignor of two-thirds to M. R. Humpton and one-third to B. A. Stone, Long Beach, Calif. Metering Purp. 1,628,083; May 10.

1,628,083; May 10.

McDaniel, Greensboro, N. C., assignors to Draper Corporation, Hopedale, Mass. Combined wett fork and grid cleaner. 1,651,148; Nov. 29.

Nixon, Clarence R. (See Dunnock, J. L., and Nixon.) Nixon, Clarence R., assignor to Swindell Brothers, Baltimore, Md. and Device for bottle-polishing machines. Nixon, Clitton W. New York, N. Y. Celn-controlled vending and change-making machine. 1,634,679; July 5.

Nixon, Clitton W., New York, N. Y. Vending machine. 1,634,679; July 5.

Nixon, J. Hartley, Woodstown, N. J. Cultivator. Nixon, J. Hartley, Woodstown, N. J. Cultivator. Nixon, J. Hartley, Woodstown, N. J. Cultivator. Nixon, John A. (See Sulmicko, J., and Nixon, 1,650,377; Nov. 22.

Nixon, Levy, Easton, Pa. Diaphragm pump. 1,650,377; Nov. 22.

Nixon, Levi T., Jet, Okla. Windshield wiper. 1,649,848; Nixon, Levi Compas M. Victoria, British Columbia, Canada.

NOV. 22.

No. Let I., Jet, Okla. Windshield wiper. 1,025,050.

Non. Let I., State, British Columbia, Canada. Spark arrester. 1,638,451; Aug. 9.

Noack, Friederich. (See Winzenburg, W., and Noack.)

Noack, Henry J., Spokane, Wesb. Puller for battery terminals. 1,641,599; Sept. 6.

Noack, William A., Oakiand, Calif., assignor to Concealo Ff. ture Company, Inc. Table-leaf hinge. 1,644,440; Noah, Leroy H., Paleo, Kans. Internal-combustion engine. 1,036,612; July 19.

Noble, Morris O., Newark, N. J. Separable cuff button. 1,628,735; May 17.

Nobel, Nicolas, Paserocan, Java. Process of and apparatus for macerating sugar-containing materials. 1417,302, Feb. 15.

Noble, Moris O., Newark, N. J. Separable cuff button.
1,628,735; May 17.
Nobel, Nicolaas, Pasoeroean, Java. Process of and apparatus for macerating sugar-containing materials.
Nobel, Micolaas, Pasoeroean, Java. Process of and apparatus for macerating sugar-containing materials.
Noble, Giuseppe.
Stee Silvestrin, Glovanni, assignor, Nobli, Giuseppe.
Noble, Rouald B., Spokane, Wash. Bearing puller.
1,640,994; Aug. 30.
Noble, Arthur H., Pawtucket, assignor to Theodore W. Foster & Brother Company, Providence, R. I. Lipstick holder.
1,632,765; June 14.
Noble, Arthur H., Pawtucket, I., assignor to Theodore W. Foster & Brother Company, Providence, R. I. Lipstick holder.
1,632,765; June 14.
Noble, Arthur H., Pawtucket, I., assignor to Theodore W. Foster & Brother Company, Providence, R. I. Lipstick holder.
1,635,631; July 12.
Noble, Arthur H., Pawtucket, R. I., assignor to Theodore W. Foster & Brother Company, Providence, R. I. Lipstick holder.
1,646,557; Oct. 18.
Noble, Arthur H., Pawtucket, R. I., assignor to Theodore W. Foster & Brother Company, Providence, R. I. Lipstick holder.
1,646,557; Oct. 18.
Noble, Arthur H., Pawtucket, R. I., assignor to Theodore W. Foster & Brother Company, Providence, R. I. Lipstick holder.
1,646,557; Oct. 18.
Noble, Benjamin, assignor, by mesne assignments, to Michigan Smelting & Refining Company, Detroit, Mich.
Nafety valve.
1,644,265; Oct. 1.
Noble, Sterence W. Gee Coryel, W. C., and Noble.)
Noble, Sterence W. Gee Coryel, W. C., and Noble.)
Noble, F. H., & Company. (See Shields, John M., assignor.)
Noble, F. H., & Company. (See Wright, Elton A., assignor.)
Noble, F. H., & Company. (See Wright, Elton A., assignor.)
Noble, F. H., & Company.
Noble, William, assignor to Tygart Valley Glass Company, Seether M., Boise, Jahob. Auxiliary tollet seat.
Noble, William, assignor to Towle Manufacturing Company, Newburyport, Mass.
Plate or analogous article.
Des. 72,490; Apr. 19.
Nock, Harold E., assignor to Towle Manufacturing Company, Newburyport, Mass.
Plate or analogous article.
Des. 72,490; Apr.

Nock, John R., Brooklyn, N. Y. Spring heel. 1,625,048; Apr. 19. Nocken, Theodor. (See Neelmeier, W., and Nocken, Nocken, Theodor. (See Neelmeier, W., Nocken, and Reb-

Nocken, Theodor, (Ste Meriana, 1987).

Noda, St. Horo, Brooklyn, N. Y. Amusement device.

Noda, 36,645; July 19.

Noddings, Henry S., Springfield, Mass. Safety-razor-blade holder. 1,627,664; May 10.

Noe, Frank P., and S. M. Gooder, Chicago, Ill., Constructing concrete walls in deep trenches. 1,628,682; May 17.

North States of the States of

assignor.)

assignor.)
Nolen. James G., New York, N. Y. Vibration modifier
for diaphragms. 1,646,628; Oct. 25.
Nolet, Maurice D., Manchester, N. H., assignor, by mesne
assignments, to Kitson Machine Shop. Counting mechanism. 1,647,143; Nov. 1.
Nolte, Henry J., Schenectady, N. Y., assignor to General
Electric Company. Vacuum condenser. 1,641,687;

Sept. 6.

Nolzen, Artur, assignor to the Firm: Bergische Elektrizitis-Gesellschaft Gebr. Nolzen, Ronsdorf, Germany. Fresh-air heater for internal-combustion engines. 1.637.006; July 26.
1.637.006; July 26.
1.637.007. Electric Corporation. (See Dam, Henry M., as-

Noma Electric Corporation. (See Dam.)
Nones, Hiram T., Washington, D. C. Parachute fabric. 1,650,998; Nov. 29.
Non-Explosive Corporation of America (New Corporation.) (See Colm. Jacoba ssignor.)
Nome of the Corporation of America (New Corporation.) (See Colm. Jacoba ssignor.)
Warren, Ohio. Machine for cutting pipe threads. 1,616,542; Feb. 8.
Nonneman, Ira W., assignor to The Borden Company, Warren, Ohio. Diestock. 1,644,143; Oct. 4.
Nonnenbeuch, Otto. (See Bourne, P. E., and Nonnenbruch)

bruch.) on-Spi Company, The. (See Winters, Edgar W., as-

Noonan, Harry, White Plains, N. Y. Box or similar container. Des. 73,940: Nov. 22.

Noonan, William J., Mansheld, Mass. Electrical heating and cooling apparatus. 1,622,803; Mar. 29.

Nor, Allen, et al. (See Vaughan, John, assignor.)

Norbeck, Emil T., Minneapolis, Minn. Window attachment for windshelded 1,030,208; May 24.

Norbert, Cillford M., Maspeth, N. Y. Draft control. 1,627,194; May 3.

Norberg, Hugo W., Flint, Mich. Figure toy. 1,633,456;

June 21.
Jun

1,020,223; Mar. 8.

Nordan, Monte E., West Frankfort, Ill. File. 1,631,882;
June 7.

Nordberg, Brune V., deceased, Milwaukee, Wis.; H. C.
Nordberg, Excuttik. Variable-capacity air compressor.

Nordberg, Excuttik. Variable-capacity air compressor.

Nordberg, Brune V., deceased; H. C. Nordberg, executrix,
Milwaukee, Wis. Valve gear for steam engines.

1,643,852; Sept. 27.

Nordberg, Brune V., deceased; H. C. Nordberg, executrix,
Milwaukee, Wis. Combined inlet and unloading valve
Milwaukee, Wis. Combined inlet and unloading valve
Nordberg, Helena C., executrix. (See Nordberg, Brune V.)

Norden, Folke F., Brooklyn, and W. G. Loan, St. George,

Norden, Folke F., Brooklyn, and W. G. Loan, St. George,

Norden, Mortimer, New York, N. Y. Huminated sign.

1,626,958; May 3.

Nordensyan, Halamar. (See Lindsay, G. W., and Nordensyan,

Nordenswan, Tom K. A., Glasgow, Scotland. Pressure

meter. 1,637,653; Aug. 2.

Nordenswan, Gustaf W. (See Thörnblad, A. R., and

Nordenswan, Gustaf W. (See Thörnblad, A. R., and

Nordenswan, Gustaf W. (See Thörnblad, A. R., and

Nordenswan, Hacorporated, New York, N. Y. Telephone re
pany, Incorporated, New York, N. Y. Telephone re-

meter. 1,637,653; Aug. 2.

meter. 1,637,653; Aug. 2.

Nordenswam.

Nor

Nordstrom, Sven J., assignor to Merco Nordstrom Vaive Company, San Francisco, Calif. Valve. 1, 634,722; July 5.
Nordstrum, George W., Chicago, Ill. Antifriction bearing. 1,638,271 Ang. 9.
1,63

signor.)
Norlipp Company, The. (See Schnoor, Raymond D., as-

Norma-Hoffmann Bearings Corporation. (See Bott, George R., assignor.)
Norma-Hoffman Bearings Corporation.

(See Meder, Arthur, assignor.)
Norman, Andrew J., deceased, California, Pa.; K. I. Norman, executrix. Bank ledger. 1,621,806; Mar. 22. Norman, George, Small Heath, Birmingham, assignor to The Birmingham Small Arms Company Limited, Birmingham, England. Small arm. 1,637,238; July 26. Norman, George, Small Heath, Birmingham, assignor to The Birmingham Small Arms Company Limited, Birmingham, England. Automatic, firearm. 1,637,234; July 26.

y 20. au, George, Small Heath, Birmingham, assignor to e Birmingham Small Arms Company Limited, mingham, England. Automatic firearm. 1,637,235;

Norman, George, Small Heath, Birmingham, assignor to The Birmingham Small Arms Company Limited, Birmingham, England. Automatic firearm. 1,637,235; July 26.

The Birmingham Small Heath, Birmingham, assignor to The Birmingham, Small Arms Company Limited, Birmingham, Bongland, Small Arms Company, Limited, Birmingham, England, Small arms Company, Limited, Birmingham, England, Small arms 1,632,631; July 26.

Norman, George M., assignor to Hercules Powder Company, Wilmington, Del. Transportable dynamite magazine. 1,625,491; Apr. 19.

Norman, Joseph T., Nanticoke, Pa. Coal breaker.

Norman, Joseph T., Frederick, Md. Wagon. 1,627,109; May 3.

Norman, Joseph T., Frederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Frederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Frederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Frederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Brederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Brederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Brederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Brederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Brederick, Md. Separator roller and bearing herefor. 1,651,622; Dec. 6.

Norman, Joseph T., Brederick, Md. Separator roller and separator of the separator

Norris, Cora A., administratrix. (See Norris, Andrew J.) Norris, Grace. (See Langdon, Jesse D., assignor.) Norris, Harry. (See Fulenwider, J. and H., Robinson, and

Norris, Harry S. (See Fulenwider, J. and H., Robinson, and Norris,)
Norris, Harry O., assignor, by mesne assignments, to G. W. Simons, Dayton, Ohio. Paint sprayer. 1,651,466;

and Norris.)

Norris, Harvey O., assignor, by mesne assignments, to G. W. Simons, Dayton, Ohio. Paint sprayer, 1,651,466; Dec. 6. Henry, fr., Westport, Md. Check valve. Norris, Lewis B., assignor of one-half to O. E. Rose, Sapulpa, Okla. Gate. 1,649,849; Nov. 22.

Norris, Lewis B., assignor of one-half to O. E. Rose, Sapulpa, Okla. Gate. 1,649,849; Nov. 22.

Norris, Marvin L., Fort Wayne, Ind., assignor to General Electric Company. Dynamo-electric machine. Norris, Paul E., Wilkinsburg, assignor to The Westing-Boattery separator. 1,644,853; Oct. 11.

Norris, Paul E., Wilkinsburg, assignor to General Electric Company, Swissvale, Pa. Storage-battery separator. 1,644,853; Oct. 11.

Norris, Ralph F. (See Wilkinsburg, assignor to The Westing-Battery separator. 1,644,853; Oct. 11.

Norris, Botert W., Birmingham, Ala. Combined signal-lamp casing. 1,640,003; Aug. 23.

Norris, John W., Woodlawn, Ohio. Child's vehicle. 1,613,356; Jan. 4.

Norsk Hydro-Elektrisk Kwaelstofakticselskab. (See Half-1,613,356; Jan. 4.

Norsk Hydro-Elektrisk Kwaelstofakticselskab. (See Sand-vold, O. Rye, and Platou, assignors.)

Norstrom, Nils E., Chicago, Ill. Slow magnet. 1,635,005; July 5.

Norstrom, Reidar M. (See Geare, E. E. S., and Norstrom, Adug. 30.

Northam. Martin K. (See Forsyth, Joseph E., assignor.)

Aug. 30.
Northam. Martin K. (See Forsyth, Joseph E., assignor.)
North American Lace Company. (See Siner, Raymond K., assignor.)
North American Lace Company. (See Truman, Fred, as-

signor.)
Northboro Brush Company. (See Le Boeuf, Arthur W., assignor.)

assignor.)

North Bro's Mfg. Co. (See Fegley, Thomas J., assignor.)

North Bro's Mfg. Co. (See Fegley, T. J., and Leopold, assignors.)

North, Charles E., Montclair, N. J. Madking mixtures of cocca or checolate and milk and product thereof. 1.617,721; Feb. 15.

North, Charles E. H., and A. H. Hudson, Bremerton, Wash. Motor fuel. 1.637,007; July 26.

Wash. Motor fuel. 1.637,007; July 26.

Wash. Motor fuel. 1.637,007; July 26.

Wash. Motor fuel. 1.647,007; July 26.

Wash. Motor fuel. 1.647,007; July 26.

Wash. Motor fuel. 1.657,007; July 26.

Wash. Motor fuel. 1.657,007; July 26.

Wash. Motor fuel. 1.657,007; July 26.

Wash. Mar. R. (1.619,963; Mar. R. (1.619, Mar. 8.

North, Clayton O., assignor to The Rubber Service Lab-oratories Company, Akron, Ohio. Rubber-vulcanization process. 1,634,336; July 5.

North, Clayton O., Tallmadge Township, Summit County, assignor to The Rubber Service Laboratories Co., Akron, Ohio. Manufacture of aidebyde reaction products of the aldehyde derivative of a Schiff's base. 1,639,957; Aug. 23.
North, Clayton O., Tallmadge Township, Summit County, assignor to The Rubber Service Laboratories Co., Akron, Ohio. Rubber-vulcanization accelerator. 1,651,931; Dec. 6.

Dec. C.
Northcott, Ephraim, and J. W. Warford, Clearinghouse,
Calif. Electrotherapeutical apparatus. 1,653,819;
Dec. 27.
North East Appliances, Inc. (See Crumrine, Chester W.,

assignor.) orth East Appliances Inc. (See Dorsey, Farnum F., North assignor.)
North East Appliances, Inc. (See Thompson, R. G., and Crumrine, assignors.)

Crumrine, assignors.)
North East Appliances, Inc. (See Williams, Anthony F., assignor.)

assignor.)
North East Electric Company. (See Lee, Thomas L.,
North East Electric Company. (See Lee, Thomas L., assignor.)
North East Electric Company. (See Williams, Anthony
North East Electric Company. (See Williams, Anthony

F., assignor.)
Northern Corrugating Co. (See Krueger, Herman W., assignor.)
Northern Corrugating Company. (See Thorp, Fred W.,

assignor.)
Northern Corrugating Company. (See Thorp, Fred W., assignor.)
Assignor.)
Tronto. Outrio. Canada. Soundsignaling installation. 1,619,585; Mar. 1.
North & Judd Manufacturing Company. (See Carpmill, J. F., and Hancock, assignors.)
North Land Cedar Chest Company. (See Newcomb, Northnore, Robert S., Chicago, Ill., assignor to The Louden Machinery Company, Faffeld, Iowa. Hanger for overhead trackways. 1,643.749; Sept. 27.
North, Ray A., Green Bay, vis. Water filter. 1,630,274; Martinop. Edward G. (See Pitney, A. H., Ogden, Northrop. Edward G. (See Pitney, A. H., Ogden, Northrop. George E., assignor to Red Star Appliances, Inc., Stamford, Com. Mailing machine. 1,624,899; Apr. 12.
Northorop. George E., assignor to Red Star Appliances, Inc., Stamford, Com. Mailing machine. 1,638,052; Aug. 16.

Northrop, George E., assignor to Rea Star Appanance, Inc., Stamford, Conn. Mailing machine. 1,639,052; Aug. 16.
Northrop, George E., assignor to Red Star Appliances, Inc., Stamford, Conn. Mailing machine. 1,639,053; Aug. 16.
Northrop, James H., Santa Ana, Calif. Attention arrester, 1,628,903; May 17.
Northrop, Jonas, Hopedale, assignor to Hopedale Manufacturing Company, Milford, Mass. Loom. 1,618,104; Peb. 15.

Feb. 15.

Northrop, Jonas, Hopedale, assignor to Hopedale Manufacturing Company, Milford, Mass. Filling-feeler mechanism for looms. 1,635,585 ; July 12.

Northrop, Jonas, Hopedale, assignor to Hopedale Manufacturing Company, Milford, Mass. Clutch mechanism for looms. 1,636,703; July 26.

Northrop, Jonas, assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Loom. 1,654,203; Dec. 27.

Northrop, Jonas, assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Loom. 1,654,203; Dec. 27.

Northrop, Jonas, assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Thread extractor for looms. 1,654,245; Dec. 27.

Northrop, Mabel E., Pasadena, Calif. Bedpan. 1,627,571; May 10. Northrop, May 10.

Northrup, Mabel E., Pasadens, Calif. Bedpān. 1,627,571; May 10.

Northrup, Annabelle S., Norfolk, Va. Flea and insect trap. 1,645,715; Oct. 18. Pinceton, assignor to Ajax trap. 1,645,715; Oct. 18. Pinceton, assignor to Ajax Dinductor coll. 1,640,799; Ang. 10. Trenton, N. J. Air-cooled Inductor coll. 1,640,799; Ang. 200, Northrup, Elmer C., San Francisco, Calif., assignor, by mesne assignments, to Sprague-Sells Corporation, Hoopeston, Ill. Nailing machine. 1,626,868; May 3. Northrup, Joshau K., Ellicottville, N. Y. Shoe last. 1,645,716; Oct. 18. Northrup, Vernon W., Hurlock, Md., assignor to The Petroleum Hydrogenation Company of America, Incorporation of the deavy petroleum oils into lighter oils. 1,642,624; Sept. 13. Northup, Harry R., and C. L. Snyder, Des Moines, Iowa. Humidor cigar holder. 1,619,306; Mar. 1. North Wayne Tool Co. (See Allen, Percy, assignor.) Northwest Blower Kiin Company. (See Mueller, Moritz L., assignor.)

signor.)
Northwestern Collapsible Carrier Co. (See Woolsey, Charles A., assignor.)
Northwestern Collapsible Carrier Co. (See Woolsey, C. Northwestern Corporation. (See Weaver, H. H., and Bolen, assignors.)
Northwestern Corporation. (See Weaver, H. H., and Bolen, assignors.)
Northwestern Expanded Metal Company. (See Dean, James H., assignor.)

Northwestern Yeast Company. (See Hill, C. B., and

Northwestern Yeast Company. (See Hill, C. B., and Givens. assignors.)
Northwestern Yeast Company. (See Hill, C. B., and Tintner, assignors.)
Northwood. Charles O., Corning, N. Y., assignor to United States Glass Company. Pittsburgh. Pa. Goblet or similar article. Des. 72,631: May 10.
Norton, Alfred A., trustee. (See Lindgren, Waldemar L., assignor).
Norton, Affred A., trustee. (See Lindgren, Waldemar L., assignor).
Norton, Annyo B., Cleveland, Ohio, assignor to Aluminum Companyo B., Cleveland, Ohio, assignor to Aluminum Companyo of America. Pittsburgh, 1r. Hollow metal article and producing the same. 1,633,187; June 21.
Norton, Arthur E., Belmont, Mass. Gear. 1,647,191: Nov. 1.
Norton, Arthur F., Craigmont, Idaho. Wrench. 1,614,534;

Norton, Arthur P., Craigmont, Idaho. Wrench. 1,614,534; Jun. 18. Norton, Charles H., Worcester, Mass., assignor, by mesne

Jan. 18. orton, Charles H., Worcester, Mass., assignor, by messassignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Centerless grinding machine. 1,639,958; Aug. 23.

Aug. 23.

Norton, Charles H., assignor to Norton Company, Worcester, Mass. Automatic controlling mechanism for machine-tool cross feeds. 1,653,922: Dec. 27.

Norton, Charles L. (See Ziegler, Crawford, assignor.) Norton, Clifford, Orange, N. J., assignor to Elevator Supplies Company, Inc. Door lock and electric switch. 1,644,644 Nov. 18.

See Bolden, Albert G., assignor.) Norton Company. (See Bolden, Albert G., assignor.) Norton Company. (See Jeppson, George N., assignor.) Norton Company. (See Jeppson, George N., assignor.) Norton Company. (See Jeppson, G. N., and Beecher, assignors.) assignors.) Norton Company. (See Jeppson, G. N., and Leafe, as-

signors.)
Norton Company.
Norton Company.
Norton Company. (See King, Clarence R., assignor.) (See Martin, Richard H., assignor.) (See Milligan, L. H., and Quick, a

Norton Company. (See Milligan, to Lee Bulligan, signors.)
Norton Company. (See Norton, Charles H., assignor.)
Norton Company. (See Van Der Pyl, Edward, assignor.)
Norton, Edward L., assignor to Bell Telephone Laboramission system. 1,642,506; Sept. 13.
Norton, Edwin C., Arcata, Calif., Blubber-slicing implement. 1,642,625; Sept. 13.
Norton, Edwin K., Great Neck, N. Y., and F. W. Skinner, Harrington Park, N. J. Liquid gauge. 1,614,849; Norton, Harold W., assignor to The Dayton Steel Racquet Norton, Harold W., assignor to The Dayton Steel Racquet

Jan. 18. Invold W., assignar to The Dayton Steel Racquet to complay, Dayton, Ohlo. Racket for tennis and similar games. 1,637,533; Aug. 2. Norton, James G., Ettingville, N. Y. Process and apparatus for making cups. 1,623,197; Apr. 5. Norton, Jann F., Mattapan, Mass. Piston. 1,637,273; Norton, John F., Mattapan, Mass. Piston. 1,637,273;

Norton, John F., Mattapan, Mass. Resilient equalizing Norton, John F., Mattapan, Mass. Resilient equalizing support for piston rings. 1,647,304; Nov. 1. Norton, Samuel H., Meadville, Pa. Reamer. 1,618,217;

Norton, John F., Mattapan, Mass. Resilient equalizing support for piston rings. 1,647,304; Nov. 1. Norton, Samuel H., Meadville, Pa. Reamer. 1,618,217; Feb. 22.
Nortol. Samuel H., Meadville, Pa. Reamer. 1,618,217; Feb. 22.
Nortol. Harry E. Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohlo. Ignition apparatus. 1,622,104; Mar. 22.
Norviel, Harry E., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohlo. Ignition apparatus. 1,624,113; Apr. 12.
Norviel, Harry E., Anderson, Ind., assignor, by mesne assignments to Delco-Remy Corporation, Dayton, Ohlo. The Corporation of the Corporation, Dayton, Ohlo. Electric switch. 1,641,352; Sept. 6.
Norviel, Harry E., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohlo. Control device. 1,641,365; Sept. 6.
Norwalk Company, The. (See Limont, Alexander W., Jr., assignor).

assignor.)
Norwalk Lock Company, The. (See Norton, A. K., and Halloran, assignors.)
Norwalk Tire and Rubber Company, The. (See Hoover.

Halloran, assignors,)
Norwalk Tire and Rubber Company, The. (See Hoover.
William C. assistance of the Company o

Norwood, Joseph C., and E. B. Hallauer, San Francisco, Calif. Mold for type forming machines. 1,615,031: Calif. Jan. 18

Call. Moid for type forming macanies. 1,010,037. Jan 18.

Nosan, Anton, Cleveland, Ohio. Aircraft variable-pitch propeller and blade mounting. 1,623,549; Apr. 5.

Bomb dropper for aeroplanes. 1,632,414; June 14.

Nosan, Anton, Cleveland, Ohio. Air-purifier apparatus. 1,632,414; June 14.

Nosan, Anton, Cleveland, Ohio. Air-purifier apparatus. 1,637,872; Aug. 2.

Nosan, Anton, Cleveland, Ohio. Air-purifier apparatus. 1,636,7,873; Aug. 2.

Nosan, Anton, Cleveland, Ohio. Altitude gauge for use not provided the state of the

1.654,370; Dec. 20.

Nothetine, Paul A., Dayton, Ohio. Picture-projecting machine. 1.645,204; Oct. 11.

Nothstine, Paul A., Chreimati, Ohio. Picture-projecting apparatus. 1,651,467; Dec. 6.

Nottage, Stanley G., Murraysville, Pa., assignor to Westinghouse Electric & Manufacturing Company. Dynamelectric machine. 1.643,785; Sept. 27.

Nottage, Stanley G., Murraysville, Pa., assignor to Westinghouse Electric & Manufacturing Company. Ventilation of dynamo-electric machines. 1,654,305; Dec. 27.

Nottage, Electric & Manufacturing Company. Ventilation of dynamo-electric machines. 1,654,305; Dec. 27.

Nottage, Clair P., Milwaukee, assignor to The Midland Company, South Milwaukee, Wis. Manufacturing buckles. 1,619,553; Mar. 1.

Nourse, Walter H. (See Ofner, F. P., and Nourse.)

Novardel Process Corporation. (See Gelissen, Henri C. J. H., assignor.)

H., assignor.)

H., assignor.).

Novadel Process Corporation. (See Van der Lande, Johannes A. L., assignor.).

Johannes A. L., assignor.

Johannes A. L., assignor.

Johannes A. L., assignor.

Loss See Seapposse, oreg. Cardon
door-securing means. 1,628,904; May 17.

Novak, John. (See Novak, Julius J., assignor.)

Novak, Julius J., assignor to J. Novak, New York, N. Y.

Combined propelling and steering apparatus. 1,643,314;

Sept. 27. (action). (See Galassi Empert P. assignor.)

Novelty Food Corporation. (See Hall, Charles G., signor.)

Novelto, Gactano. (See Galassi, Ernest P., assignor.)
Novelty Food Corporation. (See Hall, Charles G., assignor.)
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Company, Incorporated. New York, N. Y. Sheet-folding mechanism for envelopes and the like.
1.616,982; Feb. 1.62.
Novick, Abraham, Erosklyn, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Liquid-level gauge.
1.624,359; Apr. 1.2.
Novick, Abraham, Brooklyn, assignor to F. L. Smithe Machine Company, Incorporated, New York, N. Y. Envelope machine. 1.651,146; June Tor to F. L. Smithe Machine Company, Incorporated, New York, N. Y. Envelope machine. 1.651,146; June Tor to F. L. Smithe Machine Company, Incorporated, New York, N. Y. Envelope fastener-attaching machine. 1.651,834; Dec. 6.
Novick, Abraham, Brooklyn, assignor to F. L. Smithe Machine Company, Incorporated, New York, N. Y. Chip-temoving mechanism. 1.651,832; Dec. 6.
Novick, Abraham, Brooklyn, assignor to F. L. Smithe Machine Co. Inc., New York, N. Y. Chip-removing mechanism. 1.614,488; Jan. 18.
Novin, Joseph, assignor to The Centre Lighting Fixture Mfg. Co., New York, N. Y. Lighting-fixture part or analogous article. Dec. 74,670; Dec. 13.
Novin, Joseph, assignor to The Centre Lighting Fixture assignors to J. S. Stokes, Spring Valley Farms, Huntingdon Valley, Pa. Adjustable cylindrical tubing and making the same. 1,616,063; Feb. 1.
Novotny, Emil E., and C. J. Romeux, Philadelphia, ssignors to J. S. Stokes, Spring Valley Farms, Hunting-fixture of J

Noyes, Harold O. (See Adams, T. C., Noyes, and Law-

Nueske, Julius, 18.

Son, Inc., Brooklyn, Nr.

Son, Inc., Brooklyn, Nr.

Insoles, Louis, Wauwatosa, assignor to The nonInsoles, Louis, Wauwatosa, assignor to The nonInsoles, Louis, Wauwatosa, assignor to The nonInsolesse, Louis, Wauwatosa, assignor to The nonInsolesse, Louis, Wauwatosa, assignor to The nonInsolesse, Louis, Wauwatosa, assignor, Insolesse, Lackette, Charles, Lackette, Nullinger, Frank H., Struthers, Ohlo, Method and apparatus for drawing wire. 1,629,524; May 24.
Nullen, Mayrin E., Canton, assignor, by mesne assignments, to The Hoover Company, North Canton, Ohlo, Suction sweeper. 1,654,186; Dec. 27.
Numenan, George W. (See Heige, Gustav, assignor.)
Numenan, George W. (See Heige, Gustav, assignor.)
Numenan, George W. (See Heige, Gustav, assignor.)
Num. 1,613,162; Mar. 1.
Nutn. Frederick W., assignor to Nunnday Proprietary
Limited, Melbourne, Victoria, Australia. Casting of
dentures in metal. 1,632,712; June 14.
Nunn & Tunison. (See Tunison, Murray C., assignor.)
Nunnday Proprietary Limited. (See Nunn, Frederick W.,
Nunneancher, Henry J. (See Nelson, K. O., and Nunnemacher.)

Nuoto, Joseph, et al. (See Brown, W., and Morano, assignors.)

Nupeg (Australia) Limited. (See Richardson, Goshen S., assignor.)
Nussel, Joseph H., assignor of one half to T. W. Pierce.

assignor.)

Nussel, Joseph H., assignor of one half to T. W. Pierce,
Nathella, II. Wheelbarrow, I.616,329; Feb. I.

Danville, III. Wheelbarrow, I.616,329; Feb. I.

And Motor Company, Inc., Garden City, Loag Island,
N. Y. Propeller mounting, I.632,913; June 21.

Nutt, Norman W., Trenton, N. J. Fuse-plug-cap assembly,
I.637,274; July 26.

Nutt, Norman W., Trenton, N. J. Fuse plug, I.650,462;

Nutt, Norman W., Trenton, N. J. Fuse plug, I.650,462;

Nutt, William H. Mozaron, N. J. Fuse plug, I.650,462;

Nov. 22.
Nutt, William H., Newburyport, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. Shoe
heel. Des. 73,007; July 5.
Nuttail, B. D., Company. (See Schafer, Carl H., as-

Nuttail, R. D., Company. (see Schafer, Carl I., assignor.)

Nutter, James H., Erlanger, Ky. Burner. 1,620,676;

Nutter, James H., Erlanger, Ky. Burner. 1,620,676;

Nutter, James H., Erlanger, Ky. Burner. 1,620,676;

Nya Nordiska Kullager Aktiebolaget. (See Weibull, Ernst H. W., assignor.)

Nybakker, Dirke, New York, N. Y. Fuel economizer. 1,618,465; Feb. 22.

Nyberg, Herman D., Norrkoping, Sweden. Galvanic cell.

Nyberg, Sorea C. (See Mainland, J., and Nyberg.)

Nyberg, Sorea C. (See Mainland, J., and Nyberg.)

Nyborg, Niels N. T. (See Meredith, S. C., and Nyborg.)

Nyborg, Niels N. T. (See Meredith, S. C., and Nyborg.)

Nydor, Antenor, Trollhattan, Sweden. Hydraulic power of transmission mechanism. 1,627,626, 1,4

Nye 1001 & Machine Works. (See Lee, Ottar S., assignor).
Nyganrd, Oscar, Saugus, assignor to Bernitz Furnace Application of the Company, Boston, Mass. Fire bricks. 1,621,267; March. 1988.
Nygaard, Oscar O., Saugus, Mass., assignor to Combustion Engineering Corporation, New York, N. Y. Stoker air control. 1,625,276; Apr. 19.
Nyhoim, Peter, Edgewood, Wash. Extension table. 1,638,990; June 28.
1,038,899; June 29.
1,038,899; J

Nyman, Alexander. Wilkinsburg, Pa., assignor to inghouse Electric & Manufacturing Company. W telephone system. 1,628,905; May 17. Wireless Nyman, Alexander, Swissvale, Pa., assignor to Westing-bouse Electric & Manufacturing Company. Telephone device. 1,633,949; June 28.

Nyman, Alexander, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Telephone construction. 1,635,568; July 12.

Nyman, Alexander, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Inductor-type frequency changer. 1,642,041; Sept. 13.

Nyman, Alexander, assignor to Dubliner Condenser Corporation, New York, N. Y. Beryllium filament, 1,622,604; Mar. 26.

Nyman, Alexander, East Orange, N. J., assignor to Dubilier Condenser Corporation, New York, N. Y. Telephone receiver. 1,643,169; Sept. 20.
Nyman, Alexander, Swissvale, and F. Conrad, Pittsburgh, Pa., assignors to Westinghouse Electric and Maunfacturing Company. Polyphase plate-circuit excitation system. 1,645,291; Oct. 11.
Nyman, John O., Canton, Ohio. Metal door. 1,642,553; Sept. 13.

Sept. 13.

Nyquist, Harry, Jackson Heights, N. Y., assignor to American Telephone and Telegraph Company. Apparatus and method for regulating attenuation and plase on transmission lines. 1,615,911; Feb. 1.

Nyquist, Harry, Jackson Heights, M. Y., assignor to American Telephone and Telegraph Company. Carrier-curvy, Springer and Telephone and Telegraph Company. Multiplex signaling system. 1,620,735; Mar. 15.

Nyquist, Harry, Millburn, N. J., assignor to American Telephone and Telegraph Company. Multiplex signaling system. 1,620,735; Mar. 15.

Nyquist, Harry, Elmhurst, N. Y., assignor to American Telephone and Telegraph Company. Combined resonant shunic device for telegraph circuits. 1,621,567; Mar. 22.

Mar. 22.

Nyquist, Harry, Millburn, N. J., assignor to American Telephone and Telegraph Company. Ficture-transmitting system. 1627,111; May 3.

New York, March 1997, 19

current. 1,637,192; Nov. 1.
Nyquist, Harry, Jackson Heights, N. Y., assignor to
American Telephone and Telegraph Company. Method
and apparatus for compensating distortion on long
loaded lines. 1,643,145; Nov. 8.
Nyquist, Harry, Milburn, N. J., assignor to American
Telephone and Telegraph Company. Method and apparatus for measuring transmission delay. 1,645,618;
Oct. 18.

Nyrop, Aage, Horsholm, Denmark, Apparatus for atomicing liquids. 1,986,317; July 10. Nystrom, Karl F. Chicago, Ill. Draft-gear key-retaining means. 1,645,817; Oct. 18. Nystrom, Martin, assignor to The Brunswick-Balke-Col-lender Co., Chicago, Ill. Tone arm, Des. 73,979;

Political, Martin, assignor to the Brunswick-Baike-Colleder Co., Chicago, Ill. Tone arm, Des. 73-979; Nov. 29. Systrom, Martin, Chicago, Ill., assignor to The Brunswick-Baike-Colleder Company, Wilmington, Del. Station-selector dial for radio receiving sets. 1,634,625;

July 5.

Nystrom, Oscar P., (See Selby, C. M., and Nystrom.)

Nystrom, Oscar P., and J. Knoli, assignors to Holland

Furnace Company, Holland, Mich. Joint-forming ma
Nystuen, Henry, Hancock, Minn. Can washer and steri
Hzer. 1,645,501; Nov. 8.

O & J. Machine Company. (See Oslund, C. H., and

Johnson, assignors.) The (See Severson, Ole, assignor.)

O & W. Company. (See Overman, Max C., assignor.)

O dakes Ernset C. Bloomfeld N. J., assignor. In washe as-

O. & W. Company. (See Overman, state C. assignments, Oakes, Ernest C., Bloomfield, N. J., assignor, by mesne assignments, to Empire Milking Machine Company, Inc., Rochester, N. Y. Vacuum pump. 1,619,364; Mar. 1.
Oakes, Ernest C., Bloomfield, N. J., assignor, by mesne assignments, to Empire Milking Machine Company, Inc., Rochester, N. Y. Vacuum pump valve. 1,619,481; Mar. 1.

Maria Tarak J., Indianapolis, Ind. Internal-combustion descript I., 1843.681; Ind J. 5.
Oakes, George W., Crystal City, Mo., assignor to Pitts-burgh Plate Glass Company. Apparatus for applying abrasive to plate-glass-grinding mechanism. 1,618,063; Feb. 15.

Feb. 15.
Oakes Manufacturing Company, The. (See Lord, Fred W., assignor.)
Oakes, Sherman H. (See Morrow, C. G., and Oakes.)
Oakite Products, Inc. (See Clarin, David X., assignor.)
Oakite Products, Inc. (See Gray, Hiram L., assignor.)
Oakite, Erastus G., Southport, assignor to Bridgeport
making the same. 1,623,007; Apr. 5.
Oakley, Erastus G., Southport, assignor to Bridgeport
Brias Company, Bridgeport, Coun. Making flash-light
casings. 1,623,807; Apr. 5.

Oakley, Erastus G., Southport, assignor to Bridgeport Brass Company, Bridgeport, Conn. Making tire-valve casings. 1,625,492; Apr. 19.

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Oakley, John, assignor, by mesne assignments, to Perkins Machine and Gear Company, Springfield, Mass. Broaching machine. 1,650,033; Nov. 22.
Oakley, Laurence M., Trenton, N. J. Shoe sole. Des. 73,143; July 26.
Oakley, Theophield D., Chicago, Ill., assignor, by mesne assignments, to Befance Sales Corporation, New York, Oakley, William J., Brooklyn, N. Y. Sectional tire core. 1,049,723; Nov. 15.
Oakman, Erwin H., Atlanta, Ga. Attachment for autos. 1,626,746; May 3.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod Socket. 1,620,838; Mar. 8.
O'Bannon, Walter A., Tulsa, Okla. Sucker-rod socket. 1,620,838; Mar. 8.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod socket. 1,620,486; Mar. 8.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod socket. 1,620,486; Mar. 8.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod socket. 1,620,486; Mar. 8.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod socket. 1,620,486; Mar. 8.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod socket. 1,620,486; Mar. 8.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod socket. 1,620,486; Mar. 8.
O'Bannon, Walter A., Section of the mounts of the socket. 1,620,486; Mar. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,620,486; Mar. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,620,686; Mar. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,620,686; Mar. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,620,686; Mar. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,623,686; Nov. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,623,686; Nov. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,623,686; Nov. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,623,686; Nov. 8.
O'Bannon, Walter A., Section of the sucker-rod socket. 1,623,686; Nov. 8.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod socket. 1,623,686; Nov. 8.
O'Bannon, Walter A., Tulsa, Okla. Multiple sucker-rod socket. 1,623,686; Nov. 8.
O'Bannon, Walter A., Tulsa, Okla.

öbergfell, Herbert F. (See Ray, A. J., Madsen, and öbergfell.)

Obergfell, Gustav. aud E. Patswahl, Bronx, N. Y. Corvertible automobile body. 1,632,672; June 14.

Obergfell, Gustav. Automatic Electric Inc., Chicago, Ill.
Automatic charging and voltage regulating system.
1,612,876; Jan. 4.

Obergfell, Herbert F., River Forest, assignor, by mesne
assignments, to Automatic Electric Inc., Chicago, Ill.
Obergfell, Herbert F., River Forest, assignor, by mesne
assignments, to Automatic Electric Inc., Chicago, Ill.
Automatic switch mounting. 1,624,502; Apr. 12.
Obergfell, Herbert F., River Forest, assignor, by mesne
assignments, to Automatic Electric Inc., Chicago, Ill.
Automatic switch mounting. 1,624,502; Apr. 12.
Obergfell, Herbert F., River Forest, assignor, by mesne
assignments, to Automatic Electric Inc., Chicago, Ill.
Receiver headband. 1,651,623; Dec. 6.

Obergfell, Herbert F., River Forest, assignor, by mesne
assignments, to Automatic Electric Inc., Chicago, Ill.
Receiver headband. 1,651,623; Dec. 6.

Obergfell, Herbert F., River Forest, assignor, by mesne
assignments, to Automatic Electric Inc., Chicago, Ill.
Obergfell, Herbert F., River Forest, assignors assignments
Obergfell, Herbert F., River Forest, assignors by
Dergfell, Herbert F., River Forest, assignors assignments
Obergfell, Herbert F., River Forest, assignor, by
Dergfell, Herbert F., River F., Wert F., Wert F., Wert F.,

Wilnemucca, Rev. Hange, July 12.
Oblinger, Leroy I., Eagle Point Colony, Ohio. Pipe-threading tool. 1,648,502; Nov. 8.
O'Boyle, Thomas, and R. G. Hamaker, Houston, Tex., said O'Boyle assignor to said Hamaker. Polish rod clamp. 1,629,584; May 24.

O'Branovich, Matt A., Tabasco, Colo. Lock. 1.619.881:

Mar. 8.
Obrecht, A. G. (See Reents, Heike H., assignor.)
O'Brien, Anna, New York, N. Y. Hair curler. 1,612,983;

Jan. 4.

OBrien, Anna, New York, N. Y. Apparatus for waving hair. 1,646,831; Oct. 25.

OBrien, Arthur D., and D. B. Geeseman, Cannonsburg, Pa., assignors to Continental Can Co., Inc., New York, OBrien, Arthur D., and D. B. Geeseman, Cannonsburg, Pa., assignors to Continental Can Co., Inc., New York, OBrien, Orner, San Juan, Cuba. Truss. 1,641,339; Sept. 6.

OBrien, Francis E., and L. Freeman, Northampton, Mass.; said Freeman assignor to J. Freeman, Brooklyn, N. Y. Binding post. 1,643,613; Sept. 27.

OBrien, Frank, assignor to Southern Can. Company, Baltimore, Md. Outturned-edge-can closure. 1,623,808; Apr. 5.

July 5.

O'Brien, Patrick J. (See O'Brien, Richard J. and P. J.)

O'Brien, Richard J. and P. J., Bay Bulls, Newfoundland.

Buttonhole shield. 1,643,170; Sept. 20.

O'Brien, Thomas, Philadelphia, Pa. Combined bumper and brush attachment for vehicles. 1,638,641; Aug. 9.

O'Brien, Vincent J., Smuggler, assignor of one-half to E. H. Sackett, Arvada, Colo. Joint for piston and complex of the property O'Brien, signor.)

Signor.)

Signor.)

Signor.)

Signor.

May 17.

O'Cedar Corp'n. (See Brown, Peter, assignor.)

Ochs, George F. A., Newark, N. J. Anchor block for railway ties. 1,625,509; May 10.

Ochs, George F. A., Newark, N. J. Anchor block. 1,634,635; July 5.

Ochs, George F. A., Newark, N. J. Tire filler. 1,634,626; July 5.

Ochset, Emil, Sutton, Nebr. Poultry feeder. 1,652,727; Ochset, Emil, Sutton, Nebr. Poultry feeder. 1,652,727; Ochwat, Paul. (See Schirmacher, K., Zahn, Wilke, and Ochwat.)

O'Clair, Edward J., assignor to Nashua Gummed & Coated Paper Company, Nashua, N. H. Protecting and dispensing package. 1,651,289: Nov. 29.
O'Connell, Charles J., Deer Wood, assignor of one-half to W. S. Hartls, Minneapolts, Minn. Honey food product. 1,636,657; Oct. 25.
O'Connell, John J. assignor to Hopedale Manufacturing Company, Milford, Mass. Temple roll. 1,624,663; Apr. 12.

O'Connell, Joseph, and H. H. Kerr, Kensington, Victoria, Australia. Can cleaning and drying apparatus, 1,625,493; Apr. 19.
O'Conoor, Arthur F., assignor to Union Railway Equipment Company, Chicago, Ill. Drop brake mechanism. 1,618,218; Feb. 22.
O'Conoor, Arthur F., assignor to Union Railway Equipment Co., Chicago, Ill. Uncoupling device. 1,625,148; Apr. 19.

O'Connor, Arthur F., assignor to Union Railway Equipment Co., Chicago, III. Separable coupler-release rigging. 1,625,144; Apr. 19.
O'Connor, Daniel, Jessup, Pa. Hose coupling. 1,615,595; Jan. 25.
O'Connor, Daniel, Jessup, Pa. Hose coupling. 1,615,595; Jan. 25.
O'Connor, George B., New York, N. Y. Hair-waving comb. 1,624,757; Apr. 12.
O'Connor, George B., New York, N. Y. Rail obstacle. 1,622,545; May 10.
O'Connor, John B., assignor to Lyon Metallic Manufacturing Company, Aurora, III. Locker latch. 1,625,145; Apr. 19.
O'Connor, John B., assignor to Lyon Metallic Manufacturing Company, Aurora, III. Cott hook. 1,633,495; O'Connor, John B., Chicago, III., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,612,767; Jan. 4.
O'Connor, John F., Chicago, III., assignor, by mesne assignments, to W. H. Miner, Inc. Door operator. 1,616,755; Feb. 8.
O'Connor, John F., Chicago, III., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,616,756; Feb. 8.
O'Connor, John F., Chicago, III., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,616,756; Feb. 8.
O'Connor, John F., Chicago, III., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,616,758; Feb. 8.

nnor, John F., Chicago, Ill., assignor to W. H. Miner, c. Friction shock-absorbing mechanism. 1,616,759;

O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,616,919; Feb. 8.

Conner, John F., Chicago, Ill., assignor to W. H. Miner, Fretion shock-absorbing mechanism. 1,616,919; Feb. 8.

O'Conner, John F., Chicago, Ill., assignor by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., brittion shock-absorbing mechanism. 1,617,541; O'Conner, John F., Chicago, Ill., assignor by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,620,617; Mar. 15.

O'Conner, John F., Chicago, Ill., assignor by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,620,618; Mar. 15.

O'Conner, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Car construction. 1,620,690; Mar. 15.

O'Conner, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Car construction. 1,620,690; Mar. 15.

O'Conner, John F., Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., Friction shock-absorbing mechanism. 1,620,681; Mar. 15.

O'Conner, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., Eriction shock-absorbing mechanism. 1,631,147; June 7.

O'Connor, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill., Friction shock-absorbing mechanism. 1,632,917; June 7.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,633,033; June 21.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,633,033; June 21.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,633,033; June 21.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absor

O'Connor, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Shock-absorbing O'Connor, John F., Chicago, Ill. assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,640,210; Aug. 23.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1640,212; Aug. 23.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,640,214; Aug. 23.

1,640,214; Ang. 28.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism.

1,640,421; Aug. 30.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism.

O'Connor, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Resilient shackle for mine cars. 1,645,540; Oct. 18.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism.

1,648,318; Nov. 8.

O'Connor, John F, assignor to W. H. Miner, Inc., Chi-1648, 320; Nov. 8.

O'Connor, John F., assignor, by mesne assignments, so W. H. Miner, Inc., Chicago, Ill. Side bearing. 1,648,321; Nov. 8.

Nov. 8.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1648,503; Nov. 8.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock-absorbing mechanism. 1,648,912; Nov. 15.

O'Connor, John F., Chicago, Ill., assignor, by mesue assignments, to W. H. Miner, Inc. Car construction. 1,650,378; Nov. 22.

O'Connor, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,650,379; Nov. 22.

O'Connor, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,650,379; Nov. 22.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill., Briction shock-absorbing mechanism. 1,630,381; Nov. 22.

1,650,381; Nov. 22.

O'Connor, John F., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock-absorbing mechanism. 1,658,224; Dec. 20.

O'Connor, Thomas E., Minneapolis, Minn. Burglar alarm. 1,624,176; Apr. 12.

O'Dell, Charles, assignor of one-half to F. T. Reger, Brooklyn, N. Y. Shingle construction. Des. 16,832;

Odell, Edwin, Central City, Nebr. Obstetrical device. 1.614.679; Jan. 18. Odell, Edwin, Central City, Nebr. Obstetrical instrument. 1.626.49; Apr. 26. O'Dell, Frank, Union City, Ind. Steel yoke. 1,630.447; May 31.

May 31.

Odell, Grant C., Harvard, Ill. Chimney-cleaning device.
1.616,330; Feb. 1.

Odell, Rodman C., Peekskill, N. Y. Floor pollsher.
1.614,680; Jan. 18.

Odell, William W., Minneapolla, Minn. Sweeping and dustsettling compound. 1,617,343; Feb. 15.

Odiorne, William H., assignor to Mercury Manufacturing
Company, Chicago, Ill. Hitch device for trucks,
10,000 (10,000)

1,502,502; Dec. 19.

Odom, Earl R., St. Louis, Mo. Carrying-in device for leers. 1,620,778; Mar. 15.

Odom, Leland L., assignor to M-O-R Products Company, Little Rock, Ark. Manufacture of a substitute for turpentine. 1,625,622; Apr. 19.

O'Donnell, Edward M., San Francisco, and D. D. Peebles, Eureka, Calif. Expansion Joint for heat exchangers.

1,626,869; May 3

1,020,009; May 5.

O'Donnell, John F., Morris Run, Pa. Kettle insert. 1,613,671; Jan. 11.

O'Donnell, Philip L., Cincinnati, Ohlo. Taping machine. 1,628,800; May 17.

O'Donovan, David S., Vogelfontein, Transvani, assignor to O'Donovan Furnaces Limited, Johannesburg, South Africa. Hardening steel articles. 1,620,779; Mar. 15.

O'Donovan Firnaces Limited. (See O'Donovan, David S., assignor).

assignments, to Standard Gas Equipment Corporation, Baltimore, Md. Gas-stove burner. 1.625,623; Apr. 19. O'Dowd, Henry W., Jersey City, N. J., assignor to Standard Gas Equipment Corporation. Gas stove. 1,630,966; May 31.

O'Dowd, Henry W., Jersey City, N. J., assignor, by mesne assignments, to Standard Gas Equipment Corporation, Baltimore, Md. Heat-insulating unit. 1,637,497;

Estimore, Md. Heat-insulating unit. 1,637,497; Aug. 2.

Obowd, Henry W., Jersey City, N. J., assignor, by mesne assignments, to Standard Gas Equipment Corporation, Baltimore, Md. Water hester. 1,639,748; Aug. 23.

Standard Gas Equipment Corporation. Water-heating system. 1,643,223; Sept. 20.

Obowd, Henry W., Jersey City, N. J., assignor to Standard Gas Equipment Corporation. Thermostatically-controlled valve mechanism. 1,643,255; Sept. 20.

assignments, to Standard Gas Equipment Corporation, Baltimore, Md. Burner unit for gas heating apparatus. 1,647,712; Nov. 1.

Obowd, Henry W., Jersey City, N. J., assignor to Standard Gas Equipment Corporation. Gas range. 1,649,416; Obowd, Henry W., Jersey City, N. J., assignor to Standard Gas Equipment Corporation. Gas range. 1,649,417; Nov. 15.

O'Dowd, Henry W., Jersey City, N. J., assignor to standard Gas Equipment Corporation. Gas range. 1,649,417; Nov. 15.

Nov. 15.

Gas Equipment Corporation. Gas burner. 1,649,417; Nov. 22.

Odquist, Victor, assignor to American Can Company, New York, N. Y. Sheet-metal box cover. 1,613,286; Jan. 4.

Odquist, Victor, Yonkers, assignor to American Can Company, New York, N. Y. Metallic spool. 1,635,495; Jul. 2.

Quinty, New York, N. Y. Metallic spool. 1,635,495; July 12.

Quinty, New York, N. Y. Metallic spool. 1,635,495; July 12.

Quinty, New York, N. Y. Metallic spool. 1,635,495; July 12.

Quinty, New York, N. Y. Metallic spool. 1,635,495; July 12.

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Quinty, New York, N. Y. Metallic spool. 1,635,495; July 12.

Quinty, New York, N. Y. Metallic spool. 1,635,495;

Oebmig. William G. (See Wâllace, Frank W.)
Oebrie Brothers Company. (See Ochrie, Franklin W., assignor.)
Oebrie, Franklin W., assignor to Oebrie Brothers Company, Philadelphia, Pa. Valance for window draperies.
Oelkers, Alfred H., Springfield, Mo. Brake-beam safety support. 1,652,633; Dec. 13.
Oelkers, Alfred H., Springfield, Mo. Brake-beam safety support. 1,652,633; Dec. 13.
Oelkers, Alfred H., Springfield, Mo. Brake-beam safety support. 1,652,633; Dec. 13.
Oelkers, Alfred H., Springfield, Mo. Brake-beam safety support. 1,652,633; Dec. 13.
Oertel, Albred H., Springfield, Mo. Brake-beam safety support. 1,652,633; Dec. 13.
Oertel, Budolf. Banover, assignor to Ct. 4.
Oertel, Budolf. Banover, assignor to Metallbank und Metallurgische Gesellschaft Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of volotile solvents. 1,631,052; May 31.
Oertel, Wilhelm, assignor to Glockenstahlwerke Aktiengesellschaft vorm. Rich Lindenberg, Remscheid-Hasten, Company, Carrollville, Wis. Triazzo dyestuff and manufacture. 1,615,550; Jan. 25.
Oesch, Joseph B., Milwaukee, assignor to The Newport Company, Carrollville, Wis. Triazzo dyes and manufacture. 1,615,550; Jan. 25.
Oesterreich Expand, Philadelphia, Pa. Knitting maOesterreich, Roy E. (See Ringenberg, Howell V., assignor.)
Oesterwitz, Otto H., Syracuse, N. Y. Surgical instru-

Oesterreich, Roy E. (See Ringgenberg, Howell V., assignor). Otto H., Syracuse, N. Y. Surgical instru-Oesterwit. Etc. 16, 687; July 19.
eetnes, Victor L., Westfield, assignor to American Gasaccumulator Company, Elizabeth, N. J. Reflector signal. Des. 73,800; Nov. 8.
Oestnaes, Victor L., Westfield, assignor to American Gasaccumulator Company, Elizabeth, N. J. Reflector signal. Des. 73,801; Nov. 8.
Oestnaes, Victor L., Westfield, assignor to American Gasaccumulator Company, Elizabeth, N. J. Reflector signal. Des. 74,020; Dec. 6.
Oestnaes, Victor L., Westfield, assignor to American Gasaccumulator Company, Elizabeth, N. J. Reflector signal. Des. 74,021; Dec. 6.
Oetzen, Ernest A., assignor to Sumer Iron Works. Oestnaes, Victor L., Westfield, assignor to Mensert Wash. Limber of the Sumer Iron Works. Oestnaes, Victor L., Westfield, assignor to Mensert Wash. Philadelphia, Pa. Steam boiler. 1,655,505; Dec. 20.
Off, Edward P., Philadelphia, Pa., assignor to The Deutste's Supply Company. Artificial tech. 1,643,992; Off Callars. E. (See Harrington W. S. and Off.)

Oct. 4.
Off. Gustav E. (See Harrington, W. S., and Off.)
Offenbach, Solomon, Bradford, Pa. Shelf. 1,619,307;

Mar. 1.
Offenhacher, Luitpold, assignor to Bayerische Spiegelgiastabriken Bechniana Kunjere, Furth in Bayaria, Gerginss. 1.048,504; Nov. 8.
Offenhauser, Christopher, Philadelphia, Pa. Cooking and drying apparatus. 1.630,071; May 24.
Offet, Edwin A., Toledo, Ohio. Circuit closer for vehicle signals. 1.028,801; May 17.

Officer, Charles B., Winnetka, Ill., assignor to Sullivan Machinery Company, Mining-machine truck. 1.641.862; Sept. 6
Officer, Charles B., Chicago, Ill., assignor to Sullivan Machinery Company. Compressor-controlling mechanism. 1,649.920; Nov. 22.
OFlynn, John D., Vancouver, British Columbia, Canada. Newspaper vendor. 1,640.686; Aug. 30.
Ofter, Frank P., and W. H. Nourse, Portland, Oreg. Pipe-welding apparatus. 1,623.434; Apr. 5.
Ogden, Ashley G., Baltimore, Md., assignor to American 1,630,539; May 31.
Ogden, Ashley G., Baltimore, Md., assignor to American Machine & Foundry Company. Photographic-printing machine. 1,647,246; Nov. 1.
Ogden, Benjamin V., Philadelphia, Pa. Switch for automobile stop lights. 1,827,061; May 3.
Ogden, Charles H., et al. (See Hammond, Robert O., assignor).

oguen, Charles H., et al. (see nammond, Robert U., assignor).
Oguen, Clarence E., Cincinnati, Ohio, assignor to The Kodel Radio Corporation. Storage battery. 1,633,224; June 21.

Ogden, Dana P., Ottawa, assignor of one-half to E. F.
Plumb, Streator, III. Brick-forming mechanism.
1,613,567; Jan. 4.
Ogden, Herbert. (See Green, E. W., and Ogden,)
Ogden, J. Edward. (See Fisher, Joseph K., assignor.)
Ogden, J. Edward. (See Ogden, R. E., Tomkiuson, and
Van Tassell, assignors.)
Ogden, J. Edward. (See Tomkinson, Charles C., assignor.)

(See Pitney, A. H., and Ogden.) (See Pitney, A. H., Ogden, Northrop,

Signor.)
Ogden, Jacob W.
Ogden, Jacob W.
and Wheeler.)
Ogden, Jacob W.
Ogden, John E.
Ogden, John E.
Ogden, John E. (See Wheeler, W. H., jr., and Ogden.) (See Fisher. Joseph K., assignor.) (See McIntosh, Roy E., assignor.) (See Ogden, Ralph E., assignor.) (See Ogden, R. E., and Tomkinson, as-

signors.)

ogden, John E. (See Ogden, R. E., and Tomkinson, assignors.)
Ogden, John E. (See Smith, Ezra B., assignor.)
Ogden, John E. (See Tomkinson, Charles C., assignor.)
Ogden, John E. (See Tomkinson, Charles C., assignor.)
Ogden, John E., Mountainville, N. Y. Bolt anchor.
1,639,231; Aug. 16.
Ogden, Ralph E., Assignor to J. E. Ogden, Mountainville, N. Y. Setting tool for expansion shield.
1,636,831; July 26.
Ogden, Ralph E., assignor to J. E. Ogden, Mountainville, N. Y. Setting tool for expansion shield.
1,636,831; July 26.
Ogden, Ralph E., Mountainville, N. Y., and C. C. TomThe Company of the Company of

Dec. 27.

Ogden, Ward H., Keystone Heights, Fla. Self-adjusting bearing. 1,653,407; Dec. 20.

Ogilvie, Alexander L. (See Jacobson, A., and Ogilvie, Ogle Construction Company. (See Biedsoe, Carl F., as-

signor.)

Scignor.)

Ogle. Elmer L., assignor to Federal-Electric Company.

Ogle. Elmer L., assignor to Federal-Electric Company.

Ogle. Ogle. Officer L., assignor to Federal Electric Company.

Ogle. Officer L., assignor to Federal Electric Company.

Oglesby, Nicholas E. (See Bradner, D. B., and Oglesby, Olicholas E. (See Bradner, D. B., and Oglesby, Nicholas E. (See Bradner, D. B., and Oglesby, Flushing, N. Y. Motion-picture projector. 1,622-3435, Apr. 5.

O'Grady, Frederick T., assignor to H. V. O'Grady, Flushing, N. Y. Motion-picture projector. 1,623-345, Apr. 5.

O'Grady, Jeremiah J., Woonsocket, R. I. Combing machine. 1,613,672; Jan. 11.

O'Haga, D'erman'd E., assignor to The Union Switch & 1,643,251; Oct. 13.

U'Hara, Eliot, assignor to O'Hara Waltham Company.

Waltham, Mass. Attachment for steel die and plate presses. 1,640,553; Aug. 30.

O'Hara Waltham Company. (See O'Hara. Eliot, assignor.)

signor.)

signor.)
Ohaus, Gustav, Maplewood, N. J. Weighing-scale plate.
1.627,710; May 10.
Ohaver, David V. Gookville, Ind. Resilient-tire tracOhaver, David W. Rockville, Ind. Leak detector.
1.646,928; Oct. 26.
O'Haver, David W. Rockville, Ind. Leak detector.
1.642,937; Mar. 29.
O'Helr. Octavian G. I., Lowell, Mass. Shirt attachment.
1.644,098; Aug. 30.

Ohio Body & Blower Company, The. (See Dawson, Carl E., assignor.)

Oller, Frank E., Detroit, Mich. Moving-picture camera and projector. 1,621,1024, Mar. 15, splitter, assignor.) Olisela, John R., Buffalo, N. Y. Rear view mirror. 1,633,282; June 21. Okadee Company, The. (See Demarest, Thomas W., as-

Ohio Brass Company, The. (See Austin, Arthur O., as-Signor.)
Ohio Brass Company. (See Austin, A. O., and Macleod, assignors.)
Ohio Brass Company. The. (See Averill, Rex G., assignor.)
Ohio Brass Company, The. (See Bovard, William P., assignor.)
Ohlo Brass Company, The. (See Chandler, Homer P., assignor.) Ohio Brass Company, The. (See Larsson, Ernst A., as-Brass Company, The. (See Matthes, Samuel S., Ohio Bruss Company, The. (See Matthes, Samuel S., assignor.)
Ohio Brass Company, The. (See Pipes, Pliny P., assignor.)
Ohio Cultivator Company, The. (See Griffith, Richard H., assignor.)
Ohio Electric & Controller Company, The. (See Krause Walter J., assignor.)
Ohio Foundry and Manufacturing Co., The. (See Sharp, William L., assignor.)
Ohio Match Company, The. (See Parker, Lucian E., assignor.) Ohio Match Company, The. (See Swartz, Orlo E., as-Rubber Company, The. (See Reynolds, William A., assignor.)
Ohio Steam Shovel Company, The. (See Rauch, John D., assignor.)
Ohio Truss Company, The. (See Pease, Isaac M., as-

I.053,282; June 21.
Okadee Company, The. (See Demarest, Thomas W., as-Okadee Company, The. (See Vissering, Harry, assignor.)
Okazawa, Tsuruji. (See Ixeda, K., Isobe, and Okazawa, Oke, William, Chicago, Ill. Sanitary garbage can. 1,613,621; Jan. 11.
O'Keefe, William M., Birmingham, England. Sand and other reliable of wise 1,643,634; Jan. 11.
O'Keefe, William M., Birmingham, England. Sand and other reliable of wise 1,643,634; Jan. 11.
O'Keefe, William M., Birmingham, England. Sand and other reliable of wise 1,642,634; Jan. 15.
O'Keefe, William M., Birmingham, England. Sand and other reliable of the signal of the assignor.)
Ohlo Truss Company, The. (See Pease, Isaac M., assignor.)
Ohl, Russell S., New York, N. Y., assignor to American Telephone and Telegraph Company. Transferring high-frequency energy, 1(91)-882, Mar. 8.

Telephone and Telegraph Company. Transferring high-frequency energy, 1(91)-882, Mar. 8.

Telephone and Telegraph Company. Radio signaling system. 1,041,289; Sept. 6.
Ohlau, George H., assignor to Eastman Kodak Company, Rochester, N. Y., Aviation camera. 1,645,283; Oct. 18.
Ohlendorf, Leinrich. (See Herzberg, W., and Ohlendorf, Delmin 28.
Ohlendorf, Heinrich. (See Herzberg, W., and Ohlendorf, Ohlendor sugar-cane leaves. 1,005,020; Bet. 21.
Olabarria, Pete, Elko, Nev. Rim tool. 1,632,191;
June 14.
Olafson-Parr-Cohen Mfg. Co. (See Parr, George T., assignor.) Olberg, William E. (See Fonucas).
Olberg, Villiam E. (See Fonucas).
Oloctt, Charles A., assignor to S. S. Hepworth Company.
New York, N. Y. Centrifugal machine. 1,652,908;
Dec. 13.
Dec. 13.
Dec. 13. Dec 13. A. V. Venturing a machine 1,002,808; Dect 13. A. Venturing a machine 1,003,608; Diotrick 1,000 Trust Company, trustee. (See Toney, George W. assignor.)
Old Dominion Iron & Steel Works. (See Wheelwright, Thomas S., assignor.)
Old Dominion Benjamin F., Pittsfield, Mass. Terminal connecter. 1,619,086; Mar. 1.
Old National Bank of Battle Creek, The, administrator. (See Schellenberger, Charles G.)
(See Schellenberger, Char Ohmer Fare Register Company. (See Gray, Frederick O., assignor.) Ohmer Fare Register Company. (See Orth, William G., assignor.) Ohmer Fare Register Company. (See Orth, W. G., and Darst, assignors.)
Ohmer Fare Register Company. (See Sheats, John H., assignor.)
hnstrand, Enoch, Mehawk, assignor, by mesne asignments, to Remington Rand Inc., Tonawanda, N. Y.
Ledger tray, 1.647.655; Nov. 1.
Ledger tray, 1.647.655; Nov. 1.
Ledger tray, 1.647.655; Nov. 1.
Marion R., assignor, Marion R., assignor, 1.
I Conservation Engineering Company, The. (See Brooks, Stephen H., assignor, 1)
Legger Tray, 2., assignor, 1.
Legger Tray, 2., assignor, 1.
Legger Tray, 2., assignor, 2.
Legger Tray, 2 Ohnstrand, Oil Devices Co. pointer.

assignor.)
Oil Fields Specialties Company. (See Yungling, Paul,
assignor.)
Oil Well Core Drilling Company. (See Bonney, Lynn F.,

Sept. 6.

Olds, Richard, Walkerville, South Australia, Machine for fleshing furred skins. 1,649,725; Nov. 15.

Gesting furred skins. 1,649,725; Nov. 16.

Gesting furred skins. 1,649,725; Nov. 16.

Gesting furred skins. 1,645,717; Oct. 18.

Odson, John A., assignor to Wyman-Gordon Company, Worcester, Mass. Balanced crankshaft. 1,645,718; Oct. 18. Oldson, John A., assignor to Wyman-Gordon Company, Worcester, Mass. Six-throw, four-bearing, balanced crank shaft. 1649,541; Nov. 15. O'Leary, Arthur L., et al. (See Lawton, Oscar S., as-O'Leary, Arthur L., et al. (See Lawton, Oscar S., as Signor.) signor.)
O'Leary, Harold W., et al. (See Lawton,
O'Leary, John, Brooklyn, N. Y. Directory. 1,616,464;
Feb. 8.
Feb. 8.
Feb. 8. Feb. 8.

O'Leary, Mathew J., Chickasha, Okia. Valve gear.

O'Leary, Petrick J. Akron, Ohio. Sleeping pillow.

1.617,822; Feb. 15.

O'Leary, Thomas J., St. Paul, Minn. Signal for motor cars. 1.620.385; Mar. 8.

O'Leary, William C., assignor of one-fourth to J. R. Pumphrey and one-eighth to L. G. Berry, Washington, D. C. Vacuum wall receptacle. 1.636,322; July 19.

D. C. Vacuum wall receptacle. 1.636,322; July 19.

Oleson, Houliam J. (See Allison, Harry, assignor.)

Oleson, Harry S., Kohler, Wis. Respirator. 1,616,718; Jan. 25. Jan. 25.

Olgard, Harry S., Kohler, Wis. Respirator mask.

1.630,209; May 24.

Olgary, Albert, Glen Ellyn, assignor to Gaw-O'Hara Envelope Co., Chicago, Ill. Machine for punching and reenforcing blanks. 1.619,214; Mar. 1.

Olgay, Albert, Glen Ellyn, assignor to Gaw-O'Hara Envelope (1915). Chicago, Ill. Envelope-fastening device 1.619,15; Chicago, Ill. Envelope-fastening device 1.619,15; Chicago, Ill. Envelope-window-cutting device. 1.619,365; Mar. 1. Oil Well Supply Company. (See Gallman, C. E., and Haire, assignors.) Oil Well Supply Company. (See Keim, L. H., and Kline.

Olgay, Albert, Glen Ellyn, assignor to Gaw-O'Hara Envelope Co., Chicago, Ill. Envelope machine. 1,634,080; June 28. Olhausen, Jacob B., et al. (See Frambach, Mathew J., as-signor.)

1,634,050; June 28.
Olhausen, Jacob B., et al. (See Frambach, Mathew J., assignor.)
Olhausen, Jacob B., et al. (See Frambach, Mathew J., assignor.)
I., Oakland, Calif. Refrigerator condenser.
II. (15,171; Jan. II.)
Olin, Franklin W., Alton, assignor to Western Cartridge Company, East Alton, III. Detonator package.
II. (15,171; Jan. III.)
Olin, Franklin W., Alton, assignor to Western Cartridge Company, East Alton, III. Method and apparatus for stripping detonator igniter terminals. I,626,119; Apr. 26.
Olin, John M., and J. B. Smith, Alton, assignors to Western Cartridge Company, East Alton, III. Propellant powder. I,627,859; May 10.
Olin, John M., V. L. Davis, and J. B. Smith, Alton, assignors to Western Cartridge Company, East Alton, III. Propellant powder. I,627,859; May 10.
Olin, John M., V. L. Davis, and J. B. Smith, Alton, assignors to Western Cartridge Company, East Alton, III. Method and apparatus for making igniter con-Olin, John M., V. L. Davis, and J. B. Smith, Alton, assignors to Western Cartridge Company, East Alton, III. Method of and apparatus for making igniter con-Olin, John M., V. L. Davis, and J. B. Smith, Alton, assignors to Western Cartridge Company, East Alton, III. Method of and apparatus for forming detonator igniter terminals. I,627,869; May 10.
Olin, John M., V. L. Davis, and J. B. Smith, Alton, assignors to Western Cartridge Company, East Alton, III. Method of and apparatus for forming detonator igniter terminals. I,627,860; May 10.
Olin, John M., V. L. Davis, and J. B. Smith, Alton, assignors to Western Cartridge Company, East Alton, III. Method of and paparatus for forming detonator igniter terminals. I,627,860; May 10.
Olin, John M., V. L. Davis, and J. B. Smith, Alton, assignors to Western Cartridge Company, East Alton, III. Method of and paparatus for superior to Sullivan Machinery Company, Pumping system. I,628,250; Apr. 26.

Apr. 26.

Apr. 20.
Oliphant, John, Chicago, Ill., assignor to Sullivan Machinery Company. Air-lift pump. 1,653,189; Dec. 20.
Olivarius, Holger de F., assignor to California Packing
Corporation, San Francisco, Calif. Pickling ripe olives.
1,622,494; Apr. 19.
Oliver, Charles. (See Garman, B. C., and Oliver.)
Oliver, Charles. (See Atgelt, Herman E.,

Oliver Chilled Plow Works. (See Altgelt, Rudolph J., assignor.) Oliver Chilled Plow Works. (See Altgelt, R. J. and H. E., assignors.)
Oliver Chilled Plow Works. (See Dewend, William D.,

assignor.) Oliver Chilled Plow Works. (See Gallagher, Arthur D., assignor.)
Oliver Chilled Plow Works. (See Moore, Charles W., as-

Oliver Chilled Plow Works. (See Richards, E. W., and

Oliver Chilled Plow Works. (See Richards, E. W., and Janso, assignors.)
Oliver Continuous Filter Company. (See Borden, John F., assignor.)
Oliver Common.
Oliver, Edwin L., assignor to Oliver Continuous Filter Company, Oakland, Calif. Pulp thickener. 1,644,854: Oct. 11.
Oliver, Ernon V., Portland, Oreg. Distilling apparatus. 1,625,222; Apr. 19.
Oliver, Ernon V., Portland, Oreg. Water still. 1,625,223; Oliver, Ernon V., Portland, Oreg. Water still. 1,626,960; May 3.

May 3.
Oliver, Ernon V., Portland, Oreg. Condenser for stills.
1,628,736; May 17.
Oliver, Ernon V., Portland, Oreg. Condenser for stills.
1,628,737; May 17.
Oliver, Ernon V., Portland, Oreg. Water still.
1,629,807;
May 24.

May 24.

Oliver, Everett B., Chicago, Ill. Transmission mechanism.
1,624,968; Apr. 19.

Oliver, Fay, Whittier, Calif., assignor to Elliott Core
Drilling Company. Core drill. 1,624,140; Apr. 12.

Oliver, Frederick R., Los Angeles, Calif. Coin-controlled
actuating mechanism for dispensing machines.
1,633,675; June 28.

Oliver, Gene G., et al. (See Oliver, R. M., and Penn., astignores.)

Oliver, George, Seattle, Wash. Cable coupler. 1,646,489;
Oct. 28.

Ofter, George A., Cleburne, Tex. Checking and assembly table. 1,616,719; Jan. 25.
Oliver, George A., Cleburne, Tex. Grinding machine. 1,625,049; Apr. 19.
Oliver, George W., Harrow, assignor to J. Lyons and Company, Limited, London, England. Inserting cards and the like in cartons or similar containers.

Company, Limited, London, England. Inserting cards and the like in cartons or similar containers. 1,646,655; Oct. 22 Manaroneck, N. Y. Building unit construction. 1,652,634; Dec. 13.

Oliver, Hosea N., Hartville, Mo. Seed planter. 1,644,602; Oct. 4.

Oliver, Immanuel A., assignor to The Pomona Manufacturing Company, Pomona, Calif. Fump bearing. 1,633,188; June 21.

Oliver, Jesse L., Beeville, Tex. Piston-ring-contracting tool. 1,621,681; Mar. 22.

Oliver, John R., Medheld, assignor to Reece Shoe Machander of the Market of the M

Olmstead, Edward L. (See Olmstead, William L. and E. L.)
Olmstead, William L. Pomona, and E. L. Olmstead, Olmstead, William L. Pomona, and E. L. Olmstead, Anaheim, Calif. Air strainer for combustion engines. 1,618,952; Mar. 8.
Olmsted, Frederick L. (See Agnew, J. G., and Pond, Olmsted, Eussell C. (See Edge, Walter S., and Olmsted, Sussell C. (See Edge, Walter S., and Olmsted, Sussell C. (See Edge, Walter S., and Olmsted, Sussell C. (See Edge, Walter S., and Olmsted, England, Nay 17.
Olney, Benjamin, assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Thermionic-tube circuits. 1,652,148; Dec. 6.
Olofsson, Bror L., and R. E. Peterson, Dorchester, Mass. Olation, 16,630,247; Aug. 23.
St. Paul, Minn. Christmas-tree support. 1,653,225; Dec. 20.
Olschewski, Leo, Irvington, N. J. Sprinkler and rotor

Dec. 20.

Olschewski, Leo, Irvington, N. J. Sprinkler and rotor element therefor. 1,628,993; May 17.

Olsen, Alfred, Chicago, Ill. Household article, 1,613,476; Jan. 4.

Olsen, Alfred, Chicago, III. Household article. 1,613,476; Jan. 4.
Olsen, Andrew, Jr., San Francisco, Calif. Candy package. 1,640,052; Aug. 23.
Olsen, Bernt, et al. (See Erickson, August, assignor).
Olsen, Bernt, et al. (F. W. England, assignors to Illinois Tool Works, Chicago, III. Hob-grinding machine. Re16,590; Apr. 12.
Olsen, Elanar E. (See Sausen, B. R., and Olsen.).
Olsen, Eugene F., assignor to Anchor Concrete Machinery. Co., Adrian, Mich. Plastic-material moid. 1,618,466; Feb. 22.
Olsen, Feddich. Dover. N. J., and H. A. Aarsonson, New York, N. Y. Treatment of cellulose. 1,615,343; Jan. 25.
Olsen, Feddich. Dover. N. J., and H. A. Aarsonson, New York, N. Y. Treatment of cellulose. 1,615,343; Jan. 25.
Olsen, George O., Los Angeles, Calif. Shirt. 1,647,656; Nov. 1.
Olsen, George P., L'Anse, Mich. Pressure valve. 1,618,349; Feb. 22.
Olsen, H. J., et al. (See Ginger, Frank M., assignor.)
Olsen, John K., assignor to Stewart-Warner Speedometer. Corporation. Chicago, III. Magnetic speedometer.

Olsen, H. J., et al. (See Ginger, Frank M., assignor.)
Olsen, John K., assignor to Glewart-Warner Speedometer.
1,820,034; Mar. S.
Olsen, John K., assignor to Stewart-Warner Speedometer.
1,622,550; Apr. 5.
Olsen, John K., assignor to Stewart-Warner Speedometer.
1,623,450; Apr. 5.
Olsen, John K., assignor to Stewart-Warner Speedometer.
1,623,142; Apr. 18.
Olsen, John K., assignor to Stewart-Warner Speedometer.
1,625,142; Apr. 18.
Olsen, Joseph, Los Angeles, Calif. Cutter attachment for paper-tipe machines.
1,625,142; Apr. 18.
Olsen, Olser S. Gunnison, assignor of one-half to W. F.
Clegg, Centerfield, Utah. Treating sacchariferous soClegg, Centerfield, Utah. Treating sacchariferous soOlsen, Oscar, Procklyn, V. 7. Device for hanging forms from structural steel.
1,616,275; Feb. 1.
Olsen, Oswald, A., Bridgeport, Conn. Compression pump.
Olsen, Robert E., Oceanpark, Calif., assignor to Neslo Holding Company, Inc. Automatic photographic machine.
1,653,408; Dec. 20.
Olsen, Ruben A. (See Kunin, P., and Olsen.)

Olsen, Simon D., London, England. Arrangement for supplying liquid fuel to internal-combustion engines. 1,625,739; Apr. 19. Olsen, Simon D., London, England. Injecting liquid fuel into internal-combustion engines. 1,529,633; May 24. Olsen, Walter, assignor to American das Machine Com-Sept. 13. Olsen, Mahart S. Minn. Alcohol torch. 1,642,260; Olsen, Albert S. M. O

Sept. 12.

Olson, Albert S. N., Chicago, Ill. Fireless cooker.
Des. 71,810; Jan. 4.

Olson, Andrew, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Feed table.
1,626,532; Apr. 26.

Olson, Andrew, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Paper feeder.
1,626,363; Apr. 26.

Olson, Carl, Manistee, Mich. Ash-can cover. 1,638,360;

Aug. 9.

1.626.358; Apr. 26.
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Mug. 9.
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Grinding machine. 1.612,830; Jun. 4.
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Gera, G., assignor to Illinois Tool Works, Chicago, Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Gear-generating machine. 1,642,554; Sept. 13.
Olson, Carl C., Chicago, Ill. Visible-filing device. 1,644,790; cct. 11.
Olson, Carl C., Chicago, Ill. Visible-filing device. 1,644,790; cct. 11.
Olson, Carl C., Chicago, Ill. Visible-filing device. 1,644,790; cct. 11.
Olson, Carl C., Chicago, Ill. Wisible-filing device. 1,644,790; cct. 11.
Olson, Charles, Minneapolis, Minn. Rotatable window. 1,649,850; Nov. 22.
Olson, Charles, Minneapolis, Minn. Harness rack. 1,613,477; Jan. 4.
Olson, Pander M. Seo Olson, G. E., and Williams, Olson, Pander M. Seo Olson, G. E., and Williams, Tarlett, 1,651,535; Dec. 6.
Olson, George H., Bridgeport, Conn. Cement-form holder. 1,625,2918; June 21.
Olson, Gottfrid. (See Steiner, G. A., and Olson,)
Olson, Gus E., and A. J. Williams; sald Williams assignor, by mesne assignments, to D. O. Olson, Scattle, Wash. Step ladder. 1,633,90; June 28.
Olson, Gustaf, assignor to E. J. Strand, Chicago, Ill. Metallic fastener of jamb nali. 1,621,213; Mar. 15.
Olson, Harry J., assignor to Olson, Mill Company, Des Moines, Iowa. Forage mill. 1,645,770; Oct. 18.
Olson, Janse P., Mobile, Ala. Window shade holder. Olson, John A., and E. R. Hellman, Detroit, Mich. Piston ring, 1,636,012; July 19.
Olson, John B., and J. G. Shodron, assignors to James Manufacturing Company, Fort Atthesol., Wis. Valved Mosco, John B., and J. G. Shodron, assignors to James Manufacturing Company, Fort Atthesol., Wis. Valved Mosco, John D., St. Fall, Minn., assignor to Olson, Bench clamp. 1,631,428; June 7.
Olson, Marvitz, assignor to The A. H. Nilson Machine Co., Bridgeport, Conn. Chain-making machine. 1,624,603; Apr. 12.

Apr. 12.

Olson Mill Company. (See Olson, Harry J., assignor.)
Olson, Nels L., Detroit, Mich. Motor-truck chassis.
1.619.308; Mar. 1.
Olson, Nels L., Highland Park, Mich. Rear-axle-transmission mechanism. 1.630,210; May 24.
Olson, Raymond E., assignor to Taylor Instrument Companies, Rochester, N. Y. Combined recording and controlling mechanism. 1.634,205; June 28.
Olson, Samuel, assignor to Samuel Olson & Company, Chicago, Hark, assignor to Samuel Olson & Company, Chicago, Hark, assignor to Samuel Olson & Company, Chicago, Ill. Selective electric control system. 1.645,619; Oct. 18.
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company, Chicago, Ill. Trave-levator guide. 1.653,226; Dec. 20.
Olson, Samuel, & Company. (See Olson, Samuel, assignor).

Olson, Sa signor.)

Olson, Samuel, & Company. "(See Olson, Samuel, assignor.)
Olson, Sigurd, Portland, Oreg. High-compression two-cycle internal-combustion engine. 1,646,564; Oct. 25.
Olson, Theodore A. (See Theobald, G. A., and Olson.)
Olson, Wealdemar M., Chicago, Ili., assignor to Reynolds Mar. 15.
Olson, Wener O. East Orange, N. J., assignor to Asher Manufacturing Company, Irvington, N. J. Supply door for wash wheels. 1,635,141; July 5.
Olson, Werner O., East Orange, assignor to Asher Manufacturing Company, Irvington, N. J. Doorlocking device for washers, drying tumblers, and the like. 1,647,713; Nov. 1.
Olson, Ells, West Foint, Va. Charging pulp digesters. Olylis, James E., Los Angeles, Calif. Vending machine. 1,631,547; June 7.
Omaha Folding Machine Co. (See Peterson, T. B., and Holcomb, assignors.)
O'Maley, George T., Kansas City, Mo. Highway barrier. 1,651,221; Nov. 29.

O'Malley, Thomas, New York, N. Y., assignor to Victor Talking Machine Company. Needle dispenser. 1.613.622; Jan. 11.
O'Malley, Tulley, Cordova, Alaska, Marcel-waving device. 1.648,740; Nov. 8.
Omoto, Bunnosuke, Green River, Wyo. Tire casing. 1.616.543; Feb. 8.
One Minute Manufacturing Company. (See Schroeder, Simon E., assignor.)
Oneal, Ben G., et al. (See Hubbard, Lloyd B., assignor.)
O'Neal, Hugh D., and J. La Praim, Central, N. Mex. O'Neal, Hugh D., and J. La Praim, Central, N. Mex. Hugh D., and J. La Praim, Central, O'Neal, Hugh D., and J. La Praim, Central, N. Mex. Hugh D., and J. La Praim, Central, O'Neal, Hugh D., and J. La Praim, Central, N. Mex. J. La Company, La Company, La Company, La Company, La Company, La Company, N. La Company, La Company, N. La Company

signor.)

signor.)

O'Neil, Arthur S. (See Olin, J. M., and O'Neil.)

O'Neil, Arthur S., assignor to Western Cartridge Company, Bast Alton, III. Propellant powder and making same. 1,627,861; May 10.

O'Neil, Arthur S., Alton, assignor to Western Cartridge Company, East Alton, III. Propellant powder and making same. 4,100, assignor to Western Cartridge O'Neil, Arthur S., Alton, assignor to Western Cartridge making same. 1,627,862; May 10.

O'Neil, Arthur S., (See Morehead, G. L., and O'Neil, O'Neil, James A., Lynn, Mass., assignor to General Electric Company. Illuminating device. 1,640,423; Aug. 30.

Aug. 30.

Aug. 30.

O'Neil, James D. (See Palmer, John M., assignor.)

O'Neil, James H., Syracuse, assignor to Continental Can

Company, Inc., New York, N. Y. Metal container,

1,639,349; Aug. 16.

O'Neil, James H., Syracuse, assignor to Continental Can

Company, Inc., New York, N. Y. Automatic can-test
ing machine. 1,645,018; Oct. 11.

O'Neil, James R., Chicago, Ill. Electric cigar lighter.

1,617,344; Feb. 15.

O'Neil, Edward J. (See Vicau, H. F., Higby, and

O'Neill. Edward J. (See Vieau, H. F., Higby, and O'Neill.)

O'Neill, Eugene F., and E. L. Kern, Minneapolis, Minn. Needle vendor in the form of a miniature phonograph. 1,626,011; Apr. 26.

1,626,011; Apr. 26.

1,626,011; Apr. 26.

1,616,022; Apr. 26.

1,617,023; Apr. 27.

1,617,023; Feb. 15.

O'Neill, Henry J., Rochester, Minn. Surgical baker. 1,617,023; Feb. 15.

O'Neill, Henry W., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Telecompany, Incorporated, New York, N. Y. Signaling system. 1,617,414; Feb. 15.

O'Neill, Henry W., Elmhurst, assignor to Western Electric Company, Incorporated, New York, N. Y. Com-O'Neill, Henry W., Elmhurst, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y. Telegraph system. 1,625,495; Apr. 19.

O'Neill, Henry W., Elmhurst, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y. Telegraph system. 1,625,495; Apr. 19.

O'Neill, Henry W., Elmhurst, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y. Telegraph system. 1,625,495; Apr. 19.

O'Neill, Henry W., Elmhurst, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,641,450; Sept. 6.

O'Neill, Jamas P., Queens village, N. Y. Fire-prevention apparatus, 1,644,603; Oct. 4.

O'Neill, Jamas P., Queens village, N. Y. Fire-prevention apparatus, 1,644,603; Oct. 4.

O'Neill, John H., Springfield, Mo., and W. Leathers, Haworth, N. J. Continuous-water-tube fash-type disab-type disab-ty

1,644,027; Oct. 4.

O'Neill, John H., Springfield, Mo., and W. Lenthers, Haworth, N. J. Continuous-water-tube flash-type steam generator. 1,644,073; Oct. 4.

O'Neill, John W., Chicago, Ill. Radium emanator. 1,615,912; Feb. 1.

O'Neill, Joseph A., New York, N. Y. Cushion device for automobiles. 1,625,146; Apr. 19.

O'Neill, Joseph A., New York, N. Y. Record for reproducing sound tones and action. 1,635,467; Dec. 20.

O'C. assignor). Company, The. (See Kinker, Clarence O'Neill, Rectrick S.

C. assignor.)
O'Neill, Patrick S., Aicken's Township Westland, New Zealand. Breaking-down saw. 1.624.064; Apr. 12.
O'Neill, Thomas F., New Haven, Conn., and R. J. Miler, assignors to A. F. Pieper, New York, N. Y. Warm-air syringe, Rel6,819; Dec. 13.
O'Neill, Wallace H., Hazleton, Pa. Cloth gauge, Re-16,720; Aug. 23.
O'Neill, Wallace H., Towanda, Pa. Cloth gauge, Re-16,132,289; Jan. 4.
O'Neill, Wallace H., Towanda, Pa. Cloth gauge, O'Neill, Wallace H., Ratchet wrench, 1.644.079; Oct. 4.
Onleil, Kasaburo, Tokyo-Fn, Japan, Reciprocating pump fonker, Oscar, Cincinnati, Ohio. Device for placing in and removing garments from protective bags, 1,652,579; Dec. 13.

Onofrio, Anastas, Detroit, Mich. Combined scrubbing and vacuum cleaning device. 1,625.147; Apr. 19.
Onsrud Machine Works. (See Onsrud, Rudolph F., assignor.)

Onsrud, Rudolph F., assignor to Onsrud Machine Works, Chicago, Ill. Governor for fluid motors. 1,648,960; Ontario Company. (See McGann, W. D., and McGreevy,

Ontario Knife Co. Inc., The. (See Gillan, Gowan C., as-Oosterhuis, Ekko. (See Holst, G., Oosterhuis, and

Bruijnes.)
Oddyke, Scott, Billings, Mont. Self-sealing trap.
1,630,861; May 31.
Open Hearth Combustion Company. (See Danforth,
George L., Jr., assignor.)
Open Hearth Combustion Company. (See McKune, Frank
B., assignor.)
Operadio Corporation, The. (See Stone, John M., as-

Opperman, August H., Indianapolis, Ind. Combined electric-lamp bracket and convenience outlet. Des. 71,925;

tric-lamp bracket and convenience outlet. Des. 71,925; Jan. 25.

Opperman, Emil L., assignor to Precise Manufacturing Corporation, Rochester, N. Y. Electric switch. 1,645,019; Oct. 11.

Oppman, Frank, Gary, Ind. Refrigerant compressor. Oppiaco, Frank, Gary, Ind. Refrigerant compressor. Opticate Austalt C. P. Goerz Aktiengesellschaft. (See Humbrecht, Jules, assignor.)

Optische Austalt C. P. Goerz Aktiengesellschaft. (See Richter, Robert, assignor.)

Optische Austalt C. P. Goerz Aktiengesellschaft. (See Urban, Franz, assignor.)

Optische Austalt C. P. Goerz Aktiengesellschaft. (See Drange Chash Company. (See Bost, William D., assignor.)

Orange Lighting Fixture Manufacturing Co. (See Sledell, Orange Lighting Fixture Manufacturing Co.

signor.)
Orange Lighting Fixture Manufacturing Co. (See Siedell, Alfred F., assignor.)
Orbon Stove Co. (See Lehman, Max R., assignor.)
Ordog, Gergely, Ellis Island, N. Y. Elevator safety stop. 1,626,535; Apr. 26.

Ordonez, Adolfo P. (See Pazzi, A. J. S. and L. J. D., and Ordonez.) Ordway, Adolphe, Newman, Calif. Trailer. 1,642,823; Sept. 20.

Ordinaz, J.
Ordinaz, Adolphe, Newman, Calif. Trailer. 1,642,823 (Sept. 20).
Ordway, Adolphe, Newman, Calif. Trailer. 1,620,608; Sept. 20).
Ordway, Carroll T., assignor of one-half to C. Ordway, Brooklyn, N. Y. Centrifugal machine. 1,620,608; Ordway, Charles. (See Ordway, Carroll T., assignor.)
Ordway, Donald P., assignor to American Stamping Co., Battle Creek, Mich. Combination holder for rezor-blade wipers and used razor bindes. 1,646,101; Oct. 18.
Ordway, Donald P., assignor to American Stamping Co., Battle Creek, Aich. Combination holder for razor-blade ordway, Donald P., assignor to American Stamping Co., Battle Creek, Aich. Combination holder for razor-blade Orem, Greek, Aich. Combination holder for razor-blade oredway. Ordway, Donald P., assignor blades. 1,646,101; Oct. 18.
Orem, Friedrick S., Baltimore, Md. Air cleaner for automobiles and the like. 1,635,007; July 5.
Orem, William (See Davis, George E., assignor.)
Orendorff, William A., Bloomington, Ill. Grain-dumping Orlick, rat. P., Eddardson, 1,647,811; July 5.
Orling, Axel. (See Creed, F. G., and Orling, Orlov, George, assignor to W. S. Thompson. Boston, Mass. Shoulder-strap holder. 1,647,811; Nov. 1.
Orlow, Ernest M., assignor of one-half to A. J. Schmitt, Struction. 1,631,601; June Orlowsky, Wassyl, Habana, Cuba. Life-saying device for submarine vessels. 1,642,127; Sept. 13.
Ornand, Ulfo F. (See Harkins, James J., assignor.)
Ornend, James B., Flagstaff, Arl. Combination desk calendar and card-index tray or file. 1,641,600; Sept. 6.
Ormsby, Edwin A., Melrose, Mass. Window. 1,650,882; Nov. 22.
Ormick, James B., Flagstaff, Arl. Combination desk calendar and card-index tray or file. 1,641,600; Sept. 6.
Ornsby, Edwin A., Melrose, Mass. Window. 1,650,880; Nov. 29.
Ornamed A., assignor to The E. V. Benjamin Commany, Lac. New Orleans Lac. Climinar warching and commany. Lac. New Orleans Lac. Climinar

Nov. 29.
Ornamental Iron Products Co. (See Stiffel, Theophile A., assignor.)
Ornamental Iron Products Co. (See Stiffel, Theophile A., assignor.)
Orndoff, Herbert W., assignor to The E. V. Benjamin Condoff, Herbert W., assignor to The E. V. Benjamin Condoff, John Co., and C

Orr, Samuel P. (See Horton, Dock G., assignor.)
Orr, William, Memphis, Tenn. Sound-modifying means
for transmitting and reproducing machines. 1,639,308;
Aug. 16.
Orr, William S., assignor, by mesne assignments, to Cen-

Aug. 16.

Orr., William S., assignor, by mesne assignments, to Central Alloy Steel Corporation, Massilton, Ohio. Mechanism for operating ore-bin gates, 1624,171, Apr. 12.

Ogroup of the Corporation of the Corporation of Company, Cleveland, Ohio. Windshield cleaner, 1615,299; Jan. 25.

Orren, Robert C., Moline, Ill. Rake. 1,628,994; May 17.

Orrick, Charles F., Mount Vernon, Ill. Safety wheel guard. 1,623,849; Apr. 5.
Orrman. Hjalmar L., Dayton, Ohio. Tree-felling machine. 1,533,060; Dec. 20.
Orsik, George, Wellington, Ohio. Collapsible umbrella. 1,616,276; Feb. 1.
Orström, Gustaf. (See Ekström, G. C., Örström, and

Orth. Joel, West Brownsville, Pa. Desk appliance. 1.615.230; Jan. 25. Orth, William G., assignor to Ohmer Fare Register Company. Dayton, Ohio. Adjustable figure wheel.

Orth, William G., assignor to Obmer Fare Register Com-pany, Dayton, Ohio. Adjustable figure wheel. 0rth, William G., and C. H. Darst, assignors to Ohmer Fare Register Company, Dayton, Ohio. Taximeter. 1615.201; Jan. 25. Orthman. Herman E., Lexington, Nebr. Cultivator. 1,622,608; Mar. 29.

Ortiz-Escotet, Juan. (See Trians, André E. L. and R. J. A., and Ortiz-Escofet.) Ortleb, Douglas B. (See Ortleb, George and D. B.) Ortleb, George and D. B., St. Louis, Mo. Combined agitator and ink distributor for inking fountains of printing machines. 1,615,769; Jan. 25.
Ortloff, Albin, Melningen, tiermany. Self-aupporting carriod, and the productiven vehicles. 1,634,433; July 5.
Orage and Shovel Company. (See Orton, Philo A., assistance and Shovel Company. (See Orton, Philo A.,

orton Crane and Shovel Columna, assignor.)
Orton, Ole J. (See Hustad, Matias M., assignor.)
Orton, Ole J. (See Hustad, Matias M., assignor.)
Orton, Philo A., Chieago, Ill., assignor to Orton Crane and Shovel Company, Huntington, Ind. Dipper-operating mechanism for excavating machines. 1,622,239;
Mar. 22.
Mar. 22.

Adolph J., Chieago, Ill. Lock for sir valves

Mar. 22.
Ortseifen, Adolph J., Chicago, Ill. Lock for air valves of heating systems. 1,613,844; Jan. 11.
Orugi, Lewis, St. Louis, Mich. Antislip drill-rod device. 1,620,913; Mar. 15.
Orzo, Alfonso, New York, N. Y. Cosmetic jar. Des. 72,249; Mar. 15.
Osann, Frederick, Company. (See Lyons, Robert L., as-

Osanin, Frederick, Company, (See Sibbald, C. T. A., and Ransom, assignors, Osanin, Frederick, Company, (See Sibbald, C. T. A., and Ransom, assignors, Osanin, Spiral pull jack, 1634,011; Dec. 27.
Osbeck, Bluer C., assignor to Grand Rapids Brass Company, Grand Rapids, Mieb. Latch. 1,619,762;

Mar. I.

Osborn, Arthur W., Philadelphia, Pa., assignor to The White Company, Cleveland, Ohio. Dumping vehicle. 1,619,628; Mar. I.

Osborn, Frank S., Shinglehouse, Pa. Window-pane fastener, 1,647,693; Aug. 2.

device. 1,640,637; Aug. 30.

Osborn, Ferd P. (See Fleeger, D. P., and Osborn.)

Osborn, George W., Cleveland, Ohio. Single-wall reenforced high-pressure float. 1,653,966; Dec. 27.

Osborn, Harold C., Chicago, Ill. Illuminated sign.

Osborn, Henry C., assignor to The American Multigraph Company. Cleveland, Ohio. Addressing machine. 1,623,265; Apr. 5.

forced than of the Cost of the American Multigraph Company, Cleveland, Ohio. Addressing May 10.

Salam of the Company of the American Multigraph Company, Cleveland, Ohio. Address plate 1,628,630; May 10.

Salam of the Company, Cleveland, Ohio. Address plate 1,628,630; May 10.

Salam of the Company, Cleveland, Ohio. Address plate 1,628,630; May 10.

Salam of the Company of the American Multigraph Company, Cleveland, Ohio. Identification means for May 10.

Company, Cleveland, Ohio. Address plate. 1,628,630; May 10.

Osborn, Henry C., assignor to The American Multigraph Company, Cleveland, Ohio. Machification means for Company, Cleveland, Ohio. Machification means for Company, Cleveland, Ohio. Plates the Company, Cleveland, Ohio. Plates release for address plates. 1,637,498; Aug. 2.

Osborn, Henry C., assignor to The American Multigraph Company, Cleveland, Ohio. Plates release for printing Osborn, Howard II., assignor to H. G. Fischer & Co., Chicago, III. Electric switch. 1,616,277; Feb. 1.

Osborn, Howard II., assignor to H. G. Fischer & Co., Chicago, III. Spark gap. 1,634,627; July 5.

Osborn, J. B., et al. (See Nesmith, Samued D., assignor.) Osborn, Immol. L. Los Angeles, Calif. Hydrodynamic Osborn Manufacturing Company, The. (See Carman, E. S., and Curtis, assignors.)

Sebon. Mitom Wayne City, III. Stovepipe seam. 1,616,31 (bb. 1, 16,6,31 (bc. 1), 16,6,31 (bc

Apr. 12.

Osborne, Albert E. (See Pitter, Walter C., assignor.)

Osborne, David H., Victor, N. Y., assignor to Locke Insulator Corporation, Baltimore, Md. Insulator.

1.650,024; Nov. 22.

Osborne, Fay H., assignor to C. H. Dexter & Sons, Incorporated, Windsor Locks, Conn. Paper for preventing tarnishing of polished metals. 1,628,610; May 10.

Osborne, Harold S., Montclair, N. J., assignor to American Telephone and Telegraph Company. Radio direction-finding system. 1,615,913; Feb. 1.

Osborne, Howard C. (See Servoss, Willard W., assignor.)

Osborne, John L. (See Buchanan, G. H., and John L. (See Bu

Osborne, Robert L., Mount Clemens, assignor to Dongan Electric Manufacturing Co., Detroit, Mich. Transformer. 1,639,662; Aug. 23.
Osborne, Warren M., Chicago, Ill. Rail anchor. 1,612,878; Jan. 4.
Osborne, Warren M., Chicago, Ill. Rail anticreeper. 1,612,878; Jan. 4.

Osborne, William, jr., Philadelphia, Pa. Bathing suit. 1,637,157; July 26. Osborne, William L., assignor of one-half to A. R. Chandler, Los Angeles, Calif. Apparatus for cleaning crank cases. 1,632,283; June 21.

Charles, Woodcliff, N. J., assignor to National on Company, Inc. Flash light. Des. 73,192;

Carbon Company, Inc. Flash light. Des. 73,192; Aug. 2.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Rock-drilling mechanism. 1,641,451; Sept. 6.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Rock-drilling mechanism. 1,650,838; Nov. 22.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Core drill. 1,650,834; Nov. 22.
Osgood Company, The. (See Barnhart, Harry J., as-

signor.)

Osgood Company, The. (See Bannart, Harry J., assignor.)
Osgood, George H., Tacoma, Wash. Driven pressure bar
Osgood, George H., Tacoma, Wash. Driven pressure bar
Osgood, George H., Tacoma, Wash. Driven pressure bar
Osgood, The Company of the Comp

Oct. 11.

Oct. 11.

Osgood, Robert C., Claremont, N. H., assignor to Sullivan Machinery Company. Blower mechanism, 1,654,485; Dec. 27.

Osgood, Walter P., Malden, assignor to Boston Machine Works Company, Lynn, Mass. Combined taping and seam-pressing machine. 1,646,212; Oct. 18.

O'Shen, Thomas E., Chicago, Ill. Golf scoring device. 1,614,830; Jan. 18.

Oshkosh Trank Company, The. (See Meyer, Frank W.,

assignor.)

Fla., Wis.

assignor.)

Osius, Frederick J., Miami Beach, Fla., assignor to,
Hamilton-Beach Mfg. Co., Racine, Wis. Vacuum
cleaner, 1,624,963; Apr. 19.

Oslund, Charles H., and J. E. Johnson, assignors to O
& J Machine Company, Worcester, Mass. Spotting and
labeling machine. 1,641,045; Aug. 30.

Osnos, Mendel, assignor to Gesellschaft für Drahtlose
Telegraphie m. b. H., Hallesches Ufer 12/13, Berlin,
Germany. Arrangement for eliminating disturbing.

Overwest in radiofrequency circuits. 1,621,998; Mar. 22.

Overwest in radiofrequency circuits. 1,621,998; Mar. 22.

Overwest in radiofrequency circuits. 1,621,998; Mar. 22.

Overwest in radiofrequency senting stations.
1,624,006; Apr. 12.

Osnos, Mendel, assignor to Gesellschaft für Drahtlose
Telegraphie m. b. H. Hallesches, Berlin, Germany,
Frequency changer for short waves. 1,624,005;
Apr. 12.

Apr. 12.

Osnos, Mendel, assignor to Gesellschaft für Drahtlose. Telegraphie m. b. H., Hallesches, Berlin, Germany. Circuit arrangement for high-frequency sending stations, 1,645,542; Oct. 18.

Osnos, Mendel, and L. Kasarnowsky, assignors to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Wireless signaling, 1,624,005; Apr. 12.

Osolia, Alfred, Cleveland, Ohio. Bottling apparatus. 1,647,032 pp. 10.

Osolia, Alfred, Cleveland, Ohio. Aircraft safety deCornel, 1,630,211; May 24.

Ostoles, Karl G., Stocksund, Sweden, Advertising apparatus. 1,619,987; Mar. 8.

Ostdiek, Henry S., Lawrence, Nebr. Tractor wheel. 1,630,025; May 24.

1.630,025; May 24.

Osten, Joseph W., Chicago, Ill., assignor, by mesne assignments, to Auto Fabrics Products, Inc. Automobile-winter top. 1,617,642; Feb. 15.

Osterberg, Maurits, and W., Modesto, Calif. One way clutch. 1,014,805; Jan. 16: The Committee and W.)

Osterhoim, William C., Oak Park, Ill., assignor to Wilcox Products Corporation, Saginaw, Mich. Valve tappet and forming the same. 1,650,644; Nov. 29.

Osterhoim, William C., Oak Park, Ill., assignor to Wilcox Products Corporation, Saginaw, Mich. Valve tappet and forming the same. 1,650,645; Nov. 29.

1.647,852; Nov. 1, Jr., Beaufort, S. C. Fountain pen. 1,647,852; Nov. 1, 17, Senufort, S. C. Fountain pen. 1,650,645; Nov. 20.

Osterlino, August F. St. Paul, Minn. Type cylinder for-osterlin, August F. 1614,801; Jnn. 18. Osterloo, Arthur. (See Pitt. F. D., and Osterloo.) Osterman, Samuel, New York, N. Y. Battery connection. 1,651,726; Dec. 6.

June 14.

Osthoff, Max, Cottbus, Germany. Movement of vehicles. 1,646,310; Oct. 18.

Ostler, Ernest S., assignor to Stromberg Electric Com-pany, Chicago, III. Noiseless clock mechanism. 1,616,465; Feb. S. Ostler, Ernest S., assignor to Stromberg Electric Company, Chicago, III. Noiseless clock mechanism. 1,623,266;

Apr. 5.

Apr. 6.

Ostline, John E., assignor, by meen assignments, Automatic Electric Inc., Chicago, Ill. Service obsing equipment for telephone systems. 1,641,4

Sept. 6. Service observ-

Sept. 6.
Ostman, John W., Minnespolis, Minn. Tool spindle for
wood shapers. 1,644,442; Oct. 4.
Ostrander, Allen E., Bronxville, assignor to American
Car and Foundry Company, New York, N. Y. Carend construction. 1,631,327; June 7.
Ostrander, Charles L. (See Lichty, N. A. and Ostrander,)
Ostrander, Charles L., assignor of one-half to N. A.
Lichty, Waterloo, Iowa, Gasoline clarifier. 1,646,102;
Oct. 138 Ostrander, Chirasa Control Con

Ostro Products Corporation of America. (see Ostromislensky, Iwan, assignor.)
Ostroff, Sidney, Lowell, Mass. Gas mixer. 1,626,423; Apr. 26.
Ostromislensky, Iwan, New York, N. X., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Manufacturing plastic compositions and products obtained thereby. 1,613,673; Jan. 11.
Ostromislensky, Iwan, New York, N. X., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Obtaining colored polymerized styrol and its homologues of the Composition of America Compositions of the Naugatuck Chemical Company, Naugatuck, Conn. Obtaining colored polymerized styrol and its homologues and products obtained Company, Naugatuck, Conn. Obtaining colored polymerized styrol and its homologues and products obtained Company, Naugatuck, Conn. Obtaining colored polymerized styrol and its homologues and products obtained thereby. 1,627,195; May 3.
Ostromislensky, Iwan, Locust Point, assignor to Ostro-Products Corporation of America, Jersey City, N. J., Medical preparation containing arsenie and making the 1,644,548; Cot. 2.
Prob. 1, Jaseph. ir. Durvea. Pa., and P. Ostrosky, Jaseph. ir. Durvea. Pa., and P. Ostrosky, Jaseph. ir. Durvea. Pa., and P. Ostrosky, Jaseph. ir. Durvea. Pa., and P. Ostrosky.

O'Strocke Frank J., Columbus, Ohio. Valve. 1,616,386; Feb. 1.

Strosky, Joseph, jr., Duryea, Pa., and P. Ostrosky, Detroit, Mich. Window fastener. 1,619,031; Mar. 1.

Ostrosky, Paul. (See Ostrosky, Joseph, jr., and P.)

Ostwald, Waiter, assignor to Benzol-Verband Gesell-schaft mit beschränkter Haftung, Bochum, Germany. Alcohol, alcohol-containing mixtures, and similar liquids. 1,642,627; Oct. 4.

O'Sullivan, Michael J., San Juan Capistrano, Calif. Sundial. 1,651,621; Dec. 6.

OSwald, Adolph W. (See Jacques, Jean, assignor.)

Oswald, Adolph W. (See Jacques, J, and Oswald.)

Oswald, Adolph W. assignor of one-half to J. Jacques, Philadelphia, Pa. Closure for filler openings. 1,631,100; May 31.

1.631,106; May 31.

Oswald, Affred E., Hackensack, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Electric motor. 1.641,548; Sept. 6.

Oswald, Arthur A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Modulation indicator. 1.654,090; Dec. 27.

Oswald, Arthur A., and E. L. Nelson, East Orange, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Antenna Structure. 1,632,039; Oswald, Hernal P., Detroit, Mich., assignor, by mesnes assignments, The Hover Company, North Canton, Ohio. Electromagnetic switch. 1,625,820; Apr. 26.

Oswald, Franklin L. (See Morrison, R. A., and Oswald, Oswald, Hermann L., et al. (See Lomax, John L., assignor, and Oswald, Oswald, Hermann L., et al. (See Lomax, John L., assignor).

aka Fabric Company. (See Lorenz, William A., assignor.)

Otis, Albert N., Schenectady, N. Y., assignor to General Electric Company. Furnace. 1,646,213; Oct. 18. Otis Elevator Company. (See Anderson, John N., as-

otis Elevator Company. (See Brady, Thomas, assignor.)
Otis Elevator Company. (See Goebert C., and Kugler, Otis Elevator Company. (See Grosvenor, Graham B., assignor.)

Otis Elevator Company. (See Hymans, Frederick, as-

Otis Elevator Company. (See Lewis, J. D., and Pinto.
18320.7.
Otis Elevator Company. (See Lindquist, D. L., Dunn, and
Larson, assignors.)
Otis, Howard Company. (See Lindquist, D. L., Dunn, and
Larson, assignors.)
Otis, 40.

Otte. Spencer, assignor to The Locomotive Terminal Improvement Company, Chicago, Ill. Apparatus for changing the water in boilers. 1,622,339; Mar. 29. Otts, Spencer, Barrington, assignor to The Locomotive Terminal Improvement Company, Chicago, Ill. Automobile bumper. 1,633,603; June 2

O'Toole, Edward, Gary, W. Va. Rotary screen.
1,617,688; Feb. 15.
O'Toole, Edward, Gary, W. Va. Mining-machine tool.
1,634,434; July 5.
O'Toole, Edward, Gary, W. Va. Mining and loading machine.
1,638,507; Aug. 9.
O'Toole, James E. (See Billings, R. B., and O'Toole.)
O'Toole, John, Los Angeles, Calif. Windmill. 1,638,549;
O'Toole, John J., Pittsburgh, Pa. Tobacco-pipe attachment.
1,628,069; May 10.
O'Toole, John J., Bellevue, Pa. Floor mat. 1,633,951;
June 28.
Ott, Albert J. and C. L. assignors to Apperican

O'Toole, John J., Bellevue, Pa. Floor mat. 1,633,951; June 28.
Ott., Albert J. and C. L. assignors to American Grinder Company, Detroit, Mich. Indexing mechanism. 1,644,540; Oct. 4.
Ott. Hard G. (see Ott, Albert J. and C. L.)
Ott. Hard G. (assignor to Spencer Lens Company, 1,637,483 aug. 2.
Ott., Harvey N., assignor to Spencer Lens Co., Buffalo, N. Y. Binocular microscope. 1,650,646; Nov. 29.
Ott., John. (See Cadwell, W. H., Ott, and Crocker.)
Ott., Richard B. (See Brady, J. F., and Ott.)
Otte, Otho M., Tarentum, assignor to Allegheny Steel Company, Brackenridge, Pa. Ham boiler. 1,642,163; to Allegheny Steel Company, Brackenridge, Pa. Making sheets, 1,651,222; Nov. 29.
Otte, Rudolf, Breslau, Germany. Magnesium lamp. 1,654,012; Dec. 27.
Otten, Lawrence F., Fort Thomas, assignor to The Wadsworth Watch Case Company, Dayton, Ky. Strap Utter, Lawrence F., Fort Thomas, assignor to The Wadsworth Watch Case Company, Dayton, Ky. Strap Otten, Lawrence F., See Ottenheimer, Jacob B., assignor: Jottenheimer, Jacob B., assignor: Ottenheimer, Jacob B., assignor to Ottenheimer, Jacob B., assignor: Ottenheimer, Jacob B., assignor: Ottenheimer, Jacob B., assignor: Jothenheimer, Jacob B., assigno

signor.)
Ottenheimer, Jacob B., assignor to Ottenheimer Bros.,
Inc., Baltimore, Md. Refrigerator. 1,631,833; June 7.
Ottensener Wagenfabrik Albert Essmann & Co., The.
(See Essmann, Helnrich A., assignor.)
Otterson, George W., Toronto, Ontario, Canada, assignor Otterson, George W., Toronto, Ontario, Canada, assignor Otterson, George W., Toronto, Ontario, Canada, assignor Otterson, George Trucks. 1,635,338; July 12.
Otterson, Lissa A., et al. (See Otterson, George W., assignor.)

Otterson, Lissa A., et al. (See Otterson, George W., assignor.)
Ottinger, Leon, New York, N. Y. Locking means for door latches. 1,639,103; Aug. 16.
Ottinger, Leon, New York, N. Y. Mounting for latch handles. 1,641,981; Sept. 13.
Ottinger, Leon, New York, N. Y. Game-scoring device. 1,642,832; Sept. 13.
Ottinger, Leon, New York, N. Y. Teol. 1,648,189; Nov. 8.

Nov. 8.
Ottinger, Leon, New York, N. Y., assignor to Emory G.
Simpson, Detroit, Mich., Cowl ventilator for automobiles. 1,633,309; Aug. 16.
Otto, Arno F., Milwaukee, Wis. Sheet-metal window screen. 1,646,832; Oct. 25.
Otto, Carl, Bochum, Germany. Vertical-chamber oven. 1,619,535; Mar. 11.
Otto, Clemens, Unterluss, assignor to the Firm Rheinische Metallwaren- und Maschinenfabrik, Dusseldorf-Deren-July 12.
Otto, Edge. W. Jun-sighting device. 1,636,763;

Pa. Evaporator for retrigerating apparatus. 1,649,974; Nov. 22.
Ottumwa Box Chr. Loader Company. (See Phillips, H., Otwell, Halph B., Detroit, Mich. Street-cleaning attachment for tractors. 1,648,056; Nov. 8.
Oubridge, William A., Coventry, England. Lapping machine. 1,623,697; Apr. 5.
Ouchle, Elmer L., North Tonawanda, assignor to Rand England. 1,623,599; July 12.
Load March Lapping machine. 1,629,296; May 17.
Ouellette, Alphones, Fall River, Mass. Intermittent feeler mechanism for looms 1,523,491; Apr. 5.
Oullon, Daniel L., Everett, Mass., assignor to Oulton Manufacturing Corporation. Safety cranking device for internal-combustion motors. 1,628,200; Apr. 26.
Oulton, Daniel L., Everett, Mass., assignor to Oulton Manufacturing Corporation. Safety cranking device for internal-combustion motors. 1,628,200; Apr. 26.
Oulton, Daniel L., Everett, Mass., assignor to Oulton Manufacturing Corporation. One-way ditch. Oulton Manufacturing Corporation. Pneumatically-actuated tool. 1,652,498; Dec. 18.
Oulton Manufacturing Corporation. (See Oulton, Daniel L., assignor.)

L., assignor.)

Our Sales and Service Company. (See Gies, Frank G.,

Our Sales and Service Company. (See Oks., Frances, assignor.)
Ourseler, Howard B. (See Taylor, James S., assignor.)
Outcelt, Howard B. (See Taylor, James S., assignor.)
Outcelt, Howard, Parks, Marsaw, Ind. Internal-combustion engine. 1,627,403; May S.
Outhier, Marcel, Parks, assignor to Societe Anonyme des
Etablissement Killots, Levallois-kerret, France. Nut
Outlook Company, The. (See Lippert, Samuel, assignor.)
Outlook Company, The. (See Lippert, Samuel, assignor.)
Out of The Inkwell Films, Inc. (See Fleischer, Max,

Ont of The Inkweil Frime, And Andreas and Ansaignor.
Ovailt, David W., Flint, Mich. Telephone stand.
1,643,253 Oct. 11.
Oven Equipment & Manufacturing Company, The. (See Crawford, Emerick B., assignor.)
Oven, Frank J., assignor to Victor Manufacturing & Gasket Co., Chicago, Ill. Gasket. 1,626,962; May 3.
Ovenshire, Charles E., et al. (See Guenther, Bernard B., assignor.)
Ovenshire, Charles E., et al. (See Ovenshire, Hattie R.,

assignor.)

ovenshire, Charles E., et al. (See Ovenshire, Hattie R.,
assignor.)

ovenshire, Hattie R., assignor of one-third to C. E. Ovenment augmenthing to D. Des, Minneapolis, Minn. Garment supporter. 1,644,200; Oct. 4.

overbeck, Utto G. C. L. J., Grimsby, England. Electric
body comb. 1,638,407; Aug. 9.

overbeck, Wilhelm, Jr., Bochum, Germany. Guard for
motor cars against rope obstructions. 1,614,856;
Jan. 18.

Overbeke Brothers. (See Overbeke, John, assignor.)
Overbeke, John, assignor to Overbeke Brothers, Cleveland,
Ohio. Preparing waistbands and the like. 1,651,039;

Overbeke, John, assignor to Overbeke Brothers, Cleveland, Ohlo. Preparing waistbands and the like. 1,651,039; Nov. 29.
Overboe, Ellerth C., Wanamingo, and M. I. Greseth, Zambrota, Minn. Strainer and cover for pails. Overbeke, 1,651,039; Nov. 29.
Overbeke, John Strainer and cover for pails. Overbeke, 1,651,039; Nov. 20,650; May 10.
Overdick, William Brooklyn, N. J. Steering gear. 1,633,415; June 21.
Overdick, William Brooklyn, N. Y. Steering gear. 1,633,415; June 21.
Overdick, Henry, assignor to The King-Keys Advertising Chem. 1,643,040; Aug. 16.
Overlott, Albert L., Minneapolis, Minn., assignor, by mesne assignments, to Steiner Sales Company, Salt Lake City, Utah. Towel holder. 1,643,044; Sept. 20.
Overland Metal Novelty Co. Inc. (See Konoft, Alexander, assignor), voc. 1, Naw York, N. Y. Pengungte title

mesne assignments, to Steiner Sales Company, Sait Lake City, Utah. Towel holder. 1,643,084; Sept. 20. Overland Metal Novelty Co. Inc. (See Konoft, Alexander, assignor).

Valve. 1,649,321; Nov. 15.

Overman, George W. P., Norfolk, Va. Lifeboat securing and releasing mechanism. 1,631,053; May 31.

Overman, George W. P., Norfolk, Va. Lifeboat holding and launching mechanism. 1,635,360; Lifeboat holding and launching mechanism. 1,635,261; Feb. 15.

Overman, Max C., New York, N. Y., assignor to O. & W. Company. Cushion tire. 1,618,128; Feb. 15.

Oversmith, Clarence D., Boston, Mass. Advertising display case. Des. 1,621,491; Mar. 22.

Overstrom, Gustave A., Pasadena, Calif. Vibrating screen. 1,621,949; Mar. 22.

Overstrom, Gustave A., Los Angeles, and G. Overstrom. Tatt., Calif. Gas and oil separator. 1,632,919; Overton, Booker L., Shreveport La, and F. L. Overton, Houston, Tex. Combined receptacle and illuminated sign. 1,645,870; Oct. 18.

Overton, Fitchugh L. (See Overton, Booker L. and F. L.)

Overton, Booker L., Shreveport La, and F. L. Overton, Fitchugh L. (See Overton, Booker L., 1645,870; Oct. 18.

Overton, Lester E., Baltimore, Md. Tobacco-smoking pipel,1,618,776; Feb. 22.

Overton, William H., assignor of one-tenth to B. Overton, Swanwick, Ill. Electric gas switch. 1,630,212; May 38.

Overton, Pasado J., Newton, Mass. Making tea-bult tags. 1,642,307; Sept. 3.

Overton, Swanwick, Ill. Electric gas switch. 1,630,212; May 38.

Overton, William H., assignor of one-tenth to B. Overton, Swanwick, Ill. Electric gas switch. 1,630,212; May 38.

Overton, John E., assignor of one-tenth to B. Overton, Swanwick, Ill. Electric gas switch. 1,630,212; May 38.

Owen Transissing Co. Inc. (See Baser, Harry L., Osci, David Ch., and Owen, David T., and W. G. Lehmann, Cleveland, Ohic, said Lehmann assignor to said Owen. Spring cushion, mattress, seat, and bed. 1,637,584; Aug. 2. Owen-Dyneto Corporation. (See Perkins, Laurence M., assignor.) Owen-Dyneto Corporation. (See Sayre, Gordon B., as-

Owen-Frederick C., Fayetteville, N. C. Transformer for electric-arc-welding apparatus. 1.619,629; Mar. 1.
Owen, Frederick C., Fayetteville, N. C. Transformer for olectric-arc cutting, repairing, and welding apparatus. 1.619,629; Mar. 1.
Owen, Frederick C., Fayetteville, N. C. Transformer for electric-arc-welding apparatus. 1.619,753; Mar. 1.

Owen, Frederick C., Fayetteville, N. C. Transformer for electric arc cutting, repairing, and welding apparatus. 1,634,593; July 5. Owen, Frederick C., Fayetteville, N. C. Transformer for electric-arc cutting and welding apparatus. 1,637,237; July 28.

July 26. Owen, Frederick C., Fayetteville, N. C. Electrical transformer. 1,637,238; July 26. Owen, Frederick C., Fayetteville, N. C. Transformer for electric arc cutting and welding apparatus. 1,644,604;

electric are cutting mu vectors of the Cot. 4.

Owen, Frederick C., Fayetteville, N. C. Transformer for electric-are cutting and welding apparatus. 1,647,928; Nov. 1.

Owen, Frederick C., Fayetteville, N. C. Transformer for electric-are cutting and welding apparatus. 1,651,228; Nov. 29.

Owen, Frederick C., Fayetteville, N. C. Metallic-arc.

owen, Frederick C., Fayetteville, N. C. Transformer for electric-arc cutting and welding apparatus. 1,651,223; Owen, Frederick C., Fayetteville, N. C. Metallic-arc over the company of the control of th

June 7.

Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making reenforced glass tile. 1,644,349; Oct. 4.

Owen, William, Pittsburgh, Fa., assignor to Pittsburgh tus. 1,651,224; Nov. 29.

Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Multiple-groove-dressing device for abrasive wheels. 1,651,225; Nov. 29.

Owen, William O. Washington, D. C. Blasting. Owen. William O. Washington, D. C. Blasting. Owen. Bottle Company, The. (See Bragg, Thomas A., assignor).

Owens Bo

Owens Bottle Company, The See La France, Richard, Owens Bottle Company, The (See La France, Richard, John M., Owens Bottle Company, The. (See Lents, John M., Owens Bottle Company, The. (See Lents, John M.,

owens Bottle Company, The. (See Owens, Michael J., Owens Bottle Company, The. (See Rule, John F., assignor.)

signor.)

Owens Bottle Company, The. (See Soubler, Leonard D., assignor.)

Owens, Charles, Chattanooga, Tenn. Gas generator. 1,613,123; Jan. 4.

1,613,124; Jan. 4.

Owens, Charles, Chattanooga, Tenn. Cracking oll. 1,613,124; Jan. 4.

Owens, Dabney P., Lake Worth, Fla. Universal joint. 1,623,109; Japr. 5.

Owens, Dabney P., Lake Worth, Fla. Fixed housing for universal connections. 1,623,209; Apr. 5.

Owens, Dabney P., Lake Worth, Fla. Cutter. 1,623,201; Apr. 5.

Owens, Dabney P., Lake Worth, Fla. Augle screw driver and attachment. 1,628,553; May 10. Owens, John G., assignor of one-fourth to R. C. Holman, Barnwell, and one-fourth to J. I. Rice, Columbia, S. C. Hay remover and weigher for hay presses. 1,621,807; Mar. 22.

Owens, John J., Blacksburg, Va. Dishwashing machine.
1,634,038; June 23.
Owens, John L., Minneapolis, Minn. Huller and scarifier.
1,627,248; May 3.
Owens, Moinael J., assignor to The Libbey-Owens Sheet
Glass Company, Toledo, Ohio. Drawing sheet glass.
1,614,052; Jan. 11.
1,614,052; Jan. 14.
1,614,052; Jan. 15.
1,614,052; Jan

Apr. 19.
Oxarart, Domingo, Los Angeles, Calif. Vending machine.
1.640.851; Aug. 30.
Oxford Paper Company. (See Sorensen, Einar, assignor.)
Oxford Press Incorporated. (See Jenner, George O., as-

signor.) Oxford Varnish Corporation. (See Lang, George E., as-

Oxford Varinia Coriporation. (See Lang, George E., assignor.)
Oxbandler, Leopold, Chicago, Ill. Cusbioning and filler-locking flat. 1,626,870; May 3.
Oxiey, George H. (See Hirst, Arthur, assignor.)
Oxweld Acetylene Company. (See Kehl, Robert J., as-

signor.) Oxzyn Company. (See Diaz, E., and Englander, assignors.) sama. Senzo,

signors.)
Oyama. Senzo. Hilo. Hawaii. Pasteurizing apparatus.
1,640,289; Aug. 23.
Oyler, Kimball, Los Angeles, Calif., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Calender knife. 1,637,784; Aug. 2.
Oyston, William R., Sydney, New South Wales, Australia. Collapsible baby carriage. 1,620,281; Mar. S.
P. H. & F. M. Roots Company, The. (See Friend, Roydon L., assignor.).
P & M Company, The. (See Cook, Adoniram J., assignor.).
P & M Company, The. (See Moore, Philip W., assignor.).
P & M Company, The. (See Preston, Frederick A., assignor.).

F. & Company, The. (See Preston, Frederick A., assignor.)

P. & M. Company, The. (See Warr, Harold G., assignor.)

P. & M. Company, The. (See Warr, Harold G., assignor.)

P. & M. Company, The. (See Warr, Harold G., assignor.)

Panske, Jens. Clinton, Iowa. Upholstering device.

1.619,754; Mar. 1. Maywood, Ill., assignor to The Pathold.

Rest of Company, New York, N. Y. Subcooling condenser. 1,625,821; Apr. 26

Pabst Corporation. (See Eldredge, Elmer E., assignor.)

Pabst, Josef, Zurich, Switzerland. Cuff link, 1,617,269; Feb. 8.

Pabst. dosef, Zurich, Switzerland. Cloth holder.

1.652,952; Pet. 1.652,952; Pet. 6.

Pacent Electric Company. (See Goudy, Carl F., assignor.)

Pacent, Louis G. (See Decker, Frank A., assignor.)

Pacent, Louis G. (See Decker, Frank A., assignor.)
Pache, Auguste. (See Gouirand, R., and Pache.)
Pache, Julia, administratrix. (See Gouirand, R., and

Pache. Julia, administratrix. (See Gouirand, R., and Pache.)
Pacher, Franz, Dusseldorf-Rath, Germany. Case-hardenling process for steel articles. 1,635,384; July 12.
Pacific Burt Company. (See Brown, Horace P., assignor.)
Pacific Cost Iron Pipe & Foundry Company. (See Drummond, Robertson P., assignor.)
Pacific Cost Borax Company. (See Cramer, T. M., and Counell, assignors.)
Pacific Door and Sash Company. (See Nelson, Eric., as-

signor.)
Pacific Fire Extinguisher Co. (See Mollard, Thomas A.,

Pacific Foundry Company. (See Fowler, John S., as-

Pacific Gas Radiator Company. (See Spangler, Archie L. Lumber Company, The. (See Humboldt, Elie S.

assignor.)
Pacific National Co. (See Hamilton, James T., assignor.)
Pacific Pump Works. (See Wels, Arthur R., assignor.)
Pacific Radiator Shield Company. (See King, David H.

ssignor.) inc Rim Tool Company. (See Kennedy, John A.,

Pacific-Southwest Trust & Savings Bank, administrator, (See Green, Henry M.) Pacific-Southwest Trust & Savings Bank, trustee. (See Curtis, Thomas S., assigner.) Pacific Spring Company. (See Stackhouse, George A.

Pacine Spring Company. (See Satesatouse, George A., assignor.)
Package Machinery Company. (See Smith, E. L., and Fuller, assignors.)
Package Machinery Company. (See Smith, E. L., and Phelon, assignors.)

Packard, Clarence E., Abilene, Kans. Dump-body vehicle.
1,625,496; Apr. 19.
Packard, Horace N., assignor to The Cutler-Hammer
Mfg. Co., Milwaukee, Wis. Indicating and also recording various values. 1,614,535; Jan. 18.
Packard, Horace N., assignor to The Cutler-Hammer
Mfg. Co., Wauwatosa, Wis. Method and means for
1,625,277; Apr. 1, easting value of combustible gases.
1,625,277; Apr. 1, easting value of combustible gases.
1,613,190; Jan. 4.
Packard, Lester E. Brockton, assignor to Avon Sole
Company, Avon, Mass. Shoe sole or heel. 1,644,855;
Oct. 11.

Company, Avon, Mass. Since sole of need, and oct. 11.
Packard Motor Car Company. (See Andrew, F. W., and Tibbetts, assignors.)
Packard Motor Car Company. (See Bentley, Mark, as-

Packard Motor Car Company. (See Church, Harold D., assignor.)

Packard Motor Car Company. (See Corker, Joseph E.,

assignor.)
Packard Motor Car Company. (See Ewend, Walter H., Assignor.) Packard Motor Car Company. (See Griswold, Walter R.,

assignor.)
Packard Motor Car Company. (See Hammerl, Jacob, as-Packard Motor Car Company. (See Kline, Harmon J.,

assignor.)
Packard Motor Car Company. (See Knapp, Archer L.,

assignor.)
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Packard Motor Car Company. (See Pierson, Robert M.

assignor.) Packard Motor Car Company. (See Roberts, Edward F., Packard Motor Car Company. (See Tibbetts, Milton, as-

signor.) Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)

Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Packards & James Fison (Thetford) Ltd. (See Maudsley, Richard T., assignor.)
Packer, Eben R., New Rochelle, assignor to I. & C. Company, New York, N. Y. Guard-rail structure. 1,639,232;
Aug. 16.
Packer, Eldredge H., San Francisco, Calif. Piston ring.
1,624,279; Apr. 12.
Packer, Glenn W., assignor to Goodman Manufacturing Company, Chicago, Ill. Trolley support. 1,644,268;
Oct. 4.

Company, Chicago, Ill. Trolley support. 1,012,205. Oct. 4. Oct

Pacquin, Inc. (See Pogue, George D. and W. V., as-

Pacquin, Inc. (See Pogue, George D. and W. V. assignors.)
Pacz. Aladar, East Cleveland, Ohio. Metallic article.
1.614.684; Jan. 18.
Pacz. Aladar, East Cleveland, Ohio. Method and composition of matter for surface-treating aluminum.
Pacz. Aladar, East Cleveland, Ohio. assignor to General Electric Company. Extraction of metals and their compounds from ores and impure materials. 1.614.149; Jan. 11.
Pacz. Aladar, Cleveland, Ohio. assignor to General Electric Company. Alloy filament. 1.635.055; July 1.
Padbury John J., Barre, V., Bush hammer. 1.634.298; July 5.
Padbury John J., Barre, V., Bush hammer. 1.634.298; Pade Max H., assignor to The Firestone Tire and Rub-

July 9.
Pade, Max H., assignor to The Firestone Tire and Rubber Company, Akron, Ohio, Device for testing inflatable articles. 1.622.252; Mar. 22.
Paden City Glass Manufacturing Company, (See Fisher, David, assignor.)
Paden, William L., Saginaw, Mich. Combined cash register and adding machine. 1,628.420; May 10.
Padgett, Powell D., assignor of one-hulf to F. G. McCord, Atlantia, Ga. Drinking attachment. 1,629.385;

May 17.

May 17.

Padolsky, Bessie, Philadelphia, Pa. Pad for Infants.
1.637.038; July 26.

Paeplow, Charles H., Buffalo, N. Y. Curing rubber hose and the like. 1.622.340; Mar. 29.

Paff. George A., Portsmouth, Ohio, assignor to Wheeling Sitel Corporation, Wheeling, W. Va. Wire reel. 1.6447.15; Nov. 1.

Paff. John A., Allentown, Pa. Horseshoe and replaceable pnat therefor. 1.653.409; Dec. 20.

Pagvno. Gaetrno, Brooklyn, N. Y. Safety apparatus. 1,645.819; Oct. 38.

Pagano, Gaetano, assignor of one-fourth to S. Benfonti and one-fourth to G. Sofia, Brooklyn, N. Y. Clothes wringer. 1,628,554; May 10.

Page, Albert E., Brooklyn, assignor to Scott and Williams, Cline 1,627,837; May 3. Y. Circular-knitting machine 1,627,837; May 3. Y. Circular-knitting machine lenents. 1,634,682; July 5.

Page, Albert E., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Positioning device for knitting-machine elements. 1,634,682; July 5.

Page, Andrew. (See Coyne, Albert E., assignor.)

Page, Charles B., and W. D. Burton, Evanston, assignors 1,646,659; Oct. 25.

Page, Charles B., assignor to Economy Dispenser Corporation, Los Angeles, Calif. Dispensing device. 1,654,050; Dec. 27.

Page, Charles H., Hatchechubbee, Ala. Depth indicator. 1,643,110; T., assignor.)

Page, Frederick H., assignor to Handley Page Limited, London, England. Laterally controlling aircraft. 1,636,687; July 12.

Page, Gordon W., San Francisco, Calif. Antomobile Page, Hartie P., Infalted. (See Page, Frederick H., assignor,)

Page, Hattle J., Grand Kapids, Mich. Garment.

Page, Handley, Limited. (See Page, Francisco, Signor.)
Page, Hattle J., Grand Rapids, Mich. Garment.
1,646,555; Oct. 25.
Page, Heyert E., Syracuse, assignor to United States Hoffment-pressing machine. 1,623,538; Apr. 5.
Page, Herbert E., Syracuse, assignor to United States
Hoffman Machinery Corporation, New York, N. Y.
Seam opener. 1,634,206; June 29.
Page, Jenny M. (See Logan, James W., assignor.)
Page, John H., Detroit, Mich. Wall clock. Des. 73,413
Sept. 6.

Sept. 6.

Page. John W., Chicago, Ill. Revolving derick.
1,627,249; May 3.

Page, Larrance, Berkeley, Calif. Shutter-release holder.
1,633,125; June 21.

Page, Louis A., assignor of one-half to H. C. Messinger.

Providence, R. I. Extendible spectacle temple.

Providence, R. I. Extendible spectacle temple.

Page, 1010, R., seignor.)

Page Organ Company, The. (See Maus, H. P., and Lamson, assignors.)

Page Organ Company, The. (See Maus, H. P., and Lamson, assignors.). Poncomby, Auctland, New Zealand. Page, Reginalist wheel 1,845,620; Oct. 18. Page, Rescue B., Los Angeles, Callf. Stabilizer for folding beds. 1,618,467; Feb. 22. Page, Robert F., deceased; J. M. Felt, administrator, Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Vented motor casing. 1,642,083;

Sept. Page, Bert R., New York, N. Y. Top adjustable banjo ratilpiece. 1.626,694; Apr. 28. Page, Robert W., Glen Ridge, N. J. Covering of plastic material and making the same. 1.622,969; Mar. 29. Page Steel and Wire Company. (See Kyle, William T., assignor.)

assignor.)
Page, Welton, Switchback, W. Va. Mail catching and delivering device. 1,615,720; Jan. 25.
Page, William M. (See Lavarnek, F. C. and Page.)
Pagel, Fred F., Kawitter, La Crosse, Wis. Pagel, Green, S. Kawitter, La Crosse, Wis. Pagel, Gustav. (See Hösel, F. and Pagel.)
Pagel, Gustav. (See Hösel, F. and Pagel.)
Pagel, Gustav. (See Hösel, F. and Hagel.)
Pagel, Gustav. Charlottenburg, Germany, assignor to General Electric Company. Heat-exchange device. 1,651,900; Dec. 6.
Pagel, William F., Sycamore, Ill. Plumber's blowtorch.
Paget, Charles, Santa Cruz, Calif. Kettle. 1,618,992; Mar. 1. Paget, Ca

Paget, Win W., Virginia City, Nev. Propeller. 1,626,424; Apr. 26. Pagett, Earl W., Detroit, Mich. Carburetor. 1.619,309; Mar. 1.

Mar. 1.

Pagin, John B., assignor to South Bend Bait Co., South Rend Ind. Fishing bait. 1,636,832; July 26.

Pagliani, Federica. (See Camilla, S., and Pagliani,)
Pablow, Gustav C., assignor to Victor Casket Hardware Co., Galesburg, Ill. Lug for casket handles. Des.

Palmeyer, Frederick O., assignor to Heine Boiler Company, St. Louis, Mo. Boiler. 1,631,328; June 7.

Pahomi, Oscar, Chicago, Ill. Waffle iron. 1,649,039; Nov. 15.

Nov. 19.
Paige, Arthur E., Philadelphia, Pa. Radiocommunication, 1,624,637s; Apr. 12.
George H. E., assigno; Company. (See Petersen, George H. E., assigno;)
Paige-Detroit Motor Car Company. (See Reed, Ned S., assigno;)
Pailldery, George, Courbevoie, France. Atomizer. Des. 73,802; Nov. 8.

Paine, Arthur P., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detector for looms. 1,651,098; Nov. 29.
Paine, Arthur P., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Hanger for Axminster-loom tube frames. 1,653,190; Dec. 20.
Paine Company, The. (See Paine, Mathew H., assignor.) Paine, Louis A., assignor to The Lincoln Meter Company Limited, Toronto, Ontario, Canada. Electric mensuring the paint of the Company of the C

amperes. L. Ustrous, 1. (See Procknow, O. Paine Lumber Company, Charley, assignor, 1. Paine, Mathew H., Glen Ellyn, assignor to The Paine Company, Chicago, Ill. Celling and foor pipe plate. 1,651,624; Dec. 6. (Company, The. (See Turner, William S., assignor.) Company, The. (See Turner, William S., assignor.) Paisseau, Jean, Courbevole, France. Preparation of pearl essence. 1,615,770; Jan. 25. Paiste, H. T., Company. (See Palste, Henry T., assignor.)

essence. 1,615,770; Jan. 25.

Paiste, H. T., Company. (See Paiste, Henry T., assignor.)

Paiste, H. T., Company. (See Paiste, Henry T., assignor.)

Paiste, Henry T., assignor to H. T. Paiste Company, Philadelphia, Pa. Handle for assembling parts of electric fixtures. 1,629,405; May 17.

Paiste, Henry T., assignor to H. T. Paiste Company, Philadelphia, Pa. Outlet. 1,635,056; July 5.

Paiste, Henry T., assignor to H. T. Paiste Company, Philadelphia, Pa. Twin socket. 1,642,626; Sept. 13.

Pajalic, Antonio, Detroit, Mich. Fan. 1,635,454; July 5.

Jan. Evanston, Ill. Wheeled toy. Des. 72,778; May 31.

Paieau, Charles H., Glencoe, assignor to The Toy Tinkers, Inc., Evanston, Ill. Jointed figure toy. Des. 72,984; June 28.

Pajeau, Charles H., Glencoe, assignor to The Toy Tinkers, Loc. Evanston, Ill. Bowling-game apparatus. 1,625,676; Apr. 19.

Pako Corporation. (See Passman, James W., assignor.)

Pal Radio Company. (See Wacker, George W., assignor.)

Pal Radio Company. (See Wacker, George W., assignor.)

Pal Radio Company. (See Wacker, George W., assignor.)

Pal Radio Company. Ver. N. V. Latch. 1821,803.

Palacios, José, New York, N. Y. Latch. 1,621,808; Mar. 22.

Mar. 22.
Palacios, José, New York, N. Y. Sliding lock. 1,622,804; Mar. 29.
Paley, Jacob, Brooklyn, N. Y. Hat-crown block. 1,650,571; Nov. 22.
Paley, Max, Monticello, N. Y. Varying the size of garments. 1,642,627; Sept. 18.
Palickl, Robert C., Toledo, Ohio. Work glove. 1,642,128;

Palicki, Robert C., Toledó, Ohio. Work glove. 1,642,128: Sept. 13.
Palicki, Robert C., Toledo, Ohio. Work glove. 1,649,074: Nov. 15.
Palka, Andrew, Detroit, Mich. Radiator casing. Des. 72,441; Apr. 12.
Palka, Andrew, Detroit, Mich. Radiator shell. Des. 72,721; May 24.
Palka, Andrew, Detroit, Mich. Radiator shell. Des. 124.
Palka, Andrew, Detroit, Mich. Radiator. Des. 72,800; Palka, Andrew, Detroit, Mich. Radiator. Des. 73,831:

June 7.
Palka, Andrew, Detroit, Mich. Radiator. Des. 73,331;
Aug. 23.
Pallas, John, fr. Thurston, Nebr. Combined hog leader
and crate. 1,644,201; Oct. 4.
Pallenberg, Christian, Clinton, Conn. Power-transmission
mechanism. 1,613,191; Jan. 4.
Pallenberg, Christian, assignor of one-half to F. Pallenberg, Clinton, Conn. Resilient seat mount. 1,647,247;
Nov. 1.

NOV. 1.
Pallot, Charles S. (See Morris, G. A., and Pallot.)
Palm, Bernard L. (See Palm, Herbert B. and R. L.)
Palm, Blake, Washington, D. C. Switch. 1,631,054;
May 31.

Palm. Blake, Washington, D. C. Switch. 1.631,054; May 31. Palm Brothers Decalcomania Company, The. (See Wal. Ludwig, assignor.) Palm, Feelteler & Co. (See Bihr, Alphonse, assignor.) Palm, Frederick. Shorewood. assignor to A. O. Smith Corporation, Milwaukee, Wils. Axle housing and gear casing for automobiles and making the same. 1,333,573; 16. Aug.

Aug. 16.

Palm, Herbert B. and B. L., Huron, S. Dak. Hog greaser.
1,625,677; Apr. 19.

Palm, Max J., jr., Clincinnati, Ohio. Plate or similar article. Des. 72,838; Apr. 5.

Palm, Max J., fr., Clincinnati, Ohio. Plate or similar article. Des. 72,842; Apr. 5.

Palm, Max J., fr., Clincinnati, Ohio. Plate or similar article. Des. 72,842; Apr. 19.

Palm, Max J., fr., Clincinnati, Ohio. Plate or similar article. Des. 72,842; Apr. 19.

Palm, Max J., fr., Clincinnati, Ohio. Plate or similar article. Des. 72,842; Apr. 26.

Palm, Robert H., and W. F. Yohlmann, assignors to F. W. Mateer & Co., Chicago, Ill. Safety device for Palm, Robert H., and W. F. Pohlmann, assignors to F. W. Mateer & Co., Chicago, Ill. Safety device for laundry machines. 1,651,625; Dec. 6.

Palmenberg, Emil T., New York, N. Y. Pedestal or similar article. Des. 72,071; Feb. 22.
Iain article. Des. 72,071; Feb. 22.
Iain article. Des. 72,071; Feb. 22.
T. Palmenberg, Emil T., assignor. A. Y. Tedestul or the like. Des. 72,910; June 21.
T., assignor.)
Palmen, Aphonso T., Chicago, Ill. Rail anticreepei.

· T., assignor.)
Paimer, Aiphano T., Chicago, Ill. Rail anticreeper.
Paimer, Aiphano 15.
1.030,033; Mass J., Chicago, Ill. Rail anticreeper.
1.633,023; Dec. 27.
Paimer, Arthur E. (See Tracy, J. J., and Palmer, Palmer, Arthur G., Dover Plains, N. Y. Paper novelty
article. 1,622,000; Mar. 29.

signor.) Palmer Bros. Engines, Inc. (See Ulrich, Julius M., as-

signor.)
Palmer Bros. Engines, Inc. (See Ulrich, Julius M., assignor.)
Palmer, David, Sharon, Kans. Clevis. 1,620,387; Mar. 8.
Palmer, David, Sharon, Kans. Clevis. 1,620,387; Mar. 8.
Palmer Electric and Manufacturing Company, The. (See Johnson, Errics C., assignor.)
1,613,132; Jan. 18.
Palmer, Elton J. (See Pectal, O. J., and Palmer.)
Palmer, Essic R., Savannah, Ga. Automobilist's glove. 1,624,428; Apr. 12.
Palmer, Floyd, Jacksonville, Fla.
Automobile parking means. (1,639,654; Aug. 16.
Palmer, Floyd, Jacksonville, Fla.
Automobile parking means. (1,639,654; Aug. 16.
Palmer, Tanville. Clevit, C. Manufacturing Company. Circuit interrupter. 1,645,292; Oct. 11.
Palmer, Harry A., assignor of twenty-five per cent to J. J. Kelly, twenty-five per cent to W. A. McKay, and two per cent to J. A. McCarthy, Boston, Mass. Rotary engine. 1,613,528; Jan. 4,40148
Palmer, Harry A., assignor to Reynolds Spring Company. 1,618,943; Feb. 22.
Palmer, Harry A., assignor to Reynolds Spring Company, Jackson, Mich. Base frame for spring structures. 1,650,294; Nov. 22.
Palmer, Harry B., Mendham, N. J. Apparatus for ad-

pany, Jackson, Mich. Automatic U-bar-cut-off machine. Jolis, 843; Feb. 22.
Palette, 1618, 843; Feb. 22.
Palmer, Harry B., Mendham, N. J. Apparatus for administering radium emanations. 1, 1620, 684; Mar. 15.
Palmer, Harry B., Mendham, N. J. Process and apparatus for oncentrating active deposit. 1,644, 365; Oct. 4.
Palette, 162, 843; Palette, 162, 844; Palette, 162, 844;

1,653,308; Dec. 20.
Paluck, John B., Belfield, N. Dak. Hoe. 1,649,921; Nov. 22.
Palueff, Konstantin K., Pittsfield, Mass., assignor to General Electric Company. Winding for electrical apparatus. 1,629,462; May 17.
Palueff, Konstantin K., Pittsfield, Mass., assignor to General Electric Company, Autotransformer. 1,640,424; Aug. 30.
Aug. 30.

Aug. 30.

Pampinella, Frank, Brooklyn, assignor to International Motor Company, New York, N. Y. Rubber shock-in sulated bumper. 1,619,087; Mar. I. Pan American Petroleum Company. (See Black, J. C., Rlal, and Howes, assignors.)

Pannglotaros. Athanasios, and M. Jones, Fort Worth, Tex.; said Panaljotaros now, by Judical change of name, Tom Peters. Self-basting rotary roaster. 1,638,462; Aug. 9.

Panama Lamp & Commercial Company. (See McCann, C. F., and Berrenberg, assignors.)
Panay-Horizontal Show-Jar Co. (See Shover, Lamar H.,

porn.)

Pangborn, Leo D., R. M. Warwick, and G. H. McKay.
Chicago, Ill., assignors, by mesne assignments, to Chicago, Ill. Insurance Hardware Foundary Company, Chicago, Ill. Insurance Hardware Foundary Company, Chicago, Ill. Insurance Hardware Foundary, Chicago, Ill. Insurance Hardware Foundary, Chicago, Ill. Pangborn, Redmond H., Tacona, Wesh assignor of one-fourth to A. P. H. Hudson and one-fourth to R. S. Hudson. Conveyer chain. 1,641,642; Sept. 6.

Pangburn, Truman A., Camden, N. J. Electric switch.
1,639,136; Aug. 16.

Panhandle Refining Company. (See Turner, Samuel E., assignor).

Passing William J. (See Rotter, W., and Panish.)
Panished, George, Clevisland, Ohio. Pot-mouthpiece wiper
for type-casting machines. 1,638,430; July 19.
Pannell, Richard L., Birmingham, Ala. Rotary internalcombustion engine. 1,634,269; July 5.
Pannier Bros. Stamp Co. (See Pannier, William J., jr.,

Pannier Bros.
assignor.)
Pannier, William J., jr., assignor to Pannier Bros.
Co., Pittsburgh, Pa. Printing stamp. 1,6 ros. Stamp 1,620,685;

Mar. 15.

Panoch. Anthony L., Iowa City, Iowa. Gate hinge.
1.634,337; July 5.

Pantin, W. & C. (See Ingold, Ernest A., assignor.)

Pantlind, Fred Z. (See Farmer, Charles K., assignor.)

Pantlind, Fred Z. (See Farmer, Charles K., assignor.)

Pantonicke, Bohdan, Lochotin, Pilsen, Czechoslovakia.

Centrifugal fuse. 1,614,536; Jan. 18.

Pantonicke, Bohdan, Pilsen-Lochotin, Czechoslovakia.

Centrifugal fuse. 1,614,537; Jan. 18.

Pantonicke, Bohdan, Pilsen, Czechoslovakia.

Centrifugal fuse. 1,618,944. Feb. 22.

Pantonicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,552,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,552,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,522,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,522,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,522,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,522,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,648,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,648,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

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Pateronicke, Bohdan, Pilsen, Czechoslovakia.

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Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,648,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Czechoslovakia.

Percussion fuse. 1,648,636; Dec. 13.

Pateronicke, Bohdan, Pilsen, Pi

July 26.

Panyard, John F., Detroit, Mich. Piston packing.

1,638,453; Aug. 9.

Panyard, John F., Detroit, Mich. Piston packing.

Panyard, John F., Detroit, Mich. Piston packing.

Panyard, John F., Detroit, Mich. Piston packing.

1,646,978; Oct. 25.

Panal, Paul R., Shawinigan Falls, Quebec, Canada. Digester strainer. 1,625,373; Apr. 1,900.

Paolicelli, Dustace V. (See Paolicelli, Joseph and E. V.)

Paolicelli, Joseph and E. V., New York, N. Y. Burn-in Packet, Vincenze, Ulice, N. Y. Radiator. 1,644,270; Oct. 4, Incenze, Ulice, N. Y. Radiator. 1,644,270; Oct. 4.

Oct. 4.

Paone, Vincenzo, Utica, N. Y. Condensing attachment for automobile radiators. 1,652,045; Dec. 6.

Papé, Chester H., Portland, Oreg. Composition for making casting patterns, pattern mounts, and the like. 1,614,315; Jan. 11.

Pape, Edwin W., St. Louis, Mo., assignor to Crescent Stove Works, Vanderburgh County, Ind. Air-circulation control for inclosed stoves. 1,623,634; Apr. 5.

Pape, Wilhelm, assignor to Bergmann-Elektricitiis-Werke Aktion;cesilschaft, Berlin, Germany. Steam turbine. Paper Mills, Albert, Rochester, N. Y. Ash sifter. 1,629,729; May 24.

Paper Converting Machine Co. (See Christman, Peter J., jr., assignor.)

Paper Mill Laboratories, Inc. (See Wells, Sidney D., Paper Mill Laboratories, Inc. (See Wells, Sidney D.,

Paper Converting anatomous J., fr., assignor.)

Paper Mill Laboratories, Inc. (See Wells, Sidney D., assignor.)

Paper Service Company, The. (See Rowe, William W.,

Paper and Textile Machinery Co., The. (See Millspaugh, William H., assignor.)
Papin, Henry J., Grand Rapids, Mich. Grip. 1,638,454;
Papin, William, Cincinnati, Ohio. Hand press. 1,622,806;
Mar. 29.

Pappadakis, Andru G., Detroit, Mich. Alarm mechanism. 1.622.499; June 14. Pappano, Philip, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Selvage trlumer. 1,652,149;

Dec. 6.

Pappert. Emanuel. Brooklyn, N. Y. Spectacle frame. Des. 73.144; July 26.

Pappert. Emanuel, New York, N. Y. Spectacle frame. Des. 73.578; Oct. 4.

Papet, Hermann. Vienna, Austria, assignor to E. D. Foldman, New York, N. Y. Electric machine with split poles. 1,620,008; Mar. S.

Papst, Hermann, Vienna, Austria, assignor, by mesne assignments, to F. B. Keane, Bridgeport, Conn. Magnet frame for electric machines with split poles. 1,622,204;

Mar. 22.
Papst, Hermann, Vienna, Austria, assignor, by mesne assignments, to F. B. Keane, Bridgeport, Coan. Supporting housing for electrical machines with split poles. 1,625,051; Apr. 19.
Paque, Edward J., Cincinnati, and G. W. Jakeway, Marlon, assignors to The Pollak Sted Company, Cincinnati, Paquelier, René P. E. (See Malavai, P., and Paquelier, Paquelier, René P. E. (See Malavai, P., and Paquelier, Parafine Companies, The. (See Evans, Charles S., assignor).

signor.)
Paraffine Companies, The. (See Finley, Dozler, assignor.)
Paraffine Companies, The. (See Lilleston, Horace J.,
assignor.)
Paraffine Companies, The. (See Meller, Reginald B., as-

Signor.)
Paraffine Companies. (See Rosener, Leland S., assignor.)
Paraffine Companies, Inc., The. (See Finley, Dozler,

assignor.)
Paraffine Companies, Inc., The. (See Rosenor, Leland S., assignor.)
Paraflector Company, The. (See Raynolds, John F., as-

Paradector Company, The. (See Raynolds, John F., assignor.)
Paragon Can & Cap Company. (See Russell, Robert A. Paragon Can & Cap Company. (See Seward, Edward C., assignor.)
Paragon Devices Corporation. (See Fink, Frederick B., Paramount Knitting Mills. (See Zimmerman, Jacob, as-

Paramount Machine Company. (See Eanes, Hugh P.,

Paramount Machine Company. (See Eanes, Hugh P., assignor.)
Paramount Rubber Consolidated Inc. (See Roberts, Fred
T., assignor.)
Paramount Rubber Consolidated Inc. (See Roberts, F.
Paramount Rubber Consolidated, Inc. (See Roberts, F.
Paramount Rubber Consolidated, Inc. (See Roberts, William E., assignor.)
Paramount Rubber Consolidated, Inc. (See Schaefer, James, assignor.)
Paramount Parkile Machinery Co. (See Beucus, Abraham

James, assignor.

James, assig

Hi. Radiator cap. 1,625,497; Apr. 19.

Parent Caterpillar Company. (See Blackburn, Robert, assignor.)

Parentl, Armando, and Glevanni Bolognini, Genoa, Italy. Machine for the manufacture of cork taps. 1,634,640; Marchine for the manufacture of cork taps. 1,634,640; Parfumerle Rigaud, Inc. (See Kendall, William G., assignor.)

Parfumerle Rigaud, Inc. (See Kendall, William G., assignor.)

Paridon, Michael, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Mechanism for dipping match splints. 1,641,983; Sept. 6.

Paridon, Michael, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Mechanism for dipping match splints. 1,641,983; Sept. 6.

Paris, Peter, et al. (See Luther, John A., assignor.)

Parish, Winnifred B. (See Schwartz, Morris, assignor.)

Parkus, 1,651,540; Dec. 6.

Parkus, 1,651,540; Dec. 6.

Parkus, 1,651,540; Dec. 6.

Parkus, 1,650,647; Nov. 29.

Park, William B., assignor of one-half to C. M. Zink, Linton, Ind. Motor controller. 1,625,773; Apr. 19.

Parke, Davis & Company. (See Dox, Arthur W., assignor.)

Parke, Davis & Company. (See Dox, Arthur W., assignor.)

Parker, Arthur L., Cleveland, Ohio. Banding machine. 1,652,494; Dec. 13.

Lieuter, Arthur L., Cleveland, Ohio. Tube coupling. 1,619,755; Mar. 1.

Parker, Charles R., assignor to Wirt & Knox Mfg. Co., Philadelphia, Pa. Hose reel. 1,643,993; Cot. 4.

Parker, Claude E., Mountain View, assignor to Parker Penell Company, Inc., Los Angeles, Calif. Vending machine. 1,620,914; Mar. 15.

Parker and Company, Incorporated. Wrapping machine. 1,655,026; Dec. 6.

Parker, Francis D., Viroqua, Wis. Vehicle spring.
1.641.009; Aug. 30.
Parker, Frederick, assignor to Parker and Company (London) Limited, London, England. Waving hair.
Rel.6,646; Feb. 8.
Parker, Frederick R., Chicago, Ill. Electrical protective apparatus. 1.640,516; Aug. 30.
Parker, George D., Riverside, Calif. Automatic box-making machine. 1,652,373; Dec. 13.
Parker, Guy B., assignor to General Motors Corporation, Detroit, Mich. Spare-tire carrier. 1,642,460; Sept. 10.
S

ceal anotors corporation. Vehicle brake. 1,651,406; Dec. 6.

Parker, Harrison O., Tulsa, Okla., assignor to The Mathieson Alkali Works, New York, N. Y. Refining olls.

1,622,879; Mar. 29.

Parker, Harrison O., Tulsa, Okla., assignor to The Mathieson Alkali Works, New York, N. Y. Refining Parker, Harry J., assignor of one-fourth to K. Tritscholler, San Francisco, Calif. Extractor. 1,641,780; Sept. 6.

Parker, Howard. (See Brown, O. B., and Parker.)

Parker, Howard. Berlin, N. H., assignor to Brown Company, Portland, Me. Apparatus for handling pulp rubes or the like. 1,640,183; Aug. 25.

Parker, Howard, assignor to Brown Company, Berlin, Nov. 8.

Nov. 8.

Parker, Howard, assignor to Brown Company, Berlin, Nov. 8.

Parker, Howard, assignor to Brown Company, Berlin, Nov. 8.

Parker, Howard, assignor to Brown Company, Berlin, Nov. 8.

tubes or the like. T.640,183; Aug. 29.

Patter. H. Conduit joint and making the same. 1,648,057; Nov. 8.

Parker, H. Goward, assignor to Brown Company, Berlin, N. H. Conduit joint and making the same. 1,648,057; Nov. 8.

Parker, H. Goward, assignor to Brown Company, Berlin, N. H. Process of and machine for making fiber tubes, 1,651,407; Dec. 6.

Parker, Humphrey F., Philadelphia, Pa. Heat-transfer system for afrocat. Rel6,641; May 31.

Parker, John G., Richmond, Mich. Soll pulverizer. 1,619,310; Mar. 1.

Parker, John M., Richmond, Mich. Soll pulverizer. 1,621,730; Mar. 2.

Parker, John B., Washington, D. C. Washing apparatus for laboratories. 1,635,633; July 12.

Parker, John B., Washington, D. C. Washing apparatus for laboratories. 1,635,633; July 12.

Parker, John W., Barrington, R. I., assignor to Brown & Sharpe Mfg. Co., Providence, R. I. Micrometer gauge. 1,629,406; May 17.

Parker, Joseph F., deceased, Cincinnati, Ohio, J. R. Burgamy, administrator. Valve. 1,635,237; July 12.

Parker, John M., Barrington, R. I., assignor to Brown hall, Metuchen. N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Phase correction in synchronous telegraph systems. 1,636,784; July 12.

Parker, Lucian E., assignor to The Ohio Match Company, Wadsworth, Ohio. Slide feeder for match machines. 1,628,328; May 10.

Parker, Morgan, New York, N. Y. Scissors. 1,620,225; Mar. 8.

Mar. 8.

Parker, Orrel A., Cleveland, Ohio. Hib. structure for Mar. 8.

Parker, Corel A., Cleveland, Ohio. Hib. structure for Mar. 8.

Farker, Morgan, New York, N. Y. Scissors. 1,620,220; Mar. 8.
Parker, Morgan, New York, N. Y. Scissors. 1,620,226; Mar. 8.
Parker, Orrel A., Cleveland, Ohio. Hub structure for metal wheels. 1,651,541; Dec. 6.
Parker Pen Company, The. (See Blackman, Horace L., assignor.).
Parker Pen Company, The. (See Gilman, George W., assignor.).

Pen Company, The. (See Hauton, Paul S., as-

signor.) Company. (See Parker, Claude E., assignor.)

signor.)

Parker, Ralph D., San Francisco, Calif. Vehicle signaling window. 1,620,166; Mar. 8.

Parker, Ralzemond D., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Telegraph creuits. 1,634,229; July 5.

Parker, Ralzemond D., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Electrovision. 1648,055; Nov. 8.

Parker, Robert L., Oakland, Calif. Sectional railway car.

Parker Rost-Proof Company. (See Green, M., and Willard, assignors.)

Parker Rest-Proof Company. (See Green, M., and Willard, assignors.)
Parker Rust-Proof Company. (See Green, M., Jona, and Willard, assignors to Linotype and Machinery Limited, London, England. Sheet-delivery mechanism for printing machines. 1651,298; Nov. 29.
Parker, Wallace C. (See Yiberg, E. R., and Parker.)
Parker, Wallace C. (See Yiberg, E. R., and Parker.)
Parker, William A. Eric, Pa., assignor to Layne & Bowler Corporation. Mold for die-casting screening buttons. 1,646,592; Oct. 25.

Parker, William B., Placerville, Calif. Adjustable lipspray nozzle. 1,627,250; May 3,
Parker, William E., Brudepport Wis. Running-board carrier device. 1,650,848; Nov. 29.
Parker, William R., Butte Falls, Oreg. Firearm sight.
1,653,924; Dec. 27.
Parker, William S., assignor to Burson Knitting Company.
Rockford, Ill. Pattern cylinder for knitting machines.
1,635,667; June 28.
1,635,676; June 28.
Parker, William S., assignor to Burson Knitting Company.
Rockford, Ill. Cam-slide adjustment for knitting
machines. 1,635,164; Aug. 9.
Parkersburg Rig & Reel Company, The. (See Schwenlein, William, assignor.)
Parkersburg Rig & Reel Company, The. (See Wolfe,
Dell H., assignor.)
Parkersburg machine. 1,640,719; Aug. 30.
Parkes, Deric W. (See Robinson, H. W., and Parkes.)
Parkhurst, Charles E. (See Bridge, Wd. G., assignor.)
Parkhurst, Dr. Charles E. (See Bridge, W. G., and Pervier, assignors.)

Farkhurst, Dr. Charles E. (See Bridge, W. G., saftor).

Parkhurst, Karl C., Wichita, Kans. Traffic signal.

1,624,900; Apr. 12.

Parkhurst, Layton M., Indianapolis, Ind., assignor to Federal Gypsum Products (Company, Chicago, Ill. Gypsum Product and producing the same. 1,620,915; Mar. 15.

Parkh, Thomas D., Chelmsford, England, assignor

Mar. 15.

Parkin, Thomas D., Chelmsford, England, assignor to
Radio Corporation of America, Radio signaling apparatus. 1,630,364; May 31.

Parkinson, Daniel M., Dayton, Ohio. Window-shade
bracket. 1,638,742; Jug. 9.

Parkinson, James, Toronto, Ontario, Canada. Display
sign. 1,636,108; July 19.

Parkinson, Joseph C. (See Gelstharp, F., and Parkinson 3.

son.)

Bond, South C., Tarentum, Pa., assignor to Pitts-burgh Plate Glass Company. Control apparatus for leers. 1,631,151; June 7.

Parkter, Fritz E. Chicago Heights, Ill. Combination clock and scale. 1,634,639; June 28.

Farks, Birney, Pekin, Ill. Rim tool. 1,502,231; Nov. 22.

Farks, Juney, Muncie, Ind. Clothes support. 1,634,631; July 19.

Parks-Cramer Company. (See Hodge, William B., as-signor.)

sugnor.)

Parks, Darwin D., Staples, Minn. Cording attachment for sewing machines. 1,616,278; Feb. 1.

Parks, Dennis, St. Louis, Mo. Machine for gouging heet blanks. 1,652,181; Dec. 13.

Parks, Edward F., C. A. Brink, and G. N. Taylor, East Parks, Edward F., C. A. Brink, and Winding Company, Control, Mass. Winding machine. 1,651,099; Nav. 20. pany, B Nov. 29.

Parks, Frederick J., Cleveland, Ohlo. Machine for making envelopes. 1,651,627; Dec. 6.
Parks, George E., assignor of one-half to J. T. Parks, Pillager, Minn. Valve for cylinder pumps. 1,647,144;

Nov. 1.

Nov. 22.

Parks, Join T. (See Parks, George E. assignor.)

Parks, Joseph W., Altoona, Pa. Shipping case. 1,630,862;

May 31.

May 31.

Parks: Joseph W., Altoona, Pa. Shipping crate. 1,653,116; Dec. 20.

Parks: Joseph W., Altoona, Pa. Shipping crate. 1,653,116; Dec. 20.

Parks: Ostrander J., River Forest, assignor to General American Land. 22.

Royal Charles, Parks, Paul B., Ostrander Corp., Chicago, Ill. Pipe-securing Parks, Paul B., Osk Park, assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Thermally-operated circuit breaker. 1,644,443; Oct. 4.

Parks, Paul B., Oak Park, and J. Van Vulpen. assignors to Vapor Car Heating Company, Inc., Chicago, Ill. Pressure-actuated circuit breaker. 1,620,127; Mar. 8.

Parks. William J., and L. St. Evans. La Salle, Ill. Parlini, Alexander C. (See Heller, D., and Parlini, Parmele, William G., Seattle, Wash. Rotary steam engine. 1,647,464; Nov. 1.

Parmelee, Alfred E. (See Daudt, H. W., Parmelee, and Calcott.)

Calcott.)

Parmelec. Charles L., West Orange, N. J., assignor to Sinclair Refining Company, Chicago, Ill. Cracking of hydrocarbon oils. 1,613,718; Jan. 11.

Parnell, Frank G., assignor of one-half to Triumph Cycle nism for vehicle brakes. 1,637,349; Aug. 22.

Parodi, Achille, Genoa, Italy. Apparatus for cleaning potteries and the like. 1,627,112; May 3.

Parodi, Roberto, Genoa, Italy. Optical device for horizontal control of the company of the company

Parr. George T., assignor, by mesne assignments to Olat-son-Parr-Cohen Mg. Co., St. Paul, Minn. Powder pad. 1,546,107; Feb. I. Parr. George T., St. Paul, Minn., assignor to Parr Ple Company, rec-cream scoop. 1,639,809; Aug. 23.

Parr, Harris G., assignor to Fort Worth Well Machinery & Supply Co., Fort Worth, Tex. Well-drilling machine. Parr, Louis, Vancouver, British Columbia, Canada. Machine for straightening saws. 1,626,751; May 3. Parr Pie Company. (See Parr, George T., assignor.) Parris, Harry, St. Louis, Mo. Refrigerator. 1,618,468; Feb. 22.

Parris, Harry, Baltimore, Md. Trap. Sept. 27. 1.643.315:

Parris, Harry, Baltimore, Md. Trap. 1,643,315; Sept. 27.
Parrish, Ecquismin E., Honeygrove, assignor of one-half 1,931,152; June 7.
Parrish, Cecil C., assignor of forty-nine one-hundredths to J. J. Polkabla, Donora, Pa. Hanger clamp. 1,631,383; Dec. 27.
Parrish, Cecil C., assignor of Herbert Morris Incorporated, Buffalo, N. Y. Platform hoist. 1,613,901; Jan. 11.
Parrish, Jacob O., Pomona, Calif. Spring-eye bender. 1,619,537; Mar. 1.
Parrish, Vision B., Treat Barrington, Mass. Egg con-Parrish, Nelson B., Treat Barrington, Mass. Egg con-Parrish, William C., Port Arthur, Tex. Pumping system. 1,630,902; May 31.
Parrot, August, et al. (See Barry, Richard P., assignor.)
Parsch, Maxwell J., Detroit, Mich. Hat stretcher. 1,630,003; May 31.
Parrot, Or hearses. 1,637,239; July 26.
Parson Company, The. (See Vaughn, George A., assignor.)
Parson, Walter. (See Weimer, A. W., and Smith, as-Parss. Adelaide. Cardiff. South Wales. Initial. motif.

Parsons, Aeleside, Cardiff, South Wales. Initial, motif, and the like. 1.654,187; Dec. 27.
Parsons, Aebert R., assignor of one-half to P. Woods, Bonaporte, Iowa. Telescoping tire rim. 1,631,429; June 7.

Bonaporte, Iowa, Telescoping tire rim. 1,631,429; June 7.
Parsons, Arthur W., Miami, Fla. System for carrying out mimic bombing attacks. 1,625,678; Apr 19
Parsons, Ben G., Detroit, Mich., assignor to The Bendix Brake Company. Brake. 1,622,465; Mar. 29.
Parsons, Charles A., and S. 1,622,646; Mar. 29.
Parsons, Charles A., and S. S. Cook, Newcastle-on-Tyne, England, said Cook assignor to said Parsons. Condensing steam-power plant. 1,618,722; Feb. 22.
Parsons, Charles A., and S. S. Cook, Newcastle-on-Tyne, England, said Cook and said Kimber Newcastle-on-Tyne, England; said Cook and said Kimber Newcastle-on-Tyne, England; said Cook and said Kimber neglie. 1,616,332; Feb. 1.
Parsons, Charles A., S. Engelwood, N. J., and R. Stevenson, assignors to W. P. Deppe, New York. N. Y. Method and apparatus for determining equilibrium vaporization end point. 1,632,748; June 14.
Parsons, Charles J., Columbus, Ohio. Weatherproofing hardware. 1,622,646; Mar. 22.
Parsons, Charles J., Columbus, Ohio. Weatherproofing hardware. 1,622,646; Mar. 22.
Parsons, Edward B. (See Inskeep, W. D., and Parsons, Chicago, Ill. Egg product and making same. 1,630,756; May 31.
Parsons, Edward B. (See Inskeep, W. D., and Parsons.

Parsons, Frederick W., Cleveland, Ohlo. Fire-protective system. 1,617,415; Feb. 15.
Parsons, George H., New York, N. Y. Toy. 1,629,635;
Parsons, Harry N., Chicago, Ill., assignor to Marlin-Rockwell Corporation. Making ball retainers. 1,629,173; May 17.
Parsons, John H.. Ferndale, assignor, by mesne assignments, to G. A. Carlson, Detroit, Mich. Window Detroit, Mich. Window Carlson, Detroit, Mich. Window Detroit, Organical Composition L. Pulaski, Tenn. Combiaction can and bottle opener. 1,648,881; Nov. 8.
Parsons, Icon W., Cambridge, Mass., and S. P. Coleman, Corpus Christi, Tex., assignors to Standard Development Company. New York, N. Y. Purifying hydrocurbons, 1,640,720; Aug. 30.
Parsons, Newell B., La Grange, assignor to Belden Manufacturing Company, Chicago, Ill. Electric-lamp socket. 1,643,641; Sept. 2.
Parsons, Newell B., La Grange, assignor to Scott Paper Company. Conveyer, wrapping, and labeling machine. 1,620,523; May 24.
Parsons, Philip D., Philadelphia, Pa., assignor to Scott Paper Company. Cut-off sawing machine. 1,643,994; Oct. 4.

Parsons, Stuart W., assignor to The Stanley Works, New Britain, Conn. Door latch. 1,619,032; Mar. 1. Parsons, Stuart W., assignor to The Stanley Works, New Britain, Conn. Onve-knuckle hinge. 1,632,415;

New Britain, Coni. Ouve-knuckie nuge. 1002.10.

June 14.

Parsons, Stuart W., assignor to The Stanley Works, New Britain, Conn. Sealing device for box akraps.

1,049,363; Nov. 15.

1,049,363; Nov. 15.

1,049,363; Nov. 15.

2,100,363; Nov. 16.

2,100,363; Nov. 1

Pisscale, Pasquale, New York, N. Y., assignor to Dri-Steam Valve. Corporation. Steam valve. 1,647,465; Nov. 1.

Williams, Birmingham, Ala. Floor-surfacing statistics. 1,625,469; Apr. 13.

Paschen, Paul. (See Singer, K., Paschen, and Redme.) Pasce, William H., and J. Tatter, Chicago, Ill. Rotary pump. 1,613,767; Jan. 11.

Pasinl, Jerome, New York, N. Y. Ship. 1,623,888; Apr. 5.

Pasman, Abram N., assignor to Scovill Manufacturing Company. (Child, 1745; Peb. 1991), waste, and overcown and the company. (Child, 1745; Peb. 1991), waste, and overcown and the company. (Child, 1745; Peb. 1991), waste, and overcown and the company. (Child, 1745; Peb. 1991), waste, and overcown and the company. (Child, 1745; Peb. 1991), waste, and overcown and the company. (See Tussell, Mark N., assignor.) Plass & Seymour Inc. (See Thumpson, Don N., assignor.) Pass & Seymour Inc. (See Turner, William E., assignor.) W. (See Aubence, Harve C., Geirera.)

signor.)
Passaic Metal Ware Company. (See Autouch, Charles Passaic Metal Ware Company. (See Bubmsack, Harry C., ássignor.)
Passer, H., 1999.
Pastering, O'lttorio, San Francisco, Calif. Window.
1,629,479; Apr. 26.
Paszkowski, Paul, Irvington, N. J., assignor to Westinghouse Electric & Manufacturing Company. Laminated core. 1,654,306; Dec. 27.
Passer, 1999.
Passkowski, Paul, Irvington, Making fatty acids from hydrocarbons. 1,627,452; May 3.
Patant, Georges L. E., Paris, France. Device for the simultaneous obtainment of the compression and the circulation of gaseous mixtures. 1,619,631; Mar. 1.
Patanik, David, Brooklyn, N. Y., 8asb., 1,619,631; Mar. 1.
Pacsek, Kans, Clamp. 1,645,621; simultaneous obtainment of the compression and excirculation of gaseous mixtures. 1,633,988; June 28.
Patesink, David, Brooklya, N. X. Sesh. 1,619,631;
Patch, Albert C., Topeka, Kans. Clamp. 1,645,621;
Oct. 18.
Patch, F. R. Maunifacturing Company. (See Crane, LesPatchen, John C. (See Graham, David F., assignor.)
Pateman, Arthur, assignor to Imperial Typewriter Company Limited, Leicester, England.
Ribbon-reversing
mechanism. 1,634,593; July 5.
Patemande, Amable O., Torouto, Torito, Canada
Split stovepipe. 1,642,215, Sept. 13.
Patenaude, Hector F., Bisbee, Arlz.
hair clippers. 1,628,421; May 10.
Patenaude, Julien, Waterbury, Conn. Kitchen table.
1,623,850; Apr. 5.
Patenaude, Julien, Waterbury, Conn. Kitchen table.
1,623,850; Apr. 5.
Patenaude, Julien, Waterbury, Conn. Kitchen table.
1,623,850; Apr. 5.
Patenaude, Julien, Waterbury, Conn. Kitchen table.
1,623,850; Apr. 5.
Patenaude, Matter Company, The. (See Ross. Frederick N.,
Patena Musting, Company, The. (See Ross. Frederick N.,

Patenaude, Matter Company, The. (See Ross. Frederick N.,

Patenaude, Matter Company, The. (See Ross. Frederick N.,

Matter Musting, Company, The. (See Ross. Frederick N.)

assignor.)
Patent Button Company, The. (See Ross, Frederick N.,

Patent Button Company, the assignor.

Patent Novelty Company, (See Cowan, Arch D., assignor.)

Patent Novelty Company, (See Kroff, Leonard D., as-

signor.)
Patent-Treuhand-Gesellschaft für Elektrische Glühlampen
m. b. H. (See Loewenherz, Siegmund, assignor.)
Patent-Treuhand-Gesellschaft für Elektrische Glünlampen
m. b. H. (See Loewenherz, S., and Stockmayer, as-

signors.)
Patentaktiebolaget Central Smörjning. (See Clausen, Carl H., assignor.)

Patented Machinery Development Corporation. (See Schwarzmann, Leon, assignor.) Paterson, Arthur R. (See Vidinghoff, Charles A., as-Dougald S., Philadelphia, Pa., and G. B. Yonkers, N. Y. Filing machine. 1,624,846;

Paterson, Dougald S., Philadelphia, Pa., and G. R.
Paterson, Dougald S., Philadelphia, Pa., and G. R.
Apr. 12
Paterson, May H. (See Paterson, William and M. H.)
Paterson, Orian T. (See Schell, J., and Paterson, Paterson, William and M. H., Oakland, Calif. Automobile and truck traction attachment. 1,652,133; Dec. 6.
Patherson, William and M. H., Oakland, Calif. Automobile and truck traction attachment. 1,652,132; Dec. 6.
Patherson, William and S. (163,158; Root Support for Control of the Control of Con Paterson, Petsche, Apr. 12.

June 14.
Patscheider, Walter A., Auburndale, Mass. Elefor steam boilers and superheaters etc. Electric heater

Apr. 26.
Pattay, Marc A., and E. Jaquemont, Geneva, assignors to Magnetos Lucifer, Societo Anonyme, Carouge-Geneva, Switzerland, Magneto-electric machine. 1,648.564;

Switzerman. Angero-electric machine. 1,043-03-1;
Patten, Charles H., assignor to Rex Manufacturing Company, Providence, R. I. Extension device for flexible bracelets. 1,636,646; July 19.
Patten, Charles H., assignor to Rex Manufacturing Company, Providence, R. I. Mechanically-operated lead pencil. 1,636,704; July 26.
pencil. 1,636,704; July 26.
pencil. 1,636,704; July 26.
pencil. 1,636,704; July 26.
Patten, William F., Washington, D. C. Tollet novelty. 1,632,909; June 21.
Patten, William F., Washington, D. C. Syringe. 1,646,256; Oct. 18.
Hadron, Georgia Prainty Montardy, Czechoslovakia. Steel. 1,625,741; Apr. 10.
Patterson, Arthur, Covington, Ky. Closet. 1,651,901; Dec. 6.

Patterson, Arthur, Covington, Ky. Closet. 1,651,901; Dec. 6. Carl. Abbuquerque, N. Mex. Handsaw. Patterson, Charley T., Springfield, Mo. Moisture guide for incubators. 1,625,420; Apr. 19. Patterson, Edwin M., Carnegie, Pa. Holder for feeding bottles. 1,649,852; Nov. 22. Patterson, Froundry & Machine Company, The. (See Patterson, Frank, Richfield Springs, N. Y. Weeder. 1,642,261; Sept. 13. Patterson, Frank, Geneseo, N. Y. Chicken feeder. Patterson, Frank, Geneseo, N. Y. Chicken feeder. Patterson, Trank, Geneseo, N. Y. Chicken feeder. Patterson, John Carlott, Geneseo, Carlott, Sept. 14. Patterson, John, Oakfand, Calif., assignor to John Patterson, John Fee, Carlott, Calif. 1,623,203; Apr. 5.

Apr. 5. Patterson, John, Inventions, Inc. (See Patterson, John,

assignor.) ohn L. assignor to Richmond Beverage Machine Carporation, Richmond, Va. Liquid-dispensing apparatus. 1.569,151; Nov. 22.
Patterson, John W. (See Ambrose, R. B., and Patterson, John W. (See Ambrose, R. B.).

Patterson, Luther, assignor to H. F. Smith, Harris County, Tex. Rotary, 1,639,268; Aug. 16.

Patterson, M. F., Dental Supply Co. (See Holman, Frank

Patterson, M. F., Dental Supply Co. (See Holman, Frank L., assignor.)
Patterson, Martin L., Bogota, N. J., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Search-Hight truck, 1622,332 Mar. 29.
Hight truck, 1622,333 Jan. 18.
Hight to J. B. Bell, Montreal, Quebec, Canada. Vestibule-car door and traps, 1614,686 Jan. 18.
Patterson, Robert H., Atlanta, Ga. Bottle, Des. 72,385;
Apr. 5.

Patierson, Robert In. Scientific Stewart, Wilburton, and twenty-five per cent to M. R. Stewart, Wilburton, and twenty-four per cent to M. R. Stewart, Wilburton, and twenty-four harvester. 1,639,055; Aug. 19.
Patterson, Samuel C., Judson, N. C. Cyllader lock. 1,652,953; Dec. 18.

per cent to F. Benty, Hutchinson, Rans. Broom-cornharvester. 1,639,055; Aug. 16.
Patterson, Samuel C., Judson, N. C., Cylinder lock.
1,652,953; Dec. 13.
Patterson, Thomas S., Malaga, N. J. Rotary pump.
1,643,967 Oct. 13.
Company, Rochester, N. Y. Optical instrument.
1,031,329; June 7.
Patterson, William L., assignor to Bausch & Lomb Optical
Company, Rochester, N. Y. Projection apparatus.
1,031,329; June 7.
Patterson, William L., assignor to Bausch & Lomb Optical
Company, Rochester, N. Y. Company, Rochester, N. Y. Case for hemacytometer and similar apparatus. 1,639,436; Aug. 16.
Patterson, William L., Rochester, assignor to Bausch
& Lomb Optical Co., Rochester, N. Y. Colorimeter.
1,643,515; Sept. 27.
Pattison, Albert W., Lockport, N. Y. Combined bumper
and advertising medium. 1,647,014; Oct. 25.
Patton, Grafton, et al. (See Lonnux, John L., assignor.)
Patton, Carl B. (See Blaine, J. G., and Patton.)
Patton, Carl B. (See Blaine, J. G., and Patton.)
Patton, Carl B., (See Blaine, J. G., and Patton.)
Patton, Carl B., (See Blaine, J. G., and Patton.)
Patton, Tarfon, et al. (See Lonnux, John L., assignor.)
Patton, Hall, T., assignor to The Bishop & Bahocek Company, Cleveland, Ohio, Method of and apparatus for
charging hollow expansible elements. 1,629,174; May
1651 Options of the Similpaham, Ala, assignor to The Joy
Patton, Luther, Birmingaham, Ala, assignor to The Joy

Patton, Patch Luther, Birmingham, Ala., assignor to Tube Joy Company. Thre-patching appliance. 1,651,933;

Dec. 6.
Patus, Aiexander, and L. Nagy, assignors of one-third to N. E. Nay, South Bend, Ind. Wheel brake. 1,629,407; May 17.
Paty, John G., St. Louis, Mo. Indicating instrument. 1,641,454; Sept. 6.
1654,807; Dec. 25.
Patwalh, Erich. (See Obergfell, G., and Patzwahl.)
Paul, A. C., et al, trustees. (See Curtis, Lewis E., assignor).

Paul, A. C., et al, trustees. (See Curtis, Lewis E., assignor.)
Paul, Carl W., New York, N. Y. Automobile mirror system. p. 617,270 Feb. 8.
Tem. p. 617,270 Feb. 8.
Paul, Edward C., Melrose, assignor to Anderson Manufacturing Company, Everett, Mass. Spring cover. 1.614,150; Jan. 11.
Paul, Jennie H., Amarillo, Tex. Body applicator. 1.627,618; May 10.
Paul, Joseph D., Philadelphia, Pa. Grade-crossing gate. 1.628,964; May 3.
H. Chengo, H., Display device. 1.652,636; Dec. 13.
Paul, Sydney. (See Twyman, B W. and Paul.)
Paul, William E., Schenectady, N. Y., assignor to General Electric Company, Circuit mierrupter, 1,622,851; Apr. 5.
Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul, William L., Bergeley, Calif., assignor to Deere & Paul.

Apr. 5.
Paul, William L., Berkeley, Callf., assignor to Deere & Company, Moline, Ill. Subsoil plow. 1,625,278;

Apr. 19.
Apr. 19.
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Gang plow. 1,627,924; May 10.
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Weed-cutting device. 1,628,422;
May 10.
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Disk harrow. 1,639,104;
Aug. 16.

o Deere & 1,639,104; Aug. 16. ul. William L.

il, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Mounting for disks. 1,641,688; ept. 6.

Sepi. 6.
Paul, William L., Berkeley, Calif., assignor to Deere and Company, Moline, Ill. Cultivator. 1,644,686; Oct. 4.
Paule, Julius J., North Baltimore, Ohio. Wrench.
1,644,981; Paule, J., Streator, Ill. Poultry feeder and exerciser. 1,620,686; Mar. 15.
Pauli, Heinrich, Berlin, assignor to Stemens & Halske Anny. Transmitter Streenster, page 1,620,686; Mar. 15.
Pauli, Frederick. (See Fall, C., and Pauli.)

Paull, Wallace H., Erdington, Birmingham, assignor to The Duniop Rubber Company, Limited, Birmingham, England, Manulacture of rims. 1649,922; Nov. 22. Patisen, Adolph, San Carlos, Calif. Casing for artesian Paulson, Arthur New York, N. Y. Mechanical box. 1,653,967; Dec. 27. Paulson, Charles J., Brooklyn, N. Y. Vending machine. 1,617,496; Feb. 15. Paulson, Charles J., Brooklyn, N. Y. Vending machine. 1,617,496; Feb. 15. Paulson, Charles J., Brooklyn, Minn. Storm shield for pneumatic tire. 1,619,433; Mar. 1. Paulson, Olar I. 635,685; Aug. 9. Paulson, Martin L., Fort Snelling, Minn. Punctureproof pneumatic tire. 1,619,433; Mar. 1. Paulson, Ole B., Great Falls, Mont. Hay-harvesting apparatus. 1,637,648; July 26. Paparatus. 1,637,648; July 26. Paulson, Walter H., Essmond, S. Dak. Adjustable wrench. 1,631,384; June 7. Paulson, Walter H., Sessingh, S. Dak. Adjustable wrench. 1,631,384; June 7. Paulson, Walter H., See Lathrop, H. D., and Paulson. Paulson, Walter H., See Lathrop, H. D., and Paulson. Paulson, Walter H., See Kanch, R. 484, Sept. 20. Paulus, Charles L. (See McCune, M., and Paulus, Paulus, Charles L. (See McCune, M., and Paulus, Paulus, Charles L., Dayton, Ohio. Bomb or flare rack. 1,643,648; Sept. 27. Paulus, Charles L., and R. Kauch, Dayton, Ohio. Manually-adjustable impulse generator. 1,622,121; Mar. 22. Paulus, Charles L., and R. Kauch, Dayton, Ohio. Menually-adjustable wind-vane sight. 1,650,648; Nov. 29. Paulus, Charles L., and R. Kauch, Dayton, Ohio. Menually-adjustable impulse generator. 1,622,121; Mar. 22. Paulus, Charles L., and R. Kauch, Dayton, Ohio. Menually-adjustable wind-vane sight. 1,650,648; Nov. 29. Paulus, Charles L., and R. Kauch, Dayton, Ohio. Menually-adjustable impulse generator. 1,622,121; Mar. 22. Paulus, Charles L., and R. Kauch, Dayton, Ohio. Menually-adjustable impulse generator. 1,622,121; Mar. 22. Paulus, Charles L., and R. Kauch, Dayton, Ohio. Menually-adjustable impulse generator. 1,622,121; Mar. 20. Paulus, Charles L., and R. Kauch, Dayton, Ohio. Menually-adjustable impulse

assignor.)
auly Jail Building Company. (See Tracy, Michael J., Pauly

Pauly and Pauly Cheese Company. (See Pauly, Charles, assignor.)

assignor.)
Pauly Peter J., assignor to Pauly Jail Building Company, St. Louis, Mo. Composite steel bar. 1,630,031; May 31.
Paupa, Joseph, deceased; Union Trust Company. executor, assignor to J. Paupa and A. K. Volseh, Chicago, Ill. Automatic vending machine. 1,648,316; Sept. 27.
Pause, Ernst, Cologne-Mulheim, Germany. Device for Secting a sterile closure for preserve containers.
Pauses, Edmond, et al. (See Bongers, Arnold H., assignor).

effecting a sterile closure for preserve containers.
1,623,539; May 17.
1,623,539; May 17.
1,624,539; May 17.
1,624,639; May 17.
1,624,639; May 17.
1,624,639; May 17.
1,624,649; May 1,624,639; May 21.
1,624,649; May 1,624,649; May 21.
1,624,649; May 21.
1,624,649; Mar. 22.
1,624,649; Mar. 22.
1,624,649; Mar. 22.
1,624,649; Mar. 24.
1,624,649; Mar. 24.
1,624,649; Mar. 25.
1,624,649; Mar. 26.
1,624,649; Mar. 26.
1,624,649; Mar. 27.
1,625,666; Apr. 26.
1,624,649; Mar. 28.
1,624,649; Mar. 28.
1,624,649; Mar. 28.
1,624,649; Mar. 28.
1,625,666; Apr. 26.
1,625,686; A

Pawsiat, Ewait, Control of Acturing Company. Tire-repair tool. 1,019,000, Mar. 1
Mar.

Payne, Caleb, assignor to Gypsum Engineering & Manufacturing Co., Chicago, Ill. Continuous self-cleaning mixer. 1,628,632; May 10.

Payne, Caleb, assignor to Gypsum Engineering & Manufacturing Co., Chicago, Ill. Making gypsum stucco Rayne, Chale, assignor to Gypsum Engineering & Manufacturing Co., Chicago, Ill. Making gypsum stucco Payne, Charles E., Lew York, N. Y. Digging apparatus. 1,647,840; Nov. 1.

Payne, Charles H., Cincinnati, Ohio. Receptacle for paste or mucilage. 1,613,358; Jan. 4.

Payne, Clarence Q., New York, N. Y. Electromagnetic clutch. 1,622,261; Mar. 22.

Payne, Clarence Q., New York, N. Y. Electromagnetic clutch. 1,622,261; Mar. 27.

Apparatus for loading transmission circuits. 1,613,958; Jan. 11.

Payne, Edward B., Great Neck, assignor to Western Electric Company, Incorporated, New York, N. Y. Inductance coll and manufacturing the same. 1,624,560; AC, and G. E. Page, Peru, Ind. Oil burner. 1,634,638; Dec. 20.

Payne, El Roy L., assignor to Payne Furnace and Supply Company, Los Angeles, Calif. Electrically controlled valve for gas burners, etc. 1,614,802; Jan. 18.

Payne, Frank E., assignor to Crane Packing Company, Chicago, Ill. Facking. 1,653,439; Dec. 20.

Payne, Halsey D., A. W. De Clerque, and S. T. Sjoberg.

assignor.)
Payne, Halsey D., A. W. De Clerque, and S. T. Sjoberg,
Chicago, Ill., assignors, by mesne assignments, to Westinghouse Electric & Manufacturing Company, East
Pittsburgh, Pa. Washing machine with folding wringer,
Re16,776; Oct. 18.
Payne, Harold T., Sacramento, Calif. Doll. 1,615,401;
Jan. 25.

Payne, James F. (See Reiter, J. M., Nanney, and Payne.)
Fayne, John S., Bridland Park, N. J. Throttle-control
Payne, John S., Midland Park, N. J. Brake-operating
mechanism. 1,628,060; May 10.
Payne, Lindsey B., Carmel, Calif. Display cabinet.
1,613,629; Jan. 4.
Fayne, Minton M., et al. (See Bellman, John A., as-

signor.)

Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Yleldable giveway for weft-replenishing looms. 1,633,646; June 28.

Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Let-off mechanism for looms.

Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Wuftple-needle weft developed to the control of the contr

signor.)
Payne, Rosco, Macedonia, Ill. Road-bed-building machine.
1,622,970; Mar. 29.
Paynter, Albert J. Osborne, Kans. Rotary sieve.
Paynter Corporation.
(See Paynter, John C., assignor)
Paynter, John C., assignor to Paynter Corporation, Philadelphia, Pa. Tire mold. 1,632,310; June 14.
Pays, Achille, Paris, France. Reciprocating-saw machine more particularly for the sawing of metals. 1,651,101;
Nov. 29.

Payson, Aurin E., and W. R. Hastedt, assignors, by mesne assignments, to The American Thermos Bottle Company, Norwich, Conn. Container. 1,639,529; Aug. 16.

Payson, Edward, Philadelphia, Pa. Self-closing valve nozzle. 1,649,726; Nov. 15.

Payson, Edward B., assignor of one-half to M. T. Winston, Spooner, Wiss. Staple. 1,639,530; Aug. 16.

Payton, Harry, Providence, R. I. Arm rest. 1,650,385; Nov. 22.

Nov. 22.
Payton, Victor R., Ardmore, Okla, Razor compact. 1,620,389; Mar. 8.
Payzant, Henry H., Everett, Wash, Floor-laying machine. 1,631,501; June 7.
Payzant, Henry H., Everett, Wash, assignor to Wood Conversion Company, Cloquet, Minn. System of feed control. 1,627,925; May 10.
Payzant, Henry H., Everett, Wash., assignor to Wood Conversion Company, Cloquet, Minn. Distributing hood. 1,627,926; May 10.
Payzant, Henry H., Everett, Wash., assignor to Wood Conversion Company, Cloquet, Minn. Distributing hood. 1,627,926; May 10.
Payza, Arbbal J. S. and L. J. D., and A. P. Ordoñez, Ventilating of Contents to the like to the conversion of Conversion of Contents of

Peabody Engineering Corporation. (See Bixby, Alvan H.,

assignor.)
Peahody Engineering Corporation. (See Peahody, Ernest H., assignor.)
Peahody Engineering Corporation. (See Seaver, E., and Mazzur, assignors.)
Peahody, Engineer H., Pelbam Manor, assignor to Peahody Engineering Corporation, New York, N. Y. Apparatus and method for burning liquid ruel. 1,628,424; May 10.

Penbody, Ernest H., Pelham Manor, assignor to Peabody
Engineering Corporation, New York, N. Y. Air register. 1,630,056; Aug. 16.
Peabody, Ernest H., Pelham Manor, assignor to Peabody
Engineering Corporation, New York, N. Y. Viscosimeter. 1,639,067; Aug. 16.
Peabody, George M., Hyde Park, Mass., assignor to
Peabody, George M., Hyde Park, Mass., assignor to
1,624,050; Sept. 13.
Peabody, James A., Evanston, III., assignor to General
Railway Signala Company. Control means for light
signals. 1,627,453; May 3.
Peace, Thomas J., Nevada, Mo. Heating apparatus.
1,622,807; Mar. 29.
1,622,807; Stanley J., London, and A. Skipsey, Woking,
England. Vulcanization of caoutchouc. 1,653,821;
Dec. 27.

Jan. 4.

Penchey, Stanley J., London, and A. Skipsey, Woking, English and Control of caoutchoue. 1,653,821; Peacock, Albert R., Rome, Ga. Refrigerator door. 1,629,408; May 17.

Peacock, Arthur W., Albany, N. Y. Producing and maintaining a sanitary condition in milk pipes and Peacock, Frank Croydon, war Sydney, New South Wales, Australia. Bumper bar and rear fender for automobiles. 1,637,644; Aug. 2.

Peacock, Marshall H., Detroit, Mich. Signal. 1,651,408; Dec. 6.

Peadon William H., Oklahoma City, Okla., assignor to Peadon and the Lubricating Oll Equipment. Dispensing vessel. 1,634,429; Dec. 27.

Peake, Edward S., assignor to The Kligore Mfg. Company, Westerville, Ohio. Toy pistol. 1,647,577; Nov. 1.

Peale, Rembrandt, (See Davis, Kennetti, assignor.)

Peale, Rembrandt, et al. (See Peale, Richard, assignor.)

Pearce, Clarence H., Accokeek, Md. Hub and brake mechanism. 1,617,648; Feb. 15. Pearce, James W., assignor to Goodman Manufacturing Company, Chicago, Ill. System for mining. 1,622,837; Mar. 29.

Pearce, James W., assignor to Goodman Manufa Company, Chicago, Ill. System for mining. 1,6: June 21.

June 21.

Pearce, Louis M., Houston, Tex. Back-pressure valve, 1,615,811; Jan. 25.

Pearce, Louis M., and J. O. McPherson, Houston, Tex. Casing head 1,642,745; Sept. 20.

Pearce, Richard T., Covington, Ky. Splice for wice ends and the late 1,646,100; Ch. Splice for wice ends and the late 1,646,100; Ch. Splice for wice ends and the late 1,646,100; Ch. Splice for wice ends and the late 1,646,100; Ch. Splice for wice ends and the late 1,646,100; Ch. Splice for wice ends and the late 1,642,825; Sept. 20.

Co., Portland, Oreg. Weiding mandrel. 1,042,825; Sept. 20.

Pearen, William H. E. (See Gordon, B. D., and Pearen.)

Pearl, Frank A., Madison, Wis. Coaster-wagon steering

Pearl, Frank A., Martin Milwaukee, Wis. Convertible

coaster wagon. 1,625,422; Apr. 19.

Pearl, Samuel. (See Bolozky, S., and Pearl.)

Pearsall, William A., jr., Detroit, Mich. Running-board

lamp. 1,623,131 Apr. S.

Harghatients by bodily movements. 1,641,093; Aug. 30.

Pearson, Albert. (See Stone, Gunnard, assignor.)

Pearson, Albert. (See Stone, Gunnard, assignor.)

Pearson, Albert. (See Stone, Gunnard, assignor.)

Pearson, Carl, E., Cleveland, Ohio, assignor to The

Cleveland Trust Company, trustee. Adjusting means

Company, Chicago, Ill. Lifting device for tractor

mowers. 1,627,711; May 10.

Company, Chicago, Ill. Lifting device for tractor

Pearson, Charles F., Flushing, N. V. Plug attachment.

1,618,723; Feb. 22.

1.618,723; Feb. 22.
Pearson, Charles H. See Bold. Frederick W., assignor.)
Pearson, Chester L. Beverly, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. LastPearson, Edith, San Francisco, Calif. Medicine-dropper
holder. 1,043.724; Feb. 22.
Pearson. Edmund C., and J. Childs, assignors to Vickers
Limited, Westminster, London, England. Slips for
supporting drill pipes in well-boring apparatus.
1,643,730; Sept. 27.

Pearson, Eric A., Portland, Oreg. Method and apparatus for changing main sheaves and cables on lift bridges.

Penrson, Eric A., Portland, Oreg. Method and apparatus for changug main sheaves and cables on lift bridges. 1,620,284; Mar. 8.
Pearson, Brick, Minneapolis, Minn. Tread-belt tractor. 1,632,674; June 14.
Pearson, Frank C., assignor to General Motors Research Corporation, Dayton, Ohlo. Hydraulic brake system for motor vehicles. 1,635,221; July 12.
Pearson, Gardner W. (See Proctor, John H., assignor; Wehicles. 1,627,113; May 3.
Pearson, George D., Montreal, Quebec, Canada. Automobile tire. 1,625,679; Apr. 19.
Pearson, Herbert B., Brooklyn, N. Y., assignor to Ship Owners Radio Service, Inc., New York, N. Y. Inductance-coil attachment. 1,630,903; May 31.
Pearson, Herman E., Waysata, Minn. Traction driving main for the service of the serv

Searing construction.

Pearson, Lenora J., Seattle, Wash. Hairpin. 1,618,385; Feb. 22.

Pearry, Itay P., Upper Montelair, N. J., assignor to The Barrett Company. Coking pitch. 1,650,127; Nov. 22.

Pease, Emma C., Nantucket, Mass. Towel. 1,615,721; Jan. 25.

Pages P. F., Inc. (See Pease, Fred F., assignor.)

Jan. 25.
Pease, F. F., Inc. (See Pease, Fred F., assignor.)
Pease, Fred F., East Braintree, assignor to F. F. Pease
Inc. Boston, Mass. Alr-cleaning apparatus. 1,202,780;
Mar. 15.
Pease, Fred F., East Braintree, assignor to F. F. Pease
Inc., Boston, Mass. Vacuum cleaner. 1,631,549;
June 7.

Pease, Isaac M., Cincinnati, Ohio. Truss pad. 1,627,992; May 10.

Pease, Isaate M., Cincinnati, Ohio. Truss pad. 1,627,992; May 10.
Pease, Isaac M., Cincinnati, Ohio. Arch and ankle support. 1,639,193; Aug. 16.
Pease, Isaac M., Cincinnati, Ohio, assignor to The Ohio Truss Company. Pad for trusses. 1,648,361; Nov. 8.
Pease, Isaac M., Cincinnati, Ohio, assignor to The Ohio Truss Company. Pad for trusses. 1,648,361; Nov. 8.
Pease, John A., et al. (See Ewile, Oscar C., assignor.)
Pease, John A. (See Weeks, Wallace M., assignor.)
Pease, John A., Syracuse, N. Y., Bottlee dosure. 1,644,542; Oct.
Oct. 4, New Haven, V., Bottlee dosure. 1,644,542; Oct.
Apple-paring machine. 1,615,914; Feb. 1.
Pease, Uninified N. (See Pease, John W., assignor.)
Peasely, Frank O., New Hampton. Mo. Clutch-control Peasiey, Frank O., New Hampton. Mo. Clutch-control Peating, Harrison B. (See Allsaof. Charles F., assignor.)
Peeccerlio, Dominick, New Haven, Conn. Control system. 1,618,621; Feb. 8.
Pechkranz, Rodolphe, Geneva, Switzerland. Electrolyzer electrode of the filter press type. 1,643,909; Sopt. 27.
Pecina, Rudolph F., and E. V. Carlson, Los Angeles, Charles E., Suffern, N. Y. Washing paper 16317573. June 27.

May 3.

Peck, Charles B., Suffern, N. Y. Washing paper.

1.631.757; June 7.

Peck, Charles W. (See Stackhouse, George A., assignor.)

Peck, Elmer E., Noosho, Mo. Suspender attachment.

1.636.712; July 26.

Peck, Hannaford & Peck Company, The. (See Peck,
Robert E., assignor.)

Peck, Joe H., Lisco, Nebr. Animal trap. 1.614,896;

Jan. 18.

Peck, Joe H., Lisco, Nebr. Animal trap. 1,614,896; Jan. 18.
Peck, John M., assignor to The Porcelain Insulator Corporation, Lima, N. Y. Suspension insulator. 1,645,447; Oct. 11.
Peck, John M., assignor to The Porcelain Insulator Corporation, Lima, N. Y. Sectional insulator. 1,649,853: Nov. 22.

Peck, John M., Honcove Falls, assignor to The Porcelain Insulator Corporation, Lima, N. Y. Suspension insu-lator, 1,653,117; Dec. 20. Peck, Lee H., Cleveland, Ohio. Switch for automobile signal lamps. 1,646,419; Oct. 25.

signor.)
Peck, Raymond S., Vicksburg, Miss, Air-regulating fire
shield. 1.652,322; Dec. 13.
Peck, Robert E., assignor to The Peck, Hannaford &
Peck Company, Cincinnati, Obio. Ventilator canopy.
1.632,381; June 14.
Peck, Robert G. (See Brown, A., and Peck.)
Peck, Robert G. and A. Brown, assignors to The Aridor
Company, Chicago, Ili. Display receptacle. 1.623,330;
May 10.

Peck, Rulaf F., assignor to The Peck Milling & Coal Co., Cassignelia, Mich. Toy boat and its manufac-Peck, Samuel S., Honolilla, Hawall, Strainer for sugar julces and the like. 1,619,484; Mar. 1. Peck, Samuel S., Honolilla, Hawall. Strainer for sugar julces and the like. 1,649,556; Oct. 25. Peck, Shoc Company. (See Cristallial, Charles O., as-

Peck Stow & Wilcox Co., The. (See Ellrich, Charles N.,

Peck Stow & Wilcox Co., The. (See Ellrich, Charles N., assignor.)
Peck, William A., New Haven, Conn. Extension-bit Bioder. 1,1651,777; Dec. 6.
Peckenpaugh, John F., Cedar Rapids, Iowa. Window platform. 1,625,423; Apr. 19.
Diric Dental Manufacturing Co., Philadelphia, Pa. Dentist's anyil. 1,626,734; May 3.
Pecker, Joseph S., assignor of one-third to M. Katzander, one-third to E. Bloss, and one-third to G. Jellinek, Philadelphia, Pa. Folding chair. 1,562,146; June 14.
Philadelphia, Pa. Golding chair. 1,652,146; June 14.
Philadelphia, Pa. Oli burner, 1,651,628; Dec. 6.
Peckham, Charles F., Providence, R. I. Differential valve. 1,613,478; Jun. 4.
Peckham, Charles F., Providence, R. I. Fusible link or Peckham, Charles F., Jan. 4.
Peckham, Charles F., Jan. 4.
Peckham, Charles F., Jan. 4.
Dillegar, L. and B. J. Palmer, Philmont, N. Y.

strut. 1,613,476; Jan. 4.

Peckham, Frank J., Troy, Ohio. Fishing float. 1,632,502; June 14.

Peckham, Frank J., Troy, Ohio. Fishing float. 1,632,502; June 14.

Pecklatify marker and spacer. 1,624,622; Apr. 12.

Pedeletty, Walter B., Mason City, Iowa. Centrifugal fan. 1,643,317; Sept. 27.

Pedersen, Albert B., Salt Lake City, Utah. Curling iron. 1,618,306; Feb. 22.

Pedersen, Florian B., and H. P. Andersen, Alameda, Calif. Universal joint. 1,621,428; Mar. 15.

Pedersen, Harald, Trondhjem, Norway, assignor to Aluminum Company of America, Pittsburgh, Pa. Manufacturing aluminum hydroxide. 1,618,105; Feb. 15.

Luring aluminum hydroxide. 1,618,105; Feb. 15.

Luring aluminum hydroxide. 1,618,105; Feb. 15.

Luring aluminum hydroxide. 1,628,623; Apr. 12.

Pedersen, James A. and K. A., Tacoma, Wash. Front axle and spindle assembly. 1,633,041; Dec. 20.

Pedersen, John, St. Louis, Mo. Electric sign. 1,627,993; May 10.

Pedersen, John, St. Louis, Mo. Gate mechanism for freight elevator hatchways. 1,627,994; May 10.

Pedersen, Peder O., Frederlisberg, Denmark, Radiosier, Radiosier, Denmark, Radiosier, Denmark, Radiosier, Radiosier, Denmark, Radiosier, Pedersen, James A., and

C. A.)
Pederson, Peder O., Frederiksberg, Denmark. Radiosignaling antenna system. 1614.990; Jan. 18.
Pedersen, Waiter B., Mount Vernon, N. Y. Golf club. 1.616,920; Feb. 8.
Pederson, Billing, Leadville, Colo. Self-loading dumping skip or hopper. 1,616.466; Feb. 8.
Pederson, Harold G. (See Liewellyn, L. M., and Pederson.)
Pederson, Harold G., Syracuse, N. Y. Counterbalancing device. 1,645,254; Oct. 11.
Pederson, Howard L., et al. (See Erickson, August, assignor.)

Pedierson, Howard L, et al. (See Erickson, August, as-signor.). Pedigo, Benjamin H., Jackson, Tenn. Netting door for locomotive smoke boxes. 1,652,550; Dec. 18. Pedigo, Walter, et al. (See Donnelson, Blanche, assignor.) Pediar Pepole Limited, The. (See Hall, William H., assignor.)

signor.)

Pedrick, Howard A., Bala, assignor to Ey-Air-Tight Calking Co., Philadelphia, Fa. Calking machine. 1,632,569;

Pedulla, Nicola, Meyersdale, Pa. Mining machine. 1,638,361; Aug. 9.

Peebles, Dayld D. (See O'Donnell, E. M., and Peebles, Prank W. L., assignor to J. L. Hopkins, trustee, St. Louis, Mo. Vacuum packing appraratus. 1,631,855: St. Louis, Mo. June 7.

St. Louis, Mo. Vacuum packing apparatus. 1,631,885: June 7.

Peebles, Joseph B., and C. M. Stewart, Portsmouth. Ohio's said Stewart assigner to said Peebles. Lawn Chief and Chi

Peerless Light Company. (See Herst. Edward. assignor.) Peerless Machinery Company, The. (See Lautenschlager, William F. assignor.) Peerless Manufacturing Company. (See McMinn, John E.,

recrease annuactoring assignor.)
Peerless Motor Car Corporation. (See Ruppel, Frederick C., assignor.)
Peerless Novelty Company. (See Long, William F., as-

signor.) Peerless Pneumatic Systems, Inc. (See Bartling, Howard

G., assignor.)
Peerless Pacumatic Systems, Inc. (See Sausen, B. R., and

Peerless Pump Company et al. (See Hollander, Aladar,

assignor.)
Peerless Tube Co. (See Lynch, William F., assignor.)
Peers, E. P., et al. (See Carter, S. W. and Ö. E., assignors.)
Pees, Walter J., Meadville, Pa. Furnace. 1,629,586;

Peerless Tube Co. (See Lynch, William F., assignor.)
Peers, B. P., et al. (See Carter, S. W. and O. E., assignors.)
Pees, Walter J., Meadville, Pa. Furnace. 1,629,586;
May 24.
Henry, Warcoing, Belgium. Typewriter.
1,634,942; June 28.
Peeters, Henry, Warcoing, Belgium. Back-spacing mechanism for typewriters. 1,639,191; Aug. 16.
Peets, Wilbur J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Centerless grinding machine. 1,635,339; July Lay.
Manufacture of chemical ewood pulp. 1,653,730; Dec. 27.
Peevey, D. R. (See Wharton, Sidney I., assignor.)
Peevey, D. R. (See Wharton, Sidney I., assignor.)
Peevey, D. R. (See Wharton, Sidney I., assignor.)
Peevey, D. R. (See Wharton, S. I., and Peevey.)
Peglay, Emile J., New York, N. Y. Syringe. 1,643,289;
Sept. 20.
Peedow Company, Chicopee Falls, Mass. Safety device for calenders. 1,646,880; Oct. 25.
Peglow, Otto, assignor to Ludw. Loewe & Co. Actiengesell-schaft, Berlin, Germany.
Massuring tool for screw threads. 1,640,215; Aug. 23.
Person, José, Port Arthur, Tex.
Person, Alfred K., Bellevue, and K. O. Winell, assignor to 1 Pressed Steel Car Company, Pittsburgh, Pa. Articulated car. 1,644,394; Oct. 4.
Peligné, Henri, Billancourt, France. Flexible coupling. 1,635,496; July 12.
Pelier, Karl E., West Hartford, Conn. Feeding molten Pipe Company, Hartford, Conn. Apparatus for Seeding molten glass. 1,022,066; Mar. 26.
Peller, Karl E., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., Apparatus for Seeding molten glass. 1,022,066; Mar. 26.
Peller, Karl E., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., Apparatus for Seeding molten glass. 1,022,066, Mar. 26.
Peller, Karl E., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., Apparatus for Seeding molten glass into mold charges. 1,023,049; May 17.
Peller, Karl E., West Hartford, Conn. Apparatus for Seeding molten glass into mold charges. 1,023,

ford-Empire Company, Hartford, Conn. Apparatus for separating motten glass into mold charges, 1,629,409;
May 17.

Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Mold-charge-guiding Peller, Karl E., assignor to Hartford-Empire Company, Hartford, Conn. Leer conveyer. 1,635,861; July 12.

Peller, Karl E., assignor to Hartford-Empire Company, Hartford, Conn. Feeding molten glass. 1,644,883; Oct. 11.

Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Gathering-pool level regulator. 1,646,705; Oct. 25.

Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Multiple glass feeder, 1,647,746; Nov. 1.

Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Multiple glass feeder, 1,647,746; Nov. 1.

Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Multiple glass feeder, 1,647,746; Nov. 1.

Peller, Karl E., West Hartford, assignor to Hartford-Hartford Martford Martfor

1.636.387; July 19.

Petrce, John B., assignor to International Business Machines Corporation, New York, N. Y. Tabulating apparatus, 1,623,204; Apr. 5.

Peirce, John R., New York, N. Y., assignor to International Business Machines Corporation, New York, N. Y. Accounting machine. 1,628,871; May 3.

Peircz, Woolf, New York, N. Y. Gutter hanger. 1,640,369; Aug. 30.

Pelseler, Gottlieb, Leipzig-Leutzsch, Germany. Automatic device for recording the movements of machines and Patrick. 163,630; N. Y. S. Steleton form for head-pelseler, Gularence F. Grimes, 1,636,578; July 19.

Peltzman, Clarence F. Grimes, 1,630.

Pekich, Michael, Pittsburgh, Pa. Water gauge. 1,630,632; Pekich, Michael, Pittsburgh, Pa. Water gauge. 1,630,632; May 31.
Pelican Toy Company. (See Wismar, Albert D., assignor.)
Peliciter, Dominick, Fall River, Mass. Miter box. 1,625,424; Apr. 19.
Pelkey, Milton, Milwaukee, Wis. Lock bolt. 1,619,757; Mar. 1.

Felkey, Oliver E., Springfield, Mass. Support. 1,623,749; Apr. 5.

telkey, Öliver E., Springfield, Mass. Support. 1,623,749; Apr. 5.
Peilegrini, Joseph A., Pittsburgh, Pa. Parking light. 1,629,456; May 17.
Perilali, William A. (See De Lucia, J. B., and Pellegrino, Vincenzo, Rye. N. Y. Cover for curative medicines. 1,629,297; May 17.
Peilegrino, Vincenzo, Rye. N. X. Evaporator for car-Peilegrino, Vincenzo, Rye. N. X.
Peilegrino, Vincenzo, Rye. N. Y. Electrician's pliers. 1,644,361; Oct. 4.
Peilerin, Arthur E., Standish, N. Y. Suspenders. 1,614,306; Feb. 8.
Pelletter, Leonard. (See Whitehouse, V. B., and Pel-Peilette, Robert S., assignor to American Road Machinery Company, Inc., Kennett Square, Pa. Snowplow. 1,653,118; Dec. 20.
Pellini, Joseph, Marselle, France. Electric cell with Constant Intensity. J,621,518; Mar. 22.
Peloubet, William S., New York, N. Y. Catamenial sack and womb support. 1,634,555; July 5.
Pelouze Manufacturing Co. (See Schultz, Frank A., as-Peiloprey, Samuel E., French, N. Mex. Device for massaging and lubricating the human system. 1,644,666; 1,644,665

Signor.)

Pelphrey, Samuel E., French, N. Mex. Device for massaging and lubricating the numan system. 1,644,606; Oct. 4.

Pels, Walter, New York, N. Y. Wedding ring. Des. 72,072; Feb. 22.

Wentworth, Mo. Nursing-bottle professor of the control of

Pelton, Nathan, assignor to Pelton Knitting Mills, Inc., Boston, Mass. Combined shirt and supporter. 1,615,192; Jan. 18. Pelton Water Wheel Co., The. (See Foulds, Charles V.,

assignor.)
Pelton Water Wheel Co., The. (See Hutchinson, Ely C., assignor.)

assignor.) Pelton Water Wheel Company. (See Hutchinson, E. C., and Foulds, assignors.) Peltz. Ernest L., Rapid City, S. Dak. Wire stretcher. 1.637,587; Aug. 2. Peltzer, Franz F., Saarbrucken, Germany. Auxillary exhaust valve for uniflow steam engines. 1,616,667; Feb. 8.

Feu. 6.

Felz, Bruo. (See Reinhardt, C., and Pelz.)

Felzer, Harold H., New York, N. Y. Machine for applying
gumming labels, wrappers, and the like. 1,620,282;

Mat. 8.

Femberton. Hary L. (See Herthel, E. C., and Pelzer.)

Femberton. Harold, assignor to National Manufacturing
Company, Seattle, Wash. Toy balloon. 1,020,036;

Mar. S.

Penberthy, Ernest, Detroit, Mich., assignor to Chicago
Pneumatic Tool Company, New York, N. Y. Fluidpressure tool. 1,624,179; Apr. 1.

Penberthy, Ernest, Detroit, Mich., assignor to Chicago
Pneumatic Tool Company, New York, N. Y. Fluidpressure tool. 1,62,177; May 7.

Pressure tool. 1,62,177; May 7.

Premetry Ernest, Detroit, Mich., assignor to Chicago
Pneumatic Tool Company, New York, N. Y. Front
Pressure tool. 1,62,62,77; Dec. 137; N. Y. Fluidpressure tool. 1,62,62,67; Dec. 137; N. Y. Fluidpressure tool. 1,62,62,67; Dec. 137; N. Y. Fluidpressure tool. 1,62,62,67; Dec. 137; N. Y. S.

Penberthy Injector Company. (See Warrick, Charles F.,
assignor.)

Penberthy Injector Company. (See Yoder, Howard D., assignor.)

assignor.)

Pence, Alonzo H., and W. A. Pence, Somerville, Ala.
Mechanically-operated figure toy. 1,628,331; May 10.

Pence, Lafe V., El Paso, Tex. Thermostphon radiator.
1,629,298; May 17.

Pence, William A. (See Pence, Alonzo H. and W. A.)

Pendegratt, Elbert W., Seligman, Mo. Animal poke.
1,617,497; Feb. J.

Long M. S. (See Pence, Alonzo H. and W. A.)

Pendegratt, Elbert W., Seligman, Mo. Animal poke.
1,617,497; Feb. J.

Pendegratt, Elbert W., Seligman, Mo. Higgin Manufactur
Pendieton, Charlie A., Crametton, N. C. Fuse puller.
1,638,703; Aug. 9.

Pendicton, Frank R. (See Nelson, Gust, assignor.)

Pendleton, Pyam L., assignor to Martin-Copeland Company, Providence, a trusteeship consisting of E. W. Martin, Barrington, L. C. Martin, Providence, R. I., Copeland, Complete, Complete, Complete, Des. 72,723; May 24.
Pendleton, Pyam L., Providence, R. I., assignor to E. W. Martin, L. C. Martin, and G. W. Bleecker, trustees. Electric mounting or connecter. 1,628,183; May 10.
Pendock, Charles W., assignor to Le Roi Company, West Martin, L. E. Martin-Combustion engine, 1,620,917; May 13. Pendleton, Prov

Peliotec, thartes W. assignor to B. von Allis, Wis. Internal-combustion engine. 1,620,917; Mar. 15 Hard. Martinez, Calif. Pipe-sealing device. 1,627,935; May 10.

Penerick, William J. Martinez, Calif. Pipe-sealing device. 1,617,935; May 10.

Penerick, William Manufacturing dyes. 1,615,646; raz, Austria, assignor to F. Beusa, Manufacturing dyes. 1,615,646; Italy.

Genova Italy. Manufacturing dyes. 1, 615,646;
Pennicid, Arthur H., New York, N. Y. Traction device. 1,617,211; Feb. 8.
Penfold, Albert E., assignor to The Dunlop Rubber Company Limited, Fort Dunlop, Birmingbam, England. Golf ball. Des. 73,046; July 12.
Pengilly, Joseph H., assignor to Erown & Pengilly, Inc. 1,000; Joseph H., assignor to Erown & Pengilly, Inc. 1,000; Joseph H., assignor to Erown & Pengilly, Inc. 1,000; Joseph H., assignor to Erown & Pengilly, Inc. 1,000; Joseph H., assignor to Erown & Pengilly, Inc. 1,000; Joseph H., assignor to Erown & Pengilly, Inc. 1,000; Joseph H., assignor to Erown & Pengilly, Inc. 1,000; Joseph H., assignor to Penn, Albert, assignor of one-laif to R. Penn, 1,000; Joseph H., assignor to Penn, Albert, assignor to Penn, Albert, assignor to Penn, 1,000; Joseph H., assignor.)

signor.)
Penn, Ralph. (See Penn, Albert, assignor.)
Penn, S. R., Mfg. Co. (See Penn, George R., assignor.)
Penn, S. R., Mfg. Co. (See Penn, George R., assignor.)
Pennether, Pierre. Lille, France. Picker for weaving looms. 1,642,262; Sept. 18.
Pennella Cort. George C., Cakiand, assignor to F. Starr and T. L. (19,088; Mar. Land, Calif. Changeable exhibitor. 1,619,088; Mar. Land, Calif. Changeable exhibitor. 1,619,088; Mar. Land. Land. Fish-hooking device. 1,614,931; Jan. 18.
Pennell, Reglandd H. L., Windsor, and A. W. Wylle. Chobham, England. Apparatus for mixing and delivering liquids. 1,623,02; Mar. 29.

H. Scott, N. Y., assignor to General Electric Company. Protective system. 1,622,539; Mar. 29.
Mar. 29.

Penney, Harold D., Pelham, N. Y., assignor to Diamond Expansion Bolt Company. Sound amplifier. 1,631,221; June 7.

June 7.
Penniman, Abbott L., fr., Baltimore, Md., assignor to
Wheeler Condenser & Engineering Company, Carteret,
N. J. Feed-water heater. 1,621,268; Mar. 15.
Penniman, William B. D. (See Shackelford, E. J., Penni-

man, and Cain.)
Pennington, Gordon R. (See Wellman, S. K., and Pen-

nington,)
Pennington, Gordon R., assignor to The Van Dorn Iron
Works Company, Cleveland, Ohio. Dump truck.
1,628,907; May 17.
Pennington, Harry D., assignor to United Engineering
ing mechanism. 1,626,251; Apr. 26.
Pennington, Mary E., St. Davids, Pa., and A. B. Davis,
Cheinnatt, Ohio. Manufacture of strawboard.
Pennington, Mary E., St. Davids, Pa., and A. B. Davis,
Cheinnatt, Ohio. Manufacture of strawboard.
Cheinnatt. Ohio. Manufacture of strawboard.
Pennington, Mary E., St. Davids, Pa., and A. B. Davis,
Cheinnatt. Ohio. Manufacture of strawboard.
Pennington, William V. and P. C. Isam Lebapon, Kang

Company, Cont. 18.

Pennington, William V., and P. C. Isom, Lebanon, Kans. Hot-piate foot feed. 1,618,495; Feb. 22.

Pennington, William V., and P. C. Isom, Lebanon, Kans. Hot-piate foot feed. 1,618,495; Feb. 22.

Pennock, Theodore E., Rossignor to Standard Automatic Machine Company, Rochester, N. Y. Machine for applying closures to containers. 1,651,902; Dec. 6.

Pennock, Theodore E., assignor to Standard Automatic Machine Company, Rochester, N. Y. Containers to Containers. 1,619,903; Dec. 6.

Standard Automatic Machine Company, Rochester, N. Y. Container-capping machine. 1,614,042; Jan. 11.

Pennow, Willis A., and R. S. Haynes, Milwauke, Wis, assignors to Perfection Arc Co. Inc. Light-projecting Pennsylvania Crusher Company.

W., assignor)

Pennsylvania Crusher Company. (See Borton, George W., assignor.)
Pennsylvania Crusher Company. (See Borton, G. W., and Battey, assignors.)
Pennsylvania Flexible Metallic Tubing Company. (See Johnson, William A., assignor.)

Pennsylvania Pump & Compressor Company. (See Raymond, Ward, assignor.)
Pennsylvania Stamping Corporation. (See Swett, Lewis

E., assignor.)
Pennsylvania Textile Mills, Inc. (See Caluori, George, assignor.)
Pennsylvania Textile Mills, Inc. (See Day, Harry S., as-

Peoples Investment Company. (See Anderson, J. B., assignor.)
Peoples Natural Gas Company. (See Anderson, J. B., and Garner, assignors.)
Peoples, Robert E., Valley Stream, assignor to Western Electric Company, Incorporated, New York, N. Y. Testing system. 1,650,721; Nov. 29.
Peoples Trust and Savings Bank of Chicago, trustee, The. (See Eaid, John R., assignor.)
Pepe, Vincett, Brooklyn, N. Y. Coin holder. 1,633,127; June 21.

Pepe, Vincent, Brooklyn, N. Y. Coin honder, 2,000.

Pepe, Vincent, Brooklyn, N. Y. Coin honder, 2,000.

Peper, Vincent, Brooklyn, N. Y. Bedspring.

1.631,050; May 31.

1.631,050; May 31.

Pepin, Archive 1.61,329; Jan. 4.

Pepin, Emery, Santa Barbara, Calif. Gas heater.

1.640,248; Aug. 23.

Pepin, Joseph N., Chicago, Ill. Phonograph.

Sept. 6.

Pen. J. Seeph N., Chicago, Ill. Tone arm. 1,653,410;

Penin, Joseph N., Chicago, Ill. Tone arm. 1,653,410;

Nov. 8.

Nov. 8.

Polit., Joseph N., Chicago, Ill. Tone arm. 1,653,410;
Polit. Joseph N., Chicago, Ill. Tone arm. 1,653,410;
Pepin. Nelson J., Lowell, Mass. Clutch mechanism. 1,649,728; Nov. 15.

Pepino. Henry G., New York, N. Y. Bottle stopper seal. 1,628,555; May 10.

Peple. Gustave A., fr., Lynchburg, Va. Transmission. 1,613,290; Jan. 4.

Peppard. Thomas, Olympia, Wash. Fowl catcher. 1,629,040; May 17.

Pepper, Javid. Philaelphia. Pa. Manufacturing electroper. Pepper, Bradder, 1,653,872; Dec. 27.

Pepper, Frederick V. (See Megle, J. J. and Pepper.)

Pepper, Sam, Nottingham, England. Lace fabric and producing same. 1,631,886; June 7.

Pepple, John W., Akron, Ohio. Vehicle wheel. 1,616,635 Feb. 8.

Pepsodent Company. (See Kuever, Rudolph A., assignor.)
Peraira, Joseph A., and F. Roberts, Yuba City, Calif.
Machine for making hook supports. 1,633,416; June 21.
Percey, Earl E., Jerome, Idaho. Gas generator.
1,624,431; Apr. 12.
Perciabosco, Michael, et al. (See Kraus, Morris F., assignor.)

signor.)
Perciabosco, Michael, Chicago, Ill., assignor of one-half
to J. Rosinia. Vending-machine casing. Des. 73,622;
Oct. 11.
Percival H. Smith, executor. (See Smith, Oberlin, as-

signor.)

Percival, Harry S., Elmhurst, N. Y., assignor to American Telepione and Telegraph Company. Measuring instrument. 1,640,425, Aug. 30.

Percy, Bart I. Gee Yard, S. and Percy, Percy, Bart I. Gee Yard, S. and Percy, Percy, Bart I. Gee Yard, P. S. and Percy, Percy, Bart I. Gee Yard, P. S. and Percy, Percy, Bart I. Gee Yard, P. S. and Percy, Percy, Bart I. Gee Yard, Percy, Levin Dog, Inc., 1,648,659; Nov. 8.

Percy Electric Dog, Inc. (See Percy, Edwin H., assignor.)

Percy, Leon O., assignor to The Cooper Corporation, Cincinnati, Ohio. Storage-battery container. 1,635,976; July 12.

Percy, William W., Seattle, assignor of one-fourth to F. W. Harris, Renton Wash. Making sponge iron from its oxide ores. 1,645,968; Oct. 18. Perdutk, Clotilde. (See Planche, Benjamin R., assignor.) Perdue, Melvin, Sheby, Ohio. Vaive for toy balloons. 1,629,838; May 24. Perca, Albono. (See Eggiman, A., and Perca,) Perca, Albono. (See Eggiman, A., and Perca,) Perca, Cledonio, V., Buenos Alres, Argentina. Apparation of the control of the transmission of heat and cold. 1,613,687;

tus for the transmission of heat and cold. 1,614,587; Jan. 11.

Peregoy, Alwyn F., Fullerton, Calif. Child's desk. Des. 74,022; Dec. 6.

Pereira, Henry J., Chelsea, Mass. Drain plug or valve. 1,638,954; Aug. 16.

Perella, Fred. (See Cutuli, Vincenzo, assignor.)

Perelman, Solomon, Bayonne, N. J. Fountain toothbrush. 1,615,496; Feb. 1.

Peremi, Edmund. (See Polachek, J., Jepsen, and Peremi.)

Peremi, Serge N. (See Whittemore, H. L., and Peremi.)

Pereva. Joseph. (See Perev. Louis P., assignor.)

Petrenko.)
Perew, Joseph. (See Perew, Louis P., assignor.)
Perew, Louis P., assignor of one-half to J. Perew, North
Tonawanda, N. Y. Mechanical toy. 1618,408; Jan. 4.
Perey Mauufactaring Company. (See Bacon, Daniel R.,

Perey Madulacting Company (2007) assignor.) Perez, Jose A., Central Francisco, Francisco, Cuba. Inter-mediate bagasse carrier for cane-sugar mills. 1,644,607;

mediate bagasse carrier for cane-sugar mills. 1,644,607; Oct. 4.

Perez, Jose A., Central Francisco, Francisco, Cuba. Intermediate begasse chute for cane-sugar mills. 1,644,608; Oct. 4.

Perfect Point Pencil Corporation. (See Doebler, Charles F., assignor.)

Perfect Pool Pocket Irons Company. (See Jaeger, Gustav A. and A. F., assignors.)

Perfect Powder Puff Co. (See Sharp, Robert H., as-

Perfect Powder Full Co. (See Sharp, Robert II., assignor.).
Perfect Window Regulator Corporation. (See Goldsmith,
Bertram J., assignot.) Corporation. (See Goldsmith,
Perfect Window Regulator Corporation. (See Koeb,
Emil., assignor.)
Perfect Window Regulator Corporation. (See Koeb, E.,
and Goldsmith, assignors.)
Perfect Window Regulator Corporation.
(See Koeb, E.,
and Goldsmith, assignors.)
Perfect Window Regulator Corporation.
(See Koeb, E.,
assignors.) (See Kurscheldt,
Perfect Mindow Regulator Corporation.
(See Koeb, E.,
assignors.)

Perfection Arc Co. Inc. (See Penhow, W. A., and Hayase, assignors.)
Perfection Biscuit Company. (See Mullendore, Harvey, assignor.)
Perfection Brokinge Sealer Company. (See Uttz, WilPerfection Steel Body Co.
Perfection Stove Company. (See Chadwick, Lee S., assignor.)
Perfection Stove Company. (See Chadwick, Lee S., assignor.)
Perfection Stove Company. (See Chadwick, Lee S., assignor.)
Perfection Stove Company. (See Resek, Marc, assignor.)
Perfection Stove Company. (See Wood, William, assignor.)

Perfection Stove Company. (See Resek, Marc, assignor.)
Perfection Stove Company. (See Wood, William, assignor.)
Perfecto car Differential Co. (See Starr, Charles E.,
Periser Co. (See Starr, Charles E.,
Periser, Jean E., Limoges, France, Heel-seat-cutting machine. 1,623,551; Apr. 5.
Periser, Jean E., surnamed Emmanuel Périsset, Chatillon-sous-Bagneux, France. Magneto. 1,640,220; Aug. 23.
Perkin, William H., Orford, A. W. Fyfe and M. Mendoza, Charles and M. Mandrester, England. Manufacture of anthraquinone derivatives. 1,636,485; July 10).
Perkins, Albert G., Buffalo, N. Y. Pipe joint. 1,621,950; Mar. 22.
Perkins, Charles M. Cohoes, N. Y. Thread-using machine. 1,638,210; Aug. B. Newburyport, Mass. Bottle cap. Perfels. 256 Sept. 20.
Perkins, Charles W., Sulphur Mines, assignor to W. J. Miller, Sulphur, La. Rotary back-up post. 1,621,467; Mar. 15.
Perkins, Charles W., Sulphur Mines, assignor to W. J. Miller, Sulphur, La. Rotary back-up post. 1,621,467; Mar. 15.
Perkins, Charles W., Sulphur Mines, assignor to W. J. Miller, Sulphur, La. Rotary back-up post. 1,621,467; Mar. 15.
Perkins, Phoster A., South Bend, Ind. Collapsbile tube holder. 1,644,145; Oct. 4.
Perkins, Phoster A., South Send, Ind. Golf club. 1,621,897; Mar. 25.

Perkins, Frederic G., Everett, assignor to The Bankette Company, Boston, Mass. Coin bank. 1,653,021; Dec 20 Perkins, Frederick E., St. Paul, Minn. Rolling fre door, 1,621,951; Mar. 22. Perkins, George B., Weingarten, Mo. Pilers. 1,618,550;

Feb. 22.

Perkins, Hamilton C. (See Karpoulch, John, assignor.)

Perkins, Hiram A., assignor to American Woodworking

Machinery Company, Kochester, N. Y. Radial bearing,

1.002.2880, Mar. 20.

1.016.245: Feb. 8.

Perkins, Julian L., West Springfield, and H. D. Croft,

assignors, by mesne assignments, to Perkins Machine
and Gear Company, Springfield, Mass. Broaching ma
chine. 1.042.2583: Sept. 13.

Perkins, L. B. Choc, and R. H. Dobbins, Oklahoma City,

Okla. Tile lock. 1.046,512: Oct. 18.

Perkins, Laurence M., assignor of one-half to Owen-Dyneto Corporation, Syracuse, N. Y. Field winding, 1,630,757; May 31. Jos Angeles, Calif., assignor to General Electric Company. Amplifying system, 1,626,430; Apr. 26. Perkins Machine and Gear Company. (See Oakley,

Pokins, Lucius 3. Los Angeles, Callf., assignor to General Electric Company. Amplifying system. 1,626,480; Apr. 26.

Perkins Machine and Gear Company. (See Oakley, John, assignor.)

Perkins, Machine and Gear Company. (See Perkins, J. L., 1,627,996; May 10.

Perkins, Machine and Gear Company. (See Perkins, J. L., 1,627,996; May 10.

Perkins, Machine and Gear Company. (See Perkins, J. L., 1,627,996; May 10.

Perkins, Marion Topeka, Kans. Hydraulic motor. 1,627,996; May 10.

Perkins, Ralaph D., Kenosha, Wis. Carburetor. 1,640,291; Aug. 23.

Perkins, George W., assignor to J. E. Gammeter, Akron, Ohio. Combination guy and guard. 1,630,356; May 31.

Perkins, George W., assignor to J. E. Gammeter, Akron, Ohio. Combination guy and guard. 1,630,356; May 31.

Pernold Company, The. (See Brice, Norman E., assignor.)

Permold Company, The. (See Brice, Norman E., assignor.)

Permold Company, The. (See Brice, Norman E., assignor.)

Permott Company, The. (See Rrice, Norman E., assignor.)

Pernot, Frederick E., Washington, D. C. Electric telegraph apparatus. 1,647,468; Nov. 1.

Percolo, Elio A., Montelupone, Italy. Felted fabric and the manufacture thereof. 1,631,592; June 7.

Perrault, Joseph E., assignor to Hood Rubber Company, Watertown, Mass. Auxillary tool holder for lathes and the like. 1,618,993; Mar. 1.

Perrault, Joseph E., assignor to Hood Rubber Company Watertown, Mass. Tire-building machine. 1,645,887; Perrault, Joseph E., assignor to Hood Rubber Company Watertown, Mass. Tire-building machine. 1,645,887; Perrault, Joseph B., assignor to Hood Rubber Company Watertown, Mass. Tire-building machine. 1,645,897; Perrault, Joseph S., and J. T. Marquis, Nashua, N. H.

Perrault, Joseph B., assignor to Hood Rubber Company Watertown, Mass. Tire-building machine. 1,645,897; Perrault, Joseph S., and J. T. Marquis, Nashua, N. H.

Perrault, Joseph B., assignor to Hood Rubber Company Watertown, Mass. Projecting apparatus. 1,627,114; May 3.

Perrault, Joseph B., assignor to Hood Rubber Company Watertown, Mass. Projecting apparatus.

Perron. Adelard J., Lewiston, Me. Chair attachment. 1,633,469; Dec. 20.
Perron, Samuel H., Mendon, assignor to A. Steinert, Boston, Mass. Reproducing piano. 1,639,105; Aug. 16.
Perron, Samuel H., Mendon, assignor to A. Steinert, Boston, Mass. Musical instrument. 1,639,106; 309,106; Boston, Mass. Musical instrument. 1,639,100; Aug. 16.
Perron, Samuel H., Mendon, assignor to A. Steinert, Boston, Mass. Musical instrument. 1,639,100; Aug. 16.
Perron, Samuel H., Mendon, assignor to A. Steinert, Boston, Mass. Musical instrument. 1,639,107; Aug. 16.
Perrona, John M., Steeles Store Tex. Clod crusher and

Aug. 16.
Perrone, John M., Steeles Store Tex. Clod crusher and glass destroyer. 1,647.717; Nov. 1.
Perrot, Emile G., Philadelphia, Pa. Bullding. 1,654,013; Dec. 27.

Dec. 27.
Perrot, Henrl, Paris, France, Wheel mounting, 1,613,768;
P. Jan. 11.
Perrot, Henrl, Paris, France, assignor to Bendix Corporation, Chicago, Ill. Front-wheel mounting, 1,637,089; July 26.
Perrot, Henrl, Paris, France, assignor to Bendix Corporation, Chicago, Ill. Front-wheel brake, 1,640,577;
Aug. 20.

Aug. 30.

Perrot, Henri, Paris, France, assignor to Bendix Corporation, Chicago, Ill. Braking of the steering wheels of vehicles. 1642.084; Sept. 13.

Perry-Caldwell Manufacturing Company (Inc.). (See Perry-Caldwell Manufacturing Company (Inc.). (See Perry-Caldwell Menufacturing Company (Inc.). (See Perry-Caldwell Menufacturing Company). (See Perry-Caldwell Menufacturing). (See Perry-Caldwell Manufacturing). (See Perry-Caldwell Company). (See Perry-Cal

Perry, Charles L., Schenectady, N. Y., assignor to General Electric Company. Electric operating mechanism.

Perry, Charles L., Schenectady, N. Y., assignor to General Electric Company. Electric operating mechanism. 1.648.741; Nov. 8.
Perry, Charles T., Arlington, Mass. Saw protector. 1.643.085; Sept. 20.
Perry, Donald B. (See Vernam, G. S., and Perry.)
Perry, Donald B., Yonkers, N. Y. assignor to American Telephone and Telegraph Company. Printing-tele-Perry, Donald B., Yonkers, N. Y., assignor to American Telephone and Telegraph Company. Printing-telegraph-exchange system. 1,641,290; Sept. 6.
Perry, Dyer W., Keene, N. H. Eyeglass-case holding and protecting device. 1,633.417; June 21.
1,025.742; Apr. 19.
Perry, Elsie, New York, N. Y. Permanent Marcel-wave apparatus. 1,636,667; July 26.
Perry, Elsie, W., special administratrix. (See Perry, James S.)

perry, Edie, New York, N. Y. Permanent Marcel-wave apparatus. 1,636,967; July 26.
Perry, Elsie W., special administratrix. (See Perry, James S.)
Perry, Emanuel J., New Bedford, assignor to Perry Laundry Machinery Company, Fairhaven, Mass. Soap door for washing machines. 1,627,803; May 19.
Perry, Emanuel J., Fairhaven, and F. S. Boltz, Mansfield, Mass. Laundry apparatus. 1,645,998; Oct. 18.
Perry, Frank R., Chicago, Ill. Condenser for automotive-vehicle engine radiators. 1,652,793; Dec. 13.
Pure 21.
Perry, Howard M., Clarksville, Tenn. Hand-truck attachment. 1,636,574; July 19.
Perry, Hubert M., assignor to S. L. Woods, Chicago. Ill. Side bearing for railway cars. 1,615,955; Feb. 1.
Perry, Hugh A. and J. Milloure, Chicago, Ill. Dispensella administratrix. Tree treatment. 1,629,962; May 24.
Perry, John E., Sharon, Pa. Permanent hot-top mold. 1,636,013; July 19.
Perry, John E., Sharon, Pa. Ingot mold and stool Perry, John E., Sharon, assignor to Valley Mould & Iron Corporation, Sharpesville, Pa. Core bar. 1,618,130; Feb. 15.
Perry, John E., Sharon, assignor to Valley Mould & Iron Corporation, Sharpesville, Pa. Casting ingot molds and

therefor. 1,647,660; Nov. 1.

Perry, John E., Sharon, assignor to Valley Mould & Iron Corporation, Sharpesville, Pa. Core bar. 1,618,130; Perry, John E., Sharon, assignor to Valley Mould & Iron Corporation, Sharpesville, Pa. Casting ingot molds and apparatus for same. 1,620,123; Mar. 8.

Perry, John E., Sharon, assignor to Valley Mould and Iron Corporation, Sharpesville, Pa. Cere box for ingot molds of the like. 1,620,227; Mar. 8.

Perry, John E., Sharon, assignor to Valley Mould and Iron Corporation, Sharpesville, Pa. Setup and core bar for casting ingot molds. 1,643,419; Sept. 27.

Perry, John M., Vosburg, Miss. Cheek-controlled mechanism. 1,623,970; Apr. 12.

Perry, John M., Vosburg, Miss. Cheek-controlled mechanism. 1,623,970; Apr. 12.

Perry, John M., Vosburg, Miss. John Perry, Emanuel J., assignor, J., achinery Company. (See Perry, Emanuel Perry, Leroy H., Gardena, and W. F. Woodman, Long Beach, Calift. Formation thief. 1,635,340; July 12.

Perry, Lassignor, J., achinery Company. Cheek-controlled mechanism. 1,621,353; Apr. 20.

Perry, Mindon L., Washington, D. C. Hafr-straightening device. 1,642,428; Sept. 20.

Perry, Napoleon J., deceased; J. W. Marttin, administrator, assignor to May Hoslery Mills. Nashville, Tenn. Take-up for knitting machines. 1,623,455; Aug. 16.

Perry, Napoleon J., deceased; J. W. Marttin, administrator, assignor to May Hoslery Mills. Nashville, Tenn. Take-up for knitting machines. 1,623,455; Aug. 16.

Perry, Norvin, Tompkinsville, N. Y. Chain link. 1,635,385; July 12.

Perry, Norvin, Tompkinsville, N. Y. Chain link. 1,635,385; July 12.

Perry, Thomas L. (See English, F. S., and Perry.)

Perry, Winthron, L. (See English, F. S., and Perry.)

Perry, Winthron, L. (See English, F. S., and Perry.)

Perry, Winthron, L. (See English, F. S., and Perry.)

Perry, Winthron L. (See English, F. S., and Perry.)

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Perry, Winthron L. (See Engl

Persons, Ernest L., Chicago, Ill., assignor to The David J. Molloy Company. Book cover. 1,632,193; June 14. Persons, George A., Brooklyn, assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Voliage-limiting device. 1,614,254; Jan. 11. Persson, Nils, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y. Voliage-limiting device. 1,614,254; Jan. 11. Persson, and Johnson, J. Persson, J.

Peterhauser, Fritz, Riehen, near Basel, assignor to the Firm Durand & Huguenin S. A., Basel, Switzerland. Production of fast dyelnes. 1,645,925; Oct. 18. Peterkin, Guy S., Seattle, Wash. Suspensory. 1,641,094; Aug. 30.

Aug. 30.

Peterman, Henry, assignor of one-third to C. Statler and one-third to O. Johnson, Wallace, Idaho. Sugar bowl. 1.640,156; Aug. 23.

Peters, Arthur E., Littleton, Colo., assignor to Ingersoll-Rand Company, Jersey City, N. J. Drill sharpener. 1.622,175; May Inteleon, Colo., assignor to Ingersoll-Rand Company, Jersey City, N. J. Drill sharpener. 1.632,021; June 14.

Peters, Arthur E., Littleton, Colo., assignor to Ingersoll-Rand Company, Jersey City, N. J. Dolly retainer. 1.633,085; Dec. 27.

Peters, Carthur E., Littleton, Colo., assignor to Ingersoll-Rand Company, Jersey City, N. J. Dolly retainer. 1.633,085; Dec. 27.

Peters, Cartridge Company, The. (See Keplinger, Livingston B, and M. Q., assignors.)

Peters, Cornelius A., Minneapolis, Minn. Lawn mower.

1,027,252, May 3.

1,027,252, May 3.

Peters, Ernest K., Fresno, Calif. Lining for dental plates and preparing the same. Rel6,754; Oct. 4.

Peters, Frank K., Fresno, Calif. Lining for dental plates and preparing the same. Rel6,754; Oct. 4.

Peters, Frank K., New York, N. Y., assignor to Franklin. Reliway Supply Company. Locomotive-deriving-box wedge-adjusting device. 1,645,659; Oct. 18.

Peters, Frenk R., New York, N. Y., assignor to Franklin. Rallway Supply Company. Locomotive-deriving-box wedge-adjusting device. 1,645,659; Oct. 18.

Peters, Frederick W. Gleveland, Ohio, assignor to Spicer Manufacturing Corporation, South Plainfield, N. J. Universal Joint. 1,621,216; Mar. 15.

Peters, Frederick W., Cleveland, Ohio, assignor to Spicer Manufacturing Corporation, South Plainfield, N. J. Universal Joint. 1,621,216; Mar. 15.

Peters, Frederick W., Cleveland, Ohio, assignor to Spicer Manufacturing Corporation, South Plainfield, N. J. Universal Joint. 1,621,217; Mar. 15.

Peters, Frederick W., Cleveland, Ohio, assignor to Spicer Manufacturing Corporation, South Plainfield, N. J. Universal Joint. 1,621,218; Mar. 15.

Peters, Frederick W., Cleveland, Ohio, assignor to Spicer Manufacturing Corporation, South Plainfield, N. J. Universal Joint. 1,621,218; Mar. 15.

Peters, Frederick W., Cleveland, Ohio, assignor to Spicer Manufacturing Corporation, South Plainfield, N. J. Universal Joint. 1,621,218; Mar. 15.

Peters, Frederick W., Cleveland, Ohio, assignor to Spicer Manufacturing Corporation, South Plainfield, N. J. Universal Joint. 1,621,218; Mar. 15.

Peters, Frederick W., West Roxbury, Mass. Ring or the 118, 161,2831; Jan. 4.

Peters, James B. (See Peters, James C. and J. B.). Double-row

Peters, James B. (See Peters, James C. and J. B.)
Peters, James C. and J. B. Redeville, Pa. Double-row
Peters, James C. and J. B. Redeville, Pa. Double-row
Peters, James C. and J. B. Redeville, Pa. Double-row
Peters, John F. Rochester, assignor to American Can
Company, New York, N. Y. Machine for scoring and
forming tapered cans. 1,613,668; Feb. S.
Peters, John F., Rochester, assignor to American Can
Company, New York, N. Y. Can-body-making machine.
1,622,091; Apr. 19.
Peters, John F., Rochester, assignor to American Can
Company, New York, N. Y. Can-body-making machine.
1,622,091; Apr. 19.
Peters, John F., Rochester, assignor to American Can
Company, New York, N. Y. Can-body-making machine.
1,642,169; July S.
Peters, John F., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Cappany. Transformer winding. 1,632,2097; June 14.
Peters, John F., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Cappany. Transformer winding. 1,632,2097; June 14.
Peters, John F., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Current transformer. 1,640,554; Aug. 30.
Peters, John F., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. System
of distribution. 1,649,125; Nov. 15.
Peters, Louis H., Galling Ark.
Deters, Levis C., Highland Park.
Mich., assignor to La
1,644,488; Oct. 4,048,101, V. Strip-serving apparatus. 1464,505; Nov. 15.
Peters, Louis J., Brooklyn, N. Y. Strip-serving apparatus. 1464,505; Nov. 15.
Peters, John S., Edgewood, Park, Pa., assignor to La
1,644,488; Oct. 4,048,101, V. Strip-serving apparatus. 1464,505; Nov. 15.
Peters, Louis J., Brooklyn, N. Y. Strip-serving apparatus. 1464,505; Nov. 15.
Peters, Louis J., Shatter, Callf. Nut and bolt cutter.
1,643,569; Jan. 4.

Peters, Nicholas J. (See Comati, C. N., Kekenes, and Peters.)
Peters, Peter J., Shafter, Calif. Nut and bolt cutter. 1.613.359; Jan. 4.

Art of exhibiting moving pictures. 1.636.334; July 20. Peters, Term. (See Panajiotaros. A., and Jones.)
Peters, Will A. (See Shelton, Clarence L., assignor.)
Peters, Will A. (See Shelton, Clarence L., assignor.)
Petersen, Alfred O. H., Altona/Elbe, Germany, assignor to N. V. Nederlandsche Installatie Maatschappij Therma, Amsterdam, Netherlands. Condensing appetersen, Auker, Winthrop, Mass. Traverse drive for winding machines. 1.629.300; May 17.
Petersen, Anker, Winthrop, Mass., assignor, by mesne assignments, to Zenith Thread Company, Detroit, Mich. Braiding carrier. 1.638.455; Aug. 9.
Petersen, Carl M., assignor to The Bullard Machine Tool Company, Detroit, Mich. Braiding carrier. 1.628.661; May 10.
Petersen, Christen H. A., Glenada, Org. Trap for catching crabs. 1.619.366; Mar. 1.
Petersen, Christian H. A., Glenada, Org. Trap for catching crabs. 1.619.366; Mar. 1.
Petersen, Christian H. Stoux City, Iowa. Repairing overshee heels. 1.641.689; Sept. 6.

Petersen, Emil, Hamilton Beach, assignor of one-half to B. A. Pulaski, New York, N. Y. Mooring device, 1,522,1509; Mar. 2.
Petersen, George E., Bristol, Pa. Collapsible sliding closure, 1,628,511; May 10.
Petersen, George E., Bristol, Pa. Collapsible sliding closure, 1,628,511; May 10.
Petersen, George E., Bristol, Pa. Conveyer lubricator, 1,628,512; May 10.
Petersen, Hong, Month Cast-wheel construction, 1,615,847; Feb. 1.
Petersen, Hans, deceased; S. C. Petersen, executrix, assignor to The Linograph Company, Davenport, Iowa, Typographical machine, 1,622,291; Mar, 29.
Petersen, Henry, Mount Auburn, Iowa, Cultivator, 1,636,741; Oct. 4.
Petersen, Henry, Mount Auburn, Iowa, Cultivator, 1,636,741; Oct. 4.
Petersen, Henry, Mount Auburn, Iowa, Cultivator, 1,636,742; Nov. 29.
Petersen, Henry, Mount Auburn, Iowa, Cultivator, 1,636,742; Nov. 29.
Petersen, Henry, Mount Auburn, Iowa, Cultivator, 1,636,742; Nov. 29.
Petersen, Leslie T., Denison, Iowa, Barn batten, 1,644,023; Oct. 4.
Petersen, Nels P., Los Angeles, Calif. Vending-machine mechanism, 1,646,822 Feb. 8.
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Peterson, Aifred J. A. (See Schott, R. C., and Peterson.)
Peterson. Alfred P., Coleraine, Minn. Body hoist.
1.649.364; Nov. 15.
Peterson, Alfred T., Crooked Rivers, Saskatchewan, Canada, asswing arison, Minneapolis Minn. Agricultural
implement. 1.635.499; July 12.
Peterson, Arthur R., San Francisco, Calif. Billiard cue
chalking device. 1,627.573; May 10.
Peterson, August, Cleveland, Ohio. Polishing and cleaning machine. Nov. 22.
Peterson, Austin C. (See Melville, C. E., and Peterson.)
Peterson, Austin C. (See Melville, C. E., and Peterson.)
Peterson, Axol C. G. (See Poulsen, A. and Petersen.)
Peterson, B. (Sompany, Can opener.
1,638.785; July 26.
Peterson, B., Company, Can opener.
1,638.785; July 26.
Peterson, Burt A. (See Colman, H. D., and Peterson.)
Peterson, Burt A. (See Colman, H. D., and Peterson.)
Peterson, Burt A. assignor to Barber-Colman Company,
Rockford, Ill. Winder. 1,622.607; Mar. 29.
Peterson, Burt A. assignor to Barber-Colman Company,
Rockford, Ill. Winder. 1,644,946; Oct. 11.

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482 Peterson, Burt A., assignor to Barber-Colman Company, Rockford, Ill. Spooling process, 1,636,833; Oct. 25. Peterson, Charles A., Alabaster, Mich. Educational ap-paratus, 1,617,272; Feb. 8. Peterson, Charles F. (See Barringer, L. E., and Peter-Peterson, Charles F., Scotia, N. Y., assignor to General Electric Company. Making molded articles. 1,619,758; Electric Company. Making molded articles. 1,619,758; Mar. 1.
Peterson, Charles W., Detroit, Mich. Loud speaker. 1,643,029; Sept. 20.
Peterson, B. N. (See Peterson, Theodore L., assignor.) Peterson, Edwin O., Eigin, Nebr. Joining materials. 1,623,907; Apr. 26.
Peterson, Elmer C., Cleveland, Ohio. Vehicle lock. 1,629,731; May 24.
Peterson, Elmer C., Cleveland, Ohio. Vehicle lock. 1,622,839; Mar. 29.
Peterson, Emer C., Chengo, Ill. Partition-holding clip. 1,620,737; Mar. 15.
Peterson, Emil J., assignor to Hayes Wheel Company, Jackson, Mich. Rim-rolling machine. 1,632,560; June 14. Jackson, Mich. Rim-rolling machine. 1,632,560; June 14.
Peterson, Frank E., Roy, Mont. Two-plece demountable peterson, Frank E., Roy, Mont. Two-plece demountable peterson, Frank E., Chicago, III., assignor to American Optical Company, Southbridge, Mass. Adjustable bridge. 1,639,367; Mar. 1.
Peterson, Frank C., assignor, by mesne assignments, to Feoples Investment Company. Burglarproof lock. 1,622,608; Mar. 29.
Peterson, Gabull, Tarpon Springs, Fla. Propeller guard. 1,622,103; Mar. 1.
1,622,103; Mar. 8.
Peterson, George H., Brocklyn, N. Y., assignor to American Company. Trunk Company. System 1,612,880; Jun. 4.
Peterson, George H., East Orange, N. J., assignor to American Telephone and Telegraph Company. Trunk Cricuits. 1,631,153; June 7.
Peterson, Gust W., and B. T. Walls, Long Beach, Calif. Pendant ornament. 1,638,743; Aug. 9.
Peterson, Harry W., Springfield, III. Game. 1,613,530; June Peterson, Harry W., Springfield, Ill. Game. 1,613,530; Jan. 4.
Peterson. Henry G., Ames, Iowa. Calendar. 1,613,769:
Peterson. Henry J., Webster City, Iowa. Reel for barbed wire. 1,646,593: Oct. 25.
Peterson, Herber O., Elkader, Iowa. Tool. 1,652,681; Dec. 13.
Peterson, John A., and F. A. Treffer, Morrill, Kans. Insect destroyer. 1,622,922; Mar. 29.
Peterson, John N., Milwaukie, Oreg. Socket wrench. 1,643,814; Sept. 27.
Milwaukie, Oreg. Socket wrench. 1,643,814; Sept. 27.
Peterson, John N., Milwaukie, Oreg. Socket wrench. 1,643,814; Sept. 27.
Peterson, John N., Milwaukie, Oreg. Socket wrench. 1,643,801; Sept. 27.
Peterson, John N., Milwaukie, Oreg. Socket wrench. 1,643,801; Sept. 27.
Peterson, John W., South Bend, Ind., assignor to Bendix Brake Company. Chicago, Ill. Brake shoe. 1,647,661; Nov. 1.

Peterson, John W. Chicago, Ill. Brake shoe. 1,021,001, Nov. 1.
Peterson, Jonathan, Brooklyn, assignor to Combination Machine Company, New York, N. Y. Pipe cleaner. Peterson, Julius, assignor to Deere & Company, Moline, Ill. Lister plow. 1,644,894; Oct. 11.
Peterson, Julius C., Elgin, Ill. Snap fastener. 1,631,602; June 7.
Peterson, Lester C. Akron, Ohio. Laminated rubber. 1,640,800; Aug. 30.
Peterson, Malcolm, and M. J. Danielson, assignors to The Bryant Electrical Company, Bridgeport, Conn. Blectric fitting. 1,653,903; July 100 of the Presson, Martin E. Belmoat, assignor be F. Levy, Peterson, Martin E. Belmoat, assignor of B. F. Levy, Peterson, Martin E. Belmoat, assignor, Jan. 18.
Peterson, Martin E. Belmoat, assignor, Jan. 18.
Peterson & Nethaway. (See Peterson, Francis C., assignor.) Peterson & Nethaway. (See Peterson, Francis C., assignor.) Ob. Cleveland, Ohio. Stitch-picking device. Peterson, Oscar W., Cadillac, Mich. Artificial fishing bait. 1.627.455; May 3. Peterson, Oscar W., Cadillac, Mich. Artificial fishing bait. 1.627.455; May 3. Peterson, Otto H., Northfield, Minn. Record-holding handle for milk cans. 1.642,039; Sept. 20. Peterson, Pete, Monroe, Wash. Switch-operating mechanism. 1,633,869; June 28. Peterson. Peter, Berkeley, Calif. Aerial propulsion. 1,633,89; Aug. 2. Peterson, Peter, Berkeley, Calif. Aerial propulsion. 1,633,884; Dec. 20. Peterson. Bichard W., Ceresco, Nebr. Adjustable auto tool grinder. 1,647,248; Nov. 1. Peterson, Rudolph E. (See Olofsson, B. L., and Peterson, Rudolph E. (See Olofsson, B. L., and Peterson, Rudolph E. (See Olofsson, B. L., and Peterson).

Peterson, Sophus M., et al. (See Englund, Edwin H. L., assignor.)

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Peterson, Sophus M., et al. (See Englund, Edwin H. L.,

Peterson, Thorwald B., and L. H. Holcomb, assignors to Omaha Folding Machine Co., Omaha, Nebr. Gasoline pump. 1,613,845; Jan. 11. Peterson, Victor, Chicago, Ill. Door lock. 1,637,275; pump. 1,838;889; van.
Peterson, Victor, Chicago, Ill. Door local presence of the presence of t

Petin, Hector, assignor to Société Etablissements J. J.
Camand & Forges de Basse-Indre, Paris, France,
Weight-operated plate or sheet sorting machine.
1.614.630; Jan. 18.
Pettt, William H., assignor to The Miami Radio Corporation Company, Dayton, Ohio, Condenser, 1,629.882;
May 24.

May 24.

Petiticler, Neri J., St. Louis, Mo. Fuel economizer.
1,624,067; Apr. 12.

Pet Milk Company. (See Hebrank, William F., assignor.)

Pet Milk Company. (See Kaufmann, Albert J., assignor.)

Petnel, Joseph A., Troy, N. Y. Electric switch.
1,625,149; Apr. 19.

Petree, Cuthbert G., assignor to Petree & Dorr Engineers,
Inc., New York, N. Y. Recovering sugar content in

cane fuices. 1,625,680; Apr. 19.

Petree & Dorr Engineers, Inc. (See Petree, Cuthbert G.,
assignor.)

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Petree & Dorr Engineers, Inc. (See Petree, Cuthner u., assignor).

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to Status Matrix-setting and Germany. Matrix-setting and 1,23,971; Apr. 12.
Petroff, Grigori, Moscow, Russia, and P. Shestakoff, Paris, France. Treating hard water. 1,642,594;
Paris, France. Treating hard water. 1,642,594;

Germany. Marrix-setting and inne-assing macnine. 1,023,971; Apr. 12.
Petroff, Grigori, Moscow, Russia, and P. Shestakoff, Sep. 13.
Petroff, Grigori, Moscow, Russia, and P. Shestakoff, Sep. 13.
Petroff, Grigori, Moscow, Russia, and P. Shestakoff, Paris, France. Obtaining sulpho-aromatic fatty acids. 1,642,595; Sept. 13.
Petroleum Appliance Syndicate. (See Weisgerber, Edwin Crassignor). Petroleum Machinery Development Corporation. (See Langdon, Jesse D., assignor).
Petry, Nicholas A., Philadelphia, Pa. Operating device for valves and the like. 1,630,213; May 24.
Petsch. Everett C., Fleasant Dale, Nebr. Stay-put park-Petsche, Gustav B. (See Paterson, D. S., and Petsche, Devecther, Leverett C., Fleasant Dale, Nebr. Stay-put park-Petsche, Gustav B. (See Paterson, D. S., and Petsche, Petschenig, Karl, Vienna, Austria, assignor to the Firm C. P. Goerz Opticke Anstalt Aktiengeselischaft, Akciova Spolecnost K. P. Goerz Opticky Ustay, Bratislava, Czechoslovakia. Plotting board. 1,644,791; Oct. 11.
Charles H., South Haven, Mich. Walking Gurre wheeled toy. 1,653,631; Dec. 27.
Pettengill, Ralph H., Haverbill, Mass. Guard for wood-heel-turning machines. 1,622,638; Mar. 29.
Pettengill, Walter E., East Providence, R. 1. Wrapping wire. 1,653,146; Aug. 16.
Petter, Guy B., Ipswich, England. Internal-combus-Petters, Guy B., Ipswich, England. Transfer mechanism for calculating machines. 1,615,033; Jan. 18.
Pettersson, Carl G., (See Sjöman, C. F., and Pettersson, Petr A., Chicago, II. Pump. 1,652,232; Dectetres, Westerbusters headt. 1628,500; Ann. 27.

Pettersson, Pehr A., Chicago, Ill. Pump. Roozaou, Dect. 138
Dect. 138
Dect. 138
Dect. 148
Dect. 158
Dect. 158
Dect. 158
Dect. 158
Dect. 158
Dect. 168
Dect.

Diec. 6. Gustav. and H. Rittner, Offenbach-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft. Frankfort-on-the-Main, Germany. Producing combined shades on the vegetable flore and in materials treated according to such process. 1,640,802; Aug. 30.

Petzold, Gustav, and H. Rittner, Offenbach-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort, Germany. Producing combined shades of azodyestuffs and vat dyestuffs on the vegetable fiber and in materials dyed or printed according to such Pengel Ray I. Oklahoma City, Okla. Book cover or protector. I. 463,4418: Sept. 27.
Pevely Dalry Company. (See Kerckhoff, D. C., and Copp. assignors.)
Peverce, Ernest F., and G. A. Hendrie, Niagara Falls, assignors to Phosphorus Hydiogen Company, New York, N. Y. Furifying phosphoric acid. 1,648,146; Pew. Afthur E., fr., Bryn Mawr, and H. Thomas Hulley.

Nov. 8.

Pew, Arthur E., jr., Bryn Mawr, and H. Thomas, Riddey Park, assignors to Sun Oil Company, Philadelphia, Pa. Apparatus for completely separating gasoline from mineral oil. 1,464,969; Oct. 18.

Peyser, Alfred E. (See MacBride, J. A., and Peyser.)

Peyser, Louis, New York, N. Y. Combination ash tray, cigarette and plpe holder. Des. 72,028; Feb. 15.

Peyton, Ephralm G., U. S. Army, Washington, D. C. Circuit closer. 1,632,676; June 14.

Plachler, Richard. (See Lee, W. S., Pfaehler, and Pfaff, Ernest C., Chicago, Ill., Clutch., 1,848,202.

Nov. 8.

Ernest C., Chicago, Ill. Clutch. 1,648,323;

Pfanstiehl Radio Company. (See Pranstiem, Car., a. signor.)
Pfarr, John H., Newark, N. J. Flower holder. 1,624,504;
Apr. 12.
Pfau, Arnold, fr., Milwaukee, Wis. Electrical heating appliance. Des. 72,186; Mar. 8.
Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic turbine. Company, Milwaukee, Wis. Hydraulic turbine. Thauller Company, The (See Greene, Otto W., assignor.)
Pfaudler Company, (See Smith, A. H., and Miner, assignor.)

Pfaudier Company. (See Smith, A. H., and Miner, as-signors.)
Pfauser, Edward M., assignor to Blackbawk Manufacturing Co., Milwaukee, Wis. Circulating pump. 1,619,539;
Pfeiler, Annie. (See Zettlitz, Vincenz, assignor.)
Pfeifer, Ferdinand, Springfield, assignor to The Taylor
Tilting Light Company, Marysville, Ohio. Tilting
headlight for automobiles and the like. 1,627,199;

headlight for automobiles and the land.

May 3.

Pfeifer, Ferdinand A. (See Deutsch, L., and Pfeifer.)

Pfeifer, Ferdinand A. Springfield, assignor to The Thomas

& Armstrong Company, London, Ohio. Tank.

Pfeifer, Frank M., and E. Van Camp, Quincy, Ill. Trecarrier clamp. 1,615.722; Jan. 25.

Pfeiffer, Alice L. (See Bagley, James, assignor.)

Pfeiffer, Christian. (See Köppen, W., and Pfeiffer, Christian.

E. Sasignor to The Engry Register Comparty, Dayton, Ohio. Autographic register. 1,640,690;

Aug. 30.

Pfeiffer, Gattfried F. Spokane, Ohic Lime spreader. 1.614-152; Jan. 11. Pfeiffer, Immanuel, assignor, by mesne assignments, to Blue Tip Pile Wire & Knife Company, Bedford, Mass. Pile wire for looms. 1.645-255; Oct. 11. Pfeiffer, Karl. (See Edeleanu, L., Pfeiffer, Gress, and

Pfeil, Emil H., Anchorage, Alaska. Lingual bar, 1.634.469; Dec. 27. Pfeil, Hemy C., Chicago Heights, assignor to American Manganese Steel Company, Chicago, Ill. Core for molds. 1.630.337; May 31. Pfeil, Paul F., South Bend, Ind. Light projector, 1.645.721; Oct. 18.

1.645,721; Oct. 18.

Pfersdorf, Christian, Eiberfeld, Germany, Device for trying on shoes or boots. 1.635,341; July 12.

Pfeufer, Joseph, Dudelingen, near Luxemburg, Germany, Brushing apparatus for washing the human body. 1,445,926; Oct. 18.

Pfiffner, Frank J., Joilet, Ill., assignor of one-half to J. W. Eiliott, Minneapolis, Minn. Erecting machine for wall boards. 1,639,962; Aug. 23.

Pfister, Fred, Jersey City, N. J. Building-corner guard. 1.653,656; Dec. 27.

Pfister, John R., assignor of five per cent to I. Kaufman, mineteen per cent to E. Brenner, and thirteen per cent to M. Boskey, I. A. Schiller, B. Marvin, and M. E. 1,629,362; May 117. N. Y. Wood-preserving system. 1,629,362; May 117. N. Y. Wood-preserving system. Pfister, William A. (See Price, E., and Pfister.) Pfisterer, Karl, assignor to E. Grill, Zuffenhausen, Germany. Washing and mixing liquids. 1,613,531; Jan. 4. Pflager, Harry M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car truck. 1,614,637; Jan. 18. Pflager, Harry M., assignor to Commonwealth Steel Company, Granite City, Ill. Locomotive structure. 1,639,663; Aug. 23.

Pflager, Harry M., St. Louis, Mo., assignor to Commonwealth Steel Company, Granite City, Ill. Locomotive. 1,639,664; Aug. 23.

Plager, Harry M., St. Louis, Mo., assignor to Commonwealth Steel Company, Granite City, Ill. Locomotive. 1,639,664; Aug. 23.

1,639,064; Aug. 23.
Plagger, Harry M., assignor to Commonwealth Steel Company, St. Louis, Mo. Booster motor truck. 1,642,890; Sept. 20.
Plagger, Harry M., St. Louis, Mo., assignor to Commonwealth Steel Company, Granite City, Ill. Car truck. 1,642,890; Sept. 20.
Plagger, Harry M., St. Louis, Mo., assignor to Commonwealth Steel Company, Granite City, Ill. Car truck. 1,646,214; Oct. 18.
Plager, Harry M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car truck. 1,646,214; Oct. 18.
Plager, Harry M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car truck. 1,654,141; Dec. 27.
Plager, Johannes, Frankfort-on-the-Main, and A. Albert, Month Compony, Manufacture of organic arsenic componies of the Company, Green Componies of the Company, Plager, Johannes, Frankfort-on-the-Main, and A. Albert, Munich, Germany, Manufacture of new derivatives of Plager, Charles and Manufacture of the Company, Alvon, Ohio. Fishing red. Des. 73,047; July 12.
Plueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Frog spear, 1,021,022; Mar. 15.
1,021,032; Mar. 15.
1,021,032; Mar. 15.
1,021,032; Mar. 15.
1,032,033; Jan. 25.
Plager, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Artificial belt. 1,015,038; Jan. 25.
Plager, Charles T., company, Alvon, Ohio. Artificial belt. 1,015,038; Jan. 25.
Plager, Charles T., company, Alvon, Ohio. Artificial belt. 1,015,038; Jan. 25.
Plager, Charles T., company, Alvon, Ohio. Artificial belt. 1,015,038; Jan. 25.
Plager, Charles T., company, Alvon, Ohio. Priced. Krupp Aktengeselschaft, Essen-on-the-Ruhr, Germany, Electric Overload protective system. 1,630,214; May 24.
Phalin, Thomas C., Connellevillander R., assignor, Dhalon, Thomas C., Connellevillander Company, Company, Connellevillander Company, C

1051.630; Dec. 6.

Phelan, Merton D., Lynn, Mass., assignor to United Shoe Phelan, Merton D., Lynn, Mass., assignor to United Shoe Marchine, Corporation Paterson, N. J. Nail-making machinery Corporation Paterson, N. J. Nail-making machinery Corporation, Paterson, N. J. Rotary transmission means. 1,640,370; Aug. 30.

Phelan, Merton D., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Rotary transmission means. 1,640,370; Aug. 30.

Phelon, Afthur E. (See Smith, E. L., and Phelon.) Phelon, A Fred. (See Smith, E. L., and Phelon.) Phelon, A Fred. (See Austin, E. F., and Phelps.) Phelps Cotton Picker Company. (See Phelps, Frank and M. F., assignors.)

Phelps, Edwin S., Montclair, N. J. Recording-lock control means. 1,615,723; Jan. 25.

Phelps, Fryd A. (See Sinclair, C. C., and Phelps.)

Picker Company. Little assignors to Phelps. Cotton Picker Company. Little assignors to Phelps. Cotton Picker Company. Little assignors to Phelps. Control-picking machine. 1,646,594; Oct. 25.

Phelps, James W., Chicago, Ill. Electric receptacle. 1,622,205; Apr. 5.

1,623,205; Apr. 5.

Phelps, John R., San Bernardino, Calif., Date-recording instrument. 1,652,324; Dec. 13.

Phelps, Lowell S., Laramie, Wyo. Attachment for tractors. 1,632,311; June 14.

Phelps, Morton F. (See Phelps, Frank and M. F.)

Phelps, Wilbur M., Staunton, Va. Liquid-level indicator. 1,629,732; May 24.

1,631,390; Gereley, Colo. Casket-lowering device. Phenolic Process Corporation. (See Nielsen, Emil J., assignor.)

Philadelphia Drying Machinery Company, The. (See Morshead, H., and Wigglesworth, assignors.) Philadelphia Drying Machinery Company, The. Sibson, Walter W., assignor.)

Philadelphia Drying Machinery Company. (See Wigglesworth, Harry H., assignor.)
Philadelphia Drying Machinery Company, The. (See Wigglesworth, H. H., and Greiner, assignors.)
Philadelphia Electrical & Manufacturing Company. (See Bundy, Clifton L., assignor.)
Philadelphia Storage Battery Company. (See Grimditch, Philadelphia Storage Battery Company. (See Holland, W. E., and Grimditch, assignors.)
Philadelphia Storage Battery Company. (See Pearson, Lawrence J., assignor.)
Philadelphia Storage Battery Company. (See Pearson, Lawrence J., assignor.) Philadeiphia Supplies Co., The. (See Deissler, William, assignor.)
Philadeiphia Tabloid Publishing Company, The. (See Massey, Edward M., assignor.)
Philadeiphia Toboggan Company, (See Schmeck, Herbert F., assignor.)
Philadeiphia Toboggan Company, (See Schmeck, Herbert F., assignor.)
Philadeiphia Toboggan Company, (See Schmeck, Herbert E., assignor of one-half to Herbert E., assignor of one-half to G. E. Hanaker. Electric door one-half to G. E. Hanaker. Electric door pening and closing apparatus. 1,614,255; Jan. 11.
Philips. Fred A., Santa Cruz, Calif. Well-drilling. Northfield, Vt. Sand-blast relief carving. 1,627,465; May 3.
Philipp., Julius, New York, N. Y. Hair clasp. 1,618,670; Feb. 22. Feb. 22.

Feb. 22.

Feb. 23.

Feb. 24.

Feb. 25.

Filipp, Richard, assignor to the Firm Magnet-Werke G. m. b. H. Eisenach Spezialtabrik für Elektromagnet Apparate, Eisenach, Saxe-Weimar, Germany. Apparatus for regenerating bulky waste metal. 1,647,371; Nov. 1.

Filippart. Emile, Liege, Belgium. Automatic pistol. 1,638,783; Aug. 9.

Filipps, William B., St. Louis, Mo. Oil burner. 1,646,834; Oct. 25.

Filips, H. 29.

France, 7,803; Nov. 8.

Filips, N. V., Gloeilampenfabrieken. (See de Boer, Jan H., assignor.)

Filips, N. V., Gloeilampenfabrieken. (See Hertz, Gustav L., assignor.) Philips, At., V., Gloeilampenfabrieken. (See Holst, Gn. assignor.)
Philips', N. V., Gloeilampenfabrieken. (See Holst, G., and Bouwers, assignors.)
Philips', N. V., Gloeilampenfabrieken. (See Van Arkel, Philips', Prank Boer, assignors.)
1.627,574; May 10.
Philips', William F., Yantic, Conn. (Chimney attachment. 1,629,809; May 24.
Philips', A. S. (See Morin, Louis H., assignor.)
Philips, Albanus, sr., et al. (See Winterling, Williams F., assignor.)
Patryiew, Mo. Cover retainer. Phillips, A. Safery device for trol-F, assignor.)

F, assignor.

F, ass ton. Calli. Automate sand of Aug. 16.
Phillips, Benjamin, Chicago, Ill. Safety device for trolley cars. 1,647,469: Nov. 1.
Philips, Charles R. (See Smith, J. D., and Phillips, as-Phillips, Charles R. (See Smith, J. D., and Phillips, as-signors.)
Phillips, the bester, Portland, Oreg. Clamp and tightener Phillips, Clive S., assignor of one-half to F. R. Simms, London, England. Tap for fluids. 1,829,303; May 17. Phillips, David. Daytona Beach, Fla. Astronomical de-vice. 1,634,207; June 28. Phillips, Edgar J., et al., executors. (See Kraft, Henry P.)
Phillips, Edward A., Philadelphia, Pa. Bathing suit.
1.650,386; Nov. 22.
1.650,386; Nov. 22.
1.650,386; Nov. 22.
1.643,642; Sept. 32.
Phillips, Ernest B., East Chicago, and J. G. Stafford, Whiting, Ind., assignors to Sinclair Refining Company, Chicago. Ill. Refining of hydrocarbon oils. 1,639,531; 1,639,531; Whiting, 11d., assignors to Sincear healing Company, Chicago, Ill. Refining of hydrocarbon oils. 1,639,531; Philips. Floyd H., and C. E. Mann, assignors to Queen City Products, Inc., Buffalo, N. Y. Knitted cap. 1,618,222; Feb. 22. Philips. Fred L., New York, N. Y. Vision shield for vehicles. 1,649,418; Nov. 15. Philips. Frederick B., Newport, Ky., assignor to Allen & Allen, Cincinnati, Ohio. Reversing mechanism for machine tools. 1,648,201; Nov. 15. Philips. George F., and T. H. Torian, Paducah, Ky. Hendight-dimming mechanism. 1,631,657; May 31. Philips. Henry, and W. H. T. Thilips and D. H. Huttassignors to Ottumwa Box Car Loader Company, Ottumwa, Lowa. Flexible conveyer. 1,650,037; Nov. 22. Philips. John, Woodside, N. X. Thermometer. Des. 72,073; Feb. 22. Philips. John E. assignor to Albert Pick & Company, Chicago, Ill. Plate or similar article. Des. 72,493; Apr. 19.

Phillips, John E., assignor to Albert Pick & Company, Chicago, Ill. Plate or similar article. Des. 72,724; May 24. May 24. Chicago, Ill. Expansion-anchor-shell Phillips, John W., Chicago, Ill. Expansion-anchor-shell Phillips, John W., Illington, N. C. Foot accelerator. 1,628,995; May 17. Phillips, Leon A., New York, N. Y. Garment hanger. 4.626,210; Apr. 26. Phillips, Leevis P., Chicago, Ill. Fastening device. Phillips, Levis B., sr., et al. (See Winterling, William F., assignor.)
Phillips, Lewis H., Atlantic Highlands, N. J. Electric switch. 1,613,902; Jan. 11. Cyclohexyl resorcin and phillips, Levis B., St., assignor.)
Phillips, Petroleum Company. (See Hubbell, Alfred W., assignor.) making the same. 1.650.036; Nov. 22.
Phillips Fetroleum Company. (See Hubbell, Alfred W., assignor.)
Phillips, Ross M. G., New Haven, Conn. Glare device. 1.652.632; Dec. 13.
Licological Company. (See Hubbell H., assignor.)
Phillips, Ross M. G., New Haven, Conn. Glare device. 1.652.632; Dec. 13.
Licological Company. (See Couchman, A., and Phillips, Dec. 27.
Phillips, Walter L. (See Couchman, A., and Phillips, Dec. 27.
Phillips, Walter L. (See Couchman, A., and Phillips, Phillips, Walter L. (See Couchman, A., Drinkhahn, and Phillips, Walter W., Frankford. Del. Fire escape. 1.643.91; Oct. 25.
Phillips, Walter W., Frankford. Del. Fire escape. 1.643.91; Oct. 25.
Phillips, Wendell L., Bonair, Iowa. Traffic signal. 1.623.889; Apr. 5.
Philly, Fernand, Pau. France. Stationary yarn guide for weaving looms. 1.617.347; Feb. 15.
Philps, Fornand, Pau. France. Stationary yarn guide for weaving looms. 1.617.347; Feb. 15.
Phipps, Eva R., et al. (See Kay, Oscar, assignor.)
Phipps, John M. (See Williams, Willard C., assignor.)
Phipps, John M. (See Williams, Willard C., assignor.)
Phipps, John T., Huntington Park, Calif. Core barrel. 1.644.947; Oct. 11.
Phister, Albert B., Fort Thomas, Ry., assignor to The Phister Manufacturing Company. (See Phister, Albert B., assignor.)
Pheenix Burner Corporation, The. (See Egloff, Frank S., assignor.)
Phoenix Hosiery Company. (See Breyer, Robert, assignor.)
Phoenix Hosiery Company. (See Breyer, Robert, assignor.)
Phoenix Hosiery Company. (See Fitzgibbon, John E., assignor.)
Phoenical Hosiery Company. (See Pevere, E. F., and Hendrie, assignors.) Assignor.)

Phosphorus Hydrogen Company. (See Pevere, E. F., and Hendrie, assignors.)

Photogenic Machine Company, The. (See Kublac, Lester s., assignor.)
Photomaton Inc. (See Josepho, Anatol M., assignor.)
Photometric Products Corporation. (See Ladd, Lester L., assignor.)
Photometric Products Corporation. (See Rundell, Rupert E., assignor.)
Photo Plating Company, The. (See Sundbeck, Adolph, assignor.) S., assignor.) Photomaton Inc. Photo Plating Company, 1ne. (See Sunducer, Adoups, assignor.)
Photostat Corporation. (See Caps, Arthur W., assignor.)
Plcard, Edimond, Parls, France. Variable condenser.
1,615,848; Feb. I.
Plcard, Georges, assignor to B. J. Coghlin Company
Limited, Montreal, Canada. Rall anchor. 1,632,847;
June 21. Piccardo, Dionisio, New York, N. Y. Candy-coating machine. 1.618.471; Feb. 22. Piccirilli, Pasquale J., New York, N. Y. Door brace. 1.631.979; June 14. Piccirilli, Pasquale J., New York, N. Y. Door brace. 1.631.980; June 14. Pichard, Charles, and E., Paris, France. Mercuryless half-secreting process for feit making. 1.622,883; Mar. 29.

Pichard, Emile. (See Pichard, Charles, and E.)

Piché, Frank W., Detroit, Mich. Brake mechanism. 1,625,150; Apr. 19.

Piché, Frank W., Detroit, Mich. Brake mechanism for vehicles. 1,625,151. Apr. 19.

Piché Frank W., Detroit, Mich. Brake mechanism. 1,635,727; July 12.

Pick, Albert, & Company. (See McKenna, William, assignor.). signor.) ick, Albert, & Company. (See Phillips, John E., Pick, Alberassignor.) assiguor;)
Plek, Albert, & Company. (See Plek, Hugo, assignor.)
Plek, Hans Berlin-Dahlen, Germany. Diaphragm
valve. 1,618,671; Feb. 22.
Plek, Hugo, Winnetka, assignor to Albert Plek & Company.
Chicago, Ill. Combined mirror and rack. 1,638,509;
Aug. 8.

Pickance, Frederick W. W., Wimbledon, London, England. Ventilating apparatus. 1,618,552; Feb. 22.
Pickar, Leo H., North Freedom, Wis. Folding brush. 1,627,200; May 3.
Pickard. Greenled W., Newton Center, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Thermionic tube. 1,650,232; Nov. 22.
Pickard, Oliver J., (560,232; Nov. 22.
Pickard, Robert H., D. J. Lloyd, and A. E. Canne, London, England T., Marg. of chrome-tanned heavy flexard, Robert H., D. J. Lloyd, and A. E. Canne, London, England T., Marg. of chrome-tanned heavy Flexard, Rosa M., Wilmette, Ill. Door knocker. Des. 72,236; Mar. 15.
Pickard, Rosa M., Wilmette, Ill. Door knocker. Des. 72,236; Mar. 15.
Pickard, Sasignors.) emberton, Minn. Road planer. 1,624,971; Apr. 19.
Pickell, Joseph, Samsso City, Mo. Spraying device. 1,636,070; July 19.
Pickell, Joseph, Ardmore, Okla. Nut-cracking machine. Pickerl, Achie B., Kansas City, Mo. Spraying device. 1,636,070; July 19.
Pickerl, John L., Ardmore, Okla. Nut-cracking machine. Pickerl, London, Spraying device. 1,648,584; Sept. 27.
Pickett, A. Glenn, assignor to Chicago Metallic Packing. Company, Chicago, Ill. Packing. 1,616,596; Feb. 8.
20 pickerll, John, Louisville, W., Refrigerator. 1,618,106; Feb. 16.
Pickup, William T. (See Grosvenor, J. E., and Picking) Pickerll, John, Louisville, Ky. Refrigerator. 1,618,106; Feb. 16.
Pickup, William, Pendleton, and J. Berry, London, England. Rotary integlop printing machine. 1,654,481; P.

rickrell, John, Loulsville, Ky. Refrigerator. 1,618,106'; Feb. 15.
Pickup, William, Pendleton, and J. Berry, London, England. Rotary intagilo printing machine. 1,654,431; Dec. 27.
Pleezonka, Rudolph, Naugatuck, Conn. Safety device for gas valves. 1,618,307; Feb. 22.
Plehn, Theodore A., and G. Heer, San Jose, Calif. Tool.
Piel. Gottfried, fr., Forest Hills, assignor to Steiner Electric Corporation, Long Island City, N. Y. Distance control for movable parts. 1,652,794; Dec. 13.
Pieper, Alphonse F. (See O'Neill, T. F. and Miller, assignors.)
Pieper, Alphonse F., Rochester, N. Y. Universal Joint.
Des. 74,002 aug. R.
1,626,689; May S.
1,626,689; May S.
Pieper, Alphonse F., Rochester, N. Y. Dental apparatus. 1,626,689; May S.
Pieper, Alphonse F., Rochester, N. Y. Valve. 1,631,643; June 7.
Pieper, Alphonse F., Rochester, N. Y. Valve. 1,631,643; June 7.

Pieper, Alphonse F., Rochester, N. Y. Instrument support, 1,645,660; Oct. 18.
Pieper, Alphonse F., Rochester, N. Y. Dental engine.
Pieper, Alphonse F., Rochester, N. Y. Light-projecting apparatus. 1,646,587; Oct. 25.
Pieper, Alphonse F., Rochester, N. Y. Trap for cuspidors. 1,649,182; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Cuspidors. 1,649,182; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,183; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. 1,649,181; Nov. 15.
Pieper, John H., Delayan, Minn. Dispensing device.

Nov. 29.

Pieper, John H., Delavan, Minn. Dispensing device.

1.634.694; July 5nd A. F., Rochester, N. Y. Pedestal for dental apparatus. Des. 7.1944; Feb. 1.

Pieper, Willy, assignor to J. B. Soellner Nachf. Reisszeugfabrik A.-G., Nuremberg, Germany. Production of a weatherproof oxide layer on electron metal. 1,642.309; Sept. 18.

Heatt, James S., sassignor of one-fourth to W. C. Smith, 1651,103; Nov. 29. Pierce, Henty L. and A.)
Pierce, Arthur. (See Pierce, Henry L. and A.)
Pierce, Benjamin F., Glenwood, Iowa. Veterinary operating table. 1,651,290; Nov. 29. Pierce, Benjamin F., Glenwood, Iowa. Veterinary operating table. 1,651,290; Nov. 29. Pierce, Buller & Pierce Manufacturing Corp. (See Goodnow, W. F. and Vickers, assignors.)
Tor. 1,652,954; Dec. 13.
Pierce, Clarence A., Lowell, Mass. Olling traveler of spinning frames. 1,639,749; Aug. 23.
Pierce, Barl F., Chicago, Ill., assignor, by mesne assignments, to Trico Products Corporation, Buffalo, N. Y. Pierce, Earl F., Chicago, Ill., assignor, by mesne assignments, to Trico Products Corporation, Buffalo, N. Y. Windshield cleaner. 1,619,677; Mar. 1.
Pierce, Earl F., assignor to The Bassick Manufacturing Company, Chicago, Ill. Lubricating system. 1,644,202; Oct. 4.

Pierce Ernest P., Cleveland, Ohio. Die-easting machine. 1,418,223; Feb. 22.
Pierce, Frank M., Chicago, Ill. Sounding whirligig. 1,612,881; Jan. 4.
Pierce, Frank M., Chicago, Ill. Whirligig. 1,612,882; Jan. 4.

Pierce, Frank M., Chicago, Ill. Gyroscopic toy. 1,634,470; July 5. Fuse Corporation. (See Blake, Robert S., as-

Pierce Fuse Corporation. (See Blake, Robert S., assignor.)
Pierce, George, Montreal, Quebec, Canada. Vehicle headight. 1,634,043; June 28.
Pierce, George, Montreal, Quebec, Canada. Headlight dipping mechanism. 1,634,044; June 28.
Pierce, George L., Brooklyn, N. Y. Playing ball.
Pierce, George L., Brooklyn, assignor to A. G. Spalding & Bros., New York, N. Y. Playing ball. 1,621,898; Mar. 22.

elipping mechanism. 1,633,644; June 28.

Pierce, George L., Brooklyn, N. Y. Playing ball.
1,621,899; Mar. 22.

Pierce, George L., Brooklyn, assignor to A. G. Spalding & Bros., New York, N. Y. Playing ball. 1,621,898;

Pierce, George L., and H. V. Rau, Brooklyn, assignors to A. G. Spalding & Bros., New York, N. Y. Playing ball.
1,618,994; Mar. 1.

Pierce, George L., and H. V. Rau, Brooklyn, assignors to A. G. Spalding & Bros., New York, N. Y. Playing ball.
1,618,994; Mar. 1.

Pierce, George L., and H. V. Rau, Brooklyn, assignors to A. G. Spalding & Bros., New York, N. Y. Golf-bag Pierce, Harrie C., assignor to Metal Protection Corporation, Indianapolis, Ind. Chromium plating. 1,645,927; Oct. 18.

Pierce, Henry L., and A. Pierce, Ellet, Ohio. Drip-pan alarm.
1,615,647; An. 25.

Pierce, Henry L., and A. Pierce, Ellet, Ohio. Drip-pan alarm.
1,615,647; An. 25.

Pierce, Homer R., assignor to Indian Territory Illuminating Oil Company, Bartlesville, Okla. Gas gravity balance. 1,625,625; May 24.

Pierce, Hower R., assignor to Indian Territory Illuminating Oil Company, Bartlesville, Okla. Gas gravity balance. 1,625,625; May 24.

Pierce, Howard W., Butte, Mont., assignor to L. M., Stellmann, Onondaga County, N. Y. Piston and piston-pin construction. 1,623,672; Apr. 12.

Pierce, James B., fr., Charleston, W. Va. Making precupation of the play of the property of th

Plerce, Raymond T., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. MeasPeb. 15.
Plerce, Raymond T., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical measuring instrument. 1,637,390; Aug. 2.
Plerce, Robert C., assignor to J. R. Gammeter, Mon.,
Plerce, Terry W. (See Nussel, Joseph H., assignor.)
Plerce, Petry W. (See Nussel, Joseph H., assignor.)
Plerce, Vinton U. Da deceased, Asheville, N. C., J. Plerce,
executor. Intruni-combustion engine. 1,624,432;
Apr. 12.
Plerce, Witter, Glendale, Calif. Traffic signal. 1,652,728;
Poc. 33.
Plerce, Walter H., assignor to Carr Fastener Company.
Cambridge, Mass. Fastener stud. 1,634,232; June 28.
Plerce, Walter H., Watertown, assignor to Carr Fastener
Company, Cambridge, Mass. Fastener, 1,641,901;
Plerce, Winslow S., Jr., Bayville, N. Y. Breaking device
for hollow cylinders. 1,630,759; May 31.
Plerce Wrapping Machine Company. (See Pierce, Paul,
assignor.).

Pierce Wrapping Machine Company. (See Pierce, Paul, assignor.)
Piercy Company, The. (See Klein, Alfred M., assignor.)
Piercy, George F., Superior, Nebr. Syringe. 1,616,389;
Feb. 1.
Piercti, Peter J., Mount Morris, N. Y. Commode.
1,646,237; Oct. 18.
Pierle, Henry C., assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Machine tool.
1,617,606; Seb. 15.
Pierman, Alexander N., Newark, N. J. Alarm signal.
1,652,683; Dec. 13.

Piermattei, Ignazio, Landisville, N. J. Paper-receptaclemaking machine. 1,635,057; July 5.
Piernay, Walter. (See Isenberg, H. O. C., and Piernay,)
Pierpoint, Walter, Alexandria, Va. Insect trap. 1,614,153;
Pierson, Charles A., assignor to The Standard Electric
Stove Company, Toledo, Ohio. Electric stove.
1,640,371; Aug. 50.
Pierson, Edward, Calumet City, Ill. Clasp. 1,635,386;
Pierson, Floyd E., Oakkand, Iowa. Stock-watering tank.
1,029,883; May 24.
Pierson, Henry J., Keene, Nebr. Spring seat. 1,616,546;
Féb. 8. Robert M. (See Bauman, H. A., and Pierson,)
Fierson, Robert M., Akron, Ohio, assignor to The B. F.
Goodrich Company, New York, N. Y. Making an
annular lamisated disklike element. 1,622,048; Mar.
22.

Pierson, Robert M., Akron, Ohio, assignor to Packard Motor Car Company, Detroit, Mich. Inlet manifold for Motor Car Company, Detroit, Mich. Inlet manifold for Letters, Ivon S. 1881, and Inlet manifold for Pietres, Ivon S. 1881, and Inlet manifold for Company, Chicago, Ill. Furnace. 1,637,1519; July 26. Pietrsycki, Ziegmund P., Klamath Falls, Oreg. Cabinet. 1,619,312; Mar. I. Pietzsch, Frank H., assignor to Western Railway Equipment Company, St. Louis, Mo. Floor construction. 1,620,130; Mar. S. Pletzsch, Frank H., assignor to Railway Devices Company, St. Louis, Mo. Angle-cock holder. 1,626,690; Pietzsch, Frank H., assignor to Western Railway Equipment Company, St. Louis, Mo. Retaining-valve bracket. 1,640,504; Aug. 30. Pietzsch, Louis H., Coburg, Melbourne, Victorla, Australia. Liquid-dispensing apparatus. 1,627,115; May 3.

May 3.
Pigeon, Albert M., deceased; A. M. Pigeon, administrativix. Norristown, Pa. Yarn-tensioning device. 1,648,190; Nov. 1.
Pigeon, Anna M., administratrix. (See Pigeon, Albert

Piggly Wiggly Corporation. (See Saunders, Clarence, as-assignor.) Piggly Wiggly Corporation. (See Saunders, Clarence, as-

Signor.)
Phil. Albert, Murray, Utah, assignor to Holliday Radio & Manufacturing Company. Telephone receiver. Re-16,547; Feb. 8.
Pike, Arch and B., Indianapolis, Ind. Time switch. 1,613,291; Jan. 4.
Pike, Bert. (See Pike, Arch and B.)
Pike, Churles V., assignor of one-half to H. A. Orr. Cleveland, Ohio. Food carrying and dispensing means. Pike, George J. (See Gunlocke, W. H., and Pike.)
Pike Luboratories, Limited, The. (See Pike, W. J., and Gibson, assignors.)

Manufacturing Company. (See Hardy, Arthur J.,

Assignar, Pile, Mark L., St. Paul, Minn. Calculator. 1,653,655; Dec. 27.
Pile, Mark L., St. Paul, Minn. Calculator. 1,653,655; Dec. 27.
Pile, Norman C., Seattle, Wash. Dispensing device. 1,638,456; Aug. 9.
Pike, Osear G., De Kalb, Ill. Swimming device. 1,623,852; Apr. 5.
Pike, Colember C., Sompany. Electron-discharge apparatus. Pike, Robert D., San Francisco, Calif. Manufacturing oil gas. 1,644,146; Oct. 4.
Pike, Robert D., San Francisco, Calif., assignor to Cole-French Company. Regenerative furnace. 1,648,191; Nov. 8.

Pike. Walter J., Sean Francisco. Callf., assignor to Cole-ter of Commany. Reconstrative furnace for melting glass. 1.653.607; Dec. 20. Pike. Vernon B., Chettenham, Pa. Cable bender. 1.640.426; Aug. 30. Pike. Walter J., Newaygo, Mich. *Lamp. 1.652.456;

Pike, Walter J., and W. J. Gibson, assignors to The Pike Laboratories, Limited, Newaygo, Mich. Vehicle headlight, 1,643,086; Sept. 20.

headlight. 1,643,086; Sept. 20.
Pl Lambda Phi Fraiternity, Incorporated. (See Rosenthal, Robert H., assignor.)
Plates, Joe, Hamburg, Germany. Gymnastic apparatus. 1,621,477; Mar. 15.
Pliblad, Eric J., Brooklyn, N. Y., assignor to R. S. Smart, Ottawa, Canada. Spring suspension device or shock absorber. 1,626,986; May 8.
Pliblad, Eric J., Rockville Center, N. Y., assignor to R. S. Smart, in Irusl, Ottawa, Ontario, Canada. Spring suspension in Irusl, Ottawa, Ontario, Canada. Spring suspension of the Computer of the Computer

Plikington Brothers Limited. (See Le Mare, Ernest

Pilkington Brothers Limited. (See Pilkington, Geoffrey L., assignor.)
Pilkington Brothers Limited. (See Rowart, Eugène, as-

Pilkington Brothers Limited. (See Waldron, Frederic B.,

signor.)

Pilkington Brothers Limited. (See Waldron, Frederic B.,

Pilkington Brothers Limited. (See Waldron, Frederic B.,

Pilkington, Frederick, New York, N. Y. Indicating means
for faucets or the like. I.642.264 sept. 18.

Pilkington, Geoffrey L., St. Helens, assignor to Pilkington Brothers Limited Liverpool, England. Cathedral
Riass. Des. 72,029; Feb. 15.

Pillings, Bellevia Philadelphia, Pa. Drawer stop.

Pillings, Edward R., Fostoria, Ohio. Automatic lubrication
system. I,645.661; Oct. 18.

Pilling, Henry Choriton, Manchester England. PresPilling, Norman B., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Resistor alloy. 1,626.661; May 2.

Pilling, Norman B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heasistor alloy. 1,626.661; May 2.

Pilling, Norman B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heasistor alloy. 1,626.661; May 2.

Pilling, Norman B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heather the State of Sta

Pilot Electric Manufacturing Company. (See Geloso, John, assignor.)
Pilot Electric Manufacturing Company, The. (See Horton, Charles, assignor.)
Piloty, Ilans, Munich, assignor to the Firm of Jos-Po Farbenphoto Gesellschaft mit beschrankter Haftung, Hamburg, Germany. Apparatus for multiplex photography. 1,631,058; May 31.
Pimm, John C. (See Long, S. B., and Pimm.)
Oct. 4, Antoine B., San Jose, Calif. Mute. 1,644,272;
Oct. 4, Antoine B., San Jose, Calif. Mute. 1,644,272;
Pinaud, John A., Atlantic Highlands, N. J. Wind motor. 1,636,434; July 19.
Pinchbeck, Arthur S. (See Pinchbeck, Harry A. and A. S.)

Pinchbeck, Harry A. and A. S., London, England. Fruit knife. 1,638,356; Aug. 16. Pinckney, Albert J., New York, N. Y. Superdurable photo plates for ink printing. 1,640,961; Aug. 30. Pinc. William S. Vontura, Calif. Shield for casing-slip handles. 1,625,152; Apr. 19. Pincs Manufacturing Company. (See McCaleb, Albert Pincs Manufacturing Company.

G., assignor.)
Pines Manufacturing Company. (See Raleigh, James F., assignor.)

assignor.)

Pines Winterfront Company. (See Crawford, Howard H., assignor.)

Pines Winterfront Company. (See Raleigh, James F., passignor.)

passignor.)

Pine Tree Milking Machine Company. (See Babson, Henry B., assignor.)

Pingen, Henry M., Toledo, Ohio. Electron tube, 1.644,744; Oct. 11.

Pingree Fatents, Incorporated. (See Pingree, Samuel J.,

Assignor.)

Pingree Patents, incoporate. Government J., assignor.)

Pingree, G. St. Louis, Mo. Apparatus for supplying fuel to internal-combustion engines. I, 623,750 J. Apr. 5.

Pinkerton, Ernest H., Harlingen, Tex. Burial vault. 1,635,904; July 12.

Pinkerton, Ernest H., Harlingen, Tex. Grave-marker mold. 1,647,015; Oct. 25.

Pinkham, Delmar D., Texarkana, Tex. Metal screen.

Pinkham, Delmar D., Texarkana, Tex. Metal screen.

Pinkus, Abraham S., New York, N. Y. Radlocondenser. 1,625,330; Apr. 19.

Pinkus, Abraham S., New York, N. Texarkana, Tex. 1,625,330; Apr. 19.

Pinkus, Abraham S., New York, N. Y. Radlocondenser. 1,625,330; Apr. 19.

Pinkus, Abraham S., New York, N. Y. Pence knob. Des. 74,071; Dec. 13.

Pintoc, John C., Chicago, Ill. Packaging machine. 1,628,803; May 17.

Pinto, Angelo, Brooklyn, N. Y. Carrousel. 1,631,331; June 7.

Pinto, Anthony. (See Lewis, J. D., and Pinto.)

June 7.
Pinto, Anthony, (See Lewis, J. D., and Pinto.)
Pinto, Edward H., West Hampstead, London, England,
Garmont-suspension fitting for ciothing cabinets.
Pintsch, Julius, Aktiengesellschaft. (See Reinecke,
August, assignor.)
Pinzka, George P. (See Morgan, Everett C., and J. E.,
and Pinzkal
Piola, Benedict
1,642,510; Sept. 13.

Pioneer Instrument Company. (See Colvin, Charles H., offeet Instrument Company (See Walker, oneer Slaughtering Device Company. (See Walker, Eugene F., assignor.)
Oneer Suspender Company. (See Peter, Henry A., asoneer Suspender Company. (See Simmons, Frederick

signor.)
Pioneer Suspender Company. (See Simmons, Frederick Pioneer Suspender Company. (See Simmons, Frederick Company.)
Pioneer Suspender Company. (See Simmons, Frederick Company.)
Pione Suspender Company. (See Simmons, Frederick Company.)
Piper, Joseph A., Wiley Ford, W. Va., assignor of one-half to L. Settle, Cumberland, Md. Headlight adjuster for autos. I,629,360; May 17.
Piper, Walter E., Sudbury, Mass. Overshoe. 1,637,027; Piper, Joseph A., Wiley Sudbury, Mass. Overshoe pattern. 1,643,995; Oct. A. Sudbury, Mass. Overshoe pattern. 1,643,995; Oct. Arc-welding system. 1,618,672; Piper, Walter F. (See Beardsley, E. O., and Piper.)
Pipes, Pliny P., assignor to The Ohio Brass Company, Mansfield, Ohio. Arc-welding system. 1,618,672; Pipkin, James A., Waco, Tex. Bottle protector. 1,632,347; June 14.
Pippenhagen, Charles A., et al. (See Furber, Frederick Ma., assignor.)

Plppenhagen, Charles A., et al. (See Furber, Frederick M., assignor.)
Plquet, Anoel V. (See Plquet, Henri, assignor.)
Plquet, Henri, assignor of one-half to A. V. Plquet, Jacksonville, Fla. Spout. 1,617,273; Feb. 8.
Plquet, Jean. (See Bles, R. W., and Plquet.)
Plrani, Marcello. (See Skaupy, F., Plrani, Bahr, and Febse.)

Pirec, Michele, Roiano, Italy. Smoking pipe. 1,654,384;

Piece Mhele, Roiano, Italy. Smoking pipe. 1,654,884, Pirec. Mhele, Roiano, Italy. Sastynor. Pirelli & C. (See Emanuell, Luigi, assignor.) Piro, Raffaele. Naples, Italy. Sasty razor with rolling blade. 1,635,342; July 12. Pirquet, Clemens, Vienna, Austria, assignor to A. Konta, New York, N. Y. Vehicle. 1,651,727; Dec. 6. Lego, 1717; May 31. Piscator, Robert C., Indianapolis, Ind., assignor to Quality Plating and Manufacturing Company. Adjustable window stop. 1,615,554; Jun. 25. Piscator, Robert C., Indianapolis, Ind., assignor to Quality Plating and Manufacturing Company. Adjustable window stop. 1,615,554; Jun. 25. Switch-climp bracket. 1,641,590; Sept. 4. Piscatore, Nicholas, South Weymouth, Mass. Electric bammer and drill. 1,636,923; July 26. Piscitello, Dominick N. (See Piscitello, Roy C. and D. N. Piscitello, Roy C., Boonton, and D. N. Piscitello, France and Piston Ring Company, The. (See Johnson, Charles E., assignor.) Riststrafald, assignor to I. G. Farbenindus-

Pascol and assignor as assignor to I. G. Farbenindus-assignor; av. Bitterfeld, assignor to I. G. Farbenindus-the Aktiengesellschaft, Frankfort, Germany, Produc-tion of phosphorus pentoxide. 1,622.206; Mar. 2. Pistor, Walter U., Cincinnati, Ohio. Switch. 1,617,862;

Peter Id. Holder A. Schmidt Litho-graphing Company, Chicago, Ill. Box cover paper. Des. 72.633; May 10.

Piteairn, Edward, et al. (See Molony, S. B., and Nikaido, assignors.)

Piteairn, Harold F. (See Brewer, Robert W. A., as-signor.)

Pitcairn, William S., Corporation. (See Merriman, Thomas C., assignor.) Pitcairn, William S., Corporation. (See Noke, Charles J., assignor.)

assignor.)
Fitcher, Ellen W. (See Hosking, Richard T., assignor.)
Fitcher, Elmer, assignor to Pitcher Quack Grass Digger
Co., Minneapolis, Minn. Quack-grass digger. 1,632,451;
June 14.

Elmer C. (See Frederickson, A. L., and

Pitcher Quack Grass Digger Co. (See Pitcher, Elmer, assignor.)
Pitkin, Arthur F., Schenectady, N. X. Manufacture of steam-boiler stay bolts. 1,628.063; May 10.
Pitkin, John H. (See Frasier, Marion E., assignor.)
Pitman, Andrew C., assignor of one-fourth to W. R.
Bassick, Torrington, Conn. Stuffing box. 1,644,489;

Oct. 4.

Oct. 4.

Pitman, Arthur R. Lynn, Mass. Frying apparatus. 1630.309 May 7 Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Reducing viscosity of nitrocellulose solutions and product thereof. 1,636,319; July 19.

Pitman, Enoch F., Bend, Oreg. Glare shield. 1,648,994; Nov. 15.

Pitman, Henry L., Westfield, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriter, L. Westfield, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine, 1,625,331; Apr. 19.
Pitman, Louis K., New York, N. Y. Surgical instrument, 1,650,359; Nev. 29.

tney, Arthur H., assignor, by mesne assignments, Pitney-Bowes Postage Meter Company, Stamford, Co Multiple die for postage meter machines. 1,639,3 ford, Conn. 1.639.384:

Autitipie die for postage meter machines. 1,639,384; Aug. 16.
Pitney, Arthur H., and J. W. Ogden, assignors, by mesne assignments, to Pitney-Bowes Postage Meter Company, Stamford, Osha Machine for printing various denomination of the Machine for Pitney, Arthur H., J. W. Ogden, E. G. Northrop, and W. H. Wheeler, Jr., assignors to Pitney-Bowes Postage Meter machines, 1,646,106; Oct. 18.
Pitney, Arthur H., J. W. Ogden, E. G. Northrop, and W. H. Wheeler, Jr., assignors to Pitney-Bowes Postage Meter machines. 1,646,107; Oct. 18.
Pitney, Arthur H., J. W. Ogden, E. G. Northrop, and W. H. Wheeler, Jr., assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn. Trip mechanism for postage-meter machines. 1,643,108; Oct. 18.
Pitney-Bowes Postage Meter Company. (See Pitney, Arthur H., assignor.)

age-meter machines. 1,643,108; Oct. 18.

Pitney-Bows Postage Meter Company. (See Pitney, Arthur H., assignor.)

Pitney-Bowse Postage Meter Company. (See Pitney, A. H., and Orgen, assignors)

High and Company. (See Pitney, A. H., and Orgen, assignors)

Pitney-Bowse Postage Meter Company. (See Pitney, A. H., Ogden, Northrop, and Wheeler, assignors.)

Pitney-Bowse Postage Meter Company. (See Sheldrick, George E., assignor).

Pitney-Bowse Postage Meter Company. (See Sheldrick, George E., assignor).

Pitney-Bowse Postage Meter Company. (See Sheldrick, George E., assignor).

Pitney-Bowse Postage Meter Company. (See Sheldrick, George E., assignor).

Pitney-Bowse Postage Meter Company. (See Sheldrick, George E., assignor).

Pitney-Bowse Postage Meter Company to American Safety Device Co., New York, N., Y. Sign support for temperature. (See Meterson-Pitt Corporation. Kansas City, Mo. Packing or shipping carton. 1,636,071; July 19.

Pitt, Frederick D., and A. Osterloo, assignors to The Anderson-Pitt Corporation. Kansas City, Mo. Guard for Pitt, Frederick D., and A. Osterloo, Assignors to The Anderson-Pitt Corporation. Kansas City, Mo. Guard for Pitt, Grup, Meterson-Pitt, Gropping, Mount, N. C. Automobile jack. 1,640,293; Aug. 23.

Pitt, Irving, Manufacturing Company. (See Conger, Claude M., assignor).

Pitt, William A., assignor to G. F. Sheppard, Montreal, Org. Canada. Antifriction bearing. 1,630,310; Mitter, Manufacturing Company. (See Conger, Claude).

Claude M., her assignor to grade the print, William A., assignor to grade to G. F. Sheppard, Montreal, Quebec, Canada. Antifriction bearing.

Pitt, William A., assignor of one-half to G. F. Sheppard, Montreal, Quebec, Canada. Journal bearing.

1,638,957; Aug. 16.

Pitt, William P., assignor to Irring-Pitt Manufacturing Pitt, William P., assignor to Irring-Pitt Manufacturing Pittel New August, Chicago, Ill, assignor to American Can Company, New York, N. Y. Cracker can 1,645,772; Oct. 18.

Pittelew, August, Chicago, Ill, assignor to A. E. Pittelew, Walter C., Eltham, England, assignor to A. E. Allace, Walter C., Eltham, England, assigno

Oct. 18.

Pitterger, E. M. (See Inzinga, Philip, assignor.)

Pitter, Walter C., Eltham, England, assignor to A. E.
Osborne, Transmission gearing, 1,641,902; Sept. 6.

Pittman, Ernest W., Wheaton, Ill., assignor, by mesne
assignments, to Standard Gas Equipment Corporation.

Stove structure, 1,651,542; Dec. 6.

Pittman, Wilmer T., Hampton, Va. Vebicle lamp casing
or article of similar nature. Des. 73,415; Sept. 6.

Pittoni, Angelo, Lymbrook, N. Y., assignor to Rom Mestar Company. Folding bed. 1,649,323;

Pittoni, Louis E. (See Sishower, G. F., and Pittoni.)

Nov. 15.
Pittoni. Louis E. (See Sisbower, G. F., and Pittoni.)
Pitts. Edmund M., assignor to Sunland Sales Cooperative
Association, Fresno, Calif. Folding box 1,648,280;
Nov. 3.
N. Borkeley, Calif. Tobacco-pipe cleaner.
11.33,200; Aug. 16.
Pitts, Joseph M., Manilla, Ind. Garden tool. 1,650,463;
Nov. 29.

Nov. 22.

Pittsburgh Annealing Box Company. (See Hunter, Percy E., assignor.)

Pittsburgh-Erie Saw Company. (See Jull, Charles H.,

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gnor Pittsburgh J. and Pittsburgh Lavatory Supply Inc. (See Ewing, Urbane J. and A. F., assignors.)
Pittsburgh Plate Glass Company. (See Evans, Albert E., assignor.)
Pittsburgh Plate Glass Company. (See Evans, Albert E.,

Pittsburgh Plate Glass Company. (See Fox, John H., ttsburgh Frate assignor.) ttsburgh Plate Glass Company. Pittsburgh Frederick, (See Gelstharp,

Pittsburgh Plate Glass Company. (See Gelstharp, Frederick, assignor.)
Herstein Law Class Company. (See Gelstharp, F., and Pittsburgh Plate Glass Company. (See Gregorius, Joseph S., assignor.)
Pittsburgh Plate Glass Company. (See Halbach, H. L., and Sweet, assignors.)

L., assignor.)

Pittsburgh Plate Glass Company. (See Hess, Philip J., assignor.)

assignor.)
Pittsburgh Plate Glass Company. (See Hess, Philip J., sr., assignor.)
Pittsburgh Plate Glass Company. (See Hitchcock, Halbert K., assignor.)

Pittsburgh Plate Glass Company. (See Hitner, Harry F. assignor.)

Pittsburgh Plate Glass Company. (See Jenkins, J. D., and Berger, assignors.)

Pittsburgh Plate Glass Company. (See Koupal, W. G., and Gregorius, assignors.)

Pittsburgh Plate Glass Company. (See Kutchka, Karl assignor Pittsburgh Plate Glass Company. (See Oakes, George Pittsburgh Plate Glass Company. (See Oakes, George W., assignor.)
Pittsburgh Plate Glass Company. (See Owen, William, Pittsburgh Plate Glass Company. (See Parkinson, Joseph C., assignor.)
Pittsburgh Plate Glass Company. (See Rotheram, J., and Evans, assignors.)
Pittsburgh Plate Glass Company. (See Showers, Lee, as-Pittsburgh Plate Glass Company. (See Wright, Charles

Pittsburgh Plate Glass Company. (See Wright, Charles H., assignor.)
Pittsburgh Producers Supply Company. (See Banks, Reeve H., assignor.)
Pittsburgh Steel Drum Company. (See McCrery, Harold E., assignor.) Pittsburgh Tinware Manufacturing Company. (See Flowers, Stanley A., assignor.) Pittsburgh Transformer Company. (See Bingay, Robert assignor. V., assignor.)
Pittsburgh Transformer Company. (See Edwards, Donald V., assignor.)
Pittsburgh Transformer Company. (See Hodtum, Joseph B., assignor.) B., assu Pittsburgh Transformer Company. (See Horelick, Sam-

assignor.) urgh Transformer Company. (See McArn, Donald Existence Transformer Company. (See McArn, Donald G., assignor.)
Pittsburgh Transformer Company. (See Roberts, Clifford A., assignor.)
Pittsburgh Transformer Company. (See Stahl, Edward C. M., assignor.)

Pittsburgh Valve and Fittings Company. (See Wagner,

Pittsburgh Valve and Fittings Company. (See Wagner, Frank. assignor.)
Piver, William C., Hillside, N. J. Making an insecticide. 1,628,632; May 3. Hillside, assignor of one-half to Piver. William S., East Orange, N. J. Making arsenic acid. 1,615,193; Jan. 18.
Place, Claude W., La Grange, Ill., assignor to General Electric Company. Automatic switching equipment. 1,646,215; Cot. 18.
Placke. William. (See Mafer, Frank E., assignor.)
Placke. William. (See Hop-lacke. William. Charles E. Charles E. Charles E. Charles E. Planche-sur-Saone, France. Rotary pump. 1,617,863; Feb. 15.
Planche, Benjamin R., Villefranche-sur-Saone, assignor to Mrs. Wildow Ernest B., Planche, born Cloticle Perdrix, Planche, Mrs. Ernest E. (See Planche, Benjamin R., assignor.)
Planche, Mrs. Ernest E. (See Planche, Benjamin R., assignor.)

Signor.)

Flanchon, Victor, Lyon, France, Manufacture of nitrated cellulose from wood pulp. 1.641,292; Sept. 6.

Planc Speaker Corporation. (See Coburn, J. M., and Knapp, assignors.)

Plank, Alvin S. (See Lasher, D., and Plank.)

Plank, Walter E., San Francisco, Callf. Steering-mechanism stabilizer for trailers. 1.631,332; June 7.

1.639,857; Aug. 23.

Plantic, Victor D., Manitowoc, Wis. Dog harness. 1.640,53; Jan. 11.

Plans. Martin. Hatfield, Pa. Internal-combustion engine. 1.649,544; Nov. 15.

Plass. Martin. Hatfield, Pa. Internal-combustion of the control of the con

signor.)
Platou, Olaf. (See Sandvold, O., Rye, and Platou.)
Plateschick, Benvenuto, Paris, France. Backplate for
Plattschick, Benvenuto, Paris, France.
Platt, Archie W., Toledo, assignor to The Edward Ford
Platt Glass Company. Resistord, Ohio. Sheet-glassabrading means. 1.652.410; Dec. 13.
Platt, Arthur D., Portland, Oreg. Combined stopper and
pen-filling attachment for ink bottles. 1,627,804;

May 10.

May 10.

Platt Brothers and Company Limited. (See Wilkinson, H., and Bassett, assignors.)

Platt Brothers and Company Limited. (See Wilkinson, H., and Reed, assignors.)

Platt, Clarence D., Bridgeport, Conn. Electric-switch member. Des. 73,579; Oct. 4.

Platt, Clarence D., Bridgeport, Conn. Inclosed switch. 1.652,795; Dec. 13.

Platt, Cornelius B., and W. S. Brown, Carthage Mo. Platt, Cornelius B., and W. S. Brown, Carthage Mo. May 17.

Platt, Frank L. (See Hein, G. N., Platt, and Impey.)

Platt, Henry. (See Platt, John, W., and H.)

Platt, Honny, (See Platt, John, W., and H.)

Platt, Roubatx, France. Carding machine. 1,625,868; Apr. 26. Platt, John Roubaix, Apr. 26.

Platt, John G., Brighton, assignor to Hunt-Spiller Manufacturing Corporation, Boston, Mass. Piston ring. 1.643.028; Sept. 27.
Platt, Mailtand S., Toronto, Ontarlo, Canada. Combined air nozzle and gauge. 1,622,341; Mar. 29.
Platt, Millam. (See Platt, John, W., and H.)
Plaudler Company, The. (See Manison, G. N., and Col-Plaudler Company, The. (See Manison, G. N., and Col-Plaudler Company, The.)
Plaudler Company, The. (See Manison, G. N., and Col-Plaudler Company, The.)
Plaut, Antoine P., assignor of one-half to Roberts Brass Manufacturing Company, Detroit, Mich. Ajutage. 1,623,867 Ap. 26.
1,623,867 Ap. 26.
1,623,867 Ap. 26.
1,623,867 Ap. 27.
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May 10 Mich. Window construction. 1,628,187; May 10 May 10, assignor to The Kawneer Company, Niles. Mich. Threshold and constructing same. 1,646,167; Oct. 18. Plymouth Cordage Company. (See Brewster, Ellis W.,

Plymouth Cordage Company. (See Jenks, Fred A., as-

Plymouth Cordage Company. (See Jenks, Fred A., assignor.)
Plympton, Frederic K., assignor to N. D. Plympton,
Brewster, N. Y. Machine for making bottle closures.
1,625,869; Apr. 26.
Plympton, Frederic K., Wellesley, Mass., assignor, by
mesne assignments, to N. D. Plympton, Brewster,
N. Y. Bortle closure and the like. 1,640,609; Aug. 23.
Plympton, Naomi D. (See Plympton, Frederic K., assignor.)

Ply-Rite Contracting Company, The. (See Wootton, Joseph H., assignor.) Pneumatic Appliances Corporation. (See Weiland, Alfred, assignor.) Pneumatic Scale Corporation. (See Butler, James A..

Pacination Scale Corporation. (See Butler, James A. dassignor.)
Pneumatic Scale Corporation. (See Howard, Stanley R., assignor.)
Pneumatic Scale Corporation, Limited. (See Cleaves, William S., assignor.)
Pneumatic Scale Corporation, Lidd. (See Robinson, George A., assignor.)
Pocan, Alvin W. and A. F., Marinette, Wis. Harness, 1,618,673; Feb. 22.
Pochobradsky, Bedrich, Sidcup, England. Packing gland Sent, 13.

Pochoraus, for elastic-fuld turbines or the Hac. Sept. 13. For elastic-fuld turbines or the Hac. Sept. 13. For elastic-fuld turbines or the Hac. Sept. 13. For elastic full turbines or the Hac. Sept. 13. For elastic full turbines of the Hac. Sept. 13. For elastic full turbines of the Hac. Sept. 13. For elastic full turbines of the Hac. Sept. 13. For elastic full turbines of the Hac. Sept. 13. For elastic full turbines of the Hac. Sept. 13. For elastic full turbines of the Hac. Sept. 13. For elastic full turbines of the Hac. Sept. 13. For elastic full turbines of tu

fineness. 1,621,270; Mar. 15.
Podszus. Emil, Berlin-Friedrichshagen, assignor to Hartstoff-Metall Aktiengesellschaft (Hametag), Berlin-Copellschaft (Hameta

June 7.

Poetz, John C., St. Paul, Minn. Shutter opening and closing device. Le35,008; July 5.

Poetz, John C., St. Paul, Minn. Fountain pen. St. Paul, Minn. Fountain pen. Poetz, John C., St. Faul, Minn. Combined screen, hinge, and shutter 1,652,684; Dec. 13.

Pogue, George D., Mount Vernon, N. Y. Oil-pipe-line system. 1,621,221; Mar. 15.

Pogue, George D., Mount Vernon, N. Y. Pipe-line system. 1,621,623; Mar. 22.

1.621.688; Mar. 22.

Popule, George D. and W. V., Mount Vernon, N. Y., asaignors to Pacquin, Inc., New York, N. Y. Telephone
index. 1.633.952; June 28.

Pogue, Robert B., Chicago, Ill., assignor to The American Brake Shoe & Foundry Company, New York, N. Y.

Refractory liming. 1.629.047; May 17.

Popue, Webster V., 18ee Pogue, George D. and W. V.)

Phoenix Burner Corporation Heights, assignor to The
fuel burner. 1.636.384; July 12.

Pobl. Robert, Berlin, Germany, assignor to General Electric Company, Protective system for power-plant installnitions. 1.641.691; Sept. 6.

Pobl. Robert, Berlin, Germany, assignor to General Electric Company, Protective system for power-plant installnitions. 1.641.691; Sept. 6.

Pobl. Robert, Berlin, Germany, assignor to General ElecOct. 11.

Poble Walter B. Lyun, assignor conscibility for Delice Walter B.

Poble, Walter B., Lynn, assignor of one-third to P. B. Haskell, Lynn, and one-third to S. V. Russell, Chelsea, Mass. Sediment collector. 1,623,437; Apr. 5.

Pohle, Walter B., assignor of one-third to P. B. Haskell Lynn, and one-third to S. V. Russell, Chelsea, Mass. Crank casing. 1,638,756; July S. Pohlmann, Bruno G., assignor to Slemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Transmission system. 1,644,395; Oct. Pohlmann, Bruno G., assignor to Slemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telephone. 1,645,773; Oct. 18.
Pohlmann, Bruno G., assignor to Slemens & Halske Aktiengesellschaft, Siemenstadt, near Berlin Germany. Acktiengesellschaft, Siemenstadt, near Berlin Germany. Acktiengesellschaft, Siemensstadt, Germany. Apparatus for X-ray examination and X-ray photographing. 1,646,065; Oct. 18.
Pohlmann, William F. (See Palm, R. H., and Pohlmann).

ing. 1,646,065; Oct. 18.
Pohimann, William F., (See Palm, R. H., and Pohlmann.)
Pohimann, William F., assignor to F. W. Mateer & Co., Chicago. II. Safety device for laundry machines.
Polignand, Stancis N., Westfield, N. J., assignor, by mene assignments, to Super Gas Corporation. Method of and apparatus for producing and burning gas in steam locomotives. 1,618,136; Feb. 15.
Polignand, Francis N., Westfield, N. J., assignor, by mesne assignments, to Super-Gas Corporation. Wilmington, Polignand, Francis N., Westfield, N. J., assignor, by mesne assignments, to Super-Gas Corporation. Wilmington, Polignand, Francis N., Westfield, N. J., assignor by mesne assignments, to Super-Gas Corporation. Wilmington, Polilon, Etel A., Brooklyn, N. Y. Tollet-powder shaker. 1,625,092; Apr. 10.
Polilon, Etel A., Brooklyn, N. Y. Tollet-powder shaker. 1,622,230; Mar. 22.
Poindexter, George B., Seattle, assignor of one-half to 1,637,009; July 26.
Poindexter, Robert W., fr., Los Angeles, and P. T. Dolley, Los Angeles County, Calif., assignors to California Cynnide Company, Incorporated, New York, N. Y. Preparing alkali metal cyanides. 1,624,147; Apr. 12.
Pollberg, Long Beag, Calif. California Cyanide Company, Incorporated, New York, N. Y. Preparation of cyanogen compounds. 1,642,694; Sept. 20.

Prepiaration of cyanogen compounds. 1,042,094; Sept. 20. Robert W., ir. Los Angeles, and H. J. Mor-gan, Wainut Park, Calif., assignors to California Cy-anide Company, Incorporated, New York, N. Y. Meth-od of and apparatus for making pellets. 1,647,194; Nov. 1.

Nov. 1.

Poindexter, Robert W., jr., Los Angeles, Calif., assignor to California Cyanide Company, Incorporated, New York, N. Y. Preparation of calcium cyanide. 1,652,874;

Poindexter, Robert W., jr., Los Angeles, Calif., assignor to California Cyanide Company, Incorporated, New York, N. Y. Calcium-cyanide product. 1,652,909;

Fontar California Cyanute Control of Control of California Cyanute Control of Control of

Assignors.)
Polack, Aron, Paris, France. Hyperchromatic objective.
1,629,361; May 17.
Polakoff, Abraham. (See Devlin, John P., assignor.)
Polchow, Charles J., Bridgewater, S. Dak. Attachment for binders. 1,048,621; Nov. S.
Poldhütte. (See Pattermann, Otto, assignor.)
Polen, Clarence R., assignor of three-fourths to S. R. Meatly, Tolas, Okla. Reversible tool brace. 1,634,300;
Polhamus, George, Toledo, Ohio. Carrier for pails and the like. 1,620,919; Mar. 15.
Polhamus, George, Toledo, Ohio. Detachable handle.
1,648,281; Nov. 8.

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Polikier, Heinrich, Leipzig, and H. Hähle, Dessau-Ziebigk, assignors to I. G. Farbenindustrie Aktiongeselbschaft, Frankfort-on-the-Main, Germany, Tharylmethane dyes from tetraalkyl-diamino-benzophenone and arylated-ethylen-diamines. 1,629,884; May 24. Polikier, Heinrich, Leipzig, and H. Hähle, Dessau-Ziebigk, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, Triaryl-methane dyestuffs from tetraalkyl-diamino-benzophenones and dilpoling, George N., Springfield, and H. L. Dilon, Zanes-Poling, George N., Springfield, and H. L. Dilon, Zanes-Polin, George W., and G. W. Eurke, fr., Dayton, Ohlo-Fire-extinguishing apparatus. 1,653,780; Dec. 27. Polk, John L., La Grange, Ill. Electrical binding terminal. 1,642,042; Sept. 13.
Polk, Thomas B., Seattle, Wash, assignor, by mesne assignments, to Trice Products Corporation, Buffalo, N. Y. Combined windshield frame and wiper motor. 1,652,160; Dec. 6.

minal. 1,642.042; sept. 13.

minal. 1,642.042; sept. 13.

Polk, Thomas B., Seatte, Wash., assignor, by mesne assignments. The Products Corporation, Buffalo, 1,652.150; Dec. 6.

Polkabla. John J. (See Parrish, Cecil C., assignor.)

Pollack, Daniel. (See Kasdan, N., and Pollack).

Pollack, Essye K., New York, N. Y. Bust confiner.

Pollack, Altred, Vicna, Austria, Producing lactic acid from sugar-containing raw materials by means of lactic-acid bacteria. 1,624.674; pp. 1,2.

Pollak, Arnold A. (See Swanson, J. A., and Pollak.)

Pollak, Arnold A. (See Swanson, J. A., and Pollak.)

Pollak, Arnold A. (See Swanson, J. A., and Pollak.)

Pollak, Buffalo, M., assignor, J. (See Avery M.)

Pollak, Company, Chicago, Ill., Flexible coupling. 1,620.288; Mat. 8.

Pollard, Casling, M., The. (See Paque, E. J., and 1,620.288) Mat. 8.

Pollard, Carl I., assignor.)

Pollard, Carl I., assignor.)

Pollard, Carl I., assignor.)

Pollard, Carl I., assignor.)

Pollard, Carl I., assignor. (See De Minico, Frank, assignor).

Pollard, Carl I., assignor.)

Pollard, Carl I., assignor. (See De Minico, Frank, assignor).

Pollard, Carl I., assignor.)

Pollard, Carl I., assignor. (See De Minico, Frank, 2011

more, Md. Cardboard display rack. 1,006,000, Dec. 13. Pollock, Milton. (See Pollock, Elizabeth M. and M.) Pollock, Pen Company. (See Pollock, Robert T., as-

Pollock Pen Company. (See Theobald, G. A., and Olson,

assignors.)
Pollock, Robert B., Los Angeles, Calif. Signaling apparatus. 1.647.663; Nov. 1.
Pollock, Robert T. (See Erloff, G., and Pollock.)
Pollock, Robert T. (See Erloff, G., and Pollock.)
Pollock, Robert T., Boston, Mass., assignor to Universal
Oir Products Company, Chicago, Ill. Process and apparatus for crecking petroleum oil. 1.628.270; May 10.
Particles of Crecking Pollock.
Boston, Mass. Clip or fastener, 1.641.096; Aug. 30.
Polnaszek, John P., Minneapolls, assignor of one-half to
A. L. Pinet, Robbinsdale, Minn. Grain-car structure.
1.634.118; June 28.
Polo, Guido J., Toluca, Ill. Picture frame. Des. 73,804;
Nov. 8.

Poloris Company. (See Plass, Robert H., assignor.) Polson, William F., Bulfalo, N. Y. Transmission or brake band. 1,638,211; Aug. 9.

Polsson, Bror. (See Reehsing, Ludwig, assignor.)
Polymet Manufacturing Corporation. (See Lauter, Philip, assignor.)

Polyphonwerke Aktiengesellschaft. (See Wunsch, Hugo, assignor.)
Polysius, G. (See Bruhn, Bruno, assignor.)
Polysius, G. (See Goebels, Paul, assignor.)
Pomerantz, Max, Astoria, N. Y. Bag. assignor.)

1.649.976: Nov. 22 Pomeranz,

Pomeranz, Maurice M., New York, N. Y. Röntgen-ray Pomers, Edwin C., New Millord, Conn. Signal. New Millord, Conn. Signal. Pomeroy, Isabel P. (See Tonguette, C. E., and McBean assignors.)

Posteroy, Isa assignors.)

ossignors.)

Pomeroy, James W. (See Todd, W. C., and Pomeroy, John N., Ibiladelphia, assignor to General Dicectosting Company, Resading Pa. Automobile radiformers, John St., Paterson, N. J. Steam boller. 1,622,736; Mar. 29. Paterson, N. J. Steam boller. Pomons Manufacturing Company. (See McKenna, Alexander G., assignor.)

Pomona Manufacturing Company, The. (See Oliver, Immanuel A., assignor.)

Pompeian Flooring Company. (See Slosser, Alger J., as-

signor.) Emil and W. Jennerjahn, Cudahy, Wis., as-signors to The Frisk Rubber Company, Chicopes Falls, Rubber Company, Chicopes Falls, Ponce, Arthur G. (See Lucas, C. J., and Ponce, Pondelicek, William P. (See Zoufal, Frank, assignor.) Pondelicek, Leo, Chicago, III. Differential gearing, 1,022,627; May 24.

Foundations, Name Processor States, Press, assignaring.
1,629,527; May 24.
Pontiac Tractor Company. (See Wright, Norman A., assignor.)
Pontikis, John B., Washington, D. C. Display stand.
1,625,539; Oct. 11.
Pontious, John D., assignor of one-half to L. Pontious, John D., assignor.)
Pontikis, John B., Washington, D. C. Display stand.
1,625,539; Oct. 11.
Pontious, John D., assignor of one-half to L. Pontious, John D., assignor.)
Pontoppidan, Carl, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Handling dry pulverulent materials. 1,616,547; Feb. 8.
Pontoppidan, Carl, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Handling dry pulverulent materials. 1,616,547; Feb. 8.
Pontoppidan, Carl, Copenhagen, Denmark, assignor to F. L. L. Smidth & Ce., Openhagen, Denmark, assignor to F. L. L. Smidth & Ce., Openhagen, Denmark, assignor to F. L. L. Smidth & Ce., Openhagen, Denmark, assignor to F. L. Smidth & Ce., Copenhagen, Denmark, assignor to F. L. Smidth & Ce., Copenhagen, Denmark, assignor to F. L. Smidth & Ce., Copenhagen, Denmark, assignor to F. L. Smidth & Ce., Copenhagen, Denmark, assignor to F. L. Smidth & Ce., Copenhagen, Denmark, assignor to The Wahl Company, Wilmington, Del. Self-filling fountain pen. 1,618,504; Jan. 11.
Poole, Clarence F., Evaniston, assignor to Goodman Manufacture of Company, Chicago, Ill. Daraft-operated scraper. 1,644,273; Oct. 4.
Poole Engineering and Machine Company. (See Davison, Clarence M., assignor.)
Poole Engineering and Machine Company. (See Taylor, Poole, Copenhagen, Denmark, Poliadelphia, Pa. Fluid-heater control. 1,615,478; Jan. 25.
Poole, Foster M., Tulsa, Okla., assignor to The Brown Instrument Company, Philadelphia, Pa. Tube-still regulation. 1,615,481; Jan. 25.
Poole, Foster M., Tulsa, Okla., assignor to The Brown Instrument Company, Philadelphia, Pa. Tube-still regulation. 1,615,482; Jan. 25.
Poole, Foster M., Tulsa, Okla., assignor to The Brown Instrument Company, Philadelphia, Pa. Tube-still regulation. 1,615,481; Jan. 25.
Poole, Fos

Pooley Company, The. (See Pooley, Edward E., assignor, Ompany, The. (See Pooley, Edward E., assignor to The Pooley Company,
Philadelphia, Pa. Radiocabinet. Des. 72.443; Apr. 12.
Pooley, Edward F., assignor to The Pooley Company,
Philadelphia, Pa. Radiocabinet. Des. 72.444; Apr. 12.
Pooley, Edward F., assignor to The Pooley Copany,
Poons, Edward M., New York, N. Y. Sweathand for hats.
1.646,737; Oct. 25.
Poorman, George W., assignor to Kee Lox Mfg. Co.,
Rochester, N. Y. Making carbon paper. 1,614.400;
Jan. 18.
Pops. Arthur W., jr. (See Horning, H. L., Fisher, and
Pops.)

Jan. 18.
Pope, Arthur W., jr. (See Hormus, ...
Pope.)
Pope. Charles A., Elizabeth, N. J. Calf and ankle grip.
1,538,704; Aug. 9
1,538,704;

Poplawsky, Edward, Newark, N. J. Fruit picker. 1.653.412: Dec. 20.

Popp, Charles L. (See Popp, George L. and C. L.)
Popp, George. (See Popp, John, and G.)
Popp, George L. and C. L., Jackson, Mich. Rake cleaner,
1,651,291; Nov. 29.
Popp, John and G., Buffalo, N. Y. Water pump,
1,622,840; Mar. 29.
Porak, Waldemar, Vienna, Austria. Moving-picture projecting or peeping appliance. 1,639,702; Aug. 23.
Porcelain Insulator Corporation, The. (See Peck, John

Corak, Walemar, Vienna, Austrin. Moving-picture proJecting or peeping appliance. 1,639,702; Aug. 23.
Porcelain Insulator Corporation, The. (See Peck, John
M., assignor).
Portiz, Fredrick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Auribase or similar
article. Des. 72,565; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Lamp base or similar
article. Des. 72,565; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Lamp base or similar
article. Des. 72,567; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Lamp base or similar
article. Des. 72,567; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Lamp base or similar
article. Des. 72,569; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Lamp base or similar
article. Des. 72,569; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Bridge arm for electricWorks, Inc., New York, N. Y.
Bridge arm for electricWorks, Inc., New York, N. Y.
Bridge arm for electricPortiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Bridge arm for electricWorks, Inc., New York, N. Y.
Bridge arm for electricIght fixtures or similar articles. Des. 72,571; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Column for electricIlght fixtures or similar articles. Des. 72,573; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Column for electricIlght fixtures or similar articles. Des. 72,575; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Column for electricIlght fixtures or similar articles. Des. 72,575; May 3.
Portiz, Frederick M., assignor to Artistic Brass & Bronze
Works, Inc., New York, N. Y.
Column for electricIlght fixture

assignor.)

Porter, Enos, Shelbyville, Ind. Rear-view mirror for automobiles. 1,643,420; Sept. 27.

Porter, Finley R., assignor to Porter Engine Development, Inc., New York, N. Y. Internal-combustion engine. 1,618,473; Feb. 22.

Porter, Finley R., assignor to Porter Engine Development, Inc., New York, N. Y. Internal-combustion engine. 1,618,603; Feb. 22.

Porter, Finley R., assignor to Porter Engine Development, Inc., New York, N. Y. Internal-combustion engine. 1,620,832; Mar. 15.

Porter, Finley R., New York, A. Y. Internal-combustion engine. 1,620,832; Mar. 15.

Development, Inc., New York, N. Y. Internal-combustioners, Mar. 20, 100,000; Mar. V. Mar. 20, 100,000; Mar. V. Mar. 20, 100,000; Mar. V. Mar. V. Mar. 20, 100,000; Mar. V. Mar. V. Mar. 20, 100,000; Mar. V. Mar. V.

Porter, H. K., Inc. (See Porter, Tyler C., assignor.)
Porter, Harold E., Bayside, N. Y., assignor to C. T.
Porter, Manufacturing crucibles and the like.
1,637,707; Aux. 2.
Porter, Harold E., Bayside, N. Y., assignor to C. T.
Porter, Machine for the manufacture of crucibles and
the like. 1,637,703; Aux. 2.
Porter, Henry A., Los Angeles, Calif. Swab, 1,614,572;
Jan. 18.

Porter, Homer O., Denoya, Okla. Gas burner. 1,622,972; Mar. 29.
Porter, John, assignor to Arnold Print Works, North Adams, Mass. Decorative paper. 1,616.138; Feb. 1.

Porter, John L., Columbus, Ohio. Tire. Des. 73,942; Nov. 22.
Porter, Leslie F., Passaic, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,631,361; June 14.
Porter, Leslie, F., Passaic, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Porter, Russell W., Sringheid, Vt. Telescope. 1,651,412; Dec. 6.

Dec. 6.
Porter, Thomas E., Grand Rapids, Mich. Cut-off saw.
1,636,924; July 26.
Porter, Tyler C., Brookline, Mass., assignor to H. K.
Porter, Inc., Everett, Mass. Cutting tool. 1,613,480;
Jan. 4.

Porter, Inc., Everett, Mass. Cutting tool. 1,613,489; Jan. 2, 1910 C., Brookline, assignor to H. K. Porter, Luc., Everett, Mass. Cutting tool. 1,613,668; Jan. 4. Porter, Vernot C. (See Sortelle, B., and Porter). Porter, William A., assignor of one-half to W. V. Scanlan, Brisbane, Queensiand, Australia. Apparatus for making hollow bends, angles, or such like bodies of concrete or other material. 1,634,045; June 28. Forter, Wilson E. (See Whitehead, R. H., and Porter.) Porter, Wilson E. (See Whitehead, R. H., and Porter.) Porter, Wilson E., assignor to New Haven, Conn. Intermittent-alarm clock. 1,623,698; Apr. 5. Porter, Wilson E., assignor to New Haven Clock Co., New Haven, Conn. Stem-winding and stem-setting watch, 1,625,498; Apr. 19. Porter, Wilson E., assignor to New Haven Clock Co., New Haven Clock Co., New Haven Clock apr. 19. Porter, Wilson E., assignor to New Haven Clock Co., New Haven Clock C

units of clock and watch movements. 1,625,499; Apr. 19.
Porterfield, Leonadus C., St. Louis, Mo. Oil burner. 1,612,883; Jun. 4. Baltimore, Md. assignor to Prudelled Robert action, New York, N. Y. Side furnace oil still. 1,647,664; Nov. 1.
Portis, James A., Daisetta, Tex. Radius rod. 1,616,548; Feb. 8.
Portman. Frank A., Chicago, Ill. Merchandise-display box. 1,639,750; Aug. 22.
Posch, Henry R., Los Angeles, Calif. Focusing attachment for microscopes. 1,617,722; Feb. 15.
Poscs, Henry R., Los Angeles, Calif. Focusing attachment for microscopes. 1,617,722; Feb. 15.
Posc, Mark I., assignor to A. A. Vantine & Co. Inc., New York, N. Y. Bottle or similar container. Des. Poscy, Match (Mark 1988). Poscy, Mack. (See Haas, E. A., and Poscy). Postitive Lock Company, The. (See Crooks, C. L., and Vanderyoort, assignors.)
Poscy Match Mary C. Raker, Minn. Fish and fowl dresses.

Fosey, Mack. (See Hals, E. A., and Fosey.)
Fosey, March. (See Gardner, William E., assignor.)
Fosey, C. C., et al. (See Gardner, William E., assignor.)
Fosey, C. C., et al. (See Gardner, William E., assignor.)
Fosey, C. C., et al. (See Gardner, William E., assignor.)
Fosey, March. (See Hals, E. C.)
Fosey, March. (See Hals, E.)
Fosey, March. (Se

Postindex Company. (See Butler, George P., assignor.)
Postindex Company. (See Quigley, John T., assignor.)
Postl. Inc. (See Guth, Herbert Q., assignor.)
Postlethwait, Columbus E., Wallace, W. Va. Adjustable
steering post. 1,623,4345, Apr. 5.
Postlewait, Martha, Denver, Colo. Braider. 1,653,809;
Dec. 20.

Oct. 11.
Potter, J. and A. B. Medville, assignors to Alustrial Manufacturing Company, Detroit, Mich. Foot rest. 1,637,588; Aug.
Potter, Arthur C., Grantham, England. Deep-well pumping installation and the like. 1,639,703; Aug. 23.
Potter & Buffaiton Company. (See Weed, Edward L., assignor.)

assignor.)
Potter, Cushman, Houston, Minn. Fluid-transmission mechanism. 1,623,206; Apr. 5.
Potter, Earl F., Glencoe, assignor of one-half to G. W. Rodormer, Park Ridge, Ill. Ground-clamp connecter. 1,631,288; June 7.
Potter, Earl F., Glencoe, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Condenser. 1,633,870; June 28.
Potter, Earl F., Glencoe, assignor to Kellogg Switchboard and 23,270 Company, Chicago, Ill. Flug. 1,639,858; Apr. 24,270 Company, Chicago, Ill. Flug. 1,639,858; Apr. 24,270 Company, Chicago, Ill. Flug. 1,639,858; Apr. 25,270 Company, Chicago, Ill. Company, Chicago, Ill. Flug. 1,639,858; Apr. 25,270 Company, Chicago, Ill. Flug. 1,639,858; Apr. 25,270 C

The second of the second of the Potter Specialties Company, Chicago, Ill. Signaling system. 1,614,491; Jan. 18.

Potter, Frank H. T., et al. (See Kelly, George M., assignor.)

Potter, Frank H. T., et al., (See Kelly, George M., assignor.)

Potter, Frederick D., Linden, N. J., assignor to Combustion Control Company, Inc., New York, N. Y. Combustion Control Company, Inc., New York, N. Y. Combustion Control Company, Inc., New York, N. Y. Combustion Control of Company, Inc., New York, N. Y. Combustion Company, Denver, Col. Treeting clays to adapt them for decolorizing and decolorizing oils. 1,649,366; Nov. 15. Nov. 15.

for decolorizing and ecocorizing oils. Aparacouries of the colorizing and ecocorizing oils. Aparacouries of the colorization o

Potter Speciation Communication of the Markov Stands. J. Portland, Oreg. Refrigerating unit. 1,635,638; July 5. Potter, Thomas I., Orange, N. J., assignor, by mesne assignments, to Hydro Refrigerator Company, Inc. New York, N. Y. Refrigerating apparatus. 1,624,972;

signments, to handle special apparatus.

York. N. Y. Refrigerating apparatus.

Apr. 19.

Petter, Thomas I., East Orange, N. J., assignor, by mesne assignments, to Hydro Refrigeration Company, Inc., Petter, William B., Schenectady, N. Y., assignor to General Electric Company. Fuel injector for internal-combustion engines. 1,645,071; Oct. 11.

Potter, William H., Chicago, III. Sausage-making ma-chine. 1.639,270; Aug. 16. H., assignor to Western Potter, William H., Chicago, rated. New York, N. Y. Trimming articles. 1.625,332; Apr. 19. Potts, Harold E., Liverpool, assignor to T. Blandford and A. Gee, Doncaster, England. Cementation in the ground. 1,635,500; July 12. Potts, Helen. Chicago, III. Cigarette holder and the Hile. 1,623,636; Apr. 1.

like. 1,623,635; Apr. 5.
Potts, Louis M., Tenafiy, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Trouble-indicating system. 1,620,286; Mar. 8.
Potts, Louis M., Highwood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.
Poudrier, Armand L., Los Angeles, Calif.
Hydraulic snubber. 1,632,041; June 14.
Pough, Francis H., St. Louis, Mo., assignor, by mesne assignments, to Southern Acid & Sulphur Company, Incorporated, Prepared sulphur. 1,629,528; May 24.
Poulsen, Arnold, and A. C. G. Petersen, Copenhagen, Denmark. Device for conversion of light variations into electrical currents. 1,653,092; Nov. 2.
Poulsen, Oscar, Alameda, Calif. Shaft bearing, 1,623,207; Apr. 5.

oulsen, Oscar, A 1,623,207; Apr. 5.

1,623,207; Apr. 5.

Poultney, Edward C., London, A. H. Gilling, and H. A.
Akroyd, Sheffield, England. Steam locomotive.
1,618,751; Peb. 22.

Poulton, George H. (See Scott, R., and Poulton.)

Poumay, Adolphe, Jambes-lez Namur, Belgium. Cupola

furnace. 1,640,251; Aug. 23.

Pounart, Albert P., New Orleans, La. Container seal.
1,635,955; July 12.

Pow, Alexander. (See Brown, Robert M., assignor.)

Pow, Joseph C., Hays, N. C. Hospital bed. 1,631,888;

June 7.

Powdrell & Alexander, Inc. (See Feather, John A., assignor.) (See Powell, Alvah L., assignor.)

Powell, Alrah L., Miles Citz, Mont., assignor to The A. L. Powell Power Company, Incorporated. Mechan-leal movement. 1,622,841; Mar. 29. Powell, Alvah L., Miles Citz, Mont., assignor to A. L. Powell Power Company, Incorporated. Mechanical movement of the planetary goar type. 1,822,842; movement Mar. 29

Mar. 29,
Powell, Alvah L., Miles City, Mont., assignor, to The
A.L. Fowell Power Company, Incorporated. Engine.
Powell, Arthur L. Bloomfield, N. J., assignor to Westing-house Lamp Company, Filament support for series
lamps. 1,620,487; Mar. 8.
Powell, Charles, Pueblo, Colo. Attachment for carburctors, 1,637,455; Jun. 2.
P. 1616,330; Feb. U. Woodsfield, Ohlo. Pipe saddle.
Powell, Dalton L. Woodsfield, Ohlo, assignor of one-holf

1,816,390. Feb. 1.

Powel Dalton U., Woodsfield, Ohio, assignor of one-half processing the process of the proce

Powell, George R., Merion, Pa. Foot control. 1,630,760;

Powell, Hezekiah, Kansas City, Mo., and W. P. Groves, Edwardsville, Kans. Electric shoc cleaning and polish-ing machine. 1,624,758; Jpr. 12. Powell, James A., Reading, Pa. Water-heating system. 1,621,85; Mar. 22.

Powell, John, Kokomo, Ind. Husking unit. 1,622,207:

Powell, John E. Issaquah, Wash. Gasoline-consumption tester. 1.645.774; Oct. 18.

Powell, John M., Galax, Va. Apparatus for exercising eye muscles. 1.638.058; Aug. 9.

Powell, Olis W., assignar of one-half to E. Worthington, Washington, Court House, Ohio. Corn harvester. 1.654.270; Powell. William G. Altoona, Pa. Brake mechanism. 1.654.270; Dec. 27.

COUNTY DEC. 27.

Powell, William H., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Dynamo-electric machine and winding therefor. 1.628,611; May 10.

Powell, William H., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Dynamo-electric machine and winding therefor. 1,628,612; May 10.

Powell, William H., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Dynamo-electric machine and winding therefor, 1,623,613; May 10. Powell, William H., Wauwatosa, assignor to Allis-Chal-mers Manufacturing Company, Milwaukee, Wis. Dyna-mo-electric machine and winding therefor, 1,641,644;

mers Manufacturing Company, Milwaukee, Wis. Dynamoe-leetric machine and winding therefor. 1.641.643; Sept. 6.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Manual telephone system. 1.614.422; Jan. 11.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Manual telephone Manufacturing Company, Rochester, N. Y.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Call-distributing system. 1,625,624; Apr. 19.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Advantage of the Stromberg Carlson Telephone Manufacturing Company, Rochester, N. Y.

Telephone Manufacturing Company, Rochester, N. Y.

Manual telephone system. 1,641,234; Sept. 6.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Manual telephone system. 1,641,234; Sept. 6.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Manual telephone system. 1,641,235; Sept. 6.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Manual telephone system. 1,641,235; Sept. 6.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Automatic telephone system. 1,641,236; Sept. 6.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Manual telephone system. 1,641,236; Sept. 6.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y.

Manual telephone system. 1,641,236; Sept. 6.

Rochester, N. Y. Telepione system. 1,650,906; Nov. 29.
Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Telephone Manufacturing Company, Rochester, N. Y. Powelski, Albert, Kansas City, Kans. Journal bearing, 1,630,967; May 31.
Powelson, Wilfrid V. N., and W. Travell, New York, N. Y. Launching airships from moorings and device therefor. 1,647,472; Nov. 1.
Powelson, Wilfrid V. N., and W. Travell, New York, N. Y. Equipment for mooring and berthing airships over water. 1,648,423; Nov. 8.
Power, Henry R., assignor to The Carborundum Com-1,615,231; Jan. 25.
Power Manufacturing Company, The. (See Morrison, Frank B., assignor.)

Power Specialty Company.

assignor.)

(See Hight, Eugene S., as
Power Specialty Company. (See Heanan, Walter F., jr.,

Fower Specialty Company. (See Keenan, Walter F., jr., assignor.)
Power Specialty Company. (See KacDowell, Francis M., assignor.)
Power Specialty Company. (See Nells, Joseph J., as-

Power Specialty Company. (See Primrose, John, assignor.)

stroot.)

Separation of the stroot of the st · Powers, I Powers.)

Fowers, Donald H. (See Elley, H. W., and Powers, Dowers, Donald H. (See Elley, H. W., and Powers, Powers, Emmett, assignor of one-third to A. R. Kracaw, Derver, Colo. Electric battery and making the same. Powers, Frank T., assignor to Powers Photo Engraving Company, New York, N. Y. Photographic apparatus, 1,612,832; Jan. 4.
Powers, Frank T., assignor to Powers Photo Engraving Company, New York, N. Y. Photographic apparatus, 1,617,079; Feb. S. T. S. Powers, Frank T., assignor to Powers Photo Engraving Company, New York, N. Y. Photographic camera, 1,617,080; Feb. S. Powers, Frank T., Douglaston, N. Y. Briching machine. Powers, George G., assignor to Union Bed & Spring Company, Chicago, III. Folding bed structure, 1,636,532; July 19.

pany, C. July 19.

Powers, Herbert H., La Grange, III. Method of and ma-form of making saws. 1848-870 Jec. 25.

Powers, Herbert H., 1848-870 Jec. 6.

Powers, Howard, Marietta, Ohio. Concrete mixer. 1,620,287 Mar. 8.

Powers, Mark A., Dallas, Tex. Combined beverage cooler and dispenser. Des. 73,048; July 12. Powers Photo Engraving Company. (See Powers, Frank T., assignor.)

and dispenser. Des. 73,048; auly 12.
Powers Photo Engraving Company. (See Powers, Frank T., assignor.)
Powers Regulator Company, The. (See Klages, Frank E. P., assignor.)
Powers, Thomas E., New York, N. Y. Lamp. Des.
Powers, Thomas E., New York, N. Y. Wheeled toy. Des. 72,866; June 14.
Powers, Thomas E., New York, N. Y. Wheeled toy. Des. 72,867; June 14.
Powers, Thomas E., New York, N. Y. Wheeled toy. Des. 72,867; June 14.
Powers, Thomas E., New York, N. Y. Wheeled toy. Des. 72,867; June 14.
Powers, Thomas E., New York, N. Y. Wheeled toy. Des. 72,867; June 14.
Powers, John assignor to The Hazlett Storage Battery Company, Cleveland, Ohio. Apparatus, for and method of forming storage-battery grids. 1,636,242; July 19.
Pracht, Carl J., assignor, by messe assignments, to Automatic Electric Inc., Chicago, Ill. Trunk-selecting Pricisions. Earnick Cebr. Eckert. (See Eckert, Otto, assignor.)

assignor.)
Pradas, Henry, assignor of one-third to M. Kroeger and one-third to L. Carrillo, Los Angeles, Calif. Fire alarm and detector. 1,644.949; Oct. 11.
Prahl, Frederick A., Chicago, Ill., assignor to Continental Can Company, Inc., New York, N. Y. Sheet-metal container. 1,632,848; June 21.
Prall, James P., Woodorlidge, N. J. Nonpneumatic-tire filler. 1,644.609; Oct. 4.
Prämassing, Adolf. (See Riebe, J., and Prämassing.)
Prasil, Anton. (See Nelson, K. A., and Prasil.)
Prasil, Anton. (See Nelson, Companions. (See Whilon, Louis C., assignor).

Prat-Daniel Corporations. (See Whiton, Louis C., assignor.).
Prat, Esteban M., assignor to Myrurgia, S. A., Barcelona Spain. Perfume-bottle container. Des. 73,693; Oct. 13.
Spain. Perfume-bottle container. Des. 73,693; Oct. 13.
In grant Corporation of the Corp

Mar. 8.

Pratt, Alphonso C., Deep River, Conn., assignor, by mesne assignments, to American Chain Company, Inc. Bead cable for tires. 1,614,206; Jan. 11. and Pratt.)

Pratt, Benjamin H., Milwaukee, Wis, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire. Des. 72,868; June 14.

Pratt, Clara A., St. Paul, assignor of one-half to E. M. Scanlan, Minneapolis, Minn. Sacro-lifac helis, 1,628,685; May 17.

May 17.

Pratt, David S. (See Hedenburg, O. F., and Pratt.)

Pratt, Ernest C., Minneapolls, Minn. Mining coal.

1.624.505: Apr. 12.

Pratt, Ernest C., Minneapolls, Minn. Mining coal.

1.624.505: Apr. 12.

Pratt, Glenn, assignor of one-fourth to D. Krauze, one-fourth to W. A. Lincoln, and one-fourth to C. W.

Wingo, Springfield, Mo. Shield for auto headlights.

1.650.298: Nov. 22.

Pratt, Hartley B., Barrow-in-Furness, assignor to Vickers

Limited, Westminster, England. Depth charge and like submarine explosive body. 1,659,665; Aug. 23.

Pratt, Hertley B., Barrow-in-Furness, assignor to Vickers

Limited, London, England. Depth-setting gear for sub
Pratt, Henry B., Antrim, N. H., Sluice-gate construction.

1.644.445; Oct. 4, Arrim, N. H., Sluice-gate construction.

1.644.445; Oct. 6, C. (See Williams, John P., as
signor.)

Signor.).

Pratt, Lewis M., Eldorado, Kans. Poultry feeder, 1,615,402; Jan. 25.

Pratt, Lyde S., E. H. Weltz, Penns Grove, N. J., and W. L. Mills, Chester, Pa., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Making alkyl-Pratt, Oscar, Laurier, Wash. Filling devices. 1,626,050; Apr. 3.

Pratt, Oscar, Laurier, Wash. Filling devices. 1,626,050; Apr. 36. Pratt, Osca Apr. 26.

Pratt Read Player Action Company. (See Fisher, Stanley

11. assign-rayer action Company. (See Fisher, Stanley Print, Eoss H., Washington, D. C. Variable-speed transmission, 1.641.692; Sept. 6. Pratt, Ross H., Washington, D. C. Safety clutch release. 1.646.458; Oct. 25. Pratt, W. B., Inc. (See Barnard, A. E., and Caswell, Pratt, W. B., Inc.

Pratt. W. B., Inc. (See Dannel, See Allen, Frederick C., assignors.)

Pratt & Whitney Company. (See Allen, Frederick C., Pratt & Whitney Company. John A., asassignor.)
ratt & Whitney Company. (See Doane, John A., as-

ratt & Whitney Company.

Signor!)

att & Whitney Company. (See Durkee, Henry E., Pratt & Whitney Company. (See Durkee, Henry E., assignor.) Pratt & Whitney Company. (See Goodrich, Clarence L.,

rasignor.)
Pratt & Whitney Company. (See Hoagland, Frank O., assignor.)
Pratt & Whitney Company. (See Ingham, Walter E.,

assignor.)
Pratt & Whitney Company. (See Knowles, Carroll, as-

Pratt & Whitney Company. (See Moyer, Edward A., assignor.)
Pratt & Whitney Company. (See Müller, Friederich, assignor.)
Pratt & Whitney Company. (See Schramm, Carl, as-Pratt & Whitney Company. (See Schramm, C., and Vokal, assignors.)
Pratt & Whitney Company. (See Tanner, Hubert D., assignors.)
Thather, assignors.)
Thather, ussignors.)
Thather, United Company. (See Thecher, John J., assignors.)

Signor.)
Pratt & Whitney Company. (See Whitehead, A. G., and Sullivan, assignors.)
Pratt & Whitney Company. (See Wilder, Arthur L.,

Pratt & Wintney Company, assignor to Research, Incorporated, Boston, Mass. Sponge-rubber product and
making the same. 1.614,019; Jun. 11.
Pratt, William B., Weliesley, assignor to Research, Incorporated, Boston, Mass. Aqueous rubber dispension and producing the same. 1,021,468; Mar. 18.
Pratt, William C., Jonesboro, Ark. Trowel. 1,628,324;
Mar. 1.

Pratt, William H., Lynn, Mass, assigner to General Elec-Pratt, William H., Lynn, Mass, assigner to General Elec-tric Company, Electric meter. 1,637,049; July 26. Prattice of the Prattice of the American Ra-dator Company, New York, N. Y. Draft-regulating device for bollers. 1,654,486; Dec. 27. Prausnitz, Paul. (See Herschkowitsch, M., and Praus-

nitz.) ay, Thomas E., assignor to Goodman Manufacturin Company, Chicago, Iil. Mining machine. 1,616,597 Pray, Thoma

Feb. 8.
ay, Thomas E., assignor to Goodman Manufacturing
Company, Chicago, Ill. Elevating mechanism.

Feb. 8.
Pray, Thomas E., assignor Company, Chicago, Ill. Elevating meaning 1,616,598; Feb. 8.
Pray, Thomas B., assignor to Goodman Manufacturing Company, Chicago, Ill. Material-gathering machine. Company, Chicago, Ill. Material-gathering machine. Proble Eox Toc Co. (See Preble, George L., assignor.) Preble, George L., assignor to Preble Box Toc Co., Lynn, Mass. Stiffener for boots and shoes. 1,637,709;

Aug. 2.
Preble, James J., Newton, and W. B. Thompson, Winchester, assignors to Sprace Painting Equipment Company, Boston, Mass. Apparatus or tool for applying coating material. 1,627,117; May 3.
Preble, James J., Newton, Mass. Tool or apparatus for applying coating. 1,644,081; Oct. Spray Engineering Company, Boston, Mass. Pitter-cell washing machine. 1,044,082; Oct. 4.
Preble, Norman H., assignor to The Cecil R. Lambert Company, Inc., Detroit, Mich. Truck conveyer. 1,628,909; May 17.
Elemin L., assignor to The Cecil R. Lambert Company, Inc. Detroit, Mich. Conveying apparatus. 1,639,751; Aug. 23.
Precise Manufacturing Corporation. (See Opperman, Emil L., assignor).

Precision Metal Workers. (See Grunwald, Albert C., as-

Preddy, Walter G., San Francisco, Calif. Carbon feeding and adjusting mechanism for arc lamps. 1,650,849;

and adjusting mechanism for are lamps. 1,650,849; Nov. 20.

Prefentaine, Harry F., Brooklyn, N. Y. Gas safety plate. 1,623,812; Apr. 5.

Preimesberger, Alois L., assignor of one-half to F. E. Sensenberner, Menasha, Wis. Friction clutch pulley. 1,633,192; July 12.

Preisler, Enrst, assignor to Progressive Electrotyping Co., St. Louis, Mo. Plate for multigraph machines.

Preliser, Enrst, Basis, Switzerland, assignor to The Hoffmann-La Roche Chemical Works, New York, N. Y. O.-Diacyl derivatives of diphenolisatine and manufacture of same. 1,624,675; Apr. 12.

Prell, Henry, Chicago, Ill. Stove. 1,648,192; Nov. 8.

Prellwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Balanced chamber.

Prellwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Three-sterp clearance control. 1,616,987; Feb. 8.

Prellwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Single-chamber elegrance unloader. 1,625,681; Apr. 19.

Prellwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Piston assembly. 1,626,641; July 19.

Prellwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor.

Prellwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor.

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Prellwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor.

Prellwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Spring handle. 1,649,730; Nov. 15.

Premier Coal Saving Device Corporation. (See Braunstein, Julius, assignor.)
Premier Electric Company. (See Snell, James C., as-

Premier Receive Company (See Fekete, John, assignor.)
Premier Warm Air Heater Company. (See Kundee, Al-

assigner, Premier Worm Air Heater Company.

bert H., assigner, berentee, G. B., and Legat, assigners, Prentice, George E., Berlin, Conn. Fastener. 1,651,544; Dec. 6.

Dec. 6.

Dec. 6. George E., Berlin, Conn. Buckle. 1,652,211;
Dec. 6. George E., Berlin, Conn. Buckle. 1,652,211;
1.3
Prentice, George E., Berlin, and R. C. Legat, New Britain, assignors to G. E. Prentice Manufacturing Company, New Britain, Conn. Separable fastener. 1,626,873; May 3.
Prentice, Hugh. (See Buckman, H. W., and Prentice.)
Prentice, John A. San Francisco, Calif. Defensive and offensive projector composition. 1,643,954; Oct. 4.
Prentiss-Wabers Stove Company. (See Taylor, T. A., and Yenger, assignor.)
Prenveille, Antoine E. M. (See Prenveille, Donald E., assignor.)
Prenveille, Donald E., (See Prenveille, A. E. M. and D. E.)
Prenveille, Donald E., assignor of one-half to A. E. M.
Prenveille, Oakland, Calif. Beam compans. 1,628,420;
May 10.

Prenveille, Oakland, Calif. Beam compass. 1,020,4207, May 10.
Prenzel, Adam H., Halifax, Pa. Molded-flange Insole. 1,638,705; Aug. 9.
Prenzel, George C., Columbia, Tenn. Air-moistening device. 1,020,738; Mar. 15.
Press, Gilberto N., Ennis, assignor one one-tenth jointly Press, Gilberto N., Ennis, assignor one one-tenth jointly Coperating device for automobile headlight sbutters. 1,643,030; Sept. 20.
Prescott, Arthur C., East Orange, N. J., assignor to General Electric Company, Reversing controller. 1,633,825; June 28.

June 28.
Prescott, Charles F., Brooklyn, N. Y. Valve. 1,634,339;
July 5.
Prescott Company, The. (See Langill, R. E., and Grueter,

Prescott Company, The. (See Langill, B. E., and Green, assignors, assignors, assignors, assignors, prescott, Edwin, Arlington, Mass. Platform support. 1,642,265; Sept. 13.

Prescott, Sydney I., New York, N. Y., and F. J. Rummler, Lyndhurst, N. J. Wheel. 1,626,355; Apr. 26.

Prescott, William E. (See Baker, G. R., Prescott, and Gilderdaliam E. (See Head, R., and Prescott, Prescott, William E., London, England, assignor to Baker-Perkins Company Incorporated, White Plains, N. Y. Stop-motion apparatus for use in machines employing conveyed trays or equivalents. 1,613,330; Jan. 4.

employing conveyed trays or equivalents. 1,616,600°, Jan. 4.
Presho, Charles H., Alma, Nebr. Headlight-rim wrench. 1,620,739; Mar. 15.
Pressed Steel Car Company. (See Blest, Minot C., as-

signor.)
Pressed Steel Car Company. (See Brinckerhoff, Francis M., assignor.)
Pressed Steel Car Company. (See Frelin, Carl G., assignor.)

Pressed Steel Car Company. (See Koch, Felix, assignor.) Pressed Steel Car Company. (See Kurtz, Benjamin F., Pressed Steel Car Company. (See Pehrson, A. K., and Winell. assignors.)

Pressed Steel Car Company. (See Streib, John F., as-

signor.) signor.) (See Winell, Karl O., as-

Pressed Steel Car Company, tose standard signor.)
Pressier, Charles F. Fort Wayne, Ind. Vented wastepipe fitting. 1,027,928, May 10, 101.
Pressier, Charles F. Fort Wayne, Watter L., assignor.)
Pressiey, Jackson H., Oceanport, N. J. Long-waye or intermediate-frequency transformer. 1,647,372; Nov. 1.
Pressteel Engineering Corporation. (See Haid, Herbert, assignor.)

assignor.)
Presstel Radiator Company. (See Carlberg, Carl S., as-

Presstel Radistor Company. (See Caribeth, Carl Sq. casignor.)
Prestage, Edwin, assignor of one-half to H. J. West and
Company Limited, London, England, High-pressure
gas compressor. 1,614.851; Jan. 18.
Prestinari. Eugen, Pawlucket, R. I., assignor to New
Jersey Chain Corporation, Newark, N. J. Bracelet hook,
1,624.561; Apr. 12.
Prest-O-Lite Company, The. (See Benner, Raymond C.,

Prest-O-Lite Company, The. (See Benner, R. C., and French, assignors.)
Prest-O-Lite Company, The. (See Fliedner, Carlyle S.,

assignor.)
Prest-O-Lite Company, The. (See Herrly, Clarence J.,

assignor.)
Prest-O-Lite Company, The. (See Werking, Leroy C.,

assignor.)
Prest-O-Lite Storage Battery Corporation. (See Benner,
R. C., and Werking, assignors.)
Prest-O-Lite Storage Battery Corporation. (See Gossling,
Walter E., assignor.)

Presto Lock Corporation. (See Levine, Abraham, assignor.)
Preston, Bruce B., Cleveland Heights, assignors to The Ideal Heating Equipment Company, Cleveland, Ohio. Thermostatic wafer, 1,638,563; Aug. 10.
device, 1,632,504; June 14, Preston, Clarence S., San Diego, Calif. Tire valve, 1,628,064; May 10.
Preston, Clarence S., San Diego, Calif. Tire valve, 1,628,064; May 10.
Preston, Edward S., Saignor to Chicago Electric Manufestin, Chicago, Ill. Electrically-heated utensil, 1,630,999; Nov. 29.
Preston, Francis W. (See Taylor, W., and Preston.)
Preston, Fraderick A., Highland Park, assignor to The P. & M. Company, Chicago, Ill. Bond-wire supporter. P. & M. Company, Chicago, Ill. Bond-wire supporter. P. & M. Company, Chicago, Ill. Rail anchor. 1,618,674; Feb. 22.
Preston, Frederick A., Highland Park, assignor to The P. & M. Company, Chicago, Ill. Rail anchor. 1,618,674; Feb. 22.

Preston, Frederick A., Highland Park, assignor to The P & M. Company, Chicago, Ill. Rail anchor. 1,618,674; Feb. 22.

Preston, Frederick A., Highland Park, assignor to The P & M. Company, Chicago, Ill. Rail anchor. 1,628,232; Preston, George E. (See Colbert, C. C., and Preston). Preston, Herbert E., assignor to American Engineering Company, Philadelphia, Pa. Stoker-side-wall construction. 1,620,485; Mar. 8.

Preston, Marshall V., Boston, Mass. Pattern-grading machine. 1,627,662; May 3.

Preston, Marshall V., Boston, Mass. Method of and apparatus for making cutting dies. 1,647,415; Nov. 1.

Preston, Norman A., New York, N. Y. Automobile lock. 1,633,953; June 28.

Prestwich, Pright and E., Lawrence, Mass. Removable-handle mechanism for brushes and the like. 1,615,483; Jan. 25.

Prestat, Prederick E., Waterville, Conn. Tollet brush.

Pretat, Frederick E., Waterville, Conn. Toilet brush. 1,621,900; Mar. 22. Pretsch, Elise, Brooklyn, N. Y. Bed table. 1,653,657;

1.621,900; Mar. 22.
Pretsch, Ellise, Brooklyn, N. Y. Bed table. 1,653,657;
Dec. 27.
Prettenthaler, Vinzenz, Betzdorf, Sieg, Germany, assignor to Mrs. E. Habbe. Sick bed with means for easing nature. 1,636,705; July 20.
Property of the state of the stat

Oct. 23. Price, Albert W. (See Gronberg, Clarence O., assignor.) Price, Charles D., Baraboo, Wis. Fuel mixer. 1,629,964; May 24. Price, Charles P., Boston, Mass. Gas heater. 1,628,427;

May 10.

May 10.

Price, Chester P., San Antonio, Tex. Tire spreader. 1,647,054; Oct. 25.

Price, David R., Wellesley, assignor to Florence Stove Company, Gardner, Mass. Oil stove and electrical igniting means. 1,620,488; Mar. 8.

Price, David R., Lyun, and F. H. Bowman, Swampscott, Mass., assignors to General Electric Company. Synchronoscope. 1,641,693; Sept. 7.

Electric Company. Electromagnetic clutch. 1,629,304; May 1.

May 17.

Price, Edward W., Warren, Ohio, Rail joint. 1,639,859;
Aug. 23.

Price, Edward W., Syracuse, N. Y. Tooth-paste holder.
1,553,414; Dec. 20.

Price, Edwin G. (See Weber, V., and Price.)

Price, Emil, and W. A. Pfister, Los Angeles, Calif. Adjustable union. 1,632,942; June 14.

Price, Frank E., Pontiac, Mich. Side bumper. 1,643,517;

Sept. 27.

Sept. 27.

Price, Freeman B., Butte, Mont. Coffee percolator.

1,652,955; Dec. 13.

Price, George H., (See Boucher, G. F., Price, and Foster.)

Price, George R., Monessen, Pa. Changeable exhibitor.

1,619,165; Mar. 1.

1,619,165; Mar. 1.

1,639,165; Mar. 1.

1,639,165; Mar. 1.

1,639,165; Mar. 1.

1,634,596; July 5.

Price, Harry, Buffalo, N. Y., assignor to The American Coff. 2007 Co., Canton, Ohio. Cable splice. 1,646,660;

Oct. 25.

Price, Howard W., Swartz, La., and J. B. Merlam, assignors to Merlam Company, Cleveland, Ohio. Primary gauge stabilizer. 1, 4022, 448; Mar. 29.

Price, Jacob L., assignor to Bendix Brake Company, Chicago, Ill. Mannfacture of brake drums. 1,628,804; May 17.

Price, Jacob L., South Bend, Ind., assignor to V. Bendix, Chicago, Ill. Brake. 1,648,362; Nov. 8.

Price, Jacob L., Bisk brake. 1,649,185; Nov. 15.

Price, Jacob L. Disk brake. 1,649,185; Nov. 15.

Price, Jacob L., Boumington, Ind. Fish-scaling machine. 1,615,134; Jan. 18.

Price, James W., Tulsa, Okla, Casing puller, 1.625.909:

Price, James W., Tulsa, Okla. Casing puller. 1,625,909; Apr. 26.
Price, John D., Milwaukee, Wis. Electric wire housing. 1,643,723; Sept. 27.
1,650,039; Nov. 22.
Price, Joseph, assignor to Boncilla Laboratories, Inc., Full Millian Price, Joseph, assignor to The Griscom-Russell Company. Price, Joseph, assignor to The Griscom-Russell Company. New York, N. Y. Heat exchanger. 1,617,031; Feb. 8.
Price, Joseph, assignor to The Griscom-Russell Company, New York, N. Y. Sectional condenser. 1,618,034; Feb. 8.
Price, Joseph, Stapleton, assignor to The Griscom-Russell Company, New York, N. Y. Film-type sectional experience of the Company, New York, N. Y. Condenser-type heater self-company, New York, N. Y. Condenser-type heater lingage carrier, and trailer hitch attachment. 1,641,602; Sept. 6.
Price, Lydia A., executrix. (See Price, Melvin B.)
Price, Molvin B., deceased, Los Angeles, Calif.; L. A. Mar. 13.
Price, Mins B., New York, N. Y. Vanity case for auto-Mar. 13.
Price, Mins B., New York, N. Y. Vanity case for auto-Mar. 13.
Price, Mins B., New York, N. Y. Vanity case for auto-Mar. 13.
Price, Mins B., New York, N. Y. Vanity case for auto-Mar. 13.
Price, Mins B., New York, N. Y. Vanity case for auto-Mar. 15.
Price, Mins B., New York, N. Y. Vanity case for auto-Mar. 15.
Price, Mins B., New York, N. Y. Vanity case for auto-Mar. 15.
Price, Mins B., New York, N. Y. Vanity case for auto-Mar. 15.

Price executrix. Adjustable window nanger.
Mar. 15.
Price, Nina B., New York, N. Y. Vanity case for automobiles. 1,639,003; Aug. 16.
Price, Owen A., Kilmarnock, Scotland. Automatic self-closing valve. 1,629,637; May 24.
Price, Owen A., Kilmarnock, Scotland. Automatic self-closing valve. 1,629,637; May 244.
Price, Owen A., Kilmarnock, Scotland. Automatic self-Price, Pull L., Mount Vernon, N. X. Floor grating. Des. 73,440; Sept. 13.
Price, Pull L., Mount Vernon, N. X. Floor grating. Des. 73,440; Sept. 13.
Price, Pullim E., Hartsdale, N. Y. Lantern, 1,623,699; Apr. 5.

Price, Owen A., Kilmirnock, Scotland. Automatic self-closing valve. 1,631,059; May S. 1,810. Price, Paul L., Mount Vernon, N. Y. Floor grating. Des. 73,440; Sept. 13.
Price, Paul L., Mount Vernon, N. Y. Floor grating. Des. 73,440; Sept. 13.
Price, William E., Hartsdale, N. Y. Lantern. 1,623,699; Apr. V. Hilliam G., Yakima, Wash. Packing press. 1,622,669; Mar. 29.
Price, William G., Yakima, Wash. Packing press. 1,622,669; Mar. 29.
Price, William G., See Crosby, Arthur P., assignor.)
Price, William T., See Crosby, Arthur P., assignor. Orice, Wortley H. and H. G. Blumberg, San Antonio, Tex. Alarm system. 1,640,294; Aug. 23.
Prichard, Channing, Seattle, Wash., assignor of one-halt to the control of the con

Prillaman, Elmer E. (See Newhouse, George A., as-

Prillaman, Elmer L. (See Activation)
signor.)
Prillwitz, Hans, assignor to I. G. Farbenindustric Aktiengesellschaft, Frankfort-on-the-Main, Germany, Mixing
apparatus, 1530,406; May 31.
1,630,761; May 31.
Primley, Kathleen D., Evanston, Ill, Golf-ball carrier,
1,648,565; Nov. 8.
Primos Company, (See Handy, James O., assignor.)
Primrose, John, Dongan Hills, assignor to Power Specialty Company, New York, N. Y. Oil still. 1,614,653;
Jan. 18.

Jan. 18.

Primrose, John, Dongan Hills, assignor to Power Specialty Company, New York, N. Y. Oil still. 1,654,347;
Dec. 27.

Company, New York, N. Y. Oll still. 1,694,324; C. Primrose, John, assignor to Power Specialty Company, New York, N. Y. Oll heater and operating same, 1,626,674; May 3. Primrose, John, Richmond, assignor to Foster Wheeler Corporation, New York, N. Y. Vapor condenser. P. 1604,180; Dec. 27.
P. 1604,180; Dec. 2

Primrose Tapestry Co. (See Newton, James F., assignor.)
Prince, Alva L., Dallas, Tex. Mopping and scrubbing machine. 1,619,313: Mar. 1.
Prince, Burton A., Westfield, Mass., assignor to Irving Iron Works Company. Metal and concrete structure for the More of t

signor.)

Prinz. Herman L., Chicago, Iii. Movable bridge.
1,619,678; Mar. I.
Prior, Ethel M., Hartford, Conn. Cover for flatiron
stands. 1,632,488; June 14.
Prior, Ethel M., Morte Conn.
Stands. 1,632,488; June 14.
Prior, Ethel M., Morte Conn.
Adjusting device for
doors and the like. 1,637,635; Aug. 2.
Pritchard, George E., Elizabeth City. N. C. Separator
attachment for bean harvesters. 1,643,629; Sept. 27.
Pritchard, Ralph W., Chicago, Iii. Corn popper and
Pritchard, William S., assignor to Motor Products Corporation, Detroit, Mich. Radiator shield. 1,644,690;
Oct. 11.
Pritchard, William S., assignor to Motor Products Corporation, Detroit, Mich. Wildshield. 1,644,691;
Pritchard, William S., assignor to Motor Products Corporation, Detroit, Mich. Wildshield. 1,644,691;
Pritchard, William S., assignor to Motor Products Corporation, Detroit, Mich. Wildshield. 1,644,691;

Oct. 11.
Pritchard, William S., assignor to Motor Products Corporation. Detroit, Mich. Guard for heater pipes, 1.650.804; Nov. 29.
Pritchett, George E., assignor of one-affith to 7. A. Sampertichett, William H., San Diego, Calif. Automobile curtain. 1,627.457; May 3.
Pritchett, William H., San Diego, Calif. Gasoline regulator. 1,627.458; May 3.
Pritzl, Frank S. (See Chermak, E. G., and Pritzl.) Privat, Bernard, Stockton, Calif. Garden wheelbarrow. 1,631,333; June 7.

Prizma, Incorporated. (See Kelley, William V. D., asatgnor.)

Probat, Albert, Los Angeles, Calif. Eskimo-pie-vending
machine. 1,627,865; May 10.

Probst, Albert, Los Angeles, Calif. Handkerchief-vending machine. 1,646,314; Oct. 18.

Probat, Albert E., et al. (See Franke, George O., asalgon.)

Probat, Karl, Toledo, Obio. Traction wheel. 1,634,683;

Process Engineers, Inc. (See De Cew, Judson A., assignor.)

Prochaska, Emil, Catawba, Wis. Two-wheeled vehicle.
1,615,408; Jan. 25.

Procknow, George J., assignor to Paine Lumber Company,
Ltd., Oshoch, Wis. Saw guard. 1,640,517; Aug. 30.

Procter, & Gamble Company, The. (See Rhandson, A.

Procter & Gamble Company, The. (See Rhandson, A.

S., and Conley, assignors.)

Procter, Harry C., Manchester, England. Electriclighting apparatus for motor vehicles. 1,623,700;

Apr. 5.

Apr. 5

lighting apparatus for motor vehicles. 1,623,700; Apr. 5.

Procter, Joseph H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Autorization of the Company of

assignor.)

Proctor, Robert V., and H. M. Schaab, assignors to The Commercial Shearing & Stampling Company, Youngstone Commercial Shearing & Stampling Company, Youngstone Commercial Shearing & Stampling Company, Youngstone Com

signor.)
Proctor & Schwartz, Incorporated. (See Schwartz, Walter M.)
Proctor & Schwartz, Incorporated. (See Schwartz, Walter M., assignor.)
Proctor, Warren G., and F. R. Dudley, Fitchburg, Mass. Road tamper. 1.654.014; Dec. 27.
Proctor, William A., Amesbury, Mass. Windshield regulator. 1.652.638; Dec. 13.
Lety, Marcel, assignor) odults Oraniques S. A. (See Lety, Marcel, assignor.)
Productor Pictures Corporation, The. (See Kern, George H., assignor.)
Production Meter Company. (See Cannon, Frank J., as signor.)

signor.)

signor.)
Products Protection Corporation, The. (See Smith, Franklin S., assignor.)
Processel, Delbert W., Portland, Oreg. Multiple Pitot and piezometer tube for measuring the flow of water through closed conduits. 1.645.449; Oct. 11.
Progression, S. A. (See Laub, Adolf, assignor.)
Schroeder, Louis H., assignor.)
Progressive Electrotyping Co. (See Preisler, Ernst, assignor.)

signor.)

signor.)
Progressive Shoe Machinery Company. (See Havir, Andrew H., assignor.)
Prokop, John, assignor of one-half to F. V. Elibertz, Detroit, Mich. Extensible spindle. 1,647.747; Nov. 1.
Prokop, Josef, Parbudice, Czechoslovakia. Feeding and discharging apparatus for machines for material treatment. 1,623.701; Apr. 5.
Proksa, John. assignor to Hellos Corporation, Chicago, Ili. Prolecting apparatus. 1,622.599; Mar. 22.
Pronin. Rocco, Smith River, Calif. Lock spike. 1,646.630; Oct. 25.

Pronto Manufacturing Company, The. (See Mayer, Benjamin, assignor.)
Pro-phy-lac-tic Brush Company. (See Elliot, William S.,

Pro-phy-lac-tic Brush Company. (See Noble, William, assignor.)

assignor.)
Propp, Louis, et al. (See Shapiro, Hyman, assignor.)
Propp, Louis, New York, N. Y. Plug socket. 1,613,959;
Jan. 11.
Co., The. (See Shapiro, Hyman,
Propp, Morris, et al. (See Shapiro, Hyman, assignor.)
Proppt, Jacob Y., Ohatchee, Als. Apparatus for the recovery of waste heat. 1,646,836; Oct. 25.
Proskourlakoff, Avenir. (See Raizis, G. W., and Proskourinkoff.)
Prosperity Company, The. (See Braun, Aquila R., asProsperity Company, The. (See Braun, Gaius A., assignor.)

Prosperity Company, The. (See Braun, Philip N., as-

Prosperity Company, The. signor.) (See Clisson, Albert B., as-

perity Company, The. (See Daly, Joseph P., assignor Prosperity Company. (See Davis, Ernest, assignor.) Prosperity Company. (See Dorsey, William H., assignor.) Prosperity Company, The. (See Houck, George C., as-

Company, The. (See Ledbetter, James C.,

assignor.) Prosperity Company, The. (See Maury, Alfred D., as-Prosperity Company, The. (See Ryan, George E., as-

Prosperity Company, The. (See Simpson, George F., assignor.)
Prosperity Company, The. (See Titterington, Morris M.,

rosperity Company, Inc. (See Interington, Morris M., assignor.)
Prosperity Company Inc., The. (See Daly, Joseph P., assignor.)
Prosperity Company Inc., The. (See Haacke, William F., assignor.)

Prosperity Company Inc., The. (See Haacke, William F., assignor.)
Prosser, Harold P., New Rochelle, N. Y. Automatically reversible toy vehicle. 1,643,903; Sept. 27.
Prosser, Joseph W., New York, N. Y. Process and apparatus for producing depth effects in photography. 1,616,636; Feb. 8.
Protected Reful Corporation. (See Ausmus, William A.,

assignor.)
Protectolite Co., The. (See Rosemier, George M., as-Pro-tex

nor.) ex Corporation, The. (See Macy, Alfred J., as-

signor.)
Protzeller, Harry W. Bast Chicago, Ind., assignor to O. F.
Jordan Company, East Chicago, Ind. Automatic make
and break contactor. 1630,580; May 31. agreements
Proudt. Harry M. West Enling, England; stepland; by
Company, Swissvale, Pa. Electric signaling and indicating apparatus. 1,629,049; May 17.
Proudit Loose Leat Co. (See Proudit, W. S., and
Graf, assignors, Walker Township, Kent County,
Proudit Loose Leat Co. Loose-leaf binder. 1,541,397;
Sept. 6.

Sept. 6.
Proulx, Amie G., St. Paul, Minn. Steering-gear attachment. 1.623.751; Apr. 5.
Prouty, Encoh, Detroit, Mich. Internal-combustion engine. 1.62.891; Feb. 1.
Prouty, Groupe W., Boston, Mass. Press. 1.646.872; Prouty, Oct. 25

Oct. 28.

Prouty, Theodore C, and W. O, Hermosa Beach, Calif., assignors, by mesne assignments, to American Encaustic Tiling Company, Ltd., Los Angeles, Calif. Tunnel kiln. 1.613.034; Jan. 4. and W. O., Hermosa Baach, assignout, to the company of the company and the company of the company of the company of the company. Ltd., Los Angeles, Calif. Ceramic process and product. 1.62.810; May 17.

Providence Collar Button Company. (See Hallihan, Providence Collar Button Company). (See Hallihan, Providence Stock Company. (See Lederer, Sigmund L., assignor.)

Providence Stock Company. (See Myrberg, Sven O., assignor.)

signor.)
Provost, Agnes, Milwaukee, Wis. Cuticle stick. 1,636,148; July 19.
Provost, Frank W., and G. B. Haywood, Houston, Tex. Lint condenser. 1,628,065; May 10.
Lint condenser. 1,628,065; May 10.
Piller, 161,6392; Feb. Becford, Mass. Double test plug. 1,618,392; Feb. Provost, Virgile E., Cohoes, N. Y. Chain connection. 1,650,652; Nov. 29.
Prowense, Joseph S., Kansas City, Mo., assignor to J. A. Carson, Seattle. Wash. Window or windshield cleaners and the control of the control of

Follows: 1. Harold M., Wyoming, N. J., assignor, by meane assignments, to Western Electric Company, Incorporated, New York, N. Y. Carrier-wave signaling system, 1,624,506; Apr. 12.

Prudential Oil Corporation. (See Porterfield, Robert A.,

assignor.)
Prudden, Theodore M., Hingham, assignor to Kalix Cup
Company, Boston, Mass. Container and cover therefor.
1,633,605; June 28.
Prudden, Theodore M., Hingham, assignor to Kalix Cup
Logarden, Theodore M., Hingham, assignor to Kalix Cup
Logarden, Theodore M., Hongham, assignor to
Kalix Cup
Logarden, Sample M., Neulily-sur-Seine, assignor to
Société Internationale des Procédés Prudhomme, Paris,
France. Regeneration of metal catalysts contaminated
by sulphur. 1640,068; Aug. 30.
Pruett, Borrest L., assignor of one-half to W. A. Poole.
Freb. 8., Penn. Insurance cash register. 1,616,867;
Feb. 8., Penn. Insurance cash register. 1,616,867;

Jackson, Felin Feb. 8. uger, Raoul, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bearing.

Jackson, Tenn. Insurance test very problem. Jackson, Tenn. Insurance test very property. Jackson Jacks

Pryor, E.

Pryor, Bdward G., Fuello, Colo: Lock: 1,002,109; July 5, John A., Vancouver, Wash. Hand truck. 1,015,227; Dec. 27. Pryor, Joseph E., Summit, N. J. Golf-tee anchor. 1,632,801; June 21. Pryor, Wash and C. G. Schuller, Brecksville, Ohlo. Dental anchorage. 1,615,034; Jan. 18. Pryor, William A., Savannah, Ga. Rainy-day tablet shield. 1,642,285; Sept. 13. Psayla, Joseph E., New Orleans, La. Registering bite tray. 1,652,2910; Dec. 13. Storm, Ohlo. assignor to Fishander, Charles A., Yout, Sonton, Ohlo. assignor to Versille-point dispers tooth. 1,620,132; Mar. 8. Pstacek, Joseph F., Milwaukee, Wis. Rug-weaving machine. 1,629,886; May 24. Public Service Cup Company. (See Nias, Henry, assignor).

chine. 1,629,886; May 24.
Public Service Cup Company. (See Nias, Henry, asPuccioni, Corrado, Rome, Italy. Flow integrator and
recorder. 1,630,134; May 24.
Pucek, Ferdinand, Johnson City, N. Y. Sound-recording
mechanism. 1,638,059; Aug. 9.
Puclilo, Frank, Bridgeport, Conn. Coil tester. 1,636,968;
Puck, Goorge, Lakefield, Minn. Motor attachment for
corn pickers. 1,645,868; Oct. 18.
Pudelko, Riccard, assignor to Landis & Gyr A.-G., Zug.
Switzerland. Contact device for key switches.
1,653,823 Dec. 27.
H. assignor.)
Pugh, John V., assignor to Rudge-Whitworth, Limited,
Coventry, England.
1,648,821; Nov. 8.
Puch, John V., assignor to Rudge-Whitworth, Limited,
1,648,821; Nov. 8.
Pugh, John V., assignor to Rudge-Whitworth, Limited,
1,648,864; Nov. 8.
Puhl, John A. Sergor to The John Puhl Products Co.,
Chicago, Ill. Bottle. Des. 73,866; Nov. 15.
Puhl, John, Products Co., The. (See Puhl, John, asFilternd, Homas S., Wilkinsburg, Pa., assignor to WestFilternd, Homas S., Wilkinsburg, Pa., assignor to West-

Publi, John, Froquets signor.) Signor.) Pukerud, Thomas S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Separating device for circuit interrupters. 1,621,026;

inghouse rating device for the state of the

Mar. 15.
Pukt, Albert J., Boston, and I. Hendlin, South Boston, Mass. Container for ice-cream cones. 1,619,883; Mar. 8.
Pulaski. Bdward A. (See Petersen, Emil, assignor.) Pulaski. Stanley, Brooklyn, N. Y. Trolley-pole. 1,648,751; Sept. 27.
Pulaski. Stanley, Brooklyn, N. Y. Trolley-pole. Wildian Mannfacturing Corporation. (See Trinks, William W., assignor.)
Pullen, Joseph R., Chicago, and W. L. Fiene, Elimburst. III. Merry-go-round. 1,635,887; July 12.
Pullen, Joyd, Harmony, N. C. Thimble. 1,628,188; May 10.
Pulley, Dorothy H., Charlotte, N. C. Motor meter.

May 10.
Pulley, Dorothy H., Charlotte, N. C. Motor meter.
Des. 73,298; Aug. 16.
Pulley, Dorothy H., Charlotte, N. C. Motor meter.
Pullem, 148,827; too: 8.
Pulliam, James S., Champaign, Ill. Package tie.
1,614,890; Jan. 18.
Pulliam, Keeling G., jr. (See Rose, D. E., Pulliam, and
Hossfeld, 188)

Pulliam, William Z., Inglewood, Calif. Centrifugal spreader. J.644,031; Oct. 4.
Pullis, Frederick J., Jersey City, N. J. Mail-bag ejector for toy railways. 1,646,315; Oct. 18.
Pullman Car and Manutacturing Corporation. (See Lunn, Pullman Car & Manufacturing Corporation. (See Oehm, W. N., and Test, assignors.)
Pullman Company, The. (See Hawkes, A. G., and Test, assignors.)

Pullman Company, The. (See Hawkes, A. G., and Test, assignors.)
Pullman Company, The. (See Pearson, John, assignor.)
Pullman Grace D., New York, N. Y. Doll. 1,617,498;
Feb. 15.
Pullman, James H., Fall River, Mass. Textile roll. 1,645,348; Oct. 11.
Pulls, Erich F., Hamburg, Germany. Speed-controlling device. 1,647,680; Nov. 1.
Puls, Louis J., Walla, Walla, Wash. Apparatus for treating grains. 1,622,030 / May 17.
Puls, Louis J., Walla, Walla, Wash. Apparatus for treating grains. 1,622,030 / May 17.
Puls, Louis S. (See Fladell, W. M., and Puls.)
Pulser Man, Philip E., Rensselaer, N. Y. Brush. 1,652,213; Pulverman, Philip E., Charleston, W. Ya., assignor to

Pulverman, Philip E., Charleston, W. Va., assignor to The Visometer Corporation, New York, N. Y. Plunger for pressure gauges or similar articles. 1,629,887; for pressure
May 24.
Pülz, Willy, Be
ing machine.

for pressure gauges or similar articles. 1,629,887; May 24.
Pülz, Willy, Berlin-Niederschonhausen, Germany. Welghing machine. 1,613,192; Jan. 4.
Pumphrey, Joseph R., et al. (See O'Leary, William C.,
Pumphrey, Walter H., New York, N. Y. Binding post. 1,642,695; Sept. 20.
Pumphrey, William B., Sequoia, Calif. Filtering device. 1,633,604; June 28.
Pumpuru, Oiga, and V. Austrin, Bronx, N. Y. Float. 1,652,253; Dec. 18.
L652,253; Dec

engine. 163-000-15.

Purdy, Walter S., Huntington, W. Va., assignor to F. Purdy, Walter S., Huntington, W. Va., assignor to F. Gibbs, trustee, New York, N. Y. Mine car. 1.624,801; Apr. 12.

Pure Food Froducts of America, Inc. (See Burns, J. G., Dure Food Factory "Hansa." (See Stoll, K., and Meyer, Tassignors.)

Purnell, Charles S. (See Guy, Harry L., assignor.) Purox Company. (See Coberly, Clarence J., assignor.) Purox Company. (See Marshall, W. H., Killgore, and

Fedortin assignors)
Purox Company. (See Mott, Chester, assignor),
Purox Company. (See Mott, Chester, assignor),
Purschel, Ernst, Berlin, Germany, assignor to Radio Coporation of America. Arrangement for feeding vacuum tubes. 1,615.098; Jan. 18.
Purtle, Albert D., Marietta, Ohio. Clamp. 1,630,863; Purtle, Alt May 31.

Anay \$1.

Purtyman, George S., Clemenceau, Ariz. Process and apparatus for treating gases, fumes, and the like.

1.652,956; Dec. 13.

Purtzer, Edward, Lamar, Ind. Power take-off shaft for automobile wheels. 1.645.401; Oct. 11.

PurVey Carburetor Corporation, The. (See Purvey, Purvey, Moreton E. Detroit, Mich., assignor to The Purvey Carburetor Corporation. Carburetor. 1.635.433; July 12.

Purvis, Charley.

Vey Carburetor Corporation. Carburetor. 1,000,200-July 12.
Purvis. Charles A. and T. A., St. Joseph, Mo. Mop. 1,653,415; Dec. 20.
Purvis, George, Detroit Mich. Boiler blow-off and circulating device. 1,648,028; Nov. S.
Purvis, Thomas A. (See Purvis, Charles A. and T. A.)
Purvis, Thomas A. (See Purvis, Charles A. and T. A.)
Purvis, Thomas A. (See Stoney, J. T., and Purvin).
Manufacturing Company. Mansfield, Ohio. Starting apparatus for synchronous motors. 1,638,274; Aug. 9.
Putnam, Albert J., and J. W. Wilson, Kalispell, Mont. Artificial haft. 1,624,116; Apr. 12.
Putnam, Alden L., Detroit, assignor to Whitehead & Kales Company, River Rouge, Mich. Vehicle wheel. Des. 74,023; Dec. 6.
Diss. 74,024; Dec. 6.
Putnam, Alden L., assignor to Motor Wheel Corporation, Lansing, Mich. Metal wheel. 1,618,887; Feb. 22.
Putnam, Alden L., assignor to Whitehead & Kales Company, Sissignor to Whitehead & Kales Company, Mich. Wetal wheel. 1,618,887; Feb. 22.
Putnam, Alden L., assignor to Whitehead & Kales Company, Detroit, Mich. Wheel rim and attachment therefore. 1,624,974 A. Detroit, assignor, by Whitehead & Kales Company, Detroit Mich. Wheel rim and attachment therefore. 1,624,974 A. Detroit, assignor, by Menne assigning, Mich., and one-half to The Midland Steel Products Company, Cleveland, Ohio. Rim fastener for vehicle wheels. 1,639,108; Aug. 16.

Putnam, Alden L., Dearborn, assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich. Welding metal spokes, 1,639,109; Aug. 16.
Welding metal spokes, 1,639,109; Aug. 16.
Steel Wheel Corporation, by mesne assignments, to Steel Wheel Corporation, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich. Four-wheel brake, 1,652,214; Dec. 13.
Putnam, Carl E., Fairport, N. Y., assignor of one-half to F. A. Putnam, Keene, N. H. Hand-operable labeling machine, 1,648,590; Nov. 8, H.M., and Putnam, Petal A. M. Seep Dunian, H. M. and Putnam, Putnam, Fred A., Keene, N. H., assignor to Markem Machine Company, Boston, Mass. Marking machine, 1,631,691; June 28.
Putnam, George E., Fullerton, Calif. Valve-seat retainer, 1,634,631; June 28.
Putnam, Walter T., assignor to Davis & Furber Machine Company, North Andover, Mass. Carding machine, 1,652,215; Dec. 13.
Putnam, Samuel, Lansford, Pa. Measuring instrument. Putt, Earl B., New York, N. Y. Denatured ethyl-alcohol composition, 1,635,633; July 12.
Putt, Edward D., and H. D. Stevens, assignors to The Firestone Tire and Rubber Company, Akron, Ohio, Machine for cutting fan belts or the like, 1,622,253; P. P. M., Prooklyn, N. Y. Machine for mixing cementiflous materials, 1,613,846; Jan, 11.

Mar. 22. Pye. David W., Brooklyn, N. Y. Machine for mixing cementitious materials. 1,613,846; Jan. 11. Pyle-National Company, The. (See Dake, Charles W.,

assignor.) Pyle-National Company, The. (See Dake, C. W., and Levis, assignors.)
Pyle-National Company, The. (See McGinnis, Crawford

P., assignor.)
Pyle-National Company, The. (See McGinnis, C. P., and

Pyle-National Company, The. (See McGinnis, C. P., and Dake, assignors.)

Pym. Arthur F., Cliffon, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Upper-shaping machine. 1.634.510; July 5.

Pym. Charles F., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Tack-pulling Pym. Charles F., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lasting machine. 1.634.511; July 5.

Pym. Charles F., Everly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lasting machine. 1.624.599; May 10.

Lasting machine. 1.627.599; May 10.

Pyrene Manufacturing Company, and Timpson, assignors, level Manufacturing Company, (See MacGregor, Peter Manufacturing Company, Company, Edward, Edward

assignor) he Manufacturing Company. (See Waring, Edward

G., as-signor.)

Pyrene Manufacturing Company. (See Waring, Edward J., assignor.)

J., assignor.)

J., assignor.)

J., assignor.]

G. (See Warga, Kalman, assignor.)

Pyrelo Bordon. (Golo.)

Silicer and shredder. 1,617,499; Feb. 15.

Pyzel. Daniel, Piedmont, assignor to Simplex Refining Company, San Francisco. Calif. Separating hydrocarbon fractions. 1,622,737; Mar. 28.

G. (Sompany, See Ponne, Charles D., assignor.)

G. C. (Company, See Limberman, Emil C., assignor.)

G. C. (Company, See Zimberman, Emil C., assignor.)

G. C. (C. (Company, See Zimberman, Emil C., assignor.)

G. C. (C. (Company, See Zimberman, Emil C., assignor.)

G. C. (C. (Company, See Zimberman, Emil C., assignor.)

G

signor.) Quaker Oats Company, The. (See Hagmann, Ulrich, Quaker Oats Company, The. (See Miner, Carl S., as-

Quaker Oats Company, The. (See Miner, Carl S., assignor.)
Quaker Oats Company, The. (See Miner, C. S., and Steerup, assignors.)
Quaker Oats Company, The. (See Trickey, John P., as-

Quaker Oats Company, The. (See Wilson, William C., asnor.) tv Metal Bed Co. (See Simon, William M., as-

Quality Metal Bed Co. (See Simon, William M., assignor.) Inthine and Manufacturing Company. (See Quarles, Donald A. Englewond, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, Supervisory system, 1,616,823; Feb. (Supervisory system, 1,616,823; Feb. Ratl, assignor.)

Quarzlampen-Gesellschaft mit beschränkter Haftung. (See Girard, Fritz, assignor.)

Quates, Leonard S., Montgomery, Ala, Automatic releasing valve for air-brake systems. 1,638,457; Aug. 9. Quatmann, George B., Sidney, Ohlo. Waffe fron. 1,641,455; Sept. 6. Que, Jose E., Manlia, P. I. Traffice signal. 1,638,706; Aug. 9. Quatmann, assignors, in the signal assignal assignal assignated assignation, in the signal assignments, to positive x construction, as a signal assignments, to positive x construction, as a signine signal assignments, to positive x construction, as a signine signal assignments, to positive x construction, as a signine s

Sept. 27.

Quizley, John T., Boston. Mass., assignor, by mesne assignments, to Postindex Company, Inc. Filing and Indexing equipment. 1,610,593; Feb. 28.

Quizley, John T., assignor, by means assignments, to indexing equipment. 1,637,534; Aug. 2.

Quigley, John T., Los Angeles, Calif. Device for filing cards and the like. 1,637,584; Aug. 2.

Quizley, Juha E., Charlestown, Mass. Cooking utensil. 1,618,675; Feb. 22.

Quizley, Juha E., Charlestown, Mass. Cooking utensil. 1,618,675; Feb. 22.

Quizley, Juha E., Charlestown, Cooking utensil. 1,618,675; Feb. 22.

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Quizley, Juha E., Charlestown, Mass. Cooking utensil. 1,618,675; Feb. 22.

Quizley, Juha E., Charlestown, Mass. Cooking utensil. 1,618,675;

William E., Inc. (See Rathman, Gilbert, as-

signor.)
Quin, William H., Toronto, Ontario, Canada. Sander for railway rolling stock. 1,614,207; Jan. 11.
Quinian. Robertson & Janin Limited. (See Maxwell, Colin J. E., assignor.)
Quinn, Charles H., San Francisco, Calif. Fuel-feeding mechanism. 1,637,028; July 26.
Quinn, Janes J., Mimico, Ontario, Canada. Meat sitcer. 1,622,2603; Mar. 28.
Handle, Markey M., J., assignor to National Pneumatic Company, New York, N. Y. Door-operating mechanism. 1,622,334; Mar. 29.
Quinn, John J., assignor, by mesne assignments, of one-half to J. J. Lane, Englewood, N. J. Fitting. 1,650,737; Nov. 29.

nair to J. J. Lane, Englewood, N. J. Fitting, 1,000,101; Nov. 29. Quinn, John W., Hull, Mass. Apparatus for drying shoes, 1,636,195; July 19. Quinn, Marshall A., Roanoke, Va. Culvert. 1,648,148; Nov. 8.

NOV. 8.
Quinn. Martin J., Toronto, Ontario, Canada. Pump.
1.625,500; Apr. 19.
Quinn. Patrick A., Clifton, N. J. Automobile brake.
1.626,151; Apr. 20.
Quint. Everett A., assignor to Johnson & Johnson, New
Brunswick, N. J. Surgical needle and making it.
1.636,615; July 19.
Cee Gay, J. C., Smith, and Quirk.)
Quirk. Parry K., et al. (See Keuling, Robert M., asSignor) Larry K., et al. (See Keuling, Robert M., as-

Sugnor).

Guirk, Thomas J. (See Setchfield, James, assignor.).

Guiro, Francisco A., New York, N. Y. Cortrifugal appa
Guird, Francisco A., New York, N. Y. Cortrifugal appa
Guird, Andrew J., and P. S. M. Guird, James J. G. M. Guird, James J. G. M. Guird, J. G. M. G.

Qvarnstrom, Ernest J., Attleboro, Mass. Receptacle. 1.631.334; June 7. Qviller, Olaf. (See Holter. K., and Qviller.) R. C. Can Company. (See Rutkowski, Walter L., as-

signor.) K. M. Mfg. Co. et al. (See Bogdonoff, Glenn, as-

R. K. M. Mrg. Company. (See Rosenman, Leo, assignor.) R. K. M. Mrg. Company. (See Rosenman, Leo, assignor.) R. M. Company. Inc. (See Murray, Howard J., assignor.) Rabalais, Malo J., Hessmer, La. Brush. 1.641,865; Sept. 6.

Rabbit. Frank. Brooklyn. Md. Antiglare device for vehicle beadlights. 1615,199; Ján. 18.
Rabe, Paul. Leverkusen, near Cologne-on-the-Rhine, Germany, assignor, by mesne assignments. to Grassell.
Dyestinf Corporation, New York, N. Y. Dyeing, 1622,122; Mar. 22.

Rabe, Paul, Leverkusen, near Cologne, and W. Schepss, Wiesdorf, near Cologne, Germany, assignors, by mesne assignments, to Grasselli Dyestuff Corporation, New York, N. Y. Dyeing acidyl celluloses. 1,645,450; Rock, Paul, Leverkusen, near Cologne-on-the-Rhine, and W. Schepss, Wiesdorf, near Cologne-on-the-Rhine, and R. W. Hollenberg, Alameda, Chilf. Water filter, 1,621,634; Mar. 22.
Rabiczer, Theodore J., Dayton, Ohio, Display holder, Rabiolon, Light Cologne-on-the-Rhine, and R. W. Hollenberg, Alameda, Chilf. Water filter, 1,621,634; Mar. 22.
Rabiczer, Theodore J., Dayton, Ohio, Display holder, Rabiolon, Light, Cologne-on-the-Rhine, Cologne-o

Machine Confectioners' Machinery Co. (See Marr, Zacheus M., assignor.)
Racine Horseshoe Tire Company. (See Caldwell, Truman S., assignor.)
Racine Horseshoe Tire Company, The. (See McCreedy, Lloyd E. assignor.) Lloyd E. assignor.)
Racine Horseshoe Tire Company. (See Reichard, Harold

D., assignor.) Racine Radiator Company. (See Young, Fred M., assignor.) Rackham,

Assignor Company. (see Young, Fred M., assignor to Yellow Coach Manufacturing Co., Chicago, Ill. Change-speed transmission. 1,631,338; June 7ll.

Rackstraw, Albert V., Los Angeles, Calif. Boring-machine head. 1,633,752; June 28.

Racz. Michael, Philadelphia. Pa. Telescopic side inclosure for vehicles. 1,645,794; Oct. 25.

Radand, Joseph H., Emmett, Idaho. Lock for tire rims. Radelife, John C. (See Radeliffe, Owen F., assignor.)

Radeliffe, John C. (See Radeliffe, Owen F., assignor.)

Mar. 1

Rader, Marion A., Walla Walla, Wash. Glare shield. 1,033,190; June 21, See Seaton, A., and Rader, J. Radford, Douglas R. (See Lomb, C., and Radford,) Radford, Eric H., Los Angeles, Calif. Wrapper. 1,628,429;

Radford. Herbert A., assignor to U. S. Shutter Lens Com-pany, Denver, Colo. Relieving the glare from projector lichts. 1.637.622; Aug. 2. Radford. Stephen C., Oshkosh, Wis. Index card. 1.648.822; Nov. 8. Radhuber, Ferdinand. (See Hellawell, H. H., and Rad-huber.)

Radiac Metals, Ltd. (See Shackelford, E. J., Penniman, and Cain, assignors.)
Radiant Heat Corporation of America. (See Kennedy, Walter, assignor.) Radiant Lighting Fixture Co. (See Bohl, Hugo, assignor.)

Radiator Specialty Company. (See Ray, George I., assignor.)
Radice Electric Co. (See Baum, Max, assignor.)
Radic Octoporation of America. (See Agate, C. S., and
Willams, assignors.)
Radio Corporation of America. (See Blakeney, Edward,
assignor.)

Radio Corporation of America. (See Carlson, Wendell L., assignor.)
Radio Corporation of America. (See Carter, Philip S.,

assignor.) assignor.)
Radio Corporation of America. (See Clark, George H., assignor.)
Radio Corporation of America. (See Clough, Newsome H. assignor.)
Radio Corporation of America. (See Ditcham, William

. assignor.) Radio Corporation of America. (See Dowsett, Harry M., assignor.)

Radio Corporation of America, The. Harry W., assignor.) Radio Corporation of America. (See F (See Dowsett, (See Franklin, Charles

Radio Corporation of America. (See Goldsmith, A. N., and Weinberger, assignors.)
Radio Corporation of America. (See Graham, William A., assignor.)
Radio Corporation of America. (See Hill, G., and Clark,

assignors.) Radio Corporation of America. (See Loewe, Siegmund,

Radio Corporation of America. (See Lowenstein, Fritz.)
Radio Corporation of America. (See MacIlvain, Karl M., Radio Corporation of America. (See Parkin, Thomas D.,

Corporation of America. (See Purschel, Ernst, Radio Corpo assignor.) Corporation of America. (See Ranger, Richard H., Corporation of America. (See Round, Henry J., assignor

Radio Corporation of America, et al. (See Semm, A., and Schaffer, assignors.) Radio Corporation of America. (See Smith, Sidney B.,

assignor.) Radio Corporation of America, The. (See Smith, S. B., and Wright, assignors.)
Radio Corporation of America. (See Van Dyck, Arthur, F., assignor.)

Radio Corporation of America. (See Weagant, Roy A., assignor.)
Radio Corporation of America. (See Weinberger, Julius, Radio

assignor.)
dio Corporation of America. (See Whistlecroft, Arthur W., assignor.)
dio Corporation of America. (See Wright, George M., assignor.)

Radio Corporation of America. (See Young, A. M., and Simpson, assignors.) Simpson, assignors.)
Radium Dial Company. (See Goetschius, Dalton M., assignor.)
Radio Electric Clock Corporation. (See Casner, Thaddeus

Radio Electric Clock Corporation. (See Casner, Thaddeus S., assignor.). Laboratories, Incorporated. (See Hull, L. M., and Seabury, assignors.)
Radio Frequency Laboratories, Incorporated. (See Seabury, Richard W., assignor.)
Radio Lab & Mig. Co. et al. (See Scott, Ray W., assignor.)

Radio Motion Picture Phon. Corp. (See Lubé, Henry, Patents Corporation. (See Van Deventer, Harry Radio

R., assignor.)
Radiologie Aktengesellschaft. (See Fürstenau, Robert, assignor.)

assignor.)
Radiotive Corporation. (See Schmidt, Lambert, assignor.)
Radiotive Corporation, The. (See Cervi, Armando, assignor.)
Radke, Theodore J., Oak Park, II. Valve-controlling mechanism for water heaters. 1,639.866; Aug. 23.
Radiawski, Stanley, Ward, W. Va. Window-fastening device. 1,644.554; Oct.
Radiev, Saunel S., Gardner, assignor to Evans Case Co., Armander, Mass. Loosepowder container. 1,624.874; Armander, Mass. Loosepowder container. 1,624.874; Apr. 12.

Apr. 12.

Rado, Adelaide D. W. (See Rado, Adolph and A. D. W.)

Rado, Adolph and A. D. W., East Orange, N. J. Dustmop cleaner, I.614,968; Jan. 18.

Radolsky, Joseph, New York, N. Y. Safety-boiling vessel, 1.644,353; Oct. 4.

Radike, Albert, Berlin, Germany. Portable tree-felling
Radike, Albert, Berlin, Cermany. Portable tree-felling
Radike, Albert, Berlin, Cermany.

Radike, Marka, Charles, C. Milyaukee, Wis. Converting

Company, Waterbury, Conn. Making chair gildes

1.617,294; Feb. 8.

C. Milyaukee, Wis. Converting

charles, Predictivers to venst and other organic sub
stances, 1,632,312; June 14.

Raffloer, Emil, Dulsberg-on-the-Rhine, Germany, assignor of one-half to W. E. Leuchtenberg, New York, N. Y. Desulphurking coal, water or mixed gases for illuminating coal, water or mixed gases for illuminating the company of the company of the company. New Albert, assignor to Barter Machine Company, Newark, N. J. Shock absorber. 1,619,035; Mar. I. Rafter Machine Company. (See Rafter, Albert, assignor, Nagan, Sidney A., New Orleans, La. Paper-perforating machine. 1,643,565; Oct. 11.
Ragar, John S., Bowdoin, Mont. Pump. 1,615,484; Ragg, Mary E., Upper Norwood, England. Obstetric appliance. 1,625,682; Apr. 19.
Raggona, Vincent, assignor, by mesne assignments, to Cary Manufacturing Co., Brooklyn, N. Y. Machine for making divergent fasteners. 1,635,385; Aug. 23.
Ragona, Vincent, assignor to Cary Manufacturing Co., Aug. 23.
Ragonot, Edmond, Malakoff, France. Vacuum cleaner. 1,635,384; July 12.
Ragsdale, Earl J. W., Norristown, assignor to Budd Wheel Company, Philadelphia, Pa. Wheel. 1,627,202; Ragsdale, Earl J. W., Norristown, Pa., assignor to Secretary at War. Duwich E. Tayis, Dunny homb

Rais Joint Company, The.

assign assignors.)

Rail Joint Company, The.

Rail Joint Company, The.

Gadd, assignors.)

Rail Joint Company, The.

(See Thomson, McLeod, assignor).

Rail Joint Company, The.

(See Wolhaupter, Benjamin, assignor).

Rail, Joseph, Terre Haute, Ind.

Blade-grader level and slope indicator. 1,625,683; Apr. 19.

Rail, Joseph, and H. E. Sprow, Rockville, Ind. Automobile side light. 1,624,433; Apr. 12.

Railway and Industrial Engineering Company.

(See Kapptz, Carl C., assignor.)

Rail Stroptz.

(See Campbell, Sterling H., assignor.)

assignor.)
Railway Devices Company. (See Hoerr, Louis A., as-

signor.)
Railway Devices Company. (See Pletzsch, Frank H.,

signor.)
Railway Devices Company. (See Pletzsch, Frank H.,
assignor.)
Railway Improvement Company. (See Clark, Leverett M.,
mssignor.)
Railway Improvement Company. (See Gilpin, Garth
G. Wassignor.)
Railway Metal Products Company. (See Small, Arthur
E., assignor.)
Railway Metal Products Company. (See Small, Arthur
R., assignor.)
Railway Signal Company, The. (See Nicholson, J. H., and
Roberts, assignor.)
Roberts, assignor.
Roberts, Railway Signal Company Limited, The. (See Roberts,
Walter S., assignor.)
Railway Signal Company Limited, The. (See Roberts,
Walter S., assignor.)
Rail Wedding & Bonding Company, The. (See Burgett,
Lynn S., assignor.)
Railway Signal Company, The. (See Burgett,
Lynn S., assignor.)
Roberts, Aller S., and Burton, assignor.
Railway John S., and E. A. Rolfs, Maple Heights,
Obio. Power take-off device for tractors. 1,633,273;
June 21.
Raimondl, Francesco, Milan. Italy. Inductive limiting
device for alternating currents. 1,642,343; Sept. 13.
Rain, John, Shawnee, Okla. Oll cellar. 1,641,601;
Sept. 6.

Rainbow Light, Inc. (See Machlett, Raymond R., assignor.)
Rainbow Photo Reproductions, Inc. (See Flammer, E. F., and Silliman, assignors.)
Rainer, Earl, Oak Hill, Ohio. Pump. 1,614,389; Jan. 11. Raines, Belamin D., and O. Billingsley, New York, N. Y.
Rainey, Edward E., Denver, Colo. Valve lifter. 1,623,752; Apr. 5.
Rainsford, Thomas F., Detroit, Mich., assignor of one-fourth to T. C. Whitehead, River Rouge, Mich. Automobile radiator. Des. 72,187; Mar. 8.
Rainsford, Thomas F., Detroit, assignor to Whitehead & Rales Company, River Rouge, Mich. Method and adparatus for bending spokes. 1,649,4913; July 5.
Rairden, Albert S., Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey.
Weldling wire-rope cadas. 1,649,855; Nov. 22.
Weldling wire-rope cadas. 1,649,855; Nov. 22.
Weldling wire-rope cadas. 1,649,855; Nov. 22.
Rainser, August C., Philadelphia, Pa. Toy trick box. 1,628,189; May 10.
Raison, Jean L., Paris, France. Syringe for local anesthesia. 1,615,186; Jan. 18.
Raiziss, George W., Philadelphia, Pa., assignor to The mercuri-mononitro-orthoresol and its salts. 1,630,072; May 24

mercuri-mononitro-orthocreson non as same May 24.
Raiziss, George W., Philadelphia, and A. Proskouriakoff.
Lansdowne, Pa., assignors to Abbott Laboratories, ChiLansdowne, Pa., assignors to Abbott Laboratories, ChiLansdowne, Pa., assignor, and Chiladelphia a

assignor.) Raleigh, James F., River Forest, assignor to Pines Winterfront Company, Chicago, Ill. Thermostatic wafer, 1,613,292; Jan. 4. Raleigh, James F., River Forest, assignor to Pines Winterfront Company, Chicago, Ill. Thermostatically-controlled radiator shutter for automobiles. 1,634,301; July 5.

Berthampo Ajax Corporation. (See Hoffman, P., and Strong, assignors.)

Rampo Ajax Corporation. (See Hoffman, P., and Strong, assignors.)

Rambo, James H., assignor to Minneapolis Knitting Works, Minneapolis, Minn. Child's sleeping garment. Rambo, Jack P. F. Pomona, Calif. Hydraulic motor. 1,622,028; Apr. P. Pomona, Calif. Hydraulic motor. 1,622,028; Apr. 26.

Ramdor, Loopold, Seegrefold, assignor to the Firm Deutsche Post- und Eisenbahn-Verkehrswesen Aktiengeselischaft (Dapag-Efnbag), Staaken, near Spandan, Germany. Ro- 1,623,702; Apr. 5.

Ramer, Philip W., River Falls, Wis. Spraying machine. 1,623,702; Apr. 5.

Ramin, Ezra, assignor of one-third to J. H. Wolfson and one-third to L. W. Harlem, Boston, Mass. Folding one-third to L. W. Harlem, Boston, Mass. Folding 1,633,905; June 28.

Ramps, Gose B., Haun, Cuba. Farming implement. 1,633,905; June 28.

Ramps Buildings Corporation. (See d'Humy, Fernand E., assignor.)

Rampfel, Hethrich, Jersey City, N. J., assignor to Nathan Straus & Sons, inc., New York, N. Y. Piate or similar article. Des. 74,441; Sept. 13.
Rampsy, Gelendora B. (See Jackson, Thomas, assignor.) Ramsay, Karl H. W., Summit, assignor to Diamond Electric Specialities Corp., Newark, N. J. Drycell electrode and making the same. 1.644,746; Oct. 11.
Ramsburg, Charles J., Edgeworth, Pa. Humidifier. 1,618,726; Feb. 22.
Ramsburg, George S., Somersworth, N. H. Sectional florist bench. 1,626,095; Apr. 26.

Ramsdell, Thomas S., Great Barrington, Mass. Pipe cleaner. 1.617,437; Feb. 15.
Ramsdell, William E. (See Hose, H. G., and Ramsdell.)
Ramsey, Clifford H., Glen Rock, N. J. Tentering machine.
1.622,049; Mar. 22.
Ramsey, Clifford H., Glen Rock, N. J. Breaking roller.
Ramsey, Clifford H., Glen Rock, N. J. Beam-bearing
block. 1.649,077; Nov. 15.
Ramsey, Edward J., Brooklyn, N. Y. Shoe construction.
1.614,933; Jan. 18.
Ramsey, Emer R. (See Blomfield, A. L., and Ramsey,)
Ramsey, Emer R. (See Blomfield, A. L., and Ramsey,)
Ramsey, George, Brooklyn, N. Y. Speedometer. 1.628,271;
Ramsey, George, Brooklyn, assignor to Anchor Cap and
Ramsey, George, Brooklyn, assignor to Anchor Cap and

Ramsey, George, Brooklyn, N. Y. Speedometer, 1,628,271; Ramsey, George, Brooklyn, N. Y. Speedometer, 1,628,271; Ramsey, George, Brooklyn, assignor to Anchor Cap and Closure Corporation, Long Island City, N. Y. Sealing cap and package. 1,634,724; July 5.

Ramsey, George, Brooklyn, assignor to Anchor Cap and Closure Corporation, Long Island City, N. Y. Closure Cap. 1,640,902; Aug. 30.

Ramsey, George, Brooklyn, assignor to Anchor Cap and Closure Corporation, Long Island City, N. Y. Springlock cap. 1,646,765; Oct. 25.

Ramsey, George, Brooklyn, N. Y. Method and apparatus for identifying ammunition. 1,650,908; Nov. 29.

Ramsey, George, Brooklyn, N. Y. Sund-producing device. 1,651,151; Nov. 29.

Ramsey, George, Brooklyn, N. Y. Exposure meter. 1,651,4151; Nov. 29.

Ramsey, George, M. (See Gladwill, R. H., and Ramsey, Ramsey, George M. (See Gladwill, R. H., and Ramsey, Ramsey, George M. (See Gladwill, R. H., and Ramsey, Ramsey, George M. (See Gladwill, R. H., and Ramsey, Ramsey, George M. (See Gladwill, R. H., and Ramsey, Ramsey, Ramsey, Rowell, N. Mex. Friction fire starter. 1,629,638; May 24.

Ramsey, Marwell S., Rowell, N. Mex. Friction fire starter. 1,629,638; May 24.

Ramsey, Marwell E., St. Louls, Mo. Bed. 1,641,991; Sept. 13.

Ramsey, Robert L. Ben Wheeler, Tex. Organized lifting mechanism. 1,625,743; Apr. 19.

Ramsey, Marceines, North Girard, Pa. Cultivator blade.
1.641,091; Aug. 30.

Sept. 13.

Rept. 13.

Rept. 13.

Rept. 13.

Ramsey, Robert L., Ben Wheeler, Tex. Organized lifting mechanism. 1,625,743; Apr. 19.

Ramsey, Robert P., assignor to Clyde Iron Works, Dulith, Minn. Cable block. 1,625,910; Apr. 23.

Ramsey, Robert P., assignor to Clyde Iron Works, Dulith, Minn. Cable block. 1,625,910; Apr. 23.

Ramsey, Robert P., assignor to Clyde Iron Works, Dulith, Minn. Cable block. 1,625,910; Apr. 23.

Ramsey, Robert P., assignor to Clyde Iron Works, Dulith, Minn. Cable block. 1,625,910; Apr. 23.

Ramsey, Robert P., assignor to Clyde Iron Works, Dulith, Minn. Cable block. 1,625,910; Apr. 23.

Ramsey, Robert P., assignor to Clyde Iron Works, Dulith, Minn. Cable B., 24, 25, 26, 26, 26, 27.

Ramsey, Robert P., assignor, Dulith, Collapsible shaving cabinet. 1,619,761; Mar. 1.

Rand, Charles E., San Diego, Calif. Collapsible shaving cup. 1,636,822; July 19.

Rand, Charles H., Cheyenne, Wyo. Implement tongue. 1,122, 11,122

signor.) Rand Kardex Bureau, Inc. (See Day, W. H., and Thomas,

assignors.)
Rand Kardex Bureau, Inc. (See Hayes, Robert D., as-

signor.)
Rand Kardex Bureau, Inc. (See Ouchie, Elmer L., assignor.) Rand Kardex Bureau, Inc.

(See Rand, James H., assignor.) Rand Kardex Bureau, Inc. (See Rand, James H., jr.,

assignor.)
Rand Kardex Bureau, Inc. (See Sprenger, James A.,

Randall, Chester J., Woonsocket, R. I., and C. Wurtenberg, Union City, assignors to The Goodyear's Metallic Rubber Shoe Company, Naugatuck, Conn. Machine for stripping vulcanized articles. 1,623,208; chine for

chine for stripping vulcentzed articles. 1,623,208; Apr. 5.

Apr. 5.

Annoali, Gertrude E., Seattle, Wash. Educational device. 1,614,390; Jan. 11.

Randali, Herbert C., and C. F. Colbert, assignors to Canning Machinery Exchange, Baitimore, Md. Machinery Grands, and peeling fruits, etc. 1,614,390; Jan. 11.

Randali, Herbert C., and C. F. Colbert, assignors to Canning Machinery Exchange, Baitimore, Md. Machinery Grands, and peeling fruits, etc. 1,620,702; May 1,620,702; May 1,620,702; May 1,620,702; May 1,620,702; May 31.

Randali, Karl C. Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Method of and apparatus for forming insulators. 1,630,702; May 31.

Randali, Karl C. Edgewood Park, and H. K. Ansingh. 1,630,702; May 1,620,702; May 1,620,702; May 1,620,703; May

nanueman, Albert B. (See Randleman, Zouave S., assignor.)
Randleman, Zouave S., Carlisle, Iowa, assignor of onehalf to A. B. Randleman, Carlisle, Iowa-Paper holder
and display rack. 1.652.411; Dec. 13.

S. S. Steinherg, Paragould, Ark. Control means for
gear-shifting mechanism. 1.648,193; Nov. 8.
Randolph, Charles P., Oak Park, assignor to Edison Electric Appliance Company, Incorporated, Chicago, Ill.
Electric toaster. Des. 72,495; Apr. 19.
Benent-Pond Company, New York, N. Y. Machine tool.
1,633,384; July 5.
Randolph, Clifford F., Plainfield, N. J., assignor to NilesBenent-Pond Company, New York, N. Y. Machine tool.
1,634,384; July 5.
Randolph, Clifford F., Plainfield, N. J., assignor to NilesBenent-Pond Company, New York, N. Y. Tallstock,
1,634,387; Dec. 13.

Randolph, Howard H. (See Anderson, Victor T., assignor.)

andolph, Howard H. (See Anderson, Victor T., assignor.)

Randolph, Howard H. (See Anderson, Victor T., assignor.)
Randolph, Lloyd G., Big Run, Pa. Pan-turning device for cooking stoves. 1,638,745; Aug. 9.
1.614,898; Jan. 168.
1.614,898; Jan. 19.
1.614,898; Jan. 19.
1.623,553; Apr. 5.
Randolph, Oliver W., Toledo, Ohio. Coal drying. 1,622,553; Apr. 5.
Randolph, Oliver M., Toledo, Ohio. Coal drying. 1,620,133; Mar. 8.
Janes B., Bandolph, Otis M., Kinsley, Kans. Topping and pruning knife. 1,620,133; Mar. 8.
Janes B., Bandolph, Corporation. (See Johnston, Janes S., Salaga, Machine Corporation. (See Johnston, Janes S., Salaga, Cheingo, III., assignor to International Harvester Company, Grain shocker. 1,627,203; May 3.
Rang, Clemma R., Chicago, Ill., assignor to International Harvester Company, Grain shocker. 1,642,148; June 14,
Raney, Clemma R., Chicago, Ill., assignor to International Harvester Company, Grain shocker. 1,643,173; Sept. 20.

Sept. 20.

Raney, Clemma R., Riverside, assignor to International Harvester Company, Chicago, Ill. Combined tucker and stripper for binding mechanisms. 1.646.459; Oct. 25.
Raney, Edward J. (See Murphy, J. T., and Raney,)
Raney, James J. (See Bellman, Edward T., assignor.)
Route Murray, Chattanooga, Tenn. Producing finelyRangel, Hillary, New York, N. Y. Novelty mirror.
1.651.836; Dec. 6.

1.651,836; Dec. 6.

Ranger, Richard H., Brooklyn, N. Y., assignor to Radio Corporation of America. Interference-reducing means for radio receiving apparatus. 1,016,923; Feb. 8.

Ranger, Richard H., Brooklyn, N. Y., assignor to Radio Corporation of America. Radio position finding America. Radio position finding Corporation of America. Interference of Radio Radi

Rankin, Carl H., Wellsburg, W. Va. Apparatus for controlling the flow of molten glass through a discharge aperture. 1,631,061; May 31.
Rankin, David P., Kearney, Nebr. Drive belt. 1,613,193; Jan. 4.
Rankin, David P., Kearney, Nebr. Drive belt. 1,613,193; Jan. 4.
Rankin, David P., Kearney, Nebr. Drive belt. 1,613,193; Jan. 4.
Rankin, David P., Kearney, Nebr. Drive belt. 1,613,193; Jan. 4.
Rankin, Carl H., Wellsburg, W. V. A. Apparatus for controlling the flow of the plant of the pla bidge, Oct. 18.

oll conductor for engine crank cases. Re16,532; Jan. 11.
Ransohoff, Nathan, Cincinnati, Ohio. Building-block-molding apparatus. 1,649.731; Nov. 15.
Ransom, Henry N., New York, N. Y. Apparatus for lubricating. 1,651.545; Dec. 6.
Ransom, John B. (See Sibbald, C. T. A., and Ransom. Concrete Machinery Company. (See Bushnell, James E., assignot.)
Ransome, Stafford M., assignot to Barber-Colman Company. 12.

App. 12.

Ransome, Se Ranjer Limited. (See Jonides, Philip I., as-Ransome, Se Ranjer Limited. (See Jonides, Philip I., as-

Ransomes & Rapier Limited. (See Ionides, Philip I., as-

Ransomes & Rapier Limited. (See Ionides, Philip I., assignor.)
Rapeport, William H., Philadelphia, Pa. Wheel construction for motor vehicles. 1,637,180; July 26.
Raper, Charles E. (See Raper, Edward H. and C. E.)
Raper, Charles E. (See Raper, Edward H. and C. E.)
Raper, Edward H., Mapleton, Iowa, and C. E., Raper,
Raphael, Nathaniel W., South Orange, N. J. Marking and
measuring device. 1,613.676; Jan. 11.
Raphael, Nathaniel W., South Orange, N. J. Transmission chock. 1,651.227; Nov. 29.
Rapid Addressing Machine Company, (See Geiger, Erwin A., assignor).
Rapid Addressing Machine Company, (See Geiger, E. A.,
Rapp. Adolf, Brooklyn, N. Y. Seeder. 1,653,228;
Dec. 20.
Rapp. Axel G. J., Chicago, Ill. Sand separator.

Dec. 20.

Rapp. Axel G. J., Chicago, Ill. Sand separator. 1.634.385; July 5.

Rapp. Bernhard, Darmstadt, Germany. Shadow-producing agent and making the same. 1.644.446; Oct. 4.

Rapp. Henry. Maplewood, N. J. Tobacco pipe. 1.653.508; Dec. 20.

Rapp. William F., Chicago, Ill. Screen hanger. 1.624.181; Apr. 12.

Rappeport, William A., and C. Hardy, New York, N. Y. Self-filler lever device for fountain pens. 1,637.202; July 22.

Rappeport, William A., and C. Hardy, New York, N. Y. Self-faller lever device for fountain pens. 1,637,202; Rappiez, William J., Billings, Mont. Drive-shaft puller. 1,631,889; June 7.
Rappleye, Frank A., Silver Creek, N. Y. Separating and grading machine. 1,645,402; Oct. 11.
Rappold, Hermann, Duren, Germany, assignor to Zimmer mann & Jainen, Gesellschaft mit beschrankter Haftunger used in connection with blast furnaces. 1,631,950; June 7.
Rapport, Nathan, New York, N. Y. Combined checker and chess board. Des. 74,025; Dec. 6.
Rad Chess board. Des. 74,025; Dec. 6.
Rad Chess board. Des. 74,025; Dec. 6.
Radué, Arthur E. and P. E., Jersey City, N. J. Combined speed regulating and mixing valve. 1,625,281; Apr. 19.
Radué, Arthur E. and P. E., Jersey City, N. J. Combined speed regulating and mixing valve. 1,625,281; Apr. 19.
Radué, Philip E. (See Raqué, Arthur E. and P. E.)
Radin, W. B. (See Minor, Edward M., assignor.)
Raschick Charles T., St. Paul, Minn. Index. 1,649,089; Mar. 22.

Mar. 1.
Raschick Charles T. St. Paul, Minn. Check calculator.
1.621,868; Mar. 22.
St. Paul, Minn. Bottle cover and
con remover. 1.621,902; Mar. 22.
Raschig, Friedrich, Ludwigshafen-on-the-Rhine, Germany,
Wood-preserving composition. 1.616,468; Feb. 8.
Rasmesen. George, Jr., Winnetka, Ill. Wire brush.
1.633,274; June 21.

Rasmusen, Andrew M., Montrose, Colo. T square. 1,624.260; Apr. 12. Rasmussen, Albert E., Yakima, assignor of one-half to A. B. Fosseen, Spokane, Wash. Pipe-laying implement. 1,680.243; July 18. np., 1nd. Crew-saving device for submarines. 1,653.3310; Dec. 20. Rasmussen, Anton M., Rockford, Ill. Ironing machine. 1,627.747; May 10. Rasmussen, Carl, Menlo Park, Calif. Wood-splitting machine. 1,626.152; Apr. 26. Rasmussen, Charles, Toledo, Ohio. Windshield. 1,615,035; Rasmussen, Charles, Toledo, Ohio. Windshield. 1,615,035; Rasmussen, Charles, Toledo, Ohio. Windshield. 1,615,035; Rasmussen, Charles, Toledo, Ohio. Windshield. 1,615,035;

mussen.)

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Rasmussen, Charles M., Seattle, Wash. Tractor-track side plate. 1,647,540; Nov. 1.
Rasmussen, Chester A., assignor of one-half to C. R.
Butler, Long Beach, Calif. Casing wedge. 1,619,268;
Mar. 1. Egil. (See Petersen, T. E., and Rasmussen.)
Rasmussen, Jørgen. (See Petersen, T. E., and Rasmussen.)

Rasmussen, Jørgen. (See Petersen, T. E., and Rasmussen, Rasmussen, Martin. (See Ritter, J., fr., and Rasmussen.) Rasmussen, Martin, assignor to Hartmann Trunk Company, Racine, Wis. Trunk lock. 1,622,318; Apr. 5, Rasmussen, Martin, assignor to Hartmann Trunk Coupany, Racine, Wis. Latching device. 1,631,753; June 7.

Radins en, Martin, assignor to Hartmann Trunk Company, Radine, Wis. Trunk lock. 1632,195; June 14. Rasmussen, Martin, assignor to Hartmann Trunk Company, Radine, Wis. Garment retainer. 1,655,658; Doc. 27. Rasmussen, Sidney C. (See Horspool, F. L., and Rasmussen, Sidney C. (See Horspool, F. L.)

Basmussen, Sidney C. (See Horspool, F. L., and Rasmussen, Sidney C. (See Horspool, F. L., and Rasmussen, Sidney C. (See Horspool, F. L., and Rasor, Floyd O., Westerville, Ohio. Spotlight, 1,630,217; May 24.
Rasor, Floyd O., Westerville, Ohio. Spotlight, 1,630,237; May 24.
Rasp, John, McKeesport, Pa. Combined curtain and applied and rod for use therewith, 1,636,835; July 26.
Rassmann, F., Manufacturing Company. (See Rassmann, Hugo C., assignor to F. Rassmann Manufacturing Company, Beaver Dam, Wis. Water-bowl Rassmanh, Hugo C., assignor, N. Y. Extension table, 1,021,083; Mar. 15.
Rassmanh, Abraham, Elmhurst, N. Y. Extension table, 1,021,083; Mar. 15.
Rasstetter, Harry O., assignor to The Union Metal Manufacturing Company, Canton, Ohio. Lamp Standard. Des. 13,421; Sept. 13.
Reile. 142; Sept. 20.
Rastetter, William C., Fort Wayne, Ind. Folding chair. 1,614,763; Jan. 18.
Rastetter, William C., Fort Wayne, Ind. Folding chair. 1,614,763; Jan. 18.
Rastetter, William C., Fort Wayne, Ind. Folding chair. 1,614,763; Jan. 18.
Rastetter, William C., Fort Wayne, Ind. Folding chair. 1,614,763; Jan. 19.
Rateile, Charles J., assignor to Chicago Forging & Mig. Co., Chicago, Ill. Forming objects with integral cuy Rate Mariner. N. Y. Automatic stoker. 1,625,765; Apr. 19.
Ratezenstein, William, Chicago, Ill., assignor to Cresco Creamery Supply Co. Valved outlet for Pasteurizers. 1,622,765; Apr. 19. London, assignor to Cresco Creamery Supply Co. Valved outlet for Pasteurizers. 1,622,765; Apr. 19. London, assignor to Ingersoll-Rand Company, Jersey City, N. J., and The Rathburg Supplied and Rand Company, Jersey City, N. J., and The Rathburg.

gineering Company Limited, London, and two-fifteenths to W. Cannell, Oxford. England. Method and apparatus for machining spiral-tooth gears. 1,614,391; Jan. 11.

Ratbbun, Edward, Toledo, Ohio, assignor to Ingersoll-Rand Company, Jersey City, N. J., and The Rathbun-Jones Engineering Company, Toledo, Ohio. Governor regulator. 1,832,348 June 14.

Ratbbun, George F., Pontiac, Mich. Rotary valve. 1,635,767; July 12.

Ratbbun, George F., Pontiac, Mich. Rotary valve. 1,635,121; Dec. 20.

Rathbun, George F., Pontiac, Mich. Rotary valve. 1,635,121; Dec. 20.

Rathbun, George F., Bontiac, Mich. Rotary valve. 1,635,121; Dec. 20.

Rathbun, George F., Bontiac, Mich. Rotary valve. 1,635,121; Dec. 20.

Rathbun, Gavard, assignor). Caption G., assignor. Rathbun, Edward, assignor. Company, The, et al. (See Rathbun, Edward, assignor). Rather, James B., Brooklyn, and F. S. Shopard, New Rockelle, assignors to Standard Oil Company of New York, New York, N. Y. Reactivating desulphurizing angents for hydrocarbon oils, 1,622,671; Mar. 29.

Rathers, John J., assignor to Lovell Manufacturing Company, Eric, Pa. Weinger roll and making the same. 1,640,216; Aug. 23.

Rathers John J., assignor to Rathgeb, Joseph J., jr., Rathgeb, Joseph J., fr., assignor to Rathgeb Grate Company.

Rathgeb Grate Company
assignor; assignor to Rathgeb Grate Comassignor; assignor to Rathgeb Grate Comcas, I.68424; Nov. & York, N. Y. Grate for bollcas, I.68424; Nov. & Rathjen, William L. and L. K.,
Rathjen, Lillian K. (See Rathjen, William L. and L. K.,
Rathjen, William L. and L. K., Oakland, Calif. Hot-air
device. 1.639.897; Aug. 23.
Rathman, Gilbert, Newark, N. J., assignor to William E.
Quimby, Inc., New York, N. Y. Screw pump.
1.452.240. Oct. 11.

Quimby, Inc., N 1,645.349; Oct. 11

Rathmell, John M., assignor to Dunn Road Machinery Company, Conneaut, Ohio. Road-making machinery Company, Conneaut, Ohio. Ratigan, James P., Usa Angeles, Calif. Beam adjuster. 1,643,585; Sept. 27.
Ratigan, James P., Walnut Park, Calif. Beam adjuster. 1,643,586; Sept. 27.
Ratigan, James P., Walnut Park, Calif. Lock pln. 1,643,586; Sept. 27.
Ratigan, James P., Walnut Park, Calif. Lock pln. 1,643,587; Sept. 27.
Ratigan, James P., Walnut Park, Calif. Rod-rotating and shock-absorbing device. 1,649,078; Nov. 15.
Ratiganier, Marius, Villeurbanne, France, assignor to Anglo Shan Corporation Ltd., London, England. Knit-Ratifit, Lester, Moven, N. C. Liquid-spraying machine. 1,643,518; Sept. 27.
Ratner, Abraham J. (See Ratner, Elias, assignor) to Anglo Shan Corporation Ltd., London, England. Knit-Ratifit, Lester, Moven, N. C. Liquid-spraying machine. 1,643,618; Sept. 27.
Ratner, Elias, assignor of one-half to A. J. Ratner, New Tork, N. Y. Electric switch. 1,647,250; Nov. 1.
Ratner, Elias, assignor of one-half to A. J. Ratner, New Libbey Glass Manufacturing Company, Toledo, Ohio. Drinking glass. Des. 72,188; Mar. 8.
Ratner, Richard L., New York, N. Y., assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Sherbet glass, Des. 72,199; Mar. 8.
Ratner, Richard L., New York, N. Y., assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Drinking glass Manufacturing Company, Toledo, Ohio. Sherbet glass, Des. 72,199; Mar. 8.
Ratner, Richard L., New York, N. Y., assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Sherbet glass, Des. 72,199; Mar. 8.
Ratner, Richard L., New York, N. Y., assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Sherbet glass, Des. 72,199; Mar. 8.
Ratner, Richard L., New York, N. Y., Stand for electron to the Company of the Com

July 12.
Rauchbach, Aaron, Newark, N. J., assignor to The
Rauchbach-Goldsmith Co. Interior trunk-lock mechanism. 1,617,348; Feb. 15.
Rauchbach-Goldsmith Co., The. (See Rauchbach, Aaron,

assignor.)
Rauchbach-Goldsmith Co., The. (See Rauchbach, Hyman,

Rauchbach-Goldsmith Co., The. (See Rauchbach, Hyman, assignor.)
Rauchbach-Goldsmith Co., The. (See Silverman, Samuel, assignor.)
Rauchbach-Goldsmith Co., Locking bar for drawer-holding sections of wardrobe trunks. 1,636,432;
Oct. John K., Grass Range, Mont. Smoking set or similar article. Des. 72,030; Feb. 15.
Raun. Peter H., assignor to The Frederick Iron & Steel Company, Frederick. Md. Classifying or separating machine. 1,647,812; Nov. I.
Raus, Anton. Cleveland, and E. B. Isaac, East Cleveland, Ohio, assignors to General Electric Company. Stemforming machine. 1,646,258; Oct. 18.
Raus, John, assignor to The National Formetal Company, Cleveland, Ohio, Fre extinguisher. 1,638,017; Aug. 5. L. H. (See Greenleaf G. E. Blood, and

Rausch, Roswell H. (See Greenleaf, G. E., Blood, and Rausch.)

Rausch, Roswell H., Plainfield, N. J., assignor to Niles-Bement-Pond Company, New York, N. Y. Control mechanism. 1617,185; Feb. 8.
Rauschenbach, Theodore, Evansville, Ind. Expansion Joint for concrete work. 1.643,257; Sept. 20.
Rautenberg, Isidor, Chicago, Ill. Folding crib. 1.639,110; Jaug. 16.
Rauter, Fred W., assignor to Leach Company, Oshkosh, Wis. Vehicle wheel. 1,627,406; May 3.

Rauworth. Edwin S., assignor to Apollo Piano Company, De Kaib, Ill. Apparatus for leveling plano keys. 1,623,359; Apr. 5. to H. H. Martin New Rayerty, Edward J., assign machine. 1,647,838; Nov. 1. Rayertl, Armand J., Tacoma, Wash, Route indicator for automobiles. 1,015,036; Jan. 18. Rayineaux, Pol. Neullly-Sur-Seine, France. Closing device for belts. 1,636,925; July 26. Rayineaux, Pol. Neullly-Sur-Seine, France. Closing device for belts. 1,636,925; July 26. Rayine, Oystein. (See Halvorsen, B. F., Falck, and Rayner, Oystein. (See Halvorsen, B. F., Falck, and Rayner).

avnestad, Andreas J., Fredriksstad, Norway, Clarify-ing and purifying liquids and waste waters. 1,619,036; Mar. 1. Ravnestad,

Raw, Charles, Toledo, Ohio. Sash fastener. 1,642,266; Sept. 13.
Rawak, George, New York, N. Y. Headlight. 1,626,626;
May 3.

May 3.

Rawie, Franz, Osnabruck-Schinkel, Germany. Railway buffer construction. 1,614,208; Jan. 11.

Rawling, Arthur, Wilkinsburg, Pa., assignor to Westing-contact. 1,626,632; May Gompany. Switch Rawling, Francis G. Knoxville, Tenn. Improving the color of pulp. 1,630,635; May 31.

Rawling, Firnest J., assignor to Rawlings Manufacturing Company Limited, London, England. Latching and Company Limited, and Company Limited, London, England. braking June 14.

June 14.
Rawlings, George W., East Ham, London, England. Casting in situ of concrete building structures. 1,642,893; Sept. 20.
Rawlings, J. L., et al. (See Epperson, Charles B., assignor.)

Rawlings, J. L., et al. (See Epperson, Charles B., assignor.)
Rawlings Manufacturing Company. (See Latina, Harry B., assignor.)
Rawlings Manufacturing Company Limited. (See Rawlings, Ernest J. assignor.)
Rawlings Manufacturing Company Limited. (See Rawlings, Ernest J. assignor.)
Rawlings, December 1, 1623, 1439; Apr. 5.
Rawn, Edward V., Hopkinsville, Ky. Making ferrophosphorus. 1,613, 125; Jan. 4.
Rawolle, Frederick C., Salem, Conn. Decolorizing, treating, and dissolving shellac for bleaching purposes. 1,644, 451; Oct. 4.
Rawson, George A., et al. (See O'Brien, J. R., and Revell, assignors.)
Rawson, George A., et al. (See O'Brien, J. R., and Rawson, Grant I., assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich. Bolier cleaner. 1,644,275; Oct. 4.
Rawson, Grant I., assignor, by Fre-poking apparatus. 1,652,730; Dec. 13.
Rawson, Frank, Rawlins, Wyo. Fire-poking apparatus. 1,651,908; Dec. 6.
Rawson, Leslie A., Houston, Tex., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Anchor for crown blocks. 1,642,170; Sept. 1,622,844; Mar. 29. Ray, Alber Mar. 29.

Mar. 29.

Ray, Arthur J., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Substation telephone circuits. 1,633,286; June 21.

Ray, Arthur J., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Elapsed-time and zone metering. 1,633,678; June 28.

Ray, Arthur J., assignor to Automatic Electric Inc., Chicago, Ill. Multioffice automatic telephone system. 1,636,648; July 19.

Ray, Arthur J., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,646,421; Oct. 25.

Wis.; and H. Dickgrefell, River Forest, Ill., assignors, by mesne assignments, to Automatic Electric, Inc., Chicago, Ill. Automatic telephone system. 1,624,007; Apr. 12.

Apr. 12.

Ray, Bela, M., London, Eugland. Accessory for use in connection with hair waving or curling appliances, 1,637,277; July 26.

Ray, Charles T., assignor to B. F. Avery & Sons, Louisville, Ky. Fertilizer distributor. 1,613,411; Jan. 4.

Ray, Charles T., assignor to B. F. Avery & Sons, Louisville, Ky. Tillage implement. 1,643,519; Sept. 27.

Ray, Emil and H. S., Minneapolis, Minn. Weather strip. 1,646,559; Oct. 25.

1,646.559; Oct. 25.

Ray, Eugene J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Buttonholesewing machine. 1,617,417; Feb. 15.

Ray, Eugene J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Buttonholesewing machine. 1,635,785; Aug. 9.

Ray, Felicet A., Wichita Falis, Tex. Tank for separating oil and water from gas. 1,625,652; Apr. 19.

Ray, George I., Charlotte, N. C. Composition for stopping leaks in hot-water-circulating systems. 1,613,055; Jan. 4.

ping leaks in hot-water-circumstance of Jan. 4.
Ray, George I., assignor to Radiator Specialty Company,
Charlotte, N. C. Leak-stopping composition. 1,648,865:

Ray, George I., assignor to Radiator Specialty Company, Charlotte, N. C. Leak-stopping composition for hot-water systems. 1,648,866; Nov. 8.
Ray, George I., assignor to Radiator Specialty Company, Charlotte, N. C. Composition for hot-water systems. 1,648,867; Nov. 8.
Ray, George I., assignor to Radiator Specialty Company, Charlotte, N. C. Composition for repairing leaks in hot-water systems. 1,648,868; Nov. 8.
Ray, George I., assignor to Radiator Specialty Company, Charlotte, N. C. Composition for repairing leaks. In 1,648,868; Nov. 8.
Ray, George Nov. 8.
Ray, George W., Newton Center, Mass. Making shoes. 1,641,762; Sept. 6.
Ray, George W., Forty Fort, Pa. Trackway. 1,650,041; Nov. 2.

"I 041.782. Sept. 6.
Ray, Gorge W., Forty Fort, Pa. Trackway. 1,650,041;
Nov. 22.
Ray, Harry S. (See Ray, Emil and H. S.)
Ray, James L., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine-blade 18,200; Feb. 22.
Ray, John M., Apollo, Pa. Corn planter. 1,625,390;
Apr. 19.
Ray, Joseph L., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing coated cores. 1,630,451; May 31.
Ray, Joseph L., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing coated cores. 1,630,451; May 31.
Ray, Joseph V., Greensboro, N. C. Auto wheel puller.
Ray, Matt, Arkadelphia, Ark, Insect-destroying device. 1,633,651; June 28.
Ray, Samiel T. (See Braswell, F. E., and Ray.)
Ray, Thomas S., Charleston, W. Va. Track extension. 1,621,687; Mar. 22.
Ray, Thomas S., Charleston, W. Va. Track extension. 1,623,122; Dec. 20.
Ray, William D., La Fayette, Ga. Truss. 1,637,130; July 26.

1,653,122; Dec. 20.

Ray, William D., La Fayette, Ga. Truss. 1,637,130;
July 26.

Ray, William H., Monroe, Mich. Internal-combustionengine radiator. 1,632,803; June 21.

Ray, William H., Chicogo, Ill., assignor to Western Elecapparatus. 1,643,088; Sept. 20.

Ray, William H., Chicago, and M. L. Strawn, La Grange,
Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Skiving apparatus. 1,643,089;
Sept. 20.

Pachastra Commany. The, (See Greenstein, Philip D., Raybestos Company, The. (See Greenstein, Philip D.,

assignor.)
Raybestos Company, The. (See Stanley, Frederick C., as-

Rayburn, Aluen Rayburn, Francisco, Alden G., Sausalito, assignor to E. Winship, rancisco, Calif. Door opener, 1,617,864;

Raybirn, Alueb G. Calif. Door opener, San Francisco, Calif. Door opener, Feb. 15.
Raycraft, Francis J., San Francisco, Calif. Sanitary dental floss holder. 1,618,351; Feb. 22.
Rayfield, Fred J., Chicago, Ill., Assignor to Champion Pneumatic Machinery Co. Automatic air-compressor unit. 1,638,212; Aug. 9.
Rayman, Frank, Chicago, Ill. Heater. 1,635,636; July 12.
Parman Frederick J. (See Brown, D. F., and Raymer.)

Raymer, Frederick J. (See Brown, D. F., and Raymer.) Raymer, Paul H., East Orange, N. J. Chewing gum. 1,630,763; May 31. Raymond Bros. Engineering Co. (See Bergman, Lars H.,

Raymond Bros. Engineering Co. (See Bergman, Lars H., assignor.)
Raymond Brothers Impact Pulverizer Company, The. (See Raymond, Fred I., assignor.)
Raymond, Edward F., Sants Fe Springs, Calif. Guide Raymond, Edward F., Sants Fe Springs, Calif. Guide Raymond, Fred I., River Forest, assignor to The Raymond Fred I., River Forest, assignor to The Raymond Grupnie, assignor to Black, Sivalis & Bryson Mfg. Co., Kansas City, Mo. Relief-valve mechanism for oil tanks. 1,645,722; Oct. 18.
Raymond, Horace H., assignor to The Stanley Works, Aug. 16.
Raymond Horace H., Berlin, assignor to The Stanley Raymond, Aug. 16.

New Britain, Conn. Bail-bearing hinge. 1,639,633; Aug. 16.
Raymond, Horace H., Berlin, assignor to The Stanley Works, New Britain, Conn. Bail-bearing hinge. 1,639,634; Aug. 16.
R. 1639,634; Aug. 16.
R. 1639,634; Aug. 16.
R. 1639,634; Aug. 16.
R. 1639,634; Aug. 16.
Raymond, Lambert L., assignor to Broderickson-Raymond Co., Minneapolis, Minn. Reflector for Christmastrees. 1,640,094; Aug. 23.
Raymond, Lambert L., assignor to Broderick-Son-Raymond Co., Minneapolis, Minn. Lamp socket with leads trees. 1,617,221; Feb. 8.
Raymond, Lambert L., assignor to Broderick-Son-Raymond Co., Minneapolis, Minn. Christmast-tree reflector and lamp. 1,632,850; June 21.
Raymond, Lumbert L., assignor to Broderick-Son-Raymond Co., Minneapolis, Minn. Christmast-tree reflector and lamp. 1,632,850; June 21.
Raymond, Ward, assignor to Pennsylvania Pump & Compressor Company, Easton, Pa. Magnetically-controlled fluid valve. 1,622,672; Mar. 20.
Raymond, Ward, assignor to Pennsylvania Pump and Gruperssor Company, Easton, Pa. Covernor for steam-driven compressors. 1,643,129; Sept. 20.
Raymond, Ward, assignor to Pennsylvania Pump & Compressor Company, Easton, Pa. Cocoling-water-controlling means for compressors. 1,643,299; Oct. 4.
Rayner, Albert R., Beaver, Pa. Railway-track rail. 1,638,468; Aug. 9.

Raynolds, John F., assignor to The Paraflector Company, Minneapolis, Minn. Headlight reflector. 1,621,752; Mar. 22.

Raynolds, Laurence, 1.631.603: June 7. New York, N. Y. Aeroplane.

1,631,603; June 7.

Raynor, Harold H., assignor to Les Parfums de Rosine, Inc., New York, N. Y. Box or similar container for Inc., New York, N. Y. Box or similar container for Rollet preparations. Des. 72,330; Mar. 29.

Reflet Reparations. Des. 72,330; Mar. 29.

Reflet Refle

Reach Minufacturing Company. (See Smith, Charles as signor.)

Reach, George A. (See Barrett, William, assignor.)

Reach, Milton B., assignor to Stopperless Water Bottle Company, Springfield, Mass. Closure for water bags. 1,652,457; Dec. 13.

1,652,457; Dec. 13.

Reach, Mitton B., Springfield, and W. W. MacDonald, Chicopee, Mass., assignors to A. G. Spalding & Bross., New York, N. Y. Valve for sport balls or fluid containers. 1,618,676; Feb. 22.

Rainers. 1,618,676; Feb. 22.

Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Racket frame. 1,618,727; Feb. 22.

Reach, William F., Springfield, Mass., assignor to A. G. Spalding & Bros. New York, N. Y. Golf-club shaft. 1,628,697; May 3.

Reach, William F., Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Golf club. 1,642,462; Sept. 13.

Spalding & Bross, New 10's, N. S.
Sept. 18.
Reach, William F., Springfield, Mass., assignor to A. G.
Spalding & Bross., New York, N. Y. Golf-club shaft.
1,614,083; Oct. 4.
Read. Augustus R. Columbus, Ohio. Pulverlzing machine. 1,614,839; Jun. 18.
Read. Augustus R. L., Covington, Ky. Theothorush.
1,618,475; Feb. 22.
Read. Augustus R. L., Covington, Ky. Toothbrush.
1,638,838; July 26.
Read, Claude C., Detroit, Mich. Doorstop. 1,634,886;
Thir E.

Read, Henry, Kansas City, and S. M. Higgins, Webb City, Mo. Semimetallic flexible form for floor domes. 1,619,269; Mar. 1. Read, Howard W., assignor to Baker-Vawter Company, Benton Harbor, Mich. Bookkeeping form. 1,630,073; May 24.

Beaton Harbor, Mich. Bookkeeping form. 1,639,073; May 24.

Read, John B., Golden, and M. F. Coolbaugh, assignors to The Complex Ores Recoveries Company, Denver, Colo. Roasting. 1,644,692; Oct. 11.

Read, Thomas T., Washington, D. C. Closure. 1,636,487; Mar. 15.

Reader, Bose. (See Winslow, F. H., and Reader.) Reader, Edward C., Cleveland, Ohio. Drying apparatus. 1,639,967; Aug. 23.

Reading Edward C., Cleveland, Ohio. Drying apparatus. 1,639,967; Aug. 23.

Reading Chain & Block Corporation. (See Hoffmaster, Harry W., assignor.) Reading Chain & Block Corporation. (See Nelles, Russell E., assignor.) Paterson, N. J. Packet container. 1,636,757; July 26.

Ready Apron Company. (See Mercola, Michael, assignor.) Ready. William A., Brookline. Mass. Dial mechanism for radio apparatus. 1,638,875; Dec. 27.

Ready, William J., assignor to American Glass Works, Incorporated, Riehmond, Va. Glass bottle. Des. 73,540; Sept. 27.

Rean, Stephen J. Olyphant, Pa. Car-chocking means for Rean, Stephen J. Olyphant, Pa. Car-chocking means for Reardon, Robert E. Johnman, Pa. Bottle-capping utensil. 1,631,239 June 7. Reaser, Fred S., et al. (See Thompson, William H., as-signor.)

Reason, Walter M., assignor to Elizabeth Ballamos, Pontiac, Mich. Automobile transmission lock. 1,623,131; Apr. 5.
Reason, Walter M., assignor to E. Ballamos, Pontiac, Reason, Walter M., assignor to E. Ballamos, Pontiac, Mich. Transmission lock. 1,641,992; Sept. 13.
Reaveley, Emmett, Chicago, Ill. Woodwork shaper table. 1,626,153; Apr. 26.
Reaves, William P., Greensboro, N. C. Operating head-light. 1,632,581; June 21.
Reaves, William P., Greensboro, N. C. Optical apparatus. 1,644,017; Oct. 25.
Reaves, William P., Greensboro, N. C. Eye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Special apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
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Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, William P., Greensboro, N. C. Bye-testing apparatus. 1,650,768; Nov. 29.
Reaves, Will

1,032,101; Sept. 15. Remartle, Australia. Concrete re-Rebell, Fred North Fremartle, Australia. Concrete re-Fred North Fremartle, 12,24,802; Apr. 12. Reber. Christian, Lincoln Park, Mich. Emergency-brake mechanism. 1,021,431; Mar. 15. Rebmen, Ira F. (See Scritchfield, Amos J., assignor.) Rebmer, Werner. (See Neelmeier, W., Nocken, and Reb-

ner.)
Rebora, Stephen F., Chicago, Ill. Toaster. 1,021,100, Apr. 12.
Reboul, Louise, St. Etienne, France. French. 1,645,999; Oct. 18.
Recatti, Rocco, St. Louis, Mo. Toy trundle. 1,626,756; May 3.
Recen, Henry A. (See Carlson, H. F., and Recen.)
Rechard, Ottis H., York, Pa. Extrusion machine. 1,614,256; Jan. 11.

1,614,296; Jan. 11.

Rechberg, A., Gesellschaft mit beschriinkter Haftung et al., (See Beil, A., and Meyer, assignors.)

Reck, Peter W., assignor to The Bettendorf Company, and the company of the Bettendorf Company of the companies, the companies of the compan Aug. 2.

Aug. 2.

Reckford, John K., New York, N. Y. Pencil tip. Des. 73,670; Oct. 18.

Reckler, Laurence L., Westwood, Calif. Liquid-control means for hydraulic brakes. 1,826,968; May 3.

Reckmann, Hugo, Altona-on-the-Eine, Germany. Sliding device for sails. 1,647,813; Nov. 1.

Reckmann, Liquad Alfons-Eibe, Germany. Sliding device (1,967) Pec. 3,967; Pec. 3,96

Record Book Cabinet Company. (See Seward, Lesne w., assignor.)
Recording Thermometer Company. (See Frantz, Charles, T., assignor.)
Record-O-Phone Company. (See Kaplan, Jacob, assignor.)
Record-O-Phone Company. (See Kaplan, Jacob, assignor.)
Recreator Phonograph Corporation. (See Antonelli, See Antonelli, See Caplan, Jacob, Assignors.)
Recrited Manufacturing Company. (See Wall, William G., assignor.)

assignor.)

assignor.)

Rector, Thomas M., (See Hupfel, A. G., fr., and Rector.)

Rector, Thomas M., New York, N. Y., assignor to Vitapack Corporation, Hoboken, N. J., Canning process.

Recuer. Cannio. (See Lamarque, G. and Recuero.)

Reddick, John C., Toronto, Ontario, Canada. Typewriter.

1.650,299; Nov. 22.

Reddick, John J., deceased, San Francisco; J. H. Reddick, administratrix, Los Angeles, Calif. Weighing
conveyer, 1617,301; Feb. 8.

John, J.)

Reddick, Lancies E. Kew Gardens, assignor to Western.

John J.)

Reddig, Charles E., Kew Gardens, assignor to Western Electric Company, Incorporated, New York, N. Y., Ironing machine. 1,628,906; May 17.

Reddig, James T., Wilkesboro, N. C. Calculator. 1,615,838; Per I., Sasignor to Athas Box Company, Chicago, Ill. Fiber-board package. 1,647,581; Nov. 1, Redfield, Harry B., New York, N. Y. Telephone attachment. 1,625,333; Apr. 19.

Redfield, John H., Denver, Colo. Gun sight. 1,618,225; Redfield, John H., Denver, Colo. Rear sight for rifles. 1,644,149; Oct. 4.

Redfield, Snowden B., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Two chamber clearance unloader. 1,616,389; Feb. S. J. Py-pass clearance unloader. 1,616,989; Feb. R. J. By-pass clearance unloader. 1,616,989; Feb. R. J. By-pass clearance unloader. 1,616,989; Feb. R. assignor to Ingersoll-Rand Company, Jersey City, N. J. By-pass clearance unloader. 1,616,989; Feb. R. J. By-pass clearance unloader. 1,616,989; Feb. R. assignor to Ingersoll-

Redfield, Snowden B., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Single-end clearance unloader. 1,616,990; Feb. 8.

Redfield, Snowden B., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Three-chamber clearance unloader. 1,616,991; Feb. S.
Redfield, Snowden B., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Centralizer interlocking control for multistage compressors. 1,623,491; Apr. B., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Discharge unloader. 1,637,875; Aug. 2.
Redfield, William C., Cincinnati, Ohio. Typographical machine. 1,624,843; Apr. 12.
Redgrave, Gilbert R., et al. (See Boswell, George B., assignor.)

Redgrave. Gilbert R., et al. (See Boxwell, George B., assignor.)
Redhefter. Charles R., Philadelphia, Pa., and H. L. Mason, New York. N. Y. Tobacco-tamping device.
Li649,614; Nov. 15.
Li649,614; Nov. 15.
Li631,500; June 7.
Redick, Frank, Parkerton, Wyo. Sand-reel bearing.
Li631,635; June 14.
Redick, Frank, Parkerton, Wyo. Wire-Jerk-line shock absorber. Li651,039; Nov. 29.
Redick, Frank, Parkerton, Wyo. Wire-Jerk-line shock absorber. Li651,039; Nov. 29.
Redick, Frank, Parkerton, Wyo. Wire-Jerk-line shock absorber. Li651,039; Nov. 29.
Redick, Frank, Parkerton, Wyo. Wire-Jerk-line shock absorber. Li651,031; Dec. 27.
Redin, Ekstrom & Company. (See Carlson, George H., assignor.)

Redin, Exstrom & Company, Redinger, Joseph M., Providence, R. I. Cutter holder. 1,615,233; Jan. 25.
Redinger, Joseph M., Providence, R. I. Milling-machine collet and end mill. 1,618,998; Mar. 1.
Redington, F. B., Company. (See Milmoe, Michael J.,

Redirected Light Corporation of America. (See Whalen, Edward J., assignor.) Red Jacket Manufacturing Co. (See Stebbins, Timothy

Redinereted Light Corporation of America. Gee Whatea, Belwind J., assignor). Ref. assignor autacturing Co. (See Stebbins, Timothy assignor) and acturing Co. (See Stebbins, Timothy Assignor). Redilinger, Michael, Portland, Oreg., Violin. 1,635,502; July 12. Redilinger, Michael, Portland, Oreg., assignor to International Fruit Vending Corporation. Fruit-rending machine. 1,616,824 Feb. 8. Redilon, Osgood M., Bath, Me. Boiler stand. 1,622,884; Redman, Charles H., East Orange, N. J., assignor to H. Boker & Co. Inc. New York, N. Y. Guard for hat clippers. 1,621,641, Mar. 22. Schmidt, Glendale, Ky. Redman, James F., and K. Schmidt, Glendale, Ky. Redman, James F., and K. Schmidt, Glendale, Ky. Redmand, Albert G., Indianapolis, Ind., assignor to J. R. Francis, Flint, Mich. Fuel-feeding system for internal-combustion engines. 1,631,948; June 14. Redmond, Albert G., Indianapolis, Ind., assignor to Marvei Carbureter Company, Flint, Mich. Charge-heating control for internal-combustion engines. Redmond, Albert G., Indianapolis, Ind., assignor to Marvei Carbureter Company, Flint, Mich. Charge-heating Control air heater for charge-forming devices. 1,655,156; Nov. 22. Redmond, Harriet L., Needham, assignor to The William Carter Company, Needham, Heights, Mass. Woman's Redmond, William He, Dugger, Pold, Railroad grass-line and ditch cutter. 1,628,605; May 17. Redmond, William L., assignor to the Majestic Company, Redroup, William L., assignor to the Majestic Company, Redroup, William L., assignor to the Majestic Company, Redroup. William L., assignor to the Majestic Company.

Red Kwell Corporation (Signor).
Redrup, William D., assignor to The Majestic Company,
Huntington, Ind. Window, 1,639,148; Aug. 16.
Red Star Appliances, Inc. (See Eskholme, John W., assignor).
Dea Star Appliances, Inc. (See Northrop, George E., as-

gnor.) Star Appliances, Inc. (See Northrop, George E., as-gnor.) Sun Products Co. (See Goldman, Sigmund L., as-

Signor.)
Redus, James E., Memphis, Tenn. Delinter. 1,624,435;
Apr. 12.

Rec, Roelof. (See Sommer, W. R., Ree, and Kerkhof.)
Recce Button Hole Machine Company, The. (See Klewicz, John, assignor.)
Recce Folding Machine Company. (See Dixon, Walter L.,

assignor.)
Reece, John, et al. (See Giancola, Nicholas, assignor.)
Reece, John, A., Columbus, Nebr. Shoe protector.
1,616,221; Feb. 1.
Reece, Joseph A., assignor to The Libbey-Owens Sheet
Glass Company, Toledo, Ohio. Drawing sheet glass.
1,618,107; Feb. 15.
Reece, Joseph A., assignor to The Libbey-Owens Sheet

Recce, Joseph A., assignor to The Libbey-Owens Sheet Glass Company, Toledo, Ohio. Drawing sheet glass. 1,639,466; Aug. 16.

1.659,405; Aug. 16.

Recce, Joseph A., assignor to The Libbey-Owens Sheet Glass Company, Toledo, Ohio. Method and apparatus for making wire glass. 1.641,982; Sept. 6.

Recce, Raymond H., Joliet, Hl. Timer for ignition systems and the like. 1.624,975; Apr. 19.

Reece Shoe Machinery Company. (See Oliver, John R.,

Reece Shoe Machinery Company. (See Zaleski, Frank, as-Reed, Abraham, executor. (See Whitham, Frederic E.) Reed, Albert C., New York, N. Y., assignor of one-third to T. Cotter, Jersey City, N. J., and one-third to E. L. Lasier, Claremort, N. H. Vanadium compound and making same, 1,651,967; Dec. 6.
Reed, Anna S. (See Bullock, Jay, assignor.)
Reed, Benjamin C., Indianapolis, Ind. Joint composition. 1,651,164; Nov. 29.
Reed, Benjamin C., Indianapolis, Ind. Joint composition. 1,651,064; Nov. 29.
Reed, Ca., A., Company. (See Jopson, William G., assignor.)
Reed, Charles E. (See Boyaton, Stanley E., assignor.)
Reed, Charles E. (See Soyaton, Stanley E., assignor.)

Reed, Charles E. (See Royaton, Stanley E., assignor.)
Reed, Charles E. (See Royaton, Stanley E., assignor.)
Reed, Charles E. (See Schultz, Herman A., assignor.)
Reed, Charles M., Kabletown, W. Va. Artificial-minnow
Reed, Charles M., Kabletown, W. Va. Artificial-minnow
Reed, Charles M., Kabletown, W. Va. Artificial-minnow
Reed, Charles M., Kabletown, W. Well-drilling cutter
and bearing therefor. 1,636,663; July 19.
Reed, Clarence E., Wichita, Kans. Rotary deep-welldrilling apparatus. 1,636,664; July 19.
Reed, Clarence E., Wichita, Kans. Earth-boring drill.
1,636,666; July 19.
Reed, Clarence E., Wichita, Kans.
Reed, Clarence R., Wichita, Kans.

Reed, Clarence E., Wichita, Kans. Deep-well-drilling apparatus. 1,649,858; Nov. 22.
Reed, Clarence E., Wichita, Kans. Earth-boring drill. 1,649,859; Nov. 22.
Reed, Clarence E., Houston, Fox. Retary deep-well-borner and the state of the sta

Aug. 30.

Red. Harry A. and F. J. Reilly, Jerome, Ariz. Rail coler. 1.634.513; July 5.

Red. Harry H. (See Gulick, R. A., and Reed.)

Reed. James. (See Wilkinson, H., and Reed.)

Reed. James. (See Wilkinson, H., and Reed.)

Reed. James. (See Wilkinson, H., and Reed.)

Reed. James. H., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation.

Paterson, N. J. Applying fasteners. 1,625.953; Apr. 26.

Reed. James H., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Stapling machine. 1,625.953; Apr. 26.

Reed. James H., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Stop mechanism. 1,636.324; July 19.

Reed. Machonaid S., assignor to Erie Foundry Company, Erie. Pa. Power hammer. 1,653,509; Dec. 20.

Reed Manufacturing Company. (See Petersen, Thorvald, assignor.)

Reed. Ned S., assignor to Palge-Detroit Motor Car

need, Ned S., assignor to Paige-Detroit Motor Car Company, Detroit, Mich. Cast-wheel construction, 1,626,211; Apr. 26. Reed Fropeller Co., The. (See Reed, Sylvanus A., as-Reed.

Roller Bit Company. (See Bull, Clinton H. M., assignor.)
Reed Roller Bit Company. (See Childs, William L., as-

signor.)
eed Small Tool Works. (See De La Mater, Robert G.,

Reed. Sylvanus A., assignor to The Reed Propeller Co., Inc., New York, N. Y. Twisting machine. 1.635,009;

July 5.
Recd. Sylvanus A., assignor to The Reed Propeller Co.
Recd. Sylvanus A., assignor to The Reed Propeller Co.
Recd. Sylvanus A., assignor to The Reed Propeller Co.
Inc., New York, N. Y.
Aeronautical propeller Co.
Aeronautical propeller.

Reeder, Charles H., St. Louis, Mo. Chaplet. 1,648,244; Nov. 8.

Nov. 8.

Reeder, Frank C., assignor, by mesne assignments to The Fulton Sylphon Company, Knoxville, Tenn. Combined temperature and pressure regulator. 1,638,596;

Reeder, Charles H., St. Louis, Mo. Chaplet. 1,030,244; Nov. 2. R. 1,030,245; Nov. 2. R.

Dec. 27.

Reeve Howard T. Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Forming refractory crucibes. 1,648,149; Nov. S. Reeve, Vere L. Ballarat, Victoria, Australia. Printing press, 1639,965; May 21.

Reeves, Affred, Small Heath, Birmingham, assignor of Reeves, Affred, Small Heath, Birmingham, Bagland. Reeves, Bache M., Belleville, Ill. Pressure-responsive device. 1,643,4961; July 5.

Reeves, Dande H., Dayton, Ohio. Liquid-level gauge. 1,643,469; Sept. 27.

Reeves, Frank N., Wodensburg, Md., assignor to West-Reeves, Frank N., Wodensburg, Md., assignor to West-Reeves, George G., Shreveport, La. Outlet valve. 1,626,699; May 3.

Reeves, Layfayette A. (See Kisselburg, John W., assignor.)

signor.)

Reveys Manufacturing Company, The, (See Wendle, V. P., and Hunker, assignors.)

Reveys, Mitton O., assignor to Reeves-Pulley Company,
Columbus, Ind. Variable-speed reduction gearing.

1,624,895; Apr. 12.

Reeves, Milton O., assignor to Reeves Pulley Company,
Columbus, Ind. Controller for variable-speed transmission.

1,626,299; Apr. 26.

Reeves, Orwell C. assignor to Toledo Scale Company.

Reves, Orwell C., assignor to Toledo Scale Company Toledo, Ohio. W. Galsinor to Toledo Scale Company Toledo, Ohio. M. Galsinor to Toledo Scale Company Toledo, Ohio. Indicator. 1,647,306; Nov. 1. Reeves, Orwell C., assignor to Toledo Scale Company Toledo, Ohio. Weighing scale. 1,647,307; Nov. 1. Scale Company.

Reeves, Orwell C., assigner to Toledo Scale Company, Toledo, Ohlo. Weighing scale. 1.647,308; Nov. 1. Reeves, Paul B., assignor to Reeves Pulley Company, 1.626,300; Apr. 26. de block for V-shaped transmission. 1.626,300; Apr. 26. Reeves, Paul B., assignor to Reeves Pulley Company, Columbus, Ind. Controlling the speed of driven members. 1.626,564; Apr. 26. Reeves, Paul B., assignor to Reeves Pulley Company, Columbus, Ind. Cone-pulley lubricator. 1,646,570; Oct. 188. Ind. Cone-pulley lubricator. 1,646,570;

Columbus, Ind. Cone-pulley Tubercates.

Oct. 18.
Reeves Pulley Company. (See Reeves, Milton O., assignor.)
Reeves Pulley Company. (See Reeves, Paul B., assignor.)
Reeves William B., and M. J. Poole. Whitehead, N. C.
Apparatus for washing clothes. 1.626,154; Apr. 26.
Reeves, Wilmot G., Stockbridge, Mich. Extension unit.
1,621,275; Mar. 15.
Re Fil Broom Company, The. (See Helmer, Ralph E., assignor.)

signor.) Supply Company, The. (See Schlueter, William A. C., assignor.)
Refinery Supply Company, The. (See Schlueter, William A. C., assignor.)

T, assignor.)
Regal Shoe Company. (See Bliss, Ellmer J., assignor.)
Regal Shoe Company. (See White, William H., assignor.)
Regal Sliver Mfg. Co. (See Danks, R. L., and Baker, as-

Regan, Patrick J., Iowa City, Iowa. Primer. 1,652,731; Regan Safety Devices Company, The. (See Bodde, Theo-

Regan Safety Devices Company, The. (See Bodde, Theodore, assignor.)
Regan Safety Devices Company, (See Kendall, A. B., and McLied, assignors.)
Regan Safety Devices Company, The. (See Shaver, Archbahl (;, assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft gear. 1,629,307; May 17.
Regan, William J., assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft gear. 1,624,356; Sompany, Pittsburgh, Pa. Draft gear. 1,641,456;

May 17.

Regan, William J., assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft gear. 1,641,456; Sept. 6.

Regan, William J., Wilkinsburg, assignor to The McConway & Torley Company, Pittsburgh, Pa. Railway draft general property of the McConway & Torley Company, Pittsburgh, Pa. Railway draft Regelein, Wilhelm, and A. Glaubitz, Mulheim-Ruhr, Germany. Oscillation meter. 1,614,573; Jan. 18.

Regenbogen, Conrad, Kiel, assignor to Fried. Krupp Aktiengesellschaft Germaniawert, Kiel-Gaarden, Germany. Cooling arrangement for internal-combustion engines, 1,621,560; Mar. 22.

Reger, Crorad, New York. N. Y. Antiskidding device for vehicle wheels. 1,653,781; Dec. 27.

Refredet, August, Duisburg, Germany. Ironing horse for sleves. 1,613,043 Jan. 11.

Reger, Frederick T. (See O'Dell, Charles, assignor.)

Refriedt, August, Duisburg, Germany. Artificial knee incl., 1,619,485; Mar. 1.

Rehn, Edward H., Lima, Obio. Adjustable spindle bolt. 1,620,638; Mar. 15.

Rehn, Guilherme, Porto Alegre, Brazil. Seat-operating mechanism for toilets, etc. 1,616,509; Feb. 8.

Reiber, Charles A., Portland, Oreg. Rubber button.

Reibel, Herman G., assignor to The Peerlees Electric Company, Warren, Ohio. Priving connection for motor-driven fans or the like. 1,648,996; Nov. 15.

Reiber, Abert H., assignor, by mesne assignments, to Morkrum-Kleinschmidt Corporation, Chicago, Ill. Priving relegraphy. 1,658,600; Dec. 20.

Reich, Ernst, (See Friedrich, G., and Reich.)

Reich, Ernst, (See Friedrich, G., and Reich.)

Reich, Ernst, (See Friedrich, G., and Reich.)

Reichard, Harold D., assignor to Rache Horseshoe Tire Company, Rache, Wis. Tire tread. Des. 71,986; Feb. 8.

Relchard, Harold D., assignor to Rache Horseshoe Tire Company, Rache, Wis. Tire tread. Des. 71,986; Feb. 8.

Reichard, Harold D., assignor to The Akron Standard Mold Company Akron, Ohio. Tirc. Des. 72,636; May 10. Reichard, Wade H. assignor to General Railway Sixnal Company, Rochester, N. Y. Receiver for continuous inductive train-control systems. 1,644,487; Dec. 27. Reichart, James H., assignor to J. L. Moore, Muncle, Ind. Electric heating devices. 1,614,4364; Jan. 11. Reiche, Julius C., et al. (See Watson, James B., as-signor.)

signor.)
Reichel, Alvin S., New York, assignor of one-third to P. B. Smith, Brooklyn, N. Y. Motor shears. 1,613,126; Jan. 4.
Reichel, Hans, Brunswick, Germany, Hand stamp. Des. 72,276; Mar. 22.
Reichenbach, Carl L., Yonkers, N. Y., assignor to Eclipse Air Brush Company, Newark, N. J. Spray gun. 1,626,036; Apr. 26.
Reichert, Paul F. (See France. C. C., and Reichert.)
Reichhelm, George L., assignor to The Gosifier Company, Elizabeth, N. J. Burner. 1,644,610; Oct. 4.

Reichman, George F., Philadelphia, Pa., Water heater. 1,615,486; Jan. 25.

L615,486; Jan. 25.

Des. 71,849; Jan. 14.

Des. 71,849; Jan. 14.

Des. 71,849; Jan. 14.

Des. 71,849; Jan. 14.

Reichmann, Willy, Hamburg, Germany, assignor, by mesne assignments, to National Screen Service, Inc. Driving gear for films in projection apparatus. 1,621,334; Mar. 15.

Beichold, Louwig, Winsted, assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Electric teating device, 1,613,776; Jan. 11.

Reichold, Ludwig, Winsted, assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Electric teaster, 1,639,385; Aug. 16.

Reichold, Ludwig, Winsted, assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Electric teaster, 1,639,385; Aug. 16.

Reichold, Ludwig, Wauwa'cosa, assignor to A. O. Smith portatus, 1,834,914, 110; 5.

Reichold, Ludwig, Wauwa'cosa, assignor to The State of the State

du Pont de Nemours & Company, Wilmington, Dei, Cyclohexy) phthaintes and making same. I,643,393; Reid, Yreid A., St. Louis, Mo. Advertising-display device. 1,624,507; Apr. 12.
Reid, Frederick M., assignor to Fruehauf Trailer Company, Detroit, Mich. Steering gear for trailers. 1,637,456; Aug. 2.
Reid, Frederick M., assignor to Fruehauf Trailer Combany, Detroit. Mich. Running-gear structure for vehicles. 1,640,217; Aug. 23.
Reid, Frederick M., assignor to Fruehauf Trailer Company, Detroit. Mich. Locking device for semitrailers. 1,641,354; Sept. 6.
Reid, George I., 618,549; Feb. 22.
Reid, James N., 1,618,549; Feb. 22.
Reid, James N., and J. J. Illuminated-chartholding cabinet for oculists. 1,647,195; Nov. 1.
Reid, James M., et al., (See Reid, James M., assignor.)
Reid, James M., et al., (See Reid, James M., assignor.)
Round, Ontario, Canada, Broom. 1,446,041; Oct. 18.
Reid, James N., et al. (See Reid, James M., assignor.)
Reid, James S., assignor to The Newell-Thompson Company, Cleveland, Ohlo. Shock absorber. 1,649,800;

Reid, James U., et al. (see Read, sames al., assignor), Reid, James S., assignor to The Newell-Thompson Company, Cleveland, Ohio. Shock absorber. 1,649,860; Reid, James S., assignor to The Newell Thompson Mfg. Co., Cleveland, Ohio. Drum and band structure. 1,654,192; Dec. 27.
Reid, John, Oil City, Pa. Safety stop device. 1,628,332; All John, Oil City, Pa. Safety stop device. 1,628,332; All John, New York, N. Y. Air-draft system for furnaces. 1,646,111; Oct. 18.
Reid, John, Glasgow, Scotland, assignor to A. E. White, London, England. Producing advertising signs in the air and product. 1,621,482; Mar. 15.
Reid, Josiah E., and C. L. Nein, assignors to International Motor Company, New York, N. Y. Hoisting Reid, Josiah E., and C. L. Nein, assignors to International Motor Company, New York, N. Y. Hoisting mechanism for dump trucks. 1,624,978; Apr. 19.
Reid, Percy H., assignor of one-half to A. S. Piers, Montreal, Quebec, Canada. Internat-combustion engines. 1,653,898; Aug. 23.

Nov. 22.

Reid. Robert C., A. Rates, and F. Ricks, Leicester, England, assignors to United Shoe Machinery Corporation, similar articles, 1.614.444; Jan. 11. Reid, Thomas A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric furnace resistor. 1.645.293; Oct. 11. Reid, William G., Borgen, Colo. Pump-rod lift for wind-Reid, William L., Lina, Ohio. Locomotive steam pipes. 1.621,600; Mar. 22. Reier, George C. Pach.

1.621.600; Mar. 22.
Reier, George C. Brooklyn, N. Y., assignor to American
Telephone and Telegraph Company. Electrical wave
filter. 1.628,713; July 26.
Reif, Allan F. (See Reif, Charles A. and A. F.)
Reif, Charles A. and A. F., Buffalo, N. Y. Oil-feed-control
valve for oil-burning apparatus. 1.613,293; Jan. 4.
Reiffert. Wilhelm. Colone Vingst, Germany, assignor to
Dr. H. Dux Company, Inc., Jacksonville, Fla. Ball
bearing. 1.644,611; Oct. 4.
Reigel, Jacob, Lakewood, assignor of one-half to Emil
Telegraph Colone Colone Colone Vingst, Colone
The same 1.637,637; Aug. 2.
Reiger, Carl S., St. Louis, Mo., assignor to Balcor Perkins
Company, Inc., Saginaw, Mich. Toggle mechanism.
1.634,684; July 5.
Relinders, Franciscus, H., Soesterberg, assignor, af ange.

1.634.684; July 5.
Relfinders, Franciscus H., Soesterberg, assignor of one-half to Naumlooze Vennootschap Nederlandsche schrobesteller Fabrick, Hilversum, Netherlands. Diathermy device. 1.628.806; May 17.
Relland, Ernest S. and P. M., St. Paul. assignors to Rayport Foundry Company, Bayport, Minn. Sashweight pulley, Rel6.594; Apr. 19.

Reliand, Ernest S. and P. M., assignors to H. L. Fischer, St. Fanl, Minn. Sash-weight pulley, 1.644,276; Oct. 4. Reliand, Peter M. (See Reliand, Ernest S. and P. M.) Reliling, John J., assignor to George D. Ellis & Sons, Incorporated, Philadelphia, Pa. Measuring funnel 1,620,689; Mar. 13. Salt Lake City, Utah. Gaming apparatus. 1.622,673; Mar. 29. Relily, Alfred F., Attleboro, Assignor to Evans Case Company, North Attleboro, Mass. Pocket lighter. Des. 72,965; June 28. Relily, Alfred F., Attleboro, Mass. Producing the shells Relily, Afred F., Attleboro, Mass. Producing the shells Relily, Francis J. (See Reed. H. A. and Relily.) Relily, Francis J. (See Reed. H. A. and Relily.) Relily, Francis J. (See Reed. H. A. and Relily.) Relily, Francis J. (See Reed. H. A. and Rolly.) Relily, Francis C., New York, N. Y. Wrench. 1,624,508; Apr. 12. Reling, Frank C., New York, N. Y. Wrench. 1,624,508; Apr. 12. Relily, John B., Whittler, and C. H. Stone, Brea, assignors to Kammerer Corporation, Santa Fe Springs, Calif. Tool for cutting and removing pipe from wells. 1,625,536; Apr. 19. Relily, John B., Whittler, and C. H. Stone, Brea, assignors to Kammerer Corporation, Santa Fe Springs, Calif. Tool for cutting and removing pipe from wells. 1,625,536; Apr. 19. Relily, John B., Whittler, and C. H. Stone, Brea, assignors to Kammerer Corporation, Santa Fe Springs, Calif. Tool for cutting and removing pipe from wells. 1,625,536; Apr. 19. Relily, Michael K. (See Svenson Swen, assignor.) Relily, Rodolphe R., Port Washington, assignor to Angel International Corporation, New York, N. Y. Diedout Relily, Thomas A., Cleveland, Ohlo, assignor, by mesne assignments, to The Federal Foundry Supply Company, Atr cleaner. 1,639,467; Aug. 16. Relly, William, White Plains, N. Y. Machine for formal parameter for the proper service of the proper service of the proper service assignments, to The Federal Foundry Supply Company, Atr cleaner. 1,639,467; Aug. 16.

Reilly, William, White Plains, N. Y. Fish scaler. 1645,970; Oct. 18.
Reilly, William, White Plains, N. Y. Machine for forming bamburger steaks. 1,651,040; Nov. 29.
Reilly, William A., Wyoming, Pa. Coal jig. 1,646,422; Oct. 25.
Reilly, William J., Brooklyn, N. Y. Matting. 1,615,650; Jan. 25.
Reiman, William H., Oswego, N. Y. Gauge. 1,650,653; Nov. 29.

Reiman, William H., Oswego, N. Y. Gauge. 1,650,653; Nov. 29. Reiman, William H., Oswego, N. Y. Gauge. 1,650,653; Nov. 29. Reime, George. (See Singer, K., Paschen, and Reime, Brimer, Fred C., Co. Inc. (See Schmidt, Ferdinand, assignor.)

Ribert, evener for harrows. 1,629,529; May 24. Reimers. Alfred E. Harrington Park, and W. K. Tavender, Holworth. N. J. Heating device for halr treatment. 1,647,748; Nov. 1. Reimers, Louis, and N. Erickson, Dalton, Nebr. Harrow tooth. 1,622,343; Mar. 29. Rein, Edward A., assignors eldy, Seaside Heights, N. J. Liquid gauge. 1,648,317; Oct. 1, Liquid gauge. 1,648,317; Oct. 1,628,75; Dec. 13. Rein, George, Baltimore, Md. Apparatus for printing from

Dec. 13.
Rein, George, Baltimore, Md. Apparatus for printing from negatives onto sensitized surfaces. 1,646,595; Oct. 25.
Reinbold, Frank, Sheboyagan, Wi. Saythend and apparatus Reinbold, Herman, Omaha, Nebr. Preparing a medium for treatment of water. 1,646,596; Oct. 25.
Relincke, August, Furstenwalde, assignor to Julius Pintsch Aktlengeselbechaft, Berlin, Germany. Valve. Reinceke, John P., assignor to The Hoffman Heater Company. Loulsylile, Ky. Water-heating coll. 1,464,560; 1,464,560;

Reinecke, John P., assignor to The Hoffman Heater Com-pany, Louisville, Ky. Water-heating coll. 1,646,560;

Reinecke, John P., assignor to the rounant array pany, Louisville, Ky. Water-heating coil. 1,646,560; Oct. 25.
Reineke, Charles, assignor to The Reineke Motor Corporation, New York, N. Y. Multicyllader internal-combustion engine. 1,529,530; May 24.
Reinete, 1,629,530; May 24.
Reinete, 1,630,311; May 31.
Reineke, Josef H., Bochum, Germany, Apparatus for regulating air supply. 1,648,535; Oct. 11.
Reineke Motor Corporation, The. (See Reineke, Charles, assignor.)

assignor.) Reiner, Le. Detroit, Mich. Transmission band, Little and Little an

B., assignor.)

Beinhard, Frank, Eau Claire, Wis. Gear-shift stop.

1.619,955; Mar. 8.

Reinhardt, Christian, and B. Pelz, New York, N. Y. Movable doll eyes. 1.619,763; Mar. 1.

Reinhardt, James H., East Orange, N. J., assignor to American Bank Note Company, New York, N. Y.

Numbering machine. 1.635,503; July 12,

Reinhardt, Louis W., Brockton, Mass. Display form and making the same. 1,623,931; Apr. 5.

Reinhardt, Otto, Central Falls, R. 1. Curtain-rod hold-er. 1,646,360; Oct. 18. Reinhardt, Otto, Central Falls, R. I. Shade and curtain-rod holder. 1,649,079; Nov. 15. Reinhart, Adolf, Hobbean, N. J. Flsh boat. 1,619,762; Reinnart, Adolf, Hoboken, N. J. Fran Dout. 1,019,702; Mar. 1. Arno. Cleveland, Ohio. Hair protector. Reinhold, Oscar, Downers Grove, assignor to Churchill Cabinet Company, Chicago, Ill. Radiocabinet. Des. 73,943; Nov. 22. Reinhold, Oscar, Downers Grove, assignor to Churchill Cabinet Company, Chicago, Ill. Radiocabinet. Des. 73,943; Nov. 22. Reinhold, Oscar, Downers Grove, assignor to Churchill Cabinet Company, Chicago, Ill. Radiocabinet. Des. 73,943; Nov. 22. Reinhold, Franz, assignor: Or The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Designation device. 1,644,064; Oct. 4. Reinhe, John C., Ir., Pulaski, Wils. Supporting device. Reinke, William A. See Penny, V. E., and Reinke.) Reinstrom, Gustav, Wandsbek, near Hamburg, Germany, Anodic-current accumulator battery. 1,653,731; Dec. 27. Reinke, William A. (See Feiny, V. E., and Actionary, Reinstrom, Gustav, Wendsleek, near Hamburg, Garnany, And Courrent accumulation battery, 1,653,731; And Courrent accumulation battery, 1,653,731; Reintjes, George P., Kansas City, Mo. Arch and tile for forming same. 1,618,780; Feb. 22. Reintjes, George P., Kansas City, Mo. Corner-fill furnace-wall construction. 1,619,270; Mar. 1. Reintjes, George P., Kansas City, Mo. Tile arch. Reis, G., & Bros., Inc. (See Reis, Julius M., assignor.) Reis, Gale G., Duluth, Minn. Device for cleaning gasvaive seats. 1,048,150; Nov. 8. Bros., Inc., New Reis, Julius M., assignor to C. Reis & Bros., Inc., New Reis, Julius M., assignor to C. Reis & Bros., Inc., New York, N. Y. Apparatus for operating upon label tape. 1,642,387; Sept. 13. Reischl. Ludwig, assignor to Bing Werke (normerly Gebrüder Bing A. G.), Nuremberg, Germany. Child's typewriting machine. 1,634,636; July 5. Reischl. Ludwig, assignor to Bing Werke (formerly Gebrüder Bing A. G.), Nuremberg, Germany. Child's typewriting machine. 1,634,725; Reischl. Ludwig, assignor to Bing Werke. Nuremberg, Germany. Child's typewriting machine. 1,634,725; Reischl. Ludwig, assignor to Bing Werke. Nuremberg, Germany. Child's typewriting machine. 1,634,725; Reischl. Ludwig, assignor to Bing Werke. Nuremberg, Germany. Child's typewriting machine. 1,634,725; Reischl. Ludwig, assignor to Bing Werke. Nuremberg, Germany. Child's typewriting machine. 1,634,725; Reischl. Ludwig, Assignor to Bing Werke. Nuremberg, Germany. Child's typewriting machine. 1,634,726; July 5. Reischl. Ludwig, Assignor to Bing Werke. Nuremberg, Germany. Child's typewriting machine. 1,634,726; July 5. Reischl. Ludwig, Assignor to Bing Werke. Nuremberg, Germany. Child's typewriting machine. 1,634,726; July 5. Reischl. Ludwig, Assignor to Bing Werke. Nuremberg, Germany. Child's typewriting machine. 1,634,726; July 5. Reischl. L

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Reisler, Simon. (See Lapenta, V. A., and Reisler.) Reiss, Elias and Company. (See Kirchhoff, Ernest, assignor.)
Reiss, Frank A., Medimont, Idaho. Handle for shipping baskets. 1,622,674; Mar. 29.
Reiss, Loisle, Ryan, Iowa. Combination label. 1,620,833; Reiss. Winold, New York, N. Y., assignor to W. H. & A. E. Marperison & Co., Philadelphia, Pa. Towel. Des. 73,541; Sept. 27.
Reisz, Eugen, Berlin-Dahlem, Germany. Diaphragmless microphone. 1,634,210; June 28.
Reiter Company. (See McGill, Chester T., assignor.) Reiter. Daniel I., New York, N. Y. Fastening device. Reiter. Daniel I., New York, N. Y. Fastening device. Reiter. Daniel I., New York, N. Y. Fastening device. Reiter. Daniel I., New York, N. Y. Fastening device. Reiter. Daniel I., New York, N. Y. Handle for hand bags and the like. 1,639,574; Aug. 16.
Reiter, Daniel I., New York, N. Y., assignor to Rau Fastener Company, Providence, R. I. Snap fastener. 1,612,945; Jan. 4.
Wish. Roller-bearing remover. 1,612,884; Jan. 4.
Reiter, Dohn M., Auburn, assignor of one-third to P. Barnes, Scattle, Wash. Roller-bearing sleeve extractor. 1,653,410; Dec. 27.
Reiter, Philip, New York, N. Y. Safety back device for Reiter. William J., et al. (See Stitt, Charles M., assignor.)
Reiter, John M., Auburn, assignor of one-third to P. Barnes, Scattle, Wash. Roller-bearing sleeve extractor. 1,653,410; Dec. 27.
Reiter, Philip, New York, N. Y. Safety back device for Reiter, William J., et al. (See Stitt, Charles M., assignor.)

Reltz, Albert F., Kansas City, Mo. Dilator. 1,628,272; May 10. Reltz, Albert F., Kansas City, Mo. Dilator. 1,629,119; May 17.

Reitz, Charles J. (See Gries, Frank X., assignor.)
Reitz, Jacob J., assignor of one-fourth to R. D. McDowell,
Akron, Ohlo. Pattern and making the same. 1,649,262;
Reitor. S. (See Tucker, Pinkney R., assignor.)
Reitor. J. (See Tucker, Pinkney R., assignor.)
Reitar, Jay J., Los Angeles, Calif. Illuminating and heating device. 1,631,645; June 7.
Rekar, Jay J., assignor to De Luxe Lump Mfg. Co., Los
Angeles, Calif. Therapeutic treatment and dressingroom apparatus. 1,617,028; Feb. amp Mfg. Co., Los
Reiter, Calif. Incandescent-lamp structure. 1,637,786;
Aug. 2.

Angeles, Calit. Incanucescenters, Aug. 2.
Rekewitz, Charles, Racine, Wis. Lavatory. 1,626,155;
Apr. 26.
Relay Automatic Telephone Company, The. (See Mordin, Ralph, assignor.)
Relay Automatic Telephone Company, The. (See Rausseau, Ernest J. C., assignor.)
Reliable Knitting Works. (See Rosenberg, S., and Joha,

Rehause Ritting assignors, assignors, Reliable Machine company, The, (See Martindale, Charles A., assignor.)
Reliable Mfg. Company, (See Herman, Claude A., assignor.)
Reliance Company, The, (See Wilms, Gustav O., assignor.)

signor.)
Reliance Elevator Co. (See Anderson, John C. A., assignor.)
Reliance Manufacturing Company. (See Watson, Otto P.,

Reliance Manufacturing Company. (see Watson, Utto P., assignor), maniform and Machine Company, The. (See Ingram, Walter M., assignor). Reliance Storage and Warehouse Company. (See Sinclair, Cyril G., assignor.). Relich, Kosta, New York, N. Y. Fur knife. 1,629,412; May 17. Relich Kosta, New York, O. See Sprague, Alonzo B., as-Relicf Society for the Aged. (See Sprague, Alonzo B., as-

Relief Society for the Aged. (See Sprague, Alonzo B., assignor.)
Relier, Edwin L. (See Watters, L. A., Lloyd, and Relier.)
Relyea, Jesse F., assignor by mesne assignments, to Bonnie
place. Des. 73.867; Nov. 15,
Remas, Isidore T., Wood. a., N. Y., assignor to Mergenthaler Linotype Company.
I,630,094; May 24.
Remas, Isidor T., Woodhaven, N. Y., assignor to Mergenthaler Linotype Company.
Line-casting machine.
Rembrandt Lamp Corporation. (See Rothbart, Max,
assignor.)

Rembrandt Lamp Corporation. (See Rothbart, Max, assignor.)
Remde, Edward H. (See Hertner, J. H., and Remde, Company, Cleveland, Ohlo. Industrial truck. 1,620,038;
Mar. 8.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohlo. Switch mechanism. 1,620,167;
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohlo. Switch mechanism. 1,620,167;

mar. 6.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohlo. Steerable wheel construction, 1,623,554; Apr. 5.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohlo. Industrial truck. 1,629,555;

Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohlo. Industrial truck. 1,626,555; Apr. 26.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohlo. Industrial truck. 1,654,470; Rembelof, Charles, Brooklyn, N. Y. Traverse cord srip for curtains, draperies, and the like. 1,653,586; Dec. 20.
Remington Accounting Machine Corporation. (See Batr, John H., assignor.)
Remington Arms Company. (See Dickerman, John A., assignor.) Arms Company. (See Dickerman, John A., Remington Arms Company.

Remington Arms Company. (See Du Grenier, Arthur H., assignor.)

Remington Arms Company. (See Fuller, Frederick L., assignor.) Remington Arms Company. (See Lippert, Walter E., as-

Remington Arms Company. (See Loomis, Crawford C., assignor.)
Remington Arms Company. (See Loomis, Crawford C., assignor.)
Remington Arms Company. (See Marshall, Norman, as-

Remington Arms Company. (See Tillmanns, Carl W., assignor.)
Remington Arms Company. (See Valpey, Arthur L., as-

signor.) Remington-Noiseless Typewriter Corporation. (See Going,

George G., assignor.)

Redington Rand Inc. (See Dawson, George H., assignor.)

Remington Rand Inc. (See Johnston, William F., as-

Remington Rand Inc. (See Landsledel, Walter W., as-Signor.)
Remington Rand Inc.
(See Ohnstrand, Enoch, assignor.)
Remington Rand Inc.
(See Rand, James H., assignor.)
See Rand, J. H., Jr., and Hutchlings, assignors.)
(See Watters, L. A., and Lloyd,

assignors.)
Remington Typewriter Company. (See Barney, Edwin E., assignor.)

Remington Typewriter Company. (See Bridgewater, Herbert E., assignor.) Remington Typewriter Company. (See Burns, Cloyd E.,

Remington Typewriter Company. (See Hart, Frederick A., assignor.)
Remington Typewriter Company. (See Jones, Robert M.,

assignor.)
Remington Typewriter Company. (See Lewis, Richard J.,

Remington Typewriter Company. (See Shepard, Herbert C., assignor.)
Remington Typewriter Company. (See Smith, Charles

C., assignor.)
C., assignor.)
C., assignor.)
Remington Typewriter Company. (See Vergara, Gasper Remington Typewriter Company. (See Vergara, Gasper E., assignor.)
Remington Typewriter Company. (See Walsoe, S. L., and Hill, assignors)
Remmele. Louis J. assignor of one-half to A. Maier, and Hill, assignors, and the company. (See Walsoe, S. L., and Hill, assignors). Red-bending and tuft-forming apparatus. 1644,355; Oct. 4.
Remondy, Leon E., Paris, France. Percussion fuse for projectiles, aerial bombs, and the like. 1,650,300; Nov. 22.
Remonte. John, Ranger, Tex. Refrigerant container for Remonte. John, Ranger, Tex. Refrigerant container for Remonte. John, Ranger, Tex. Refrigerant container for Legister, Benjamin P., Indianapolis, Ind. Electric generator. 1621,469; Mar. 15.
Remy, Benjamin P., Indianapolis, Ind. Magneto. 1,632,270; Apr. 5.
Remy Franz, Fosses-lenz-Namur, Belgium. Electric tractions of the company o

Remy, Franz, Fosses-lenz-Namur, Belgium. Pressure and suction distributing mechanism. 1,644,792; Oct. 11. Renard, Ferdinand. (See Renard, Pierre and F.) Renard, Inc. (See Todd, Paul H., assignor,) Renard, Inc. (See Todd, Paul H., assignor,) Renard, Pierre and F., assignors to Societe Renard Frere et Fils. Nonancourt, France. Power loom for carpets. 1,622,123; Mar. 22. Joseph. Mo. Automobile steering mechanism. 1,617,458; Feb. 15. Renault. Louis. (See Salves, Léon, assignor.) Renaux, Eugène P., Paris, France, assignor to Bendix Brake Company, Chicago, Ill. Servo-expanded brake. 1,629,532; May 24. Renaux, Eugène P., Paris, France, assignor to Bendix Brake Company, Chicago, Ill. Compound brake. 1,623,532; May 24. Rendleman, Norman C., Dormont, Pa. Monufacture of flanged beams with thin webs. 1,623,272; Apr. 5. Rendleman, Norman C., Dormont, Pa. Rolling flanged beams, 1,623,273; Apr. 5. Rendleman, Norman C., Dormont, Pa. Rolling flanged beams, 1,623,273; Apr. 5. (Rendleman, Norman C., Dormont, Pa. Rolling flanged beams, 1,623,273; Apr. 5. (Rendleman, Norman C., Dormont, Pa. Rolling flanged beams, 1,623,273; Apr. 5. (Rendleman, Norman C., Dormont, Pa. Rolling flanged beams, 1,623,273; Apr. 5. (Rendleman, Claude R., Texas City, Tex. Cut-off. 1,619,956; Mar. 8.

Mar. 8.
Renfro, Eugene H., Offerle, Kans. Mail box. 1,629,785:
May 24.
Renholdt, John E., Stratford, Conn. Control mechanism.
1,620,230; Mar. 8.
Renholdt, John E., Stratford, assignor to Dictaphone Corporation. Bridgeport, Conn. Speed-control mechanism.
1,625,093; Apr. 19.
Renick, Morris W. (See Kelty. Charles C., assignor.) Renick, Morris W. (See Keltyn. Simone and L. J.
Renna, Slumoe, Brokklyn, and L. Bran. Attachment for sewing machines. 1,636,758;
July 26.
Renner, Frank J., Madison, Wis., assignor, by messne assignments, to F. B. Smith, Washington, D. C. Radio-

July 26.
Renner, Frank J., Madison, Wis., assignor, by mesne assignments, to F. B. Smith, Washington, D. C. Radiograficonia, Beld, 728 Aug. 30.
Cardionals Beld, 728 Aug. 30.
Rennel, John A. (See Cooke, C. J., and Rennie.)
Reno, Leo, Flint, Mich. Lathe. 1,622,292; Mar. 29.
Renou, Frederick G., Caulfield, assignor to Australian Bitumenous Compounds Limited, Mchourne, Australia. Statistics, America, Mar. 20, 2008.
Rennel, Frederick G., Caulfield, Mchourne, Australia, Statistics, Mchourne, Australia, Carlotte, Mchourne, Carlotte, Mchourne, Mcharlotte, Carlotte, and Renshawa, Arnold. (See Fairbrother, T. H., and Renshawa)

Renshaw, Arnold. (See Fairorouse.)

Renshaw. Bartholomew, Glenbrook, Conn. Weaving narrow width ware and machine for carrying out such method. 1.622.542; Mar. 29.

Renshaw. Clarence, deceased, M. B. Renshaw, executrix, assignor to National Metal Molding Company, Pittsburgh, Pa. Oulet box. 1.038.510; Aug. 9.

Renshaw. Chrence.)

Renshaw. Chrence.)

Renshaw. Chrence.)

Renshaw. Chrence.)

Renshaw. Chrence.)

Renshaw. Chrence.)

Renshaw. Chrence.

Renshaw. Chrence.)

Renshaw. Chrence.

Jan. I. spin W. Harberthill, Mass. Card-index holder. Renischler, Harvey C. (See Marden, J. W., and Rentschler, Harvey C. (See Marden, J. W., and Rentschler, Harvey C. Wast Orange N. J., assignor

schlor.)
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company, High-frequency lamp, 1,616,001; Feb. 1.
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company. Treatment of vacuum devices to remove occluded gases therefrom. 1,616,431; Eab. 1

nischler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company, High-voltage electron device, 1,626,603; May 3.

Rentschier, Harvey C., and J. W. Marden, East Orange, N. J., assignors to Westinghouse Lamp Company. Tar. Rentschier, Harvey C., and J. W. Marden, East Orange, N. J., assignors to Westinghouse Lamp Company. Target for X-ray tubes. 1,625.427, 4pr. 19.
N. J., assignors to Westinghouse Lamp Company. Tenget, paring uranium in a coherent mass. 1,648.682; P. Rentschier, Harvey C., and J. W. Marden, East Orange, paring uranium in a coherent mass. 1,648.682; P. Rentschier, Mahlon J. Willoughby assignor, of anesthred

NOV. 15.
Rentschler, Mahlon J., Willoughby, assignor of one-third to W. R. Jeavons, Cleveland Heights, and one-third to to W. R. Jeavons, Mentro, Ohio. Refractory body and product Charles S. dee Tittemere, F. A., and Bennick. Charles S. See Tittemere, F. A., and Bennick.

wick.) enwick. Frederick W., Camden, N. J. Dial for radio apparatus. 1,637,051; July 26. enz., George H., Newark, N. J. Game. 1,637,278;

Renz, George H., Newark, N. J. Game. 1,637,278; July 26.
Renz, Joseph P., Brooklyn, N. Y., Attachment for sheeting machines. 1,642,746; Sept. 20.
Renzo, Francesco, Paterson, N. J. Shuttle-tension device. 1,647,542; Nov. 1.
Renzulli, Francesco, Newark, N. J. Vehicle bumper. 1,622,056; Mar. 22.
Reo Motor Car Company. (See Jeffries, Schuyler A., assignor).

Reo Motor Car Company. (See Jeffries, Schuyler A, assignor.) acropage & (See Brown, L. H., and Repass.)
Repass, Theodore, Los Augeles, Calif. Separable connecter for sectional containers and supports.
1,648,591; Nov. 8.
Repenstein-Veeder Co. (See Blum, Sidney J., assignor.)
Replitura Corporation, The. (See Brixey, Austin D., assignor.)

Resignor., Replogle, Frederick G., et al. (See Replogle, Ulysses U., assignor). Replogle, John R., assignor, by mesne assignments, to Electric Refrigeration Corporation, Detroit, Mich. Valve mechanism. 1,615,406; Jan. 25.
Replogle, John R., assignor to Electric Refrigeration corporation, Detroit, Mich. Carlon, apparents. 1,634,628; July 5.
Replogle, John R., assignor to Electric Refrigeration Corporation, Detroit, Mich. Damper for ventilator openings. 1,652,216; Dec. 13.
Replogle, Ulysses G., assignor of forty one-hundredths to H. E. Jaquette, twenty-five one-hundredths to F. G. Replogle, Ulysses G., assignor of forty one-hundredths of H. E. Jaquette, twenty-five one-hundredths to F. G. Replogle, Hundredth and the Company of the Co

Republic Flow Meters Co. (See Cunningham, Arthur B., assignor.)
Republic Rubber Company The (See McVincen Company)

Rubber Company, The. (See McKinney, Carlos

Republic Rubber Corporation, The.
Harold F., assignor.) (See Dumbleton,

Harold F., assignor.)

Re Qua, Frederick L., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Regulation of electric circuits. 1,625,282; Apr. 19.

Reschew William F., Wichita, Kans. Shock absorber for oil-well pump rods. 1,638,213; Aug. 9.

Reschke, William F., Wichita, Kans. Gearing for oil-well pump rods. 1,638,213; Aug. 9.

Reschke, William F., Wichita, Kans. Gearing for oil-well pump rods. 1,638,213; Aug. 9.

Reschke, William F., Wichita, Kans. Gearing for oil-well pump rods. 1,638,213; Aug. 9.

Reschke, William F., wichta, Kans. Gearing for oil-well pump rods. 1,638,213; Aug. 9.

signor)
Resek, Marc. (See Chadwick, L. S., Resek, and Dahl-strom.)

Resek Marc, East Cleveland, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio. Thermostatically-controlled water-heating system. 1.621,601;

Mar. 22.
Reshaw, George O. Cory, Colo. Fruit-packing device.
1.617.963: Feb. 15.
Resines, Francis J., assignor to By-Products Recovery
Company, Philadelphia, Pa. Refining oils: 1,619.486;

Company, Financipular, Mar. I. Respess, William R., St. George, N. Y., assignor, by mesne assignments, to Brandes Laboratories, Inc., Newark, N. J. Acoustic horn. 1.646,707; Oct. 25.
Respro Inc. (See Abbort, Royal K, assignor, Bestrin, Clement, Hatboro, Pa. Fiber packing, 1.625,095; Apr. 19.
1.025,095; Apr. 19.
1.025,085; Apr. 19.
1.025,085; Apr. 19.
1.025,085; Apr. 10.
1.025,085; Ap

ester. Henry E., and G. B. Werekley. Be Locomotive railway attachment for tractors. Feb. 15.

Feb. 15.
Retallack, John B., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Testing device for testing register senders, 1,628,997; May 17.
Retriedal, Olaf, and N. J. Nelson, Minneapolis, Minn. Ellipsocraph, 1,644,205; Oct. 4.
Rettremeyer, Francis X., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. System for wave analysis, 1,626,436; July 19.
Retterer, Ray W. (See Murphy, F. K., and Retterer.)

Retterer, Raymond W. (See Murphy, F. K., and Rettern,)
Rettig, Max R., Koenigsberg, assignor to Festbaukasten
Gesellschaft mit beschränkter Haftung, Berlin, Germany Froducing models of bulldings and the like.
Rettman, Mike F., Kimberly, Wis. Door holder.
1,650.654; Nov. 29.
Retz, Andrew J., assignor, by mesne assignments, to
R. Hoe and Co., Inc., New York, N. Y. Guard for
planing machines and the like. 1,630.671; May 31.
1,622,508; Mar. 29.
Reubel, Henry, Company. (See Crawford, James O., assignor.) Reiziar, John, Omaha, Nebr. Window fastener. 1,622,908; Mar. 29.

Reubel, Henry, Company. (See Crawford, James O., assignor.).

Reubeus, Emmanuel, Washinton, D. C. Check protector. 1,627,619; May 10.

Reuleke, Charles F., Philadelphia, Pa. Hat protector. 1,622,611; Feb. 2.

L022,612; Apr. 26.

Reuss, Arthur E., Cincinnati, Ohio. Radiocabinet. 1,616,229; Feb. 1.

Reuter, John, Jr., Dickinson, N. Dak. Golf club. 1,616,038; Jan. 18.

Reuther, Howard J. (See Reuther, John and H. J.)

Reuther, John and H. J., East Aurora, N. Y. Dispensing Reutier, Philip A., assignor to Scovill Manufacturing Company, Waterbury, Conn. Combined refill and puff holder. 1,614,055; Oct. 4.

Rever, Willing Company, Conn. Combined refill and puff holder. 1,614,055; Oct. 4.

Rever, Willing Company, Conn. Combined refill and puff holder. 1,614,055; Oct. 4.

Rever, Willing Company, Conn. Combined refill and puff holder. 1,614,055; Oct. 4.

Rever, Willing Company, Conn. Combined refill and puff holder. 1,614,055; Oct. 4.

Rever, Willing Company, Conn. Combined refill and puff holder. 1,614,055; Oct. 4.

Rever, Willing Company, Conn. Combined refill and puff holder. 1,614,055; Oct. 4.

Rever, Willing Company, The. (See McGavack, John, assignor.) signor.)
Revo Manufacturing Co., The. (See Custenborder, John M. assignor.) Revo Manufacturing Co., The. (See Custembour, Stomm. assignor.)
Revolutionary Oil Well Tool Company. (See Dougherty, Charles T., assignor.)
Rewett, Carl J., Los Angeles, Calif. Chain wrench. 1,643,825, Sept. 27. of one-third to A. Slavin and one-fact, Charles C., Stommer C., Carles C., assignor.)

x Manufacturing Company. (See Hull, Matthew R., Rex Ma. Manufacturing Company. (See Hull, Robert W., as-Signor.)

Rex Manufacturing Company. (See Hull, M. R., and Money, assignors.)

Rex Manufacturing Company. (See Miller, F. V., and Crawford, assignors.)

Rex Manufacturing Company. (See Patten, Charles H., Rex Bandard Rex Basignor.)

Rasignor, Sc C. (See Hontz, Harry E., assignor.)

Rex, Ralph K., Cleveland Obio. Finger-nail trimmer.

1,629,967, May 24.

Rex Research Corporation. (See Hedenburg, Oscar F., Active Control of the Control of the

1630,927; July 26.
Rheinische Gumml-und Celluloid-Fabrik. (See Beyler, Albert, assignor.)
Albert, assignor.)
Fabrik Gesellschaft mit beschränkter Haftung. (See Schällkopt, Karl. assignor.)
Rheinische Metallwaaren und Maschinenfabrik. (See Kernen et alle assignor.)

Reynolds, Eugene, Albuquerque, N. Mex. Demountable rim. 1.630.630; May 31. Reynolds, Pernol D. Serval B. E. W., and Reynolds, Reynolds, Prank D. Sen Bend, Ind., assignor to Bendix Brake (Company, Chicago, Ill., Brake shoe. 1,642.558; Sept. 13.

Reynolds, Frederick D., et al. (See Frink, Melvin L., assignor.)

Reynolds Oas Regulator Co. (See Gaunt, F., Reynolds, and Hughes, assignors.)

511 Reynolds, George A., Syracuse, N. Y. Exercising apparatus. 1641,355; Sept. 6.

Reynolds, George W., Los Angeles, Calif. Lamp-post. Des. 73,194; Aug. 2.

Reynolds, H. M., Shingle Company. (See Judkins, Orlo Reynolds, H. M., Shingle Company. (See Judkins, Orlo Reynolds, H. M., Shingle Company. (See Judkins, Orlo Reynolds, Henry W., and R. H. Jenkins, Roanoke, Va., assignors to Nathan Manufacturing Company, New York, N. Y. Oli cap. 1,613,432; Jan. 4.

Wilson assignor of his entire right of Reynolds. Beam and Joist chair. (1615,561; Jan. 25.

Reynolds, James W., and C. L. Ball, Chester, Nebr. Rall spike. 1,621,027; Mar. 15.

Reynolds, John, assignor to Butler Mill, New Becford, Mar. 25.

Reynolds, John, assignor to Butler Mill, New Becford, Mar. 25.

Reynolds, John, assignor to Eutler Mill, New Becford, Mar. 25.

Reynolds, John, assignor to Eutler Mill, New Becford, Mass. 27. Pattern mechanism for dobbles. 1,622,345; Mar. 25.

Reynolds, John J., New York, N. Y. Food product. 1,647,649; Nov. 1.

Reynolds, Joseph H., Bristol, Tenn. Automatte gluing machine for applying paper to wood. 1,620,570; Mar. 8.

Reynolds, Joseph S., Long Beach, Calif. Rotary scraper with automatic elevating control. 1,642,826; Sept. 20.

San Francisco, Calif. Hydraulic unit. 1,636,488; July 19.

Reynolds, Moore M., Dawmont, W. Va. Gas-separating exprolés. Reynolds, George A., Syracuse, N. Y. Exercising apparatus. 1,641,355; Sept. 6.
Reynolds, George W., Los Angeles, Calif. Lamp-post. Des, 73,199; Aug. 2. signor.)

Reynoids Spring Company. (See Van Hove, Desire H.,
assignor.)

Reynoids Spring Company. (See Webster, Benjamin C.,
assignor.)

Reynoids Spring Company. (See Zimmer, Paul H., assignor.)

Reynoids, Sydney W. (See Bainbridge, G. K., and Reynolds.)

Reynoids, Thomas G., Tororto. Ontario, Canada. Informotion tag case. 1,644,150; Oct. 4.

Reynoids, William A., assignor to The Ohio Rubber Company. Cleveland, Ohio. Bulb for hydrometer syringes.
Des. 73,147; July 26.

Reynoids, William B., and W. E. Jackson, Fort Worth,
assignors of one-tent to S. Morgan, Greenville, Tex.

Reynoids, William B., and W. E. Jackson, Fort Worth,
assignors of one-tent to S. Morgan, Greenville, Tex.

Reynoids, William G., Grandview, Manitoba, Canada.
Printing machine. 1,625,595; Apr. 26.

Reynoids, William G., Grandview, Manitoba, Canada.

Printing machine. 1,625,595; Apr. 26.

Reynoids, William H. (See Trullinger, H. A., and Reynolds.) Rhind, Hugh M. (See Questel, W. L., and Rhind.)
Rhinelander, Harry W. Palembang, Sumatra, East
Indies, Oil-well jack. 1622,4677 Mar. 29.
Rhoade, Max. et al. (See Watter, Michael, assignor.)
Rhoades, Almer W. (See Smith, A. M., and Rhoades,
Rhoades, Alonzo E., assignor to Draper Corporation,
Hopedale, Mass. Battery feed for looms. 1,814,209;
Rhoades, Alonzo E. assignor.

Hopedale, Mass. Battery feed for looms. 1,614,209; Jan. 11.
Rhoades, Alonzo E., assignor to Draper Corporation, Hopedale, Mass Quick-acting warp stop mechanism for Market and M

dell, Sidney B., assignor.)

Rhode Island Braiding Machine Company. (See Thomas, Rhode Island Braiding Machine Company.)

Rhode, Lewis W. (See Eckles, Noble, assignor.)

Rhode, Lewis W. (See Eckles, Noble, assignor.)

Rhode, Lewis W. (See Eckles, Noble, assignor.)

Rhodes, James W., Harris, Mo. Grease cup. 1,631,158;

Rhondes, Lewis T., Mont Clare, P., assignor to New York Coll Company, New York, N. Fixed condenser.

1,026,356; Apr. 26.

Rhondes, Warren A., Shreveport, La, and T. C. McKinley, Charleston, W. Va., assignors to The Libbey-Owens 1,631,763; June 7.

Rhondes, Horry E., assignor to The Willys-Overland Company, Toledo, Ohio, Fuel heater for internal-combustion engines. 1,623,441; Apr. 5.

Rhondes, Horry E., assignor to The Willys-Overland Company, Toledo, Ohio, Fuel heater for internal-combustion engines. 1,623,441; Apr. 5.

Rhondes, Jesse B., La Jolla, Calif. Making ornamental candles. 1,622,347; Mar. 29.

Rhondes, Joses B., La Jolla, Calif. Making ornamental candles. 1,622,347; Mar. 29.

Rhondes, John R., Boyertown, Pa. Automobile headlight with the standard of the standard candles. 1,622,347; Mar. 29.

Rhodes, Arnold N., Rocky Point, N. C. Door-locking mechanism. 1,622,837; Apr. Engine La Making ornamental candines. 1,639,968; Aug. 23.

Rhodes Eret O, assignor, by mesne assignments, to Jay B., Rhodes Company, Kalamazoo, Mich. Dispensing receptacle. 1,648,029; Good, England. Press for drawning hollow ware of sheet metal. 1,629,833; May 24.

Rhodes, Ener O, assignor, by mesne assignments, to Jay B., Rhodes Company, Kalamazoo, Mich. Dispensing receptacle. 1,648,029; Good, England. Press for drawning hollow ware of sheet metal. 1,629,839; May 24.

Rhodes, Charles J., Wakefield, England. Mechine for flanging and seaming sheet-metal receptacles. 1,648,470; Sept. 27.

Rhodes, Hampton P., assignor, to Rhodes Master Packing Company, Houston, Tex. Forming metallic packing. 1,629,651; May 17.

Rhodes, Hampton P., assignor, to Rhodes Master Packing Company, Houston, Tex. Forming metallic packing. 1,629,651; Jul

F. assignor.)

Rhodes-Hochriem Manufacturing Co. (See Hochriem, Gustav F., assignor.)

Rhodes, Jay B., Company. (See Rhodes, Bert O., assignor.)

Rindes, Jay B., Company. (See Rindes, Bet U., 88-Rhodes, John J., assignor of one-half to F. M. Gordon, South Hamilton, Mass. Hook bracket. 1,625,745; Apr. 19.
Rhodes Manufacturing Company. (See Rhodes, Marcus H., assignor to Rhodes Manufacturing Rompany.) (See Rhodes, Marcus H., 1014,492; Jan. 18.
Rhodes Master Packing Company. (See Rhodes, Hampton P., Rhodes, 1,621,301; Apr. 26.
Rhodes, Russell I., North Attleboro, Mass. Jewelry-box Rhodes, 1,621,301; Apr. 26.
Rhodes, Russell I., North Attleboro, Mass. Jewelry-box Rhodes, Russell I., North Attleboro, Mass. Jewelry-box Rhodes, Russell I., North Attleboro, Mass. Jewelry-box Rhodes, Mussell I., North Attleboro, Mass. Box and making the same. 1,645,403; Oct. 11.
Rhodes, William A., New York, N. Y., assignor to American Telephone and Telegraph Company. Thermal Rinch, Henry J., assignor to G. Waldref, St. Paul, Minn. Power take-off device. 1,639,812; Aug. 23.

Rial, Samuel B., Tempe, Ariz. Fan. 1,641,904; Sept. 6. Rial, Wirt D. (See Black, J. C., Rial, and Howes) tital, Wirt D., and E. W. Gard, Wilmington, Calif. Preparing an adsorbent for oils. 1,634,514; July 5. Ribert D. 1,000 and the control of the

Riccia, Angelo D., Brussels, Belgium. Transforming machine with symmetrically subdivided flux for the control of traction motors or the like. 1,646,066; Oct. 18.

Oct. 18.

Rice, Arthur R., Toronto, Ontario, Canada. Electric switch. 1,639,533; Aug. 16.

Rice, Charles M., St. Louis, Mo. Identifying tag. Rice, Charles M., St. Louis, Mo. Identifying tag. Rice, Chester W., Schenectady, N. Y., assignor to General Electric Company. Sound-reproducing apparatus. 1,631,646; June 7.

Rice, Chester W., Schenectady, N. Y., assignor to General Electric Company. Radio receiving system. 1,640,427; Aug. 30.

Rice, Clarence L., and T. B. Wilkinson, Laurel, Miss, Lumber-marking machine 1,618,845; Feb. 22. Rice, George E., Brooklyn, N. Y., assignor to Conservation Corporation of America. Treating, impregnating, seasoning, and stabilizing wood. 1,650,738; Nov. 29. Rice, George E., and C. L. Simmons, Brooklyn, N. Y., assignor to Conservation Corporation of America. Combination treating tank and dry kiln. 1,643,174; Sept. 20.

Rice, Georg

Combination treating tank and dry kiln. 1,643,174; Sept. 20.

Rice, George L., and L. E. Whitcomb, assignors to International Harvester Company, Chicago, III. Piling machine, 1,653,311; Dec. 20.

Rice, Hong G., Chicago, III. Holder for socket-wrench sets. 1,649,615; Nov. 15.

Rice, John, 19, Faston, Pa. Dump car. 1,613,122; Jan. 4, Rice, John, ir, Faston, Pa. Dump car. 1,613,122; Jan. 4, Rice, John, jr, Faston, Pa. Dump car. 1,613,122; Jan. 4, Rice, John A., assignor of two-fifths to J. F. Rice, two-fifths to M. B. Solomon, and one-fifth to J. H. Gesing, Cleveland, Ohio. Closure fastener. 1,618,353; Feb. 22.

Rice, John W., Jr., Bordentown, N. J., assignor, ground the property of the property

Cigartic Carlotte, Mo. Dustpan. 1,000,000.

Rice, William C., Holden, Mo. Dustpan. 1,000,000.

Rice, William R. (See Smith, E. R., Rice, and Jackson.) Rice, Willia B. (See Anderson, J. W., and Rich.) Rich, David, assignor of one-half to J. W. Hendrickson, Spooner, Wis. Nut lock. 1,634,629; July 5. Rich, Elmer A., Ir., Chicago, Ill., assignor to the Ameri-Rich, Electrical Carlotte, Spooner, Wis. Nut lock. 1,634,629; July 5. Rich, Electrically welded valve tappet. 1,628,911; May 17.

Rich, George R., Battle Creek, Mich. Liectrically-welded valve tappet. 1,628,911; May 17.

Rich, George R., Estitic Creek, Mich. Valve tappet and mich. George R., Estitic Creek, Mich. Valve grinder. 1,650,389; Nov. 22.

Rich, George R., Battle Creek, Mich. Apparatus for and Rich, George R., Battle Creek, Mich.

Rich, George R., Battle Creek, Mich. Apparatus for and making composite metal articles by are welding. 1,651,647; Dec. 6.
Rich, H. A., et al. (See Smith, Charles F., assignor, Rich, Malcolm N. (See Marden, J. W., and Rich,)
Rich Manufacturing Company, The. (See Mott, Carl W., assignor).

assignor.)

assignor.)
Rich & McLean, Inc. (See Ireland, Charles B., assignor.)
Rich-Sampliner Knitting Mills Company. (See Sampliner,
Samuel S., assignor.)
Rich, Theodore A., East Lynn, Mass., assignor to General Electric Company. Electric measuring instrument.
1.632,623; June 14.
(See Jardine, Robert, assignor.)

Richard, Charles D., West New Brighton, assignor to West ern Electric Company, Incorporated, New York, N. Y., Synchronizing mechanism. 1.637.161; July 26.
Richard, Charles D., West New Brighton, and G. T. Morris, assignors to Western Electric Company, Incorporated, New York, N. Y. Coll with multiple adjust the company of the company o

Richardson, Albert S., and C. V. Conley, assignors to The Son.) and Albert S., and C. V. Conley, assignors to The Procter & Gamble Company, Cincinnati, Ohio. De-Procter & Gamble Company, Cincinnati, Ohio. De-Procter & Gamble Company, Cincinnati, Ohio. De-Procter & Gamble Company, Carlot Marchardson, Alian S., Butte, Mont. Reenforced air hose. 1,635-957; July 12. Richardson Ball Bearing Skate Company. (See Salberg, Gustave R., assignor.) Skate Company. (See Whitcomb, Henry F., jr., assignor.)
Richardson & Boynton Company. (See Gilbert, Maxwell F., assignor.)

F., assignor.)
Richardson, Carrie E., Simpsonville, S. C. Toy. 1,633,496;

Richardson, Carrie E., Simpsonville, S. C. Toy. 1,633,496; Junc 21. Richardson, Charles M., and Z. E. Sargisson, Akron, Ohloassignors to The B. F. Goodrich Company, New York, N. Y. Apparatus for reeling strip material, 1,624,183; Apr. 12. Richardson, Charles P., trustee. (See Ford, R. H., Richardson, Greenabaum, and Priest, assignors.) Richardson, Chester A., San Francisco, Calif. Refrigerator car. 1,643,471; Sept. 27.

Richardson, Clarence C., Long Beach, Calif. Apparatus for removing solid matter from rotary mud. 1,647,310; Nov. 1. Richardson Company, The. (See Fisher, Harry C., as-

signor.)
Richardson Company, The. (See Lukens, Alan R., as-

Richardson Company, The. (See Morris, Warren A., assignor.) Richardson Company, The. (See Trefzger, Herbert, assignor.)
Richardson Corporation. (See Ferree, Harry L., as-

signor.)
Richardson, David W., Princeton, N. J. Radio antenna
system. 1,620,231; Mar. 8.
Richardson, De Soto E., Riverside, Wash. Fruit picking
and thinning device. 1,642,311; Sept. 13,
Richardson, De Soto E., Riverside, Wash. Weeding and
cultivating implement. 1,645,115; Oct. 11.
Richardson, Edward A., Mansield, Mass. Cleat.
Richardson, Edwin F. (See A'Hearn, F. M., 2nd RichRichardson, Edwin F. (See A'Hearn, F. M., 2nd Rich-

Richardson, Ernest, Beaver Falls, Fa. Water-closet struc-ture. 1,636,649; July 19. Richardson, Ezra N., Detroit, Mich. Marking mechanism for planters. 1,635,435; July 12. Richardson, Frank C., et al. (See Duncan. Charles H., assignor.)

Michardson, Frank C., et al. (see Dunche, Charles H., assignor.)
Richardson, Frederick E., Manchester, Iowa. Rake. 1,621,276; Mar. 16. Manchester, Iowa. Corn pop-Richardson, Frederick B. Manchester, Iowa. Corn pop-Richardson, Gordon, New York, assignor of one-fourth to P. J. Eder, Forest Hills, N. Y. Manufacturing barium sulphide. 1,648,870; Nov. 8.
Richardson, Goshen S., Sydney, assignor to Nupeg (Australia) Limited, Waterloo, Sydney, New South Wales, Australia. Clothes peg. 1,615,725; Jan. 25.
Richardson, Henry, Chicago, Ill. Corner lock for bed-steads. 1,617,865; Feb. 15.
Steads. 1,617,865; Feb. 15.
Steads. 1,617,865; Feb. 16.
N. Y. Electrical connecting unit. 1,639,310; Aug. 16.
Richardson, Henry K. (See MacRae, D., and Richardson.) Richardson, Henry K., East Orange. N. J., assignor to Westinghouse Lamp Company. Affixing coatings on in-candescent-lamp filaments. 1,624,071; Apr. 12.
Richardson, Horace G., San Antonio, Tex. Asphalt spreader. 1,642,747; Sept. 20.
Richardson, Horatio A. (See Fontaine, R. A., and Self, assignors).

assignors.]
Richardson, James A., Halkirk, Alberta, Canada, Shocker. 1,632,043; June 14.
Richardson, James D., assignor to The Die Cast Art Berlandson, James L., assignor to The Die Cast Art Des., 72,031; Feb., James L., Shore and Carlon Shore Machinery Corporation, Paterson, N. J. Shoe and method for use in the manufacture thereof. 1,618,729; Feb., 22.
Lawrence, Louisville, Ky. Railway-car side bearing, 1,645,871; Oct. 18.
Richardson, Myron H., Chicago, Ill. Windmill. 1,614,804; Jan. 18.

Richardson, Myron H., Chicago, and A. E. Gebert, Wil-mette, assignors to Advance Machine Company, Chi-cago, Ill. Check-controlled lock. 1,624,980; Apr. 19. Richardson, R. R., et al. (See Nesmith, Samuel D., as-

cago, Ill. Check-controlled lock. 1.624,980; Apr. 19. Richardson, R. R., et al. (See Nesmith, Samuel D., assignor.) Richardson, Raymond B., Cape Charles, Va. Wheel guard for railway cars. 1.612,944; Jan. 4. Speed governor. Richardson, Rodney G., Chicago, Ill. Speed governor. Richardson, Rodney G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. Re16,602; Apr. 19. Richardson, Rodney G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. Re16,602; Apr. 19. Richardson, Rodney G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,627,939; May 10. Richardson, Rodney G., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,629,533; May 24. Richardson, Rodney G., assignor to Automatic Electric Inc., Chicago, Ill. Sellamy, Brookfield, assignors, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Party-line automatic telephone system. 1,640,157; Aug. 23. Richardson, Rodney G., Chicago, and J. I. Bellamy, Brookfield, assignors, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Party-line automatic telephone system. 1,640,157; Aug. 23. Richardson, Rodney G., Chicago, and J. I. Bellamy, Brookfield, assignors, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Party-line automatic telephone system. 1,645,662; Oct. Resured-service telephone system. 1,645,662; Oct. Resured-

Richardson, Willard D., Columbus, Ohio. Method and apparatus for burning clayware. 1628.273; May 10. Richart, Joy J. (See Hoferer, Daniel W., assignor.) Riche, Jacob P., Kansas City, Mo. Support for metal trays. 1,647,665; Nov. 1.

Riches, Charles H., Toronto, and C. W. Aird, Brantford, assignors to The Brantford Oven & Rack Co. Limited, Brantford, Ontario, Canada. Baking oven. 1,637,427;

Branton, Joseph Aug. 2.

Aug. 2.

Richey, Albert E., Fairview, assignor to The Fisit Rubber Company, Chicopes Falls, Mass. Cutting device for calenders. 1,651,837; Dec. 6.

Richey, George H., Boston, Mass., assignor to Sullivan Machinery Company. Broaching tool. 1,631,693;

Machinery Company. Broaching tool. 1,631,693; June 7. Richey, Thomps R., Atlanta, Tex. Highway safety device. 1,626,627; May 3. Richhelmer, Isaac D., New York, N. Y. Coffee maker. 1,613,483; Jan. 4. Richie, James K., Butler, Pa. Postal scale. 1,622,924; Mar. 29.

Mar. 29.
Richie, Joseph D., Casper, Wyo. Chain connecter.
1.648.507: Nov. 8.
Richian, Joseph D., Calif. Power driven brush.
Richman, Solomon, Laurel Hill, assignor to National Enameling and Stamping Company, New York, N. X.
Stirrer for barrels. 1,621.277; Mar. 15.
Richmond Bewerage Machine Corporation. (See Patterson, John L., assignor.)
Richmond Fireproof Door Company. (See Hewitt, Walter

Electric bell. 1,633,288; June 21.

Richmond Piston Ring Co. (See Booker, Richard A., assignor.)

Richmond, Robert Y., Paisley, Scotland. Machine for casing dental parts and the like. 1,644,543; Oct. 4.

Casting dental parts and the like. 1,644,543; Oct. 4.

Richmond, Samuel L., Balboa, Canal Zone, Panama. Dry storage. 1,649,752; Nov. 15.

Richmond, Samuel L., Balboa, Canal Zone, Panama. Dry Richmond, Vinceut C., and G. H., Scott, Cardington, England. Mooring gear for airships. 1,619,680; Mar. 1.

Richmond, Vinceut C., and G. H., Scott, Cardington, England. Mooring gear for airships. 1,619,680; Mar. 1.

Richmond, Waldemar S., Buffalo, N. Y. Electric speed-regulating apparatus. 1,616,230; Feb. 1.

Richmond, Fred C., Rochester, N. Y. Eaves-trough hanger. Richsto Manufacturing Company. (See Richards, Charles II., assignor.)

Richter, Aifred, Doberitz, near Berlin, Germany, assignor to A. G. für Handels- und Industriewerte Glarus, Glarus, Switzerland. Refrigerating apparatus of the Richter, August F., Watertown, and F. A. Augsbury, Ordensburg, assignor to Richter Manufacturing Company, Watertown, N. Y. Method and apparatus for treating fiber. 1,658,446; Dec. 20.

Richter, George A., assignor to Richter Manufacturing Company, Watertown, N. Y. Method and apparatus for treating fiber. 1,658,446; Dec. 20.

Richter, George A., assignor to Richter Manufacturing Company, Watertown, N. Y. Method and Robert Manufacturing Company, Watertown, N. Y. Method and Apparatus for treating fiber. 1,658,446; Dec. 20.

Richter, George A., assignor to Richter Manufacturing Company, Berlin, Stephen Company, Berlin, Steph

Richter, Garl H., assignor to recurse the pany. Chicago, Ill. Banjo and the like. 1,636,244; July 19. Richter. George A., assignor to Brown Company, Berlin, N. H. Cooling and utilizing the hot content of relief Rose from sulphic discreters. 1,640,000 Compony, Berlin, N. H. Process of and apparatus for treating fiber. 1,632,802; June 21. Richter, George A., assignor to Brown Company, Berlin, N. H. Producing white pulp of high strength. 1,635,637; July 12. Richter, George A., assignor to Brown Company, Berlin, Aug. 2. Making sulphite cooking liquor. 1,637,353; Aug. 2.

natt, Ohlo, Lines-marking machine, Aldekter, Sept. 13.
Richter, John W., Chicago, Ill., assignor to Western Flectife Company, Incroporated, New York, N. Y. Feeding device, 1872,832, June 21.
Richter Manufacturing Company, (See Richter, Carl H.,

Richter Manuactung assignor; assignor; Richter, Morten B., Copenhagen, Denmark. Device for counting electrical impulses. 1,615.884; Feb. 1. Richter, Paul C., assignor to The Yule & Towne Manufacturing Company, Stanford, Conn. Trolley construction. 1,646,217; Oct. 18.

Richter, Paul F., Newark, N. J. Chord-controlling means for instruments of the lute type. 1,652,797; Dec. 13. Richter, Robert, Berlin-Friedenau, assignor to the Firm Optische Anstalt C. P. Goerz Aktiengesellschaft, Friedenau, anear Berlin, Germany. Lens attachment for Richter, Walter E., Wauwatoss, assignor to A. O. Smith Corporation, Milwankee, Wis. Cushloned spring-hanger connection for automobile frames. 1,643,258; Sept. 20. Richter, Wilhelm, Berlin, Germany. Instrument for electric ionic medication. 1,652,327; Dec. 13. Rick, Edward L., Los Angeles, assignor to Dunn Manufort. 25. Company, Oxnard, Calif. Elevance. 1,646,981; C. Rick, Gerorge A., Woodhwen, assignor to A. G. Spalding Rick, Gerorge A., Woodhwen, assignor to A. G. Spalding Rick, Gerorge A., Woodhwen, assignor to A. G. Spalding Rick, George A., Woodhwen, assignor to A. G. Spalding Rick, George A., Woodhwen, assignor to A. G. Spalding

Oct. 25.

Oct. 25.

Rick, George A., Woodhaven, assignor to A. G. Spalding & Bros., New York, N. Y. Shoulder pad. 1,631,694;

June 7.

Rick, George, New York, N. Y. Snounce, & Bros., New York, N. Y. Snounce, T. June 7.

June 7.

Rick, Rudolph A., Rhinelander, Wis. Refrigerator-door construction. I,654,094; Dec. 27.

Ricken, Charles B., assignor of one-half to G. M. Ketcham, fr., Brooklyn, N. Y. Adjustable door jamb, 1,614,318; Jan. II.

Ricken, Charles B., assignor of one-half to G. M. Ketcham, Erooklyn, N. Y. Concealed inclosure. 1,630,906; May 31.

Ricken, Charles B., assignor of one-half to G. M. Recensum-Brooklyn, N. Y. Concealed inclosure, 1,630,906; May 31.
Rickenbacher, Adolph, Los Angeles, Calif. Doorstop, 1,613,806; Jan. 11.
Ricker, Chester S., Indianapolis, Ind. Change-speed Ricker, Hester C., Indianapolis, Ind. Change-speed Ricker, Maurice E., Kalons, Iowa. Leakless cream-can iid. 1,618,730; Feb. 22.
Ricker, Morman H., assignor to Humble Oll and Refining Company, Houston, Tex. Scismograph, 1,625,625; Apr. 19.
Rickets, William I., Crofton Park, England. Electrical condenser, 1,622,052; Mar. 22.
Rickets, William I., Crofton Park, England. Electrical Condenser, 1,622,052; Mar. 12.
Rickets, William I., Crofton Park, England. Electrical Condenser, 1,622,052; Mar. 12.
Rickets, Fred. (See Reid, R. G., Bates, and Ricks.) Ricks, Fred. (See Reid, R. G., Bates, and Ricks.) Ricks, Fred. Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Blank-pre-Machinery Corporation, Paterson, N. J. Blank-pre-Son, N. J. Sæwing machine, 1,631,385; June 7.
Ricke, Fred, and E. G. E. Burgoyre, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Sawing machine, 1,631,385; June 7.
Ric-Wil Company, The (See Fichter, J. B., and Crouch, assignors.)

assignoss, in the test returner, J. B., and Crouca, Richards and Crouca, Riddell, John T., Evanston, Ill. Inflatable ball. 1,613,677; Jan. 11. Riddell, John T., Evanston, Ill. Athletic shoe. 1,642,827; Sept. 20. Riddell, Katherine J. (See Fullington, William H., as-Riddell, Katherine J. (See Fullington, William H., as-

Riddell, Ratherme v. signor.)
Riddell, William A., Frederick, Md. Separating or classifying machine. 1,647,815; Nov. 1.
Riddell, William A., Frederick, Md. Separating or classifying machine. 1,647,816; Nov. 1.
Riddell, William A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic shutter casing.

Hiddell, William A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic shutter casing. 1.616,925; Feb. S. Signor to Eastman Kodak Company, Rochester, N. Y. Photographic shutter. 1.629,534; May 24. Riddell, William A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic shutter. 1.629,534; May 24. Riddell, William A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic shutter. 1.644,920; Oct. 18. Riddie, Carlton, assignor to The McNeil Boller Company, Akron, Ohio. Digester. 1,639,613; Aug. 16. Riddie, Daniel W., Maywood, Calif. Truck stake and mounting therefor, 1,639,670; Aug. 25. S., assignor.)

Riddle, Edward N., Company, The. (See Crower, Frank S., assignor) R. (1998) R. (2008) R. (2008) R. (2008) R. (2008) Riddle, Frank H., assignor to Champion Porcelain Com-pany, Detroit, Mich. Porcelain. 1,631,695; June 7. Riddle, John, assignor to Telegraph Construction and Maintenance Company. Limited, London, England, Galvanometer and like recording instrument. 1,526,694;

Riddle Process Company. See Mode, 2009.
Ridenout Martin C., assignor of one-sixth to T. M.
Ridenout and one-sixth to M. L. Ridenout, Kingwood,
W. Va. Steering connecting rod for automobiles.
1,628,914; May 17.

Ridenour, Minnie L., et al. (See Ridenour, Martin C., assignor.) Ridenour, Thomas M., et al. (See Ridenour, Martin C., assignor.) Rideout, Arthur E. (See Kimball, W. D., and Rideout.) Rideout, Arthur E. (See Kimball, W. D., Rideout, and McFaull.)

McFaull,

Rideout, Arthur E. (See McFaull, M., and Rideout.)

Rider, Douglas. (See Morgan, J. S., and Rider.)

Rider, Douglas. (See Morgan, J. S., and Rider.)

Rider, George F., Chicago, Ill. Ring or similar article of

jewelry. Des. 73.010; July 5.

Rider, Graville S., New York, assignor to Lock-Stub.

Check Company, Incorporated, Brooklyn, N. Y. Check

dispensing machine. 1,637.10; Aug. 2.

Rider, Herbert E., assignor to E. L. Hall, New York, N. Y.

Insulator. 1,620,392; Mar. S.

Rider, Herbert E., New York, N. Y., assignor to D. Gray,

Portland, Me. Heat Indicatoor. 1,652,838; Dec. 13.

Ridge Manufacturing Company. (See Ridge, Isaac L.,

assignor: Os.

Ridge Mandhacturing Company. (See Ridge, Issae L., assignor.) Ridge, William F., Akron, Ohio. Windshield cleaner. 1,615,915; Feb. 1. Ridgely Heater Company. (See Ridgely, William W., assignor.)

Ridgely Heater Company. (See Ridgely, William W., assignor.)
Ridgely Trimmer Company The. (See Davidson, William W., assignor.)
Ridgely Trimmer Company The. (See Davidson, William W., assignor.)
Ridgely Heater Company, Scranton, Ph. Heater Lake, assignor, by mesne signaturate, to Eidgely Heater Company, Scranton, Ph. Heater. 1,648,622; Nov. 8.
Ridgway, Ellis B. (See Ridgway, William H., assignor.)
Ridgway, Harry W., Denver, Colo. Safety support for brake beams. 1,653,417; Dec. 20.
Ridgway, William H., assignor to W. H. and E. B. Ridgway, William H., assignor to W. H. and E. B. Ridgway, William H., assignor to W. H. and E. B. Ridgway, William H., assignor to E. B. Ridgway, William H., assignor to E. B. Ridgelder, Harry C., Minneapolis, Minn. Cooling device for Ridger, Harry C., Minneapolis, Minn. Humidifer. 1,650,739; Nov. 29.
Ridley, Grahame B., assignor to D. B. Ward, San Francisco, Calif. Desiccator. 1,619,765; Mar. I. and Francisco, Calif. Desiccator. 1,619,765; Mar. I. Riebe, Johannes, New York, and A. Primassing, Bronx-ville, N. Y. Pipe-bowl cleaner. 1,649,487; Nov. 15.
Rieck, Hugh W., Roosevelt, Tex. Goat and sheep coat. 1,612,945; Jan. 4.

1.612.945; Jan. 4.

Rieck, William A. J., Tyler, Tex. Spring shackle structure. 1.621.028; Mar. 15.

Riedel, Augustus I., Savannah, Ga. Scrubbing machine. 1.636.437; July 19.

Riedel, Augustus I., Savannah, Ga. Scrubbing machine. 1.636.437; July 19.

Riedel, Walter W., assignor, by mesne assignments, to Deico-Remy Corporation, Dayton, Ohio. Engine-starting apparatus. 1.638.214; July 9.

Riedelman. Christine. Oakland, Calif. Bedpan and pad. 1.639.419; Nov. 15.

Riedinger, Edward, Bloomfield, N. J. Brake mechanism.

Riggel Arrors H. Niles, Ohio. Making sheet-metal landers. 1,45,5071. Oct. 18.
Riegel, Samuel S., Scranton, Pa., assignor, by mesne assignments, of one-half to J. H. Allen, Jørsey (City, N. J. Passenger-car waste-transfer apparatus. 1,613,848; Jan. 11.

Riegel, Samuel S., Scranton, Pa., assignor, by mesne assignments, of one-half to J. H. Allen, Jersey City, N. J. Passenger-car waste-transfer apparatus. 1,613,849; Jan. 11.

Jan. 11.

Riegel, Samuel S., Scranton, Pa., assignor, by mesne assignmente, of one-half to J. H. Allen, Jersey Clif. Passenger-car waste-transfer apparatus. Passenger-car waste-transfer apparatus. Riegel, Samuel S., Scranton, Pa., assignor, by mesne assignments, to J. H. Allen, Jersey City, N. J., Railway-vehicle ash or other waste transfer method and apparatus. 1,625,429; Apr. 19.

Rieff, John G., London, Wis. Milking stool. 1,652,639; Dec. 12.

Richl, Frederick W., Yonkers, N. Y. Headlight for motor vehicles. 1,628,193; May 10.
Richl, Robert, St. Louis, Mo. Vehicle wheel. 1,633,606; June 28.

Riehm, Wilhelm, assignor to the Firm: Maschinenfabrik Augsburg - Nuernberg Aktiengesellschaft, Augsburg, Germany, Two-stroke internal-combustion engine. 1,629.535; May 24

1,629,535; May 24
Riehm, Wilhelm, assignor to the Firm; Maschinenfabrik
Augsburg-Nuernberg Aktiengesellschaft, Augsburg,
Germany, Double-acting two-stroke internat-combustion
Regine, 1,632,934; June 21.
Riek, Rudolph A., Rhinelander, Wis. Refrigerator door,
1,633,236; June 21.
Riek, Rudolph A., Rhinelander, Wis. Refrigerator,
1,633,236; June 21.

Rieke, Theodore W., Chicago, Ill., assignor, by mesne assignments, of one-half to A. Schroeder and one-half tainers. 1,651,632; Dec. 6. Onlo. Pitting for con-tainers. 1,651,632; Dec. 6. Onlo. Pitting for con-titude of the control of the control of the tire. 1,633,999; June 28. Rieser, William, Newark, N. J. Tool for marking tiles, 1,619,091; Mar. 1.

1.619,091; Mar. 1. Rieske, Edward L., Dayton, Ohio. Traction sheave, 1,653,062; Dec. 20. Riesner, Michael, Cincinnati, Ohio, assignor to Worthing-ton Pump and Machinery Corporation, New York, N. Y. Mechanism for automatically controlling the unloading valves of air compressors for a plurality of pressures. 1,615,039; Jan. 18.

Varies of air compressor.

1,615,039; Jan. 18.

Riesner, Michael, Cincinnati, Ohio, assignor to Worthington Fump and Machinery Corporation, New York, N. Y. Cylinder and plunger arrangement for high-pressure compressor.

Riesner, Michael, Carlatt, St. 19.

Riesner, Michael, Cincinnati, Ohio, assignor to Worthington Fundament Michael, Compressor. 1,636,439; July 19.

Riesner, Michael, Cincinnati, Ohio, assignor to Worthington Fump and Machinery Corporation, New York, N. Y. Compensating air compressor. 1,636,440; July 19.

Rietner, Rudolph, (See Ulich, Harald E. and W. E., and Rietzel.) Rife, Urlah L., Sound Beach, Conn. Key protector. 1,643,494; Sept. 27.

Rife, William C., Toledo, Ohio. Fishing reel. 1,648,824; Nov. 8.

Nov. 8.

Nov. 8.

Rigby, Albert, assignor of one-half to P. Diamond, Paterson, N. J. Loom. 1,625,156; Apr. 19.

Rigby, Charles, Cincinnati, Ohio. Golf club. 1,613,360; Rigby, Charles, Cincinnati, Ohio. Golf club. 1,634,082; June 28.

Rigby, Charles, Cincinnati, Ohio. Golf club. 1,634,887; July 5.

Rigby, John, New Bedford, Mass. Bag holder. 1,637,131; July 26.

July 26.

Righy, Thomas, London, England, Manufacture of cement, 1,628,000; May 10.

Rigg, Gilbert, (See Gepp, H. W., Hey, Rigg, Stevens, and Williams,)

Riggle Automatic Train Control Company, (See Riggle, Thomas M., assignor.)

Riggle, Loo J., Monroe, Wis. Apparatus for developing picture films, 1,645,452; Oct. 11.

Riggle, Loo J., Monroe, Wis. Apparatus for developing picture films, 1,645,452; Oct. 11.

Riggle, Thomas M., assignor to Riggle Automatic Train Control Company, Oakland, Calif. Automatic train Riggles, John W. (See Rowley, J. S., Riggles, and McCully, Soft Survey, Washington, assignor to Western Riggs, Sorges, Port Washington, assignor to Western

Cully)

Riggs, George, Port Washington, assignor to Western Electric Company, Incorporated. New York, N. Y. Testing system. 1,635.782; Dec. 277.

Riggs, Homer C., and C. C. Harris, assignors to Rodney Hunt Machine Company, Orange, Mass. Piling machine. 1,613.196; Jan. 4.

Riggs, James (See Hull. John W., assignor.)

Riggs, Michael G., Mishawaka, Ind. File holder, 1,618,604; Feb. 22.

Righter, James B., River Falls, Wis. Cushion lift for shors, 1,650,466; Nov. 22.

R. 1,550, Jan. 1, 1,507,461, N. Y. Trolling spoon. Des. Rightnou, Charles H., et al. (See Scutchall, William E., assignor.)

assignor.)
Rigney, William, Irvington, N. J. Self-adjusting watergauge connection. 1,620,692; Mar. 15.
Rigsby, John P., Essington, Pa., assignor to Westinghouse
Electric and Manufacturing Company. Auto stop governor. 1,621,084; Mar. 15.
Rihosek, Johann, Vienna, and R. L. Leuchter, WeldlingauHadersdorf, assignors of one-half to the Firm Gebrüder
Hardy Maschinenfabrik und Glesserei Aktien Gesellby-stop dingle-chamber alr-pressure brakes. 1,652,876;
De. 13.
De. Chierry, M. S. S. K. Service, machine.

Dec. 13.

Rikonen, John, Chicago, III, Self-service machine, 1,629,536; May 24.

Riis, Oscar J. C., Copenbagen, Denmark, File for receiving loose sheets, magazines, and the like. 1,614,991; Jan. 18.

Riise. John, Doylestown, Ohio. Shock insulator. 1,650,045; Nov. 22.

Riise, John, Doylestown, Ohio. Motor vehicle. 1,635,388; July 12.

Rilse, John, Doylestown, Ohio. Motor shock-insulating means. 1.642.697; Sept. 20. Rike Folding Box Company, The. (See Klin, John R.,

assignor.) Rike, Frederick F., assignor to Buckeye Iron and Brass Works, Dayton, Dho. Fill box. 1654-095; Dec. 27, Works, Dayton, Dho. Fill box. 1654-095; Dec. 27, D

lley, Francis B., Newton Highlands, assignor to Hey-wood-Wakefield Company, Boston, Mass. Apparatus for producing fabric of nonfaccid strands. 1,647.311;

Riley, James R. (See White, A. D., and Riley.) Riley, John F. (See Smallman, William H. M., as-

signor.)
Riley, Lester S., Reading, Mass. Machine for making corner mounts. 1,627,667; May 10.
Riley, Louis H., and C. O. Wood, Fellows, Calif. Tubing bleeder. 1,639,004; Aug. 16.
Riley, Lynn G., and H. R. Meyer, Wilkinsburg, and H. H. Johnston. Edgewood Park, and J. M. van Nieukerken, Wilkinsburg, Pa., assignors to Westinghouse Ellectric & Manufacturing Company. Control apparatus. 1,627,340; May 3.

Manufacturing Company. Control apparatus. 1,627,340;
May 3.
Riley. Lynn 6, Wilkinsburg, A. H. Candee, Forest Hills, and M. F. Jones, Wilkinsburg, Pa., assignors to Westingthouse Electric & Manufacturing Company. Control apparatus. 1,640,565; Aug. 30.
Riley, Mirhael J., East Cleveland, Ohlo, assignor to The Machine for trimming blanding, Waterbury, Conn. Machine for trimming blanding, Waterbury, Conn. Hacking for the Hiller Rel6,522; Jan. 4.
Riley, Olga B., Koxboro, N. C. Detachable brace for plow handles. 1,612,834; Jan. 4.
Riley. Partick J., Cleveland, Ohlo. Oll container and pump. 1,655,661; Dec. 27.
Riley Relef S., assignor to S. Riley Stoker Corporation, Workester, Mass. Furnace-wall construction. 1,624,009; Apr. 12.
Riley, Robert S., assignor to S. Riley Stoker Corporation,

Worcester, Mass. Falley Stoker Corporation, Apr. 12.
Riley, Robert S., assignor to S. Riley Stoker Corporation, Worcester, Mass. Side-wall construction for furnaces. 1.624.803; Apr. 12.
Riley, Robert S., assignor to Riley Stoker Company, Worcester, Mass. Dumping mechanism for mechanical stokers. 1.651,468; Dec. 6.
Riley Stoker Company. (See Beach, D. K., and Taylor, Riley Stoker Company.) Stoker Company. (See Beach, David K., assignor Riley St Stoker Company. (See Harrington, Joseph, as-

signor.)
Riley Stoker Company. (See Taylor, I. A., and Rich,

assignors.)
Riley Stoker Corporation, (See Beers, Royce L., assignor.)
Riley Stoker Corporation, (See Beers, Royce L., assignor.)
Riley Stoker Corporation. (See Daniels, Fred H., assignor.) Riley Stoker Corporation. (See Dornbrook, Fred, as-

signor.) Riley-Stoker Corporation. (See Grahame, Dallas F., as-

Signor.)
Riley, S., Stoker Corporation. (See Riley, Robert S., assignor.)
Riley, S., Stoker Corporation. (See Taylor, Irving A., assignor.)

Riley, S., Stoker Corporation. (See Riley, Robert S., Issignor.)
Riley, S., Stoker Corporation. (See Taylor, Irving A., assignor.)
Riley, Thomas J., Philadelphia, Pa. Manually-propelled vehicle. 1,629,308; May 17. Park. Calif. Labricating Riley. Thomas J., Philadelphia, Pa. Manually-propelled vehicle. 1,629,308; May 17. Park. Calif. Labricating Riley. William K., Huntington J., Park. Calif. Labricating Riley. Rilliam K., Huntington J., Park. Calif. Labricating Rill. Rilliam K., Huntington J., Park. Calif. Labricating Rilliam K., Huntington J., Park. Calif. Labricating Rilliam J., Rilliam

Ringler, William A., Philadelphia, Pa., assignor to The Globe-Wernicke Co. Visible index. 1.641,293; Sept. 6. Ringrose, Henry T., Newark-on-Trent, England. Detecting, indicating, and recording the presence of imfam-length of the process of the presence of imfam-length of the present of the p

astrice. Des. 12,032; Feb. 1b. Algorithms, as-lipley, Melyin G., et al. (See Turver, William H., as-signs, Kurt, assignor to F. Pollak, Vienna, Austria, Manufacturing homogeneous glassille condensation products of urea and formaldehyde. 1,625,233; Apr. 19.

Paul W. (See McCoy, W. F., and Ripple.)

petoe, Curtis E., et un (See Smith, Robert C., as-guor.) George A., et al. (See Smith, Robert C., as-

Rippictoe, George A., et al. (See Smith, Robert C., assignor.)
Rippey, Hugh F., (See Davidson, G., Rippey, Cone, Laucks, and Banks).
River and Banks, Brown of D. I. F. Laucks, Inc., Seattle, Developed Conference of Seaten Producing crackers and the products of said process. 1,633,872; June 28.
Rippien, Waiter, Philadelphia, Pa. Lock guard. 1,618,846; Feb. 22.
Rippien, Waiter, Philadelphia, Pa. Hydrometer. 1,620,393; Mary S. Banks, Ridward V. Detroit Mich. assignor to The

Mar. 8, Rippinglile, Edward V., Detroit, Mich., assignor to The Grolan Manufacturing Company, Dayton, Ohlo. Liquid-level indicator. 1,630,023; May 24. Rippi, Charles H., East Cleveland, assignor to The Clark Controller Company, Cleveland, Ohlo. Overload device for alternating-current motors. 1,621,173; Mar. 15. Rippie, Pery H., assignor to The American Hardware Corporation, New Britain, Com. Doorcheck. 1,629,120; May 17.

Ripple, Pery H., assignor to The American Hardware Corporation, New Britain, Conn. Doorcheck, 1,629,120; May 17.

Rippy, Auctiv C., Amarillo, Tex. Snubber. 1,614,392; Rippy, Auctiv C., Amarillo, Tex. Cultivator attachment. 1,617,029; Feb. 8.

Risberg, Johannes V. M., Sodertelje, assignor to Aktiebolaget Baltic, Stockholm, Sweden. Self-adjusting centrifugal bowl. 1,624,117; Apr. 12.

Risdon Manufacturing Company, The. (See Beardsley, Risdon Manufacturing Company, The. (See Beardsley, Risdon Manufacturing, Company, The. (See Beardsley, Risdon; Merrill C., Oliton, Okla. Rotary drill connection. 1,650,301; Nov. 22.

Rising, Harry A., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Stock-fitting Ringery, Frank V., Lakewood, Ohlo. Burner. Re16,574; Margor, Frank V., Lakewood, Ohlo. Burner grid and making the same. 1,642,426; Sept. 13.

Risley, Eiton, Ventnor, N. J. Suction pipe. 1,631,761; June 7.

Riscompany, Chicago, III. Cap-feeding appliance. 1,615,040; Jan. 18.

Rissler, Albin P., assignor to Uhicago Raliway Equipment Company, Chicago, III. Brake beam and constructing the same. 1,624,509; Apr. 12.

Ritchey, Fark D., Poughkeepsle, and R. A. Holt, Wappingers Falls, assignors to Standard Gage Company, Inc., Poughkeepsle, N. Y. Adjustable pin gauge. 1,623,741; May 17.

Ritchie, W. C., & Company. (See Stock, Julius A., assignor) William G., Salt Lake City, Utah. Lifting jack. 1,618,550; Feb. 8.

Ritchie, William G., Salt Lake City, Utah. Meat-cutting machine. 1,633,692; Dec. 27.

Ritchie, William G., Salt Lake City, Utah. Lifting inck. 1,618,550; Feb. 8.

Ritchie, William G., Salt Lake City, Utah. Lifting machine. 1,633,692; Dec. 27.

Ritchie William D., et al. (See Gage, Charles H., assignor) Ritchey, William D., et al. (See Gage, Charles H., assignor) Ritchey, Lifting Marker Company. (See Ripper, Allen F., assignor) Ritchey, Lifting Marker Company. (See Ripper, Allen F., assignor) Ritchey, Lifting Marker Company. (See Ripper, Allen F., assignor) Ritchey, Lifting Marker Company. (See R

Rite Hardware Company. (See Kipper, Allen F., assignor.)
Riter, William D., et al. (See Gage, Charles H., assignor.)
Riter, William D., et. al., trustees. (See Gage, Charles H., assignor.)
Ritow, Herman, Chicago, Ill. Skate, 1,620,232; Mar. 8.
Ritow, Herman, Chicago, Ill. Slide rule. 1,632,505;
June 14.

Ritt, Michael J., Chicago, Ill. Engine-mounting means.

1.618,364; Feb. 22. jr., Cincinnati, Ohio. Combined signal lamp and supporting bracket for automobiles and other vehicles. Des. 73,098; July 19. Rittenhouse, Walter B. (See Fisher, H. II., and Rittenhouse, Walter B.

Dental Manufacturing Co. (See May, Adam J.,

Ritter Denta Manuacusus, assignor to Weatherproof Body Ritter, Frederick D., assignor to Weatherproof Body Corporation, Corunna, Mich. Door and curtain. 1.626,737; May 3. Ritter, George, Brooklyn, assignor of one-half to E. Mueller, Ridgewood, N. Y. Sausage hanger. 1,619,231;

lei, Ridgewood, N. Y. Saussige menger, Lycoput, Feb. 1.
Ritter, George, Perth Amboy, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa. Automatic Middle and measuring machine, 1,622,254; Mar. 22.
Ritter, George, Woodbridge, R. J., assignor to The Barber, 1,631,938; June Philadelphia, Pa. Flexible shingle, 1,631,938; June Philadelphia, Pa. Shingle, 1,640,806; Ang. 30.
Ritter, George, Woodbridge, N. J., assignor to The Rarber Asphalt Company, Philadelphia, Pa. Shingle, 1,640,806; Ang. 30.
Ritter, George F., assignor to The Tillotson Manufacturing Company, Toledo, Ohio. Carburetor, 1,632,198; June 14.
Ritter, Heinrich, Esslingen, assignor to the Firm Dr. Finckh Apparate-Gesellschaft m. b. H., Stuttgart, Germany, Food preserving jar. 1,623,754; App. 5.
Ritter, John C., Portland, Oreg. Cream scoop, 1,622,248; Mar. 29.

many.

Mitter, John C., Fortland, Oreg. Cream scoop.

Ritter, John G., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Contour.

Ritter, John G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Track structure. 1,650,960; Nov. 29.

Ritter, John G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Track structure. 1,650,960; Nov. 29.

Ritter, Julius, Pr., and M. Rasmussen, assignors to Hartmann Trunk Company, Racine, Wis. Automatic trunk lock. 1,613,056; Jan. 4.

Ritter, Julius, Pr., assignor to Hartmann Trunk Company. Ritter, Julius, Pr., assignor to Hartmann Trunk Company. Racine, Wis. Trunk Grawer attachment. 1,634,302: July 16.

mann Trunk Company, Racine, Wis. Automatic trunk lock. I,618,056; Jan. 4.
Het Child. F., assignor a Hertmann Trunk Company, Racine, Wis. Grunk drawer attachment. 1,634,302: July 5.
Ritter, Julius jr., assignor to Hartmann Trunk Company, Racine, Wis. Garment retainer. 1,648,195; Nov. 8.
Ritter, Julius, jr., and M. J. Wisby, assignors to Hartmann trunk Company, Racine, Wis. Drawer-locking device. 1,649,188; Nov. 15.
Ritter, Julius, jr., and M. Rismussen, assignors to Hartmann Trunk Company, Racine, Wis. Garment-hanger retainer. 1,652,640; Dec. 13.
Ritter, Julius, jr., and M. Rasmussen, assignors to Hartmann Trunk Company, Racine, Wis. Garment-hanger retainer. 1,652,641; Dec. 13.
Ritter, Helmrich. (See Petzold, G., and Rittner.)
Ritz, Charles C., Forest Hills, N. Z. Control for musicality, and the second process of the second p

Mar. 1.5.

Ritz Woller, Oliver C., Chicago, Ill. Combined lamp and license-plate holder or similar article. Des. 72,033; Feb. 15.

Ritz Woller, Oliver C., Chicago, Ill. Combined lamp and license-plate holder or similar article. Des. 72,034; Feb. 15.

Ritz Woller, Oliver C., Chicago, Ill. Combined lamp and license-plate holder or similar article. Des. 72,035; Feb. 15.

Feb. 15.

Ritz-Woller, Ollver C., Chicago, Ill. Fluid-pressure-operated device. 1,613,904; Jan. 11.

Ritzerfeld, Wilhelm, Berlin-Charlottenburg, Germany, Multiplying records. 1,645,380; Oct. 18.

Rivat, Googe, assignon'by mesne assignments, to Lyons Rivat, Googe, assignon'by mesne assignments, to Lyons Rivat, Googe, assignon'by mesne assignments, to Lyons Rivière, Ciercy, (Sec Chemet, L., and Rivière, Ciercy, (Sec Chemet, L., and Rivière, Ciercy, (Sec Chemet, L., and Rivière, Rivat, Caroline, 18.

Rivat, Frank, assignor of one-half to J. F. Siegel, New York, N. Y. Oll burner. 1,625,334; Apr. 19.

Rixdorff, Ragnar J., Paris, France, assignor to P. M. Charlotte, Chemet, C. (Sec Chemet, L., and C.)

Rixdorff, Ragnar J., Paris, France, assignor to P. M. Charlotte, C. (Sec Chemet, L., and C.)

Rixdorff, Ragnar J., Paris, France, assignor to P. M. Charlotte, C. (Sec Chemet, L., and C.)

Rixdorff, Ragnar J., Paris, France, assignor to P. M. Charlotte, C. (Sec Chemet, L.)

Rixdorff, Ragnar J., Paris, France, assignor to P. M. Charlotte, C. (Sec Chemet, L.)

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Rixdorff, Ragnar J., Paris, France, assignor to P. M. Charlotte, C. (Sec Chemet, L.)

Rixdorff, Ragnar J., Paris, France, assignor to P. M. Charlotte, C. (Sec Chemet, L.)

Rixdorff, Ragnar J., Paris, France, assignor to P. (Sec Chemet, L.)

Rixdorff, Ragnar J., Paris, Paris, Paris, Paris, P.

to hattery grids. 1.653,687; Dec. 20.

Riza, Will E., Nemo, Tex. Cotton harvester. 1.662,459; Dec. 13.

Rizer, Darl A., assignor of one-half to E. F. Stella, Los Angeles, Calif. Refrigerator. 1.640,252; Aug. 23.

Rizzo, Tricle, Schenettady, N. Y. Signal transmitter.

Roach-Appleton Manufacturing Company. (See Fischer, Albert C. assignor).

Roach-Appleton Manufacturing Company. (See Ginsburg, Henry, assignor).

Roach-Appleton Manufacturing Company. (See Ginsburg, Henry, assignor).

Roach-Appleton Manufacturing Company. (See Roscher, Emmett J. (See Meeker, J. A., and Roach.).

Roach, Thomas W., Seattle, Wash. Oll burner, 1,641,356; Sept. 6.

Roan, John M. (See Carney, Samuel E., assignor.)

Roan, Luther, Rives, Mo. Cable-operated conveyer. 1,620,785; Mar. 15.
Roark, Robert H., Waco, Tex. Lee-scoring machine. 1,644,396; Oct. 4.
Roark, Rutic C., Washington, D. C. Fumigant. 1,649,254; Nov. 15.
Roat, Harry A. (See Messinger, George M., assignor) of one of the conveyed of the

means for internal-combustion engines, 1,613,107; Jan. 4.
Robb, George W. (See Harrington, John H., assignor, Robb, James R., Oilton Okla. Adjustable bearing plate for wire-line pumping jacks. 1,652,048; Dec. 6.
Robb, John F., Cleveland, Ohlo, assignor to Kochring Chromatology, Cha

Waltham, Mass. Cylinder gauge. 1,619,370; Mar. 1, Robbins, George, Minneapolis, Minn. Coat. Des. 74,121; Dec. 20. Robbins, Isaac, Bayonne, N. J. Building block. 1,649,780; Robbins, Isaac, Bayonne, N. J. Building block. 1,649,780; Nov. 15. Robbins, Isaac, Bayonne, N. J. Building block. 1,649,780; Nov. 15. Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel-wool machine. 1,625,159; Apr. 19. Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel-wool removing machine. 1,625,159; Apr. 19. Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel-wool buffer. 1,638,98; 201 Sept. 19. Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel-wool buffer. 1,638,98; 201 Sept. 19. Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel-wool buffer. 1,638,98; 201 Sept. 19. Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel-wool buffer. 1,638,98; 201 Sept. 19. Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel-wool buffer. 1,638,98; 201 Sept. 19. Robbins, William H., Springfield, assignor. Robert & Co. (See Langkammerer, Karl, assignor.) Robert & Co. (See Langkammerer, Karl, assignor.) Rober (See Langkammerer, Karl, assignor.) Rober of the manufacture of chocolate clear-mays. Device for intermittently driving cigarette-many. Device for intermittently dr

Reverte Bris Company, The. (See Zannoth, Robert C., assignor, assi

Sept. 6.
Roberts, Earl W., assignor to The Roberts Brass Manufacturing Company, Detroit, Mich. Sprinkler. 1.647.582; Nov. 1.
Roberts, Edric M. (See Fowler, C. R., and Roberts, Edward F., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,614.982; Jan. 18.
Jan. 18.

Roberts, Edward H., Kansas City, Mo. Picture frame. 1.637.589: Aug. 2.

Roberts, Edwin C., San Diego, Calif. Fishing reel.

1,017,043; Feb. 15.

Roberts, Ellis, East Palestine, Ohlo. Building block.

1,623,442; Apr. 5.

Roberts, Ellis, East Palestine, Ohlo. Building block.

1,623,442; Apr. 5.

Roberts, Evin E., San Diego, Calif. Air buoy for bathers and the like. 1,617,723; Feb. 15.

Roberts, Evin E., San Diego, Calif. Air buoy for bathers and the like. 1,617,723; Feb. 15.

Roberts, Eugene, assignor to The Western States Machine Company, Sait Lake City, Utah. Screen for centrifugal baskets. 1,625,377; Apr. 19.

Roberts, Eugene, assignor to The Western States Machine Company, Sait Lake City, Utah. Backing for centrifugal baskets. 1,628,377; Apr. 19.

Roberts, Eugene, assignor to The Western States Machine Company, Sait Lake City, Utah. Centrifugal machine. 1,627,638; May 10.

Roberts, Frake City, Utah. Belt-tensioning device. 1,652,799; Dec. 33.

Roberts, Frake B., Anaheim, assignor of one-half to W. G. Huntington, Sawtelle. Calif. Stacking and conveying mechanism. 1,646,667; Oct. 18.

Roberts, Frake B., Dayton, assignor of one-half to W. G. Huntington, Sawtelle. Calif. Stacking and conveying mechanism. 1,646,381; Oct. 18.

Roberts, Frake B., Dayton, assignor of one-half to W. G. Huntington, Sawtelle. Calif. Stacking and conveying mechanism. 1,646,381; Oct. 18.

Roberts, Fred T., Yonkor, assignor to Paramount Rubber Consolidated Linc., Tuckahe, N. Y., Making both Consolidated Linc., Tuckahe, N. Y., Making hold Wester, Manuar Charles, M. W., Making hold Wester, Stacking, and Manuar Charles, M. S., Marker, A. (See Peralra, J. A., and Roberts, Pred T., Yonkers, assignor to Paramount Rubber Consolidated Inc., Tuckahe, N. Y., Making hold Wester, Manuar Charles, M. W., Making hold Wester, Manu

nism for tag-stringing machines and the like. 1,025,157; Apr. 19.
Roberts, Hugh L., Roanoke, Va. Drifting valve. 1,647,887; Nov. 1.
Roberts, John Greenwich, Conn. Detachable finger bowl. Roberts, John G., Deberts, John G., Dobbs Ferry, assignor to Western Electric Company, Incorporated, New York, N. Y. Loaded the Company, Incorporated, New York, N. Y. Loaded Roberts, John G., Dobbs Ferry, assignor to Western Electric Company, Incorporated, New York, N. Y. Transmitter. 1,650,740; Nov. 29.
Roberts, Joseph, Englewood, R. I., assignor, by mesne assignments, to Proctor & Schwartz, Juc., Philadelphia, Roberts, Kenneth A. (See Humphris, Frank, assignor,) Roberts, Kenneth A. (See Humphris, Frank, assignor,) Roberts, Kenneth A. (See Humphris, Frank, assignor,) Roberts, Millard J., Tohnawanda, N. Y. Gas burner. Roberts, Moltague, H., Englewood, N. J., assignor to Franklin Railway Supply Company, Locomotive-booster apparatus. 1,647,146; Nov. 1.
Roberts, Montague H., Englewood, N. Y., assignor to Franklin Railway Supply Company, Locomotive-booster apparatus. 1,647,146; Nov. 1.
Roberts, Montague H., Englewood, N. Y., assignor to Franklin Railway Supply Company, Locomotive-booster apparatus. 1,647,146; Nov. 1.
Roberts, Montague H., Englewood, N. Y., assignor to Franklin Railway Supply Company, Fower reverse Roberts Numbering Machine Company, (See Kern, Maximilian H., assignor).

Roberts Numbering Machine Company. (See Kern, Maximilian H., assignor.)
Roberts, Odin, Boston, Mass. Collar and cuff. 1,631,985;
June 14.
Roberts, Oren F., assignor to McGee Manufacturing Com-

Roberts, Oren F., assignor to McGee Manufacturing Company, Kansas City, Mo. Vending apparatus. 1,615,885; Feb. 1.
Roberts, Ovid E., jr., Washington, D. C. Manufacture of shaped articles of set plastic material. 1,628,807;

May 17 Roberts, Owen W. (See Spencer, C. E., and Roberts,) Roberts, Park D. (See Roberts, Webster M. and P. D.) Roberts, Roy W. (See Elmer, Frank E., and Roberts,) Roberts, Sarah, Oakland, Calif. Slipper. Des. 72.036:

Roberts, Roy W. 150e France.

Roberts and Schaefer Company. (See Arms, Ray W., asstreet.)

Roberts and Schaefer Company. (See Arms, Ray W., asstreet.)

Roberts Arms, Ray W., asstreet.

Roberts Thomas C., assignor, by mesne assignments, to
Dietaphone Corporation, New York, N. Y. Supporting
yillinatory structures. 1541 602: Sept. 6.

Roberts Thomas C., Long Beach, Calif. Automatic golfball tee. 1,637,537; Aug. 2.

Roberts, Thomas F., Peckham, London, England. Control of aeropianes and the like. 1,622,208; Mar. 22.
Roberts, Thomas H. (See Johnson, L. H., and Roberts.) Roberts, Thomas H. (See Johnson, L. H., and Roberts.) 1,644,895; Oct. 11.
Roberts, Uriah, Berryville, Ark. Advertising sign. Des. 73,580; Oct. 4.
Roberts, Walter S., Ormskirk, assignor of one-half to The Roberts, Walter S., Ormskirk, assignor of one-half to The Roberts, Walter S., Ormskirk, assignor of one-half to The Roberts, Walter S., Ormskirk, and J. H. Burton, Liverpool, assignors of one-third to The Railway Signal Company Limited, London, England. Traffic-control-ling apparatus for railways. 1,615,632, Jan. 25.
Roberts, Walter S., Ormskirk, and J. H. Burton, Liverpool, assignors of one-third to The Railways Signal Company Limited, London, England. Traffic-control-ling apparatus for railways. 1,615,632, Jan. 25.
Roberts, William E. (See Roberts, Fred T. and W. E.) Roberts, William E., Kenosha, Wis. Cuff link. 1,627,460; May 3.
Roberts, William T. B., Leicester, England, assignor to United Shoe Machinery Corporation. Paterson, N. J. Grading machine. 1,640,372; Jan. 30.
Roberts, William T. B., Leicester, England, assignor to United Shoe Machinery Corporation. Paterson, N. J. Machine for shaping uppers over lasts. 1,681,237; Sept. 6.

Machine for shaping uppers over mous anti-consequence of the consequence of the consequen

Robertshaw, George A., Greensburg, Pa. Valve. 1,001,038; Dec. 6.
Robertshaw, George A., and H. T. Hood, Greensburg, asRobertshaw Thermostat Company, Youngwood Ph. Electric thermostat: 1,638,410 Aug. 6.
Robertshaw Thermostat Company. (See Robertshaw,
G. A., and Hood, assignors.)
Robertson, Alexander D. (See Wilson, A. A., and
Robertson, Alexander D. (See Wilson, A. A., and
Robertson, Charles A., Jackson, Mich., assignor to
Montgomery Ward & Company, Chiengo, Ill. Governor
Robertson, Charles A., Jackson, Mich., assignor to
motor-vehicle road springs. 1,634,168; June 28.
Robertson, Edmond, Newport, Ky. Filter. 1,629,085;
May 17.
Robertson, H. H., Company. (See Beach, Edward F.,
assignor.)
Robertson, H. H., Company. (See Foung, James H., assignor)

Signor.)

Robertson, Harry C., Seattle, Wash. Power-operated window-cleaning device. 1.644.545; Oct. 4.

Robertson, Harry M., Lakewood, Ohio. Apparatus for burning or calcining materials. 1.621,222; Mar. 15.

Robertson, Harry M., Lakewood, Ohio. Apparatus for treating articles. 1.628,742; May 17.

Robertson, Harry M., Lakewood, Ohio. Kiln truck. Robertson, Harry M., Lakewood, Ohio. Apparatus for producing smoke. 1.644.693; Oct. 11.

Robertson, Henry A., Lakewood, Ohio. Prairie, Minn. Boat-anchor hoist. 1.625,871; Apr. 26.

Robertson, Henry E., et al. (See Broyles, John E., assignor.)

Robertson, James E., Dunedin, New Zealand. Lamp of motor vehicles. 1,633,064; Dec. 20
Motor vehicles. 1,633,064; Dec. 20
Robertson, James K., and S. Duerden, Whitehall, Bristol, England. Webfeeding mechanism. 1,617,419; Feb. 15. Robertson, John, Co. (See Jacobson, Conrad C., assigner.), Robertson, John, W. (See de Lugo, A., and Robertson,) Redit, Vancouver, British Columbia, Canada. Robertson, Neil, Vancouver, British Columbia, Canada. 1,622,610; Mar. 29.
Robertson, Robert A., Rocksprings, Tex. Water motor. 1,622,610; Mar. 29.
Robertson, Robert D., Windsor, Ontarlo, Canada. Losaing device. 1,620,039; Mar. 8.
Robertson, Robert H., Dunfermline, Scotland. assignor to Scars, Roebuck & Co., Chicago, Ill. Tablecloth. Robertson, Robert R., Evanston, Ill. Copying camera. 1,612,987; Jan. 4.
Robertson, Robert R., Evanston, Ill. Copying camera. 1,612,987; Jan. 4.
Robertson, Robert S. (See Bumstead, R. W., and Robertson).

Robertson, Robert S. (See Bumstead, R. W., and Robertson, Robertson, William, assignor to Lovell Manufacturing Company, Erie, Pa. Wringer, 1,629,736; May 24, Robertson, William H. (See Fuller, F. L., and Roberts-

son.)

Robertson, William H., Dayton, Ohio. Traveling conveyor. 1,625,501; Apr. 19.

Robertson, William H., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash register. 1,613,129; Jan. 4.

Robertson. William H., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,627,119; May 3.

Robertson. William H., assignor. by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,625,637; May 24.

Robertson, William H., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohlo. Cash register. 1,638,275; Aug. 9. Robertson, William W. (See Dacey, E. J., and Robert-

son.)
Robertson, William W., assignor to Crompton & Knowles
Loom Works, Worcester, Mass. Check for Axminsterloom needle motion. 1,651,549; bec. 6.
Robeson, Hawkins E., Garner, Tex. Railway motor car.
1,628,513; May 10.
Robeson-Rocchester Corporation. (See Schott, Howard H.,

Robeson-Rochester Corporation. (See Schott, Howard H., assignor.)
Robichaux, Hermogene, Franklin, La. Animal trap 1,616,334; Feb. 1.
Robillard, Godfrey N. (See Blackham, N. A., and Robil-

Robichaux, Hermogene, Franklin, La. Animal trap 1.616.334; Feb. 1.
Robillard, Godfrey N. (See Blackham, N. A., and Robillard, Godfrey N. Y. (See Blackham, N. Y. Casing for a loud speaker. Des. 73.758; Nov. 1.
Robin, Goseph E., New York, N. Y. Method and apparatus for fire protection in moving-picture machines. 1.619.957; Mar. 8.
Robin, Joseph E., New York, N. Y. Coordinating signaling system. 1.650.241 Oct. 11.
Godfrey County of the Coordination of Coordinating See Coordination of Coordina

Robinson, David. (See Willison, J., and Robinson.)
Robinson, David, assignor to National Malleable and Steel
Castings Company, Cleveland, Ohio. Coupler. 1,647,544;

Castings Company, Cleveland, Ohio. Coupler. 1,647,544; Nov. 1.

Robinson, Douglas G., Weymouth, assignor of one-half to W. S. Collins, London, England. Electrical Tuse. 1633,955; June 28.

1633,955; June 28.

1633,655; June 28.

1634,655; June 28.

1634,655; June 28.

1635,655; June 28.

1635,755; June 28

Robinson, Francis T., Brooklyn, assignor to Arkell Safety Bag Company, New York, N. Y. Bag or lining, 1,624,626; Apr. 12. Robinson, Franklyn P. (See Robinson, William F. and F. P.)

Robinson, Frederick, Seaforth, Ontario, Canada. Boller compound. 1,623,514; May 10.
Robinson, Frederick, Broblyn, R.Y. Spectacle or eye-Robinson, G. L., et al. (See McKenney, F. Y., and Cheney, assignors, Robinson, George A., Battle Creek, Mich., assignor to Pneumatic Seale Corporation, Ltd., Norfolk Downs, Mass. Compensator for carton conveyers. 1,636,014; Robinson, George O. (See Mitchell, D. W. and George O. (See M Robinson, George O. (See Mitchell, D. W., and Robin-

Robinson, George R., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,613,139; Jan. 4.
Robinson, George W., assignor of one-half to F. N. Dorland. San Diego, Colif. Piston. 1,645,256; Oct. 11.
Robinson, Grosvenor P., Summit, and W. T. Blackweil, Westfield, N. J.; sald Robinson assignor, by mesne assignments, to said Blackweil. Lighting fixture. 1,627,461; May 3.
Robinson, Harvey W., Lakemore, Ohio. Cord take-up. Robinson, Harvey W., New Orleans, La. Current motor. 1,631,647; June 7.
Robinson, Henry, Lyndhurst, N. Y. Vegetable-paring machine. 1,644,448; Oct. 4.
Robinson, Herbert W., West Bromwich, England. Manufacture of match-striking compositions. 1,640,224; Aug. 23.

Robinson, Herbert W., West Bromwich, Luguand Facture of match-striking compositions. 1,640,224; Aug. 23.

Aug. 23.

Robinson, Herbert W., Birmingham, and D. W. Parkes, Survey Bromwich, Braighand, Kemowal of tar acids from ammonia liquor and other liquors. 1,653,783; Dec. 27.

Robinson, Holton D., New York, N. Y. Cable squeezer. 1,642,508; Sept. 13.

Robinson, Ira L. (See Murphy, Ralph L., assignor.)

Robinson, Ira L. (See Robinson, John L., assignor.)

Robinson, J. L., Inc. (See Robinson, John L., assignor.)

Robinson, James. (See Prince-Smith, W., and Robinson, James.

gine frame. 1,646,931; Oct. 25.
Robinson, J. L., Inc. (See Robinson, John L., assignor.)
Robinson, James K. Jr., Altoona, Pa. Glass battery box. 1,629,969; May 24.
1,631,969; May 24.
1,629,969; May 24.
1,629,669; May 24.
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Jan. 11.

Jan. 12.

Jan. 14.

Jan. 14.

Jan. 15.

Jan. 16.

Jan. 1

Robinson. Samuel F., Columbus, Ohio. Curette. 1,628,275; May 10. Nampa, Idaho. Paint and plastic substance. 1,635,095; July 5. Robinson, Thomas, Babylon, N. Y., assignor to Anaconda Sales Company. Roofing element. 1,612,895; Jan. 4. Robinson, Thomas, Babylon, N. Y., assignor to Anaconda Sales Company. Roofing element. 1,638,7004; June 7. Robinson, Thomas, New York, N. Y. Protected metal Robinson, Thomas, New York, N. Y. Protected metal Robinson, Thomas, Selevitor, N. Y. Protected metal Robinson, Thomas, Salegior to Anaconda Sales Company, New York, N. Y. Protected metal Robinson, Thomas, Salegior to Anaconda Sales Company, New York, N. Y. Protected metal Robinson, Thomas B., Flindelphia, Ya. Gate or door Robinson, Thomas H. (See Bell, Charles E., assignor.) Robinson, Thomas H., (See Bell, Charles E., assignor.) Robinson, Thomas H., (See Bell, Charles E., assignor.) Robinson, Thomas H., (See Bell, Charles E., assignor.) Robinson, Weed. (See Willtington, L. E., and Robinson, Homson, Welliam H., (See Bulle, Allen M., assignor.) Robinson, William H., (See Duffle, Allen M., assignor.) Robinson, William H., (See Duffle, Allen M., assignor.) Robinson, William H., (See Hirsb.) J. E. and Robinson, Bonaiel B., Cicco, assignor to Kellogg Switch-Bolinson, William H., Sparta, Ill. Combined feeder and waterer for poultry. 1,614,394; Jan. 11. Robson, Arthur D. (See Hirsb.) E. and Robson. (Berence E., Philadelphia, Pa. Making roller Roby, Sheldon Company, Meriden, Conn. Automatic dipping machine. 1,628,431; May 10. Roby, J. J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J., et al. (See Roson, Samuel C., assignor.) Roby, J.

Nov. I.

Rochas, Marcel, Parls, France, assignor to David Crystal,
Inc., New York, N. Y. Dress, Des. 73,011; July 5.

Roche, John, Hoboken, N. J., assignor to American Lead
Pencil Company. Process and apparatus for marking
articles. 1,619,487; Mar. 1.

Roche, Phoebe M., Cleveland, Ohio. Mop. 1,619,040;
Mar. 1.

Rochefort, François, Paris, France. Apparatus for dis-tributing fuel. 1.614.493; Jan. 18. Rochefort, François, Paris, France. Fuel-injection de-vice for internal-combustion engines. 1,616.335;

vice for internal-combustion engines. 1,616,335; Feb. 1.
Rochester Germicide Company Inc. (See Crowell, Clarence Pen, assignor)
Rochimologies of Company inc. (See Crowell, Clarence Pen, assignor)
Rochette, Henry C. (See Bennett, M. H., and Rochette, Henry C. (See Bennett, M. H., and Rochette, Henry C., assignor to Scovill Manufacturing Company, Waterbury, Conn. Relay 1,638,093; Aug. 9, Ročić, Ivan, New York, N. Y. Building wall and block construction. 1,644,035; Oct. 4.
Rock Asphalt & Construction Co. Inc. (See Bauer, Gus-Rock, George L., Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Insulating cores. 1,628,285; June 21.
Rockhestos Products Corporation. (See Mau, Edward A., assignor.)

A., assignor.)

A., assignor.)

Rocke. Edwin C., deceased. Bloomington, Ill.; J. Rocke, administrator. Adjustable drain board for wringers. 1,634,799; July S. (1634,799; July S. (16

Rockfeller, John W., ir., assignor to John Chatillon & Sons, New York, N. Y. Scale. 1,630,096; May 24. Rockfeller, John W., ir., assignor to John Chatillon & Sons, New York, N. Y. Spring scale. 1,636,708; July 26.

Rockforler, John W., fr., assignor to John Chatillon & Sons, New York, N. Y. Scale, 1,641,603; Sept. 6.
Rockenstire, Water C., Watervillet, N. Y. Uncoupling mechanism for railway cars. 1,618,605; Feb. 22.
Rockenstire, Water C., Watervillet, N. Y. Roller side bearing, 1,640,180; Nov. 15.
Rockford Drilling Macline Company. (See Stickney, Rockford Macline Tool Company.)

B., assignor.)

Rockford Steel Furniture Company. (See Faust, Levin, assignor.)
Rockford Steel Furniture Company. (See McClafferty, Harry J., assignor.)
Rock Island Plow Company. (See Heider, Henry J., assignor.)
Rock Island Plow Company. (See Kaupks, Lee H., assignor.)
Rock Island Stove Co. (See Mitchell, Leon W., as-

Rock Island
Signori, Signori, See Wood,
Rockland & Rockport Lime Corporation. (See Wood,
George E., assignor),
Rockley, Benjamin, Northport, Wash. Saw set. 1,613,199;
Jun. 3.

Signor.)

Rockland & Rockport Lime Corporation. (See Wood, George B., assignor.)

Rockley, Benjamin, Northport, Wash. Saw set. 1.613,199;

Rockwell, Byrd C., St. Joseph, Mo. Knife glue clamp. 1.619,989; Mar. 8.

Rockwell, Byrd C., St. Joseph, Mo. Knife glue clamp. 1.619,989; Mar. 8.

Rockwell, Edward A., New York, N. Y., assignor, by mesne assignments, to Stewart-Warner Speedometer Corpora
Rockwell, Forest A., Detroit, Mich. Pin-ball game device. 1.647,583; Nov. 1.

Rockwell, Harry J., Bellfower, Callf. Thermostatic gas regulator. 1.635,559; July 12.

Rockwell, Harry J., Bellfower, Callf. Thermostatic gas regulator. 1.635,559; July 12.

Rockwood, George O., Indianapolis, Ind., assignor to The Rockwood Manufacturing Company. Pulley construction. 1.613,905; Jan. 11.

Rockwood Manufacturing Company, The. (See Rock
Rockwood Manufacturing Company, The. (See Rock
Rockwood Sprinkler Company. (See Carlson, Hjalmar G., assignor.)

Rockwood Walter W., assignor of onehalf to A. R. Mellish, Chicago, Ill. Painting apparatus. 1,653,688; Dec. 20.

Rockwood Walter W., assignor of onehalf to A. R. Mellish, Chicago, Ill. Painting apparatus. 1,653,688; Dec. 20.

Rockwood Charles H. H., Versailles, assignor to Etablissements Ed. Jaeger, Paris, France. Construction of speed indicators. 1,926,697; May 3.

Rodanet, Charles H. H., Levallois-Perret, France, Construction of speed indicators. 1,926,697; May 3.

Rodanet, Charles H. H., Levallois-Perret, France, Condenter, String and winding mechanism for watches. 1,643,630; Sept. 27.

Rodanet, Charles H. H., Levallois-Perret, France, 2.

Rodanet, Charles H. H., Levallois-Perret France, 2.

Rodanet, Charles H. H., Levallois-Perret, France, 2.

Rodanet, Charles H. H., Levallois-Perret France, 2.

Rodanet, Charles H. H., Levallois-Perret France, 2.

Rodanet, Charles H. H., Levallois-Perret France, 2.

Rodanet, Charles

Rode, Frederich J., assignor to Marquette Tool & Manufacturing Co., Chicago, Ill. Die cushion. 1,644.086; Oct. 4.
Rodefeld, William H. (See Nickell, T. P., and Rodefeld,

feld.)
Rodenmeyr, Elmer C., et al. (See Clay, Frank, assignor.)
Roderburg, Jacob, assignor to Aachener MaschinenbauGesellschaft m. b. H., Aachen, Germanv. Riank-feeding
device for wireworking machines. 1,64,007; Aug. 30.
device 1,617,459; Feb. 15.
Roderick, Charles E., Battle Creek, Mich. Blood-testing
device. 1,613,553; June 7.
Roderick, Marcy B., Rutherford, N. J., assignor to W. E.
Brubaker & Ros. Company, Millersburg, Pa. Flue sheet
tool. 1,643,679; Sept. 27.
Roderok Ballast Car Company. (See Hindahl, David, asRoderok Ballast Car Company.)

Rodger Ballast Car Company. (See Hosceit, W. J., and Hindahl, assignors.) Rodger Ballast Car Company. (See Morey, William E.,

assignor.

Rodgers, Braxton F., Dallas, Tex. Gas cook stove.
1,630,039; May 24.

Rodgers, Braxton F., Dallas, Tex. Lap link. 1,651,909; Dec. 6.

Rodgers, Claude M., assignor to South Bend Bait Co., South Bend, Ind. Fishing bait. 1,638,215; Aug. 9.
Rodgers, Claude M., Portage Township, St. Joseph County, Ind., assignor to South Bend Bait Co. Artificial bait. 1,644,151; Oct. 4.
Rodgers, Daniel C., Canton, Ohio. Shock absorber. Bodgers, Dominick, Pittsburgh, Pa. Fan. 1,635,768; July 12.
Rodgers, Edward B., New York, N. Y. Valve construction for case engines. 1,621,485; Mar. 15.
Rodgers, Edward B., New York, N. Y. Valve construction for case engines. 1,621,485; Mar. 15.
Rodgers, Edward B., New York, N. T. Valve construction for case engines. 1,621,485; Mar. 15.
Rodgers, Radio Corporation. (See Fouryth, Robert, assignor.)
Rodgers, Radio Corporation. 4.
Rodgers, Thomas T., M. A. Giblin, F. K. and G. T. Moore, West Allis, Wis. Variable condenser. 1,621,379; Mar. 15.
Rodgers, Thomas T., M. A. Giblin, and F. K. and G. T. Moore, Milwankee, Wis., assignors to Rodgers Radio Corporation, West Allis, Wat Allis, Wis. Condenser. 1,623,360; Rodde, 2016, assignor to Svenska Aktiebolancet Mono.

Rodgers, Thomas T., M. A. Giblin, and F. K. and G. T. Moore, Milwaukee, Wis, assignors to Rodgers Radio Corporation, West Allis, Wis. Condenser. 1,623,360; Rodhe, Olof, assignor to Svenska Aktiebolaget Mono, Stockholm, Sweden. Continuously-operating gas-analyzing apparatus. 1,644,951; Oct. 11.
Rodino, Cono. (See Porsi, D. D., and Rodino.) Rodinond, Daniel A., et al. (See Milkewich, Wladimir Rodman, Balanche, administratrix. (See Rodman, Earl C.) Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Insulating liquid. 1,622,809; Mar. 29.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Preventinghouse Electric & Manufacturing Company. Preventinghouse Electric & Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Deoxinghouse Electric & Manufacturing Company. Deoxinghouse Electric & Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Deoxinghouse Electric & Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric Manufacturing Company. Burner. 1,645,294; Oct. 11.
Rodman, Clarence J., Wilkinsburg, Pa., assignor to Westinghouse Electric Manufacturi

Rodriguez, Celso J., Wells, Minn. Cultivating implement. 1.620,394; Mis u.S., Alfredo, Angiola, Calif. Hand fan. 1.620,394; Mis u.S., Celso J., Wells, Minn. Cultivating implement. 1.634,449; Oct. 4.
Rodriguez, Ramon, New York, N. Y. Sound-amplifying instrument. 1.634,349; July E. Rodriguez, Roberto, Detroit, Mich. Cold-air-supplying apparatus. 1.632,689; June 14.
Roe, Edwin O., New Bedford, Mass., and L. P. Frieder, New York, N. Y., assignors to National Spun Silk Co., Inc., New Bedford, Mass. Textile-colling machine. 1,630,718; May 31.
Company, Detroit, Mich. Air gun. 1.616,469; Feb. 8.
Roe, Evona S., Patchogue, N. Y. Hose attachment. 1.651,550; Dec. Roca, S., Patchogue, N. Y. Hose attachment. 1.651,550; Dec. Roya E., Elyria, Ohio. Bicycle. Des. 73,049; July 12.
Roe, Mayo E., assignor to The Colson Company, Elyria, Roe, Mayo E., assignor to The Colson Company, Elyria,

Rec. Book S. P. P. Richogue, N. Y. Hose attachment. 1.635.1850; Dec S. P. Richogue, N. Y. Hose attachment. 1.635.1850; Dec S. Roe. Mayo E., Elyria, Ohio. Bicycle. Des. 73,049; July 12.

Roe. Mayo E., assignor to The Colson Company, Elyria, Ohio. Caster mechanism. 1.636.325; July 15.

Roe. Mayo E., assignor to The Colson Company, Elyria, Ohio. Caster. 1.636.326; July 19.

Ohio. Caster. 1.636.326; July 19.

Roe. Mayo E., assignor to The Colson Company, Elyria, Ohio. Cycle. 1,636.327; July 19.

Roe. Mayo E., assignor to The Colson Company, Elyria, Ohio. Cycle. 1,636.327; July 19.

Roe. Mayo E., assignor to The Colson Company, Elyria, Ohio. Luralid chair and the like. 1,651.728; Dec. 6.

Roe. William C., Pittsburgh, Pa. Frequency changer. Roebel. Ludwig. Mannheim. Germany, assignor to Aktiengesellschaft Brown, Bovert & Cle., Baden, Switzerland. Machine-control apparatus. 1,632.417; June 14.

Roebel. Ludwig. Mannheim. Germany. Winding for electrical machines. 1,653.784; Dec. 27.

Roebeken, Carl B., Washington, D. C. Light-reflecting means. 1,621.024; Mar. 15.

Roebuck, Alfred L., Winchendon, Mass., assignor to General Box Company, Chicago, Ill. Box-securing means. 1,650.741; Nov. 29.

Roebuck, Alfred L., Winchendon, Mass., assignor to General Box Company, Chicago, Ill. Box-securing means. 1,650.741; Nov. 20.

Roebuck, Harold. (See Elliott, E., and Roebuck.)

Roedding, Gordon E. (See Doerr, F. H., and Roedding.)
Roedding, Gordon E., Grand Rapids, Mich. Wall pocket or
similar article. Des. 72,331; Mar. 28,181.
Roedding, Gordon E., Grand Rapids, Mich. Bottle-cap
ping device and the like. 1.648.030; Nov. 8.
Roeder, Berting of the Company of the Company of the Company of the Company.
Roeder, July, and W. Wellmann, Witten, Germany.
Roeding, George C. (See Beckman, John W., assignor.)
Roeding, George C. (See Beckman, John W., assignor.)
Roeding, Kurt, et al. (See Huetter, Andrew, assignor.)
Roeding, George C. (See Beckman, John W., assignor.)
Roeding, George C. (See Huetter, Andrew, Curtral, Belgin;
Shock, and Company of the Co Roeding, George U. (See Bueckman, John W., assignor.)
Roehil, Kurt, et al. (See Huetter, Andrew, assignor.)
Roehids, Adelson, Wacken, near Courtral, Belgingham Country, Marchael Company, Country, Belgingham Country, Cou

Rep. 1. Rogers, Charles P., and Company (Inc.). (See Albertine, Herman, assignor.) Rogers, Chester, Goin, Tenn. Leg holder. 1,635,638; July 12.

Rogers, Chester, Goin, Tenn. Leg holder. 1,635,638; July 12.
Rogers, Curtis E., Logan. W. Va. Pressure indicator and regulator. 1,632,051; Dec. 6.
Rogers, Donald G., Buffalo. Sasignov to National Aultine General Rogers, Donald G., Buffalo. Sasignov to National Aultine austic Husions. 1,644,493; Oct. 4.
Rogers, Donald G., Buffalo, assignor to National Aultine & Chemical Company, Inc., New York, N. Y. Manufacture of 2-minoanthraquinone. 1,644,494; Oct. 4.
Rogers, Blued C., Lockbort, N. Y. Cotton batting and making the same. 1,642,509; Sept. 13.
Rogers, Fluisheth M. (See Walker, Elizabeth M.)
Rogers, Elwood C. Indianapolis, Ind. Photographic enlarger. 1,633,225; June 2.N. J. Wheel or tire handling apparatus. 1,640,297; Aug. 23.
Rogers, Francis C. (See Callaban, J. J., and Rogers, Rogers, Francis C. (See Callaban, J. J., and Rogers, Rogers, Francis C. (See Callaban, J. J., and Rogers, Prancis C. (See Callaban, J. J., and Rogers, Prancis C. (See Danlel, Paul U., assignor.)
Rogers, Francis C. (See Danlel, Paul U., assignor.)
Rogers, Francis C. (Whiting, Ind., and R. E. Wilson, Chicago, Ill., assignors to Standard Oil Company, Whiting, Ind., and Chicago, Ill., Continuous distillation of crude petroleum oils. 1,615,407; Jan. 25.

72535-P-34

Rogers, Francis M., and Frank V. Grimm, Whiting, Ind., and Gerald L. Wendt, Chicago, Ill., assignors to Standard Oil Company, Whiting, Ind. Treating sludge acid. 1,630,074; May 24. Rogers, Fred B., et al., trustees, (See Rogers, Harry R.,

Rogers, Fred B., et al., trustees. (See Rogers, Harry R., assignor.) and A., Cardiff, Wales. Sound recording and reproducing machine. I.618,888; Feb. 22.
Rogers, Harold A., Cardiff, Wales. Gramophone record. I.632,318; June 14.
Rogers, Harrison W., New York, N. Y. Method and apparatus for piural recording and reproducing of sound. 1643,265; Oct. 11.
July 5.
Rogers, Harry R., chicago, Ill. Foot support. 1,634,516; July 5.
Rogers, Harry R., et al., trustees. (See Rogers, Harry R., assignor.)
Rogers, Harry R., assignor to H. R. and F. B. Rogers and W. A., Sarly Enview. Colo.; L. T. Martin, Kansas and W. A., Sarly Enview. Colo.; L. T. Martin, Kansas and W. A., Sarly Enview. Colo.; L. T. Martin, Kansas Lusk, Wyo. Boiler for carbon-black retorts. 1,644,152; Oct. 4. Accept W. A. Sharpe, Desiver, Colo.; L. T. Martin, Kansas City, Mo.; A. L. Miller, L. Johnson, and L. A. Galbreath, trustees of the Consolidated Producers Trust, Lusk, Wyo. Boiler for carbon-black retorts. 1,644,152; Oct. 4. Harry T., Chicago, Ill. Concrete-working tool. Rogers, Homer L., Hartwell, Ohio, assignor to The Philip Carey Manufacturing Company. System of track installation. 1,649,191; Nov. 15.
Rogers, Homer L., Basignor to Milwankee Air Power Pump Company, Milwankee, Wis. Pneumatic pump. 1,628,276; May 10.
Rogers, John F., Gecassed; A. R., Rogers, administrator, and the company of the com

signor.)
Rogers, William F., et al. (See Gallagher, Philip J.,
assignor.)
Rogers, William M., Whiteaville, Ky. Rallway ticket.
Rogers, William M., New York, N. Y. Nonrefillable-bottle
cap. 1,640,095; Aug. 23.
Rogers, William S., Van Buren, Ark. Horse collar.
1,642,427; Sept. 18.
Rogerson. Grace, assignor of one-third to O. Shank,
Assonville, Ind. Machine spring. 1,633,212; June 28.
Assonville, Ind. Machine spring. 1,633,212; June 28.
Rogerson. Grace, assignor to Norco Mfg. Co.,
Norco, Calif. Milk-bottle supporting and locking device. 1,635,346; July 12.
Rogginger, John. San Diego, assignor to Norco Mfg.
Co., Norco, Calif. (Lamping ring. 1,033,347; July 12.
Roggiue, Carl, Tegel, Germany, assignor to General Elec1,632,624; June 14 Gondenser plant for locomotives.
1,632,063; May 31.
Rogow, Sydney. (See Duncan, J. H., and Rogow.)
Rohan, Francis D., (See Frengle, F., and Rohan,
Rohan, Francis D., (See Frengle, F., and Rohan,

Roban, Francis 29, t. a. (1997) assignors, assignors, assignor to Champion Spark Plue Com-Robat, 0110 C., assignor to Champion Spark Plue 1,636,197; July 19, Robid, Paul, Berlin, Germany, assignor to Copercial Electric Company, Alternating-current commutator motor, 1,620,395; Jar. 8, Roben, Even J. (See Havir, A. H., and Fletcher, assignment, and the communication of the communication

Rohen, Even J. (See Havir, A. H., and Fletcher, assignors).
Rohlfing, John M., Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y.
Ladde elevator. 1.631,339; June 7.
Rohlfing, John M., Plainfield, N. J., assignor to American
Car and Foundry Company, New York, N. Y. Brake
for elevators. 1.631,340; June 7.

Rohlin, Karl W. (See Fitts, J. L., and Rohlin.) Rohm & Hass Company. (See Hollander, Charles S., as-signor.)

Rohm & Hass Company. (See Louisnoer, Charles S., assignor.)
Rohm & Haas Company. (See Lauter, Pelix, assignor.)
Rohm & Haas Company. (See Lauter, Pelix, assignor.)
Rohm, James X., nassignor of one-third to I. II. Ashman, Philipsburg, and one-third to J. B. Slipe, Pittsburgh, Pa. Rail tie. 1,650,235; Nov. 22.
Rohmer, Frank D., Lackawanna, N. Y. Combination lock. 1,627,462; May 3.
Rohmer, Gabriel E., New York, assignor to Andrews Lead Company, Inc., Long Island City, N. Y. Oxidizing Romer, Gabriel E., New York, R. X. Construction of Rohmer, Gabriel E., New York, N. Y. Construction of Rohmer, Gabriel E., New York, N. Y. Construction of Rohmer, Gabriel E., New York, N. Y. Construction of Rohmer, Gabriel E., New York, N. Y. Construction of Rohmer, Gabriel E., Palectric Company, (See Rohm, George F., assignor to George F. Rohn Electric Company, Milwaukee, Wis. Power cabinet. 1,642,698; Sept. 20.
Rohn, Wilhelm, Hanau-on-the-Main, Germany, assignor to

F., assignor.)
Rohn, George F., assignor to George F. Rohn Electric Company, Milwaukee, Wis. Power cabinet. 1,642,698; Sept. 20.
Rohn, Whelm, Hunahu-othe-Main, Germany, assignor to Rohn, Whelm, Hunahu-othe-Main, Germany, assignor to sistance mulle furnace. 1,619,292; Mar. S.
Rohne, Even J., Minneapolis, Minn. Electric frying pan. 1,629,737; May 24.
Rohne, Even J., Minneapolis, Minn. Electrically heated steam brush. 1,629,738; May 24.
Rohoit, Charles, Gee Hendi Ron. N. T., and Rohott, Bohott, Charles, Gee Hendi Ron. N. T., and Rohott, Rohott, Charles, Gee Hendi Ron. N. T., and Rohott, Hardy Maschinenfabrik und Giesserei, A. G., Vienna, Austria. Single-chamber air-pressure brake. 1,640,005; Aug. 30.
Rohott, Chris W., assignor to Indiana Lamp Corporation, Chris W., assignor to Indiana Lamp Corporation, 11.
Rohr, Louis N. (See Wilkins, J. M., and Rohr.).
Rohrbach, Adolf, Charlottenburg, Germany. Wing construction for metal airplanes. 1,619,372; Mar. 1.
Rohrbach, Adolf, Charlottenburg, Germany. Wing for 10 habbach, Adolf, Berlin-Wilmersdorf, Germany, Method and device for the increase of floating stability of airplanes. 1,619,374; Mar. 1.
Rohrbach, Adolf, Berlin-Wilmersdorf, Germany, Method and device for the increase of floating stability of airplanes. 1,619,374; Mar. 1.
Rohrbach, Adolf, Berlin-Wilmersdorf, Germany, Method and device for the increase of floating stability of airplanes, 1,619,374; Mar. 1.
Rohrbach, Adolf, Berlin-Wilmersdorf, Germany, Method and Gevice for the large as a season of the Moore Shoe Company, St. Louis, Mo. Shoe. 1,628,743; May 17.
Rohrey, Jhn D., assignor to United States Asbestos Company, St. Louis, Mo. Shoe. 1,628,743; May 17.
Rohrey, Jhn D., assignor to United States Asbestos Company, Manheim, Pa. Friction lining and making the same. 1,640,373; Aug. 50.

Röhrich, Curt, Magdeburg, Germany. Ruler. 1,614,044; Jan. 11.
Rohrke, Hugo F., Ansley, Nebr. Sanitary cream saver. 1,629,300; May 17.
Rohrseltz, Karl, Metallwarenfabrik. (See Von Sazenhofen, Ludwig K., assignor.) to Societe Anonyme d'Etudes et de Constructions d'Appareils Mecaniques pour la Verrerie, Paris. France. Collecting glass by suction. 1,615,886; Feb. 1.
Róka, Koloman. (See Krause, E., and Roka.) Rokoski. Welles, Carlos, Minn. Wail construction. 1,628,387; May 17.
1,623,262; June 14.
Rolaff, Walter G. E., St. Louis, Mo. Compressor. 1,632,562; June 14.
Rolaff, Walter G. E., St. Louis, Mo. Distributor for use in refrigerating systems. 1,650,046; Nov. 22.
Rolaff, Walter G. E., assignor to Rotary Compressor Company, Belleville, Ill. Air compressor or pump. 1,626,557; Apr. 26.
Rolf, Harry G., et al. (See Koehn, Daniel W., assignor.) Rolf, Harry G., et al. (See Koehn, Daniel W., assignors Rolf, Harry J. (See Rolfs, Robert H. and H. J.), assignors to Amity Leather Freducts Co., West Bend, Wils. Bill folder. 1,619,643;

Product. Mar. 1.

Rollsen, 60s. Larvik, Norway. Rock-cutting tool. Rollsen, 635 Dec. 27.
Rolloe, 635 Dec. 27.
Rolloe, Carl C., and C. Norre, Chicago, III. Machine for Tolding the corners of book covers. 1,632,452; June 14.
Rolland, Eugene, assignor to Rolland Glass Company. Clarksburg, W. Va. Splitting buck. 1,652,959; Dec. 18.
Rolland Glass Company. (See Rolland, Eugene, assignor). Rolland Glass Company. (See Hurley, R. D., and Patton,

assignors.)
Rollaway Motor Company, The. (See Fox, Cecil M., as-

signor.)
Roller, Louis H., White Plains, N. Y. Electromagnetic pump. 1,647,147; Nov. 1.
Rolley, Noh. F., Karthuus, Pa. Pocket holder for pool tables. 1,625,685; Apr. 19.
Rolley, Thomas, Brisbane, Queensland, Australia. Metalberdlug machine. 1,636,786; July 26.
Rolling, Frank A., Company, The. (See Burgdorf, Herman, assignor.)

Rollins, Henry H., Phoenix, Ariz. Shade or awning raising device. 1,619,635; Mar. 1.
Rollins, Jarrot L., Auburn, Calif. Dimmer glasses. 1,650,236; Nov. 22.
Rollins, John O., West Los Angeles, Calif. Jar closure. 1,629,639; May 24.
Rollinson, Earl H., Lyons Farms, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Lamp-bulb socket, L,629,970; May 24.
Rollinan, Michael A., Mount Joy, Pa. Food receptacle. 1,624,010; Apr. 12.
1,622,938; May 17.
Rollinan, Michael A., Mount Joy, Pa. Meat chopper. 1,644,196; Nov. 1.
Rolls Royce Limited. (See Rowledge, Arthur J., assignor.)
Rolls Royce Limited. (See Royce, Frederick H., as-Shade or awning

Rolls-Royce Limited. (See Royce, Frederick H., as-

Rolls-Royce Limited. (See Royce, F. H., and Elliott, as-

signor.)

Signor.)

Rolis-Royce Limited. (See Royce, F. H., and Elliott, asRolinick, Herman, New York, N. Y. Combination muffier holder for coats. 1,629,846; May 24.

Rolph, Benjamin M., Dixon, Ill. Excavating machine.
1,625,912; Apr. 26.

Roman, Benjamin. (See Holtzman, John, assignor.)

Roman, Frank L., Chicago, and H. T. Winsenius, Conplany, Incorporated, New York, N. Y. Insulated electrical conductor. 1,649,924; Nov. 22.

Roman, Henry, Bay Point, Calif, assignor to YatesAmerican Machine Company, Beloit, Wis. Chip breakmerican Machine Company, Beloit, Wis. Chip breaker. 1,651,551; Dec. 6.

Roman, Max. (See Roman, Joseph and M.)

Romanelli, Emilio, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Electrolytic cell. 1,648,963;

Nov. 15.

Romanoff, William N., Chicago, Ill. Necktie. 1,621,753;

Mar. 22. Lohann. (See Romanowicz Murian and J.)

Mar. 22. Lohann. (See Romanowicz Murian and J.)

Mar. 22. Lohann. (See Romanowicz Murian and J.)

Romanoff, Villiam N., Chicago, H., Asserbarder, Wallan and J.)

Romanowicz, Johann. (See Romanowicz, Marian and J.)

Romanowicz, Marian and J., Vienna, Austria. Photographic film or plate pack. 1,641,867; Sept. 6.

Romanowski, Frank. Defroit, Mich. Vehicle signal.

1,635,436; July 12.

Romberg, Henrich, Dusseldorf, Germany. Gun carriage.

1,629,739; May 24.

Rome Metallic Bedstead Company. (See Pittoni, Angelo, assignog.)

assignor.) ome Radiation Company. (See Hart, Austin H., as-

Romberg, Helmrich, Dusseldorf, Germany. Gun carriage. 1,629,733; May 24.
Rome Metallic Bedstead Company. (See Pittoni, Angelo, assignor.)
Romer, Charles, Newark, N. J. Tire-inflating means. 1,641,457; Sept. 6.
Romer, Morris C., Brooklyn, N. Y. Lock joint for congress of the congress of

Ronk, George T., Fairfield, Iowa. Mechanism for operating and controlling excavator dippers. 1,627,869; Ronk George T., Fairfield, Iowa. Hoisting mechanism. 1,628,916; May 17.
Ronk, George T., Fairfield, Iowa. Frame construction for excavator trucks. 1,629,890; May 24.
Ronning, Victor C., assignor to Jahn & Oilier Engraving Co., Chicago, Ill. Rectebing half tones on copper together with a formula applicable thereto. 1,628,857; Rong C., Chicago, Ill. George C., Chicago, Ill. Rectebing half tones on copper together with a formula applicable thereto. 1,628,857; Rong C., Chicago, C., Chicago, C., Chicago, C., Chicago, C., Chicago, C., Rong C., Penngrove, Callf. Dehydrator. 1,651,293; Nov. 29.

1,651.293; Nov. 29.
Rood, Charles F., Sutherlin, Oreg. Doorknob. 1,630,032;

Any 11.

On Schemer, Charles G., Penngrove, Calif. Dehydrator. 20.

Rood, Charles F., Sutherlin, Oreg. Doorknob. 1,630,032; May 24.

Rood, Charles F., Sutherlin, Oreg. Smoking pipe. 1,648,676; Oct. 25.

Rood, Hazel B., Ames. Jowa. Thumb-sucking preventive for bables. Providence, 1,648,197; Nov. 8.

Rook, Harry B., Newark, N. J. Soyund-reproducing instrument. 1,629,971; May 24.

Rook, Harry B., Newark, N. J. Soyund-reproducing instrument. 1,629,971; May 24.

Rook, Harry B., Newark, N. J. Soyund-reproducing instrument. 1,629,971; May 24.

Rook, George F., Providence, R. I. Toy bank. Des. 71,945; Feb. 1.

Rook, W. J. Soyunder, C. R. J. Toy bank. Des. 71,945; Feb. 1.

Rook, W. J. Soyunder, J. J. Soyunder, R. J. Rook, W. J. Soyunder, R. J. Rook, W. J. Soyunder, J. J. Soyunder, R. J. Rook, W. J. Soyunder, R. J. Rook, W. J. Soyunder, J. J. Soyunder, R. J. Rook, W. J. Soyunder, R. J. Rook, W. J. Rook, W. J. Soyunder, R. J. Rook, W. J. Soyunder, R. J. Rook, W. J. Rook, W.

Root Manufacturing Company, The. (See Root, Ralph R., assignor.)
Root, Ralph R., Lakewood, assignor to The Root Manufacturing Company, Cleveland, Ohio. Agricultural powder-distributing device. 1,619,316: Mar. 1.
Root, Ralph R., Lakewood, assignor to The Root Manufacturing Company, Cleveland, Ohio. Protected bearing for powder-dispensing devices. 1,622,539; May 24.
Root, Ralph R., Lakewood, Ohio. assignor to The Root Gerdistributing device. 1,627,732; Dec. 13.
Root Spring Scraper Company. (See Utter, Eben B., assignor.)

Root Spring Scraper Company, (See Utter, Eben B., assignor).

Rooth Addiff, Ludvika, assignor to Almanna Scenska Charles and Company, assignor to Almanna Scenska Charles and Charles and

Denney W. (See Buck, N. E., Roper, and

Thoms.)

Roper, Geo. D., Corporation. (See Hobson, Stanley H., assignor.)

Assignor.)

Roper, Geo. D., Corporation. (See Larson, Swan, assignor.)

Roper, Walter L., Maplesville, Ala. Radius-rod holder.

1.644.037; Oct. 4.

Ropp, Ezra B. Oklahoma City, Okla. Automatic baseball game.

1.643.522; Sept. 27;

Geo. Company. Chicago, Ill. Sprocket wheel. 1.630.313; May 31;

Wheel. 1.630.313; May 31;

Royabeck, Claude, Chicago, Heights. assignor to American Manganese Steel Company, Chicago, III. Endless-chain execavator bucket with digging teeth. 1,638.039;

Aug. 9.

Chicago Heights, assignor to American execavator bucket with digging teeth. 1,638.039;

Aug. 9.

excavator bucket with digging teeth. 1,638,098; Aug. 9.
Rorabeck, Claude, Chicago Heights, assignor to American Manganese Steel Company, Chicago, Ill. Renewable-rim sprocket wheel. 1,643,472; Sept. 27.
Rosales, Mariano, San Antonio, Tex. Float-operated circuit closer. 1,632,098; June 14.
Rosan, Clifford D., deceased. New Haven, Conn., E. H. Rosan, administratrix. Cigarette holder. 1,630,243; May 24.

Resan, Eva H., administratrix. (See Resan, Clifford D.)
Rosat, Charles, Boudry, assignor to Fabriques des Montres Zenith, successur de Fabriques des Montres
Zenith Georges Favre-Tacot & Co., Le Locle, Switzerland. Assembling device for bridges, plates, and the
like in timepiece movements, counting mechanisms, and
like apparatus. 1,634,214; June 28;
Rosato, Victor, Eronx, X. X., Revolving stencil-cylinder
Rosch, Arthur, Charlottenburg, Berlin, Germany, assignor, by mesne assignments, to General Electric
Company, Schenectady, N. Y. Industrial-heating
elastic-fluid prime-mover installation. 1,621,435;
Mar. 15.

elastic-fluid prime-mover installation. 1,621,435; Mar. 15.
Roschanek, Otto, assignor of one-half to Huebner & Mayer, Vienna, Austria. Shutting-off device and valve. 1,649,735; Nov. 15.
Roschitsch, Karl. (See Mische, F., and Roschitsch.)
Roscoe, Edward, Edendde, Auckland, New Zealand. Application of the control of the c

Rose, Fred G., Rocky Ford, Colo. Transmission. 1,635,958; July 12. Rose, Henry L. (See Rose, Bert R., H. L., and M. C.) Rose, James, Olean, N. Y. Spindle retainer. 1,626,252; Apr. 26.

Rose, James A., San Francisco, Calif. Receptacle. 1,613,536; Jan. 4. Rose, James A., assignor to Lowell-Wintsch Automatic Train Control, Inc., Lancaster, Pa. Method and ap-paratus for transmitting electric current. 1,627,409;

Train Control, not, and paratus for transmitting electric current.

May 3.

Rose, James M., Corona, Calif. Elevated railway.
16:10,761; Peb. 8.

16:10,761; Peb. 8.

16:10,761; Peb. 9.

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July 26.

Rose, L. W., et al. (See Weisgerber, Henry D., assignor.)

Rose, Merritt C. (See Rose, Bert R. H. L., and M. C.)

Rose Novelty Co. et al. (See Hurewitz, Joseph.)

Rose, Onar E. (See Norris, Levis B., assignor.)

Rassignor, and Label Co., The. (See Rosenthal, Arthur, assignor.)

Rose, Richard C., Osceola, Ark. Condenser. 1,646,663;

Oct. 25.

Rose, William, Stuart, Fla. Septic tank. 1,645,116;

Oct. 11.

Rose, William, Glainsbargorth, Professorth

Rose, William, Stuart, Fla. Septic tank. 1,645.116; Oct. II.
Rose, William, Gainsborough, England. Apparatus for wrapping cartons, blocks, and similar articles in paper or like material. 1.618.025; Feb. 15.
Rose, William, Gainsborough, England. Apparatus for feeding and registering a paper web. 1,637.635; Aug. 2.
Rose, William, assignor to Mathis Klein & Sons, Inc., 10.
Rose, William, Additional Paper of the Mathist Relay (1998). A sons, Inc., 10.
Rose, William H., Jersey City, N. J. Windshield. 1,644.395; Oct. 4.
Rose, William H., Jersey City, N. J. Window ventilator. Rose, William H., Jersey City, N. J. Window ventilator. 1,644.400; Oct. 4.
Rose, William H., Jersey City, N. J. Window ventilator. 1,644.400; Oct. 4.
Rose, William H., Jersey City, N. J. Window ventilator. 1,644.400; Oct. 4.
Rose, William H., Jersey City, N. J. Window ventilator. 1,644.400; Oct. 4.
Rose, William H., Jersey City, N. J. Window ventilator. 1,644.400; Oct. 4.
Rose, William H., Jersey City, N. J. Ventilating device. 1,650.237; Nov. 22.
Roselbush, Waldo E., assignor to Inland Empire Paper Company, Millwood, Wash, Mcthod and apparatus for paper-machine direvs. 1,631.832; June 7.
Rosell, Avel J., Brooklyn, N. T.
Rosell, Avel J., Brooklyn, N. T.
Rosenier, George M., assignor to The Protectolite Co., 10.
Roseman, Leo, Newark, N. J. Garment-fastener means. 1,644.357; Oct. 4.
Rosemier, George M., assignor to The Protectolite Co., 10.
Rosemier, George M., assignor to The Protectolite Co., 10.
Rosemier, George M., assignor to The Protectolite Co., 10.
Rosemier, George M., assignor to The Protectolite Co., 10.
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Rosemier, George M., assignor to The Protectolite Co., 10.
Rosemier, George M., assignor to The Protectolite Co., 10.

Rosen, Abraham W., New York, N. Y. Combined ash re-ceiver and match box. Des. 72,803; June 7.

Rosen G., 1840,518; June 30.

Rosen, Isidor, Brooklyn, N. Y. Game board. Des.

Rosenband, Aibert. (See Greenbaum, N., and Rosenband.)

Rosenband Mfg. Co. (See Brauns, W., and Walker, as-

Rosenband, Albert. (See Greenbaum, N., and Rosenband, Mgs. Co. (See Braums, W., and Walker, assignors.)
Rosenbaum, Fritz, Nuremberg, Germany. Toy automobiles. 1,646,169; Oct. 18.
Rosenbaum, Fritz, Nuremberg, Germany. Toy automobiles. 1,646,169; Oct. 18.
Rosenbaum, Lester F., assignor to Sam Rosenbaum & Sons Company, Kalamazoo, Mtch. Knickerbockers. 1,633,607; June 28.
Rosenbaum, Rudolph R., Chicago, Ill. Fuller's-earth-Rosenbaum, Rudolph R., Chicago, Ill. Fuller's-earth-Rosenbaum, Rudolph R., Chicago, Ill. Fuller's-earth-Rosenbaum, Sam, & Sons Company. (See Rosenbaum, Lester F., assignor).
Rosenbaum, Sam, & Sons Company. (See Rosenbaum, Theodor). (See Doty, William W., assignor).
Rosenbaum, Salma, et al., sole heirs. (See Rosenbaum, Theodor). (See Doty, William W., assignor).
Rosenbaum, Theodor, deceased; S. and I. A. M. Rosenbaum, Theodor deceased; S. and I. A. M. Rosenbaum, Theodor, Theodor, Deceased, S. and J. A. M. Rosenbaum, Theodor, deceased; S. and I. A. M. Rosenbaum, Theodor, deceased; S. and I. A. M. Rosenbaum, Theodor, deceased; S. and I. A. M. Rosenbaum, Theodor, Deceased, S. A. M. A. M. Rosenbaum, Theodor, M. W. Rosenberg, Joseph H., Denver, Colo. Alarm gauge. 1,645,567; Nov. S. Rosenberg, Joseph H., Denver, Colo. Alarm gauge. 1,648,567; Nov. S. Maukee, Wis. Apparatus for cleaning metal parts. 1,624,985; Apr. 10.
Rosenberg, Louis, New York, N. Y. Sassignor, M. K. Rosenberg

Rosenberg, Maurice J., Baltimore, Md. Knickers, 1,631,064; May 31. Rosenberg, Ralph H., Syracuse, N. Y., assignor to Ameri-can Cable Company, Inc. Wheel brake. 1,646,392; Oct. 25.

signor)
Rosenfeld, William S., Baltimore, Md. Alignment device
for automobile wheels, 1.625.431; Apr. 19.
Rosenhaln, Carl, East Orange, N. J. Lock. 1,643.752;
Sept. 27.
Rosenheim Co. Inc. (See Jones, Perclyal W., assignor.)

Rosenhoffer, Henry J. (See Kerlin, J. F., and Rosen-

Mfg. Company. Fastener strip or fly for garments. 1,023,361; Apr. 5.

Rosenman, Leo, Newark, N. J., assignor to R. K. M. Mfg. Company. Fastener strip or fly for garments. 1,629,540; May 24.

Rosenman, Leo, Newark, N. J., assignor to R. K. M. Mfg. Rosenman, Leo, Neward, O. L. A. Stripper to R. K. M. Mfg. 1,617,148; Nov. 1.

Rosenoulis, Edward, Onkland, Calif. Chiropractic table. 1,616,665; Feb. 1.

Rosenshine, Annette, New York, N. Y. Ash tray. Des. 73,201; Agr. 2.

Rosenstein, Ludwig, San Francisco, Calif. Removing sulphur dioxide and compounds from food products. 1,620,001; Apr. 5.

Rosenthal, Lagr. 8.

Rosenthal, Aaron E., and W. E. Clarin, assignors to Beacon Steef Furniture Co., Chicago, Ill. Removable foot for legs. 1,651,000; Nov. 29.

Rosenthal, Abraham, New York, N. Y. Woman's undergarment. 1,623,637; Apr. 5.

Rosenthal, Abraham, New York, N. Y. Woman's undergarment. 1,623,637; Apr. 5.

Rosenthal, August, assignor to Rosenthal Mfg. Co., West Allis, Wis. Shaker trough for corn huskers. 1,629,930; May 24.

Rosenthal China Corporation. (See Wesp, George, assignor) bumbar A and C. P. Winter, assignors

Rosental, Dunb Rosenthal, Dunb Traited States

May 24.

Mosenthal, China Corporation. (See Wesp, George, asRosenthal, Dunbar A., and C. P. Winter, assignors to
United States Paper Mills, Inc., Chambersburg, Pa.
Folding machine. 1,625,566; Apr. 19.
Folding machine. 1,625,566; Apr. 19.
Fosenthal, Frank, New York, N. Y. Manufacture and
treatment of threads. 1,617,544; Feb. 15.
Rosenthal, Frank, New York, N. Y. Making thread.
1,620,233; Mar. S.
1,630,408; May 21.
Rosenthal, Hugo. (See Kovarik, Karl, assignor.)
Rosenthal, Hugo. (See Kovarik, Karl, assignor.)
Rosenthal, Isadore L., assignor to J. Rosenthal, Brooklyn, N. Y. Method of and device for preventing the
skidding of self-propelled road vehicles. 1,625,746;
Apr. 13.
Rosenthal Mg. Co. (See Rosenthal, Isadore L., assignor,
Rosenthal Mg. Co. (See Rosenthal, Laguat, assignor,
Rosenthal Mg. Co. (See Rosenthal, August, assignor,
Rosenthal, Robert H., assignor to Pi Lambda Phi Fraternity, Incorporated, New York, N. Y. Pi Lambda
Phi fraternity pin. Des. 73,868; Nov. 15.
Rosenthal, Sam, assignor to The Pony Fruit Corporation.
New York, N. Y. Paper box and making the same.
1,633,229; June 21.
Rosenthal, Uraia I., and J. J. Crowley, Montreal, QueSep. 70.
Rosenthal, William, assignor to Enid Manufacturing
Company, New York, N. R. P. Brassière, 1,648,649;
Nov. 8.
Rosenthal, William, assignor to Enid Manufacturing Co.,
Rosenthal, William, assignor to Enid Manufacturing Co.

Rosenthal, William, assignor to Enid Manufacturing Co., Inc., New York, N. Y. Brasslere for formal wear. 1,649.736; Nov. 15.
Rosenzweig, Fred. Pittsburgh, Pa. Recovering metals from slag. 1,643.610; Sept. 27.
Roser, Mathias F., Detroit, Mich. Collapsible hand bag. Rosewall. Section of the Rosewall. Rosewa

Rosin, Forence M., Tanadeipina, Fa. Tray. Des. 12,500; June 28. Rosine, Conrad. Chicago, Ill. Lubricating apparatus. 1.616.199; Feb. 1. Rosine, Conrad, Chicago, Ill. Adjustable fan. 1,621,603; Mar. 22.

Rosine, Conrad, Chicago, III. Adjustable fan. 1,621,603; Mar. 22.
Rosinia, James. (See Perclabosco, Michael, assignor.) Rosinia, James, et al. (See Kraus. Morris F., assignor.) Roser, Frank A. St. Paul, Minn. Towel holder. Ross, Albert M., Grand Island, Nebr. Container-cutting machine. 1,649,194; Nov. 15.
Ross, Albert M., Grand Island, Nebr. Container-cutting machine. 1,649,194; Nov. 15.
Ross, Barton, Chicago, III. Automatic belt guide. 1,628,614; May 10.
Ross, Braton, Chicago, III. Automatic belt guide. 1,628,614; May 10.
Ross, Export C. and J. E. Zomnir, Springfield, Mass., assignors to The Diamond Match Company, Chicago, III. Composition-applying mechanism for match machines. 1,649,787; Nov. 15.
Ross, Chrine E., assignor to The Collette Manufacturing Company, Amsterdam, N. Y. Nut-tapping machine. 652,853, June 21.
Ross, Clyde P., Kenliworth, III. Pivoted gate for skip holsts. 1,655,589; Doc. 20.
Ross, David E. (See Gruenewald, E. J., and Ross.) Ross, David E. (See Gruenewald, E. J., and Ross.) Ross, David E. (See Gruenewald, E. J., and Ross.) Ross, David E. (See Gruenewald, E. J., and Ross.) Ross, David E. (See Gruenewald, E. J., and Ross.) Ross, David E. La Payette, Ind. Compensating gearing. 1,626,136; Apr. 26.

Ross, David E. La Fayette, Ind. Internal-combustion engine. 1e36,877; May 3.

Ross, David E. La Fayette, Ind. Differential gearing. 1.647,750; Nov. 1.

Ross, David E. La Fayette, Ind. Compensating gearing. 1.647,252; Nov. 23.

Ross, David E. La Fayette, Ind. Compensating gearing. 1.651,228; Nov. 23.

Ross, David E. La Fayette, Ind. Compensating gearing. 1.651,228; Nov. 23.

Ross, David E. La Fayette, Ind. Compensating gearing. 1.651,228; Nov. 23.

Ross, David E. La Fayette, Ind. Compensating gearing. 1.651,228; Nov. 23.

Ross, David E. La Fayette, Ind. Compensating gearing. 1.681,268; Nov. 24.

Ross, David E. La Fayette, Ind. Compensating gearing. 1.682, 268.

Ross, Edward E. (See Hebrew, J. S., and Ross.) Ross, Edward E. (See Hebrew, J. S., and Ross.) Ross, Ernest. (See Farrand, C. L., and Ross.) Ross, Ernest. (See Farrand, C. L., and Ross.) Ross, Ernest. (See Farrand, C. L., and Ross.) Ross, Francet, assignor to U. S. Tool Co., Inc., East Ortange, N. J. Multiple condenser drive. 1.615,041; Jan. 18.

Ross, David E. La Fayette, Ind. Ross, Pract, assignor to U. S. Tool Co., Inc., East Ortange, N. J. Rotor-plate spindle mounting for variable Ross, Frank A., Wilmette, 28 paper to Stewart-Warner Speedometer Corporation, Chicago, Ill. Expansible shackle bolt and the like. 1,630,499; May 31.

Ross, Frank M., Blackburn, Mo. Farm gate. 1,617,135; Ross, Frederick N., Detroit, Mich., assignor to The Patent Button Company, Waterbury, Conn. Hopper construction. 1,631,160; June 7.

Ross, Gederick N., Detroit, Mich., assignor, by means and Ross, assignors.)

Ross Gear Tool Company. (See Gruenewald, E. J., Ross, Harry, assignor to Fur Guide Machine Corporation, New York, N. Y. Needle plate for fur-sewing machines. 1,631,605; June 7.

Ross, Harry M., Tolcdo, Ohio. Card game. 1,632,681; Ross, Harry M., Tolcdo, Ohio. Card ga

1,631,605; June 7.

Ross, Harry H., Toledo, Ohio. Card game. I,632,054; June 4.

Ross, Harry H., Toledo, Ohio. Card game. I,632,054; June 4.

Ross, Harry M., assignor of one-half to Beverlage Paper Campany, Indianapolis, Ind. Mottling device for paper making. I,624,184; Apr. 12.

Ross, Homer B. (See Benham, R. E., and Ross.) Ross, Hugh C., Toledo, and H. W. Falconer, near Perrysburg, Ohio; said Ross assignor to said Falconer, Identification device for vehicles, I,619,271; Mar. I.

Ross, Huch M., Woodhaver assignor to Adriance Machine Works, Inc., Brooklyn, N. Y. Bottlefilling machine, 1.641,550; Sept. 6.

Ross, James A., North Tongwanda, N. Y. Hot-air dispenses and the second process of the seco

Feb. 8.

Ross, James G. (See Martus, M. L., Becker, and Ross.)

Ross, John D., Washington, D. C. Nonsilp attachment

for automobile wheels. 1.627,866; May 10.

Ross. Joseph, New Albany, Ind. Drill-hole reamer.

1.621,812; Mar, 22.

Ross, Joseph A., Nanticoke, assignor of one-half to W. L.

Delaney, Sheatown, Pa. Toy pump. 1,635,978;

Ross, Julius. (See Schuelke, E. A., and Ross.)

Ross, Julius, and E. A. Schuelke, assignors to The Napler

Co., Meriden, Com. Vanity box. 1.645,351; Oct. 11.

Ross, Lioyd. L. (See Pennell, Chaeles H., assignor).

Ross Manufacturing Company. (See Ryan, James C., as
signor.) signor.)

Ross Manufacturing Company. (See Ryan, James C., assignor.)
Ross, Maurice L. and B. A., assignors to Hertz Driv-UrSelf Stations, Inc., Chicago, Ill. Key carrier,
1.601.6741 Feb. 8.
Ross, Maurice L., Bradford, Pa. Vegetable washer,
1.630.1381 May 24.
Ross, Philip S., Montreal, Quebec, Canada. Fly screen,
1.645.775; Oct. 18.
Ross, Rufus R., Detroit, Mich. Fuel economizer and carbonizing device. 1.619.830; Mar. 8.
Ross, Rufus R., Detroit, Mich. Fuel economizer and carbonizing device. 1.619.830; Mar. 8.
Ross, Rufus R., Detroit, Mich. Carburetor attachment.
1.630.242; May 24.
Ross, Thomas S., Allentown, Pa. Friction roll for looms,
1.649.080; Nov. 15.
Ross, Thomas W., Manchester, England, assignor to WestInghouse Electric and Manufacturing Company. Regu
The Ross, Valugh H., Vancouver, British Columbia, Canada,
Wire-tying machine. 1.652.460; Dec. 13.
Ross, Walter, Louisville, Ky. Ball-bearing porch-swing
hook, 1.629.363; May 17.
Ross, Valugh E., Blubs, La. Photographic camera.
Ross, Walter, E., Hibbs, La. Photographic camera.
Ross, Walter, E., Hibbs, La. Photographic camera.

1.622.925; Mar. 29.

Ross, William, Surbiton, England. Device for feeding and controlling material. 1.631.633; Dec. 6.

Rossbeth, Adolph H., Columbus, Ohio. Apparatus for Rossbeth, Adolph H., Columbus, Ohio. Apparatus for Rossbelle, George T., Tiffin, Ohio. 2016. 16.

Rosselle, George T., Tiffin, Ohio. 16.

Rosselle, George T., Selson, Mich. Excavator-bucket extension. 1.648.783; Nov. 8.

Rosselle, George T., assignor to Austin Machinery Corporation. Muskegon, Mich. Power shovel. 1.649.739; Rosselle, George T., assignor to Austin Machinery Corporation. Appl. 18.

Rosselle, George T., Selson to Austin Machinery Corporation. Muskegon, Mich. Power shovel. 1.649.739; Rosselle, John H. (See McClure, Ralph R. assignor.)

Rosseter, John H. (See McClure, Ralph R., assignor.)

Rossi, Angelo, Santa Rosa, Calif. Valve-operating struc-ture for motor cycles. 1,624,365; Apr. 12. Rossi, Louis M., Perth Amboy, N. J., assignor to Bakelite Corporation, New York, N. Y. Making a phenolic resin varnish. 1,613,724; Jan. 11. Rossi, Paul A., Campbell, Ohio. Paintbrush. 1,653,374; Dec. 20.

Dec. 20.
Rossiter, Wayne F., Vallejo, Calif. Pistol grip for cameras. 1,621,903; Mar. 22.
Rossman, Agnes R., Scotch Plains, N. J. Sleeping car. 1,621,036; Mar. 15.
Rossman, Agnes R., Scotch Plains, N. J. Service door. 1,620,157; Apr. 26.
Rossman, Agnes R., Scotch Plains, N. J. Sleeping car. 1,647,534; Nov. 1.
Rossman Corporation. (See Southwick, Myron J., as-Rossman Corporation.)

signor.)
Rossmann.

signor.)
Rossmann, Rudolf, assignor to Doutsche Wollenwaren
Manufaktur Aktlengesellschaft, Grunberg, Germany,
Meibed of and apparatus for passing threads into fabrics. 1645.257; Oct. 11.
Rossner, May H., New York, N. Y. Combination dish
drainer and tub cover 1,645.905; Sept 27
Rosson, Alpine B., Lincoln, Ark. Hammer. 1,639,614;

Rosson, Alpir Aug. 16. Rosswinkle.

Rosson, Alpine S., Lincoln, Ark. Rammer. 1,000,014; Aug. 16.

Rosswinkle. Herman, Marshfield, Oreg. Headrest. 1,644,402; Oct. 4., and S. H. Smith, Cumberland, Md. Tire dap. 1,638,460; Aug. 9.

Rost, Hobor, Dover, N. J. Toy. 1,635,223; July 12.

Rost, Robert W., Newark, N. J., assignor of one-half to A. F. Bigger, New York, N. Y. Playing ball. 1,626,302; Apr. 26.

Rost, Robert W., Newark, N. J., assignor of one-half to A. F. Bigger, New York, N. Y. Manufacture of coagulum ruber articles. 1,628,135; May 10.

Rost, Robert W., Newark, N. J., assignor of one-half to A. F. Bigger, New York, N. Y. Manufacture of coagulum ruber articles. 1,628,135; May 10.

Roston, J. Soeph A., Cambridge, Mass. Rheostat. 1,620,573; Mar. A., Cambridge, Mass. Rheostat. 1,648,032; Oct. 25.

Rotary Compressor Company, New York, N. Y. Water-tube boiler. 1,646,933; Oct. 25.

Rotary Compressor Company. (See Roloft, Waiter G. E., assignor.)
Rotary Machine & Engineering Company, The. (See Roessler, Amandus C., assignor.)
Rotary Printing Company, The. (See Willard. Louis J., assignor.)

Rotary Refrigeration Incorporated. (See Ryder, C. D., and Moores, assignors.) Rotary Rod Weeder & Mfg. Co. (See Wolfe, Henry K.,

Rotary Rou Weeter & Rose assignor. Roth, Albert. (See Mallory, E. B., and Roth.)
Roth, Anthony and J. W., New Brunswick, N. J. Automobile attachment. 1.648,784; Nov. 8.
Roth Brothers & Co. (See Williams, Raiph T., assignor.)
Roth-Buchner Aktiengesellschaft. (See Felst, Eugen,

Roth-Bucomer Astropasses.

Roth, Claude L. administrator. (See Keith, Nathaniel S.)

Roth, Claude L. administrator. (See Keith, Nathaniel S.)

Roth, Edward B., St. Louis, Mo. Retort for treating oil

shale. 1,638,217; Aug. 9.

Roth, Edward B., St. Louis. Mo. Retort for treating oil

shale. 1,649,195; Nov. 15.

Roth, Edward N., assignor to Roth Manufacturing Company, Chicago. Ill. Flexible pipe joint. 1,649,616;

Roth, Edward N., assignor to note sentent. 1,649,616; Nov. 15.

Roth, Frank H., Bay Shore, N. Y. Fuel economizer. 1,637,501; Aug. 2.

Roth, G. A., Manufacturing Company. (See Cleiand, Melvin L., assignor.)

Roth, H. G. A., Wanufacturing Company. (Pumbing fixture. 1,628,255; Apr. 26.

Roth, Irving. (See Stern. I., Roth, and Markowitz.)

Roth, Irving. (See Weinberger, V., Jakobovits, and Both).

Roth, Irving, (see Weinberger, V., Janaco V., Roth.)
Roth, Joseph W. (See Roth, Anthony and J. W.)
Roth, Louis, Elizabeth, N. J., assignor to Sterling Bronze
Company, New York, N. Y. Operating means for sash
adjusters, 1,615,851; Feb. 1.
Roth Manufacturing Company. (See Roth, Edward N., asagence).

signor.)

Roth. Martin A. Lille. Erance. Machine for drafting Roth. Martin A. Lille. Erance. Machine for drafting Roth. Martin A. Lille. Erance. Machine for drafting Roth. Martin Land. 1844.747; Oct. 11.

Roth. Martin A. Lille. Erance. Machine for drafting Roth. Martin. 1848.825; Nov. 8.

Rothbart. Max., assignor to Rembrandt Lamp Corporation. Chicago, Ill. Lamp bracket. Des. 72.014; June 21.

Rothbart. Max. assignor to Rembrandt Lamp Corporation. Chicago, Ill. Lamp base. Des. 73.093; July 19.

Rothbart. Max. assignor to Rembrandt Lamp Corporation. Chicago, Ill. Lamp base. Des. 73.101; July 19.

Rothbart. Max. assignor to Rembrandt Lamp Corporation. Chicago, Ill. Lamp bracket. Des. 73.202; July 19.

Rothbart. Mix. assignor to Rembrandt Lamp Corporation. Chicago, Ill. Lamp bracket. Des. 73.203; Aug. 2.

Rothbart. Max. assignor to Rembrandt Lamp Corporation. Chicago, Ill. Lamp bracket. Des. 73.203; Aug. 2.

Rothbart. Max. assignor to Rembrandt Lamp Corporation. Chicago, Ill. Lamp bracket. Des. 73.203; Aug. 2.

Rothbart. Max. assignor to Rembrandt Lamp Corporation. Chicago, Ill. Lamp bracket. Des. 73.204; Aug. 2.

Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp bracket. Des. 73,206; Aug. 2. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp bracket. Des. 73,207; Aug. 2. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp bracket. Des. 73,208; Aug. 2. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,385; Aug. 2. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,335; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,337; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,337; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,339; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,349; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,341; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,341; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,341; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,341; Aug. 23. Rothbart, Max, assignor to Rembrandt Lamp Corporation, Chicago, III. Lamp base. Des. 73,341; Aug. 23. Rothbart, Max, assignor to Pittsburgh, Plate Glass Company, Glass-tank construction. 1,622,346; Mar. 29. Rotherham, Walter S., Little Falls, N. J., assignor to Westinghouse Lamp Company, New York, N. Y. Typewriting machine. 1,631,23; June 7. Rothis, Jacob, Muncie Ind., assignor to W. D. Smith Silver Co. Chicago, III. Spon or similar article. Rotherman, Alex, New York, N. Y. Car-seat handle. 1,650,23; June 7. Rothis, Jacob, Muncie Ind., assignor to W. D. Smith Silver Co. Chicago, III. Spon or similar article. Rotherman, Alex, New York, N. Y. Car-seat handle. 1,650,23; June 7.

Rotiman, Robert, Brooklyn, N. Y. Khit rabric. 1,636,943; July 26.
Rotiman, Albert, Heldelberg, and H. Stein, Mannheim, Mandhelin, Waidhol, Germany, Making bisaikyl-xanthogens. 1,626,558; Apr. 26.
Rothschild, Louis, Philadelphia, Pa., and E. G. Clements, Washington, D. C. Dispensing apparatus and means for operating same. 1,641,783; Sept. 6.
Rothschild, Max. New York, N. Y., assignor to Susquehanna Silk Mills. Textile fabric. Des. 72,445; Apr. 12.
Rothschild, Max. New York, N. Y., assignor to Susquehanna Silk Mills. Textile fabric. Des. 72,447; Apr. 12.
Rothschild, Max. New York, N. Y., assignor to Susquehanna Silk Mills. Textile fabric. Des. 72,779; May 31.
Rothschild, Max. New York, N. Y., assignor to Susquehanna Silk Mills. Textile fabric. Des. 72,779; May 31.
Rothschild, Max. New York, N. Y., assignor to Susquehanna Silk Mills. Textile fabric. Des. 72,780; May 31.

hanna May 31.

Sept. 27.
Rottger, John F., Modesto, Calif. Automatic siphon. 1.634.518; July 5.
Rotthouse, Charles A., Brandywine Hundred, assignor of one-half to E. G. Cook, Wilmington, Del. Cibres hanger, 1.616.870; Feb. dywine Hundred, assignor of Courles A. Brandyme Hundred, assignor of Leg2,588; May 24.
Rottler, Clarence T., Scattle, Wash. Borling machine. 1.614.691; Jan. 18.
Rottler, Clarence T., Scattle, Wash. Holding blades in cutter heart. 1.8732; Feb. 22.
Rottler, Clarence T., Scattle, Wash. Holding blades in cutter heart. 1.8732; Feb. 22.
Rottler, Clarence T., Scattle, Wash. Holding blades in cutter heart. 1.8732; Feb. 22.
Rottler, Clarence T., Scattle, Wash. Holding blades in cutter heart. 1.8732; Feb. 22.
Rottler, Clarence T., Scattle, Wash. Holding blades in cutter heart. 1.621,133; Mar. 15.

tudinal and Mar. 15.

Rottum, Charles. (See Stonequist, L. W., Rottum, and Stonequist).
Rounacl, Louis, Ivry-Port, France, assigner to Compagnle d'Applications Mecaniques. Paris, France. Rearing with rolling members. 1,631,763; June 7. Rounact, Louis, assigner to Compagnie d'Applications Mecaniques, Ivry-Port, France. Split pulley. 1,643,611; Sept. 27.

Rouanet, Louis, assignor to Compagnie d'Applications Mecaniques, Ivry-Port, France. Split pulley. 1649-978; Nov. 22.

Rouanet, Louis, assignor to Compagnie d'Applications Mecaniques, Ivry-Port, France. Manufacturing cages for ball or roller bearings. 1,650,852; Nov. 29.

Rouanet, Louis, assignor to Compagnie d'Applications Mecaniques, Ivry-Port, France. Manufacturing cages for ball or roller bearings. 1,650,853; Nov. 29.

Rouanet, Louis, assignor to Compagnie D'Applications Mecaniques, Ivry-Port, France. Manufacturing cages for ball or roller bearings. 1,650,853; Nov. 29.

Rouanet, Louis, assignor to Compagnie d'Applications Mecaniques, Ivry-Port, France. Device for assembling two-piece ball-bearing cages by spot welding. 1,651,779; Dec. 6.

Roubaix Mills, Incorporated. (See Lister, James R., assignor.)

sugmor.)
suband, Emile C. C., and R. A. Veillon, Paris, France.
Product for destroying mosquito larvæ. 1,625,627;

Product for destroying mosquito larva: App. 19.
Apr. 19.
Roneayrol, Ernest, Parls, France. Apparatus for controlling and distributing electric currents. 1,621,279;
Mar. 16.
Rouch, Vernen E., and W. J. Abbott, Fulton, Ind. Electrical the-pressure indicator. 1,652,738; Dec. 18.
Roucka, Erich, Blansko, Czechoslovakia. Impulse system of control. 1,621,280; Mar. 15.
Roucka, Erich, Blansko, Czechoslovakia. Automatic regulator. 1,630,314; May 31.
Roucka, Erich, Blansko, Czechoslovakia. Compound system for transmitting a plurality of values. 1,633,718; June 28.

Roucka, Erich, Blansko, Czechoslovakla. Automatic regulator. 1,630,413; May 31.
Roucka, Erich, Blansko, Czechoslovakla. Measuring system for transmitting a plurality of values. 1,633,713; May 9.
Roucka, Erich, Blansko, Czechoslovakla. System of measuring by auxiliary energy. 1,638,101; Aug. 9.
Roucka, Erich, Blansko, Czechoslovakla. Measuring system. 1,638,103; Aug. 9.
Roucka, Erich, Blansko, Czechoslovakla. Measuring system for transmitting or measuring variable conditions. 1,638,103; Aug. 9.
Roucka, Erich, Blansko, Czechoslovakla. Measuring system. 1,638,103; Aug. 9.
Roucka, Erich, Blansko, Czechoslovakla. Measuring system. 1,638,104; Aug. 9.
Roucka, Erich, Blansko, Czechoslovakla. System for transmitting variable conditions. 1,638,105; Aug. 9.
Roucka, Erich, Blansko, Czechoslovakla. Measuring system. 1,641,195; Sept. 6.
Roucka, Erich, Blansko, Czechoslovakla. System for transmitting variable conditions. 1,641,197; Sept. 6.
Roucka, Erich, Blansko, Czechoslovakla. System for transmitting variable conditions. 1,641,197; Sept. 6.
Roucka, Erich, Blansko, Czechoslovakla. System for transmitting variable conditions. 1,641,197; Sept. 6.
Roucka, Erich, Blansko, Czechoslovakla. System for transmitting variable conditions. 1,641,197; Sept. 6.
Roucka, Erich, Blansko, Czechoslovakla. System for transmitting variable conditions. 1,641,197; Sept. 6.
Roucka, Erich, Blansko, Czechoslovakla. Plow-measuring system. 1,641,198; Sept. 6.
Roucka, Erich, Blansko, Czechoslovakla. Plow-measuring system. 1,645,624; Oct. 18.
Roucka, Erich, Blansko, Czechoslovakla. Plow-measuring system. 1,645,624; Oct. 18.
Roucka, Erich, Blansko, Czechoslovakla. Plow-measuring system. 1,645,624; Oct. 18.
Roucka, Erich, Blansko, Czechoslovakla. Plow-measuring system. 1,645,624; Oct. 18.
Roucka, Erich, Blansko, Czechoslovakla. Recording system. 1,645,624; Oct. 18.
Roucka, Erich, Blansko, Czechoslovakla. Plow-measuring system. 1,645,624; Oct. 18.
Roucka, Erich, Blansko, Czechoslovakla. Plow-measuring system. 1,645,624; Oct. 18.
Roucka, Erich, Blansko, Cze

Rousseau, Joseph L., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Justifying spacer to Mergenthaler Linotype Company. Justifying spacer to Space Band. 1,635,950; July 12.
Rousie, Helen M., Providence, R. I. Can for gasoline or the like. 1,627,807; May 10.
Roussie, Helen M., Brovidence, R. I. Can for gasoline or the like. 1,627,807; May 10.
Roussie, Helen M., Brovidence, R. I. Can for gasoline or the like. 1,627,807; May 10.
Routon, Howard W., Oakland, Calif., assignor, by meane assignments, to Minimax Utilities Corporation. Washing machine. 1,625,096; Apr. 19.
Routon, Royard W., Oakland, Calif., assignor, by meane assignments, to Minimax Utilities Corporation. Washing machine. 1,625,298; Mar. 29.
Routon, Chille L., Los Angeles, Calif. Making plaster board. 1,646,597; Oct. 25.
Routon, Chille L., Los Angeles, Calif., assignor to Plastoid Products, Inc. Plaster board. 1,646,598; Oct. 25.
Routon, Chille L., Los Angeles, Calif., Cutlery holder for cooking receptacles. 1,627,575; May 10.
Row, William, Melbourne, Victoria, Australia. Electrical Dispute Marchael Company, Providence, R. I. Dispute Manufacturing Company, Providence, R. I. Display card. 1,643,241; Sept. 27.
Rowan, Albart J., assignor, by mesne assignments, to Uncas Manufacturing Company, Providence, R. I. Display card. 1,643,241; Sept. 27.
Rowan, John V., U. S. Andrews, W. H., and Rowan, Rowan, John V., U. S. Andrews, W. Building construction. Row York, N. Y. Building construction on the providence of the Producers. 1,649,257; Nov. 29.
Rowan, Thomas Brooklyn, assignor to Structural Gypsum Corporation, New York, N. Y. Building construction. Row York, N. Y. Building construction. Row York, N. Y. Building construction on the Producers. 1,649,649; Oct. 11.
Rowe, Alvin V., Galesburg, Ill. Ladder and preparing rungs and rails thereof. 1,644,694; Oct. 11.

Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Evisible link, 1,622,034; Mar. 22.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Alarm mechanism. 1,641,827; Sept. 6.
1,642,827; July 12.
1,643,624; July 12.
1,644,644; Sept. 6,644; Sept. 6

Rowley, John S., J. W. Riggles, and H. E. McCully, Lansing, Mich. Dirigible headlight mechanism. 1634.63, 1919.5 https://dx.doi.org/10.1016/j.mechanism. 1627.419.1 https://dx.doi.org/10.1016/j.mechanism. 1627.419.1 https://dx.doi.org/10.1016/j.mechanism. 1627.419.1 https://dx.doi.org/10.1016/j.mechanism. 1628.619.1 https://dx.doi.org/10.1016/j.mechanism. 1628.6 Roxana Petroleum Corporation. (See Jenny, Willy, as-

signor.)

Roxana Petroleum Corporation. (See Jenny, Willy, assignor.)

Roy, Edmond J., New York, N. Y. Moving-picture maloging and the second of the second control of the second contro

Electrotype Company. (See Walsh, John J., as-

assignor.) aval Metal Lighting Fixture Company. (See Cricchio,

yal assignor.) yal Typewriter Company. (See Degener, Gustavo O., assignor.) oyal Typewriter Company. (See Handley, George F.,

Typewriter Company. (See Hess, Edward B., as-Royal

signor.)
oyal Typewriter Company. (See Myers, Lewis C.,

Royal Typewriter Company. (See Myers, L. C., and Royalty Holding Corporation. (See Maby, Frederick W.,

assignor.)

assigner.)

Royce, Frederick H., West Wittering, near Chichester, assigner to Rolls-Royce Limited, Derby, England. Innition device of internal-combustion engines. 1.652,328; Dec. 13.

Royce, Frederick H., West Wittering, near Chichester, assigner to Rolls-Royce Limited, Derby, England. Mounting engines in vehicles. 1.648,061; Nov. 8.

Royce, Frederick H., and A. G. Elliott, West Wittering, near Chichester, assignors to Rolls-Royce Limited, Derby, England. Support of aero engines. 1.624,761; Apr. 12.

Royer, Georges G., Papis, France, Automatic means for running off liquid from containers, at predetermined conditions of temperature, 1,630,907; May 31; Royer, Ralph, and J. A. Sognis, assignors to M. J. Mc-Donald Betate, Trenton, N. J. Extension tower, 1,644,613; Oct. 4.

1644-618; Oct. 4.

Royer, William R., Wilkes-Burre, Pa. Auxiliary valve for pneumatic tire valve stems. 1,629,972; May 24.

Royle, Vernon, Paterson, N. J. Tubing machine. 1,618-026; Feb. 15.

Royle, Vernon, Paterson, N. J. Gearing mechanism for fulling machines. 1,627,576; May 10.

Royle, Vernon, Paterson, N. J. Chip fan for routing machine. 1,627,6376; May 10.

Royle, Vernon, Paterson, N. J. Tubing machine. 1,645,157; Oct. 11.

Royse, Grover C. Orden, Utah. Convertible built-in hot-sit furnace. 1,620,235; Mar. 8.

Royston Paper Company, The. (See Atkinson, Thomas M., assignor.)

Rozič, Joseph, Palmerton, Pa. Cooking kettle. 1,622,975; Mar. 29.

Rozier, Honoré, Marseille, France. Universal woodworking machine for carpenters, joiners, and cabinetmakers.

March, Joseph (1997), 1800, 19 1.626,559; Apr. 26.
Rubarth, Joseph, Wittlage, Germany. Agricultural implement. 1.642,342; Sept. 13.
Rubber Latex Research Corporation, The. (See Wescott, William B., assignor.)
Clayton (O., assignor) tories Co., The. (See North, Clayton (O., assignor) Co., The. (See Scott, Win-

Rubber Shackle Company. (See Blomgren, Henry E., assignor.)

Rubber Shackle Company. (See Blomgren, Henry E., assignor).
Rubber Shock Insulator Company, The. (See Lipoot, Fred L., assignors).
Rubber Shock Insulator Company. (See Masury, A. F., and Fink, assignors).
Rubberstone Corporation. (See Hannam, G. C., and Schede, assignors).
Rubel, Charles F., and F. Kucera, assignor to Union Special Machine Company, Chicago, Ili. Sewing machine for cording. 1619-436. Mar. 1.
Ruben Retrifer Company, Chicago, Ili. Seam for sewed articles. 1,619-437 (Mar. 1.
Ruben Rectifier Corporation of Delaware. (See Ruben, Samuel, New York, N. X. Apparatus for indicating the presence and the concentration of gases and Ruben, Samuel, New York, N. X. Electron relay. 1,627,431; May S.
Ruben, Samuel, New York, N. Y. Electrostatic relay device. 1,631,764; June 7.
Ruben, Samuel, New York, N. Y. Prometer. 1,639,534; Aug. 16.

device. 1,631,102; June r.

Ruben, Samuel, New York, N. Y. Pyrometer. 1,639,534;
Ruben, Samuel, New York, N. Y. Electrical vacuum discharge tube. 1,649,420; Nov. 15.
Ruben, Samuel, New York, N. Y., assignor, by mesne assignments, to Ruben Rectifier Corporation of Delaware.
Electric-current rectifier. 1,649,741; Nov. 15.
Ruben, Samuel, New York, N. Y., assignor, by mesne assignments, to Ruben Rectifier. 1,649,742; Nov. 15.
Ruben, Samuel, New York, N. Y., assignor, by mesne assignments, to Ruben Rectifier Corporation of Delaware.
Electric-current rectifier. 1,649,743; Nov. 15.
Ruben, Samuel, New York, N. Y., assignor, by mesne assignments, to Ruben Rectifier Orporation of Delaware.
Electric-current rectifier. 1,649,743; Nov. 16.
Rubin, Samuel, New York, N. Y., assignor, by mesne assignments, to Ruben Rectifier Orporation of Delaware.
Rubin, Abraham, assignor to Henry Hyman & Co., Inc.,
New York, N. Y. Cord connecter. 1,637,836; Aug. 2.
Rubin, Adolph, St. Louis, Mo., assignor, by mesne assignments, to Arcade Manufacturing Company, Freeport,
III. Fastener for refrigerator doors. 1,631,831;

Detroit, Nov. 22.

Nov. 22.

Ruckstahl, Alfred, and R. T. Cadwell, assignors to Holcroft and Company, Detroit, Mich. Conveyer.
1,649,926; Nov. 22.

Ruckstahl, Alwin, Winterthur, Switzerland. Rotary compressor. 1,616,992; Feb. 8.

Ruda Manufacturing Company.

(See Boucek, Charles F.,
assignor.)

Rudberg, Emil, assignor of one-third to K. W. Bergman and one-sixth to A. J. Franson, Duluth, Minn. Stormsash fastener. 1.641,551; Sept. 6. Rudd, Albert V. East St. Louis, Ill. Railway-tie mechanism. 1,633,130; June 21. Rudd, Harry B. Chicago, Ill., assignor to Electropure Corporation, Detroit, Mich. Regenerative heat-exchange device. 1.617,807; Feb. 15. Rudd Manufacturing Company. (See Humphrey, Herbert

Rudd, Harry B., Chicago, III., assignor to Electropure Copporation Detroit, Mich. Regenerative heat-exchange Copporation Detroit, Mich. Regenerative heat-exchange Rudd Manufacturing Company. (See Humphrey, Herbert S., assignor.)
Rudd, Ole E. (See Leslie, John N., assignor.)
Ruddick, John J., West Newton, Mass. Trolley switch. Ruddick, John J., West Newton, Mass. Trolley switch. 1,624,012; Apr. 12.
Ruddick, John J., West Newton, Mass. assignor to General Street Signal Corporation, Rochester, N. Y. Traffic-signaling system. 1,641,694; Sept. 6.
Ruddick, John J., West Newton, Mass., assignor to General Street Signal Corporation, Rochester, N. Y. Traffic-signaling system. 1,641,694; Sept. 6.
Rüdenberg, Reinhold, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Gesellschaft mit beschränkter Haftung, Siemensstadt, neur Berlin, Germany, Cooling electric machinery, 1,681,765; Jun 17.
Rüdenberg, Reinhold, Berlin-Charlottenburg, near Berlin, Germators. 1,650,910; Nov. 29.
Rüdenberg, Reinhold, Charlottenburg, near Berlin, Germany, Deceptive & Manufacturing Company. Induction motor. 1,645,296; Oct. 11.
Rüdenberg, Reinhold, Berlin-Grunewald, assignor to Siemens-Schuckertwerke Gesellschaft mit beschränkter Haftung, Siemensstadt, near Berlin, Germany, Dechertic & Manufacturing Communication systems. 1,651,729; Dec. 6.
Rüdenberg, Reinhold, Berlin-Grunewald, assignor to Siemens-Schuckertwerke Gesellschaft mit beschränkter Haftung, Siemensstadt, neur Berlin, Germany, Switch tube for controlling electric circuits. 1,650,009; Rüdenberg, Reinhold, Berlin-Grunewald, assignor to General Electric Company, Manufacturing sheet metal. 1,622,307; Apr. 19.
Ruder, William E., Schenectady, N. Y., assignor to General Electric Company, Manufacturing sheet metal. 1,622,307; Apr. 19.
Ruder, William E., Schenectady, N. Y., assignor to General Electric Company, Manufacturing sheet metal. 1,622,307; Apr. 19.
Ruder, William E., Schenectady, N. Y., assignor to General Electric Company, Manufacturing sheet metal. 1,622,307; Apr. 19.
Ruder, Wil

Rudge-Whitworth Limited. (See Heathcote, Henry L.,

assignor.)
Rudge-Whitworth, Limited. (See Pugh, John V., as-

Rudie-Whitworth, Limited. (See Pugh, John V., assignor.)
Rudisili. Henry B., Anniston, Ala. Wrought Iron or steel core bar. 1.615.887; Feb. 1.
Rudland, Johannes, Nordre Fron, Gudrandsdallen, assignor to Interessentskaper Johs. Rudlands Selvhinder, Lillehammer, Norway. Mowing and reaping machine. In 1630.033; May 24.
Rudlin, Frederick W., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Distributing valve for rock drills. 1.614.999; Jan. 18.
Ror Tock drills. 1.614.999; Jan. 18.
Rudolph Corrie F., Washington, D. C. Piezo-electric-crystal mounting. 1.649.081; Nov. 15.
Rudolph Corrie F. Washington, D. W. York, N. Y. Musical toy. 1.648.245; Nov. 8.

1.648.245; Nov. 8.
Rudolph, Franklin, Chicago, Ill., assignor to American
Can Company, New York, N. Y. Can-body blank,
1.642.174; Sept. 13.
Rudolph, Waiter J., assignor to The Imperial Brass
Manufacturing Company, Chicago, Ill. Air pump,
1.625.097; Apr. 19.
Rudolph, Walter J., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill. Atomizing cleaner,
Rudolph, Walter J., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill. Pump, 1,625.099;
Apr. 19.

19 Rudolph, Wilhelm. (See Hahnemann, W., Rudolph, and Wilckens)

Wilchens: Mudolph, Wilhelm, Kiel, and A. du Bois-Reymond, Plon, near Kiel, assignors to the Firm Signal Gesellschaft m. b. H., Kiel, Germany. Sound-direction finder, 1.638.576; July 19.
Rudolph Wurlitzer Company, The. (See Starke, Emil O., assignor.), Rudolph Wurlitzer Manufacturing Company, The. (See Deverall, Charles N., assignor.), Rudolph, Frank. (See Wilerl, M. E., and Rudolphi.) Rudolyst, Carl A., Staket, Sweden. Emilion plur for internal-combustion motors. 1.632.314; June 14.

Rudqvist, Carl A., Kunksangen, assignor to J. & C. G.
Bolinders Mek. Verkstadts Aktiebolag, Stockholm,
Sweden. Spark-plug vaive for internal-combustion motors. Io23,349; Mar. 29.

Rudqvist, Carl A., Kunksangen, assignor to J. & C. G.
Bolinders Mek. Verkstadts Aktiebolag, Stockholm,
Sweden. Spark-plug vaive for internal-combustion motors. Io23,349; Mar. 29.

Rudvist, Carl W., Rockford, II. Shipping box for
chickens. I.647,015; Oct. 25.
Rudedbusch, Herman H., Elkton, S. Dak. Adjustable
pneumatic horse coliner. Io44,995; Jan. 18.
Rudedbusch, Herman H., Elkton, S. Dak. Vehicle signal.
I.646.766; Oct. 25.
Ruege Leonard, Los Angeles, Calif. Faucet. I.632,418;
Rueges, Ebrnest, Creswell, Orcg. Rotating advertising
device. I.623,432; May 10.
Rumelin, Richard, Minneapolis, Minn. Sand sifter.
I.652,478; Dec. 13.
Rudt, Carl, Zurich, Switzerland. Potato-laying machine.
Ruff, Edward, and E. C. L. Balley, Newark, N. J. Automatic reciprocating boit. I.628,808; May 17.
Ruff, Frederick A., Newark, N. J. Luggage carrier.
I.617,768; Feb. 15.
Ruff, Israel P., Connellsville, Pa. Kitchen utensil.
I.623,703; Apr. 5.
Ruff, Martin L., Jacksonville, Fla.
Cilppers, I.025,747; Apr. 19.
Ruff, Israel P., Connellsville, Pa. Attachment for hair
cilppers, I.025,747; Apr. 19.
Ruff, Martin L., Jacksonville, Fla.
Cilppers, I.025,747; Apr. 19.
Ruff, India, Alla I.61,224; Cres. 25.
Ruffin, Malla I.61,224; Cres. 25.
Ruffin, Martin L., Jacksonville, Fla.
Cilppers, I.025,747; Apr. 19.
Ruffin and A. Ruffin, executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors. (See Ruffin, John A.)
Ruffin, Horace E., et al., executors.

Ruggies-Klingeman ang, co. Signor, by meshe as-signor.)
Ruggies, Leonard L., Wheaton, assignor, by meshe as-signments, to Automatic Electric Inc., Chicago, Ill. Party-line automatic telephone system. 1,648,031; Nov. 8.
Rugh. John M., Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y., Producing ferrocyanides from crude calcium cyanides. 1,650,390; Nov. 22.

ferrocyanides from crude calcium cyanides. 1,650,390; Nov. 22.
Ruzroden, John A., Elbow Lake, Minn. Attachment for autos. 1,617,651; Feb. 15.
Rublock, Federick C. (See Bager, W. M., Lehman, and Rukenbrod, Cornelius J., Princeton, assignor to The Electric Porcelain and Manufacturing Company, Trenton, N. J. Securing vitreous articles in place. 1,652,052; Dec. 6.
Rukop, Hans, assignor to Gesellschaft file Drahtloss Telestrungement for generating oscillations. 1,614,494; Jan. 188.

Jan. 18.
Rukop, Hans, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, Circuit arrangement for generating electrical oscillations. 1,622,001; Mar. 22.
Rukop, Hans E., assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Valve amplifer. 1,618,288; Feb. 22.
Rule, John F., assignor to The Owens Bottle Company, Toledo, Ohlo, Forming and delivering charges of Rule. John F., assignor to The Owens Bottle Company, Toledo, Ohlo, Gens-forming machine. 1,642,828; Sept. 20.

Sept. 20.

Rule, Oliver, and J. A. Bennett, Chicago, Ill. Threspreading device. 1,652,414; Dec. 13.

Rulison, Carroll J., Clay, N. Y. Trap. 1,616,552; Feb. 8.

Rumbaugh, Roland C., Shreveport, La. Jack-post construction. 1,617,966; Feb. 15.

Rumble, Alex C., assignor of one-half to W. E. Lauer, Las Angeles, Calif. Automatic disconnecting pot heads.

Rumble, Alex C., Los Angeles, Calif. Splice head for electric cables. 1,647,251; Nov. 1.

Rumbough, Stanley M., New York, N. Y. Cap. 1,627,065; May 3.

Rumelly, Stanley M., New York, N. Y. Cap. 1,627,065; May 3.

May 3.

Rumely, Vincent P., Detroit, Mich. Tool for adjusting points of spark pluzs. 1,029,000; May 17.

Rumely, Vincent P., assignor to Hudson Motor Car Company, Detroit, Mich. Brace for shipping vehicles in freight cars. 1,651,351; Nov. 29.

Rumks. George H., Denver, Colo. Amusement apparatus. 1,628,745; May 17.

Rummer, John C., Flemington, assignor of one-half to D. Stewart, Lock Haven, Pa. Combined tire and rim car-rier and rim tool. 1,635,907; July 12. Rummins, John, Lansing, assignor to General Motors Cor-poration, Detroit, Mich. Shart bearing. 1,649,258; Nov. 15.

Rummins, John, Lansing, assignor to General Motor Corporation. Detroit, Mich. Shaft bearing, 1,649,268; Rummier, Francis J. (See Prescott, S. I., and Rummier.) Rumore, Joseph, Ressemer, Ala. Battery terminal. 1,651,294; Nov. 29.
Rumrich, Alfons, Flittsburgh, Pa. Burglar alarm. 1,629,312; May 17.
Rumsch, Emil. Forst-Luusitz, Germany. Safety device for steam mangles, 1,639,386; Aug. 16.
Tor steam mangles, 1,639,386; Aug. 16.
Rundgen, John, and C. A. Ellletdoux, Philadelphia, Pa. Drafting table. 1,622,847; Mar. 29.
Rundger, John, and C. A. Billetdoux, Philadelphia, Pa. Drafting table. 1,622,847; Mar. 29.
Rundgett, Ceorge W., Washington, D. C. Temporary tiretube valve. 1,637,499; Aug. 2.
Rundquyis, Thore R. E., Claremont. N. H., assignor to Tibe Miller Company, Meriden, Conn. Lamp support. 1,625,100; Apr. 19.
Runge, Riebard M., assignor to Leach Company, Oshkosh, Wis. Track roller. 1,627,413; May 3.
Runge, Richard W., assignor to Leach Company, Oshkosh, Wis. Track roller. 1,627,413; May 3.
Runge, Richard W., assignor to Leach Company, Oshkosh, Wis. Track roller. 1,627,413; May 3.
Runge, Richard W., assignor to Leach Company, Oshkosh, Vis. Track roller. 1,627,413; May 3.
Runge, Robert F., Forest Hills, N. Y., assignor to The Skayef Ball Rearing Company, Hartford, Conn. Sheet-

Numer, Robert F., Forest Hills, N. Y., assignor to The Skayef Ball Bearing Company, Hartford, Conn. Sheetmetal cage for roller bearings. 1,616,827; Feb. 8. Runge, Robert F., Forest Hills, N. Y., assignor to The Skayef Ball Bearing Company, Hartford, Conn. Sheetmetal cage for roller bearings. 1,616,828; Feb. 8. Runge, Robert F., Forest Hills, N. Y., assignor to The Skayef Ball Bearing Company. Hanger box. 1,638,747; Aug. 8. Aug. Company. Hanger box. 1,638,747; Aug. 9. Aug. 1,738; Au

Schneffer.)
Runnels, Paul P. (See Williamson, F. and Runnels, Paul P. (See Williamson, William B., assignor to The Dayton Malleable Iron Company, Dayton, Ohio, Melting furnace, 1.614,085; Jan. 11.
Runyan, William B., assignor to The Dayton Malleable Iron Company, Dayton, Ohio, Jack. 1,652.582; Dec. 18.

signor.)

Ruppert, Albert A., assignor to General Motors Corporation, Detroit, Mich. Trimming, 1,643,318; Sept. 27.

Ruprecht, Louis, Montchair, N. J., and A. G. Kolistede,
New York, N. Y. Method of and machine for grinding,
1,022,849; Mar. 29.

Rurup, Walter F., Santa Ana, Calif. Tree-shaking device.
1,623,44; Apr. 5.

Rusch, Christ A., et al. (See Haussmann, John F., asatmort.)

Rusen, Christ A., et al. (See Haussmann, John F., assignor.)
Ruseher, Harold, New York, N. Y. Diagram holder.
1.631.988; June 14.
Ruseoni, Louis, Fresno, Calif., Draft equalizer.
1.647.888; Nov. 1.

Rusdell, William J., Wolverhampton, England. Pumping liquid and apparatus therefor. 1,615,139; Jan. 18. Rusdell, William J., Wolverhampton, England. Pump or motor. 1,615,140; Jan. 18. It. Gregory and the state of the state of

Nov. 29.

Rushmore, Samuel W., Plainfield, N. J., Cooling system for internal-combustion engines. 1,644,083; Oct. 4.

Rushmore, Samuel W., Plainfield, N. J., Cooling system. 1,651,157; Nov. 29.

Rushmore, Walter C., Denver, Colo. Device for supplying cleaning solution. 1,647,473; Nov. 1.

Rushion, Eugene R., Midlson, Wis. Producing arsenic compounds. 1,624,251; Apr. 2.

executix, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Locomotive boiler. 1,614,396; Jan. 11.

Jan. 11. Rushton, Margaret P., executrix. (See Rushton,

Kenneth, brizic. Turin, Italy. Manoeuver indicator. Russid. 27; May 17.
Russ, George F, Jersey City, N. J., assignor to Russ Inserting Machine Co., Inc., Dover, Del. Envelope-filling machine, 1,633,350; June 21.
Russ Inserting Machine Co. (See Russ, George F., as-

machine. 1, 533,300; June 21.

Russ Inserting Machine Co. (See Russ, George F., asRuss Manufacturing Company, The. (See Joslin, C. T.,
and Klotz, assignors.)

Russak, Michael J., New York, N. Y. Cigarette holder.
1, 627,463; May 3.

Russe. William H. (See Allen, Chester B., assignor).

Russel, John W., Marletta Pa. Combination drain board

Russel, Philip S., St. Louis, and D. M. Boyd, Kirkwood.

assignors, by mesne assignments, to Electrol, Inc., of

Missouri. St. Louis, Mo. Pump. 1,629,121; May 17.

Russell, Advin B., Brooklyn, N. Y. Wall-apper-removing

tool. 1,617,924; Feb. 16.

Russell, Bavld M., and J. H. Shley, Chicago, Ill. Egg

crate. 1,621,904; Mar. 22.

Russell, Edward A. (See Gold, E. H., and Russell).

Russell, Edward A. (See Gold, E. H., and Russell).

Russell, Edward A. assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Flexible Joint. 1,615,774;

Jan. 25.

Russell, Edward A. assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Flexible piolit. 1,615,774;

Jan. 25.

Russell, Edward A. (assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Flexible piolit. 1,615,774;

Jan. 25.

Russell, Edward A., Chicago, Ill. Priexible piolit. 1,615,774;

Jan. 25.

Russell, Edward A., Chicago, Ill. Prevalle pine Joint

1,619,218; Mar. 1.

Russell, Edward A., Chicago, Ill. Plexible pine Joint

1,613,161; June 7.

See Warner, Albion L., assignor).

Russell, George H., Florence, Ala. Dispensing stand.

1,621,905; Mar. 22.

Russell, Guy M., deceased, Synacuse, by American Plano

Company, New York, N. Y., assignee. Automatic regulation

Company, New York, N. Y., assignee.

Russell, Guy M., despend Syracuse, by American Plane Russell, Guy M., N. Y., assignes. Automatic musical instrument, Relid-29; Aug. 30, Russell, Harty G., assignor to Consolidated Electric Sign Corporation, Battle Creek, Mich. Sign. Des. 74,123; Dec. 20.

Bee, 20.

Russell, Herbert O., Detreit, Mich., and C. L. Paulus, Dayton, Ohio. Electrically-operated wing-tip flare bracket, 1,627,668 May 3.

Russell, Herbert O., Parlice, Calif., and C. L. Paulus, Payton, Ohio. Gun sight for night use. 1,635,659;

Russell, Howard W., Collingswood, N. J. Buckle. 1.648.062; Nov. S. Russell, James M., Dayton, Ohlo. Solder iron. 1,641,604; Sept. 6.

Sept. 6.

Russell, James M. Dayton, Ohio. Parachute pack. 1,627,007; May 3. assignor to H. R. McClintock, San Russell, James M. assignor to H. R. McClintock, San Russell, James M., assignor to H. R. McClintock, San Diego, Callf. Patrachute pack. 1,631,767; James M., assignor to H. R. McClintock, San Diego, Callf. Patrachute pack. 1,631,767; James M., assignor to H. R. McClintock, San Diego, Callf. Patrachute paraches, 1,631,768; June 7. Russell, James M., assignor to H. R. McClintock, San Piezo, Callf. Patrachute baranes, 1,631,768; June 7. Russell, Jesse E. S., Los Angeles, Callf. Laundry carrier, 1,641,465; Sept. 6.

Russell, John W., Columbia, Pa., assignor of one-half to Marietta Hollow Ware and Enameling Company, Marletta, Pa. Combination drain board and cover. 1,628,746; May 17.

Russell, Leon L., Livermore Falls, Me. Game board. Des. 73,269; Aug. 18.

Russell, Leon L., Livermore Falls, Me. Game. 1,624,282; Russell, Leon L., Livermore Falls, Me. Game. 1,624,282; Nov. 15.

Russell, Leon L., Livermore Falls, Me. Game. 1,649,082; Nov. 15.

Russell, Leosle A., assignor to Keehring Company, Milwaukee, Wis. Power shovel. 1,639,752; Aug. 23.

Russell, Leslie A., assignor to Pass & Seymour, Inc., Syracuse. N. Y. Lang Pielra, IFex. Adjustable broom. 1,613,771; Jan. 11.

Russell, Nelson J., Chicago, Ill. Fuel-saving device. 1,618,907; Jan. 11.

Russell, Relson J., Chicago, Ill. Fuel-saving device. 1,618,907; Jan. 11.

Russell, Relson J., Rustuurg. Va. Road scraper. Russell, Robert A., Ridgewood, N. J. Receptacle closure. 1,633,276; June 21.

Russell, Robert A., Ridgewood, N. J. Receptacle closure. 1,633,276; June 21.

Russell, Robert A., Ridgewood, N. J. Receptacle closure. 1,633,276; June 21.

Russell, Robert A., Ridgewood, N. J. Receptacle closure. 1,633,276; June 21.

Russell, Robert A., Ridgewood, N. J. Receptacle closure therefor and dauber. 1,645,159; Oct. 11.

Russell, Robert A., et al. (See Ackerman, Chester W., assignor.)

& Cap Company, Inc., Paterson, N. J. Combined receptacle, closure therefor and dauber. 1,645,159; Oct. 11.
Russell, Robert L., et al. (See Ackerman, Chester W., assignor, ass. pr., Hendersonville, N. C. Automobile headlight. 1,618,108; Feb. 15.
Russell, Samuel G., assignor to Shakespeare Company, Kalaimazoo, Mich. Fishing reel. 1,640,375; Aug. 30.
Russell, Samuel G., assignor to Shakespeare Company, Kalaimazoo, Mich. Fishing reel. 1,640,375; Aug. 30.
Russell, Thomas C., Chicago, Ill. Electric heating struc-Russell, Thomas C., Chicago, Ill. Electric terminal. 1,647,232; Nov. 1.
Russell, Thomas M., Chicago, Ill. Brake-lever connection. 1,647,232; Nov. 1.
Russell, Thomas N., assignor to Chicago-Cleveland Car. 1,647,232; Prop. 32.
Russell, Thomas N., assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Uncoupling device for couplings, 1,622,055; Mar. 22.
Russell, Thomas N., assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Char. Prop. 1,622,055; Mar. 22.
Russell, Thomas N., assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car. end. 1,637,618; Aug. 2.
Russell, Thomas N., assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car. end. 1,637,618; Aug. 2.
Russell, Thomas N., assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car. end. 1,637,618; Aug. 2.
Russell, Homas N., assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car. end. 1,625,613; Apr. 20.
Russell, White S., Los Angeles, Calif. Material-handling device. 1,625,513; Apr. 20.
Russell, White W., Chicannatt, Ohio. Carton. 1,626,971; May. 3.
Russell, White W., Chicannatt, Ohio. Carton. 1,626,971; May. 3.
Russell, White W., Chicannatt, Ohio. Carton. 1,626,971; May. 3.
Russell, White W., Chicannatt, Ohio. Carton. 1,626,971; May. 3.
Russell, Carston C. assignor of C. W. Warren. Sauk Rapids, Minn. Curtain guide and support. 1,646,493; Oct. 25. Rapids, Oct. 25. Ussell M William Oct. 25.

Russell Manufacturing Company, The. (See Fisher, William C., assignor.)

Russell Manufacturing Company, The. (See Ingersoll, Charles A., assignor.)

Russell Manufacturing Company, The. (See Moore, Harold J., assignor.)

Russell & Stoil Company. (See Meschenmoser, William F., assignor.)

Russell & Stoil Company. (See Meschenmoser, William F., assignor.)

Russo, Albert, Pittston, Pa. Nipple. 1,621.134; Feb. 15.

Russo, Alpert, and J., Brooklyn, N. Y. Clothesline support. 1,639.247; Aug. 16.

Russo, Ampelo, Burlington, Mass. Lock. 1,639.535;

Russo, Singechino, Catanja, Italy. Optical apparatus as

Aug. 16.
Russo, Gloacchino, Catunia, Italy. Optical apparatus, as photographic camera, for reproducing the objects with their natural colors. 1,029,974; May 24.
Russo, Joseph. (See Russo, Albert, and J.)
Rutenber, Edwin A. (See Lindemann, W. C., and Ruten-

Rurenber, Edwin A. (See Lindemann, W. C., and Rutenber, Der.)
Rutenber, Edwin A., assignor to A. J. Lindemann & Hoversen Company, Milwaukee, Wis. Timer for electrically-operated devices, 1,622,002; Mar. 22.
Rutenber, Edwin A., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Curling fron. 14,627-166; May 34.
Hoverson Company, Milwaukee, Wis. Timer for electrically-operated devices, 1,634-683; June 28.
Rutenberg, Samuel, New York, N. Y. Necktie and Ilming. 1,621,336; Mar. 15.
Rützerswerke Aktienzosellschaft Abteilung Planiawerke. (See Kahl, Leopold, assignor).
Ruth, Charles H., Huntington Park, Calif. Connecting means for bed rails, 1,144-281 Oct. 4.
Ruth, George P. (See Davis, Emerson, assignor)

Ruth Glass Company. (See Koenig, Robert H., assignor.) Ruth, Ross T., Winterset, Iowa. Wall-board support.

Ruth Ross T., Winterset, Iowa. Wan-pours. 1,633,834; Dec. 27.
Ruth, Walter H., Greensburg, Kans. Automobile attachment. 1,649,083; Nov. 15.
Ruthenburg, Louis R., East Moline, Ill. Boat. 1,636,076; [clu. 19]

Rutherlond, Edward J. Y., Cheltenham, England. Liquid-fuel burner. 1,650,281; Nov. 22. Rutherlond, Harry K., U. S. Army, and W. E. Krotee, Philadelphia, Pa. Telescopic musket sight. 1,613,807; Jan. 11.

Jan. 11. Rutherford, Marvin E., Los Angeles, Calif. Storage-bat-tery terminal. 1,630,218; May 24. Rutherford, Walter, et al. (See Geake, William H. G., assignor.) Ruths Accumulator Company. (See Wettstein, Fritz, as-

Ruths Accumulator Company.

Ruths, Johannes, Djursholm, assignor to Aktiebolaget
Vaporackumulator, Stockholm, Sweden. Steam plant.

1.622.678; Mar. 29.

Ruths, Johannes, Ljursholm, assignor to Aktiebolaget
Ruths, Johannes, Ljursholm, assignor to Aktiebolaget
Stockholm, Sweden. Support.

1.634.084; June 28.

Rutkowski, Walter L., assignor to R. C. Can Company,
St. Louis, Mo. Powder can. 1.653.471; Dec. 20.

Rutledge, John J., assignor of one-half to J. H. Harrison,
Johe, Ill. Engine-stopping device. 1.633.386;

theoge, v. Hi. Engine-stopping Jolict, Hi. Engine-stopping June 21. Rutner, Stanley A., Hili, Cam.
Rutner, Spr. 19
Apr. 19
Gallus, Rorschach, Switzerland. Removing deRicacle, Gallus, Rorschach, Switzerland. 1,045,664;
posit, scale, or incrustations from metal. 1,045,664;

posit, s Oct. 18. Ruttan, A

Apr. 19.

Apr. 19.

Russche, Gallus, Rorschach, Switzerland. Removing deposit, scale, or incrustations from metal. 1,645,664; Ruttan, Alfred A., Rochester, assignor to Eastman Kodak Company, Rochester, N. Y. Film-pack construction. 1,635,562; Aug. 9.

Ruttenauer, Alfred, Berlin-Charlottenberg, Germany, assignor, and the state of the state of

Electric wave signaling system. 1,652,993; Dec. 13. Ryan, Frederick E., Danbury, Conn. Bill fold. 1,633,462; Ryan, George E., Tsunton, Mass. Heating and bumidifying device. 1,619,092; Mar. I. Ryan, George E., Los Angeles, Calif., assignor to The Prosperity Company. Inc., Syrenese, N. Y. Spring-pad construction. 1,628,196; May 10. Ryan, Issae 24., Ironton, Ohio. Barge-unloading apparatus. 1,631,065; May 21. Ross Manufacturing. Company, Kansas City, Mo. Flush-tank valve. 1,637,592; Aug. 2. Ryan, Jeremiah. Syracuse, N. Y. Offset tool holder, 1,635,437; July 12. Ryan, John J., Chicago, Ill. Valve. 1,624,186; Apr. 12. Ryan, John J., Chicago, Ill. Valve. 1,624,186; Apr. 12. Ryan, John J., and J. Gaffney, assignors to National Centron. 1,625,637; Apr. 19. Haven, Conn. Display Centron. 1,625,637; Apr. 19. Ryan, John J., and J. Gaffney, assignors to National Folding Box Company, New Haven, Conn. Display container. 1,650,392; Nov. 22.

Ryan, John W., French Camp, Calif. Pliers. 1,640,723;

Ryan, John W., French Camp, Calif. Pliers. 1,640,723;

Aug. 30.

Ryan, Joseph F., Chicago, Ill. Oll-well-regulation method and means. 1,631,085; June 28.

Ryan, Michael B., Milford, Conn. Chain link and making the same. 1,631,000; Jan. 18.

Ryan, Chael B., Milford, Conn. Chain link and making the same. 1,631,000; June 28.

Grane. 1,638,366; Aug. 9, 100.

Ryan. Chicken J., Loughas, Ariz. Folding table. 1,631,539; Jan. 18.

Ryan. Waiter D.A. Schenectady, N. Y. Headlight. 1,647,149; Nov. 1.

Ryan. Waiter D.A. Schenectady, N. Y. Headlight. Ryan. Waiter D.A. Schenectady, N. Y. Headlight. Ryan. Waiter D.A. Schenectady, N. Y. Headlight. Ryan. Waiter D., Schenectady, N. Y. Headlight. 1,648,198; Nov. 8.

Ryan. Waiter D., Schenectady, N. Y. Headlight. Ryan. Waiter D., Schenectady, N. Y. Headlight. 1,648,393; Nov. 8.

Ryan. Waiter D., Schenectady, N. Y. Headlight. Nyan. William J., Jr. (See Weir, J. W., and Ryan.) Waiter D., Schenectady, N. Y. Headlight. 1,648,393; Nov. 8.

Rybeck, Adolph W., assignor to The T. L. Smith Company, Milwaukee, Wis. Liquid-measuring apparatus. 1,648,661; Nov. 8.

Rybeck, Adolph W., assignor to The T. L. Smith Company, Milwaukee, Wis. Liquid-measuring apparatus. 1,648,661; Nov. 22.

Ryckman. Norman E. (See Kemp. C. T., and Ryckman.) Rydberg, John T., Brooklyn, N. Y., assignor to Supreme Player Action Corporation. Automatic playing instru-

Rydberg, John T., Brooklyn, N. Y., assignor to Supreme Player Action Corporation. Automatic playing Instru-Rydberg, John T., Harrison, N. J., assignor to Supreme Player Action Corporation. Transmission mechanism for player actions. 1,630,035; May 24.
Rydberg, John T., Harrison, N. J., assignor to Supreme Player Action Corporation. Plane action. 1,650,095;

Rydberg

Player Action Corporation. Plano action. 1,650.095; Nov. 22.
Ryden. John, and C. Gustavson, Rockford. Ill. Adjust able clamp. 1,642.829; Sept. 20.
Ryder, Alfred C. (See Ryder, Alfred and A. C.)
Ryder, Alfred and A. C., Sheffield, Ala. Adjustable hat block. 1,630.803; May 31.
Ryder, Charles, assignor to Wolverine Motor Works. Inc., Bridgeport, Conn. Operating oil engines and improved oil engine. 1,618.221; Feb. 22.
Ryder, Charles D., and Grand Charles D., and Grand Ryder assignor to the company of the control of

Feb. 1.
Ryder, Elmer. Rerwyn, Ill. Liquid-level gauge.
1.654.666; Dec. 27.
Ryder, Elmer. Elgin. Ill. Vaporizing attachment for internal-combustion engines.
1.653.667; Dec. 27d.n. Ill. Motor-vehicle heater.
1.653.668; Dec. 27.
Ryder, Elmer. Elgin, Ill. Motor-vehicle heater.
1.653.668; Dec. 27.
Ryder, Forest C., Elgin, Org. Glarschield. 1.642.045;
Sept. 13.

Sept. 13.

Ryder, Frank P., Ningara Falls, N. Y. Green-pea viner. 1.652.498; Dec. 13.

Ryder, Gilbert E., Leonia, N. J., assignor to The Superheater Company, New York, N. Y. Locomotive tender with all separator. I. 636.787. Inly 26.

Ryder, Harry M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermionic device. 1.652.497; Dec. 13.

Ryder, Harry M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermionic device. 1.652.497; Dec. 13.

Ryder Mark H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vaccumpings of the Company. September 1.655.634; Aug. 25.

Ryder, Parally II., and C. W. Moore Buckyus, Ohlo ass.

Jan. 25.
Ryder, Parmly H., and C. W. Moore, Bucyrus, Ohlo, assignors to Smokeless Oil Burner Company. Oil burner, 1,624,806; Apr. 12.
Ryder, Parmly H., and C. W. Moore, Bucyrus, Ohlo, assignors to Smokeless Oil Burner Company. Oil assignors to Smokeless Oil Burner Company. Oil Ryder, Robert W., assignor to Santa Cruz Portland Cement Company. San Francisco, Calif. Cement kiln feeder, 1,628,197; May 10.
Ryding, Herbert C., and A. B. Hisswell, Birmingham, Ala, Henting furnace, 1,624,763; Apr 12.
Ryding, Hertiff W., assignor to Huron Industries, Inc., 1,639,670; Aug. 231.

Rydzy Bunny M., Michigan City, Ind. Combination flash light and circuit tester. 1.653,669; Dec. 27. Rye, Olaf. (See Sandvold, O., Rye, and Platou.)

yerson, Cornelius A., Toronto, Ontario, Canada. Thermal-efficiency cosing for fluid-heating bollers. 1,014,805; Jan 18. yerson, Cornelius A., Toronto, Ontario, Canada. Ther-mal-efficiency cashing for heating bollers. 1,614,806;

Hart Relation of meaning observes. 1,012,000; Ryerson, Eilof S., Dayton, Wash. Load-bracing jack. 1,613,057; Jan. 4. Ryerson, Joseph T., & Son, Inc. (See Seymour, W., fr., Groff, and Schaaf, assignors.) Rylander, James B., et al. (See Rylander, Partish H., Rylander, James B., et al. (See Rylander, Partish H.,

assignor.)
Rylander, Parrish H., et al. (See Rylander, William P.,
assignor.)
Rylander, Parrish H., assignor to W. P., J. B., and P. H.
Rylander, constituting the Firm of the Rylander Company, Austin. Tex. Sterilizing cotton and other seeds.
1.641.097; Aug. 30.
Rylander, William P., et al. (See Rylander, Parrish H.,

assignor.)

assignor.)
Rylander, William P., assignor of one-third to T. F., Caldwell, Austin, and one-third to P. H. Rylander, San Antonio, Tex. Storage and display apparatus for San Antonio, Tex. Storage and display apparatus for San Antonio, 1988, and 198

1.629.228; May 17.

Ryon, Eppa H., Waltham, assignor to Crompton & Knowles

Loom Works, Worcester, Mass. Stop motion for

Ryon, Eppa H., Waltham, assignor to Crompton &

Knowles Loom Works, Worcester, Mass. Shutle placer

for wett-replenishing looms. 1,633,648; June 28

Ryon, Eppa H., Passdena, Calif., assignor to Crompton &

Knowles Loom Works, Worcester, Mass. Shutle placer

for wett-replenishing looms. 1,633,648; June 28

Ryon, Eppa H., Passdena, Calif., assignor to Crompton &

Knowles Loom Works, Worcester, Miss. Thread-cutting

mechanism for looms. 1,643,422; Sept. 27.

R1811; Jan. 4. C., Yonkers, N. Y. Radiocabinet, Des

Rypinski, Maurice C., Yonkers, N. Y. Radiocabinet, Des 71.811; Jan. 4.

Rypinski, Maurice C., Yonkers, N. Y., assignor to Brandes Laboratories, Inc., Newark, N. J. Loud-speaker cabinet. Des. 72.112; Mar. I. N. Y., assignor to Brandes Laboratories, Inc., Newark, N. J. Loud-speaker cabinet. Des. 72.113; Mar. I. N. Y., assignor to Brandes Laboratories, Inc., Newark, N. J. Sound-reproducing diaphragm. 1616.533; Feb. 8.

Rypinski, Maurice C., Yonkers, L. W. Staunton, Jackson Heights, and S. Bourne, New York, N. Y., assignors to Brandes Laboratories, Inc., Newark, N. J. Cone speaker. Des. 72.871, June. 10. Newark, N. J. Co

Mar. 22,

Rystedt. Ingemar K., assignor of one-half to C. R.
Snyder. Dayton, Ohio. Motor car. 1,642,971; Sept 20.

Rundido, John. Shenandoah, Pa. Ice slipper. 1,664,348;

S. & B. Specialties Manufacturing Company. (See Blanc, Adolph I.)

S.C. Regulator Manufacturing Company. The. (See Barrett, Jaseph M., assignor.)

S. & W. Machine Company. (See Wermes, Frederick J., Snar, Clifford. (See Dick, Charles O., assignor.)

Saare, Walter, Leipzig, Germany. Washboller. 1,635,979;

July 12.

Sabultscelka, Theodor, Berlin-Steelitz, Germany, Pes-sabultscelka, Theodor, Berlin-Steelitz, Germany, Pes-Sabhag, Liffallah G. Esst Roston, assignor of one-half to M. A. Tawa, Boston, and one-half to N. G. Sabbag, East Boston, Mass. Machize for automatically rolling articles from blanks of plastic material, 1,852,375; Dec. 13.

The 13
Sabbag, Nasceb G., et al. (See Sabbag, Litfallah G., assignor)
Sabbah, Camille, A., Schenectady, N. Y., assignor to General Electric Compuny. Pressure-control apparatus, 1.618,109; Feb. 15
Sabel, John C., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Rinacular microscope. 1.622,350; Mar 29.

Mar. 29.
Sabin, Alex., & Sons. (See Sabin, Milton, assignor.)
Sabin, Clayton R., assignor to General Insulating and
Manufacturing Company. Alexandria, Ind. Pipe Insulation. 1.613.725; Jan. 11.
Sabin, Enest E., Revelty Mass., assignor to United Shoe
Sabin, Ernest E., Revelty Mass., assignor to United
Shoe Machinery Corporation. Paterson, N. J. Apartarts for
operating on parts of shoes. 1.621.519; Mar. 22.
Sabin, Ernest E., Revelty Mass., assignor to United
Shoe Machinery Corporation. Paterson, N. J. Pasting
machine. 1.634.519; July 5.
Sabin, Milton H., New York, N. Y. Watch bracelet.
Sabin, Milton assignor to Alex, Sabin & Sons, New York,
N. Y. Chain. 1.621.954; Mar. 22.

Sabourin, Jean B. (See Smith, C. F., and Sabourin.)
Sacerdote, Secondo, Milan, Italy, Cooking stove with
thermoelectric storage. 1,633,290, June 21.
1,637,639; Aug. Milan, Italy. Thermoelectric oven.
1,646,745; Oct. 11.
1,646,745

Sacks, Abraham, Brooklyn, N. Y. Tassel. 1,618,111; Fcb. 15.

Fcb. 15.
Sacks, Abraham, Brooklyn, N. Y. Combination dish mop and scraper. 1,943,857; Sept. 27.
Sacks: George P. (See White, George H., assignor.)
Sacksteder, Overton, fr., assignor to Aladdin Manufacturing Company, Muncle, Ind. Portable lamp. Des. 7,871; Nov. 15.
Saco-Lowel Shops. (See Borovoy, S., and Perry, assections)

Saco-Lowell Shops. (See Bounts, signors.)
Saco-Lowell Shops. (See Langevin, Felix D., assignor.)
Saco-Lowell Shops. (See Langevin, Felix D., assignor.)
Sacor Lowell Shops. (See Langevin, Felix D., assignor.)
Sacor Lowell Shops. (See Cattert, Harry, assignor.)
Sacor Lowell Shops. (See Langevin, Felix D., assignor.)
Sacro Lowell Shops. (See Langevin, Felix D., assignor.)
Sacor Lowell Shops. (See Langevin, Felix D., assignor.)

1.638.246; Jul. 10.
Sadler, F. H., Company, The (See Sauser, assignor,)
Sadler, F. Frederick W., assignor of one-fourth to B. E.
Turney, Okiahoma City, Okia. Casing cover and tool
Didder, 1.62.7774; Apr. 10.
Artieboro, Mass. Compact holder, 1.644.282; Oct. 4.
Sadler, Luther, Los Angeles, Callif, Vehicle periscope,
1.635.011; July 5.
Sadler, Will R., et al. (See Schumacher, Robert H.,
Assignor,)

sassignor.)
Saddter, Helena S., Erdenheim, Pa. Transferring dyesadts to havreSadts to havreSadts to havreSadts to the Sadts to

signor.

signor.)
Saenger, Carl, Irvington, N. J. Socket for radio vacuum
tubes. 1,639,971; Aug. 23.
Séanz, Mauro G., Colonia Postal, General Anaya, Mexico,
Electrical connecter socket of the wall and plug type.
1,639,437; Aug. 16.
Safberg, Bror F. F. (See Hiller, N. H., and Safberg.)
Sac-T-Stat Co., The. (See Collins, William A., as-

Signor.)

Safety Car Heating & Lighting Company, The. (See Cole, T. S., and Johnson, assignors.)

Safety Car Heating & Lighting Company, The. (See Hulse, George E., assignor.)

Hulse, George E., assignor.)

Safety Car Heating and Lighting Company, The. (See Hurchison, Miller R., assignor.)

Safety Car Heating and Lighting Company, The. (See Schepmoes, Lindsley, assignor.)

Safety Car Heating & Lighting Company, The. (See Turbayne, William A., assignor.)

Safety Car Henting & Lighting Company, The. (See Safety Concrete Internet Signor)

Safety Concrete Internet Co. Inc. (See Feigenbaum, Joseph, assignor.)

Safety Hone Company. (See Sullivan, James M., as-signor.)
Safety Pressure Mining & Equipment Company. (See
Crawford, J. H., Helmholtz, and Ferrell, assignors.)
Safeway Lock Company. (See Anakin, Arthur E., as-

signor.)
Saffold, James W., Cleveland, Ohio. Bumper. 1,617,824;
Feb. 15.
Saftr, Leo C., New York, N. Y. Bath robe package.
1,641,552; Sept. 6.
Sagar, Charles, Seattle, Wash. Towing and hauling device. 1,632,922; June 21.
Sage, Andrew, Farrell Berough, Pa. Combined coverholding-down and pressure-relief device for manways.
Sage, M. Jay. 61. (See Hawxhurst, John J., assignor.)
Sage, M. Jay, et al. (See Hawxhurst, John J., assignor.)

Sage, M. Jay, et al. (See Hawkhurst, Signor.)
Sager, J. H., Company. (See Sager, James H., assignor.)
Sager, James H., assignor to J. H. Sager Company,
Rochester, N. Y. Bumper. 1.632.503; June 14.
Sager, John W., Indepo, Ill, assignor to Wester Electer and the sager of the sager of the sager, John W., Indepo, Ill, assignor to Wester Elecsager, Lee R., and R. H. Mitchell, Minneapolis, Minn.
Piece feeder for flatwork ironers. 1.641.764; Sept. 6.
Sagers, Bert, et al. (See Moore, Samuel M., assignor.)
Sagers, Bonnie R., et al. (See Moore, Samuel M., assignor.)

signor.)
Saget, Andre, Paris, France. Locking hand-operated brakes. 1,631,066; May 31. Y. Automatic window-sagly, Frank, New York, N. P. Automatic window-sagly, Frank, New York, N. P. C. 13.
Sagi, Engen, Bratislava, Czechoslovakia, assignor to Chemosan Aktiengeselschaft, Vienna, Austria. Production of solutions of mercury derivatives of hydroxysulpho-benzoic acids. 1,613,569; Jan. 4.
Saginaw Manufacturing Co. (See Gilbert, Henry J., as-Salazoff, Alexander V., Chreinnadi, Ohio, assignor to

Saginaw Nanufacturing Cô. (See Gilbert, Henry J., assignor.)
Saharoff, Alexander V., Cincinnati, Ohio, assignor to Worthington Fump and Machinery Corporation, New York, N. Y. Intake silencer. 1,644,94; Oct. 11.
Sahiberg, Carl A., Chicago, Ill. Canning meats. 1,652,454; Jun H. Hutchinson, Minn. Dental impression trays. 1,629,177; May 17.
Saikawa, Sakuhei, Higashinojiri-Mura, Japan. Arrangement for transforming direct-current voltage. 1,626,097; Apr. 26.
Sainson, Bugene, Great Kills, N. Y. Dish or similar article. Des. 71,928; Jan. 25.
Sainson, Bugene, Great Kills, N. Y. Plate or similar article. Des. 71,928; Jan. 25.
St. Aubin, Arthur P., Yakima, Wash. Headlight-lens-rim tool. 1,650,807; Nov. 29.
St. Clair, James A., assignor of one-half to K. M. Rowe, Broken Arrow, Okla. Measuring device. 1,651,643; Dec. 6.
John C., Butte, Mont. Combined coal stoker and burner. 1,633,645; June 21.
St. Clair, Moffat, Galt, Ontario, Canada. Fuel pump for combustion engines. 1,613,654; Jan. 11.
St. Claire, Alexander, Los Angeles, Calif. Light indicator for reflector imps. 1,644,207; Oct. 4.
St. Heiens Cable and Rubber Company Limited. (See Harrison, Harry C., assignor).
St. Jacouse Emile J. M., Montreal, Quebec, Canada, assignor).

Hartison, St. Helens Iron & Marine Works.

St. Helens Iron & Marine Works.

St. Jacques, Emile J. M., Montreal, Quebec, Canada,,
signor to O. Surprenent, himself, and J. T. Dur
Schenectady, N. Y. Derailment brake. I,613,2

St. James, Robert T., Chicago, Ill. Transformer, 1,633,047; June 21.

St. James, Robert T., assignor to Chicago Miniature Lamp Works, Chicago, Ill. Exhausting detector tubes, 1,646,633; Oct. 25.

St. John, Ancel, Brooklyn, N. Y., assignor to Union Carbinatories, Inc. Method of and apparatus for radiographic examination, 1,622,149; Mar. 22.

St. John, Ancel, Brooklyn, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Inc. X-ray filter, 1,624,443; Apr. 12.

St. John, Ancel, Brooklyn, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Inc. Producing blee & Carbon Research Laboratories, Inc. Producing Apr., 26.

St. John, Assignor to Maerican Apparatus therefor, 1,626,306; Apr., 26.

Apr. 26.
St. John, Everett, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Battery light. 1,651 480; Dec. 6

1.651.480: Dec. 6.
t. John, Henry A., and J. F. Griffen, Utica, N. Y. Calipers. 1.631.896; June 7.
t. John, Walter S., New York, N. Y. Building construction. 1,635.231; July 12.
t. Lawrence, Joseph N., Grand Forks, N. Dak. Carrying case. 1.647.551; Nov. 1.
t. Louis Braid Company. (See Hebeler, Henry, jr.,

assignor.)

Louis Car Company. (See Richards, Leslie W., as-

signor.) . Louis Pump & Equipment Company. (See Hinds,

St. Louis Pump & Equipment Company.

St. Louis Beaming Tool Co. (See Davis, Robert R., assigner.)

St. Louis Screw Company. (See Miller, Edward J., assignor.)
St. Louis Steel Ball Corporation. (See Mangann, Merritt W., assignor.)
St. Onge, Azarlas. (See Gingras, L. J., and St. Onge.)
St. Onge, Azarlas. (See Gingras, L. J., and St. Onge.)
St. Feter, Nelson, Mount Vernon. N. Y. Tool for removally the state of the s

alloy steel and fron. 1,619,462; Mar. 1.

Saklatwalla, Byramip D., Crafton, Pa. Manufacture of chromium iron alloys. 1,623,757; Apr. 5.

Saklowski, Hugo K., New York, N. Y. Pin. 1,626,303; Apr. 26.

Salo, Theodore A., Dallas, Tex. Gas-log heater. 1,618,477; Apr. 26.

Sala, Theodore A., Dallas, Tex. Fireplace heater. 1,618,478; Feb. 22.

Sala, Theodore A., Dallas, Tex. Fireplace heater. 1,618,478; Feb. 22.

Sala, Theodore A., Dallas, Tex. Fireplace heater. 1,618,478; Feb. 22.

Sala, Theodore A., Dallas, Tex. Fireplace heater. 1,618,478; Feb. 22.

Sala, Theodore A., Dallas, Tex. Fireplace heater. 1,618,478; Feb. 22.

Sala, Burdone A., Dallas, Tex. Fireplace heater. 1,618,478; Feb. 22.

Sala, Burdone A., Dallas, Tex. Fireplace heater. 1,604,134; Aug. 23.

Salberg, Gustave R., assignor to Richardson Ball Bearing Saket Company, Chicago, Ill. Roller skate. 1,640,134; Aug. 23.

Sale, Burt, Riverside, Calif. Nut lock. 1,624,764; Sale, Nelson, et al. (See Jones, Henry R., assignor.).

Salem China Co., The. (See Sebring, Frank H., Jr., assignor.).

Salem China Co., The. (See Sebring, Frank H., Jr., assignor.).

Salem China Co., The. (See Sebring, Frank H., Jr., assignor.).

Salinger, Hans Berlin, Germany. Pelegraph cable profile of the Salinger, Hans Berlin, Germany. Pelegraph cable profiles and process of treating oils. 1,628,747; May 17.

Salisbury, Frank C., Cleveland, Ohio. Steam halt curler. 1,639,900; Aug. 28.

Salisbury, Frank C., Cleveland, Ohio. Steam halt curler. 1,639,900; Aug. 28.

Salisbury, Frank C., Cleveland, Ohio. Steam halt curler. 1,614,996; Jal. John A., Rockford, Ill. Vehicle heater. 1,614,996; Jal. Jan. 18.

Sallac, Harry C., St. Louis, Mo. Resilien

Jan. 18.

Jan. 18.
Sallac, Harry C., St. Louis, Mo. Resilient wheel. 1,614,397; Jan. 11.
Sallacd, Clarence E., Minneapolis, Minn. Air moistener. 1,621,430; Mar. 15.
Sallee, Robert A., Port Richmond, Calif. Gate. 1,640,135; Aug. 23.
Sallee, Robert A., Port Richmond, Calif. Gate. 1,640,135; Aug. 23.
Sallee, Robert A., Port Richmond, Calif. Gate. 1,640,135; Aug. 23.
Sallee, Thomas I. Mobile, Ala. Operating mechanism for dirigible headlights. 1,635,097; July 5.
Sallop, Harry A., New York, N. Y. Automobile seat-cover fastener. 1,647,334; Nov. 1, 20.
Salmon, Barbar M., Serena Park, Md. Frying-pan cover. 1,622,351; Mar. 29.
Salmon, Fank, Luxerne, N. Y. Bouquet pin. 1,647,197; Nov. 1,
Salmon, Robe L., Paris, France. Large-sized reservoir

Nov. 1.

Salmon, René L., Pavis. France. Large-sized reservoir for liquids. 1,654,016; Dec. 27.

Salmon, Wilmer W., Larchmont, assignor to General Railway Signal Company, Rochester, N. Y. Continuous Inductive train-control system. 1,647,970; Nov. 1.

Salmons, George C., West Brighton, assignor to Wired Railway Company, Rochester, A. Amplifying three-phase and the control of the

sations, Martin, Milwaukee, Wis. Bott-locking menns. 1,621,845, Mar. 22.
Saloun, Martin, Milwaukee, Wis. Preserving receptacle. 1,639,069; Aug. 16.
Salpas, Spero M., Chiengo, Ill. Atomizer. 1,617,545; Feb. 15.

Salsbery, Charles E. (See Jensen, H., Salsbery, and Graham.) Salsich, Neil E., Bethlehem, Pa. Gauge rod. 1,631,769; June 7.

Salstrom Carving Machine Company. (See Salstrom, David B., assignor.)
Salstrom, David B., assignor to Salstrom Carving Machine Company, Chicago, Ill. Wood-carving machine.
Salt, William B. (See Kissinger, George B., assignor.)
Salterini, John B., New York, N. Y. Bridge lamp. Des. 73.581; Oct. 4.
Salterini, John B., New York, N. Y. Lamp arm. Des. 73.582; Oct. 4.
Salterini, John B., New York, N. Y. Lamp arm. Des. 73.582; Oct. 4.
Salterini, John B., New York, N. Y. Lamp arm. Des. 73.582; Oct. 4.
Salterini, John B., New York, N. Y. Lamp arm. Des. 73.583; Oct. 4.
Salts, Fitz O. (See Seidel, G. F., Salts, and Whitcomb.)
Saltzman, Joseph. (See Zeman, Anton, assignor.)
Saltzman, Joseph. (See Zeman, Anton, assignor.)
Salvage Process Corporation. (See Wheeler, H. J., and Engstrand, assignors)
Salvacen, Fredrik B., Brooklyn, N. Y. Cultivator. 1,022,748,741; Detroit, Mich., assignor of one-half to J. W. Headley, fr. Wrench. 1,616,871; Feb. 8.
Salyards, Bilmer S., Moline, Ill. Coal-dust-feed mechanism. 1,645,932; Oct. 18.
Sambor, Samuel, Newark, N. J. Machine for dispensing articles. 1,634,916; July 5.
Samis, Iyalou E., Los Angeles, Calif. Educational game. 1,034,270; July 5.
Samoue, George A., Brooklyn, N. Y. Animal trap. 1,634,270; July 5.

Sammis, H. M., et al. (See Nesmith, Shauer L., assignor.)
Samouce, George A., Brooklyn, N. Y. Animal trap.
1,634,270; July 5.
Samper, George A., Brooklyn, N. Y. Animal trap.
Samper, Joaquin, Bogota, Colombia. Indicating electrical overloads.
1,635,248; July 12.
Sample, Millon B., Elizabeth City, N. C. Bean and pea harvester. 1,621,642; Mar. 22.
Samples, John W., Sue, W. Va. Shipping crate.
1,637,660; Aug. 2.
Samples, John W., Sue, W. Va. Shipping crate.
1,637,660; Aug. 2.
Samples, Charles H., and J. L. Whitley, Rochester, N. Y.
Buckle. 1,618,389; Feb. 22.
Sampson, Charles H., and J. L. Whitley, Rochester, N. Y.
Buckle. 1,618,389; Feb. 22.
Sampson, Harold A., Butlingame, Calif.
1,618,389; Gee Prirchett, George E., assignor.)
Sampson, Joseph A. (See Prirchett, George E., assignor.)
Sampson, Morthal Corporation. (See Sampson, Robert Wannies H. Chicago, Ill., Ogran relay.

Sampson, Joseph A. (see Filtenews Sampson, Robert W., assignor.)
Sampson, Maurice H., Chicago, Ill. Organ relay.
1.639,901; Aug. 23.
Sampson, Robert W., assignor to Sampson Martin Corporation, New York, N. Y. Fneumatic cushion, mattress, and the like. 1.646,18; Aug. 30.
Sampson, Victor J., Woodland, Wash. Track brace and gauge. 1.637,3019. Aug. 2.
Suns, Orde O., De Noya, Okla. Pump jack. 1,612,886;

Samson, Alta M., Albion, Nebr. Colander. 1,652,053; Dec. 6. Samson Cordage Works. (See Lewis, Warren K., as-

Samson Cordage works. (See Lewis, Varieta Englishmon, Curt, Berlin, Germany, assignor to General Electric Company. Incandescent electrode device. 1.620,331; Mar. 8.

1.620,331; Mar. 9.

mstag dassignor.) omstag & Hilder Bros., Inc. (See Samstag, Henry R., Samstag &

Sanstig c Hield S. Saugus, Mass. Spring and receil Sangues, 1,628,749; May 17.
Sangues, 1,628,749; May 17.
Sangues, Alexander, assignor to C. J. Root, Terre Haute, Ind. Glass-working machine. 1,620,292;

Samuelson, Eric, assignor to R. Williamson & Company, Chicago, Ill. Lighting fixture. 1.015.043; Jan. 18. Samuelson, Eric T., assignor to R. Williamson & Company, Chicago, Ill. Lighting fixture. 1.666.495; Oct. 25. Samuelson, Victor K., Chicago, Ill. Lamp. Des. 72,074;

Feb. 22.

Feb. 22.

Sanborn. Albert E., Laconia, N. H. Stocking top.
1,016,003; Feb. 1.

Sanborn, George H., Malden, Mass. Automatic traincontrol device. 1,634,119; June 28.

Sanchez, Adalberto. Kingman, Ariz. Automobile signal
device. 1,637,962; Aug. 2.

Sandage, William L., Los Anzeles, Calif. Rotatablydriven reciprocating-piston pump. 1,649,196; Nov. 15.

Sandberg, Gustaf E., New York, N. Y. Sileing board.
1,623,498; Apr. 5.

Sandberg, Carl, Ettlerfort. 1,651,555; Dec. 6.

Sandberg, Eugene S., Allentown, Pa. Vibratory distributor of electric current. 1,635,802; July 12.

Sandberg, Johannes, (See Ensdorf, W., and Sandberg, Johannes, Tikzabeth, N. J., and W. Ensdorf,
New York, N. Y. Soldering Iron. 1,639,537; Aug. 16.

Sandberg, John R., Denvey, Colo. Folding towing device
for automobiles. 1,649,084; Nov. 15.

Sandberg, Oscar, assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Wrapping machine. 1,646,496; Oct. 25.
Sandberg, Oscar, assignor to Johnson Automatic Sealer Cheek, Mich. Wrapping machine. 1,646,497; Cerek, Mich. Wrapping machine. Cheek, Mich. Wrapping machine. 1,644,497; Lett. Creek, Mich. Wrapping machine. 1,644,497; Lett. Sandele, Albert, assignor of one-half to F. Scholz, Chicago, Ill. Same apparatus for multisix color games. Sandel Manufacturing Company. (See Sturnam, Morris C., assignor.)
Sandel Henry K., Chicago, Ill. Electric motor. 1,634,352; July 5.
Sandel Henry K., Chicago, Ill. Transforming system. Sandel Matufacturing Company. (See Sturnam, Morris C., assignor.)
Sandel: Henry K., Chicago, Ill. Transforming system. Sandel: Henry M., Sandel: Millem. (See Guertler, W., and Sander.)
Sander, William E. C., Hollis, N. Y. Typographic numbering apparatus. I.633,278; June 21.
Sanders, Albert E., Glendora, Calif. Mortar-applying Sanders, Allen C., Eric, Fa. Ellipsograph. 1,626,430; Apr. 26.
Sanders Clyde W., Bagle Rock, Calif. Combined cablnet and table. 1,613,294; Jan. 4.
Sanders, George E., Deloro, Ontario, Canada, assignor to Riches, Piere & Co. Copper-lime dust. 1,620,499; Mart. 8.

Sanders, George E., Deloro, Ontario, Canada, assignor to Riches, Piver & Co. Copper-lime dust. 1,620,490; Mar. 8. Sanders, George E., Deloro, Ontario, Canada, assignor to Riches, Piver & Co. Copper-arsenic dust. 1,642,511; Sanders, George R. (See Hall, E. A., and Sanders, Sanders, John W., Detroit, Mich. Cigarette-printing device. 1,643,340; Sept. 27; John J., Canaders, Joseph A., Philadelphi, Pa., assignor to The artificial teeth. 1,643,6487; July block for mounting artificial teeth. 1,643,657; July block for mounting artificial teeth. 1,645,658; July block for mounting artificial teeth. 1,645,658; July block for mounting artificial teeth. 1,645,658; July block for mounting brace. 1,645,258; Oct. 11. Sanders, Walter C., assignor to The Timken Roller Bearing Company, Canton, Ohio. Car-azie bearing. Company, Canton, Ohio. Raliway-car truck. 1,640,963; Aug. 30. Sanderson, Edward S., assignor to Scovill Manufacturing Company, Canton, Ohio. Raliway-car truck. 1,640,927; Nov. 22. Sanderson, Sanwel B., Brooklyn, N. Y. Automatic variable-speed transmission. 1,644,614; Oct. 4. Sandhoff, Jacob, Saskatoon, Saskatchewan, Canada. Weeding attachment for land harrows. 1,645,933; Oct. 11.

Oct. 18.
Sandifer, William T., Jackson, Miss. Flexible coupling.
1.638,412; Aug. 9.
Sandifer, William T., Jackson, Miss. Spring hanger.
1.645,821; Oct. 18.
Sandidan, Survey, Sandidan, Sandidan, Sandidands, James, Toronto, Ontario, Canada. Indicating valve. 1.635,349; July 12.
Sandin, David A., assignor to W. H. Deubener, St. Paul, Mim. 1825; Sept. 1845; Sept. 1845; Sandin, Maurits J., Wilkinsburg, Pa., assignor to Westingbouse Electric & Manufacturing Company. Cut-out. 1,630,358; May 31.
Sandman, August G. (See Mublfeld, J. E., and Sandman, August G.

ndman, August G., Baltimore, Md. Automatic drain and discharge trap for refrigerator cars. 1,613,908; Jan. 11. man.) Sandman,

Jan. 11.

Sandman, August G., Baltimore, Md. Corner post for drop-end gondola cars. 1,638,128; Aug. 9.

Sandmen, Henry, assignor of one-half to J. Aschinger, Union City, N. J. Adjustable damper-wire connection for grand-piano actions. 1,053,590; Dec. 20.

1,638,366; Aug. 9.

Sands, Edwin T. (See Birkin, C. W., and Sands.)

Sands, Edwin T. (See Birkin, C. W., and Sands.)

Winding Company, Boston, Mass. Compensating devices of the company and the company. The (See Hamilton, Paul H., assignor).

Sand Spun Patents Cornoration. (See Beatty, Douglas T., assignor).

Sand Spun Patents Corporation. (See Moore, William

Sand Spun Patents Corporation. (See Moore, William D., assignorents Corporation. (See Moore, W. D., and Morgan, assignores.)
Sandstrom, Eric, Erle, Pa. Tool-driving spindle. 1.630.541; May 31.
Sandstrom, Ferdinand E. St. Paul, Mind. Run board for Sandstrom, Ferdinand E. St. Paul, Mind. Run board for Sandyla Nation B., Grafton, N. Dak. Grain separator. 1,026,885; Apr. 26.

Sandvold, Ole, O. Rye, and O. Platou, Notodden, assignors to Norsk Hydro-Elektrisk Kvaelstofaktieselskab, Oslo. Norway. Electrode device for electric furnaces. 1,617,136; Feb. S. 162, 136; Feb. S. 162, 136; Feb. S. 162, 136; Feb. S. 163, 136; Feb

Sanford Investment Company. (See Sanford, H. W., and Jones, assignors.)
Sanford, Lynn H., assignor of one-half to C. L. Mann,
Toledo, Ohio. Brake-shoe-key holder. 1,619,767;
Mar. 1.

Sanford Motor Truck Company. (See Wilkins, Fred W.,

Sanford Motor Truck Company. (See Wilkins, Fred W., assignor.)
Sanford, Robert G., Yonkers, N. Y. Motor compressor. 1,650,769; Nov. 29.
Sanford, Roy S., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,620,921;
Sanford, Roy S., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake system. 1,652,290;
Dec. 13.
San Francisco-Sacramento Railroad Co. (See Miller, Ernk A., assignor).

Ernk A., assignor assignor to Filtrators Company, Incorporated. New York, N. Y. Apparatus for use in preventing the incrustation of steam boilers. 1,645,973; Oct. 18.
Sangamo Electric Company. (See Holtz, Frederick C., assignor.)

1.645.973; Oct. 18.
Sangamo Ellectric Company. (See Holtz, Frederick C.,
assignor.)
Sangren, Harry A., assignor to American Optical Company, Southbridge, Mass.
1.630.276; May 31.
Sangren, Harry A., assignor to American Optical Company, Southbridge, Mass.
1.641.785; Sept. 6.
Sangren, Harry A., assignor to American Optical Company, Southbridge, Mass.
1.654.654; Dec. 27.
Sanguinetti, Louis, San Jose, Calif. Cooker. 1,651.730;
Dec. 6.

Sani-Tabl-Tub Company. (See Darrow, Benjamin H., assignor.)

assignor.)

Sanitarium and Hospital Equipment Company. (See Goodrich, Norris E., assignor.)

Sanitarium and Hospital Equipment Company. (See Tuttle, Roy X., assignor.)

Sanitarium and Hospital Equipment Company. (See Wentworth, Merton W., assignor.)

Sanitary Nursing Bottle Company. (See McMullen, George B., assignor.)

Sanitary Products Corporation of America. (See Mallory George I., assignor.)

Sanitary Products Corporation of America. (See Ruckert, Harry E., assignor.)

Sanitary Products Corporation of America. (See Ruckert, H. E., and Fine, assignors.)

Sanitary Refrigerator Corporation. (See Shore, Morris, assignors.)

Sanitary Refrigerator Corporation. (See Snore; Morriso, assignor.)
Sanikey. Clinton E., Ellwood City, Pa. Foot protector.
1.640.669; Ang. 20.
Sanikey, Harold B., Albrighton, England. Spoked wheel.
1.614.901; Jan. 18.
Sannar, John T., and C. R. Lawler, Enterprise, Oreg.
Log-securing device. 1.619.958; Mar. 8.
Sanner, Hulbert, assignor to L. Ederer, Chicago, Ill. Distributing switch. 1.653.313; Dec. 20.
Sanni, Bartolo, Boston, Mass. Vehicle. 1.646.664;
Cor. 25.

tributing system. 1.055,315; Dec. 20. Color, Sanal, Bartolo, Boston, Mass. Vehicle. 1,646,664; Sanson, Charles E., East Syzacuse, N. Y. Sectional mold for making concrete blocks. 1,645,776; Oct. 18. Santa Barbara Lumber Company. (See Cummings, Earle W., assignor.)

Santia Barbara Lamber Company. (See Cummings, Earle W. assignor.)
Santa Cruz Portland Cement Company. (See Ryder, Robert W., assignor.)
Santee, Walter H., Allentown, Pa. Closure fastening. 1.638.748; Aug. 9.
Santerre, Arthur, Los Angeles, Calif. Upedging and collapsing portable bed. 1,641,459; Sept. 6.
Santiago, Juan S. Santiago, P. R. Direction indicator Santiago, Juan S. Santiago, Juan P. R. Direction indicator for vehicles. 1,645,455; Oct. 11.
Santiago, Juan S. San Juan, P. R. Direction indicator for vehicles. 1,645,456; Oct. 11.

Santibáñez, José R., San Juan, P. R. Elastic supporter. 1.654,433; Dec. 27.

Santino. Salvatore, assignor to L. C. Berman, Chicago, III. Lifting Jack. 1.651,556; Dec. 6.

1.60,376; Aug. 30.

Santos, Juan de Jesés, New York, N. Y. Tube-repairing clamp. 1.60,376; Aug. 30.

Santos, Juan de Jesés, New York, N. Y. Automobile display device. 1.617,724; Feb. 15.

Santoy-Guillermo F., Santa Paula, Calif. Pruning saw. 1.638,749; Aug. 9.

Santur-Clo. Feter, Columbus, Ohio. Hair-curling apparaSanymetal Products Company, The. (See Carpenter, R. F., and Anderson, assignors).

Sauchelik, Jacques, Neuilly-sur-Seine, France. Window opening and closing mechanism. 1.631,892; June 7.

Sapp. George E. Sce Howell, J. E., and Sapp.)

Sapp. James E., assignor of one-half to R. Bower, Bainbridge, Ga. Animal trap. 1.634,688; July 5.

Sapp. James E., assignor of one-half to R. Bower, Bainbridge, Ga. Boittle-vending machine. 1,639,615; Aug. 16.

Jan. 4.

Sarff, Forest M., Los Angeles, Calif. Constant supply for fluid braking systems. 1,617,275; Feb. 8.

Sarff, Forest M., Los Angeles, Calif. Wheel brake. 1,617,276; Feb. 8.

Sargent Leonard, Fairmont, W. Va. Railway tle. Sargent & Company. (See English, Huntington, assignor.)

Sargent & Company. (See Sargent, Edward R., assignor.)

Sargent & Company. (See Sargent, Edward R., assignor.)

Sargent & Company. (See Sargent, Heater for automobile Sargent, Dn A., Bargor, Mc. Heater for automobile Sargent, Dn A., Bargor, Mc. Snow fence. 1,647.585; Nov. 1.

Sarrent Edmund S. Windsor, assignor to The Fuller Brush Compuny, Hartford, Conn. Toggle spreader. 1,628,615: May 10. Sargent, Edward R., assignor to Sargent & Company, New Haven. Conn. Sliding bolt. 1,626,482; Apr. 26. Sargent Engineering Corporation. (See Sargent, Sumner

Sargent Engineering Corporation H., assignment, Frank P. (See Cravens, Graham H., assignment, Frank P. (See Cravens, Graham H., assignment, George H., Chicago, III. Inspection 1,619.273; Mar. 1.

1,619.273; Mar. 1.

Sargent & Greenleaf, Inc. (See Hill, William R., assignor.)

Sargent, Hedda J., San Francisco, Calif. Balancing block.

1,648,199: Nov. 8.

Sargent Howard R., Bridgeport, Conn. Indicating device. 1,623,950; Apr. 5.

Sargent & Lundy Incorporated. (See Schroeder, Bernhard, assignor.)

Sargent & Lundy Incorporated. (See Schroeder, Bernhard, assignor.)

Sargent Summer B., assignor to Sargent Engineering Corporation. Los Angeles, Calif. Sucker rod and plunger Sargent's G. 510; Dec. 20.

Sargent's California Control of Composition. (See Furbush, Frank L., assignor.)

Sargisson, Zaccheus E. (See Richardson, C. M., and Sargisson.)

Sarrood, Harry M. (See McQuinn, Thomas H., assignor.) Sarjeant, Cyril J. (See Hastings, H. C., and Sarjeant.) Sarnicky, Nickolas J., Gas City, Ind. Safety crank for automobiles. 1,616,872; Feb. 8. Sarpy, George, et al. (See Dominguez, Manuel D., as-

signor.)
Sarr, Elmer E., Huron, Ohio. Rail-spike puller.
1.650.096; Nov. 22.
Sarr, Elmer E., assignor of one-half to H. M. Ronnett,
Huron Ohio. Railway-crossing gate. 1,646,877; Fr. Elmer M.
Huron, Ohio. Railway Crossing
Oct. 25.
Oct. 25.
train, Louis M., Pelham, Tenn. Coupling. 1,613,900;

Oct. 25. Sartain, I. Jan. 11

Jan. 11.

Sartiskoff, Jack D., assignor of one-half to Khetah Corporation, New York, N. Y.

Signal for fuel-supply systems, 1,633,608; June 28.

Sartiskoff, Jack D., assignor of one-half to Khetah Corporation, 1,652,376; Dec. 13.

Sartiskoff, Jack D., assignor by mesne assignments of one-half to Khetah Corporation, New York, N. Y.

Liquid gauge, 1,652,377; Dec. 13.

Sartis, Johannes, Berlin-Zehlendorf, Germany, Tobicco-dended half process and apparatus, 1,640,298; Aug. 29.

Sartini, Achille, New York, N. Y. Flying machine. 1,622,676; Mar. 29.
Sartory, Feter, Bayswater, London, England, Hair curier and waver. 1,616,090; Feb. 1.
Sarver, Glenn C., Lone Elm, Kans. Mail-bag receiving and delivering device. 1,617,222; Feb. 8.
Sarver, Ray D., Owarona, Minn. Tire casing and tube 12,2877; Sept. 20.
Sasgen Derrick Company. (See Sasgen, Michael J., asairmar.

Sasgen Derrick Company. (See Sasgen, Michael J., asSasgen, Michael J., assignor to Sasgen Derrick Company,
Chicago, Ill. Semiportable derrick, 1,650,636; Nov. 29.
Sasseman, David C., River Forrst, assignor to F. H.
Smith Manufacturing Company, Chicago, Ill. Seal
press. 1,619,959; Mar. 8.
Sasser, Otto, Clovis, N. Mex. Carbonated-water-cut-off
Saster, Edmont fourthi, 1,632,625; June 14.
Sather, Edmont fourthi, 1,632,625; June 14.
Sather, Edmont fourthi, 1,632,625; June 14.
Sather, Edmont fourthi, 1,632,6325; June 14.
Sather, Sather fourthin fourthin fourthin fourthin fourthin fourthin fourthin fourthin for preparing
Feb. 15.

Sato, Sadasuke, San Francisco, Calif. Lamp shade. Des. 74.124; Dec. 20.

Sato, Shizuo, Osako-Shi, Japan. Stethoscope. 1,617.652; Feb. 15.

Bato, Takeo, Honolulu, Hawaii. Machine for preparing pineapple crowns for planting. 1.051.158; Nov. 20.

1.614.020; Jan. 11.

Satterlee, Henry S., New York, N. Y. Sound amplifler. 1.647.253; Nov. 1.

Satterlee, Henry S., New York, N. Y. Sound amplifler. 1.647.253; Nov. 1.

Satterlee, John P., San Diego, Calif. Theater chair. 1.049.546; Nov. 10.

1.039.112 For 10.

Satterlee, John P., San Diego, Calif. Theater chair. 1.039.112 Aug. 16.

Sattler, Gustav. (See Syptroth, Emil, assignor.) Saudino, Dominic. (See Howard, William B., assignor.) Saudino, Dominic. (See Howard, William B., assignor.) Saudino, Dominic. (See Lazzarl. L., and Saudino.) Sauer, Angust F. (See Bendtin, Fan M., assignor, and filtering agents and for separating undissolved substances from liquids. 1.619.042; Mar. 1.

Sauer, Johan N. A., Amsterdam. Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, Johan N. A., Amsterdam. Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, John N. A., Amsterdam. Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, Johan N. A., Amsterdam. Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, Johan N. A., Amsterdam. Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, Johan N. A., Amsterdam. Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, Johan N. A., Amsterdam. Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, Johan N. A., Amsterdam. Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, Johan N. A., Amsterdam, Netherlands. Manufacture of active carbon. 1.641.053; Aug. 30.

Sauer, Johan N. A., Sauer, Johan N. A.,

Feb. 8.
Sauer, Louis B., Western Springs, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Condenser. 1,636,328; July 19.
Sauer, Louis J., Oak Park, and C. H. Joy, Jr., assignors, L. Joy, Jr., Chicago, Ill. Ball bearing, Control of the Control

Sauer. Theodor. Co. (See Sauer. Walter P., assignor.)
Sauer. Walter P., Poreet Hills. assignor to Theodor Sauer.
Co., Inc., New York, N. Y. Extension table 1,622,544;
Sau. Larold, Vancouver. British Columbia, Canada. Mophend. 1,618,553; Feb. 22.
Saulia, Charles. New York, N. Y. Pneumatic. tool.
1,640,470; Aug. 30.
Saulinier. Joseph. New Bedford, Mass. Mixing machine.
1,622,294; Mar. 29.
Saums, Joseph. R., assignor to Dr. Wood Foot Appliance.
Co. Larold, Saums, Joseph. R., assignor to Dr. Wood Foot Appliance.
Co. Larold, Saums, Joseph. R., assignor to Dr. Wood Foot Appliance.
Co. Hall, 18.
Saunders, Addison T. Akron, Ohio, assignor to A. G., Spalding & Bros., New York, N. Y. Shuttle for badminton and the like. 1,620,922; Mar. 15.
Saunders, Albert F., Syracuse, assignor to T. N. Benedict Mfc. Co. East Syracuse, N. Y. Teapot construction. Momphis. Tenm. Arrangement and construction of store fixtures. 1,647,889; Nov. 1.
Saunders. Edward W. St. Louls, Mo. Windshield.
1,626,758; May 3.
Saunders. Orien R., Cove, Oreg. Weeding machine.
1,635,088; July 5.
Saunders. Orien R., Cove, Oreg. Weeding machine.
1,635,088; July 5.
Saunders. Orien R., Cove, Oreg. Weeding machine.
1,635,088; July 5.
Saunders, Orien R., Cove, Oreg. Weeding machine.
1,635,088; July 5.
Saunders, Miller T., Los Angeles, Callf. Brush proSaurwein, Karl. (See Nawiasky, P., Zahn, and Saurwein, Karl. (See Nawiasky, P., Zahn, and Saurwein, Karl. (See Nawiasky, P., Zahn, and Saurwein, Medical See Nawiasky, P., Zahn

wein.)
Richard. wein.)
Sause, Richard, New York, N. Y. Coin-controlled radioreceiver. 1650-238; Nov. 22.
Sausen, Bert R., and H. D. Binks, assignors to Bluks
Super, Bert R., and H. D. Binks, assignors to Cooling,
Cooling and Cooling and

Sauvage, Herbert J. (See Goodbue, J. G., and Sauvage.) Sauvage, Herbert J., assignor to trustees of The Electro Thermostatic Control Company, Chicago, Ill. Ther-mostatic control. 1,619,636; Mar. I. Sauvage. Herbert J., assignor, by messne assignments, to the trustees of Electro Thermostatic Control Company, Chicago, Ill. Thermostatic appliance. 1,633,902;

Chicago. III. Thermostatic appinance. 1,633,902; Aug. 23.

Sanyag. Herbert J., assignor to Electro Thermostatic valve. 1,613,523; Sept. 27.

Sauvage. Herbert J., assignor to trustees of the Electro Thermostatic Control Company, Chicago, III. Thermostatic control. 1,643,858; Sept. 27.

Sauvage. Herbert J., assignor to Trustees of the Electro Thermostatic Control. 1,643,858; Sept. 27.

Sauvage. William H., assignor, by mesne assignments, to Gould Coupler Company, New York, N. Y. Slack adsister. M. 1,643,759; Sept. 27.

Sauvage. William H., assignor, by mesne assignments, to Gould Coupler Company, New York, N. Y. Slack adsister. 1,645,777; Oct. 18.

Sauveur, Harry, Berlin-Lankwitz, Germany, assignor to the Firm Flexo-Industric Gesellschaft m. b. H., Vienna, the Firm Flexo-Industric Gesellschaft m. b. H., Vienna, Chapter J. Sauveur, Harry, Berlin-Lankwitz, and T. Kollinek, Berlin. Germany, assignors to Handel-Maatschappij H. Albert De Bary & Co., Amsterdam, Netherlands. Compressed-air bratte apparatus for motor vehicles.

Anosof, 189; 199c. 27.

Sauzedde, Claude, Detroit, assignor to Sauzedde Manufacturing Corporation, Mount Clemens, Mich. HubBauzedde, Claude, Detroit, Mich. Hub-locking device for wheels. 1,635,505; July 12.

Sauzedde Manufacturing Corporation. (See Sauzedde, Claude, assignor.).

assignor.)
Sawage, Basil H., assignor of four-sixteenths to N. B.
Bennett, one-sixteenth to O. F. Bowman, four-sixteenths
to M. A. Davis, and two-sixteenths to H. B. Newcomb,
Los Angeles, Calif. Fuel-fred apparatus for internalcombustion engines. 1,630,971; May 31.
Sawage, Edward S., Rochester, N. Y. Changeable assembly set for anusement and educational purposes.
1,620,574; Mar S.
1,620,574; Mar S.
1,620,574; Mar S.
2, West Boylston, Mass. Chalk-line
tree and any 1,653,191; Dec 20,
Sawage, Guyton D., Norfolk, Va. Ring. Des. 73,673;
Oct. 18.

Savage, John C., Ryde, Isle of Wight, England, assignor to The Skywriting Corporation of America. Smoke, luminous, or other visible trails from aircraft. 1,613,134; Jan. 4. Savage, Marion A., Scotia, N. Y., assignor to General Electric Company, Winding for alternating-current apparatus. 1,643,178; Sept. 20. Savage, Walter E., Modesto, Calif. Container. 1,648,785; Nov. 8.

Nov. 8. Frederic L. (Sae Howes, F. C., and Savageau.)
Savery Benjamin F., Devter Mich. Automobile headlight switch. 1,641,905; Sept. 6.
Savidge, Albert C., Indianapolis, Ind. Valve seat reamer.
1,650,962; Nov. 29.
Savilis, Thomas, Sons. (See MacKay, John, assignor.)
1,624,437; Apr. 12.
Savitzky, Morris, New York, N. Y. Embroidered lace medillion. Des. 72,389; Apr. 5.
Savitzky, Morris, New York, N. Y. Embroidered lace medillion. Des. 72,389; Apr. 5.
Savitzky, Morris, New York, N. Y. Embroidered lace Savitzky, Morris, New York, N. Y. Table scart. Des.
72,637; May 10.
Savov. Philip A., Fullerton, Calif. Renewable fuse.
1,632,316; June 14.
Savoye, Richard G., et al., executors. (See Francke, William J., assignor)

Sawdey, John M., assignor to Dakota Koolaire Company, Mitchell, S. Dak. Deposit receptacle. 1,644,039;

Mirchell, S. Dak. Deposit receptacie. 1,022,005, Oct. 4.
Sawdon, Jonas. (See Butterfield, C. L., and Sawdon.) Sawford, Harold S., Brooklyn, N. Y. Screen for reducing secondary radiation from X rays. 1,621,813; Mar. 22.
Sawford, Harold S., Brooklyn, N. Y. X-ray screen. 1,021,814; Mar. 22.
Sawford, Harold S., Brooklyn, N. Y. X-ray screen. 1,021,814; Mar. 22.
Sawford, Bubert F., assignor to I. L. Keith, Haverbill, Minss. Refrigerating system. 1,643,179; Sept. 20.
Sawford, Abert E., assignor to I. L. Keith, Haverbill, Minss. Refrigerating system. 1,643,179; Sept. 20.
Sawford, Abert L., Old Town, Mc. Current take-off clamp. 1,648,326; Nov. 8.
Sawger, Charles, Occomman, Va. Rail tie and rail-fastening means. 1,613,295; Jan. 4.
Ing. means. 1,613,295; Jan. 4.
Ing. County, N. J. Extender of card holders. 1,651,471; Dec. 6.

Dec. 6. D. Chicago, III. Yleiding byrrier for

Dec. 6, Emerson D., Chicago, Ill. Yielding barrier for stopping vehicles. 1,653,670; Dec. 27.

Sawyer, Geo. W., Germantown, Philadelphia, Pa., assignor to Sinclair Refining Company, Chicago, Ill. Tank wagon. 1,644,090; Oct. 4.
Sawyer, Philip A. (See Peer, Richard W., assignor.) Sawyers, John S., Glenwood, Iowa. Clod-crushing and soll-pulversing attachment for agricultural machines.

Sare, Andrew C., Winsted, Conn. Electrical socket. 1,614,508; Jan. 18.
Saxon. Frank. Worthington, Minn. Snowplow. 1,638,708; Jun. 18.
Saxon. Herman R., assignor, by mesne assignments, to The Company, Toledo, Ohio. Lamp Drick Ref. 1,614,508; Jun. 18.
Saxon. Albert H., assignor to National Bundle Tyer Company, Blissfield, Mich. Automatic bundle tier. 1,629,341; May 24.
Saxton. Augustus C. (See Hill, G. S., and Saxton.) Saxton, Frank S., Blissfield, Mich. Apparel rack. Saybolf, John W., Jersey City, N. J., assignor to Standard Development Company. Turbine lubrication. 1,618,29; Feb. 8.
Sayerk, Toufik A., Central Falls, R. I. Game apparatus. 1,627,129; May 3.
Sayers, Albert J., assignor to Link-Belt Company, Chicago. Ill. Supporting wheating screens. 1,651,394; Dec. 6.
Ill. Supporting wheating screens. 1,651,394; Dec. 6.
Ill. Supporting wheating screens. 1,651,394; Dec. 6.
Sayers, Royd R. (See Yant, W. P., Sayers, and Hilde-brand.)

Sayles Finishing Plants Inc. (See Huey, Harold I., as-

Sayles Finishing Plants Inc. (See Huey, Harold I., assignor.).
Sayles, Louis F., Brookfield, Mo. Center joint and dowel bar holder. 1,614,495; Jan. 18.
Sayre, Duane G., Meadville, Pa. Plaster-cast saw. 1,641,655; Sept. 6.
Sayre, Gordon B., assignor to Owen-Dyneto Corporation, Syracuse, N. Y. Windshield wiper. 1,626,629; May 3.
Sayre, Ralph B., New Rochelle, assignor to Metals Ray ores. 1,640,218; Aug. 27.4. N. Y. Concentration of ores. 1,640,218; Aug. 27.4. N. Y. Latch-controlled operating mechanism. 1,628,474; May 10.
Scacchitti, Arnaldo, Springfield, Ill. Vaporizer. 1,613,537; Jan. 4.

Jan. 4.
Scaffolding (Great Britain) Limited. (See Palmer-Jones, Daniel, assignor.)
Scaglione, Frank. (See Morello, John, assignor.)
Scala, Angelo, Brooklyn, N. Y. Vehicle. 1,633,279;
June 21.
Scales, Edgar F., Danville, Va. Automatic alarm for satchels. 1,640,254; Aug. 23.
Scammell China Co. (See Schnepf, Emil L., assignor.)
Scammell China Chengery Ltd. (See Jensen, Thomas

Scandinavian Export agency for C., assignor.)

Scanes, Arthur E. L. Ashton-on-Mersey, and T. Brighouse. Manchester. England, assignors, by mesne assignments, to Westinghouse Electric and Manufacturing Company. Scaling gland. 1.617.500; Feb. 15. Scanes. Arthur E. L., Straibfield, England, assignor, by mesne assignments, to Metropolitan-Vickers Electrical Company, Limited. Electrical transformer. 1,647,531; Nec. 1.

Scanlan, Charles J., jr. (See Rowland, P. J., and Scan-

Scanian, Charles J., Jr. (See Rowman, 1. 181.)

Lat.)

Lat.)

Scanlan, Edith M. (See Pratt, Clara A., assignor.)

Scanlan, William V. (See Porter, William A., assignor.)

Scanlon, John A., trustee. (See Zabodiakin, Victor F.,

assignor.)

Scanlon, John A., trustee. (See Zabodiakin, Victor F.,

assignor.)

Scanlon, John A., trustee. (See Zabodiakin, Victor F.,

Scarborough, Elmore D., Corsicana, Tex. Signal apparatus for rallways and highways. 1.645.875; Oct. 18.

Scarff, Frederick W., London County, assignor to Vickers Limited, London, England. Gun mounting for use on aircraft. 1.(28.088; May 10).

Scarff, Total S. M., Springvalley, Ohio. Roofing cleat.

Scarlett, Charles E., et al., trustees. (See Charles, Carl Carlett, Charles E., et al., trustees. (See Charles, Carl

1.042.046; Sept. 1.0 carlet L., carlet L., Charles E., et al., trustees. (See Charles, Carl L., assignor.) Scarseth. Edwin J., Galesville, Wis. Game apparatus. 1.612.946; Jan. 4.

Scarth, Harold, Detroit, Mich. Tile closure. 1,625,628; Apr.

Searth. Harold. Detroit, Mich. Door-frame anchor. 1642.175. Sept. 13.
Scatena. Vincent. Pittsburgh, Pa. Signal light casing. Des. 73.805; Nov. 8.
Scavullo, Angelo C.. New York, N. Y., assignor to Jos. Heinrichs Corporation, Cream pitcher. Des. 72.498;

Apr. 19. Schaab, Harry M. (See Proctor. R. V., and Schaab.) Schaaf, Albert. (See Seymour, W., fr., Groff, Schaaf.)

Schaake, William, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Trolleyshor guard. 1628,917; Mey 17.
Schaap, Alexander K., Jr., Brooklyn, assignor to The Schaap, Durant Control Corporation, New York, N. Y.
Liquid-level gauge. Re16,589; Apr. 12.
Schap, Alexander K., Jr., Brooklyn, assignor to The Schaap-Durant Control Corporation, New York, N. Y.
Liquid-level gauge. 1,023,555; Apr. 5.

Schaap-Durant Control Corporation, The. (See Durant, Schaap-Durant Control Corporation, The. (See Durant, John D., assignor.)
Schaap-Durant Control Corporation, The. (See Schaap, Alexander K., Ir., assignor.)
Schacht, Clifford A., Huntington, Ind. Scraper. 1,647,761; Nov. 1.

Schacht, Clifford A., Huntington, Ind. Scraper. 1,647,751; Nov. 1.

Schacht, George E., Plainfield, N. J. Fare-registering device. 1,643,907; Sept. 27.

Schacht, Gustave A., Cincinnati, Ohio. Spring hanger for trucks and automotive vehicles. 1,617,031; Feb. 8.

Consected F. D. L. Contington, Ind. Louis speaker schocht. William F., Huntington, Ind. Game apparatus. 1,616,236; Feb. 1.

Schacht, William F., Huntington, Ind. Game apparatus. 1,616,236; Feb. 1.

Schacht, William F., Huntington, Ind. Bumper. Schacht, William F., Huntington, Ind. Bumper. 1,641,756; Sept. 6.

Schacht, William F., Huntington, Ind. Stopple. 1,641,156; Sept. 6.

Schacht, William F., Huntington, Ind. Stopple. 1,641,156; Sept. 6.

Schachter, Heinrich, Mannheim, Baden, assignor to Stotz G. m. b. H. Abt. der Brown, Boveri & Cie., A.-G., Mannheim, Germany, Automatic electric circuit break-Schad, Anthony C., Hollywood, Calif. Athletic spring exerciser. 1,613,538; Jan. 4.

Schade, Blanche, Gloucester, Mass. Visible registering device for cameras. 1,620,040; Mar. 8.

Schade, Blanche, Gloucester, Mass. Visible registering device for cameras. 1,620,040; Mar. 8.

Schade, Edmund A., assignor to The Stanley Works, New Britain, Conn. Reviews of the Stanley Works, New Britain, Conn. Rev

Aug. 16.

Aug. 16.

Schnde, Edmund A., assignor to The Stanley Works, New Britain, Conn. Plane, 1,643,524; Sept. 27.

Schade, Edmund A., assignor to The Stanley Works, New Britain, Conn. Carpenter's plane. 1,651,634; Dec. 6.

Schade, John, assignor to National Blank Book Company, Holyoke, Mass. File container for loose-leaf sheets. 1,622,003; Mar. 22.

Schade. John, assignor to National Blank Book Company, Holyoke, Mass. Locking device for telescoping elements. 1,645,834; Oct. 18.

Schade, Gustav, New York, N. Y. Ignition timer. Schadel, William F., assignor to Kanawha Manufacturing Company, Charleston, W. Va. Vibratory screen. 1,620,575; Mar. 8.

1.620,575; Mar. 8.
Schadt, Ewald K., assignor to General Motors Corporation, Detroit, Mich. Lens. 1.635,225; July 12.
Schaefer, August C., Portland, Oreg. Can opener of the nipper type. 1.626,052; Apr. 26.
Schaefer, Edward C. F., York, Pa. Manure spreader. 1.646,878; Oct. 25.
Schaefer, Frank M., Steger, assignor to C. C. Shields, Lake Forest, Ill. Peeling machine. 1.641,993; Sept. 13.
Schaefer, Frederic, Pittsburgh, Pa. Closed-link brake Schaefer, George, 640, 125.
Schaefer, George, 640, 125.
Schaefer, George, 640, 125. T., assignor.)

T., assignor.)

Schaefer, George A., Los Angeles, Calif. Apparatus for removing fluid from wells. 1,646,599; Oct. 25.
Schaefer, Custaw, Wagon Company, The. (See Jackson, Vilas H., assignor)
Schaefer, James, West Paterson, assignor to Paramount Rubber Consolidated, Inc., Little Falls, N. J. Method of and apparatus for making hollow rubber articles. 1,623,398; Apr. 19.
Schaefer, James, Vonkers, N. Y. assignor to Paramount Rubber Consolidated, Inc. Method of and apparatus Schaefer, Karl A., Pforzheim, Germany. Bracelet fastener. 1,636,809; July 26.
Schaefer, Louis, assignor to Reed & Barton, Taunton, Mass. Display case or roll for flat-metal tableware. 1,650,393; Nov. 22.
Schaefer, Aibert, (See Thiess, K., Müller, Runne, and Schaeffer,

Schaeffer, Albert. Schaeffer.)

Schaeffer, Arnold A., Houston, Tex. Door latch. 1.621,437; Mar. 15.
Schaeffer, Charles, Paris, France. Steering device for Schaeffer, Charles D. R., Fort Dodge, Iowa. Shaft construction. 1.640,670; Aug. 30.
Schaeffer, Dorman, Helena, Mont. Toy vehicle. Des. 72,577; May 3.
Schaeffer, Dorman, Helena, Mont. Riding toy. 1,624,627; App. 42.
Schaeffer, Dorman, Helena, Mont. Riding toy. 1,624,628; App. 12.
Schaeffer, Elmer, H. and D. Antel Reading, Pa. Tires.

Apr. 12.
Schaeffer, Elmer H., and D. Apfel, Reading, Pa. Tire spreader, 1,622,468; Mar 29.
Schaeffer, Elmer R. (See Baldwin, L. A., and Schaeffer, Schaeffer, Elmer R. (See Baldwin, L. A., and Schaeffer, 1,622,595; Mar. 29.
Schaeffer, Francis, Mohnton, Pa. Hat-felting machine. 1,622,595; Mar. 29.
Schaeffer, George W., Chicago, Ill. Roof-fashing scaling and relaining device. 1,625,688; Apr. 19.
Schaeffer, John A., St. Louis, J. H. Calbeck, Jophin, Mo., and J. R. Crensbaw, East St. Louis, Ill., assimors in the Eagle-Ficher Lead Company, Chichmatt, Ohlo-Schaeffer, Leon, Sulphur, Okla. Device for adjusting the spine. 1,646,519; Aug. 30.

Schaer. Charles, Langenthal, Switzerland, assignor to Busch-Sulzer Bros.-Diesel Engine Co., St. Louis, Mo. Air compressor. 1,646,795; Oct. 25.
Schaeren, Ernst. Bern. Switzerland, assignor to Busch-Sulzer Bros.-Diesel Engine Co., St. Louis, Mo. Air compressor. 1,646,795; Oct. 25.
Schaeren, Ernst. Bern. Switzerland, assignor to Busch-Bros. 1,646,642; Oct. Mo. High-pressure crude-oil motor. 1,546,642; Oct. Mo. High-pressure crude-oil motor. 1,546,642; Oct. Mo. High-pressure crude-oil motor. 1,546,642; Oct. Mo. High-pressure crude-oil motor. 1,546,042; Oct. Schaller, Friedrich, St. Gall, Switzerland. Scaling device for box fasteners. 1,648,152; Nov. Oct. Western Electric Company, Incorporated, New York, N. Y. Rectlifer and modulator. 1,648,006; Nov. S. Schäfer, Joseph, Haitlingen, Germany, assignor to the Firm J. R. Gegy, S. A. Tanning animal hides. 1,644,098; Aug. 30.
Schäfer, Max, W. Hilbnie, and W. Walther, assignors to Robert Bosch Aktiengesellschaft, Stuttzart, Germany, Magneto-electric and the like machine. 1,650,879; Schafer, William H. (See Petersen, Hans, assignor). Schaffer, Melle, Los Angeles, Calif. Sanitary belt. 1,653,877; Dec. 27.
Schaffer, Belle, Los Angeles, Calif. Sanitary belt. 1,654,1460; Sept. 6.
Schaffer, Goldberg. (See Goldberg, Carl M., assignor.) Schaffer, Lewis D., assignor to The State Banking & Trust Company, trustee for himself, and The Singer Hrust Company trustee for himself, and The Singer Schaffer, Alcob D., assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, Vacuum-tube oscillator. 1,639,671; Aug. 23.
Schaffer, Mylter, (See Semm, A., and Schaffer). Schaffer, Lacob D., assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, Vacuum-tube oscillator. 1,639,671; Aug. 23.
Schaffer, Wulter, sasignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, Vacuum-tube oscillator. 1,639,671; Aug. 23.
Schaffer, Wulter, See Semm, A., and Schaffer.) Schaffer, Wulter, See Semm, A., and Schaffer.) Schaff

Schalle, Walter, New York, N. Y. Brush. 1,649,490; Nov. 15. Schamberg, Herbert L., assignor to A. Deutz, New York, N. Y. Footwear. 1,617,462; Feb. 15. Schanche, Herman G., Philadelphia, Pa., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Lithopone and increasing the resistance thereof to sunlight. 1,619,376; Mar. 1. Schanck. Harry S., et al. (See Ames, Charles F., assignor.)

Schaffer. Harry C., designor to The Fanner Manufactursigno. Edward H., assignor to The Fanner Manufacturng Company, Cleveland, Ohio. Clamping member for
awnings. 1-628,687; May 17.
Schane, Edward H., and E., Durant, assignors to The
Fanner Manufacturing Company, Cleveland, Ohio. Awning-raising mechanism. 1-616,317; Feb. 1.
Schaffer Manufacturing Company, Cleveland, Ohio. Awning-raising mechanism. 1-616,317; Feb. 1.
Schaft Der G. 1-616,300; Aug. 2000; Schaft Der, 1-641,045; Aug. 200;
Schaft, G. 1-61,050; Aug. 200; Schaft Der, 1-641,054; Aug. 30.
Schaft Z. Carl, Freiburg, Germany. Preserving wood and
the like. 1-632,200; June 14.
1.614,086; Jan. 11.
Schaper, Harry C., assignor to The Weight-O-Graph Company, St. Louis, Mo. Weighing device. 1.622,276;
Apr. 5.

pany, Apr. 5.

pany, St. Louis, Mo. Weighing device. 1.623,276; Apr. 5.

Schaper, Harry C., assignor to The Weightograph Company, St. Louis, Mo. Personal weighing scale. 1.631,341; June 7.

Scharf, John H. (See Leppke, L. A., and Scharf.) Scharf, Michael M., Lancaster, Pa. Work-holding device. 1.614,852; Jan. 18.

Scharff, Carl A., 1.622,810; Mar. 29.

Scharlf, John J., Jr., Philadelphia, Pa., assignor to J. F., Meyer, Jr., Cuncago, Ill. Coln-controlled machine. 1.621,756; Mar. 22.

Scharltman, Harry, assignor to A. L. Wagner Mig. Co. Inc. New York, N. Y. Salt and pepper shaker or article of similar nature. Dec. 73,050; July 12.

Scharlt, Horman A. (See Smith. William F., assignor.) Schart, Hormann. Schwanheim-on-the-Main. assignor to the Firm I. G. Parbenindustric Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of co-baltons acetate. 1,637,251; July 26.

Schatz, William A., New York, N. Y. Cooler attachment. 1648,721, Now. 28.

Schatz, William A., New York, N. Y. Cooler attachment, 1.648.594; Nov. 8. Schatz, William A., Satoria, assignor of seventy per cent to W. J. Atwood, New York, N. Y. Dispensing faucet. 1,631,731; Dec. 6.

Schaub, Eugene, Logan, Utah. Cradle for hydraulic pipe lines. 1,646.423; Oct. 25. Schaub, Jacob, Lawrenceburg, Ind., assignor to The Theroz Company, New York, N. Y. Apparatus for and manufacture and filing of capsules. 1,628,333;

manufacture and filling of capsules. 1,020,000, May 10.

Schuman, Bror M., assignor to M. W. Cantwell, New Young, M. Y. Anchor davit. 1,636,944; July 26.

Schauman, Bror M., Atlantie Highlands, assignor to an association comprising G. V. Johnson, O. Gautschy, and H. W. Johnson, Highlands; W. Koch, Long Branch; and B. M. Schauman, Atlantic Highlands, N. J.; one-fifth to each member. Davit. 1,640,671; Aug. 30.

Schauman, For M., Atlantic Highlands, assignor to an association comprising G. V. Johnson, O. Gautschy, and H. W. Johnson, Highlands; W. Roch, Long Franch, and H. W. Johnson, Highlands; W. Roch, Long Franch, fifth of each member. Anchor davit. 1,640,672; Aug. 30.

Schauman, Kayl O., S. R., Yancey, and J. L. Mifsud, assential control of the c

Actomma, Kurl O., S. R. Yancey, and J. L. Mifsud, assences to Sure-Guard Corporation, New York, N. Y. Spring control. 1,656,963; Nov. 29.
Schaurte, Paul, Zurich-Altstetten, Switzerland. Rotary machine. 1,626,973; May 3.
Schawrow, Ralph, Bayonne, N. J., assignor to National Standard Threadless Coupling Corporation, Rockaway Park, N. M. Hose coupling. 1,638,813; Aug. 25.
Fark, N. M. Those coupling. 1,638,813; Aug. 25.
Scheel, Gustav, assignor to Telegraphic-Geselischaft mit beschränkter Hartung System Stille, Berlin, Germany. Magnetic talking. dictating, and like machine. 1,639,060; Aug. 18.
Schooler Charles A. assignor to Buffalo Wire Works

1,639,000; Aug. 16.
Scheeler, Charles A., assignor to Buffalo Wire Works
Co., Buffalo, N. Y. Bulletproof woven-wire fabric.
1,649,548; Nov. 15.
Scheer, John B., Milwaukee, Wis. Pipe hanger.
1,646,881; Oct. 25.
Scheetz, Adam E., Norwood, Pa. Liner. 1,630,138;
May 24.
Scheffer, J. A., et al., trustees. (See Enell, Otto E., assignor.)

Scheffer, J. A., et al., trustees. (See Eneil, Otto E., assignor).

Schaffer, Gorge B. (See House, A. C., and Scheffer).

Schaffer, Gorge B. (See House, A. C., and Scheffer).

Scheffer, George B., Wechawken, N. J. Cloth board or winder. 1,616,874; Feb. 8.

Scheffer, George B., Wechawken, N. J., assignor to Lightship Board Company, Inc., Wechawken, N. J., assignor to W. J., assignor to M. J., assignor dispenser. J. (345,935; Oct. 18.

Schein, Alexander E., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Stabilizing gyroscope Company, Brooklyn, N. Y. Radial bearing. J. (29,314; Scheinbert, Henry, et al. (See Scheinbert, Morris M.

May Irg. Henry, et al. (See Scheinberg, Morris M., Sessignor.) Scheinberg, Morris M., et al. (See Scheinberg, Morris M., assignor.)

assignor.)
Scheinberg, Morris M., Brooklyn, assignor to H. Scheinberg and M. M. Scheinberg, copartners, doing business under the name and style of Sturm & Scheinberg, New York, N. Garter and manufacturing same. Scheiner, Phillp, Brooklyn, N. Y. Stand for a drinking set or similar article. Des. 72,499; Apr. 19. Scheits, Jacob J. (See Galius, J. M., and Scheits.) Scheiwer, Albert T., Erle, Pa. Screw-driver mechanism for insulator screws. 1,619,043; Mar. L. Scheige, Raymond, Hawthorne, Calif. Auxiliary heater 1,618,415; Mar. Scheing, Raymond, Hawthorne, Calif. Combination String and String and Scheins.

Schell, David, Myerstown, Pa. Combination fixture support and base. 1,623,813; Apr. 5.
Schell, Jefferson, and O. T. Paterson, Ottawa, Ontario, Canada. Attachment for paper machines. 1,634,159; June 28.

June 28.
Scheil, Joseph E., Cleveland Heights, Ohio. Heating element for motor radiators. 1.632.857; June 21.
Schellenberger, Charles G., deceased; The Oid National Bank of Battle Creek, administrator, Battle Creek, Mich. Themostatic signal. 1.622.545; Mar. 29.
Schelleng, John C., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Oscillation generator. 1.622.001; May 17.
Schelleng, John C., Millburn, N. J. assignor to Western John C., Bast Orange, N. J., assignor to Western Schelleng, John C., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Rectifying and modulating system. 1,634.800; July 5.
Schelleng, John C., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Belectric Company, Incorporated, New York, N. Y. Electric Company, Incorporated, New York, N. Y. Electric Wave signaling system. 1,635,378; Dec. 27.

Schellens, Christopher A., Marblehead, and A. T. Trow-bridge, Arlington, Mass. Oil burner. 1.649.745:

Scheiters, Christopher A., marindean, and A. T. 1100-bridge, Arlington, Mass. Oil burner. 1,643,745; Schellens, Eugene L. Pointe Claire, Quebec Canada, and J. S. Coffin, jr., Lishon, N. H., assignors to C-S Engineering Company. Spring support. 1,620,491; Mar. 8.

Schellens, Eugene L., Pointe Claire, Quebec, Canada, and J. S. Coffin, Jr., Lisbon, N. H., assignors to C-8 Engineering Company. Spring support. 1,620,492;

St. G. Company. Spring support. I, 520,492; Schellens, Eugene L., Pointe Claire, Quebec, Canada, and J. S. Coffin, jr., Lisbon, N. H., assignors to C. S. Engineering Company. Truck. 1,621,606; Mar. 22. Schellens, Eugene L., Pointe Claire, Quebec, Canada, and J. S. Coffin, jr., Lisbon, N. H., assignors to C. S. Engineering Company. Truck. 1,648,964; Nov. 15. Scheller, Emma, Long Island City, N. Y. Window screen, 1,634,303; July 5. Schellerer, Fridolin, Secane, Pa. Power hammer. 1,642,550; Sept. 13. Scheller, Gormany. Manufacturing solid cork bodies and the like. 1,637,577; Schellhammer. Alfred L., Warren, Pa. Furnace.

facturing Aug. 2.
Schellhammer, Alfred L., Warren,
Schelling, John 25.
Schelling, Edmund. (See Arter, J., and Schelling.)
Schelling, John C., Rochester, N. Y. Last. 1,643,180;
Schelling, John C., Rochester, N. Y. Last. 1,645,882;

Scheiter, John C., Rochester, N. Y. Last. 1,648,882; Nov. 8.
Scheiter, John C., Rochester, N. Y. Last. 1,648,883; Nov. 8.
Scheiter, John C., Rochester, N. Y. Last. 1,648,883; Nov. 8.
Scheiter, John C., Rochester, N. Y. Last. 1,648,883; Nov. 8.
Scheininger, G. E., Last. 1,648,883; Nov. 8.
Scheininger, G. E., Caene, Uccle, near Brussels, Belgium. Regulating automatically sweeping fire in machine guns. 1,025,775; Apr. 19.
Scheminger, John, ir., Providence, R. I., assignor to Actna Automatic Oli Burner, Incorporated, New York, N. Y. Liquid-fuel saving and safety device. 1,619,167; Schemmel, Frank P., San Jose, Callf. Facing tiles. 1,641,553; Sept. 6.
Schemmel, Frank P., San Jose, Callf. Facing tiles. 1,641,553; Sept. 6.
Schemmel, Robert C., assignor to The Backstay Machine & Leather Company, Union City, Ind. Combined finity of the Company of the Company, Union City, Ind. Combined finity of the Company, Union City, Ind. Combined finity of the Company, Union City, Ind. Combined finity of the Company, Bethiehem, Pa. Welded beam. 1,620,293; Mar. 8.
Schenck, Charles, assignor to Bethlehem Steel Company, Bethiehem, Pa. Welded beam. 1,620,293; Mar. 8.
Schenck, John F., sr. Lawndale, N. C. Skein-winding machine. 1,631,893; June 21.
Schenck, Peirce D., Dayton, Ohio, assignor to The Duriron Company, Inc. Corrosion-resisting alloy. 1,651,470; Dec. 6.

Schenck, Rudolf, Munster, assignor to Vereingte Stahl-werke Aktiengesellschaft, Dusseldorf, Germany. Elimi-nation of phosphorous from pig iron. 1,650,157; Nov. 22.

werter Art of phosphorous from pig iron. 1,630,157;
Nov. 22.
Schenck, Samuel B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,622,677; Mar. 29.
Schenck, Samuel B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Colenita, Samuel B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Minufacturing Company. Schenic Schenitz, Philipp, Zurich, Switzerland. Preventing and dissolving scale in steam boilers. 1,617,350; Feb. 15.
Schenke, Philipp, Zurich, Switzerland. Preventing and dissolving scale in steam boilers. 1,617,350; Feb. 15.
Schenke, July 5.
Schenke, Marchael Philipp, Pa. Electrical terminal. 1,634,639; July 5.
Schenken, Joseph, Minneapolis, Minn. Underground support. 1,632,415; Dec. 13.
Schenker, Walter, Winterthur, Switzerland, assignor to Busch-Sulzer Bros. Diesel Engline Company. St. Louis, Schenker, Walter, Winterthur, Switzerland, assignor to The Safety Car Heating & Lighting Company. Lighting apparatus. 1,652,416; Dec. 13.
Schepper, Adam. and P. Schreeder, Bay City, Mich. 1,602,618.
Scheps, Wilhelm. (See Rabe, P., and Schepss.)
Scherbarth. William E. R., Hinckley, Minn. Bedstead attachment 1,647,199. Nov. 1.
Scherbarth, William E. R., Hinckley, Minn. Bedstead attachment 1,647,199. Nov. 29.
Scherbarth, Silliam E. R., Hinckley, Minn. Bedstead attachment 1,647,199. Nov. 29.
Scherbarth, Silliam E. R., Hinckley, Minn. Bedstead attachment 1,647,199. Nov. 29.
Scherbarth, Silliam E. R., Hinckley, Minn. Bedstead attachment 1,647,199. Nov. 1.
Scherper, Carlot, Scherper, Markurter-roll-forming machine. 1,631,697; June 7.
Scherer, Evelyn D. (See Scherer, Warren C. and E. D.) Scherr, George F., Jackson, Mich. Making and finishing

Scherer, Evelyn D. (See Scherer, Warren C. and E. D.) Scherer, George F. Jackson, Mich. Making and finishing spokes. 1,640.377; Aug. 30. Scherer, John, Marinette, Wis. Lumber gauge. 1,624,150; Apr. 12.

Scherer, Karl, New York, N. Y. Spare-tire lock. 1.619.044; Mar. 1. Scherer, Karl, New York, N. Y. Automobile lock. 1.638.062; Aug. 9. Scherer, Water G., Cleveland, Ohio. Heater. 1,647.315;

1.638.062; Aug. 9. Scherer, Waiter G., Cleveland, Ohio. Heater. 1,647,315; Nov. 1. Scherer, Waiter L., Dallas, assignor of one-half to C. R. Pressley, Fort Worth, Tex. Clarifying system for cleaning fluids. 1,613,136; Jan. 4. Y. Hair waver. Scherm, Albert E., Cincinnatt, Ohio. Crossing pavement. 1,613,850; Jan. 11. Schermerhorn, John L., assignor to American Transformer Company, Newark, N. J. Transformer. 1,612,947; Jan. 4.

er Company, Newsen, A.
Jan. 4.
Scherner, John, Milwaukee, Wis., assignor to The Fisk
Rubber Company, Chicopee Falls, Mass. Bead ring.
1.642.561; Sept. 13.
Scherr, Morris, Baltimore, Md. Weight-registering gauge
for weighing scales. 1.640.520; Aug. 30.
Scherri, Faul, Hoboken, N. J. Safety pocket. 1,617,825;
Feb. 15.

(See Scherz, Louis and E.)

Fcb. 15.
Scherz, Emil. (See Scherz, Louis and E.)
Scherz, Louis and E., Wikkes-Barre, Pa. Bye protector, 1,627,121; May 3.
Schesvold, George T., and A. M. Johnson, Minneapolis, Minn. Tool for removing transmission bands. 1,641,994; Sept. 13.
Schetzer, Charles H., Limon, Colo. Knife. 1,613,200;

Schetzer, Charles II., Jonad. Callf. Heating orchards and Jan. 4. Scheu, William C., Upland, Callf. Heating orchards and apparatus therefor. 1,680,452; May 31. Scheuer, Max G., New York, N. Y. Baglike receptacle. 1,639,005; Aug. 46. Scheuer, Sydney, Brooklyn, N. Y. Jewelry. 1,628,278; May 10.

Scheuer, Max C., Are.
1,639,005; Aug. 16.
Scheuer, Sydney, Brooklyn, N. Y. Jeweiry. 1,628,278;
May 10.
Scheuern, Brooklyn, M. Y. Jeweiry. 1,628,278;
May 10.
Scheuermann, Charles, Mobile, Ala. Burner cone.
1,636,616; July 19.
Schicht, Georg, A.-G. Aussig. (See Grün, A., and Limpicher, assignors.)
Schick, Adolph M., Wheeling, W. Va. Vehicle signaling apparatus.
1,631,698; June 7.
Schick, Jacob, Bast Orange, N. J., assignor to Magazine repeating Razor Company. Safety razor.
1,652,695; Dec. 13.
Schick, Johann G., St. Gellen, Switzerland. Printing
Schick, Johann G., St. Gellen, Switzerland. Printing
Schick Murray, San Francisco, Calif. Hair guard and template. 1,629,741; May 24.
Schickerling, Alfred, Scarsdale, N. Y. Identification-card case. 1,613,414; Jan. 4.
Schiding, George L., York, Pa. Septic tank. 1,616,394; Feb. 1.

Feb. 1. Schieder, Karl. (See Müller, August, assignor.) Schieder, Karl. (See Müller, August, assignor.) Schieferstein, Georg H., Berlin-Charlottenburg, Germany. Schieferstein, Georg H., Berlin-Charlottenburg, Germany. Bell-ring machinery. 1,645.822; Oct. 18. Schieferstein, Heinrich, Charlottenburg, near Berlin, Germany, assignor to Westinghouse Electric & Manufacturing Company. Radio transmission system. 1,626.809;

Mäy 3. Schieffelin, Schuyler, New York, N. Y. Internal-combustion motor. 1.613,136; Jan. 4. Schiele, Richard F., Glen Ellyn, Ill. Combined spotlight and cigar lighter. 1.638,642; Aug. 9. Schiele, Richard F., Glen Ellyn, Ill. Combined cigar lighter and lamp. 1.638,751; Aug. 9. Schierenbeck, John. Albany, N. Y. Egg-marking device. 1.641,238; Sept. 6.

1.641.238; Sept. 6
Schlerholtz, Henry A., assignor to Western Clock Company, La Salle, Ill. Clock case. Des. 72.332; Mar. 29, Schlesarl, Mario, New York, N. Y. Method of and apparatus for making sculptures. 1.636.149; July 19. Schless, Fritz, Lichtensteig, Switzerland. Machine for cutting or severing metallic bars. 1.625.748; Apr. 19. Schlff. Signaturd, assignor to The J. H. Day Company. 1.639.061; Aug. 16. Schliffner, Joseph A., assignor of one-third to H. Shwartz and one-sixth to M. Witherwax, Denver, Colo. Flash light. 1.621.955; Mar. 22. Schliffner, John. New York, N. Y. Outlet strainer. Schliffner, Leo. 28 signor to Landis Machine Company, St. Louis Mo. Stifch remover, 1.624.013; Apr. 12. Schliffer, Walter D., Detroit, Mich. Garment protector, 1.628,433; May 10.

1.628,433; May 10.

Schille, Andreas, Maunheim, Germany, assignor of forty per cent to J. Wissing, New York N. Y. Rodent and Insect exterminator. 1.646,767; Oct. 25.

Schiller, Ira A. et al. 18.00 Phster, John R., assignor.)

Schiller, Ira S. et al. 18.00 Phster, John R., assignor.)

Des. 73.89; Aug. 30.

Schilling, Waller W., Scotla, N. Y., assignor to General Electric Company, Relay. 1.646,219; Oct. 18.

Schilling, Warler C. Green Bay, Wis. Paper carton. Des. 73.209; Aug. 30.

Schilling, Warler C. Green Bay, Wis. Paper carton. Sec. 2006; Carton Company, Carton Compa

Schiltz, Bernard P., assignor to The P. A. Geler Company, Cleveland, Ohio. Strafghtening press and method of stratightening. 1,646,260 ° Oct. 16 G. Marsac, Los Schiltz, John, assignor of one-third to G. Marsac, Los Angeles, Calif. Electrical-conduct-crossover system. 1631,224; June 7.
1. Schilmak Joseph F., Worcester, Mass. Tape condenser.

Schiltz, John, assignor of one-third to G. Marsac, Los Angeles, Calif. Electrical-condult-crossover system. 1.633,224 conductors of the conductor of the

Schieder, Edouard, Lausanne, Switzerland. Spray Schieder, Edouard, Lausanne, Switzerland. Spray Schiefer, Valentin, Sommerda, assignor to Rheinische Metaliwaren- und Maschlendfarik, Dusseldorf-Deren-dorf, Germany. Fuse for projectiles. 1,637,964; Aug. 2.

Aug. 2. Schlafhorst, W., & Co. (See Reiners, W., and Kahlisch,

Schlafhorst, W., & Co. 188e Reners, W., and Schlaffy, Julius H., Canton, Ohio, assignor to Central Alloy Steel Corporation, New York, N. Y. Metal-lathattaching clip. 1.624.187; Apr. 12.
Schlafty, Julius H., assignor, by messe assignments, to The Berger Manufacturing Company, Canton, Ohio. Schlafty, Julius H., assignor, by messe assignments, to The Berger Manufacturing Company, Canton, Ohio. Sheet-metal packing band. 1,64-6,982; Oct. 25.
Schlage Company, The. (See Schlage, Walter R., assignor).

fror.) free Lock Company. (See Schlage, Walter R., as-

signor.)
Schlage, Walter R., San Francisco, Calif. Doorknob fastener. 1,621,174; Mar. 15.
Schlage, Walter R., San Francisco, Calif. Combination marker gauge. 1,644,403; Oct. 4.
Schlage, Walter R., assignor to 4,635,511; Dec. 20.
Schlage, Walter R., assignor to Schlage Lock Company, San Francisco, Calif. Door fastener. 1,655,512; Dec. 20.
Schlage, Walter R., assignor to Schlage Lock Company, San Francisco, Calif. Door fastener. 1,655,512; Dec. 20.
Schlage, Walter R., assignor to Schlage Lock Company, San Francisco, Calif. Beutcheon-plate fastener. 1,653,513; Dec. 20.
San Francisco, Calif. Glass-knob mounting. 1,653,514; Dec. 20.

D.c. 20 Schlagenhauf, Johann, Oberlikon, near Zurich, Switzerland, Automatic trailer coupling, 1,649,980; Nov. 22. Schlagenbuuf, Johann, Bauhof, Oerlikon, near Zurich, Switzerland, Automatic brake for trailers, 1,652,254; Dec. 13

Dec. 13.

Schlagenhauff, Karl, Berlin-Charlottenburg, assignor to Maschinenbu-Aktlengesellschaft vorm. Starke & Hoffmann, Hirschberg, Germany, Valve for piping of large diameter 1.652.054; Dec. 6.

Schlaich, Herman, Long Island, City, N. Y. Combined casing and dial. Des. 78.870; Nov. 15.

Schlaich, Herman, Long Island, City, N. Y. Tubing, 122.897; Mar. 29.

Schlaich, Clara L., et al. (See Delker, William L., assium).

Schlamp, Mabel D., et al. (See Delker, William L., assignor.)

signor.)
Schlatter, Cerl. assignor to S. Shater & Sons. Incorporated, Webster, Mass. Pressure-relieving means for hydraulic calenders. 1637.282; July 26.
Schlatter, Rudolph, assignor to fluxeb-Sulzer Bross-Dissel cine. 1.622.398; Mar. 29.
Schlaupitz, Oswald, and W. Schum, assignors to The Timehen Roller Benfine Company, Conton, Ohio. Roll-making machine. 1,640.984; Aug. 30.
Schlayer, Pred. (See Schlayer, Walter, assignor.)

Schlayer, Walter, Jamaica, New York, N. Y., assignor to F. Schlayer, Woodhayen, Long Island, N. Y. Cap for containers. 1,633,420; June 21.
Schleek, Eduard, Berlin, Germany. Electric steam boller. 1,630,788; July 26.
Schlegel, Manufacturing Co. Uphoistery molding. 1,649,981; Nov. 22.
Schlegel, Helnrich, Duisburg-Rubrort, Germany. Production of building blocks. 1,632,317; June 14.
Schlegel Manufacturing Co. (See Schlegel, Charles P., assignor.)
Schlegel, Werner, Pegau, Germany. Door latch. 1,636,868; July 26.
Schlegel, Werner, Pegau, Germany. Door latch. 1,636,868; July 26.
Schleich, William F., Harrison, assignor to Schleich Studios, Inc. (See Schleich, William F., assignor, Schleicher, Frank J., St. Louis, Mo. Box. Des. 72,967; June 28.
Schleicher, Frank J., St. Louis, Mo. Box. Des. 73,445;

Tally 19.
Schleicher, Frank J., St. Louis, Mo. Box. Des. 72,967;
June 28.
Schleicher, Frank J., St. Louis, Mo. Box. Des. 73,445;
Schleicher, Frank J., St. Louis, Mo. Candy box. Des.
Schleicher, Get. 11.
Schleicher, Frank J., St. Louis, Mo. Candy box. Des.
1,631,225; June 7.
Schleicher, Frank J., St. Louis, Mo. Paper box.
1,631,25; June 7.
Schleicher, Frank J., St. Louis, Mo. Paper box.
1,631,25; June 7.
Schleicher, Frank J., St. Louis, Mo. Paper box.
1,631,648,01.
Schleicher, John A., assignor to Lufkin Rule Co., Saglnaw, Mich. Wrench and handle for inside micrometers.
1,631,488; Jan. 25.
Schleicher, Leo W., Detroit, Mich. Tool handle.
1,636,247; July 19.
Schleicher, Otto, assignor of one-half to R. E. Scheurer.
Electra, Tex. Hydraulic jack. 1,626,158; Apr. 26.
Schleicher, Otto, assignor of one-half. Thett-preventing der vice.
1,636,401; D. Barges, Calif. Thett-preventing der vice.
1,636,602; D. Barges, Calif. Thett-preventing der vice.
1,636,602; D. Barges, Calif. Th

corporated, New York, N. Y. Spool. 1,617.421; Feb. 15.
Schlereth, Andrew J., administrator. (See Hanford, Orin A.)
Schlesinger, Alex. New York, N. Y. Telephone-instrument attachment. 1,627.41 Em. May 3.
Bobbin bin and shelf therefor. 1,622.399; Mar. 29.
Schlesinger, Georg. Berlin-Charlottenburg. Germany. Method of and apparatus for producing cylindrical formations or hollow bodies from veneer or thin sheet wood. 1,645.393; Oct. 18.
Schless Harwood Co. (See Schless, Maurice J., assignor.) Schless Harwood Co., New York, N. Y. Ring. Des. 74.125; Dec. 20.
Schless, Robert, Emportum, Pa. Cleansing compound. Schlesser, Fred. River Grove, assignor to Ajax Spring Stabilizer Company, Chicago, Ill. Spring cover. 1,648.742; Nov. 8.
Schleter, George H., Swissvale, Pa., assignor to Westinghouse Electric & Maunfacturing Company. Fan. Schleter, Rengre D., Elkins Park, assignor to Schleter & Zander, Inc., Philadelphia, Pa. Lady's hosiery. 1,651.732; Dec. 6.
Schleter & Zander, Inc. (See Schletter, Richard E., assignort or Zander, Inc. (See Zander, Rock, assignor).

chletter & Zander, Inc. (See Zander, Walter E., as-

signor.)
Schler, Fred. Wankegan, Ill. Latching means for gates.
1,820,134; Mar. 8.
Schley, Frederick L., and C. Ernst, Brooklyn, N. Y.
Agricultural machine. 1,619,586; Mar. 1.
Schlever, Victor, assignor, by mesne assignments, to Dean
Hill Pump Company, Anderson, Ind. Centrifugal pump
1,634,304; July 5.
Schliederer, Emil. Nuremberg, Germany, assignor to the
Firm: Kinz-Werk, vorm. Gebr. Bing Aktiengesellschaft.
Schlomar Aktiengesellschaft. (See Löwy, Ludwig, assignor) Aktiengesellschaft.

Schloemann Aktiengesellschaft. (See Möller, Fritz, as-

Schloemer, John F., Los Angeles, Calif. Egg case filler. 1.644.898; Oct. 11. Schlosherg, Morris. (See Meyers, R. J., and Schlosberg,) Schloss, Emil. New York, N. Y. Ribbon. 1.614.258; Jan. 11.

Jan. 11. Schlosser Brothers. (See Schlosser, John J., assignor.) Schlosser, John J., assignor to Schlosser Brothers, Frank-fort, Ind. Temperature control. 1,633,680; June 28.

Schlosser, William J., San Antonio, Tex. Tennis game board. 1,654,018; Dec. 27.
Schlosstein, Hans, Chicage, Ill. Medium for treating oils and making the same. 1,638,643; Aug. 100 oils and making the same. 1,638,644; Aug. 9.
Schlotterer, George K., Chester, and R. H., Youngman, Pittsburgh, assignors to Harbison-Waller Refractories Company. Pittsburgh, Pa. Unburned refractory brick. 1643,131; Sept. 20. Cleveland, Ohio, assignor to W. Elsey. Lenvy C. Cleveland, Ohio, assignor to W. Elsey. Tetroit, Mich. Rotary brush. 1,633,230; June 21.

Elsey, 1 Schlueter, Henry R., and A. H. Hatke, Richmond, Va. Machine for attaching pins to leaves. 1,639,353;

Elsey, Detroit, Mich. Rotary brush. 1,633,230; June 21.
Schlueter, Henry R., and A. H. Hatke, Richmond, Va. Machine for attaching pins to leaves. 1,639,353; Aug. 16.
Schlueter, William A. C., assignor to The Refinery Supplied of the Company, The Company, 1,649,746; Nov. 15.
Schlumpf, Jacques, Oberwinterthur, Switzerland. Apparatus for treating vegetable, animal or artificial fibers with dyes or other liquids. 1,628,557; May 10.
Schlumpf, Jacques, Oberwinterthur, Switzerland. Apparatus for treating vegetable, animal or artificial fibers with dyes or other liquids. 1,628,557; May 10.
Schlumpf, Jacques, Oberwinterthur, Switzerland. Machine Jacques, Oberwinterthur, Switzerland. Jacques, Oberwint

July 5.
Schmidgail, Frederick J., Cincinnati, Ohio. Latch keeper.
1.614.046; Jan. 11.
Schmidt. Adolphe W., Lewiston, Idaho. Cushion tire.
1.654.019; Dec. 27.
Schmidt. Affred, Dusseldorf, Germany. Manufacture of pipe bends. 1.617.277; Feb. 8.
Schmidt. Arno. et al. (See Fassler, Peter, assignor.)
Schmidt, Benjamin F., et al. (See Schmidt, Benjamin F., assignor.)

assignor). Schmidt, Benjamin F., South Pasadena, Calif. Gearshift mechanism. 1628,974; May 3.
Schmidt, Benjamin F., Los Angeles, Calif. Gear shift.
1.626,975; May 3.
Schmidt, Benjamin F., Los Angeles, Calif. Increasing
valve lifter for gas engines. 1,654,020; Dec. 27.
Schmidt, Benjamin F., and T., D. Heyl, Los Angeles, Calif.
Schmidt, Benjamin F., assignor to Gellette Schmidt Corporation. Los Angeles, Calif. Hand-operated gear-shift
mechanism I. Gas.076; May 24.
Schmidt, Benjamin F., Exter, assignor to K. C. Gillette
and R. F. Schmidt, conartners, doing business as Gillette-Schmidt Gear Shift Company. Los Angeles, Calif.
lette-Schmidt Gear Shift Company. Los Angeles, Calif.
Lindid Gear Shift Company. Los Angeles, Calif.
Lindid Camilla. Berling-lething.
Schmidt, Camilla. Berling-lething.
Schmidt, Camilla. Berling-lething.
Lindid Gear Shift Company. Los Angeles, Calif.
Ling cakes of soap with advertising matter. 1,636,703;
July 26.
Schmidt, Carl E., Oscoda, Mich. Imitation driftwood and

Schmidt, Carl E., Oscoda, Mich. Imitation driftwood and manufacturing same. 1,628,918; May 17. Schmidt, Carlos A., Oskland, Calif. Vehicle bumper. Des. 73,510; Sept. 20.

Schmidt, Carlos A., Oakland, Calif. Vehicle bumper. Des. 74.075; Dec. 13.
Schmidt, Carlos A., Oakland, Calif. Vehicle bumper. 10.05; 123; Oct. 18.
Schmidt, Carlos A., Oakland, Calif. Vehicle bumper. 10.05; 123; Oct. 18.
Schmidt, Diedrick, Alta, Iowa. Drawbar for drags. 1.021, 201; Apr. 5.
Schmidt, Diedrick, Alta, Iowa. Drawbar for drags. 1.621, 201; Mar. 15.
Schmidt, Ernest H., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Shockabler, Carlotte, Carlott

signor.)
Schmidt, George C., and F. G. D. Muller, Houston, Tex.
Tank vent. 1,628,069; May 10.
Schmidt, George C., and F. G. D. Muller, Houston, Tex.
Combination tank vent, fame arrester, and automatic
Schmidt, George H., et al.
(See Nesmith, Samuel D.,
assignor.)
Schmidt, Gustav, assignor to The Cincinnati Butchers'
Supply Company, Cincinnati, Ohio. Refrigerator show
case. 1,614,319; Jan. 11.
Schmidt, Henry, Detroit, Mich. Door closer. 1,632,924;

June 21.

Schmidt, Henry F. (See Trotter, H. R., and Schmidt.)
Schmidt, Henry F., Landsdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fluid tachometer. 1.613,727; Jan. 11.
Schmidt, Henry E., Lansdowne, Pa., assignor to Westing-Schmidt, Henry E., Lansdowne, Pa., assignor to Westing-Formation of the Company. Hydraulic regulating apparatus. 1.617,460; Feb. 15.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westing-house Electric & Manufacturing Company. Turbine-blade shrouding. 1.625,483; Apr. 19.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westing-house Electric & Hanufacturing Company. Lubricating system. 1.627,730; May 10.
Schmidt, Henry F., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fluid-translating device. 1.614,574; Jan. 18.
Schmidt, Henry F., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fluid-translating device. 1.614,574; Jan. 18.
Schmidt, Henry F., & Manufacturing Company. Requisiting to the Manufacturing Company. Requisiting the Manufacturing Company. Requisiting the proposition of the Manufacturing Company. Requisiting the Manufacturing Company. Requisiting the Manufacturing Company. Requisiting Company. Requisition of the Manufacturing Company. Requisiting Company. Requisition of the Manufacturing Company. Requisition of the Manufac

Schmidt, Henry F., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Requilator system for condenser circulating pumps, 1,639,767; May 31.

Schmidt, Henry F., Swarthmore, Pa., assignor to Westinghouse Electric and Minufacturing Company. Radial-Life Company. Land 1,630,043; May 31.

Schmidt, Henry F., Swarthmore, Pa., assignor to Westinghouse Electric and Manufacturing Company. Condenser installation. 1,638,645; Aug. 9.

Schmidt, John, Camden, N. J. Valve construction. 1,630,973; May 31.

Schmidt, John, Camden, N. J. Valve construction. 1,630,973; May 31.

Schmidt, John, Camden, N. J. Valve construction. 1,630,973; May 31.

Schmidt, Soef, Freienobil, Germany. Swivel plow with Schmidt, Boef, Freienobil, Germany. Fire extinguisher. 1,638,507; Aug. 9.

Schmidt, Karl, Nerunpin, Germany. Fire extinguisher. 1,638,507; Aug. 9.

Schmidt, Karl, Berlin-Sudende, assignor to C. Lorenz Aktiengeselischaft, Berlin-Tempelhof, Germany. High-frequency transformer. 1,613,772; Jan. 11.

Schmidt, Karl, Berlin-Sudende, assignor to C. Lorenz Aktiengeselischaft, Berlin-Tempelhof, Germany. Frequency multiplication. 1,632,263; June 14.

Schmidt, Karl, Berlin-Sudende, assignor to C. Lorenz Aktiengeselischaft, Berlin-Tempelhof, Germany. Frequency multiplication. 1,637,283; July 26.

Schmidt, Karl, Berlin-Tempelhof, Germany. Speed regulator. 1,632,565; June 14.

Schmidt, Karl, Berlin, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelnof, Germany. Speed-regulating
system. 1,647,020; oct. 25.
Schmidt, Karl F., Heidelberg, and P. Zutavern, assignor
to Knoll & Co., Ludwigshafen-on-the-Rhine, Germany.
Production of organic compounds. 1,637,661; Aug. 2.
Schmidt, Karl W. (See Redman, J. F., and Schmidt).
Schmidt, Lambert, Brooklyn, N. Z., assignor to Radiotive
Schmidt, Lambert, Fr., Erooklyn, N. Z., Thettproof lamp
bulb. 1,648,916; Nov. 15.
Schmidt, Lambert, Fr., Erooklyn, N. Z., Thettproof lamp
bulb. 1,648,916; Nov. 15.

Schmidt, Le Roy L., South Tacoma, Wash. Traffic signal. 1,620,576; Mar. 8.

nal. 1,620,576; Mar. 8.
Schmidt, Louie, Atlantic, Iowa. Seed-corn nubber.
1,614,971; Jan. 18.
Schmidt, Louis A., Brooklyn, assignor to R. Hoe & Co.,
Inc., New York, N. Y. Web guide for rotary printing
machines. 1,613,900; Jan. 11.
Schmidt, Louis A., Brooklyn, assignor to R. Hoe & Co.,
Inc., Mew York, N. X. Plate clamp. 1,649,928;

Inc., Nov. 22.

Nov. 22.

Schmidt, Ludwig, Schwalg, near Nuremberg, Germany, assignor to Westinghouse Liectric & Manufacturing Company. Meter-window structure. 1,614,156; Jan. 11.

Schmidt, Ludwig, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, New York, N. Y. Apparatus for the production of artificial jewels or precious stones. 1,653,022; Dec. 20.

Schmidt, Max, Cincinnati, Ohio, Scalpel. 1,647,546; Nov. 1.

Nov. 1.

Schmidt, Maximilian P., Biebrich-on-the-Rhine, Germany, assignor, by mesne assignments, to Grasselli Dyestuff Corporation, New York, N. Y. Manufacture of vat Germany, assignors, to Kalle & Co. Aktiengesellschaft, Biebrich-on-the-Rhine, Germany. Sensitive layer on a suitable base and making the same. 1,628,279; May 10.

Schmidt, Maximilian P., and W. Neugebauer, Biebrich-on-the-Rhine, Germany, assignors, by meane assignment of the Companies of the benearthrone series. Schmidt, Ottmann G., Fargo, N. Dak. Gasoline torch. 1,629,280; May 10.

Schmidt, Ottmann G., Fargo, N. Dak. Gasoline torch. 1,620,695; Mar. 15.

Schmidt, Ottmann G., Fargo, N. Dak. Gasoline torch. 1,620,695; Mar. 15.

Schmidt, Oscar C., assignor to The Cincinnati Butchers' Supply Company, Cincinnati, Onio. Cooling apparatus for congealable substances. 1,630,864; May 31. Schmidt, Oscar C., assignor to The Cincinnati Butchers' Supply Company, Cincinnati, Ohio. Knocking pen. 1,646,334; Oct. 25. Schmidt, Oscar C., assignor to The Cincinnati Butchers' Supply Company, Cincinnati, Ohio. Studing machine. 1,647,732; Nov. 1.

1.694,702; Nov. I. Schmidt, Oscar C., and A. G. Klawitter, assignors to The Cincinnati Butchers' Supply Company. Cincinnati, Ohio. Hashing machine. 1,637,965; Aug. 2. Schmidt, Robert E., Eberfeld, Germany, assignor to Grassell Dyestud Corporation. New York, N. Y. Splitting off sulpho groups from antiraquinone sulphonicacid derivatives. 1,650,153; Nov. 22.

Schmidt, Robert E. Eberteld, Germany, assignor to Grassell Dyestuff Corporation, New York, N. Y. miking same 1,652-584; Dec 13. Schmidt, Rudolph, Rosedale, Kans. Truss. 1,638,218; Aug. 9.

Aug. 9.
Schmidt, Theodore A., Lithographing Company. (See Pistorius, Anna, assignor to International Precipitation Company, Los Angeles, Calif. Damper construction. 1,634,555; July 5.
Schmidt, Walter A., assignor to International Precipitation. 1,634,555; July 5.
Schmidt, Walter A., assignor to International Precipitation. 1,635,067; Nov. 22.
Schmidt, Werner. (See Von Weinberg, A., and Schmidt, Schmidt, Wilhelm, deceased; S. Hoffmann, executor, assignor to Schmidt'sche Dieissdampf G. m. b. H., Cassel-Wilhelmshohe, Germany. Steam superheater for steam engines. 1,618,230; Feb. 22.
Schmidt, Wilhelm, deceased; S. Hoffmann, executor, assignors.

engines. 1,618,230; Feb. 22.
Schmidt, Wihlelm, deceased; S. Hoffmann, executor, assignor to Schmidt'sche Heissdampf, G. m. h. H., Cassel-Wilhelmshohe, Germany, Steam-power plant for submarries. 1,635,601; July 12.
Schmidt'sche Heissdampf, Gesclischoft m. b. H., Cassel-Wilhelmshohe, Germany, Power plant for warships. 1,632,925; June 21.
Schmidt, William F., assignor to The All-Metal Products Company, Wyandotte, Mich. Spring gun. 1,633,795; June 28.

June 28.
Schmidt, Willy. (See Thiel, A., and Schmidt.)
Schmidt'sche Heissdampf G. m. b. H. (See Hartmann,
O. II., and Wempe, asslgnors.)
Schmidt'sche Heissdampf G. m. b. H. (See Schmidt,
Wilhelm, assignor).
Schmidt'sche Heissdampf-Gesellschaft m. b. H. (See
Franke, Hermann, assignor).
Schmidt'sche Heissdampf-Gesellschaft m. b. H. (See
Hartmann, Otto, assignor).
Schmidt'sche Heissdampf-Gesellschaft m. b. H. (See
Hartmann, Otto, assignor).

Schmidt'sche Heissdampf-Gesellschaft m. b. H. (See Schmidt, Williem, assignor).
Schmidt sche Heissdampf-Gesellschaft m. b. H. (See Thimself williem).
Schmidt'sche Heissdampf-Gesellschaft m. b. H. (See Wempe, Friedrich, assignor).
Schmidt sche Heissdampf-Gesellschaft m. b. H. (See Wempe, Friedrich, assignor).
Schmidt, Gas, Gas, Gas, War. 15.
Schmidt, Grant williem, assignor williem, assignor of C. G. Haubold, A. G. Chemidt, Charles J. Algoma, Wis. Composite table top.
Schmidt, Frank R., Brooklyn, N. Y., assignor to American
Machine and Foundry Company. Shelling coconuts.
1,032,031 App. 28.
Schmidt, Frank R., Brooklyn, N. Y., assignor to American
Machine and Foundry Company. Shelling coconuts.
1,032,031 App. 28.
Schmidt, Henry J., Emsworth Borough, assignor of onehalf to W. M. Young, Avalon, Pa. Air moistening and
schmidt, Henry J., Emsworth Borough, assignor of onehalf to W. M. Young, Avalon, Pa. Air moistening and
Schmidt, Henry J., and J. Little, Omaha, Nebr. Automobile lifting jack. 1,622,525; Mar. 29.
Schmidt, Hony J., and J. Little, Omaha, Nebr. Automobile lifting jack. 1,622,525; Mar. 29.
Schmidt, John A., Columbus, Ohio, assignor to The
Universal Milking Machine Company, Waluscha, Wis.
Phistor. 1,647,871; Nov. 1.
Schmidt, Otto G., assignor to The Scholl Mig. Co., Chicago, III. Corp. Plaster machine. 1,637,624; Aug. 2.
Schmidt, Mohrt. Corp. Plaster machine. 1,637,624; Aug. 2.
Schmidt, William A., Meredosia, III. Puller. 1,650,964;
Nov. 29,
Schmidt, Schrift, Germany, Press for pressing
Schmidt, Schrift, Germany, Press for pressing
Schmidt, Mohrt. Ceveland. Ohio. Tametelearance.

Schmitt, William A., Meredosia, Ill. Puller. 1,650,965; Nov. 29.
Schmitz, Alwin, Erfurt, Germany. Press for pressign hollow bronze objects. 1,629,417; May 17.
Schmitz, Fred A., Cleveland, Ohio. Tappet-clearance guuge. 1,649,259; Nov. 15.
Schmitz, William, assignor to C. R. Whiting Co., Newark, N. J. Lining paper or similar article. Des. 72,550; App. 26.
App. 26.
App. 26.
App. 26.
App. 27.
App. 28.
App. 28

Apr., 26.
Schmbli, Aifred C., Beaver Falls, assignor to Koppel Industrial Car and Equipment Company, Pittsburgh, Pa. Dump car., 1642,760; Sept. 20.
Schmolze, Mildred C., assignor to Franklin Simon & Co., Inc., New York, N. Y., Dress. Des. 74,155; Dec. 27.
Schmuck, Philip A., Tulsa, Okla. Swivel rope socket.
1,841,686; Sept. 6.
Schnabel Company, The. (See Schnabel, Paul R., assignor).

Schnaber Computer, Arc. Schopber Schnaber Computer, Schopber Schopber Schopber Schnaber Schna

Schnabel, Paul R., Oakmont, assignor to The Schnabel Company, Pittsburgh, Pa. Vehicle body, 1,620,404; Mar. 8.
Schnabl, Smil J., Amberg, Wis. Milking-pail holder. Schnabl Trees, 1972. Bee. 1972. Bee

Schneggenburger, Günther, Berlin-Halensee, Germany, Pump with cam-controlled plungers. 1,612,888; Jan. 4.

Schnergenburger, Günther, Berlin-Halensee, Germany, Flum with cam-controlled plungers. 1,612,888; Schneider, Adolf, assignor to Nicderbayerische Cellulosewerke, Kehheim-on-the-Danube, Germany. Apparatus for vaporizing liquids. 1,624,014; Apr. 12.
Schneider, Alexander M., assignor to G. Sperling, New York, N. Y. Undergarment. 1,633,616; May 31.
Schneider, Alexander M., assignor to G. Sperling, New Schneider, Alexander M., assignor to G. Sperling, New Schneider, Alexander M., assignor to G. Sperling, New Schneider, Charles L., and H. C. Fruehauf, assignors to Fruehauf Träiler Company, Detroit, Mich. Trailer, 1,613,724; Jai 11.
Schneider, Charles T., deceased; L. Schneider, administratrix, assignor of one-half to Thomas Siderits, Milwaukee, Wis. Door hanger. 1,657,976; Nov. 1.

Schneider, Christian L., Davenport, Iowa. Sash-weight support. 1,649,861; Nov. 12.

Support. 1,649,861; Nov. 12.

Support. 1,649,861; Nov. 12.

Support. 1,649,861; Nov. 12.

Schneider & Cie., See Schneider, Eugene, assignor.)

Schneider & Cie., et al. (See Schneider, Eugene, assignor.)

Schneider, Edward, St. Paul, Minn. Fastening device for gas-main sweat plugs. 1,639,165; Aug. 16.

Stamford, Conn. Spark plug. 1,046,318; Oct. 18.

Schneider, Eugene, assignor to Schneider & Cie. and J. L.

Routin, Paris, France. Apparatus for controlling the firing against aerial objectives. Rel6,734; Sept. 6.

France. Transmitting apparatus utilizing the principle of the Wheatstone bridge. 1,625,650; Apr. 26.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for gun mounting, laying. and sighting for artillery on aeroplanes. 1,638,692; Schneider, Ferdinand, Miami, Fla. Safety sewer outlet. 1,651,473; Dec. 6.

Schneider, Ferdinand, Miami, Fla. Safety sewer outlet. 1,651,473; Dec. 6.

Schneider, Franklin, assignor to The Van Dorn Electric Tool Company, Cleveland, Ohio. Portable hand tool. Schneider, Franklin, assignor to The Van Dorn Electric Tool Company, Cleveland, Ohio. Portable hand tool. 1,650,911; Nov. 29.

Schneider, Heinrich, Lenzburg, Switzerland. Spinning-Schneider, Heinrich, Lenzburg, Switzerland. Spinning-Schneider, Heinrich, Lenzburg, Switzerland. Onling-mechanism for spinning, twisting, and like machines. Schneider, Heinrich and F. Rahn, assignors to the Firm: C. H. Boehringer Son Chemische Fabrik, Niederingel-heim-on-the-Rhine, Germany, Baking powder. 1,641,013; Aug. 30.

Schneider, Hermann. Cheser, Jul. Carpet and rug beat-heim-on-the-Rhine, Germany, Baking powder. 1,641,013; Schneider, Hermann. (See Strub, F., and Schneider.) Schneider, John J. (See Ewald, Martin B., assignor.) S

Schreider, Julius, Omaha, Nebr. Garment. 1,648,282; Nov. S.
Schneider, Laurence A., assignor to Canton Forge & Axle Company, Canton, Ohlo. Apparatus for manufacturing rail anctors. 1,644,283; Oct. 4.
Schneider Leopoid B., Galena, III. Sanitary bedbug trap. 1,644,157; Jan. 11.
Charles Troules, administratrix. (See Schneider, Charles Murray. (See Rosenblum, H., and Schneider, Schneider, Newton H., Salinas, Calif. Acid-resisting compound. 1,638,709; Aug. 9.
Schneider, Newton H., Salinas, Calif. Acid-resisting compounds. 1,649,326; Nov. 15.
Schneider, Newton H., Salinas, Calif. Acid-resisting compounds. 1,649,826; Schneider, Newton H., Salinas, Calif. Acid-resisting Schneider, Newton H., Salinas, Calif. Acid-resisting Schneider, Newton H., Salinas, Calif. Acid-resisting Schneider, Revious H., Salinas, Calif. Schneider, Schneider, Brudalph, Salinas, Calif. Schneider, Schneider, Brudalph, Salinas, Calif. Schneider, Schneider

Schneider, Rudolph, assignor to Busch Sulzer Bros-Diesel Engine Co. St. Louis, Mo. Cylinder and head construction 1,622,813; Mar. 29. Schneider, Rudolph, assignor to Busch-Sulzer Bros-Diesel Engine Co., St. Louis, Mo. Engine bedplate. 1,626,760; May 3.

May 3. Co., St. Cooks, Mo. Engine bechate. 1,026,705; May 1. Schneider, William C., Verdon, Nebr. Baby's chair. 1,647,200; Nov. 1. Container cover. 1,625,335; Apr. 19. Schneider, William G., Toledo, assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Ignition evilia, 164,417; Nov. 1. X. Railway-track 1,630,534; May 31,900rt, N. Y. Pen clip or similar Schneil, William, Detroit, Mich., assignor to Nash Motors Co. Kenosha, Wils. Radiator cap. Des. 71,813; Jan. 4.

Jan. 4.

Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Plate for automobile window-regulator handle or similar article. Des. 72,284; Schnell, William, assignor to Ternstedt Manufacturing Co., Detroit, Mich. Window-regulator handle or similar article. Des. 73,624; Oct. 11.

Schnell, William, assignor, by meene assignments, to Ternstedt Manufacturing Company, Detroit, Mich. Window-regulator-handle assembly. 1,648,283; Nov. 8.
Schnelly, Schnell, Michael Schnell, William, assignor, Description, 10,648,283; Nov. 8.
Schnelpresenfabrik Aktiengesellschaft Heidelberg. (See Büttner, Artur, assignor, 10, Scammell China Co., Trensther, Femil L., assignor to Scammell China Company, Trenton, N. J. Plate, Des. 72,178; Ternston, N. J. Plate, Des. 73,104; July 19.

Schnepp, Emil L., assignor to Scammell China Co., Trenton, N. J. Plate, Des. 73,104; July 19.

Schnepp, Louis W. (See Davis, L. F., and Schnepp.)

Schnepp, Louis W., assignor of one-half to L. F. Davis, Huntington Beach, Calif. Water heater. 1,616,143;

Feb. 1.

Schnepp, Louis W., Huntington Beach, assignor to First
National Bank of Anaheim, trustee for Snap-0-Stat
Company, Anaheim, Calif. Thermostatic valve.
1,617,548; Feb. 15.
Schnepp, Louis W., Huntington Beach, assignor to First
National Bank of Anaheim, trustee for Snap-0-Stat
Company, Anaheim, Calif. Thermostatic valve.
1,632,565; Aug. 23.
Schnieders, John B. (See Mumaw, J. H., Schnleders, and Hoat.)

Schnieders, J

Schnieders, John B. (See Mumaw, J. H., Schnieders, and Hais.)

Schnitzer, William E., Garden Grove, Calif. Tractor hitch. 1,632,509; June 14.

Schnitzer, Beno, Akron, Ohio, assignor to Luftschiffbau Eppella. Schnitzer, Beno, Akron, Ohio, assignor to Luftschiffbau Eppella. Schnitzer, Beno, Akron, Ohio, assignor, to Luftschiffbau Eppella. Schnitzer, Haffung, Ground transportation of airships. 1,637,759; Aug. 2. Schnitzler, Abraham, Chelsea, Mass. Shifting jack for motor vehicles. 1,626,630; May 3.

Schnoor, Raymond D., Maywood, assassy. Chicago, Ill. Radiator-cap-latching device. 1,650,805; Nov. 29.

Schnoor, Harymond D., Haubbard, Iowa, Illuminated sign. 1,649,547; Nov. 15.

Schnuck, Carl F. (See Bowen, D. R., and Schnuck.)

Schnuck, Jacobs, M., F. Kesselring, J. Schnur, and S. Joniscik, assignors to K. Schnur, as trustee, Chicago, Ill. Carton-feeding machine. 1,625,057; Apr. 19.

Schnurk, Katherine, trustee. (See Schnur, J. M., Kessel-Schnyder, Johann, assignor to Firm Actingseslischaft der Maschinenfabrik von Theodor Bell & Cle., Kriens-Luzern, Switzerland. Rotary valve for pipe lines. 1,646,631; Oct. 25.

Schoborer, George A., assignor to Hartmann Trunk Com-Nov. 22.

Schoborer, Carl J., Cleveland, Ohio, Smoke-treating appa-

Nov. 22.
Schobrone, Carl J., Cleveland, Ohio. Smoke-treating apparatus. 1.641,995; Sept. 13.
Schock, Clarence, Mount Joy, Pa. Gasoline-dispensing system. 1.633,458; June 21.
Sept. 1.633,458; June 21.
Supermore the sept. Supermore dispensing sassine from underground storage tanks. 1,633,450; June 21.
Schock, Godfried, Cleveland, Ohio. Automobile direction signal. 1,621,335; Mar. 15.
Schoedinger, F. O. (See Conrad, Islah, assignor.)
Schoedinger, F. O. (See Morey, W. W., and Armstrong, assignors.)

assignors.)
Schoel, Louis. (See Heath, K. L., and Schuel.)
Schoelerman, Ferdinand H., Keystone, Iowa. Luggage
carrier. 1,633,497; June 21.
Schoeller, Alfred, Frankfort-on-the-Main, Germany. Electric cigar lighter. 1,622,263; Mar. 22.
Schoeller, Walter. (See Feldt, A., Schoeller, and Borgwardt.)

wardt.)
Schoeller, Walter, and M. Gehrke, assignors to the Firm:
Chemische Fabrik auf Actien (vorm. E. Schering), Berlin, Germany. Pharmaceutical product containing arschool of the state of the st

1.647,151; Nov. 1.

Schoen, Karl, Wuersburg, Germany. Knockdown cofferdam. 1,633,131; June 21.

Schoenegg, Anton A., San Francisco, Calif. Rice separator. 1,640,010; Aug. 23.

Schoenfeld, Joseph, Alameda, assignor to The Magnavox Company. San Francisco, Calif. Electric heater. Schoenfeld, Joseph, Alameda, assignor to The Magnavox Company, San Francisco Calif. Combination radiant and convection heater. 1,652,686; Dec. 13.

Schoenhoefer, Robert, Brunswick, Germany. Preparing a material for the maunfacture of artificial stone and convection of the c

Schoenke, V Appliance Mar. 1.

Mar. 1.

Schoenrock, Otto R., Chicago, Ill., assignor to International Harvester Company. Throttle-valve control means. 1,639,470; Aug. 16.

Schoenthal, Fred C., Buffalo, N. Y., assignor, by mesne assignments to Stee Wheel Corporation, Lansing, Mich. Oschoenthal, Fred C., Buffalo, N. X., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich. Disk wheel. 1,640,378; Aug. 30.

Schoenthal, Fred C., Buffalo, N. Y., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Bich. Disk wheel. 1,640,378; Aug. 30.

Schoenthal, Fred C., Buffalo, N. Y., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing. Bich. Corporation, Lansing. Bich. 1,619,159; Mar. 1.

Schoenwerk, Otto C., assignor, by mesne assignments, to Budd Wheel Company, Philadelphia, Pa. Tool for Schoenwerk, Park Company, Philadelphia, Pa. Tool for Schoenwork, Pred Chicago, 1818-180, Ny mesne assignments, to C. B. Camp, trustee, Oak Park, Ill. Carburetor. 1,649,260; Nov. 15. Schofield, Joe. (See Hessch, H. W., and Schofield.) Schoger, William H., Aurora, Ill. Stenciling apparatus. 1,619,587; Mar. 1; Scholer, Gustav, New York, N. Y. Fire escape. 1,629,541; May 24. Scholes, Daniel R., Chicago, Ill., assignor to Aeromotor Scholes, Micharl R., Hinsdale, Ill. Hall anchor. 1,619,313; Jan. 25. Scholes, Richard T., Hinsdale, Ill. Tie plate. 1,626,631; May 3. Scholes, Richard T., Hinsdale, Ill. Rall Joint. 1,636,442; Scholes, Richard T., Hinsdale, Ill. Rall Joint. 1,636,442;

Scholes Richard T., Hinsdale, Ill. Rail Joint. 1,636,442; Scholes Richard T., Hinsdale, Ill. Rail Joint. 1,636,402; Scholl, Heinrich, Pforzheim, Germany. Foldable comb. 1,636,670; July 26. Scholl Mig. Co., The. (See Schmitt, Otto G., assignor.) Scholl, William T., Oakland City, Ind. Oral kil.

Schold William T. Dakland Chap.
Schold William T. Dakland Chap.
Schold Heinrich (See Meiler, La, and Scholler.)
Scholler, Louis, Fresno, Calif. Motor-vehicle lift.
Scholler, Louis, Fresno, Calif. Motor-vehicle lift.

1,024,010; API, 120.
Scholler, Heinrich, (See Meiler, L., and Scholler, Scholler, Louis, Fresno, Culif, Motor-vehicle Hft.
1,041,035; Nov. 1.
Schollhorn, William, Company, The. (See Bernard, WilSchollkopf, Karl, assignor to Rheinische Kampfer-Fabrik
Gesellschaft mit beschrankter Haffung, DusseldorfOberkassel, Germany, Manufacture of menthol.
1,625,771; Apr. 19.
Schollkopf, Karl, assignor to Rheinische Kampfer-Fabrik
Gesellschaft mit beschränkter Haffung, Dusseldorf-OberSchöllkopf, Karl, assignor to Rheinische Kampfer-Fabrik
Gesellschaft mit beschränkter Haffung, Dusseldorf-OberMay 17.
Scholly, Frank C., Philadelphia, Pa. Ball. 1,629,804; May 17.
Scholly, Frank C., Philadelphia, Pa. Ball. 1,629,804; May 17.
Schollen, George W., Muscatine, Iowa. Ham presser.
1,624,808; Apr. 12.
Licktic Company, Sped-control system, 1,632,627; June 14.

June 14.

Schommers, Nicholas, (See Stremel Joseph, assignor.)

Schon Leter, (See Schoenberg, M. H., and Schon, J. Schon, Leter, (See Schoenberg, M. H., and Schon, J. Schon, J. David E., Fresno, Calif. Combination puller, 1629,003; May 17.

Schonhoff, John H., Advance, Mo. Mower-pitman connection, 1,640,053; Aug. 23.

Schoof, Rajho T., Dodge City, Kans. Pocket postal scale, 1,626,976, May. 32.

Schoole, Rajho T., Dodge City, Kans. Pocket postal scale, 1,626,976, May. 32.

Schoole, John H., Advance, Mo. J., assignor to Standard Underground Cable Company, Pittsburgh, Pa. Cable reel, 1,625,503; Apr. 19.

Schooley, James E. (See Frince, J. E., and Schooley, Schooley, James E. (See Frince, J. E., and Schooley, Schoonenberg, Pancras, assignor to Namilooze Veunouschap, Philips' Gloellampenfabrieken, Eindhoven, Netherlands. Continuous manufacture of glass tubes or Schoonenberg, Pancras, assignor to N. V. Philips' Gloellampenfabrieken, Eindhoven, Netherlands. Glass-manufacturing machine and method. 1,642,312; Sept. 13.

Schoonmaker, Charles F. (See Jacobs, E. H., and Schoonmaker, Charles F. (See Jacobs, E. H., and Schoonmaker, Charles F. (See Jacobs, E. H., and Schoonmaker).

Schoommaker, Charles F. (See Jacoos, E. H., and Schoommaker, Charles F. (See Jacoos, E. H., and Schoommaker).

Schoop, Max U, Zurich, Switzerland. Device for coating articles with glass, enamel, quartz, and metals.

Schoper, Alfred, Leipzig, Germany. Testing of mechanical strength. 1637-011; July 26.

Schor, Joseph. (See Eldridge, J., and Schor.)

Schorger, Arlie W., Madison, Wis., assignor, by mesne assignments. to Wood Conversion Company. Cloquet, Minn. Gelatinizing wood. 1,631,834; June 7.

Schorger, Arlie W., Madison, Wis., assignor, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover, Del. Koofing felt. 1,649,884; Nov. 22.

Schort, Herman E. (See Gibson, A. R., and Schort, Schorsch, Ludwig, Goerkan, Czechoslovakia. Lap machine. 1,642,178; Sept. 13.

Schoshusen, Arthur, West Somerville, Mass. Boot or shee form. 1,632,044; June 14.

Schott & Gen. (See Herschkowitsch, M., and Prausnitz, assignors.)

assignors.)

assignors.)
Schott, Henry, Longmendow, Mass. Refrigerator.
1 633,231; June 21.
Schott, Howard H., assignor to Robeson-Rochester Corporation, Rachester, N. V. Urn. Des. 72,872; June 14.
Schott, Robert C., Broodskyn, N. V. and d. Johnson, Chottle Manufacturing Commany. Demand-building relay. 1.647,316; Nev. 1.
Schötter, Manufacturing Commany. Demand-building relay. 1.647,316; Nev. 1.
Schötter, Ussef. (See Bönner, Johann J., assignor.)
Schottky, Wulter, Wurzhurg, medgnor to Slemens & Halske Aktlongeenleschaft, Slemenstatt, near Berlin, Gommy. 1 Linch Schotter, Sc

Schottland, Abraham, Paterson, N. J. Self-threading shuttle, 1,615,314; Jan. 25. Schrack, Eduard, Vienna, Austria. Grid for electron-discharge tubes. 1,654,471; Dec. 27. Schrade, George, Bridgeport, Conn. Ink eraser. 1,634,120;

Schrack, Edwin, 1,654,471; Dec. 24.
Schrade, George, Bridgeport, Conn. Ink eraser. 1,634,120; June 28.
June 28.
June 28.
Sarl C. Hughson, Calif. Marker block.
1,629,053; May 17.
Schrader, Ernest C., assignor to Economy Glass Company, Morgantown, W. Va. Goblet or similar article.
Des. 72,968; June 28.
Schrader, Ernest C., assignor to Economy Glass Company, Morgantown, W. Va. Tumbler or similar article.
Des. 72,968; June 28.
Schrader, Ernest C., assignor to Economy Glass Company, Morgantown, W. Va. Tumbler or similar article.
Schrader, Greeker C. C., 51; Sept. 20.
Schrader, Horbert, assignor to Wheeling Steel Corporation, Wheeling, W. Va. Header for pais. 1,636,839; July 26.
Schrader, Herbert, assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sanitary can. 1,650,572, Nov. 22.

German, W. va. Heater for pairs. 1,606,503; 111,103.

Schrader, Herbert, assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sanitary can. 1,650,572; Nov. 22.

Schrader, Thomas O., Allentown, assignor to The Dent Hardware Company, Fullerton, Fa. Door closer. The Company of the Company

Feb. 15
Schramm, Carl, West Hartford, Conn., assignor to Pratt
& Whitney Company, New York, N. Y. Grinding machine. 1.617,167; Feb.
Schram, Carl, West Hartford, Conn., assignor to Pratt
anism. 1.617,168; Feb. W York, N. Y. Relleving mechanism. 1.617,168; Feb. Work, N. Y. Relleving mechanism. 1.622,678; Nar. 29.
Schramm, Carl, West Hartford, Conn., assignor to Pratt
& Whitney Company, New York, N. Y. Centering machine. 1.622,678; Mar. 29.
Schramm, Carl, West Hartford, and P. F. Vokal, HartIord, Conn., assignors to Pratt & Whitney Company,
July 5. Driving connection. 1,634,386;
July 5. Driving connection. 1,634,386; New 1 July 5.

ford, Conn., assignors to Pratt & Whitney Company, New York, N. Y. Driving connection. 1,634,386; Schramm, Waiter J., Chicago, III. Ticket case. 1,620,295; Mar. S. Schramz, Karl. (See Kayser, F., and Schramz). Schramz, Karl. (See Kayser, F., and Schramz). Schranz, Karl. (See Kayser, F., and Schranz). Schranz, Karl. (Eberfeld, and C. Lutter, Barmen-Langerfeld, Germany, assignors to Winthrop Chemical Company. Company. 1,618,282; Feb. 1. Schraysshune, Carl. assignor to Specied Chain Co., Providence. R. I. Display card. 1,639,672; Aug. 23. Schraysshune, Carl. assignor to Specied Chain Co., Providence. R. I. Display card. 1,639,672; Aug. 23. Schreiber, Allen B., St. Joseph, Mo. Stock-feed compound. 1,638,964; Aug. 16. Schreiber, Allen B., St. Joseph, Mo. Producing animal feed. 1,638,964; Aug. 16. Schreiber, 1,638,1430; June 7. Sch

Schriner, Charles F., Cleveland, Ohio. Bushing for metal receptacies. 1,644,154; Oct. 4.
Schreiner, John, assignor to Paul W. Koch & Company, Chicago, Ill. Saw. 1,627,622; May 10.
Schreiner, Marcel, New York, N. Y. Whirling toy. 1,613,331; Jan. 4.
Schremp, Edward J., Rochester, N. Y. Pressing machine for garments and the like. 1,631,770; June 7.
for placing washers in rubber heels. 1,639,312; Aug. 16.
Schroder, Edmand, Perlin, Germany, assignor to the Godycar Edmand-Ethining & Co., Basel, Switzerland. Electrode-operating means for welding machines. 1,617,770; Feb. 15.
Schroder, Edward J., Lowell, Ind. Variable condenser.

Fcb. 15.
Schröder, Edward J., Lowell, Ind. Variable condenser.
1,631,226; June 7.
Schröder, Herman, Capron, Okla. Steering device.
1,620,237; Mar. 8.
Schröder, Brander Schröder, Paul, Stuttgart, Germany, assignor to Excaelum Corporation. Airship. 1,655,603; Dec. 20.
Schröder, Paul, Stuttgart, Germany, assignor to Excaelum Corporation. Condenser for airships. 1,653,604; Dec. 20.

Corporation. Condenser in arrange.

Dec. 20.
Schröder, Peter. (See Plauson, H., and Schröder.)
Schröder, William, Covington, Ky., assignor to The Sebastian Lattle Company, Cincinnati, Ohio. Fastening Schröder, Albert, Piqua, Ohio. Street-cleaning machine. 1.615,348; Jan. 25.
Schröder, Albert, Piqua, Ohio. Street-cleaning machine. 1.630,719; May 31.
Schröder, Alfred. (See Benniger, John, assignor.)
Schröder, Anthony, et al. (See Rieke, Theodore W., assignor.)

Apr. 12. Simon E., Newton, Iowa. Washing-machine tub. 1,627,931; May 10. Schroeder, Simon E., Oak Park, Ill. Wringer. 1,644,040; Oct. 4.

Schroeder, Simon E., Newton, Iowa. Wringer construc-tion. 1,644,041; Oct. 4. Schroeder, Simon E., Oak Park, Ill. Wringer. 1,645,160;

Oct. 11. Schroeder, Simon E., Newton, Iowa. Wringer. 1,645,161; Oct. 11. Schroeder, Simon E., Newton, Iowa. Wringer. 1,645,297;

Schroeder, Simon E., Newton, Iowa. Wringer. 1,645,297; Oct, 11.

Schroeder, Simon E., Newton, Iowa. Wringer construction. 1,646,601; Oct. 25.

Schroeder, Simon E., assignor of one-half to One Minute Manufacturing Company, Newton, Iowa. Agitator to washing machine. 1,619,637; Mar I.

Some Market and Company, Newton, Iowa. Agitator and chalking device. 1,649,747; Nov. 15.

Schroeter, John F., Atlanta, Ga. Automatic clamping device for paper-cutting and other machines. 1,640,965; Aug. 30.

Schroeter, George A., Denver, Colo. Dewatering peat. 1,625,038; Apr 19.

Schroter, George A., Denver, Colo. Dewatering peat. 1,625,038; Apr 19.

Schroter, George A., Denver, Colo. Dewatering peat. 1,625,038; Apr 19.

Schroter, Charles T., Sioux Falls, S. Dak, and E. C. Dessem. Worthington, Minn. Cleaning device. 1,650,542; Nov. 22.

Schroyer, Martin, Brownsville, Pa. Attachment for track drills. 1,613,809; Jan. 11.

Schroun, Feter J., Monaca Heights, assignor to Colona Grinding Company, Pittsburgh, Pa. Apparatus for forming thread protectors. 1,651,231; Nov. 29.

Schruth, Albert E., E., and J., Pepin, Wis. Draft equalizer. 1,646,768; Oct. 25. Schruth, Edward. (See Schruth, Albert E., E., and J.) Schruth, John. (See Schruth, Albert E., E., and J.) Schruth, John. (See Schruth, Albert E., E., and J.) Schruth, John. (See Schruth, Albert E., E., and J.) Schruth, John. (See Schruth, Albert E., E., and J.) Schruth, John. (See Schruth, Albert E., and J.) Schruth, John (See Schruth, Appetic) Bridge, near Bradford, England. Manufactured Particial silk. J.(519,769; September 1988) Schruth, John (September 1988) Schruth, J

Schubert, Friedrich W., assignor to Brysilka, Limited, Apperiew Bridge, near Bradford, England. Apparatus Mars.

Schubert, Friedrich W., assignor to Brysilka, Limited, Apperiew Bridge, near Bradford, England. Collapsible reel for winding filaments, yarns, threads, silks, and the like. 1,613,431; June 7.

Schubert, Friedrich W., assignor to Brysilka, Limited, Apperiew Bridge, near Bradford, England. Collapsible read for Friedrich W., assignor to Brysilka, Limited, Apperley Bridge, near Bradford, England. Manufactapacity pump. 1,683,367; Aug. 9.

Schubert, Friedrich W., assignor to Brysilka, Limited, Apperley Bridge, near Bradford, England. Variable-capacity pump. 1,683,367; Aug. 9.

Schubert, Friedrich W., assignor to Brysilka, Limited, Apperley Bridge, near Bradford, England. Treating artificial silk. 1,631,222; Nov. 29.

Schubert, Friedrich W., assignor to Brysilka, Limited, Apperley Bridge, near Bradford, England. Treating artificial silk. 1,631,222; Nov. 29.

Schubert, Friedrich W., assignor, Container, especially canister, for automobile driving liquids. 1,654,144; Dec. 27.

Schubert, Gart, Schubert, Bradford, W., Schubert, Anthony G., Los Angeles, Calif. Ventilating apparatus. 1,624,016; Apr. 12.

Schubert, Gart, A., Pforsheim, Germany. Hearing shell. 1,640,908; Aug. 30.

Schubert, Pullan L., See Wynd, L. A., and Schuber, Schubert, Julan L., Peorin, Ill. Making basic open-benches, Edgar F., Alta, Lowa. Milk-pall support. 1,682,586; Dec. 18.

Schubert, Edgar F., Alta, Iowa. Milk-pall support. 1,682,586; Dec. 18.

Schubert, Edgar F., Alta, Iowa. Milk-pall support. 200,000; Aug. 200,000; 1,

Sentermann.)

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Schuermann.

Schuermann.

Schuermann.

Tulsa. Okla. Braking mechanism for motor vehicles. 1,642,898; Sept. 20.

Schuermann.

Schuerma

June 7.
Schuffenhauer, Arthur E., Chicago, Ill. Radiotube-holding device. 1.633.041; June 21.
The state of th

May, 3.
Schifftan, Eugen, Hollywood, Calif. System of taking photographic and chematographic pictures. 1,636,112;
July 19.
Schuffan, Richard, Wilmersdorf, near Berlin, Germany.
Fastener particularly for bandages. 1,633,681;

June 28.

June 28.
Schula, Anton, Vienna, Austria. Sealing means.
1,621,907; Mar. 22.
Schuld, Otto J., Madison, S. Dak. Corn-snapping roller.
1,647,936; Nov. 1.
Schule, Fredrick W., Bloomfield, and C. W. Hunt, South
Orange, N. J., assignors to Westinghouse Lamp Company, Method and apparatus for preventing slippage
of the Company of the Compan

Schulemann, Werner.

Bonrath,
Schulenberg, Frederick H., Lima, Ohio. Hydrocarbon
Schulenberg, 1,625,162; Apr. 19.
Schuler, John G., Dutton, Mont. Engine-ignition lock.
1,639,354; Aug. 16.
Schuler, Max, Gottingen, Germany. Electric connecting
system for the purposes of telecontrol. 1,648,915;

Schuler, Max. Gottlugen, Germany. Electric connecting system for the purposes of telecontrol. 1,648,915; Nov. 15.
Schulert, Paul A., Ferndale, Mich. Refuse receptacle. 1,648,065; Nov. 8.
Schull, Leopold, Vlenna, Austria. Arrangement for disengaring the friction coupling of eccentric presses. 1,616,839; Feb. 8.
Schull, Leopold, Vlenna, Austria. Driving mechanism for presses. 1,618,479; Feb. 22.
Schuller, Carl G. (See Prvor. W. J., and Schuller.)
Schuller, Carl G., Brecksville, Ohlo. Rotary cutting tool. 10,777.
Schulman Solomon, New York, N. Y., assignor to Labor Saving, Appliance Corp. Mop wringer. 1,652,800; Dec. 13.

Schuloff, Robert, Aussig-on-the-Elbe, Czechoslovakia, as-signor to 1. G. Farbenindustrie Aklengesellschaft, Frankfort-on-the-Main, Germany. Bodies of desensi-Schult, Theodor. (See Neimeler, W., and Schult.) Schult, Fitz. (See Herz, R., and Schult.) Schult, and making same. 1,653,614; Dec 20.

Mar. 15. Schulte, Robert W., assignor to W. R. Heffelinger, St. Paul, Minn. Self-compensating fan belt. 1,614,693;

Mar. 15.
Schulte, Robert W., assignor to W. R. Heffelfinger, St.
Faul, Minn. Self-compensating fan beit. 1,614,693;
Schulte, Walter B., assignor to Burgess Battery Company,
Madison, Wis. Radiobattery. 1,654,146; Dec. 27.
Schultheis, Robert B., Brooklyn, N. Y. Time-control
mechanism for radioreceivers. 1,628,810; May 17.
Schultheiss, William F., Los Angeles, Calif. Diversion
valve. 1,640,726; Aug. 30.
Schultz, Abraham J., Newark, N. J. Bedstead corner
tock. 1,540,236; Aug. 30.
Schultz, Abraham J., Newark, N. J. Bedstead corner
tock. 1,543,260; July C. Clarion, Iowa. Quick-change
pump-rod connection. 1,642,464; Sept. 13.
Schultz, Arthur F. (See Hodge, Arthur A., Sasignor,)
Schultz, Arthur F. (See Hodge, Arthur A., Sasignor,)
Schultz, Arthur E., assignor of one-half to A. A. Jahr,
Forest Park, Ill. Rallway bumping post. 1,629,124;
May 17.
Schultz, August L., assignor to The American Multigraph

Nay 17.

Schultz, August L. assignor to The American Multigraph C. Chee Leveland, Ohio. Addressing machine. 1446-220; Oct. 18.

Schultz, Charles H., Chicago, Ill. Thermometer. 1,638,276; Aug. 9.

Schultz, Edward, Chicago, Ill. Combination standard and tray for a combined floor lamp and smoking stand. Des. 73,440; Sept. 13.

Schultz, Edward, assignor to The Nagel-Chase Mfg. Co., Schultz, Edward, assignor to The Nagel-Chase Mfg. Co., Chicago, Ill. Smoking stand. Des. 72,285; Mar. 22.

Schultz, Edward, assignor to The Nagel-Chase Mfg. Co., Chicago, Ill. Smoking stand. Des. 72,286; Mar. 2.

Schultz, Edward, Casignor to The Nagel-Chase Mfg. Co., Chicago, Ill. Smoking stand. Des. 72,286; Mar. 2.

Schultz, Edward, Chicago, Ill., assignor to J. B. Ladd. Des Moines, Iowa. Caster. 1,634,631; July 5.

Schultz, Edward, Chicago, Ill., assignor to J. B. Ladd. Des Moines, Iowa. Caster wheel. 1,639,860; Aug. 23.

Schultz, Edward, Chicago, Ill., assignor to J. B. Ladd. Des Moines, Iowa. Caster wheel. 1,639,860; Aug. 23.

Schultz, Edward, Maywood, Ill., assignor to American Can Company, New York, N. Y. Coin bank. 1,648,425; Nov. 8.

Nov. 8.
Schultz, Edward P., Brooklyn, N. Y. Universal joint.
1,648,624; Nov. 8.
Schultz, Ernest, East Melbourne, Victoria, Australia.
Resilient wheel. 1,630,865; May 31.
Schultz, Frank A., assignor to Pelouze Manufacturing
Co., Chicago, Ill. Scale casing. Des. 72,969; June 28.
Schultz, Horderick B. (See McPherson, D., and Schultz, Joschultz, H., & Company. (See Tackle, Louis, assignor.)
Schultz, H., and Company. (See Wagner, Frederick P.,
jr., assignor.)

Schultz, Hermann, Lankwitz, near Berlin, Germany, assignor to Metal & Thermit Corporation, Carteret, N. J. Rall clamp, 1,644,365; Oct. 4.
Schultz, Herman A., Chleago, assignor to C. E. Reed, township of Mellenry, H. H. Copying lathe. 1,623,638;

ship of

Schultz, Herman A., Chicago, Ill., assignor to C. E. Reed. Copying lathe. 1,688,511; Aug. 9. Schultz. Herman J., assignor to W. F. Hall Printing Co. Chicago, Ill. Printing press. 1,617,608; Feb. 18. Schultz, J. W. (See Springheld, W. E., and Frazier, assenting the printing press. 1,617,608; Feb. 18. signors.)

signors.)
Schultz, John. (See Hailo, F., and Schultz.)
Schultz, John L., assignor to American Engineering Company, Philadelphia, Pa. Protective cuttain for fursing the state of the state

Schulz, Arthur E. (See Kochendorfer, F. S., and Schulz.)
Schulz, Arthur E., Chicago, Ill., assignor to Western Elecford Company of the Comp

Aug. 30.

Schulz, Josef, Barmen, Germany. Sheet-metal casing for photographic films. 1,528,558; May 10.

Schulz, Myrtle, Riverside, III. Package wrapping. 1,630,642; May 31.

Schulz, Otto E., assignor of one-half to J. E. Jahraus, Labadle, Mo. Water filter. 1,653,473; Dec. 20.

Schulz, Faul H., and C. Jessen, assignors to Traffic Control, Inc., Milwakec, Wis. Illuminated sign or signal. 1,635,863; July 12.

Schulz, Raymond L., Los Angeles, Calif., assignor to Boehm Surgical Instrument Corporation, Rochester, N. Y. Surgical Instrument 1,643,631, Sept. 27. Schulze, Max A. E., Hamburg, Germany, Closure for boxes, trunks, and the like. 1,644,091; Oct. 4. Schulze, William H., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Radiator cap. Des. 73,344; Aug. Schulze, William H., assignor to Stewart-Warner Speedomice. William H., assignor to Stewart-Warner Speedomice. Control of the Computation Chicago, Ill. Shaft and detach able gear. 1,648,290; Nov. 8. Schlaupitz, O., and Schum.) Schumacher, Conrad. (See Gaisman, H. J., and Schumacher, Conrad. (See Gaisman, H. J., and Schumacher, Conrad. (See Gaisman, H. J., and Schumacher, Conrad. (See

Schumatcher, Earle E. East Orange, N. J., assigner to Western Electric Company, Incorporated, New York, N. Y. Sintering refractory metals. 1,615,957; Feb. 1. Schumacher, Elmer L., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,613,202; Jan. 4.

1,613,202: Jan. 4.
Schumacher, Elmer L., assignor to American Optical Company, Southbridge, Mass. Goggles. 1,636,443;

Schumacher, Elmer L., assignor to American Optical Company, Southbridge, Mass. Goggles. 1,636,4487, 510,149.

Sully 19.

Schumacher, Erwin A. (See Helse, G. W., and Scaumacher, Erwin A., Brooklyn, N. Y., assignor to National Carbon Company, Inc. Electrolyte seal and making the same. 1,647,021; Oct. 25.

Schumacher, John, S. Los Angeles, Calif. Tilting tray. Schumacher, John, Los Angeles, Calif. Wall-board edge. 1,653,474; Dec. 20.

Schumacher, John, Los Angeles, Calif. Wall-board edge. 1,653,474; Dec. 20.

Schumacher, Robert H., Long Beach, Calif., assignor of one-fourth to B. W. Fulghum and one-fourth to E. W. Fulghum, Los Angeles, and one-fourth to W. R. Sadler, San Pedro, Calif. Preservative and forming the same. 1,647,937; Nov. 1.

Schumaker, Edward E., Hilbert, Wis. Propeller. 1,651,230; Nov. 29.

Schuman, Isador, Kansas City, Mo., and B. E. Frank, Johnson County, Kans. Drier. 1,620,5377; Mar. 8.

Schumann Paul R., Chicago, Ill. Smoking pipe. 1,627,431; May 2.

Schumann Plano Company. (See Hurst, James D., assistances).

signor.) Schünemann,

Schumann Piano Company. (See Hurst, James D., assignor.)
Schünemann, Carl Bemen, Germany. Three-color integliontary printing press. 1,637,713. Aug. 2.
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Bursting-strength tester for sheet material. 1,618,231; Feb. 22.
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Method of and mechanism for testing pulp suspensions. 1,653,125. Dec. 20.
Schur, Raymond, Chicago, Ill. Vacuum-tube socket. Schurch, Adolph E. Los Angeles, Calif. Football-game apparatus. 1,633,040; June 21.
Schurch, Jacob H., Philadelphia, Pa., assignor of one-half to W. H. Heise, Los Angeles, Calif. Power transmission for vehicles. 1,627,712; May 10.
Schurmann, W. A., & Co. (See Schurmann, William A., assignon, W. A., & Co. (See Schurmann, William A., assignor).

assignor.)

Schurmann, William A., assignor to W. A. Schurmann & Co., Inc., Chicago, Ill. Egg carton. 1,634,596; July 6, Schurr, Charles H., assignor to The Lees-Bradner Company, Cleveland, Ohio, Machine for hobbing gears, shafts, and other articles. 1,621,23; Mar. 15. Schurr, Charles H., assignor to The Lees-Bradner Company, Cleveland, Ohio, Finishing gear teeth. 1,642,179; Sept. 13.

Schurr, Charles H., assignor to The Lees-Bradner Company, Cleveland, Ohio. Testing apparatus. 1,651,159; Nov. 29.

pany, Cleveland, Ohio. Testing apparatus. 1,651,159; Nov. 29. Schurr. William H., assignor to Searls Manufacturing Company, Newark, N. J. Fixture support. 1,625,163; Apr. 19.

Apr. 19.

Schurtz, Ralph E., Kansas City, Mo. Refrigeration system. 1,627,898; May 10.

Schusky, William W. (See Casper, George D., assignor.)

Schussler, Charles, Blue Island, III. Car-door opening and closing mechanism. 1,624,680; Apr. 12.

Schussler Tobacco Machine Company. (See Schussler, Schussler Tobacco Machine Co. Inc., The. (See Schussler, Walter H., assignor.)

Schussler Walter H., assignor to The Schussler Tobacco Machine Company, Philadelphia, Pa. Cigar-bunching machine. 1,621,088; Mar. 16.

Schussler Walter H., Philadelphia, Pa., assignor to Unigar-banchone Company, Newark, N. J. Cigar-bunching machine. 1,624,083; Mar. 16.

Schussler Walter H., assignor to The Schussler Schussler Chacco.

Schussler, Walter H., assignor to The Schussler Tobacco Machine Co. Inc., Philadelphia, Pa. Cigar bunching machine, 1.634.690; July 5. Schuster, Carl J., Milwaukee, Wis. Bottle closure, 1,630,805; May 31.

Schuster, Curt. (See Krannich, W., Krzikalla, and Schuster.)
Schuster, Diedrich O., and H. H. Gerke, Fort Wayne, Ind. Circuit closer for motor vehicles. 1,641,099; Aug. 30.
Schuster, Frank, Richmond Hill, N. Y. Electric melt-Schuster, Karl, R., Hoppr. O.
1,633,682; June 28.
Schuster, Martin B., trustee. (See Darlington, H. T., and Steffen, assignors.)
Schutte, August E., Northboro, Mass. Roadway construction. 1,639,276; Aug. 16.
Schutte, August E., Northboro, Mass. Roadway construction. 1,639,276; Aug. 16.
Gerice Odenan C. F. A., Berlin, Germany. Holding Gerice Oct. 18.
Schutte & Koerting Commany. (Sp. Commany Left, 18).
Schutte & Koerting Commany.

Schultz, Joseph M., Chicago, III., assignor, by mesne assignments, to Centrifux Durartin, Corporation, Cleveland, Ohio Centrifuxal paparatus, 1,612,837; Jan. 4.

Schultz, Joseph M., Chicago, III., assignor, by mesne assignments, to Centrifux Corporation, Cleveland, Ohio Centrifuxal paparatus, 1,612,838; Jan. 4.

Schultz, Harry M., Parls, France. Advertising device. 1,640,409; Aug. 1,612,613; Aug

Oct. 25.

Schwab, John, jr., Winnipeg, Manitoba, Canada. Making a rubber composition for lining tubes and using the same. 1,639,861; Aug. 23.

Schwab, Maurice M., and S. S., Toledo, Ohio. Caustic trank for dry-cleaning systems. 1,630,673; May 21.

Schwab, Maurice M., and S. S., Toledo, Ohio. Scrubber Schwab, Maurice M., and S. S., Toledo, Ohio. Scrubber Schwab, Maurice M., and S. S., Toledo, Ohio. Scrubber Schwab, Maurice M., and S. S., Toledo, Ohio. Scrubber Schwab, Maurice M., and S. S., Schwab, Maurice M., and S. S., Schwab, Maurice M., and S. S., Schwab, M., and S. S., Schwaber Caustin, William, Yonkers, N. Y., assignor to Ward Leonard Electric Company. Apparatus for controlling electric Cruptis. 1, 622,004; Mar. 2, Lag. 1, 654,098; Dec. 27.

Dec. 27.

Schwalbe, Carl G., Eberswalde, Germany, Utilizing waste sulphite cellulose lye. 1,615,102; Jan. 18.

Schwalbenberg, Peter J., New York, N. Y. Engine-cooling system. 1,652,736; Dec. 13.

Schwalberg, Abraham, Brooklyn, N. Y. Removable wristwatch bracelet. 1,626,160; Apr. 26.

Schwan, Clarence, Oklaboma City, Okla. Poultry roost. 1,639,066; Aug. 16.

Schwan, Louis A., Fort Wayne, Ind., assignor to A. G. Spatling & Bros., New York, N. Y. Referee's stand. Schwanhiusser, Herbert, Nuremberg, and Woldemar Schwanhiusser, Munich, Germany, Machine for polishing pencils and other rod-shaped bodies. 1,640,910; Aug. 30.

Schwanhiusser, Waldemar. (See Schwanhäusser, Herbert, Schwanhäusser, Waldemar.

Schwanhäusser, Waldemar. (See Schwanhäusser, Herbert, and W.)

and W.)

Schwanhausser, Walter E., Jersey City, N. J., assignor to Charles Beseler Company, New York, N. Y. Image-projecting machine. 1,550,657; Nov. 29.

Schwanke, Albert F., Grey Eagle, Minn. Cream-separator-bowl washer. 1,623,863; Apr. 5.

Schwarber, Henry, Weehawken, N. J. Embroidered lace. Des. 72,038; Feb. 15.

Schwarber, Henry, Weehawken, N. J. Embroidered lace. Des. 72,683; May 17.

Des. 72,683; May 17.

Schwarber, Henry, Weehawken, N. J. Embroidered lace. Medaillon. Des. 73,447; Sept. 13.

Schwarber, Henry, Weehawken, N. J. Embroidered lace. Des. 73,945; Nov. 22.

Schwartz, Andrew G., Chicago, Ill. Bank fortification. 1,648,365; Nov. 8.

Schwartz, Garl, New Rochelle, N. Y., assignor to International Combustion Engineering Corporation. Combustion. 1,617,694; Feb. 15.

Schwartz, Federico, assignor of one-half to Gil-Camporro, Barcelona, Spain. Freparing a varnish. 1,621,488; Schwartz, Frederick, assignor to Robert Findlay Manufacturing Company, Inc., Brooklyn, N. Y., Stand for radio loud speakers or similar articles. Des. 73,760; Nov. 1.

Nov. 1. Schwartz, Frederick, assignor to Robert Findlay Manufacturing Company, Inc., Brooklyn, N. Y. Stand for radio loud speakers or similar articles. Des. 73,761; Nov. 1.

Schwartz, George L. (See Reid, E. E., and Schwartz, Schwartz, George L., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Cellulose-ester composition. 1,633,683; June 28. Schwartz, Gerhardt F., St. Louis, Mo. Making hot-water tanks. 1,624,983; Apr. 19. Schwartz, Harry A., Cleveland Heights, assignor, by messe assignments, to National Malleable and Steel Castings Company, Cleveland, Ohio. Making malleable from castings. 1,636,637; July 19. Schwartz, Indiana Charles Company, Cleveland, Ohio. Making malleable iron castings. 1,640,674; Aug. 30. Schwartz, Isidore, New York, N. Y., assignor to Animated Picture Products Co. Display apparatus. 1,648,827; Nov. 8.

Chiettre Products Co. Display apparatus. 1,648,827; Nov. 8.
Schwartz. Louis, New York, N. Y. Ball. 1,614,853; Jan. 18.
Schwartz, Michael, assignor, by mesne assignments, to Automatic Electric, Inc., Chicago, Ill. Service-observing 30.
Schwartz, Michael, assignor to Automatic Electric Inc., Chicago, Ill. Automatic telephone systems. 1,640,675; Schwartz, Michael, assignor to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,646,262; Oct. 18.
Schwartz, Morris, assignor of one-holf te W. P. Parish, Chicago, Ill. Die mechanism. Re16,659; June 14.
Schwartz, Morris, assignor of one-half to W. B. Parish, Chicago, Ill. Die mechanism. 1,613,961; Jan. 11.
Schwartz, Morris, assignor to American Flange & Manufacturing Co., Chicago, Ill. Container. 1,645,163; Oct. 11.

Tacturing Co., Chicago, III. Container. 1,645,163; Oct. 11. Schwartz, Niell, Brooklyn, N. Y. Hose clamp. 1,615,142; Jan. 18. Schwartz, Roy H. Cleveland, Ohio. Tire flap or pretector. 1,649,362; Nov. 22. Schwartz, Russell F. Cincinnati, Ohio. Electrode-hold-Schwartz, Natter M., assignor to Froctor & Schwartz, Incorporated, Philadelphia, Pa. Conyeyer for a drier. 1,615,237; Jan. 25. Schwartz, Walter M., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Screen conveyer. 1,634,963; July 5. Schwartz, Walter M., assignor to Proctor & Schwartz, Schwartz, Walter M., assignor to Proctor & Schwartz, Decorporated, Philadelphia, Pa. Panel. 1,652,055; Decorporated, Philadelphia, Pa. Panel. 1,652,055; Decorporated, Philadelphia, Pa. Ventilator Ventilator L. Schwartz, Ventilator L. Schwartz, Ventilator L. Schwartz, Ventilator Ventilator

Schwartzberg, Alter L., Shreveport, La. Ventilator. 1.652,330; Dec. 13. Schwartzman, Benjamin. (See Alter, H. A., Wollner, and Schwartzman.)

1.652.330; Dec. 13.
Schwartzman, Benjamin. (See Alter, H. A., Wollner, and Schwartzman.)
Schwartzman.)
Schwartzman.)
Schwartzman.)
Schwarz, Carl. Charlottenburg, near Berlin, Germany.
assignor to Westinghouse Electric & Manufacturing Company. Arrangement of connections for sending 3nd receiving electric waves. 1622.679; Mac. 29.
assignors to Westinghouse Electric & Manufacturing Company. Tuning arrangement for radio communication. 1,649.131; Nov. 15.
Schwarz, Carl. Charlottenburg, near Berlin, Germany.
assignor to Westinghouse Electric & Manufacturing.
Company. Tuning arrangement or radio communication over wires.
1,649.132; Nov. 15.
Schwarz, Ernest M., Philadelphia, Pa. Window screen.
1,624.368; Apr. 12.
Schwarz, Lienry A., Jr., Ricketts, Jowa. Gauge. 1,613.678;
Schwarz, Linny A., Jr., Ricketts, Jowa. Gauge. 1,613.678;
Schwarz, Vincent. (See Jakopec. G., and Schwartz.)

Schwarz, Vincent W., North Bergen, N. J. Mold plate for roofing-tile machines. 1,619,490; Mar. 1. Schwarze. Herman, and F. M. Holden, assignors to Gen-eral Motors Corporation, Detroit, Mich. Lock-controlled switch. 1,635,226; July 12. Schwarzenbach-Huber Co. (See Albach, George F., jr., as-signor).

(See Hellawell,

Schwarzenbach-Huber Company, The. (See Hellawell, H. H., and Radhuber, assignors.) Schwarzen/P. Production of molybdenum trioxide and tungsten trioxide. 1,629,004; May 17. Schwarzenann, Evon, New York, N. Y. Automatic embrodering machine. 1,626,256; Apr. 26.

Schwarzmann, Leon, assignor to Patented Machinery Development Corporation, New York, N. Y. Gold-letter-Schweiger, Brund, Erkelenz, Germany. Apparatus for raising oil from wells. 1,644,748; Oct. 11. Schweiger, William F., assignor to Multiposter Company, Incorporated, Rochester, N. Y. Stamp-dispensing machine. 1,625,327, Apr. 26.

Strict of the Company of the Company of the Company, Incorporated, Rochester, N. Y. Stamp-dispensing machine. 1,645,073; Oct. 11.

Schweigert, William F., Buffalo, N. Y. Closure for conscipers, William F., Buffalo, N. Y. Closure for conscience for conscience for conscience for conscience for textile machinery incorporating a swift. 1,622,124; Mr. 22.

Schweitzer, Hans, Hongen, Switzerland, Measuring device for textile machinery incorporating a swift. 1,622,124; Mr. 22.

Schweitzer, Hans, Hongen, Switzerland, Measuring device for textile machinery incorporating a swift. 1,622,124; Mr. 2

Schweitzer & Conrad. (See Conrad, Nicholas J., as-

Schweitzer & Contad. (see Contad. (see Contad. Signor.)
Schweitzer, Edmund O., Chicago, Ill. Automatic reclosing circuit-breaker system. 1,648,508; Nov. 8.
Schweitzer, Edmund O., Chicago, Ill. Lighting fixture. 1,653,671; Dec. 27.
Schweitzer, Wilhelm H., Heidelberg, Germany. Trenting Tussah silk. 1,634,757; July 5.
Schweitzer, William K., Cleveland, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Insecticide. 1,648,596; Nov. 8.
Schweitzer, William K., assignor to The Grasselli Chemical Company, Cleveland, Ohio. Insecticide. 1,648,596; Nov. 8.

Nov. 8.
Schweiz, Serum- & Impfinstitut Bern. (See Eckmann, Aron, assignor.)
Schweizer, George J., Greenville, Miss. Automobile windshield screen, 1,649,985; Nov. 22.
Schweizer, William H. Baltimore, Md. Bullding block. 1.621,957; Mar. 22.
Schwenlen, William, assignor to The Parkersburg Rig & Ref. Company, Parkersburg, W. Va. Bolt. Schwenke, Alfred L., Portland, Me. Snow loader. 1,654,311; Dec. 27.
Schwenker, Charles F., Schenectady, N. Y., assignor to General Electric Company. Safety switch. 1,651,935; Dec. 6.

Dec. 6.

General Electric Company. Safety switch. 1,651,935; Dec. 6.

Schwenzer, George A., and H. L. Stackhouse, Cincinnati, Ohio, assignors, by mesne assignments, to United States Pump Corporation. Gasoline-dispensing device. 1,652,231; Dec. 20.

Schwein, St. Dec. 20.

Schwein, Frank H., West View, assignor to The Duff Manadacturing Company, Pittsburgh, Pa. Oll-well Jack. Schwein, Frank H., West View, assignor to The Duff Manadacturing Company, Pittsburgh, Pa. Mine post or jack. 1,653,129; Dec. 20.

Schwein, Frank H., Bellevue Borough, assignor to The Duff Manufacturing Company, Pittsburgh, Pa. Mine post or jack. 1,653,129; Dec. 20.

Schwein, Frank H., Bellevue Borough, assignor to The Duff Manufacturing Company, Pittsburgh, Pa. Tie pucces. 1,653,129; Dec. 20.

Schwein, Frank H., Bellevue Borough, assignor to The purf and the state of the second secon

Schwimmer, Fred J., and C. S. Wright, assignors to The National Supply Company, Toledo, Ohio. Oiling apparatus for band-wheel mechanism. 1,612,989; Jan. 4. Schwimmer, Fredrick J., and C. S. Wright, assignors to The National Supply Company, Toledo, Ohio. Oiling apparatus for band-wheel mechansm. 1,645,066; Nov. 8. Schwindt, Andrew A., Dickinson, N. Dak. Bolt cutter. Schwinger, John K. Marion, Ohio. Awning for automobile windows. 1,651,160; Nov. 2. Schwinn, Frank W., Chicago, Ill. Retrigerating apparatus. 1,630,077; May 24. Schwinn, Frank W., Chicago, Ill. Thermostatic switch. 1,648,682; Oct. 25. 1. 1646,882; Oct. 25. Chicago, Ill. Thermostatic switch may be supplied to the control of the

Schworetzky, Gustav, Esslingen-on-the-Neckar, Germany. Testing pressure storage vessels. 1,613,962; Jan. 11. Schylander, John F., Chicago, Ill. Lubricator. 1,653,230;

Scintilla Aktiengese.lschaft. (See Billon, F., and Bohli, assignors.)
Scimonelli, Antonio, Brooklyn, N. Y. Shoe-tree. 1,651,001;

assignors.)

Scimonelli, Antonio, Brooklyn, N. Y. Shoe-tree. 1,651,001;

NOV. 23.

Scimonelli, Antonio, Brooklyn, N. Y. Shoe-tree. 1,652,011;

NOV. 24.

Scalter, Panhoe H., Pittsfield, Mass., assignor to General Control of the Company. Transformer. 1,652,911;

Dec. 12.

Scalield, Lynn M., and H. J. Thomas, assignors to H. S. Merritt, Los Angeles, Calif. Film support for motion-picture-projecting machines. 1,639,469; Aug. 16.

Scofield, Theodore J., Jackson, Mich., assignor to The Spatis-Withington Company, Cleveland, Ohio. Horn. Scofield, Thomas E. (See Oberle, Alfred, assignor to The Scofield, Thomas E. (See Oberle, Alfred, assignor).

Scoth, John R., assignor to Baker Brothers Glass Company, Okmulgee, Okla. Shawl carrier. 1,642,562;

Sept. 13.

Scordamaglia, Frank, Brooklyn, N. Y. Electric-fuse indicator. 1,641,203; Sept. 6.

Scotcher, Arthur W., Nutley, N. J. Carton. 1,614,972;

Jan. 18.

Scotcher, Arthur W., Newark, N. J. Container.

Scotcher, Arthur W., Newark, N. J. Container. 1,614,997; Jan. 18. Scott, Aaron A., Tigrett, Tenn. Incubator. 1,624,629; Apr. 12. Scott, Allen C., Omaha, Nebr. Container for shipping

scott, Aaron A., Tigrett, Tenn. Incubator. 1,624,629; Apr. 12.

Scott, Allen C., Omaha, Nebr. Container for shipping goods. 1,627,344; May 3.

Scott, Allason E. H. (See Kogstrom, Axel W., assignor.) Scott, Allason B., Fairmont, W. Va. Golf putting box. 1,632,439; Ann. (See Geyer, H. D., and Scott.) Scott, Allaw W. (See Geyer, H. D., and Scott.) Scott, Annie A., E. H., P. R., and E. M. Scott, deceased, Christchurch, by J. W. Macdonald, administrator, Wellington, New Zealand, said Macdonald assignor to said Annie A. Scott, E. H. Scott, and P. R. Scott. Gas cooking and heating oven. 1,632,737; Dec. 13.

Scott, Archield D., deceased, by M. V. Scott, executry, Jorgey City N. J., assignor to Yangey Duplex Magnet Scott, Archie W., Geneva, Olic. Door catch. 1,622,926; Mar. 29.

Scott, Baxter C., Pickens, Miss. Denture. 1,626,761; May 3.

Scott, Benjamin, West End, Calif. Shock absorber.

cont. Benfamin. West End, Calif. Shock absorber. 1.616,031: Feb. 3. Woodlynne, N. J., assignor to The Hammarium Manufacturing Company, Incorporated. Making colls. 1.643,998; Oct. 4. Scott, Carl W. (See Hawley, E. R., and Scott.) Scott, Cartherine E., Milwinkee, Wis. Paper-erlimping machine. 1.629,743; May 24. Scott, Charles B., Hanover, N. H. Anchor. 1,636,617; July 18.

July 19.

Scott. Charles D. Topeka, Kans. Railway gate.
1.649,748: Nov. 15.

Scott, Charles H., Company, The. (See Haberkamp,
Jessel M., assignor,
1.00 per second of the control of the c

Scott, David J., assignor to I. and D. J. Scott, executors of the estate of W. Scott deceased doing business under the result of the state of W. Scott deceased doing business under the property of the state of the

Scott, Ethel M. (See Scott, Annie A., E. H., P. R., and E. M.)

Scott, Fletcher, Memphis, Tenn. Price-tag supporting means. 1,641,697; Sept. 6.

Scott, Floyd, L., assignor to Hughes Tool Company, Houston, Tex. Coupling loosener. 1,638,219; Aug. 9.

Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Coupling loosener. 1,638,219; Aug. 9.

Scott, Floyd L., and L. H. Wellensiek, assignors to Hughes Tool Company, Houston, Tex. Drill cutter. 1,647,753; Nov. 1.

Scott, Floyd L., Houston, Tex. Gauge cock. 1,653,734; Scott, Floyd L., Houston, Tex. Gauge cock. 1,653,734; Scott, Floyd R., Houston, Tex. Gauge cock. 1,653,734; Scott, Flank G., New Orleans, La. Operating mechanism for ice-cream freezers. 1,645,68; Oct. 11.

Scott, George H. (See Richmond, V. C., and Scott.) Scott, George H. (See Richmond, V. C., and Scott.) Scott, George M., London, England. Vitreous enamel composition and making same. 1,651,474; Dec. 6.

Scott, Guy E., Wilkinsburg, Fa., assignor to Westing-produced to the second control of the second c

ott, Her signors.)

signors.)
Scott, Henry M. (See Wheeler, J. H., and Scott.)
Scott, Howard B., J. C. Widmont, and H. Huey, assignors,
Scott, Howard B., J. C. Widmont, and H. Huey, assignors,
Company, Dayton Ohio,
Company, Dayton Ohio,
Scott, Howard E., Los Angeles, Calif. Comb. 1,615,408;
Jan. 25,
Jan. 26,
Jan. 26,
Jan. 27,
J

assignor.) ott, Isabella, et al., executors. (See Scott, Walter C.,

Scott, John J. L. St. Louis, Mo. Oli-burning system. 1,624,631; Apr. 12.

Scott, John L. See Scott, Milton and J.)
Scott, John J. Harriston, Miss. Car fiange-wheel oiler. 1,620,578; Mar. 8.
Scott, John E., Harriston, Miss. Car fiange-wheel oiler. 1,620,578; Mar. 8.
Scott, John J., Harriston, Miss. Car fiange-wheel oiler. 1,620,516; May 10.
Scott, Joseph B., Freeport, III. Rim-treatment process. 1,618,926; Feb. 8.
Scott, Joseph B., Freeport, III. Rim-treatment process. 1,628,516; May 10.
Scott, Leon H., et al. (See Scott, Ray W., assignor.)
Scott, Lewis L., St. Louis, Mo. Oil-burner boiler. 1,619,839; Mar. 8.
Scott, Lewis L., St. Louis, Mo. Oil-burning system. 1,624,631; Apr. 12.
Scott, Lewis L., St. Louis, Mo. Oil-burning system. 1,640,731; Aug. 30.

Scott, Lewis L., St. Louis, Mo. Oll burner. 1,640,731; Aug. 30.
Scott, Lewis L., assignor to Electrol, Inc., of Missourl, St. Louis, Mo. Maintaining the prime in pumps. 1,617,422; Feb. 15.
Scott, Lewis L., assignor to Electrol, Inc. of Missourl, St. Louis, Mo. Combustion system. 1,625,629; Apr. 19. Scrtt, Lewis L., assignor to Electrol, Inc. of Missourl, St. Louis, Mo. Combustion system. 1,625,630; Apr. 19.
Apr. 19.

Apr. 19. Apr. 19.

Scott, Lewis L., assignor to Electrol, Inc., of Missouri, St. Louis, Mo. Oil-burning system. 1,629,542; May 24.

Scott, Lewis L., assignor to Electrol, Inc. of Missouri, St. Louis, Mo. Gear pump. 1,640,727; Aug. 30.

Scott, Lewis L., assignor to Electrol, Inc. of Missouri, St. Louis, Mo. Domestic Oil Burner. 1,640,728; Aug. 30.

Scott, Lewis L. assignor to Electrol. Inc. of Missouri, St. Louis, Mo. Domestic Oil Burner. 1,640,728; Aug. 30.
Scott, Lewis L. assignor to Electrol, Inc. of Missouri, St. Louis, Mo. Oil burner. 1,640,730; Aug. 30.
Scott, Lewis L. assignor to Electrol, Inc. of Missouri, St. Louis, Mo. Oil burner. 1,644,496; Oct. 4.
Scott, Louis H., Toronto, Ontario, Canada, assignor to G. L. Mitchell, Detroit, Mich. Windshield-wing mounting. 1,628,200; May 1. (See Scott, Archibald D.)
Scott, Marty V., executiv. (See Scott, Archibald D.)
Scott, Marty V., executiv. (See Scott, Archibald D.)
Scott, Nelson H., assignor of one-half to L. B. Day, La Fayette, Ga. Split sprocket. 1,623,814; Apr. 5.
Scott, Nelson H., assignor of one-half to L. B. Day, La Fayette, Ga. Split sprocket. 1,623,814; Apr. 5.
Scott, Nerson H. (See Pule, J. A., and Scott.)

Scott Paper Company. (See Parsons, Philip D., assignor.)
Scott, Percy R. (See Scott, Annie A., E. H., P. R., and
E. M., H. (See Scott, Annie A., E. H., P. R., and
See M., See Scott, Annie A., E. H., P. R., and
"Compared to the seed of the seed of

Apr. 26.

Apr. 26.

Scott, Raibb, B., Los Angeles, Calif. Conduit cleaner.

Scott, Raib W. Los Angeles, assignor of one-half to Radio
Lab. & Mfg. Co., and one-half to L. H. Scott, Passdena, Calif. Machine for milling lumber and the like.

1,629,742; May 24.

Scott, Robert, and G. H. Poulton, Winnipeg, Manitoba,
Canada. Nonskid device for chains. 1,650,302;

dena, Call., Machine for mining immer and the fixe. 1,029,742; May 24 G. Poulton, Winnipeg, Manitoba, Called C. Marchadol, Manitoba, C. Manitoba, C.

Scott-Ullman Company, assignors to assignors to assignors to Scotts Household Appliances Limited, Newcastle-upon-Type, England, Excluding drafts from under doors. 1,643,132; Sept. 20.
Scott, Walter, Sheridan, Wyo, Ball-bearing universal joint. 1,627,932; May 10.
Scott, Walter, & Company. (See Scott, David J., as-

Scott, Walter, & Company. (See Scott, Pavid J., assignor.)

Scott. Walter A. Minneapolis, Minn. Sound deadener.

1,622,469; Mar. 29.

Scott, Walter A., Minneapolis, Minn. Sound deadener.

1,622,469; Mar. 29.

Scott, Walter B., Marblehend, Mass. Toy windmill.

Des. 73,050; July 12.

Scott, Walter C., deceased, assignor to I. Scott and D. J. Scott, Walter C., deceased, assignor to I. Scott and D. J. Scott, Walter C., deceased, assignor to I. Scott and D. J. Scott, Walter C., deceased, assignor to I. Scott and D. J. Scott, Walter C., deceased, assignor to I. Scott and D. J. Scott, Walter C., deceased, assignor to I. Scott and Scott, Walter C., deceased, assignor to I. Scott and D. J. Scott, Walter J. Woonsocket, R. I. Stop motion for drawing frames. 1,635,693; July 12.

Scott, Walter M. (See Kusman, Earl H., assignor.)

Scott, Walter M. (See Wiseman, Earl H., assignor.)

Scott, Walter M. (See Wiseman, Earl H., assignor.)

Scott, Walter M., Lakewood, and R. E. Tresise, Cleveland, Ohio, Casing for electrical measuring instruments. 1,630,693; May 31. Scott, Walter M., Lakewood, and R. E. Tresise, Cleveland, Ohio, Casing for electrical measuring instruments. 1,631,606; June 7.

Scott, William H. Rochester, N. Y. Scocptacle filling and

1.631.606; June 7.

Scott, William H., Rochester, N. Y. Recoptacle filling and dralning device. 1.630.543; May 31.

Scott, William R., assignor of one-half to E. Stevenson, Springdale. Conn. Automatic starcher for raw-gum material. 1.648,828; Nov. 8.

Scott. William T., Youngstown, Ohio. Tool for separating adhering sheets. 1.635.040; July 12.

Scott & William S., Inc. (See Boogl. José, assignor.)

Scott & Williams, Corporated. (See Madaris, Clint, assignor.)

Scott & Williams, Inc. (See McMaster, Cedric S., as-signor.) Scott and Williams, Inc. (See Page, Albert E., as-

signor. oft and Williams, Inc. (See Scott, Robert W., as

Scott, Winfield, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Making disubstituted guandines. 1,630,769; May 31, Scott, Winfield, Akron, Ohio, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Vulcanization of rubber. 1,638,220; Aug. 9.
Scott, Winfield, assignor to The Rubber Service Laboratories Co., Akron, Ohio. Accelerating the vulcanization Scott, Winfield, assignor to E. du Pont de Nemours & Company, Wilmington, Del. du Pont de Nemours & Company, United. (See Wylam, B., Harris, and Thomas, assignors.)
Scotts Household Appliances Limited. (See Scott, W., Scovill Manufacturing Company. (See Bennett, Morris H., assignor.)

H. assignor.)
Scovill Manufacturing Company. (See Bennett, M. H., and Rochette, assignors.)
Scovill Manufacturing Company. (See Boden, George,

assignor.) Scovill Manufacturing Company. (See Chapman, Lyman

B., assignor.)
Scovill Manufacturing Company. (See Cook, Clarence P.,

assignor.)
Scovill Manufacturing Company. (See Coons, Arthur M., assignor.)
Scovill Manufacturing Company. (See Fenton, Paul E.,

Scovill Manufacturing Company. (See Fenton, P. E., and Warner, assignors.)
Scovill Manufacturing Company. (See Goss, John H.,

Scovill Manufacturing Company. (See Hyde, Burdon P.,

Scovill Manufacturing Company.
Scovill Manufacturing Company.
Warner, and Tompkins, assignors.
Scovill Manufacturing Company. (See King, G. A., (See McAtree, John

L., assignor.)
Scovill Manufacturing Company. (See Pasman, Abram

N., assignor.)
Scovill Manufacturing Company. (See Reutter, Philip A..

Scovill Manufacturing Company. (See Rochette, Henry C., assignor.)
Scovill Manufacturing Company. (See Root, Le Roy, as-

signor.)
Scovill Manufacturing Company. (See Sanderson, Edward S., assignor.)
Scovill Manufacturing Company. (See Senior, Frederick

J., assignor.) Scovill Manufacturing Company. (See Stellmach, Paul,

assignor.)
Scovill Manufacturing Company. (See Summey, David L., assignor.) Scovill Manufacturing Company. (See Villaret, Gustave

E., assignor.) Scovili Manufacturing Company. (See Wayne, Glenn H.,

Scovill Manufacturing Company. (See Wayne, Glenn H., assignor). Scoville, Eugene M., Milwaukee, Wis., assignor of one-half to F. L. Swanberg, Danville, Ill. Liquid conditioning and supply system. L628,201; May 10. The condition of the condition

Scranfon Button Company, 10c. [See Weils, Crus P. assignor.]
Scranton, Henry O., Jeanerette, La. Shears for rice straw. 1.617.461; Feb. 15.
Scranton, Henry O., Jeanerette, La. Sugar-cane harvest-Scrib, 1500(1); May 2 seignor to The Timken Roller Bearing Company, Canton. Ohio. car axle. 1.642.513; Sept. 13.
Scripto Manufacturing Company. (See Ferst, Monie A., assignor).

Scripto Manufacturing Company. (See Ferst, Monte A., assignor.).
Scriftchfield, Amos J., Weiser, assignor of one-half to I. F. Rebmen, Boise, Idaho. Beet-topping machine. 1.649.617; Nov. 15.
Scriven, Edward O., assignor to Western Electric Company, Incorporated, New York, N. Y. Transformer circuit. 1616.044; Jan. 18. 678.

Goodrich Company, New York, N. Y. Tire-building apparatus. 1.619.377; Mar. 1.
Scruby, Horace F., Los Angeles, Calif. Braking motor vehicles. 1.618.607; Feb. 22.
Scruggs, Daniel, et al. (See Moore, S., and Sheets, assignors.).

Scruges, Daniel, et al. (See Moore, S., and Sheets, assignors.)
Scuidder, Charles J., Scranton, Pa. Connecting-rod bearing, 1,619,588; Mar. I. Miller, W. G., and Scuidder, Charles G., Williser, W. G., and Scuidder, Scuillin Steel Company, (See Doerr, Harry E., assignor).
Scuillin Steel Co. (See Dreibus, Harry C. assignor).
Scuillin Steel Co. (See Dreibus, Harry C. assignor).
Scuillin Steel Co. (See McCulbungh, Paul J., assignor).
Scuilly George H., Los Angeles, assignor of one-third to C. O. Middleton, sr., Beverly Hills, Calif. Impulse equalizer for internal combustion engines. 1,637,245;
July 20.

Scully, John T., New York, N. Y. Recording and reproducing apparatus. 1,641,947; Sept. 6.
Scully, John T., New York, N. Y. Arm rest. 1,652,801; Dec. 13.

Scully, John T., New York, N. Y. Arm rest, 1,652,801, Dec. 18, Scully, Fatrick, Lewiston, Idaho, Heating stove, 1,650,674, May 2,650,674, May 2,674, Ma

Mar, 22.
Seabolt, Frank J., Schenectady, N. Y., assignor to The Phonograph Company. Phonograph. 1,622,814; Mar.

Phonograph Company. Phonograph. 1,622,814; Mar. 29.
Seabolt, Frank J. Schnectady, N. Y., asalganor to The Phonograph Charles R. Appleton Wils., assignor to American Likes Paper Company. Chicago, Ill. Engraving method and apparatus. 1,627,625 i May 3.
Seabright, Huber A., Columbus, Ohio. Size-gauging machine. 1,645,118; Oct. 11e.
Seabrook Bagster R. W. Inc. 261,841; Dec. 6.
Seabury, Richard W. (See Hull. L. M., and Scabury.) Seabury, Richard W., assignor to Radio Frequency Laboratories, Incorporated, Boonton, N. J. Composite article and making same. 1,625,749; Apr. 19.
Seabolm, Ernest W., Detroit, Mich. Radiator cap. Des. Seabolm, Ernest W., Detroit, Mich. Radiator cap. Des. 25,746; May 24.
Seabolm, Ernest W., Detroit, Mich. Automobile-radiator casing. Des. 72,746; May 24.
Seabolm, Donn P., Moline, Ill., assignor, by mesne assignments, to Moline Implement Company. Seat-guide cultivator. 1,622,435; May 10.
Seal and Control Corporation. (See Briegel, William, assignor.)

Seal and Control Corporation. (See Briegel, William, assignor.)
Sealed Containers Corporation. (See Stanley, Irving, assignor.)
Sealed Containers (See Baum, Ewald G., assignor.)
Seal-Kap Company. (See Baum, Ewald G., assignor.)
Seal-Kap Company. (See McLaine, Claude I., assignor.)
Seal-Kap Company. (See McLaine, Claude I., assignor.)
Sealock, John W., assignor, by mesne assignments. to
Wolverine Metal Specialties Co., Grand Rapids, Mich.,
Cap for automobile radiators. 1,643,133 Sept. 20.
Sealock, John W., and M. De Granf, Grand Rapids, Mich.,
swinging device. 1,624,677; Apr. 12.
Seaman Body Corporation. (See Seaman, Harold H.,
assignor).
Seaman Container Manufacturing Corporation. (See Ital.,
Richard E., assignor).
Seaman Body Corporation.
Seaman Milliam O., Brooklyn, N. Y. Combination chair
and stepladder. 1,654,386; Dec. 27.
Seaman, William O., Brooklyn, N. Y. Combination chair
and stepladder. 1,654,386; Dec. 27.
Seaman, Stepladder. 1,634,383; Jan. 4.
Searles, John W., et al., (See Bell, R. H., and Searles, Jinn W., et al., (See Gage, Charles H.,
Searles, Linn W., et al., (See Gage, Charles H.,
Searles, Linn W., et al., trustees. (See Gage, Charles H.,
Searles, Volney A., Jackscon, Mich., assignor to StewartSearles, Volney A., Jackscon, Mich., assignor to Stewart-

Searles, Linn W., et al., trustees. (See Gage, Unaries I., assignor).

Searles, Volney A., Jackscon, Mich., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Liquid-feeding device. 1,646,609; Oct. 18.

Scarles, Volney A., Jackson, Mich., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Fuel-feeding device. 1,649,133; Nov. 15.

Searles, Wayne S., assignor to Universal Optical Corporation, Providence, R. I. Metallic temple for eyeglass mountings. 1,647,152; Nov. 1.

Searless, Raymond R., assignor to The Fafnir Bearing Company, New Britain, Conn. Self-locking drive collar. 1,630,573; Nov. 22.

Searle Manufacturing Company. (See Schurr, William H., assignor).

Searls Manufacturing Company. (See Schurr, William H., Searls Manufacturing Company. (See Schurr, William H., Sears. Archie K., Pasadena, Calif. Saw-filing guide. 1,648.426; Nov. 8.
Sears. Edward M., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tire. Des. 72,240; Mar. 15.
Sears. Edward M., Akron, Ohio, assignor to The B. F. Cears. Edward M., Akron, Ohio, assignor to The B. F. Cears. Edward M., Yakima, Wash. Removing residual polsons from fruit. 1,624,074; Apr. 12.
Sears. Fred W., and A. Buck; said Buck assignor to R. Hueckler, Three Rivers. Mich. Water deckle for papermaking machines. 1,623,278, Apr. Brookes, Teddington, Middlesex, England; said Sears assignor to said Brookes. Magnetic chuck. 1,636,533; July 19.
Sears. Roebuck and Co. (See Fitch, Charles M., assignor.

signor.
Sears, Roebuck and Co. (See Fortier, Leon D., assignor.)
Sears, Roebuck and Co. (See Kingdon, Ralph H., assignor.)
Sears. Roebuck & Co. (See Robertson, Robert H., as-

Sears. Ro

Sears, Roebuck and Co. (See Sexton, Lawrence E., assignor.)
Seasock, Edward T., Well, Pa. Attachment for electric Seasock, Edward T., Well, Pa. Attachment for electric Section plugs. 1,625,507; July 2,125; July

Seattle Tent & Awning Co. (See Grunbock, John F., assignor.)
Seaver, Edward, Needham, and F. A. Mazzur, deceased, Waban, Mass., M. P. Mazzur, administratrix, assignors to Peabody Engineering Corporation, New York, N. Y. Combination oil and gas burner. 1,643,781; Sept. 27. Seaver, Eliick J., Beloit, Wis. Exterminator. 1,637,246; July 26,

July 26, Scavey, Elmer S., Bethlehem, Pa., assignor to Bethlehem Steel Company, Splice bar and method of manufacture. 1,046,170; 0ct. 138. N. J. Combined hat Search France, 162,620; 1. J. V. J. Combined hat Seavey, F. H., et al. (See Johnstone, Samuel, assignor.) Seavey, F. H., et al. (See Johnstone, Samuel, assignor.) Seavey, J. Seavey, F. H., et al. (See Johnstone, Samuel, assignor.) Seavey, J. Seavey,

Seawell, Joseph M., Richmond, Va. Schollier, J.Daujzer, Apr. 19.
Seay, James I. (See Lawlor, J. P., and Seay.)
Seay, James I. (See Lawlor, J. P., and Seay.)
Sebuld, Lesile E., Ridgewood, N. J., assignor to The Griscom-Russell Company, New York, N. Y. Low-heat-level evaporator system. 1,623,941; Apr. 5.
Sebald, Lesile E., Ridgewood, N. J., assignor to The Griscom-Russell Company, New York, N. Y. Vertleal Griscom-Russell Company, New York, N. Y. Vertleal Sebassian Lattle Company, The. (See Schroder, William,

Sebastian Latthe Company, The. (See Schroder, William, assignor.).
Sebell, Harry, Boston, Mass. Nonskid device for automobiles. 1,643,959; Oct.
mobiles. 1,643,959; Oct.
L. F. Buff, Boston, Mass. Window catch. 1,645,354; Oct. 11.
Sebell, Harry, Boston, assignor to A. H. Parker, Lexington, Mass. Can. 1,647,056; Oct. 25.
Sebell, Harry, Somerville, assignor of one-half to Babson Can Company and one-half to E. S. Foster, Boston, Lifet, 1,652,331; Lifet, 13.

Mass. Cover for boxes and the theory beet 18.
Schesta, Edward F., Minneapolis, Minn. Automobile signal. 1,638,414; Aug. 9.
Schille, Leo P., Cleveland, Dhio. Gas-generating apparation of the company. Akron. Ohio. Vulcanization of rubber and producing same. 1,616,994; Feb. 8.
Sebrell, Lorin B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Accelerating the vulcanization of rubber and product thereof. 1,635,103; Tuly 12.

Subjust 12. H., China Company, The. (See Sebring, Sebring, E. H., China Company, The. (See Sebring, Sebring, Ellsworth H., assignor to The E. H. Sebring, China Company, Sebring, Ohio. Covered dish. Des. 72.114; Mar. 1. Sebring, Frank H., Jr., assignor to The Salem China Co., Salem, Ohio. Flate. Des. 73,328; Aug. 9. Sebring Manufacturing Corporation. (See Brunt, Samuel,

ignor. Sebring Pottery Company. (See Burian, Jaroslava, as-signor.)

Sebring Manufacturing Corporation. (See Lewis, William

signor.)

Seckhach, Ernst, Gorlitz in Schlesien, Germany. Headrest for baths. 1,550,743; Nov. 20.

Sector, Eara, St. Joseph, Mich. Safety device for presses.
1,643,259; Sept. 20.

Secor, John A., assignor to Advance-Rumely Company,
La Porte, Ind. Exhaust nozzle and assembly.
1,625,102; Apr. 19.

Secord, Frederick A., Portland, Me. Apparatus for drying. 1,621,355; Mar. 22.

Secretary of Commerce of the United States, strustee.

Secretary of Commerce of States, as trustee.

Secretary of the United States, as trustee.

(See Freed, Meyer L., assignor.)

Secretary of War of the United States, trustee. (See
Weeks, Paul, assignor.)

Secrophones Limited. (See Gamoty, Lucien J., assignor.)

Secrophones Limited. (See Gamoty, Lucien J., assignor.)

Secripty Trust Company. (See Long, Elmer C.,
assignor.)

Scentity Trust Company, assignor; 10 American Hoist & Derrick Company, St. Paul, Minn. Electric controller. 1.619.960; Mar. 8. Soderholm, John E., assignor to American Hoist & Derrick Company, St. Paul, Minn. Electric heater. 1,620,296; Company, St. Paul, Minn. Electric heater. 1,620,296;

Sederholm, John E., St. Paul, Minn., assignor to Amerlcan Holst & Derrick Co. Interlocking switch mechanism. 1.634,121; June 28.
Sedcwick, Isham, Riverside, Callf. Three-wheeled tractor. 1,521,856; Mar. 22.

Šedivá, Jarmila, Pribram, Czechoslovakia. Device for separating and straining liquids. 1,622,511; June 167 september 1,622,511; June 160,000; July 160,000;

See, Edward E., Omaha, Nebr. Staff base. 1,631,227;
See, Willard, assignor to The Dixic Culvert & Metal Company, Atlanta, Ga. Surface toilet. 1,615,775; Jan. 25.
Seeberg, Christen, Oslo, Norway. Ski binding. 1,654,272.
Dec. 27.
Seeberger, Fred B., Philadelphia, Pa. Cue tip and manufacture thereof. 1,624,894; Apr. 19.
Seek, Fordinand W., Lebanon, Oreg. Differential.
Seek, Fordinand W., Lebanon, Oreg. Differential.
Seede. John A., Schenectady, N. V., assignor to General Electrical Company. Electric furnace. 1,626,431; Apr. 26.

Apr. 26.
Seede, John A., Schenectady, N. Y., assignor to General
Electric Company. Electric furnace. 1,645,074; Oct. 11.
Seede, John A., Schenectady, N. Y., assignor to General
Electric Company. Electric furnace. 1,645,221;
Oct. 18.
Seede, John A., Schenectady, N. Y., assignor to General
Electric Company. Electric heating. 1,646,498;

Oct. 25.
Seede, John A., Schenectady, N. Y., assigno Electric Company. Electric furnace. assignor to

Nov. 29.
Seeger, Adolph M., Toledo, Ohio. Cable carrier.
1,622,741; Mar. 29.
Seeger, Edwin W., assignor to The Cutler-Hammer Mg.
Seeger, Edwin W., assignor to The Cutler-Hammer Mg.
Co., Milwaukee, Wis. Controller for electric motors.
1,637,054; July 26.
Seeger, Edwin W., assignor to The Cutler-Hammer Mg.
Co., Milwaukee, Wis. Motor controller. 1,638,884;
Co., Milwaukee, Wis. Motor controller. 1,638,884;

Aug. 16.
Seeger, Edwin W., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Control system for electric elevators. 1,645,075; Oct. 11.
Seeger, Edwin W., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor controller. 1,646,171;

Seeger, Edward Co., Milwauke, Wis. Motor controller. 1,040,141, Co. 18. Get 18. Get 18. Get 18. Get 19. Get 19. Get 18. Get 19. Get 19

Rochesfer, N. Y. Leying and J. L. Seel, Paul C., assignor to Eastman Kodak Company, Rochester, N. Y. Reducing the viscosity characteristics Rochester, N. Y. Reducing the viscosity characteristics Seel, Paul C., assignor to Eastman Kodak Company, Rochester, N. Y. Changing the viscosity characteristics of nitrocellulosic materials. 1,648,509; Nov. 8. Seelbach, Kurt L., assignor to J. C. Miles, Cleveland, Ohio. Temperature-controlling appliance. 1,633,498; Janue 21. June 21. eeley, George

Ohio. Temperature-controlling appliance. 1,633,498; June 21.
Seeley, George A. Chicago, Ill., assignor to Western Electric Company, Incorporated, New York. N. Y. Method of and apparatus for braiding. 1,639,673; Seeley, George A., Irvington, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Press. 1,648,427; Nov. 8.
Seelman, John J., Milwaukee, Wis. Dispensing device. 1,623,708; Apr. 5.
Seels, Aubrey W., assignor to Chicago Bridge & Iron Company, Chicago, Ill. Crown support for gas hold-company, Chicago, Ill. Crown support for gas hold-seely, Glenn H., Akron, Ohio. System for control of boilers or the like. 1,641,934; Sept. 6.
Seely, Thomas H., Malden, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Pattern-copying machine. 1,617,502; Feb. 15.
Seely, Thomas H., Malden, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lasting machine. 1,623,135; Apr. 5.
Seely, Thomas H., Malden, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fasterning-inserting machine. 1,623,279; Apr. 5.
Seely, Thomas H., Malden, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastering-inserting machine. 1,623,279; Apr. 5.
Seely, Elyn E., assignor of on-half to National Concrete form for building construction. 1,633,715; Seenjas, Frederick A., assignor to Davenport Machine & Foundry Company, Davenport Law.

Seeman, Frederick A., assignor to Davenport Machine & Foundry Company, Davenport, Iowa. Jolt-roll-over mechanism. 1,627,348; May 3.
Sefton Manufacturing Corporation, (See Hoge, Max, assignor.)

Sefton Manufacturing Corporation. (See Lamboy, Lee

Section Manufacturing Corporation. (See Lamboy, Lee W., assignor.)
Segal, Herman, Bronx, N. Y. Phonograph reproducer, Des. 73, 448; Sept. 13.
Segal, Samuel, New York, N. Y. Casing for locks, 1642,047; Sept. 13.
Segav, Adiolphe, Montrouge, France, Explosive, 1,620,536; Mar. 15.
Segelhorst, August L. Whittler, Calif. Packing device, 3,633,434; June 7.

Segelhorst, August L., Whittier, Calif. Casing head. 1,637,055; July 26. Segelhorst, August L., Whittier, Calif. Slip handler. 1,637,056; July 26. Segelhorst, August L., Whittier, Calif. Slip handler. 1,637,056; July 26. Segelken, Herbert C., Phoenicia, N. Y. Oll can. 1,618,732; Feb. 22. Seguin, Sear F., Sedalla, Mo. Axle-measuving instruserent Thomas F., Sedalla, Mo. Axle-measuving instructions of the seguin, Oscar E., Springfield, and C. J. Clemens, East Longmeadow, assignors to Universal Candy and Chocolate Machinery Company, Inc., Springfield, Mass. Conveyer belt and means for guiding the same. 1,628,436; May 10. Seguin, Augustin, (See Seguin, Laurent and A.) Seguin, Augustin, Paris, France. Speedometer. 1,613,249; Jan. Seguin, Augustin, Paris, France. Speedometer. 1,618,310±

Seguin, Augustin, Paris, France. Speedometer. 1,618,310; Feb. 22.

Seeuin Augustin, Paris, France. Speedometer. 1,613,249; Jan. 4.

Seguin, Augustin, Paris, France. Speedometer. 1,618,310; Feb. 22.

Seguin, Augustin, Paris, France. Apparatus for measuring speeds. 1,632,378; Dec. 3, and 1, and

Seifert, Thomas H., Springtown, Pa. Mold. 1,649,549; Nov. 15. Seigh, Frank. (See Jupp, A. E., and Seigh.) Seizle, Peter G., Dunmore, and G. E. Dean, Scranton, Pa. Method of and apparatus for breaking coal. 1,620,838; Mar. I. Mamaroneck, assignor to Johns-Mansackiel, Theornerated, New York, N. Y. Heat-insulating material and making it. 1,613,137; Jan. 4. Seigman, Harry, New York, N. Y. Adjustable phonograph repeater, 1,626,100; Apr. 26. Seizman, Harry, New York, N. Y. Rest for sadiron. 1,626,101; Apr. 26. Seizman, Edward, Wychita, Kans. Poultry feeder. Seikman, Edward, Wychita, Kans. Poultry feeder. Seilaz, Liu, Leon A., Zurich, Switzerland. Wig. 1,635,099; July, Leon A., Zurich, Switzerland. Wig. 1,635,099; July, Seiler, Albert D., assignor of one-half to L. P. Somer, Seiler, Albert D., assignor of one-half to L. P. Somer,

Seller, Albert D., assignor of one-half to L. P. Somer, Mount Joy, Pa. Reenforced paper box. 1,643,564; Sept. 27.

Mount Joy, Pa. Reenforced paper box. 1,643,564; Sept. 27. Seller, Bert, Algoma, Wis. Transmission case. 1,613,484; Seller, Carrie. (See Korn, Francesca, assignor.) Seller, George J., Danville, Ill. Wall-building device. 1,632,514; June 14. Seller. Michael I., assignor to Keystone Reamer & Tool Co., Millersburg, Pa. Reaming jig. 1,621,137; Mar.

Seimei Hara and Goshikaisha Nakaqama Kogyo-Sho. (See Nakayama, Takasuke, assignor.)
Seipt, Meinhardt M., Peoria, Ili. Milk-bottle holder. 16:14,299; Jan. 11.
Seitz, Jacob H., Marlon, Ohio. Coaster sled. 1,635,641;

Seltz, Alex. (See Gail, George E., assignor.) Seltz, Casper P., Hays, Kans. Theft alarm. 1,648,067;

Seitz, Casper P., Hays, Kans. Theft alarm. 1,648,067; Nov. 8.
Nov. 9.

Seitz, Georg H., Jr. (See Settz, Theodaid F. and H., Jr.)
Seitz, Henry C., Niles, Ohio. Dirigible lamp for vehicles. 1,652,738; Dec. 13.
Seitz, John F., Hollywood, Calif. Making motion pictures. 1,616,287; Feb. 1.
Seitz, Oskar, Baden, assignor to the Firm Gleichrichter-Aktiengesellschaft, Glarus, Switzerland. Vacuum pump. 1,648,885; Nov. 8.
Seitz, Theobaid F. and G. H., Jr., assignors to Seitz, Theobaid F. and G. H., jr., assignors to Seitz-Seitz-Werke G. m. b. H. (See Seitz, Theobaid F., and G. H., jr., assignors.)
Seitz-Werke G. m. b. H. (See Seitz, Theobaid F., and G. H., jr., assignors.)

Seitzinger, William M. (See Kischel, E. L., and Seit-

zinger.) z Walter,

Settlinger, William M. (See Alschei, E. L., and SelfSeiz, Walter, Baden, Switzerland, assignor to General
Electric Company, Speed-control system. 1,632,682;
June 14.
Selz, Walter, Baden, Switzerland, assignor to General
Electric Company, Induction-motor exciting system.
Electric Company, Induction-motor exciting system.
Sekeley, Andrew, and A. Ladanyi, New Castle, Pa. Rail
joint. 1,632,739; Dec. 13.
Sekinger, Otto, Zurich, assignor to Altorfer, Lehmann &
Cle., Zentrahleizungsfabrik. Zöfingen, Switzerland.
Cle., Zentrahleizungsfabrik. Zöfingen, Switzerland.
Sekowsky, Hermann A. Elliyander, Wis. Hydrocarbon
burner, 1,630,139; May 24.
Selby, Charles M., and O. P. Nystrom, assignors to Holland Furance Company, Holland, Mich. Power-driven
landsw. 1,645,008; Nov. 8.
Signors. 1,645,008; Nov. 8.
Signors. 1,640,008; Nov. 8.
Selden Company, (See Canon, F. A., and Andrews, assignors.)

Seiden Company. (See L. P. Poultry-trussing designors.)
Seiden, James M., Pittsburgh, Pa. Poultry-trussing device. 1.633,499; June 21.
Seiden, James M., Pittsburgh, Pa. Carrying on catalytic reactions. 1.647,317; Nov. 1.
Seiden, Justice L., et al. (See Amato, Luciano, as-

signor.)
Selden, Justice L. and L. Amato, South Berkeley, Calif.
Selden, Justice L. and L. Amato, South Berkeley, Calif.
Huminated pixel. 4, 514,409 Jan. 25.
H. and Eastman, assignors.)
Selective Treatment Company Limited. (See Dolbear,
S. H., and Zachert, assignors.)
S. H., and Zachert, assignors.)
Self. Thomas H. (See Fontaine, R. A., and Self.)
Self. Arting Switch Co. (See Eppley, Charles S., as-

Self-Feeding Vaporizer Corporation. (See Berdon, Albert

E., assignor.)
Self Locking Machine Company. (See Evers, Arthur J.,

Seligmann, Arthur, Bremen, German. Low-temperature cooling. liquefaction, and separation of gases. 1.615.597: Jan. 25.
Seligstein, Harry B., et al. (See Steenstra, George, as-

Seligstein, Morris F., et al. (See Steenstra, George, as-Seligstein, Sidney J., et al. (See Steenstra, George, as-

signor.)
Sell, Helmut, Berlin-Siemensstadt, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, Germany. Microphonic relay, 1,624,511; Apr. 12.
Sell, Otto R., Colorado Springs, Colo. Headlight construction, 1,647,899; Nov. 1.
Sellaro, Sam, et al. (See Brown, W., and Morano, assignors.)
Sellera, G., L. & Sons Company. (See Cornwell, W., and Sellara, G., et al., assignors.)
Sellera, G., assignors.)
Sellera, G., et al., G., assignors.)
Sellera, G., et al., G., assignors.)
Sellera, G., et al., d., Hinge, Des. 74,029; Dec. 6.
Sellera, G., George, Elwood, Ind. Hinge, Des. 74,076; Dec. 13.

Senters, George, Elwood, Inc. Sellers, Sellers, Sellers, Sellers, William, & Company. (See Kneass, Strickland L., assignor.)

Sells, Millar W., assignor to Peerless Husker Company, Buffalo, N. Y. Corn-husking machine. 1,634,758;

Signor) Sager Herbert D., Glen Olden, Pa. Box. 1,624,439; Sager H2 Senchak. Andrew, Detroit, Mich. Indicator. 1,649,197; Nov. 15.

Senchak, Andrew, Petrolt, Alich, Hudhard, Nov. 15.
Sendelbach, Edward C., Philadelphia, Pa. Wood disk wheel. 1,620,398; Mar. 8.
Sendilbeck, Henry, New York, N. Y. Hair comb. 1,614,631; Jan. 18.
Sendilinger Optische Glaswerke G. m. b. H. (See Wuromus, Arthur F., assignor.)
Seneca Falls Machine Co. (See Ashton, Richard A., as-

signor.)
Seneca Falls Machine Company. (See King, N., and

signor.)

Seneca Falls Machine Company. (See King, N., and Ashton, assignors).

Senecal, Aaron T., Rock Island. III. Door-controlling desenced, Aaron T., Rock Island. III. Door-controlling desenced, Aaron T., Rock Island. III. Door-controlling desenced, Aaron T., Rock Island. III. Door-controlling desenced to the Company of the Company of the Company of the Company. The Company of the

Nov.

Senn, Alfred H., College Point, N. Y. Page holder. 1.615.889; Feb. 1. Senn. Carl, Petrolla, Calif. Cap wrench. 1,618,480; Feb. 22.

Feb. 22.

Senn. Carl. Petrolia, Calif. Wrench. 1,648,661; Nov. 8.
Senn. Caspar, assignor to Maschinenfabrik Rüti, formerly
Caspar Honegger, Rüti, Switzerland. Lay structure
for power looms. 1,636,717; July 26.
Sennett, John H., Woodlawn, assignor to Jones & Laughlin Steel Corporation, Pittsburgn, Pa. Pipe-welding
plant. 1,640,220; Aug. 23.
Senseman, William B., Los Angeles, Calif. Concentrating
liquids. 1,651,557; Dec. 6.
Sensenberner, Frank E. (See Preimesberger, Alois L.,
Sensenberner, Frank E. (See Preimesberger, Alois L.,
Sensen Carl U., Los Angeles, Calif. Portable wall bracket
1,622,057; Mar. 22.
Senter, James D., et al. (See Bobbitt, Conrad E., as
signor.)

Senter, Ralph T., assignor to The J. G. Brill Company Philadelphia, Pa. Omnibus top. 1.655.066; Dec. 20. Senzul, Nobuo, Kanagawaken, Japan, assignor to Genera; Electric Company. Switching arrangement. 1,651,842; Dec. 6.

Sepúlveda, Benjamin U., Santiago, Chile. Propeller 1.639.785; Aug. 23.

Sera, Ryumatsu, Glendale, Calif. Lawn mower. 1,022,011; Mar. 29. Seraphin, Theophilus A., Philadelphia, Pa. Automatic tank gauge. 1,621,857; Mar. 22. Sercili, Enrice, Stiena, Italy, assigno, to Isidore Braggiotti, Serdin, Matthew, Royal Oak, Mich. Damper for fire-places. 1,650,159; Nov. 22. Sergel, Ruth F., and L. H. Meyers, Pittsburgh, Pa. Educational card game. 1,647,772; Feb. 16. Sergel, Ruth F., and L. H. Meyers, Pittsburgh, Pa. Educational card game. 1,647,772; Feb. 16. Sergel, Ruth F., and L. H. Meyers, Pittsburgh, Pa. Educational Card game. 1,647,772; Feb. 16. Center of the Computer of the Cardon Computer of the Cardon Cardo

tional care general control of the c

Wraphing machaes. Francisco. Serio, Harry P., Elmira, N. Y. Truss. 1,615,045; Jan. 18.
Serling, Maurice E., et al. (See Pfister, John R., as-

Jan. 18. Serling, Maurice E., et al. (See Phster, John Serling, Maurice E., et al. (See Phster, John Serling, Manuel S., Rodeo, Calif. Window-screen hanger. 1,022,927; Mar. 29. Serja, Manuel S., Rodeo, Calif. Windows-screen hanger. 1,624,369; Apr. 12. Seria Sió. José, Barcelona, Spain. Spindle bearing. Seria Sió. José, Barcelona, Spain. Spindle bearing. Apr. 12. Spindle bearing. Spindle bearing. 1,653,475; Dec. 20. Serravallo, Vittorio, Trieste, Italy, and E. Wels, Vlenna, Austria. Motor-fuel-testing composition. 1,615,143; Jan. 18.

Arthur H., et al. (See Mason, Frank B., as-

signor.)

Serrell, John J., Blizabeth, assignor to Smith and Serrell, Newark and Mahwah, N. J. Spring cross yieldable coupling, 1,635,150; July 5.

Serrurier, Iwan, Altadena, Calif. Pleture-projecting apparatus. 1,643,134; Sept. 20.

Serva, Adam A., assignor to The United Electric Company, Canton, Ohio. Pulley. 1,632,512; June 14.

Servais, Fernand J. J., Westminster, England. Signal Lamp for vehicles. 1,636,441. No. 246; H., assignor.)

Servidor Company, The. (See Smith, Harrison A., assignor.)

Servinor Company, Strictorest, assignor of one-third to service and the service of the service o

assignor.)

assignor.) R., decassed, Upper Darby Township, Phila-assignor.) R., decassed, Upper Darby Township, Phila-delphia County, Pa.; B. E. Setz, administratrix. Cyl-inder structure for Internal-combustion engines. 1.623,630; Apr. 5. Sctzenfand, Werner, Berlin, assignor to Siemens & Halske Aktlengesellschaft, Siemensstudt, near Berlin, Germany. Setzer, Albert, Providence, R. I. Storage battery. 1,618,112; Feb. 15. Sctzkr. Horace B., Coffeyville, Kans., assignor to The National Refining Company, Cleveland, Ohio. Produc-ling gasoline. 1,029,810; May 2. Seyener, Storage Dalbaro, Latouche, Alaska. Clathes. Seyener, Johnson, Latouche, Alaska. Clathes.

Sever, Fred, and M. Johnson, Latouche, Alaska, Clothes clenner, 1.643-823; Sept. 27. Severance, Malvern W. (See Dunzweiler, C. J., and Severance.)

Severance.)

Severia, Carl, Cleveland Heights, Ohio, assignor to General Electric Company. Filament for incandescent imps or similar articles. 1,632,769; June 14.

Severia, Frank W., Chicago, Ill. Fuel-freel mechanism for oil engines. 1,646,579; Aug. 30.

Severia, Frank W., assignor to Venn-Severia Machine Co., 1,640,579; Aug. Governing mechanism for oil engines. 1,646,579; Aug. Severia, Machine Landing, Landing, Machine Landing, Landing

Severson, Ole, Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y. Tool holder with side clamp. 1, 1964,949; Oct. 25.

Sevikuy, Hollis J., Sanford, Me. Oll-gauge-rod wiper. 1,653,315; Dec. 20.

Sevilie, William, assignor to Draper Corporation, Hopelooms. 1,631,067; May 31.

Sewall Paint & Varnish Company. (See Bartling, Howard G., assignor.).

Sewalr Paint & Varnish Company. (See Bartling, Howard G., assignor.).

Seward, Edward C., Brookiya, N. Y., assignor to Paragon Closure. 1,645,164; Oct. 11.

Seward, Edward C., Brookiya, N. Y., assignor to Paragon Closure. 1,645,164; Oct. 11.

Seward, Edward C., Brookiya, N. Y., assignor to Paragon Closure. 1,645,164; Oct. 11.

Seward, Edward C., Sevente, C. C. C. C. C. C. C. Seward, Edward C., Sevente, R. S., assignors.

assignors.)

assignors,)
Seward, Ira W., assignor of seven twenty-fourths to I. W.
Seward, seven twenty-fourths to L. F. Ballard, seven
twenty-fourths to J. C. Williams, and three twentyfourths to Hiwanda Currey, Jopin, Mo. Internal-combustion engine. 1,648,597; Nov. 8.
Seward, Ira W., et al. (See Seward, Ira W., assignor.)
Seward, James W., et al. (See Bock, Charles S., assignor.)

Seward, Leslie W., Atlantic City, N. J., assignor to Record Book Cabinet Company. Bookease. 1,639,887; Aug. 16. Seward, Owen L. (See McClellan, C. R., and Seward.) Seward, Owen L., Meriden, Conn. Counting mechanism. 1,618,149; Feb. 15. Seward Trunk and Bag Company. (See McKenney, Charles S. assignar)

Sewell, Beny B., Congany. (See McKenney, Schuleter, S. and Bag Company. (See McKenney, Schuleter, S. and Bag Company. (See Sewell, Benjamin S. p., Chula, Va. Tractor attachment. 1,623,615; Apr. 5. Sewell Cushion Wheel Company. (See Sewell, H. J., and Wilking, assignors.)

Sewell, Herbert J., and L. C. Wilkins, assignors to Sewell Cushion Wheel Company, Detroit, Mich. Steering wheel. 1,646,172; Oct. 18.

Sewell, John B., Zanesfeld, Ohio. Snow-clearing apparatus for automobiles. 1,624,800; Apr. 12.

Sewoster, Henry J., Cleevland. Ohio, assignor to Zowie Sewoster, Henry J., Cleevland. Ohio, assignor to Zowie Vice. 1,616,004; Feb. 1.

Sexton, Augustus H., assignor to D. L. Short, Philadelphia, Pa. Hair curling and waving device. 1,626,254; Apr. 26.

Apr. 26.

Apr. 26.
Sexton, George A., Winchester, Mass. Test measure.
1,638,415; Aug. 9.
Sexton, Lawrence E., assignor to Sears, Roebuck and Co.,
Chicago, Ill. Tire. Des. 72,115; Mar. 1.
Sexton, Lawrence E., assignor to Sears. Roebuck and
Co., Chicago, Ill. Tire. Des. 72,116; Mar. 1.
Seyhold, Charles. (See Valiquette, W. L., and Seybold.)
Seyhold Machine Company, The. (See Valiquette, W. L.,
Seyhold, Assignore). Germany. Stepped furnace
grate. 1,644,953; Oct. 11.
Seydel Chemical Co. The. (See Seydel, Paul, assignor.)
Seydel Chemical Company. (See Spencer, Hugh M., assignor.)

signor.)

signor.)
Seydel, Paul, Nitro, W. Va., assignor to The Seydel
Chemical Co. Antispasmodic. 1,621,757; Mar. 22,
Seyer, Joseph, Hawthorne, assignor to Standard Sitk
special Company of the Seyer of Seyer of Seyer,
and dyeing it. 1,615,520; Jan. 25.
Seyfert, John P., assignor to Atlas Metal Parts Company,
Milwaukee, Wis. Pipe hanger. 1,639,635; Aug. 18.
Seyfind, C. J. (See Davis, Clawson, assignor.)
Seyi, Joseph C., Chicago, Ili. Fling device. 1,614,445;
Jan. 11.

Seymour, Benjamin F., Washington, D. C. Combined re-silient transmission and bearing 1,620,136; Mar. 3, resilient transmission and bearing 1,638,138; June 21. Seymour, Benjamin F., Washington, D. C. Vehicle con-struction and suspension. 1,637,355; Aug. 2. Seymour, Benjamin F., Washington, D. C. Combined resilient suspension and transmission. 1,637,392;

resilient suspension and Aug. 2. Seymour, Benjamin F., Washington, D. C. Vehicle suspension. 1,643,681; Sept. 27.
silient hearing and transmission. 1,643,682; Sept. 27.
Seymour, Burton W., sr., Jamestown, N. X. Tresting oil wells. 1,623,890; Apr. 5.
Seymour, Charles R., assignor to M. D. Knowlton Company, Rochester, N. X. Tube-cutting machine, 1,653,678; May 3.

Seymour, Charles R., assignut to party. Rochester. N. Y. Tube-cutting macame-l. 1625,875; May S. W. Flushing, N. Y. Variable pathway. 1627,474; Nov. 1. 1647,474; Nov. 1. 1647,475; Nov. 1. 1647,475; Nov. 1. 1647,475; Nov. 1. 1647,476; Nov. 1647,476; Nov. 1647,476;

Seymour, William, Sault Ste. Marie, Ontario, Canada. Dip-pipe construction for the hydraulic mains of gas plants. I.628,334; May 10. Groff, and A. Schaaf, assignors to Joseph T. Ryerson & Son, Inc., Chicago, Ill. Metal-bending machine. I.631,386; June 7. Saackelford Benjumin E., East Orange, and W. H. T. Hoiden, Bloomfield, N. J., assignors to Westinghous Lamp (Company. Protective device. I.653,376; ackeno. Holden, Bloomie. Aomn Company.

Lamen, Botompany, Protective device. 1,655,376; Dec. 20.

Dec. 20.

Shackelford, Edward H., jr., assignor to Hebbard Manufacturing mechanism. 1625,927; June 21.

Shackelford, Ezekiel J., W. B. D. Penniman, Baltimore, Md., and J. E. Cain, Washington, D. C., assignors to Manufacturing and the state of the

Shacketiord, Orie, Farrmont, W. Va., assignor to harr-ford-Empire Company, Hartford, Conn. Apparatus for and method of annealing glassware. 1.642.700; Shacketion, William J., Scotch Plains, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Testing system. 1.613.904; Jan. II. Shacketion, William J., Scotch Plains, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Transformer, 1.616.200; Feb. I. Shackelton, William J., Scotch Plains, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Transformer, 1.616.200; Feb. I. Shackelton, William J., Scotch Plains, N. J., assignor to Western Electric Company, Incorporated, New York, 1.624.630; Apr. 12. Shackelton, William J., Scotch Plains, N. J., assignor to Western Electric Company, Incorporated, New York, 1.624.630; Apr. 12. Shackelton, William J., Scotch Plains, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Tansformer, 1.634.620; Apr. 12. Shackelton, William J., Scotch Plains, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Alternating-current supply means. 1.654.697; Shackleton, Samuel P., Wyoming, N. J., assignor to American Telephone and Telegraph Company. Cond-frequir repeater, 1.635.227; July 12. Shackleton, Samuel P., Wyoming, N. J., and L. Glezen, Shackleton, Samuel P., Wyoming, N. J., and J. T. Schott, Brooklyn, N. Y., assignors to American Telephone and Telegraph Company. Impulse registering device. Shackleton, Samuel P., Wyoming, N. J., and L. Glezen, Electric Company, Incorporated, Shadbolt, Anna A., executrix. (See Shadbolt, W. O., and Marklein). Shadbolt, Anna A., executrix. (See Shadbolt, W. O., and Marklein, Brooklyn, N. Y.; satid Marklein, assignor of A. E. Carlsen, Minneapolis, Minn. Safety cut-out for gas mains and the like. 1.648.662; Nova 8. Shadbott, A. Novrman

Tamagua, Pa. Traveling grate stoker. 1,630,220; May 24.

Bafer, Harvey G. Indianapolis, Ind. Gear grinder. 1,639,44,1018.

T.644,495; Oct. H. Richmond, Va. Money receptacle. T. Richmond, Va. Loading skip for concrete mixers. Shafer, Samuel, Ir., assignor to Chain Belt Company, Milwankee, Wils. Loading skip for concrete mixers. Shafer, Samuel, Ir., assignor to Chain Belt Company, Milwankee, Wils. Loading skip for concrete mixers. 1640,221; Aug. 23.

Shaff, Ernest H., assignor to W. H. Keller, Inc., Grand Haven, Mich. Governor for pressure-duid-operated tools. 1,640,620; Aug. 30.

Shaff, Ernest H., assignor to W. H. Keller, Inc., Shaff, Ernest H., assignor to W. H. Keller, Inc., Shaff, Ernest H., assignor to W. H. Keller, Inc., Crand Haven, Mich. Fluid-pressure-operated tool. 1,639,131; Aug. 16.

Shaff, Ernest H., assignor to W. H. Keller, Inc., Grand Haven, Mich. Fluid-pressure-operated tool. 1,639,131; Aug. 16.

Shaff, Ernest H., assignor to W. H. Keller, Inc., Grand Haven, Mich. Fluid-pressure-operated tool. 1,639,131; Aug. 16.

Aug. 16.
Shaff, Ernest H., assignor to William H. Keller, Inc., Grand Haven, Mich. Fliud-pressure-operated tool. 1645-169. St. L. Sasignor to William H. Keller, Inc., Grand Haven, Mich. Governor for pressure-fluid-operated tools. 1650-048; Nov. 22.
Shaffer, Daniel J., assignor of one-half to L. E. Worth, Aurora. II. Water heater. 1.(625-286; Apr. 19.
Shaffer, Frank E., assignor of one-half to W. Placke, St. Sent, 6. Web. Auromobile light plog. 1,641,870; Sent, 6.

Shaffer, Glenn A., and F. H. Wirtz, assignors to Fort Howard Paper Company, Green Bay, Wis. Paper-folding machine, 1,652,417; Dec. 13.

Shaffer, John C., and L. S., Mankin, assignors to Tules Valve Company, Tules, Okia. Water gauges for boilers. 1,625,828: Apr. 26. Shaffer, William D. (See Collins, James H., assignor.) Shaffer, Wm. D. (See Wigle, Wilson B., assignor.) Shakal, Louis, Tampa, Fla. Smoking pipe. 1,614,903;

Shader, Vun. D. (See Wilke, Name of Shakel, Louis, Tampa, Fia. Smoking pipe. 1,614,903; Jan. 18.
Shakeproot Lock Washer Company, Division of Illinois Shakeproof Lock Washer Company, Gree Hosking, Richard T., assignor. (See Hosking, Richard T., assignor.)
Shakespeare Company. (See Russell, Samuel G., as-

Shakespeare Company. (See Russell, Samuel G., assignor.)
Shakespeare, Joseph, Brooklyn, N. Y. Vehtcle body construction.
1,614,401; Jan. 11.
Shakespeare, Valentine E., West New Brighton, N. Y. Transmission case. 1,622,978; Mar. 29.
Shaid, Bruce J., O'Nelll, Nebr. Electric signal for rail-way crossings, public highways, and the like. 1,625,873; Apr. 26.
Shamberge John P., Wilkinsburg, Pa., assignor to West-Russell Standberge, Carl V., Rockingham, Pa., assignor to Mine Appliances Company. Truck.
1,649,134; Nov. 15.
Shanaberger, Carl V., Rockingham, Pa., assignor to Mine Appliances Company. Coal-mining machine. 1,654,055; Dec. 27.
Shanck, Roy B., Woodside, N. Y., assignor to American Telephone and Telegraph Company. Preventing elec-

Dec. 27.

Shanck, Roy B., Woodside, N. Y., assignor to American Telephone and Telegraph Company, Preventing electrical interference. 1,633,611; June 28.

Shanck, Roy B., Bellemst, N. Y., assignor to Merican Company, Preventing electric trips and the state of the st

Aug. 20: Aug

Shanan. George A. Brooklys, and F. A. Kuntz, Woodhaver, Sassignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound-producing device. 1,645,823; Oct. 18.
Shananon, Ellwood M., Bala, Pa. Mallet locomotive. 1,621,339; Mar. 15.
Shananon, Ellwood M., Bala, assignor to The Baldwin Locomotives. 1,615,238; Jan. 25.
Shananon, Ellwood M., Bala, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Throttle valve. 1,618,113; Feb. 15.
Shananon, Ellwood M., Bala, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Throttle valve. 1,618,113; Feb. 15.
Shananon, Ellwood M., Bala, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Cylindrical valve for locomotives. 1,632,629; June 14.
Shananon, Ellwood M., Bala, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Cylindrical valve. 1,653,737; Dec. 27.
Shananon, James D., Dines, Wyo. Crank-case ventilator. 1,653,637; Dec. 27.
Shananon, James L., Springfield, Mass. Flash light. 1,613,203; Jan. 4.
Shananon, Philip F. (See Shannon, Richard S. and P. F.)
Shananon, Walter N., Jr., San Bernardino, Calif. Truck Shananon, William J., East Cleveland, Ohlo. Ballast-cleaning machine. 1,632,045; June 14.
Shapiro & Aronson, Inc. (See Klein, Max, assignor.)
Shapiro, Hayan, Brooklyn, assignor to M. Propp Dod.

Shapiro, Navid H., Montreal, Oachee, Canada, Composition used for marking on cloth and the like. 1,622,353; Mar. 29.

Shapiro, Hywan, Brooklyn, assignor to M. Propp and L. Propp, trading under the firm name The M. Propp Co., New York, N. Y. Electric socket. 1,646,499; Oct. 25.

1,644,284; Oct. 4. New York, N. Y. Tooth guard. 1,646,284; Oct. 4. New York, N. Y. Tooth guard. 1,646,284; Oct. 4. New York, N. Y. Egg-testing device. 1,648,093; Sept. 20.

Shapiro, Philip C., assignor to Slegel Light Supply Company, Philadelphia, Pa. Smoking stand. Des. 1,645,646; Des. 1,646,646; Des. 1,648,646; Des. 1,648,646; Des. 1,648,646; Des. 1,648,648; Aug. 1,648,6

Shapiro, Theodore, assignor to Arteraft Metal Stamping Corporation, Brooklyn, N. Y. Lighting fixture. Des. 73,242; Aug. 9.
Shapiro, Theodore, assignor to Arteraft Metal Stamping Corporation, Brooklyn, N. Y. Lighting fixture. Des. 73,243; Aug. 9.
Shapiro, Theodore, assignor to Arteraft Metal Stamping Corporation, Brooklyn, N. Y. Lighting fixture. Des. 73,244; Aug. 9.
Sharilow, Harry, assignor to Solar Lighting Fixture Co., Los Angeles, Calif. Lighting-fixture bracket. Los Angeles, Calif. Lighting-fixture Evacuation of the Computer of Solar Lighting Fixture Co., Los Angeles, Calif. Lighting fixture. Des. 73,270; Aug. 16.
Sharilow, Harry, assignor to Solar Lighting Fixture Co., Aug. 16.
Sharilow, Harry, assignor to Solar Lighting Fixture Co., Aug. 16.

Aug. 16.

Aug. 16.

Shardlow, Harry, assignor to Solar Lighting Fixture Co.

Los Angeles, Calif. Lighting fixture. Des. 73,345;

Shardlow, Harry, assignor to Solar Lighting Fixture

Co., Los Angeles, Calif. Lighting-fixture bracket.

Des. 73,074; Oct. 18.

Shardlow, Harry, assignor to Solar Lighting Fixture

Co., Los Angeles, Calif. Lighting fixture.

Co., Los Angeles, Calif. Lighting fixture. Des. 73,872;
Nov. 15.
Shardlow, Harry, assignor to Solar Lighting Fixture Co.,
Los Angeles, Calif. Lighting fixture bracket. Des.
Sharkey, Albert G., New York, N. Y. Traveling sign.
1,650,659; Nov. 29.
Sharp & Dohme, Inc. (See Dohme, Aifred R. L., assignor).

Sharkey, Albert G., New York, N. Y. Traveling sign. 1,650,659; Nov. 29.
Sharp & Dohme, Inc. (See Dohme, Alfred R. L. as Sharp, & Dohme, Inc. (See Dohme, Alfred R. L. as Sharp, & Dohme, Inc. (See Sharp, & Dohme, Inc. (See Sharp, & Dohme, Inc. (See Sharp, Edward, Ir., Brookline, Mass. Sign. 1,629,229; May 17.
Sharp, George G., Wyoming, N. J. Passenger-ship construction. 1,629,589; May 24.
Sharp, George G., Wyoming, N. J. Passenger-ship construction. 1,629,589; May 24.
Sharp, John E., New Kensington, assignor to Aluminum Company of America, Pittsburgh, Pa. Closure seal. 1,622,547; Mar. 29.
Sharp, John H., Chiengo, Ill. Automobile theft alarm. 1,633,314; Aug. 16.
Sharp, Millan R. (See Sharp, Robert H., assignor). Sharp, Milland K., Sharpsburg, Ill. Temporary stringer for telegraph, telephone, and electrical transmission lines. 1,649,986; Nov. 22.
Sharp, Peter, Perth, Scotland. Bobbin for spinning machines. 1,642,647; Sept. 20.
Sharp, William E., assignor to Grip Nut Company, Chiengo, Ill. Lock nut and making the same. 1,627,207; Shary 3.
Sharp, William L., assignor to The Ohio Foundry and Manufacturing Co., Steubenville, Ohio. Gas heater. Des. 72,729; May 24.
Sharp, William L., assignor to The Ohio Foundry and Manufacturing Co., Steubenville, Ohio. Gas heater. Des. 72,730; May 28.
Sharp, William L., assignor to The Ohio Foundry and Manufacturing Co., Steubenville, Ohio. Gas heater. Des. 72,730; May 28.
Sharp, William L., assignor to The Ohio Foundry and Manufacturing Co., Steubenville, Ohio. Gas heater. Des. 72,730; May 28.
Sharp, William L., assignor to The Ohio Foundry and Manufacturing Co., Steubenville, Ohio. Gas heater. Des. 72,730; May 28.
Sharp, William L., assignor to The Ohio Foundry and Manufacturing Co., Steubenville, Ohio. Gas heater. Des. 73,346; Aug. 23.
Sharp, William L., assignor to The Ohio Foundry and Manufacturing Co., Steubenville, Ohio. Gas heater. Des. 73,346; Aug. 23.
Sharp, William L., assignor to The Ohio Foundry and Manufacturing Co., Steubenville, Ohio. Gas heater. Sharp, William L., assi Sharpe, William R., assignor.)

R., assignor.)
Sharpleigh, James H., Mountain Lakes, N. J., and C. A.
Bigelow, assignors to Hercules Powder Company, Wilminaton, Del. Making nitric acid. 1,655.023; Dec. 20.
Sharples, Arthur E., Astoria, N. Y. Ring clgarette holdcr. 1,645.877; Oct. 13.
Sharples, David T., assignor to The Sharples Separator
Company, West Chester, Pa. Separator. 1,644,615;

Company, West Chester, Pa. Separator. 1,644,615; Oct. 4. Philip M., assignor to The Sharples Separator Company, West Chester, Pa. Centrifugal milk separa-tor. 1,634,759; July S. Sharples, Richard G., Radeliffe, and C. Wilbraham, Wors-ley, Manchester, England. Machine for winding yarn. 122,2007; Mar. 22. Sharples Separator Company, The. (See Sharples, David

T., assignor.) Sharples Separator Company, The. (See Sharples, Philip

Sharples Separator Company,

M. assignor.)

Sharples Specialty Company, The.

E. fr., assignor.)

Sharples Specialty Company, The.

(See Ayres, Eugene

E. fr., assignor.)

Sharples Specialty Company, The.

(See Jones, Leo D.,

Read C., assignor.)

wald C., assignor.)
Sharples Specialty Company, The. (See Jones, Leo D., assignor.)
Sharples Specialty Company, The. (See Jones, L. D., and Ayres, assignors.)

Sharpless, Stewart L., Milyaukes, Wis. Multicolor-printing mechinery, 1,621,607, Mar. 22. Sharpless, Stewart L., Milwaukee, Wis. Tripping mecha-nism for printing machinery, 1,623,304; Anr. 26. Sharpsville Boiler Works Co. (See Fagan, Charles D., assignor.)

assignor.)

Sharrard, George M., White Plains, assignor to Book Saver Company, Port Chester, N. Y. Reenforced book cover. 1,614,733; Feb. 22.

Shartle Brothers Machine Company, The. (See Shartle, C. W., and Bridge, assignors.)

Shartle, Charles W., Middletown, Ohio. Stock beater. 1,624,875; Apr. 12.

Shartle, Charles W., and A. E. Bridge, assignors to The Shartle Brothers Machine Company, Middletown, Ohio. Paper drier. 1,614,694; Jan. 18.

Sharvood, Sydney E., Lakeland, Fla., assignor to The Sharvood Sydney E., Lakeland, Fla., assignor to The Wall faxture. Des. 72.504; June 7.

Shasteen, Charles H., La Junta, Colo. Track jack. 1,646,770; Oct. 25.

Shasteen, Donald, Toledo, Ohio. Figure toy. 1,649,135; Nov. 15.

Shattuck, S. W., Chemical Company, The. (See Potter,

Nov. 15.
Shattuck, S. W., Chemical Company, The. (See Potter, John S., assignor.)
Shattuck, William P., Minneapolis, Minn. Clothes Wringer. 1,641,204; Sept. 6.
Shaub, Louis, and O. 1. F. F. 162, 68.
Shaub, Louis, and O. 1. F. F. 162, 68.
Shaub, Louis, and O. 1. F. F. 162, 68.
Shauphessy, Bernard F., Brooklyn, N. Y. Combination tool. 1,615,410; Jan. 25.
Shaughnessy, Bernard F., Brooklyn, N. Y. Incinerator. 1,651,636; Dec. 6.
Shaughnessy, John L., Harvey, assignor of one-half to Jacobs Marchal (1982, 1984). The shauphessy of the shauphessy, John L. Harvey, assignor of one-half to Jacobs Marchal (1982, 1984). Shaunessey, Martha, Chicago, Ill. Needle guard. 1,617,223; Feb. 8.

Feb. 8.

Shave, George F., Lyndhurst, South Victoria, Australia, Reversible stump-jump disk plow. 1,636,079; July 19.

Shaver, Archibald G., Chicago, Ill., assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Speed circuit controller. 1,641,461; Spt. 6.

Shaver, Lester W., San Diego, Calif. Tool attachment Shaver, Repy F. B. 10,923; Mar. 1.

Shaver, Roy F. B. 10,923; Mar. Calif. Model yacht. 1,639,707; Aug. 23.

Shaw, Arthur J., Spokane, Wash. Cattle guard. 1,164,056; Dec. 27.

Shaw, Arthur J., Spokane, Wash. Cattle guard. 1,654,056; Dec. 27.

Shaw, Arthur J., Spokane, Wash. Cattle guard. 1,646,405; Oct. 7,000; Dec. 27.

Shaw, Shaw, Arthur J., Spokane, Wash. Cattle guard. 1,646,405; Dec. 27.

Shaw, Belle H. (See Shaw, James, assignor.)

Shaw, Belle Belle H. (See Shaw, James, assignor.)
David E., Milwaukee, Wis. Utensil. 1,621,758;

Shaw, David E., Milwabace, W.S.
Mar. 22.
Shaw, Edmund, Chicago, Ili. Sand cleaning and classi-tying device. 1.637.625; Aug. 2.
Shaw, Ernes e., assignor to Alis-Chalmers Manufactur-ing Company, Milwaukee, Wis. Packer. 1,641.698; Sept. 6.

Sept. 6.

Shaw, Fred W., Cumberland Center, Me. Toy building block. 1,636,080; July 19.

Shaw, George A., Siloam Springs, Ark, Plant-setting machine, 1,638,568; Aug. 9.

Shaw, George W., Philadelphia, Pa. Circuit closer. 1,637,837; Aug. 2.

L652,642; Dec. 13.

L652,642; Dec. 14.

L652,

Show, James, San Francisco, Calif. System of frost prevention for or beby carriage. Des. 72,500; Apr. 19.

Shaw Harold N. Milwaukee, Wis. Electric heater. 1,629,744; May 24.

Shaw, Harry J., Toledo, Ohlo. Concrete mixture. 1,615,315; Jan. 25.

Shaw, James, San Francisco, Calif. System of frost prevention for orchards. Calif. Shaw. James, San Francisco, assignor to B. H. Shaw, Lodd, Calif. Manufacture of paper-pulp bottles and the like. 1,632,928; June 21.

Shaw, John C., assignor to Keller Mechanical Engineering Corporation, Brooklyn, N. Y. Bourdon-tube spring, 1,632,749; June 14.

Shaw, John E., Murpheys, Calif. Drill-supporting structure. 1,629,745; May 24.

Shaw, John E., Murpheys, Calif. Drill-supporting structure. 1,629,745; May 24.

Shaw, John F., Somersworth, N. H., assignor to Draper Corporation, Hopedale, Mass. Automatically-threading Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Strike plate. 1,629,432; Apr. 26.

Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Key-cutting device. 1,628,637; May 10.

Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Key-cutting device. 1,628,637; May 10.

Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock. 1,645,208; Oct. 11.

Shaw, John S., Leeds, England. Furnace for melting and refining glass and other like purposes. 1,636,151; July 19. Shaw, Joseph, New York, and J. W. Berwick, assignors,

Snaw, John S., Leeds, England. Furnace for meting and redming glass and other like purposes. 1,636,151; Shaw, Joseph, New York, and J. W. Berwick, assignors, by mesne assignments, to United Color Pictures, Inc., Mount Vernon, N. Y. Method of and apparatus for treating continuous films. 1,615,047; Jan 18. Shaw, Lew W. (See Simpson, Robert, assignor.) Shaw, Louis E., East Orange, N. J. Radiodial. 1,629,801; May 24. Shaw, Lew W. (See Simpson, Robert, assignor.) Shaw, Lew W. (See Simpson, Robert, assignor.) Shaw, Percy W., Lynn, Mass. Uniting metal sections. 1,617,224; Feb. 8. Shaw, Robert D. (See Woods, W. G., and Shaw.) Shaw, Percy W., Lynn, Mass. Uniting metal sections. 1,617,224; Feb. 8. Shaw, Robert D. (See Shaw, John C. and R. D.) Shaw, Samuel H., New York, assignor to Universal Shock Eliminator, Inc., Long Island City, N. Y. Bumper. 1,612,948; Jan. 4. Shaw, Samuel H., New York, assignor to Universal Shock Eliminator, Inc., Long Island City, N. Y. Bumper. 1,615,621; Jan. 25. Shaw, Samuel H., New York, assignor to Universal Shock Eliminator, Inc., Long Island City, N. Y. Bumper. 1,615,621; Jan. 25. Shaw, Samuel H., New York, assignor to Universal Shock Eliminator, Inc., Long Island City, N. Y. Bumper. 1,615,621; Jan. 25. Shaw, Samuel H., New York, assignor to Universal Shock Eliminator, Inc., Long Island City, N. Y. Bumper. 1,615,621; Jan. 25. Shaw, Samuel W., Galesburg, Kans. Garden cultivator. Shaw, Wanker Ompany, The. (See Hunter, David E., assignor: Ompany, The. (S

assignor.)

Shaw, Wesley J., assignor to New England Wood Heel.

Co., Haverhill, Mass. Bearing, 1,625,568; Apr. 19.

Shaw, Wesley J., assignor to New England Wood Heel.

Co., Haverhill, Mass. Machine for grooving wood heels.

1,653,932; Dec 27.

Shaw, William F., Detroit, Mich. Apparatus for installing payement separator joints. 1,629,544; May 24.

Shaw, Guy E., Mansheld, Ohio, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. East Pittsburgh, Pa. Resistor-supporting means. 1,628,558; May 17.

Shawmut Engineering Company. (See Bixby, Walter, assignor.)

Shawmut Engineering Company. (See Hathaway, E. F., assignor.)

Shawmut Engineering Company. (See Hathaway, E. F., and Bixby, assignors.)

Shawmut Engineering Company. (See Hathaway, E. F., and Bixby, assignors.)

and Lea. assignors.)
Shawmut Engineering Company. (See Lea, Charles, as-

Shawmat Engineering Company. (See Lea. Charles, assignor.)
Shawmat Engineering Company. (See Mason, H., Bixby, and Bogan, fr., assignors.)
Shay, Harry E., assignor of one-third to W. A. Masters and one-third to J. L. Murray, Los Angeles, Calif. Bubble-absorption tower. 1,635,440; July 12.
Shea, Daniel P., Worevert, Mass. Razor strop and treat-Shea, George H. (See Tompkins, Lewis R., assignor.)
Shea, John P. (See Dolan, J. R., and Shea.)
Shea, Timothy E. (See Do Monte, R. W., and Shea.)
Shea, Timothy E. (See Johnson, K. S., and Shea.)
Shea, Timothy E. (See Johnson, K. S., and Shea.)
Shea, Timothy E. (See Johnson, K. S., and Shea.)
Shea, Timothy E. (See Johnson, K. S., and Shea.)
Shea, Timothy E., Rutherford, N. J., assignor to Western Tated. Electrical company, Incorporated, New York, N. Y.
Wave filter. (1,636,152; July 19.
Shea, Timothy E., Rutherford, N. J., assignor to Western and the strong of th

Sept. 6.
Sheahan John F. Canton, Ill., assignor to International Harvester Company. Plow. 1.643.182; Sept. 20.
Sheal. Robert E., Cleveland, Ohio. Movable bridge, 1.613.485; Jan. 4.
Sheal. Robert E., Cleveland, Ohio. Anchoring device, 1.613.965; Jan. 11.
Shean. Thomas P., Chicazo, Ill. Metal window construction. 1.651.635; Dec. 6.
Shean. Thoriur H. (See Billiott, Winfred W., assignor.)
Shear, Max, Kansas City, Mo. Adjustable foot rest for shoe-shiring stands. 1,635.441; July 12.

Shearer, Edward J., Colton, Calif. Double-acting pump. 1,616,201; Feb. 1. Shearer, Harry R., Dorena, Oreg. Automobile light. 1,627,669; May 10. Shearer, Harry R., assigner to Landis Machine Company, Shearer, Janes Johannesburg, Transis, June 7, J

Shearer, William H., Rand, Colo. Fastener. 1,623,891; Apr. 5.
Shearwood, Edward R., Cincinnati, Ohio. Combination implement. 1,613,729; Jan. 11.
Sheasley, Charles H., and B. H. Crossen, Franklin, Pa. engines. 1,630,637; May 31.
Sheather, Albert, Elizabeth, N. J. Oil burner. 1,631,771; June 7.
Sheats, John H., assignor to Ohmer Fare Register Combination of the Combination

New York, N. Y. Metuod of the appearance of taining disruptive effects. 1,631,290; June 7. Sheehan, Frank, Ithaca, N. Y. Knee brace. 1,622,211; Mar. 2. Sheehan, William E. Albany, N. Y. Web carrier for paper-making machines. 1,651,476; Dec. 6. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Locomotive underframe. 1,614,695; Jan. 18. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Locomotive tender. 1,615,918; Feb. 1. Company, St. Louis, Mo. Dump-car underframe Company, St. Louis, Mo. Underframe for ore cars. 1,628,921; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Underframe for ore cars. 1,628,921; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Dumping door and mounting. 1,628,921; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Hopper car structure. 1,628,923; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe. 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe, 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe, 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe. 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe. 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe. 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe. 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe. 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe. 1,628,925; May 17. Sheehan, William M., assignor to Commonwealth Steel Company, St. Louis, Mo.

Sheeban, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car underframe. 1,628,924; May 17.

Sheeban, William M., assignor to Commonwealth Steel Company, St. Louis, Mo. Railway car. 1,628,925; May 17.

Sheeban, William M., St. Louis, Mo., assignor to Commonwealth Steel Company, Grante City, Ill. Locomotive bed and steam passage. 1,629,316; May 17.

Sheeban, William M., St. Louis, Mo., assignor to Commonwealth Steel Company, Grante City, Ill. Electric-Sheeban, William M., St. Louis, Mo., assignor to Commonwealth Steel Company, Grante City, Ill. Electric-Sheeban, William M., assignor to Commonwealth Steel Company, Grante City, Ill. Electric-Sheeban, William M., assignor to Commonwealth Steel Company, Grante City, Ill. Electric-Incomotive truck. 1,638,640; July 26.

Sheeban, William M., assignor to Commonwealth Steel Company, Grante City, Ill. Electric Incomotive truck. 1,638,640; July 26.

Sheeban, William M., assignor to Commonwealth Steel Frame. 1,640,054; Aug. 23.

Sheeby, Micheal D., Kitchener, Ontario, Canada. Rotary off burner. 1,618,339; Jan. 4.

Sheely, Chris L. (See Smith, F. H., and Sheely.)

Sheen, H. M., Company. (See Sheer, Henry M., assignor.)

Sheer, H. M., Company. (See Sheer, Henry M., assignor.)

Sheer, H. M., Company. (See Sheer, Henry M., assignor.)

Sheer, H. M., Company, 'New Combinet, Andrew F., as-Signor,' M., Company, (See Shuler, Andrew F., as-Signor, I. M., Company, (See Shuler, Andrew F., as-Signor, I. Burner control for brooders and the like. 1.618.114; Feb. 15.
Sheer, Henry M., deceased: G. Irwin, administrator, assignor for H. M. Sheer Company, Quincy, Ill. Oil tank. Sheers, John W. (See Wehr, A. J., Ellot, and Sheeres, Sheet Metal Products Co., The. (See Corrigan, Frederick S., assignor.)
Sheets, Fred O. (See Moore, S., and Sheets.)
Sheets, William, Portsmouth, Ohio. Automobile sect. 1.647.057; Oct. 25.
Sheets Rocco M., Bradenton, Fla. Tooth and massage brush. 1.642.465; Sept. 13.

Sheffer, Irving H., Ecore, Mich. Feed collet. 1,646,771;
Oct. 25.
Sheffer, Jesse G. (See Sumpter, O. H., and Sheffer,)
Sheffield, W. H. (See Cornell, Fritz G., fr., assignor,)
Sheffield, Walter C. Bainbridge, Ga. Bottle-washing machine. 1,648,743; Nov. 8.
Sheffield, Washington K., and A. J. Horton, assignors to
Mechanical Engineering Corporation, New London,
Conn. Rand-operated bulletin-printing machine.
Conn. Rand-operated bulletin-printing machine.
Sheffield, William M., New York, N. Y. Mold and making
the same. 1,621,281; Mar. 15.
Sheffield, William M., New York, N. Y. Mold. 1,630,771;
Nov. 29.

Sheffield, William M., New York, N. 7.

Nov. 29.
Sheiner, Philip, Brooklyn, assignor to Metropolitan Lamp.
Co. Inc., New York, N. Y. Base for a lamp. Des.
72,579; May 3.
Sheinman, Morris, New York, N. Y. Lock. 1,628,750;
May 17.
Shekerjian, Hrant R., Atlantic City, N. J. Broom bridle.
1,643,092; Sept. 20.
Sheldion Axle and Spring Company. (See Weiland, Alfred,
assignor.)

Sheldon Axle and Spring Company. (See Weiland, Alfred, assignor.)
Sheldon Axle and Spring Company. (See Weiland, Alfred, assignor.)
Sheldon, Edward P., assignor, by mesne assignments, to R. Hoe and Co., Inc., New York, N. Y. Slow-down mechanism for printed products. 1,624,985; Apr. 19.
Sheldon, Edward P., Brooklyn, assignor, by mesne assignments, to R. Hoe and Co., Inc., New York, N. Y. Sheldon, Fred L., Tacoma, Wash. Hobbyhorse. 1,617,725; Feb. 15.
Sheldon, Rufus N., Milwaukie, Oreg. Barrel or drum truck. 1,615,919; Feb. 1.
Sheldon, Rufus N., Milwaukie, Oreg. Barrel or drum truck. 1,615,919; Feb. 1.
Sheldon, Waldo, Greenwich, Conn. Oll-well-drilling apparatus. 1,622,682; Mar. 22.
Sheldon, Waldo, Greenwich, Conn. Well-drilling chuck. 1,628,283; May 10.
Sheldon, Waldo, Greenwich, Conn. Well-drilling apparatus. Sheldon, Waldo, Greenwich, Conn. Well-drilling apparatus. 1,634,181; June 21.
Sheldon, Waldo, Greenwich, Conn. Well-drilling apparatus. 1,634,191; July 5.
Sheldon, Waldo, Greenwich, Conn. Well-drilling apparatus. 1,634,191; July 5.
Sheldon, Waldo, Greenwich, Conn. Well-drilling apparatus. 1,634,83; June 21.
Sheldon, Waldo, Greenwich, Conn. Well-drilling apparatus. 1,634,83; Detroit, Mich. assignor, by mesne assignments, to Pitney-Bowes Postage Meter Company, machines. 1,638,752; Aug. 9; track for mail-stampling machines. 1,638,752; Aug. 9; track for mail-stampling machines. 1,638,752; Aug. 9; track for mail-stampling machines. 1,648,83; Oct. 25.

Statistical count. Envelope reed mechanism. 1,648,883; Oct. 25. Sheley, George T., Indianapolis, Ind. Pencii clip and craser holder combined. 1,633,135; June 21. Shell, Sanders P., Anna, Tex. Drill set. 1,653,786; Dec. 27.

Shell, Sanders P., Anna, Tex. Drill set. 1,653,789; Dec. 27.
Shellabarger Mills & Elevator Company, The. (See Cornelius, John W., assignor.)
Shellenberger, John, Chicago, Ill. Machine for making General Sheller, Samel A., Clevaland, Ohl. Hand and band saw side file. 1,643,135; Sept. 20.
Sheller, Thomas W., Los Angeles, Calif., assignor to W. W. Whitecotton. Tricycle. 1,625,337; Apr. 19.
Shelly, National B., Wadsworth, Ohio. Door hanger and track structure. 1,622,400; Mar. 29.
Shelly, Thomas W., Gee Simpson, Fredrick J., assignor, Shelly, Thomas P., (See Simpson, Fredrick J., assignor, Shelly, Thomas P., (See Simpson, Fredrick J., Spray Shelton, Glarence L., assignor of one-third to W. A. Peters, Globe, Ariz. Timer for automobiles. 1,615,101; Jan. 18.
Shelton, Frederick J., Wellington, New Zealand. Displaying goods, merchandise, or the like. 1,643,224; Sept. 20.
Shelton, Harry J., St. Louis, Mo. Crusher and pulverizer. 1,650,525; Nov. 8.

1,648.625; Nov. 8.
Shelton-Jancke Corporation. (See Jancke, Benno F., asSignor.).
Signor.).
Si

Shepard, Norman A., and S. Krall, assignors to The Firestone Tire and Rubber Company. Akron, Ohio. Vul. 1647,754; Nov. 11
Shepard, Oscar F., Cincinnati, Ohio. Electric brake. 1,628,202; May 10.
Shepard, Sarah E. B., Lowell, Mass. Ensemble under-Shepard, Sarah E. B., Lowell, Mass. Girdle brassière. 1,647,023; Oct. 25.
Shepard, Sarah E. B., Lowell, Mass. Girdle brassière. 1,647,023; Oct. 25.
Shepard, Victor J., Pittsburgh, Pa., assignor to Westingshouse Electric & Manufacturing Company. Driving Shepherd, Harold F., assignor to The Kent-Owens Machine Company, Toledo, Ohio. Method of and apparatus for delivering measured charges. 1,945,547; St. 18.
Shepard, Maryll, All Mayrle)
Sheperdson, John W., assignor to Morgan Construction Company, Worcester, Mass. Rolling mill. 1,647,668; Nov. 1.
Sheppard, Charles E. (See Cooke, C. J., and Rennie,

Nov. 1. Sheppard, Charles E. (See Cooke, C. J., and Rennie,

Sheppard, Charles E. (See Cooke, C. J., and Rennie, assignors, Coorge F. (See Pitt, William A., assignor). Sheppard, Samuel E., assignor to Eastman Kodak Company, Rochester, N. Y. Fluorescent material and preparing same. 1,648,510; Nov. 8. Sheppard, Samuel E., and L. W. Eberlin, assignors to Eastman Kodak Company, Rochester, N. Y. Cake of compressed gelatin powder and making the same. Sheppard, Samuel E., and R. F. Punnett, assignors to Eastman Kodak Company, Rochester, N. Y. Photographic emulsion and material and process used in the preparation thereof. 1,623,439; Apr. 5. Sheppard, Samuel E., and S. S. Sweet, assignors to Eastman Kodak Company, Rochester, N. Y. Photographic Company, Rochester, N. Y. Nondusting carbon pigments and making the same. 1,651,733; Dec. 6.

Sheppard, William H. (See Sherman, J. A., and Shep-

part.)
Sheppy, Annabel F., et al., executors. (See Sheppy, Charles L.)
Sheppy, Charles G., et al., executors. (See Sheppy, Charles L.)

Chirles L.)
Sheppy, Charles L., deceased, Buffalo, N. Y.; A. F., and C. G. Sheppy, executors, Resilient driving or power-transmitting device. 1.646.772; Oct. 25.
Sherbino, Morton R., assignor to Hydraulic Brake Company, Detroit, Mich. Noncorrosive liquid for fluid systems, 1,616.670; Feb. 8.
Sherbino, Morton R., assignor to Hydraulic Brake Company, Detroit, Mich. Noncorrosive solution, 1,638,710; Aug. 9.

Sherbino, Morton R., assignor to Hydraulic Brake Com-pany, Detroit, Mich. Noncorrosive solution. 1,638,711; Aug. 9.

Sherbondy, Frederick G., Akron, Ohio, and M. E. Bochm, Appleton, Wis. Bleaching wood pulp. 1,638,886;

Aug. 9.
Sherbondy, Frederick G., Akron, Ohio, and M. E. Boehm,
Appleton, Wis. Bleaching wood pulp. 1,638,886;
Sherbondy, Frederick G., Akron, Ohio, and M. E. Boehm,
Appleton, Wis. Apparatus for bleaching wood pulp.
1,638,965; Aug. 16.
Sherburne, Leon G. (See Sherburne, Rufus B. and L. G.,
and Hansen.)
Sherburne, Rufus B. and L. G., and M. Hansen, New York,
N. Y., said Leon G. Sherburne and said Martin Hansen
assignors to said Rufus B. Sherburne Colar-celving
assignors to said Rufus B. Sherburne, Colar-celving
Apr. 26.
Sherrid, M. William T., Chicago, Ill. Counter. 1,626,013;
Apr. 26.
Sheridan, Charlotte M., Chicago, Ill. Golf-score register.
1,651,558; Dec. 6.
Sheridan, John, Meath, Irish Free State. Manipulating
detachable rims of pneumatic and solid tires. 1,618,566;
Feb. 22.

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Sherman, George A., Pasadena, Calif. Advertising stand. 1,627,751; May 10. Sherman, George B., assignor, by mesne assignments, to Copennan Laboratories Company, Filmt, Mich. Mold-Sherman, Jacob S., assignor to Universal Lamp Company, Chicago, Ill. Glass finak. Des. 71,990; Feb. 8. Sherman, Jacob S., assignor to Universal Lamp Co., Chicago, Ill. Miner's lamp. Des. 72,075; Feb. 22. Sherman, Jesha Chicago, Life, W. M., and Sherman, Sterman, Jesha Chicago, The Company, Chicago, Ill. Glass finay, Des. 72,075; Feb. 22. Sherman, Jesha Chicago, Ill. Miner's lamp. Des. 72,075; Feb. 22. Sherman, Jesha Chicago, Jacob Chicago, Ill. Glass finay, Pagaparta, Worcester, Mass. Ball cock. 1,629,645; May 24.

Sherman, John Q. (See Shotwell, Fred M., assignor.)
Sherman, John Q., Juyton, Ohio. Autographic register.
1,617,032; Feb. 8.
Sherman, John Q., Dayton, Ohio. Autographic register.
1,644,957; Oct. 11.
Sherman, John Q., Dayton, Ohio. Manifolding register.
1,644,957; Oct. 11.
Sherman, John Q., Dayton, Ohio. Manifolding-paper
shirale. 1,648,968; Nov. 15.
Sherman, John Q., and A. W. Metzner, Dayton, Ohio,
said Metzner assignor to said Sherman. Manifolding
machine. 1,644,956; Oct. 11.
Sherman, Vernon W., Detroit, Mich. Transfer switch.
1,627,357 MS S. (See Killebrew, Charles A., assignor.)
Sherman, Willis S., Minneapolis, Minn. Flooring-end
matcher. 1,628,355; May 10.
Sherman, Willis S., Minneapolis, Minn. Saw. 1,649,864;
Nov. 22.

Nov. 22.
Sherrerd, Francis H., East Orange, N. J. Pipe joint.
1,615,239; Jan. 25.
Sherrerd, Francis H., East Orange, assignor to Newark
Concrete Pipe Co., Newark, N. J. Self-calking joint
for concrete pipe. 1,624,418; Dec. 13.
Sherrick, Edward F., Los Angeles, Calif. Carburetor.
1,614,473; Jan. 18.

1.614.973; Jan. 18.

Sherrod, William H., Los Angeles, Calif. Toy.
1.624.986; Apr. 19.

Sherrod, William H., Los Angeles, Calif. Toy exerciser.
1.626.181; Apr. 26.

Sherrod, William H., Los Angeles, Calif. Rocking-horse.
1.637,500; Aug. 2.

Sherry, Milliam H., Los Angeles, Calif. Rocking-horse.
1.637,500; Aug. 2.

Sherry, Sol. C., Englewood, N. J. Mail box. 1,636,329;
July 19.

Sherrs, Salmes H., Newark, N. J., assignor to E. I. du
Pout de Nemours & Company, Wilmington, Del. Motor
vehicle and window therefor. 1.643,355; Oct. 11.

Sherwood, Chapter W., Buffalo, and G. B., Groff, Ehenezer,
Feb. 1.

Combined froning board and stand. 1,618,115;
Feb. 1.

Sherwood, Charles F., San Francisco, Calif. Reciprocating pump. 1,621,858; Mar. 22.
Sherwood, George A. (See Warburton, H., and Sher-

wood.) Sherwood.

wood.)
Sherwood, Glenn L., Buchanan, Mich., assignor of one-half to A. F. Kilasing, Chicago, Ill. Spring door closer. 1,632,643; Dec. 13.
Shestakoff, Peter. (See Petroff, G., and Shestakoff.) Sheizline, Roy A., New York, N. Y., assignor to American Telephone and Telegraph Company. Neutralization of inductive interference. 1,643,350; Sept. 27.
Shetzline, Samuel R., Jr., Philadelphia, Pa., and E. A. Dodelin, Moorestown, N. J. Shoe-lace fastener. 1,624,564; Apr. 15.
J. Challed and E. A. Dodelin, Moorestown, N. J. Shoe-lace fastener. 1,624,564; Apr. 1,500.

Sheviin, Joseph, P., assignor to Aladdin Hydraulic Jack Company, Denver, Colo. Hydraulic jack. 1,624,151; Apr. 12

Apr. 12.

Shewry, William M., Chicago, Ill. Coaster wagon. 1,623,443; Apr. 5.

Shiba, Yaichiro, San Jose, Calif. Combined finger ring and cord cutter. 1,651,637; Dec. 6.

Shickman, Ab J., W. A. Thum, and W. L. Dempsey, St. Louis; said Thum and said Dempsey assignors to said Shickman. Automatte printing press. 1,625,569;

Shidler, Frank L., and R. D. Gregg, Kankakee, Ill. Appliance for finishing concrete pavements. 1,626,879; May 3.

May 3
Shiek, Daniel W., Aurora, Ill. Locking device.
1.652.644; Dec. 13.
Shiel, John B., Corona, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1.645.778; Oct. 13.
Shield, Paul S., Cincinnati, Ohio, assignor to A. Davis, Fr., Covington, Ky. Tank vent. 1.651,971; Dec. 6.
Shield, William C., Crocket, Calif. Pressure-regulating middless and California Company of Coronbey, and C. A. Windell, Sentite Wash. Shock-absorbing device. 1.625.570; Apr. 19

Apr. 19. Shields, C. Shields, C. Apr. 12. C. Culver. (See Schaefer, Frank M., assignor.) Carl E., Rock Island, Ill. Toaster. 1,624,017;

Apr. 12.
Shields, Frank S., Brooklyn, assignor to The Universal
Tiller Corporation, New York, N. Y. Tractor hitch for
plows, 1,848,366; Nov. 8.
Shields, George A., Columbus Ohio. Building construction. 1,617,033; Feb. 8.
Shields, George A., Columbus, Ohio. Apparatus for forming glass sheets or plates. 1,617,653; Feb. 15.
Shields, George A., Columbus, Ohio. Building construcShields, George A., Columbus, Ohio. Apparatus for making trunsparent sheet glass. 1,624,233; Apr. 14.
Shields, Hastings M. Los Angeles, Calif. Orange machine, 1,652,379; Dec. 13.
Shields, Hastings M., Los Angeles, Calif. Conveyer.
1,652,419; Dec. 13.

Shields, Henry B., Freeport, assignor to International Motor Company, New York, N. Y. Closure. 1,612,839;

elds, Henry B., Freeport, assignor to International fotor Company, New York, N. Y. Brake. 1,633,136; [une 21].

June 21.
Shields, John M., assignor to F. H. Noble & Company,
Chicago, Ill. Ring box. 1,636,251; July 19.
Shields, Lowell W., assignor to Hickok Manufacturing
Company, Inc., Rochester, N. Y. Belt buckle, Des.
72,191; Mar. 8.

Shields, Lowell W., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 72,191; Mar. 8.

Saields, Martin J. (See Gunning, W. A., and Shields.) Shields & Moore. (See Shields, Thomas P., assignor.) Shields, Fatrick W., assignor to McKenna Brass & Manufacturing. And the Mar. 16.

Shields, Patrick W., assignor to McKenna Brass & Manufacturing Company, Inc., Pittsburgh, and L. De Markins, Montrose, assignors to McKenna Brass and Manufacturing Company, Inc., Pittsburgh, Pa. Method and apparatus for low-pressure carbonation and bottling. Shields, Thomas P., assignor to Shields & Moore, New York, N. Y. White-gold solder. 1,652,740; Dec. 13.

Shields, Thomas P., assignor to Shields & Moore, New York, N. Y. White-gold solder. 1,652,740; Dec. 13.

Shikles, John R. (See Shikles, Ernest A. and J. R.)

Shikles, John R. (See Shikles, Ernest A. and J. R.)

1,639,862; Aug. 23.

Shillman, Albert H., Baltimore, Md. Pocketbook. Shillman, Albert H., Baltimore, Md. Pocketbook. 1,641,297; Sept. 6.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 72,805; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 72,805; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 72,805; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 72,805; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 72,805; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 72,805; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,806; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,806; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,806; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,807; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,807; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,807; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,807; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,808; June 7.

Shiman, Abraham, Newark, N. J. Finger ring. Des. 71,808; June 7.

Shiman, Abraham, Newark, N. J. Fin

Shinkez, Victor R., assignor to Hancock Manufacturing Co., Charlotte, Mich. Door handle. 1,634,342; 31415.

Standard M., U. S. Army, Honolulu, Hawaii. Stop for rotating parts. 1,625,5371; Apr. 19.

Shinn, Charles P., New York, N. Y. Filter. 1,617,504; Feb. 15.

Shinn, Frank H., Davenport, Iowa. Interleaving device. 1,627,417; May. 3.

Standard M. H., Bavenport, Iowa. Interleaving device. 1,627,417; May. 3.

Shinn, Lyle B., assignor to Chicago Lock Company, Chicago, Ill. Lock. 1,644,092; Oct. 4.

Shinnic Lyle B., assignor to Chicago Lock Company, Chicago, Ill. Lock. 1,644,092; Oct. 4.

Shinnic Lyle B., assignor to Chicago Lock Company, Chicago, Ill. Lock. 1,644,092; Oct. 4.

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Shinnic Lyle B., assignor to Chicago Lock Company, Chicago, Ill. Lock. 1,644,092; Oct. 4.

Ship Owners Radio Service, Inc. (See Pearson, Herbert B., assignor.)

Ship Owners Radio Service, Inc. (See Pearson, Herbert B., assignor.)

Shipley, Bernis M., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash register. 1,614,540; Jan. 18.

Shipley, Bernis M., assignor, by mesne assignments, to Cash register. 1,619,796; Mar. 1.

Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,628,880; May 8.

Shipley, Bernis M., assignor, by mesne assignments, to Cash register. 1,628,389; May 10.

Cash register. 3,623,389; May 10.

Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,633,042; June 21.

Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,633,042; June 21.

Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,631,477; Dec. 6.

Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,651,477; Dec. 6.

Shipley, Elevister. 8, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,651,477; Dec. 6.

Shipley, Elevister. 8, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,651,477; Dec. 6.

Shipley, Eleme E. Washington, D. C., Window-cleaning Geylee. 1,622,470; Mar. 29.

Shipley, Eleme E. Washington, D. C., Window-cleaning Geylee. 1,624,44; Apr. 12.

Jack, assi assignor of one-half to R. P. Knight, n. Electric cigar lighter. 1,615,555; Shipley,

Shipley, Jack, assignor of one-half to R. P. Knight, Athens, Tenn. Electric cigar lighter. 1,615,555; Shipley, John H., assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Paper-folding machine. 1,638,176; Aug. 9.
Shipley, John H., assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Paper-folding machine. 1,638,176; Aug. 9.
Shipley, John H., assignor to The Cleveland Folding mechanism. 1,645,824; Oct. 18.
Shipley, Marion K., Manhattan Beach, assignor, by mesne assignments, to Oil Appliance Manufacturing Corporation, Los Angeles. Calif. High-pressure cock having automatic scating plug. 1,624,312; Apr. 12.
Shipley, Marion K., Manhattan Beach, Calif. Joint for Shipley, Adrion K., Manhattan Beach, Calif. Joint for Shipley, Adrion K., Manhattan Beach, assignor, by mesne assignments, to Oil Appliance Manufacturing Corporation, Los Angeles. Calif. Stopcock having floating plug. 1,642,373; Sept. 20.
Shipley Tatent Corporation. (See Shipley, Thomas, assignorents, to Oil Appliance Manufacturing Corporation, Los Angeles. Calif. Stopcock having floating plug. 1,642,373; Sept. 20.
Shipley, Stanley D., Stamford, Conn., assignor to Atlas Powder Company, Wilmington, Del. Reducing the viscosity of nitrocellulose and other cellulose exters. Shipley, Stanley D., Stamford, Conn., assignor to Atlas Powder Company, Wilmington, Del. Reducing the viscosity and increasing the solubility of nitrocellulose. 1,652,587; Dec. 13.
Shipley, Stanley D., and G. C. Given, Stamford, Conn. assignors to Atlas Powder Company, Wilmington, Del. Lacquer and lacquer cnamel. 1,618,482; Feb. 22.
Shipley, Stanley D., and G. C. Given, Stamford, Conn. assignor to Atlas Powder Company, Wilmington, Del. Lacquer and lacquer cnamel. 1,618,482; Feb. 22.
Shipley, Stanley D., and G. C. Given, Stamford, Conn. assignor to Atlas Powder Company, Wilmington, Del. Lacquer and lacquer cnamel. 1,618,482; Feb. 22.
Shipley, Stanley D., and G. C. Given, Stamford, Conn. assignor to Atlas Powder Company, Wilmington, Del. Lacquer and lacquer cname

smirely, Herman V., Long Beach, Calif. Chain. 1,620,613; Mar. 8.
Shively, Jess A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for putting second illipper on beads. 1,651,734; Dec. 6.
Company, Akron, Ohio. Machine for gum stripping beads. 1,651,735; Dec. 6.
Shively, Louis S., University City, assignor to The Weightograph Company, St. Louis. Mo. Flexible beam connection for steelyards. 1,635,508; July 21.
Shively, Louis S., University City, assignor to The Weightograph Company, St. Louis. Mo. Flexible beam connection for steelyards. 1,635,508; July 12.
Shively, Louis S., University City, assignor to The Adjustable cam for scales. 1,536,8743; July 126.
Shively, Walter E., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Cushion tire. 1,635,194; July 12.
Shinger, Abraham E. and B. M. Groisser, Boston, Mass. Shinger, Abraham E. and B. M. Groisser, Boston, Mass. Shilek, Leo, Boston, Mass. Drying cylinder. 1,640,855; Aug., 30.
Shilek, Leo, Montreal, Quebec, Canada. Beating engine. 1,623,364; Anr. 5.

Shmyroff, Andrew. Kew Gardens, B. Bogoslowsky and J. Dill, New York, assignors to Lion Match Co., Inc., Long island City, N. Y. Machine for sorting and stacking book matches. 1.646.710; Oct. 25. Shoc-Bloc Co., The. (See Williams, Frank B., assignor, Shoc-Bloc Co., The. (See Williams, Frank B., assignor, Dhia, P.a. Flower holder. 1.623.856; Apr. 5. Shockley, Herbert M. (See Waiters, Oliver H., assignor; Shockley, William I., assignor of one-half to K. W. F. 1.648.698; Nurse, Oreg. Sirup-pitcher attachment, 1.648.698; Nurse, Oreg. Sirup-pitcher attachment, Shodron, John G. (See Olson, J. B., and Shodron.) Shoe Form Co., The. (See De Witt, William J., assignor.) Shoe Form Co., The. (See De Witt, William J., assignor.)

Shoe Form Co. Inc., Tab. (See Joslin, William H., assignor.)
Shoe Lace Company, Ltd. (See Matson, Carl A., assignor.)
Shoe Lace Company, Ltd. (See Matson, Carl A., assignor.)
Shoemaker, Charles A., near Middletown, Ohio. Vehicle signal lamp. 1,641,056; Aug. 30.
Shoemaker, Earl D. (See Coleman, M. C., and Shoemaker, Earl D.

Shoemaker, Edwin. (See Kanabusch, E. M., and Shoe-

Shoemaker, Edwin. (See Kanabusch, E. M., and bindermiker.)
Shoemaker, George A., Philadelphia, Pa., assignor to Bound Brook Oil-Less Bearing Company. Bearing, 1.637,317; July 26.
Shoemaker, George A., Philadelphia, Pa., assignor to Round Brook Oil-Less Bearing Company. Boundbrook of Bound Brook Oil-Less Bearing Company. Boundbrook of Bound Brook Oil-Less Bearing Company. Boundbrook of Bound Brook Oil-Less Bearing Company. Boundbrook Oil-Less Bearing Company. Boundbrook Oil-Less Bearing Company. Boundbrook Oil-Less Bearing Company. Shoemberg. Electric cigar lighter. Des. 72,946; feb. 15.
Shoenherd, Gustav. (See Dunn, P. P., and Shoenheld.)
Shogran, David H., San Diego, Calif. Gas control. 1,028,337; May 10.
Altatanoga, Tenn. Fireplace basket. 1,255,038; Nov. 22.
Shollenberger, Warren R. (See Updegrave, C. A., and Shollenberger.)
Shoman, Maurice, Plymouth, Mass. Fire-hose protector. 1,655,127; Dec. 20.
Shonle, Horace A. (See Van Scoyoc, G., Wehrbein, and Shonlen Horace A., assignor to Elli-Vator Supplies Company, Inc. Control valve. 1,644,093; Oct. 4.

vator Supplies Company, Inc. Control valve. 1.644,098; Oct. 4.
Shoonard, Harold W., Montclair, N. J., assignor to Elevator Supplies Company, Inc. Fluid-pressure system. 1.645,076; Oct. 11.
Shoonard, Harold W., Montclair, N. J., assignor to Elevator Supplies Company, Inc. Door-operating means. 1.64 Supplies Company, Inc. Door-operating means. 1.64 Supplies Company, Inc. Door-operating means. 1.65 Shoot, Alexander M., Toronto, Ontario, Canada, assignor to Aquazone Corporation, New York, N. Y. Making aqueous solutions and the product. 1.616,202; Feb. 1. Shoot, Florain J., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Attchment degree Company, New York, N. Y. Connection for torque arms or the like. 1,629,178; May 17.
Shoot, Florain J., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Connection for torque arms or the like. 1,629,178; May 17.
Shoot, Harman J., Bellingham, Wash. Purse clip. 1,644,616; Oct. 4.
Shooth, John E., Elttsburgh, Pa. Air-cooled damper.

1,644,616; Oct. 4.

Shook, John E., Pittsburgh, Pa. Air-cooled damper.
1,649,749; Nov. 15.

Shook, Lawrence G., Los Angeles, Calif. Bearing-lip remover.
1,641,555; Sept. 6.

Shook, Wilman A., McGales, 618,606; Aug. 9.

Shoop, Herbert E., Pittsburgh, Pa. Tobacco pipe.
1,640,097; Aug. 23.

Shoopman, Henry R., and S. Shindo, Grand Island, Nebr.
Engine. 1,642,217; Sept. 13.

Shoor, Louis.

Shoot, Aug. 30

Aug. 30.

Shore, Morris, assignor, by mosne assignments, to Simon Pearl, Philadelphia, Pa. Refrigerating cabinet. Des. 73.106; July 19.

Shore, Morris, assignor to Sanitary Refrigerator Corporation, Philadelphia, Pa. Spigot, Des. 72.243; Mar. 15.

Shore, William E., Staten Island, N. Y. Fuel vaporizer. 1.627.671; May 10.

Shore, William E., Staten Island, N. Y. Internal-combustion engine. 1.633.909; June 28.

Shore, William E., New York, N. Y. Oil-burning system. Shores, Etchebert, San Francisco, Callf., assignor to American Smelting and Refining Company, New York, N. Y. Transporting unit for calking metal. 1.650.394; Nov. 22.

Shores, Lewis, Burkburnett, Tex. Shade bracket. 1.649,262; Nov. 15. Shorrock, James L., Acerington, assignor to Entwiste & Kenyon Limited, Ewbank Works, Acerington, England. Carpet sweeper. 1,620,297; Mar. 8.

Short, Albert E., and H. O., and A. Gouge, Rochester, England Air propeller. 1,633,612; June 28.
Short, Charles R. (See Kettering, C. F., and Short.)
Short, Charles R., assignor to General Motors Research Corporation, Detroit, Mich. Crank shaft. 1,627,809; May 10.
Short, Charles R., assignor to General Motors Research Corporation, Dayton, Oblo. Resilient connecter, 1,647,647; Oct. 11.
Short, Charles R., assignor to General Motors Corporation, Detroit, Mich. Transmission casing. 1,644,749; Oct. 11.
Short, Charles R., assignor to General Motors Research Corporation, Dayton, Oblo. Valve-operating means. 1,644,750; Oct. 11.
Short, Charles R., assignor to General Motors Research Corporation, Dayton, Oblo. sasignor to General Motors Research Corporation, Detroit, Mich. Thermostatic valve. 1,644,751; Oct. 11.
Short, Charles V., Des Moines, Iowa. Sanitary heated hog house. 1,628,702; May 17.
Short, Clifford F., North Long Beach, Calif. Electrode holder. 1,628,926; May 17.
Short, Gurney L., Angus, Minn. Cow-tail tie. 1,619,274; Mar. 1.
Short, Hugh O. (See Short, Albert E. and H. O., and Gouge.)
Short, William J., Heber Springs, Ark. Automatic carburetor adjustment. 1,624,631; Apr. 12.
Shortt, James, assignor) be Albert and West of Shortt, James, assignor) be short a signor.)

Shortley, signor.)

Shorting. Urvinie B. (See Fatenaude, Amable U., assignor.)
Shorting Mess assignor to Alloy Metal Products Co., Los Angeles, Calif. Wall-bracket arm fixture. Des. 73,449; Sept. 13.
Shortt. James, assignor to Alloy Metal Products Co., Los Angeles, Calif. Hanging electric-light fixture. Des. 73,873; Nov. 15.
Shostrom, Oscar E., Seattle, Wash. Window lock. 1,622,979; Mar. 29.
Shot-Lite Corporation of America. (See Freund, Robert R., assignor.)
Shotton, John May 10.
Shotwell, Fred M., Detroit, Mich., assignor to J. Q. Sherman, Dayton, Ohio. Protected-index-file unit. 1,613,570; Jan. 4.
Shoun, George B., Fairfax, Okla. Straw-dispensing de-Shoun, George B., Fairfax, Okla. Straw-dispensing de-Shoun, George B., Fairfax, Okla. Straw-dispensing de-

Jan. 4. Shoun, George B., Fairfax, Okla. Straw-dispensing device. 1.646,983; Oct. 25. Shoup, George, Muskegon, Mich. Air tank. 1,613,059; Jan. 4.

Jan. 4.
Shoup, James T., assignor to M. R. Shoup, Chicago, Ill.
Vehicle. 1.632,804; June 21.
Shoup, John A., Battle Creek, Mich. Self-closing safetyBoung Cettle R. 283,605, June 21.
Shover, Barton R., Pittsburgh, Pa. Reel for strip metal.
1.644,857; Oct. 11.
Shover, Lamar H., assignor to Panay-Horizontal ShowJar Co., Milwaukee, Wis. Candy jar. 1,621,285;
Mar. 15.

Mar. 15.

Showalter, Andro E., and J. W. Johnson, Richvalley, Ind.

Shaft-adjusting mechanism. 1,633,910; June 28.

Showers, Ernest S., Champion, Mich. Coaster-wagon

brake. 1,628,559; May 10.

Showers, Brest S., Champion, Mich. Steering mechanism

for coaster wagons. 1,632,334; June 14.

Showers, Joseph R. (See Tindali, Carl A., assignor.)

Showers, Joseph R. (See Tindali, Carl A., assignor.)

Showers, Log. Charlevol. 13., assignor to Pittsburgh

Plate Glass Company. Making sheet glass. Re16,755;

Oct. 4.

Oct. 4.

Shredded Wheat Company, The. (See Anderson, George M., assignor.)

Shredded Wheat Company, The. (See Anderson, G. M., and Hilder, assignors).

Shredded Wheat Company, The. (See House, Henry A., assignor).

assignor.)

assignor.)
Shreeve, Herbert E., Wyoming, N. J., assignor to American Telephone and Telegraph Company. Signaling system, Reif6,335; Dec. 27.
Shreve, Emit T., (See Kinkaid, C. R., and Shreve.)
Shriner, Robert L., Weehawken, N. J., assignor to Hudson Heating Systems, Inc., New York, N. Y. Water heater. 1658,672; Dec. 27.
Shreeve, Emit T., Company, Marion, Ohio, Fire box for oil burners and the like. 1,647,318; Nov. 1.
Shrodes, George H., Los Angeles, Calif. Artificial limb. 1,617,925; Feb. 15.
Shrodes, George H., Los Angeles, Calif. Artificial limb. 1,617,925; Teb. 15.
Shrodes, George H., Columbus, Ohio, Nut-castellating machine. 1,648,222; Oct. 18.
Shroyer, Jacob L., Oak Park, assignor to Edison Electric Appliance Company, Inc., Chicago, Ill. Coffee urn. 1,648,699; Nov. 8.

Shrum, Peter J., Monaca Heights; and H. A. Henigen, Rochester, assignors to Colona Manufacturing Com-pany, Pittsburgh, Pa. Thread protector. 1,639,814; pany,

Shrum, Peter J., Monaca Heights; and H. A. Henigen, Rochester, assignors to Colona Manufacturing Company, Pittsburgh, Pa. Thread protector. 1,639,814; Aug. 23.

Shrum, William R., assignor to Brown & Bailey Company, Philadelphia, Fa. Fastening means for paper folders and containers. 1,615,200; Jan. 18.

Sand containers. 1,615,200; Jan. 18.

Sand containers. 1,615,200; Jan. 18.

Sand containers. 1,615,200; Jan. 18.

Obertoit, Mich. Gas valve. 1,625,574; Apr. 26.

Shuell, Frank W., assignor to Ever Hot Heater Company, Detroit, Mich. Water heater. 1,634,889; July 5.

Shuell, Frank W., assignor to Everhot Heater Company, Detroit, Mich. Water-heating apparatus. 1,637,389; Shuell, Frank W., assignors to Everhot Heater Company, Detroit, Mich. Draft hood for hot-water heaters. 1,636,016; July 19.

Shuell, Frank W., E. E. Ledhetter, and T. J. Tobey, assignors to Everhot Heater Company, Detroit, Mich. Draft hood for hot-water heaters. 1,636,016; July 19.

Shuell, Frank W., E. Sand Shuell, Shuell, Frank W., E. Ledhetter, and T. J. Tobey, assignors to Everhot Heater Company, Gardner, Mass. Wheel-attaching device. 1,635,389; July 12.

Shuell, Shuell, Michael M., Sand Shuell, M. Shuell, Mary M., et al., executors, assignors to H. M. Shuel, W. B., et al., executors. (See Shuler, Andrew F.) Shull, William G., assignor to Kellogg Switchboard and M. B. Shueller, Mary M., et al., executors. (See Shuler, Andrew F.) Shull, William G., assignor to Kellogg Switchboard and Shuller, Mary M., et al., executors. (See Shuler, Andrew F.) Shull, William G., assignor to Kellogg Switchboard and Shuller, Mary M., et al., executors. (See Shuler, Andrew F.) Shull, William G., assignor to Kellogg Switchboard and Shuller, Mary M., et al., executors. (See Shuler, Andrew F.) Shull, William G., assignor to Kellogg Switchboard and Shuller, Mary M., et al., executors. (See Shuler, Andrew F.) Shull, Al

Shumaker. Josephine J., executrix. (See Shumaker, Frink D.), assignor to Pennsylvania Wire Glass Combined, Philadelphia, Pa. Roof or skylight construction. 1,638,666 Aug. 9.
Shunk, James H., Roscoe, Ill. Holder for pyrotechnical devices, 1,613,852; Jan. 11.
Shunk, James H., Roscoe, Ill. Pyrotechnic spinning Shunk, James H., Roscoe, Ill. Pyrotechnic lance holder. 1,621,908; Mar. 22.
Shunk, James H., Jr. Roscoe, Ill. Pyrotechnic wheel. 1,617,034; Feb. 8.
Shunk, James H., Jr. Roscoe, Ill. Pyrotechnic wheel. 1,617,034; Feb. 8.
Shunk, James H., Jr. Roscoe, Ill. Pyrotechnic wheel. 1,617,034; Feb. 8.
Shunk, James H., Jr. Roscoe, Ill. Spinched, John Material-dispensing means of the state of th

Harold V., assignor.)
Shurmer, Thomas, Stockport, England. Feed roller for straining planing, and like machines. 1,629,642;
Mur.On Standard Optical Company. (See Du Paul, George H., assignor.)
Shur-On Standard Optical Company. (See McDonell, William E., assignor.)
W. B., and Leytham, assignors.)
Shurts, Englebert, assignor to The Universal Milking Machine Co., Waukesha, Wis. Dairy-equipment cleaner. 1,643,356; Oct. 1.
Shurts, Englebert, assignor to The Universal Milking Machine Co., Waukesha, Wis. Dairy-equipment cleaner. 1,643,356; Oct. 1.
Shuster, Inc. 1,629,643; May 24.
Shuster, James R. (See Kniskern, F. B., and Shuster.)
Shutt, John E., assignor to L. A. Shutt. Stuttgart, Ark. Pump-actuality mechanism. 1,647,024; Oct. 25.
Shuttleworth John, Altrinchands and John Studens Company and Machinery Limited, London, England. Printing-press cylinder for enabling the printing, impression, or offset surfaces to be adjusted. 1,651,295; Nov. 29.
Shwartz, Harry, et al. (See Schiffner, Joseph A., as-

Shwartz, Harry, et al. (See Seminary volumes). Shwayder, Benjamin H., Denver, Colo, Traveling bag, 1.628,812; May 17.
Shyer, Joseph, Brooklyn, assignor to Zylo Ware Corporation. Inc. New York, N. Y. Ophthalmic mounting, 1.642,090; Sept. 13.

Siarkowski, John, Buffalo, N. Y. Machine for cutting buttonholes. 1,633,196; June 21. Sibbald, Charlies T. A., and J. B. Rausom, Troy, assignors, by mesne assignments, to Frederick Osana Company, New York, N. Y. Button-sewing machine. 1,633,613;

New York, N. Y. Sewing on buttons. 1,633,614; Active 1018, N. 1. Sewing on buttons. 1,085,012;
Shudi & Bernitetta G., Duuth, Minn. Baking receptacle. 1,630,140; May 24.
Shley, Edwin J., Westbury, N. X. Combined shutter Shley, Edwin J., Westbury, N. X. Combined shutter

Jan. 18.
Sibley, Edwin J., Westbury, N. Y. Combined shutter hook and spring. Des. 73,874; Nov. 15.
Sibley, Edwin J., Westbury, N. Y. Ediction casement-Strong the strength of the strength of

vices Corporation. Lubricating system. 1,644,156; Oct. 4.
Sibson, Walter W., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Hosiery-drying machine. 1,634,237; June 28.
Sickie, Jacob M. (See Westerberg, A. M., and Sickle,) Sickler, Clarence E., Endlectt, N. J., Electric-circuits-Sicks, Okla W., French Lick, Ind. Paper weight. Des. 72,334; Mar. 29.
Siddail, Wilbur H., assignor to Bay State Optical Company, Attleboro, Mass. Eyeglass construction. 1,635,142; July 5.
Sidders, Roy R., Urbana, Ohio. Calf weaner. 1,616,203; Feb. 1.

Feb. 1. Sidebotham.

Sidderfs, Roy R., Dronna, Onto. Chil wenner. Apoc.205. Sidebothum, Arthur H., Grand Rapids, Mich. Cigarette class. 1,650,304; Nov. 22. Sidebotham, Melvin H. (See La Bombard, L. E., and Sidebotham.) Siderts, Thomas. A Tree Schneider, Charles T., assignor.) Siderits, Thomas. A Tree Schneider, And Sidle.) Siderits, July Siderits, Apoc. Siderits, July Siderits, Apoc. Siderits, July Making irregularity-cored articles of hard rubber and the like. 1,642,064; Sept. 13. Sidery, John, Portland, Org. Shock absorber. 1,648,201; Sidway Topliff Company. (See Hawkinson, Axel W., assignor.)

Sidway Topliff Company. (See Hawkinson, Axel W., assignor.)
Slebenbrodt, Otto, Chicago, Ill. Lamp stand. 1,619,639; Mar. I.
Slebenmann. Daniel. Bern, Switzeriand. Beam scale. 1,649,967; Aug. 30.
Schine. 1,615,524; Jan. 25.
Sleber, Jacob, London, assignor to C. T. Everist, Forest Hill, London, England. Carburetor for internal-combustion engines. 1,623,760; Apr. 5.
Sleber, Jacob, Sidcup, England, assignor, by mesne assignments, to International Skywiters Limited. Toronto, Canada. Advertising sign. 1,645,560; Oct. 25.
Slebert, Ganda. Advertising sign. 1,645,560; Oct. 25.
Slebert Wright, Derrot, Mich., assignor to Abo. 1,622,546; Mar. 29.
Slebert, Gustave, St. Paul, Minn. Trouser support. 1,618,763; Peb. 8.
Slebert, O. W., Company. (See Slebert, Otto W., assignor, to W. Slebert, Otto W., assignor, to W. Slebert, Otto W., assignor, the W. assignor, the W. assignor, the W. assignor, the W. Schert Company.

1,616,763; Feb. S. Siebert, Otto W., assebert, O. W., Company. (See Siebert, Otto W., assignor to O. W. Siebert Company, Gardner, Mass. Carriage body, 1,638,252; July 19. Siebrandt. John R., Kansas City, Mo. Arm splint. 1,639,515; Aug. 23. Siebs, Claude T., Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Holsting Charles, Claude T., Riverside, 111, assignor to Western Electric Company, Incorporated, New York, N. Y. Holsting I. (1,629,988; Apr. 19. Siedentopf, Henry, assignor to Firm of Carl Zeiss, Jena, Germany. Additional device for binocular microscopes with one objective. 1,632,930; June 21. Siedler, Niedler, Phillipp, Griesbeim-on-the-Main, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of carbon disulphide. 1,616,656; Jan. 25. Siefarth, Chester J., assignor to Willamette Iron & Steel Works. Portland, Oreg. Cable system. 1,617,551;

Works, Portland, Oreg. Cable system.
Feb. 13. (Chester J., assignor to Willamette Iron & Steel
Works, Portland, Oreg. Cable-block system. 1,641,298;
Company.

Works, Portland, Oreg. Cable-block system. 1,641,298; Sept. 6.
Slefen. John J., assignor to Bennett Brass Commany, Greenville, Mich. Float valve. 1,649,020; Nov. 15.
Slefert. Huga A., (See Elsenberg, R. and Slefert.)
Slefert. Huga A., assignor to Samuel M. Langston Company, Candlen, J. Sheet-feeding mechanism. 1,634,088; June 28.
Sleg, Karl, Brooklawa, assignor to Samuel M. Langston Company, Candlen, N. J. Sheet-feeding mechanism. 1,644,695; Oct. 11.
Slegel, Henry M., Malden, Mass. Trousers supporter. 1,625,166; Apr. 10.

Siegel, John F. (See Rix, Frank, assignor.) Siegel, Joseph, assignor to American Lady Corset Com-pany, Detroit, Mich. Girdle. 1,651,736; Dec. 6. Siegel Light Supply Company. (See Shapiro, Phillip C.,

Walter, assignor.)
Siemens & Halske Aktiengesellschaft. (See Flad. Arthur.

assignor.) Siemens & Stemens & Halske, Aktiengesellschaft. (See Gerdien, Hans, assignor.) Siemens & Halske Aktiengesellschaft. (See Horn, Ernst,

assignor.) Stemens & Halske Aktiengesellschaft. (See Kafka, H., and Klein, assignors.) Stemens and Halske Aktiengesellschaft. (See Keinath, Georg, assignor.) Stemens & Halske Aktiengesellschaft. (See Kirn, Max,

assignor.) Halske Aktiengesellschaft. (See Küpfmüller, Siemens &

Siemens & Halske Aktiengesellschaft. (See Küpfmüller, Karl, assignor.)
Siemens & Halske Aktiengesellschaft. (See Langenbeck, B., and Merten, assignors.)
Siemens & Halske Aktiengesellschaft. (See Lidblad, Nils, assignor.)
Siemens & Halske Aktiengesellschaft. (See Lubberger, Fritz, assignor.) Attiengesellschaft. (See Lubberger, Fritz, assignor.) Attiengesellschaft. (See Lubberger, F., Stemens & Halske Aktiengesellschaft. (See Lübberger, F., and Küpfmüller, assignors.)
Siemens & Halske Aktiengesellschaft. (See Mansel, Paul, assignor.)

assignor.)
Siemens & Halske Aktiengesellschaft, Wernerwerk. (See Mathias, Maximilian, assignor.)
Stemens & Halske Aktiengesellschaft. (See Moeller, Max, assignor.)
Siemens & Halske Aktiengesellschaft. (See Paull, Heinrich, assignor.)
Siemens & Halske Aktiengesellschaft. (See Pohlmann. Bruno G., assignor.)
Siemens & Halske Aktiengesellschaft. (See Pohlmann, Max, assignor.)
Max, assignor.)
Max, assignor. Aktiengesellschaft Wernerwerk. (See Preuss. Alexander B., assignor.)
Siemens & Halske Aktiengesellschaft. (See Schottky, Walter, assignor.)

ter, assignor.) Siemens & Halske Aktiengesellschaft Wernerwerk. (See

Schlitmann, August, assignor.)
Slemens & Halske Aktlengesellschaft. (See Sell, Helmut, assignor.)

mut, assignor.)
Slemens & Halske Aktiengesellschaft. (See Setzepfand,
Werner, assignor.)
Siemens & Halske Aktiengesellschaft Wernerwerk. (See
Stemens & Halske Aktiengesellschaft Wernerwerk. (See
Waschnack. Adolf, assignor.)
Slemens & Halske Aktiengesellschaft Wernerwerk.
Waschnack. Adolf, assignor.)
Slemens Schuckertwerke Gesellschaft mit beschrinkter
Haftung. (See Abtenkirch, Edhund, assignor.)

Siemens-Schuckertwerke Gesellschaft mit beschränkter Haftung. (See Gleichmann, Hans, assignor.)
Slemens-Schuckertwerke Gesellschaft mit beschränkter Haftung. (See Hojer, Wibelm, assignor.)
Siemens-Schuckertwerke Gesellschaft mit beschränkter Haftung. (See Hojer, Wibelm, assignor.)
Siemens-Schuckertwerke Gesellschaft mit beschränkter Haftung. (See Rüdenberg, Reinbold, assignor.)
Siemon, William H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Knife-blade switch. 1,643,789, Sept. Pa., assignor to Westinghouse Electric & Manufacturing Company. Knife-blade switch. 1,643,789, Sept. Pa., assignor to Westinghouse Electric & Gottenborg, Pa., assignor. Tackle. Sieurin, Sven A. Gottenborg, Sweden. Lifeboat. 1,619,001; Mar. 1.
Sieurin, Sven A. Gottenborg, Sweden. Lifeboat. 1,619,001; Mar. 1.
Siever, August 21.
Siever, August 21.
Siever, Charles W., Los Angeles, Calif. Gas burner. 1,648,229; Nov. 8.
Sievert, Charles W., Los Angeles, Calif. Gib burner. Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Siewert, Almon D., Pasadena, Calif. Ligature dispensing cap. 1,614,260; Jan. 11.
Siewert, Charles W., Los Angeles, Calif. Oli burner. 1,622,401; Mar. 29.
Siewert, Siemen, Cap. 1,614,600; Jan. 11.
Siewert, Charles W., Los Angeles, Calif. Oli burner. 1,622,401; Mar. 29.
Siewert, Charles W., Los Angeles, Calif. Oli burner. 1,622,401; Mar. 29.
Siewert, Charles W., Los Angeles, Calif. Oli burner. 1,622,40

Signal Gesellschaft m. b. H. (see du bos kryfarsur, Alard, assignor.) Signal Gesellschaft m. b. H. (See Rudolph, W., and du Bois-Reymond, assignors.) Signal Gesellschaft mit beschrünkter Haftung. (See Hahneman, W., Hecht, Lichte, and Adelmaun, as-

Hahnemann, W., Hecht, Lichte, and Aberman, W., Hecht, Lichte, and Aberman, W. Recht, Lichte, and Gesellschaft mit beschränkter Haftung. (See Hahnemann, W., Rudolph, and Milckens, assignors.) Signal Gesellschaft mit beschränkter Haftung. (See Hahnemann, W., Wilckens, and Lichte, assignors.) Signal Gesellschaft mit beschränkter Haftung. (See Hahnemann, W., Wilckens, and Lichte, assignors.) Signal Gesellschaft mit beschränkter Haftung. (See Hahnemann, W., Wilchens, and E. M. Duckwall, New York, N. V. Dipplay card Des. 13,713; Oct. 25, 1916. (See Mannel A., assignor.) Signal Gesellschaft mit Gesell

assignor. Silaj, Eras Prank A., Chicago, Ill. Ash tray. Des. 71.931:

assignor.)

Slaj, Frank A., Chicago, Ill. Ash tray. Des. 71,931;
Jan. 25.

Slaj, Frank A., Chicago, Ill. Smoker stand. Des. 71,932;
Jan. 25.

Slad, Frank A., Chicago, Ill. Smoker stand. Des. 71,932;
Jan. 25.

Slad, Frank A., Chicago, Ill. Smoker stand. Des. 71,932;
Jan. 25.

Slad, Frank A., Chicago, Ill. Smoker stand. Des. 71,932;
Jan. 25.

Sliberman, Brooklyn, assignor to Special Stamping and Manufacturing Co., Inc., New York, N. Y. Bedpost lock. 1,622,743; Mar. 29.

Sliberman, Clara, executrix. (See Silberman, Jacob.)

Sliberman, David, New York, N. Y. Hook and eye tape. 1,623,472; Aug. 16.

Sliberman, David, New York, N. Y. Hook and eye tape. 1,645,548; Oct. 18.

Sliberman, David, New York, N. Y. Textile fabric or the Sliberman, Jacob, deceased, New York, N. Y.; C. Silberman, Jacob, deceased, New York, N. Y.; C. Silberman, Jacob, deceased, New York, N. Y.; C. Silberman, Edwin Mar. S.

Slibert, Harold C., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Suppression of echoes and singing in four-wire circuits. 1,633,738; Slient, Harold C., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Schosuppressor relay. 1,619,891; Mar. S.

Slient, Harold C., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Echo-suppressor relay. 1,619,891; Mar. S.

Slient, Harold C., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Echo-suppressor relay. 1,619,891; Mar. S.

Slient, Harold C., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Echo-suppressor relay. 1,619,891; Mar. S.

Slient, Harold C., Brooklyn, N. Y., assignor to American Telephone and Telegraph. Company. Echo-suppressor relay. 1,619,891; Mar. S.

Slient, Harold C., Brooklyn, N. Y., assignor to American Telephone and Telegraph. Company. Echo-suppressor relay. 1,619,891; Mar. S.

Slient, Harold C., Brooklyn, N. Y., assignor to American Telephone and Telegraph. Company. Echo-suppressor relay. 1,619,891; Mar. S.

Slient, Harold C., Brooklyn, N. Y., assignor to Ameri

Silent Automatic Corporation. (See Their Octo, hassignor.)
Silex Company. (See Bridges, Hazel M. Asstenor.)
Silica Gel Corporation, The. (See Miller, Ernest B., assignor.)
Silico, Lewis K. (See Wilpine, G. L., and Silicox.)
Silicox, Lewis K. (See Wilpine, G. L., and Silicox.)
Silicox, Lewis K. (See Wilpine, G. L., and Silicox.)
Silicox, Lewis K. (See Wilpine, Friedrichshafen, Germany. Gas cell of rigid airships. 1,631.895; June 7.
Siller, Lenhart G., Sacramento, Calif. Closure mounting and operating means. 1,622.886; Mar. 29.
Siliman, Inlisey E. (See Finamer E. F., and Siliman.)
Silino Chemical Company. (See Miller, Walter E., assignor).

signor.)
Silmo Chemical Company. (See Molofsky, David, as-

Silten, Ernst, Berlin, Germany. Making therapeutic materials. 1,626,662; Adv. 26.

Kiln. 1,617,559; Feb. 15.

Silva, Michael F., Hyde Park, Mass. Sprinkler system. 1,636,444; July 18.

Silven, Joseph, et al. (See Weinaug, E., and Macfarlane, assignors. W., Opden, Utah. Endless-belt conveyer. Silver, Joses W., Tacoma, Wash. Aircraft. 1,629,843; May 24.

Silver, Joses W., Tacoma, Wash. Aircraft. 1,629,843; May 24.

Silver, John H. F., Philadelphia, Pa. Control mechanism for calculating machines. 1,636,718; July 26.

Silver, Walter H., assignor to Beere & Company, Moline, Ill. Tongue support. 1,653,673; Dec. 27.

Silver, Walter H., assignor to Deere & Company, Moline, Ill. Tongue support. 1,653,673; Dec. 27.

Silverman, Samuel, Kewark, N. J., assignor to The Raucubach-Goldsmith Co. Drawer-locking mechanism Rauchach-Goldsmith Co. Drawer-locking mechanism Co. Brawer-locking Co. Brawer-locking

signor.)
Silverstein, Samuel. (See Silverstein, Charles and S.)
Silverstein. William I., Brooklyn, N. Y. Machine for
making ventilators for wearing apparel. 1,631,773; (See Mitnick, J. J., and Sil-

Silverstine, Jackson L.

Silverstine. Jackson L. (See Mifnick, J. J., and Silverstine.)
Silverthorn, Charles, Pontiac, Mich. Antiskid device for motor vehicles. 1,621,138; Mar. 15.

16,21,138; Mar. 15.

18,21,138; Mar. 15.

Simmonds, Eugene B., et al. (See Bell, Frank M., as-

signor.)

Simmons, Albert H., Wheaton, assignor to Edison Electric Appliance Company, incorporated, Chicago, Ili. Electric-heater base or similar article. Dos. 72,336; Mar. 29.

Simmons, Albert H., Oak Park, assignor to Edison Electric Appliance Company, Inc., Chicago, Ili. Electric Simmons, Albert H., Oak Park, assignor to Edison Electric Appliance Company, incorporated, Chicago, Ili. Waffile iron. 1,632,630; June 14.

Simmons, Albert H., Oak Park, assignor to Edison Electric Appliance Company, incorporated, Chicago, Ili. Waffile iron. 1,632,630; June 14.

Simmons, Albert H., Oak Park, assignor to Edison Electric Appliance Company, incorporated, Chicago, Ili. Electric connecter. 1,637,639; July 26.

Electric connecter. 1,637,639; July 26.

Simmons, Clarence L. (See Rice, G. E., and Simmons, Simmons, Icalude, Reno, Nev. Actomobile brake and Jack. 1,625,226; Apr. 19.

Simmons, Frank L., assignor to The Taft-Peirce Manufacturing Company, Woonsocket, R. I. Magnetic bar Simmons, Frederick C., Highland Park, Pa., assignor to Ploneer Suspender Company. Belt buckle. 1,636,912; Nov. 29.

Simmons, George H., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ili. Automatic telectric Inc., Chicago, Ili. Insulator changer. 1,618,764; Feb. 8.

Simmons, Leon E., Claremont, N. H., assignor to Sullivan Machinery Company, Portable abutment. 1,648,707; Nov. S. or.)
ns, Albert H., Wheaton, assignor to Edison Elec-Appliance Company, Incorporated, Chicago, Ill.
tric-heater base or similar article. Des. 72,336;

Machinery Company. Portable abutment. 1,648,070; Machinery Company. Fortable abutment. 1,648,070; Simmons, Leon E., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,653,826; Dec. 27.
Simmons, Oliver G., Lakewood, Ohto. Spiral cutter. 1,643,474; Sept. 27.
Simmons, Oliver G., Lakewood, assignor to The National Tool Company, Cleveland, Ohio. Valve seating and aligning fool. 1,621,471; Mar. 15.
Elim. 1,636,490; July 19.
Simmons, Raiph C., Beverly, Mass., assignor to United Shoe Machinery Corporation. Paterson. N. J. Cutting sheet material. 1,647,254; Nov. 1.
Simmons, William J., Forest Lake, Minn. Trap set. 1,617,424; Feb. 15.
Simmons Company. (See Byern, Matthew F., assignor.) Simmons Company. (See Brackhaw, Richard, assignor.) Simmons Company. (See Brackhaw, Richard, assignor.)

Simmons Company. (See Collett, Frederick W. H., assignor.) Simmons Company. (See Gail, John F., assignor.) (See Kusterle, Frank, assignor.) (See Lindblom, William E., as-Simmons Company

Simmons Company. (See Kusterie, Frank. assignor.) Simmons Company. (See Lindblom, William E., assignor.) Simmons Company. (See Travis, Don C., assignor.) Simmons, Frank C., East Palestine, Ohio. Electric heating unit. 1,632,318; June 14.
Simms, Frank C., East Palestine, Ohio. Making ceramic members. 1,632,319; June 14.
Simms, Frederick K., London, England. Yielding rotary driving mechanism. 1,631,439; June 7.
Simms, Frederick R., London, England. Flexible rotary coupling. 1,630,439; July 19.
Simms, Harold H., et al. (See Hammond, Robert O., assignor.) Minon, Alfred B., Selab, Wash, Converted motor-power plant. 1,614,402; Jan. 11.
Simon, Alfred B., Selab, Wash, Converted motor-power plant. 1,614,402; Jan. 11.
Simon, Frederick. Freiburg-Breisgau, Germany. Para-

Mar. S. Simon, Friedrich, Freiburg-Breisgau, Germany. Parachute, 1,626,563; Apr. 26. Simon, Gerald H., New York, N. Y., assignor to Simon Millinery Co., San Francisco, Calif. Lady's hat. Des. 73,763; Nov. 1. New York, N. Y., assignor to Simon Millinery Co., San Francisco, Calif. Lady's hat. Des. Millinery Co., San Francisco, Calif. Lady's hat. Des. Simon Henry, Limited. (See Mitchell, Alfred R., assignor Lady, Limited. (See Mitchell, Alfred R., assignor Lady).

Simon, Henry, Limited. (See Mitchell, Alfred H., assignor.)
Simon, Lester S., Inc. (See Simon, Lester S., assignor.)
Simon, Inc. Transom hinge. 1,638,065; Aug. 9.
Simon Milnery Co. (See Simon, Gerald H. assignor.)
Simon Milnery Co. (See Simon, Gerald H. assignor.)
Simon Robert.
Simon Milnery Co. (See Simon, Gerald H. assignor.)
Simon Milnery Co. (See Simon, Gerald H. assignor.)
Simon Milnery Co. (See Simon Milnery Alring and inading airplanes from and upon suspended positions. 1,624,188; Apr. 12.
Simon Milliam M., assignor to Quality Metal Bed Co., Chicago, Ill. Folding bed. 1,615,412; Jan. 25.
Simond, Walter A. (See Murphy, G. and Simond.)
Simond, Walter A. (See Murphy, G. and Simond.)
Simond, Powey Tr. Schenectady, N. Y., assignor to Generate Milliam Mil

Simonds Saw and Steel Company. (See Giles, Theodore

Simonds Saw and Sree Company. (See Giles, Incodore E., assignosire J., sr., Duxbury, Mass. Creel equipped with automatic tension device. 1,614,497; Jan. 18. Simont, Alexander. (See Fischer, C., and Simont, Simons, Aaron, New York, assignor of one-fourth of New Holman, March 1988, 1

July 26.

N. Y. Apparatus for plucking fowls. 1,637,000; July 26.

Slmons, Aaron, New York, assignor of one-fourth to N. Weinberg, Brooklyn, N. Y. Fowl-plucking device. 1,637,661; July 26.

Slmons, Donald M., Osborne, assignor to Standard Englands of the Standard Company, Pittsburgh, Pa. Method of building for oil-filled cables, 1,613,910; Jan. 11.

Simons, Donald M., Osborne, assignor to Standard Underground Cable Company, Pittsburgh, Pa. Method of building joints. 1,613,911; Jan. 11.

Slmons, Donald M., Osborne, assignor to Standard Underground Cable Company, Pittsburgh, Pa. Apparatus for Simons, Donald M., Osborne, assignor to Standard Underground Cable Company, Pittsburgh, Pa. Cable joint. 1,628,438; May 10.

Simons, Donald M., Osborne, assignor to Standard Underground Cable Company, Pittsburgh, Pa. Cable joint. 1,612,514; Sept. 13.

Simons, Encat R., St. Paul, Minn. Quilting frame. 1,642,515; Sept. 13.

Simons, Ernest R., St. Paul, Minn. Quilting frame. 1,643,515; Sept. 13.

Simons, Gorge W. (See Norris, Harvey O., assignor.) Simons, Gorge W. (See Norris, Harvey O., assignor.) Simons, Harry C., Philadelphia, Pa. Sand, emery, or 1919, 22.

Simons, Harry C., Philadelphia, Pa. Sand, emery, or 1919, 22.

Simons, Harry C., Philadelphia, Pa. Sand, emery, or 1919, 12.

July 12.
Simons, Irvin. (See Knox, C. P., and Simons.)
Simons, John A., Montevideo, Minn. Vehicle body.
1,648,965; Nov. 15.
Simons, Philip, Pewamo, Mich. Combined cultivator
tooth and sweep. 1,630,545; May 31.
Simons, Roy B. and J. Penrod, Okmulgee, Okla. Tubing
anchor. 1,626,162; Apr. 26.
Simonsen, William F., et al. (See Vaughan, John, as-

signor.)
Simplex Cap Company. (See Zarobsky, Charles A., as-

signor.)
Simplex Heat Regulator Company. (See Myer, Albert P., assignor.)

Simplex Ice and Manufacturing Company. (See Lee, Adubrey M., assignor.)

Adubrey M., assignor. Hing Company. (See Solenberger, Dean M., assignor.)

Simplex Player Action Co. (See Brown, Theodore P., assignor.)

Simplex F Refining Company. (See Kramer, Gustav A.,

assignor.)

Simplex Reaming Company. (See Pyzel, Daniel, assignor.)

Simplex Sampling Association, Inc. (See Stenz, Bernard F., assignor.)

Simplex Valve & Meter Company. (See Ledoux, J. W., and Borden, assignors.)

Simplex Wire and Cable Company. (See Boggs, Charles R., assignor.)

Simplex Wire and Cable Company. (See Boggs, Charles R., assignor.)

simplex Valve & Aleter Company. (See Leooux, J. W., and Boyleen, assignors,)

M. assignor.)

Simpson, Arthur E., et al. (See Mullinack, George H., assignor).

Simpson, Bryant, Washington, D. C. Tailor's measure. 1.024,768; Apr. 12.

Simpson, Bryant, Washington, D. C. Tailor's measure. 1.024,768; Apr. 12.

Simpson, Christine M. (See Waterbor, Elmer F., assignor.)

Simpson, David H., New York, N. Y. Machine for stripping and cutting tobacco leaves. 1,638,018; Aug. 9.

Simpson, Bryant, Washington, M. Mouthpiece adjuster. 1,629,322; May 24.

Simpson, Emory G. See Ottinger, Leon, assignor.)

Detroit, Mich. Window regulator. 1,643,822; Sept. 27.

Simpson, Franki I., assignor to Fisher Body Corporation. Detroit, Mich. Window regulator. 1,643,822; Sept. 27.

Simpson, Franki I., R., Rochester, N. Y. Floor-polishing attachment for vacuum cleaners. 1,650,660; Nov. 29.

Simpson, Frankin S., Alton, Ill. Machine for grinding attachment for the strippson, Frederick G., Seattle, Wash. Converter of electric current. 1,622,504; Apr. 19.

Simpson, Frederick G., Seattle, Wash. Converter of electric current. 1,622,504; Apr. 19.

Simpson, Frederick G., Seattle, Wash. Speed and course indicator for convoyances. 1,632,567; June 14.

Simpson, Frederick G., assignor to Simpson Radio Corporation, Seattle, Wash. Radio telegraph and telephone indicator for convoyances. 1,632,567; June 14.

Simpson, Frederick J., assignor to T. P. Shelly, Montreal, Quebec, Canada. Die for bolt making or similar machines. 1,646,425; Oct. 25.

Simpson, George R., assignor to The Prosperity Company, Inc., Syracuse, N. Y. Woven-wire-cloth covering for pressing-machine elements. 1,639,458; Aug. 16.

Simpson, George R., Chicago, Ill. Power mechanism. 1.1030,810; May 31.

Simpson, George R., Chicago, Ill. Power mechanism. 1.1030,810; May 31.

Simpson, George R., Chicago, Ill. Power mechanism. 1.1030,810; May 31.

Simpson, James, Bellshill, and J. Glen. Contbridge, Scotland. Apparatus for measuring linear dimensions. 1,6115,525; Jan. 25.

Simpson, John M., assignor

Simpson, John M., assignor to Warner Gear Company, Muncie, Ind. Transmission gearing, 1,631,937; June 7. Simpson, John M., assignor to Warner Gear Company, Muncie, Ind. Automobile transmission. 1,631,938; June 7. Simpson. John M., assignor to Warner Gear Company, Muncie. Ind. Speed-varying transmission. 1,631,839;

June 7.

Simpson, Mayroe D., Brooklyn, N. Y. Fluid transmission. 1.637.968; Aug. 2.

Simpson, Norman W. (See Young, A. M., and Simpson.) Simpson. Ray. River Porest, assignor to Jewell Electrical Instrument Co. Chicago, Ill. Electrical measuring instrument. 1.642.516; Sept. 13.

Simpson, Robert, Detroit, assignor to L. W. Shaw, Highland Park, Mich. Rotary snow-sweeper attachment for tractors. 1.629.221; May 17.

1.639.222; May 24.

Simpson, Robert J. O., Athol, Mass. Wearing apparel. 1.648.153; Nov. 8.

Simpson, Robert J. O., assignor to The L. S. Starrett Company, Athol, Mass. Cylinder gauge. 1.625,401; Apr. 1.9.

Apr. 1.9.

Compa Apr. 19 Simpson,

Apr. 19.
Simpson, Robert J. O., assignor to The L. S. Starrett Company, Athol, Mass. Dial indicator. 1,625.766: Apr. 19.
Simpson, Robert J. O., assignor to The L. S. Starrett Company, Athol, Mass. Micrometer calipers. 1,625,767;

Apr. 19.
Simpson, Robert W., et al. (See White, Phillip A., assignor.)

signor.)
Simpson, Stephen, Newton Abbot, England. Dry gas
meter. 1.642.899; Sept. 20.
Simpson, Tudor R., Johannesburg, Transvaal. South
Africa, assignor to Minerals Separation North Amermetalliferous ores. 1.632.419; June 14.
Simpson, Ward T., Detroit, assignor, by mesne assignments, to A. G. Dickinson, Grand Rapids, Mich. Carburetor, 1.625.572; Apr. 19.
Simpson, Ward T., Ann Arbor, Mich. assignor, by mesne
assignments, to A. G. Dickinson, Grand Rapids, Mich.
Carburetor. 1.625.573; Apr. 19.

Simpson, Ward T., Ann Arbor, Mich., assignor, by mesne assignments, to A. G. Dickinson. Grand Rapids, Mich. Carburetor and fuel-feeding system therefor. 1,625,575; Apr. 19.

Simpson, Ward T., Ann Arbor, assignor, by mesne assignments, to A. G. Dickinson, Grand Rapids, Mich. Carburetor. 1,625,574; Apr. 19.

Simpson, Ward T., assignor by mesne assignments, to A. G. Dickinson, Grand Rapids, Mich. Carburetor. 1,625,574; Apr. 19.

Simpson, Ward T., assignor to A. G. Dickinson. Grand Rapids, Mich. Carburetor. 1,647,058; Oct. 25.

Simpson, Ward T., assignor to A. G. Dickinson. Grand Rapids, Mich. Carburetor. 1,647,058; Oct. 25.

Simpson, Willis H. (See Piver, William C., assignor.) Simpson Radio Corporation. (See Simpson, Frederick G., assignor.) Simpson Radio Corporation. (See Simpson, Frederick G., assignor.) Singson, Willis H. (See Piver, William C., assignor.) Singson, Wallis H. (See Piver, William C., assignor.) Singlair, Clyde C., and F. A. Phelps, assignors to Moonlight Batt Company, Paw Paw, Mich. Arthical bair of part of the part of

assignors.)
Sinclair Retining Company. (See Frye, W. A., and Heady,

assignors.)
Sinclair Refining Company. (See Herthel, Eugene C.,

Sinclair Refining Company. (See Hertner, Eugene C., assignor.)

Sinclair Refining Company. (See Herthel, E. C., and Isom, assignors.)

Sinclair Refining Company. (See Herthel, E. C., and Pelzer, assignors.)

Sinclair Refining Company. (See Isom, Edward W., assignors.)

Sinclair Refining Company. (See Isom, Edward W., assignors.)

Sinclair Refining Company. (See Isom, E. W., and Bell, assignors.)

Sinclair Refining Company. (See Miller, Albert E., as-signor.) Sinclair Refining Company. (See Parmelee, Charles L.,

Sinchair Refining Company. (See Phillips, E. B., and Stafford, assignors.)
Sinchair Refining Company. (See Sawyer, Geo. W., as-

signor.) Sinclair Refining Company. (See Sloan, Alfred J., as-

Sinclair Befining Company. (See Sloan, Alfred J., assignor.)
Sinclaire, Francis S., Cambridge, Mass. Tube socket.
1,621,831; Mar. 15.
Sindeband, Maurice L., New York, N. Y., assignor to
General Railway Signal Company. Automatic trainstandard Company. Automatic trainSinderson, John B., assignor by mesne assignments, to
Barber-Coleman Company, Rockford, Ill. Cutter grinder.
1,618,680; Feb. 22.
Sineath, Julius B., Orangeburg, S. C. Headlight.
1,617,463; Feb. 15.
Siner, Haymond K., assignor to North American Lace
Company, Philadelphia, Fa. Headband. 1,626,433;
Sineclinany. Adolph H., Newburch, N. Y. Self-tubricat-

Company,
Apr. 26,
Apr. 26,
Singelmann, Adolph H., Newburgh, N. Y. Self-lubricating bearing, 1,637,956; Aug. 2,
Singer, B. Alexander. (See Van Meter, James W., as-

lig beause.
Singer, B. Alexander.
Singer, Felix. Berlin-Charlottenberg, Germany. Stoneware
of high resistance against the perforating power of
of high resistance against the perforating power of
ofeetring sparks and making the stoneware. 1,642.754;
offeetring and G. Reime, Nuremberg,

electrical sparsa have made and G. Reime, Nuremberg, Sept. 20.
Singer, Konnad, P. Paschen, and G. Reime, Nuremberg, Index, Konnad, P. Paschen, and G. Reime, New York, N. Z. Electricity meter, 1,645,299; Cot. 11.
Singer, William T. (See Butler, E. R., and Singer.)
Singer Manufacturing Company, The. (See Allen, Edge Manufacturing Company)

Singer Manufacturing Company, The. (See Allen, Edward B. assignor).

Singer Manufacturing Company, The. (See Becker, Rudolph, assignor).

Singer Manufacturing Company, The. (See Chason, Daniel H., assignor).

Singer Manufacturing Company, The. (See Chason, Daniel H., assignor).

Singer Manufacturing Company, The. (See Corrall, H., and Heggies, assignors).

Singer Manufacturing Company, The. (See De Voé, Albert H. inssignor).

Singer Manufacturing Company, The. (See Diehl, Frederick, assignor.)

Singer Manufacturing Company, Tae. (See Gatchell, George S., assignor.)
Singer Manufacturing Company, The. (See Hemleb, Martin, assignor.)
Singer Manufacturing Company, The. (See Naul, James

M, assignor.)
Singer Manufacturing Company, The. (See Peets, Wilbur J, assignor.)
Singer Manufacturing Company, The. (See Ringe, John C.,

bur J., assignor.)
Singer Manufacturing Company, The. (See Ringe, John C.,
assignor.)
Lewis D., fasciuring Company, The. (See Schaffer,
Lewis D., assignor.)
Singer Manufacturing Company, The. (See Tivendale,
William, assignor.)
Singer Manufacturing Company, The. (See Wood, Alfred
Rasignor.)
Singer Manufacturing Company, The. (See Wood, Alfred
Rasignor.)
Singiser, John P., Chiengo, Ill., assignor to The American
Laundry Machinery Company, Cincinnatt, Ohio. Pressing machinery Company, Cincinnatt, Ohio. Pressing machinery Company, Cincinnatt, Ohio. Pressing machinery Company, Cincinnatt, Ohio. Tool.
Singley, Leslie K., Hendersonville, N. C. Rod joint,
1,639,009; Aug. 16.
Singley, Leslie K., Hendersonville, N. C. Rod joint,
1,639,009; Aug. 16.
Sinbaldi, Gabriel, St. John, New Brunswick, Canada.
Decoy, for wild fowl and the like, 1,616,600; Feb. 1
Sinbaldi, Gabriel, St. John, Mew Brunswick, Canada.
Decoy, for wild fowl and the like, 1,616,600; Feb. 1
Sinbaldi, Co., Chiago, Ill.
Nov. 1.

& Mfg. Co., Chicago, Ill. Metallic bank. 1,647,341; Nov. 1. Sinko Tool & Mfg. Co. (See Sinko, J., and Szantay, as-

signors, and Scaling, as signors, Sinks, William R. (See Budd, T. D., and Sinks.)
Sinks, William R. (See Budd, T. D., and Sinks.)
Sinner, Emil, Milwaukee, Wis. Timer. 1,631,291;
June 7.

Signe 7

Sinning, Frank R., Ramsey, Ill. Track liner. 1,645,825;
Oct. 18.
Sintow, Ely W., Brooklyn, assignor to Art Cage Mfg.
Co., Inc., New York, N. Y. Bird eage. Des. 73,391;
Aug. 30.
Lakewood, Ohio. Flower holder. Des. 72,638; May 10.
Sipe, Clinion R., assignor by mesne assignments, to Automatic Electric Inc. Chicago, Ill. Automatic switch.
1,631,506; June 7.
Sipe, George B., Shrev-port, La. Drill-bit-blade construeSipe, Groupe B., Shrev-port, La. Combined drill and
underreamer. 1,647,670; Nov. 1.
Sipe, James B., et al. (See Rohm, James T., assignor.)
Sipes, William, Shelbyville, Ind. Rail joint. 1,641,014;
Aug. 30.

Sharp Street, and Street and Stre

Single Enres H., and N. J. Weight, assignors, by mesne supple Enres H., and N. J. Weight, assignors, by mesne for the following the company, and the company of the company

Sivian, Leon J. (See Fletcher, H., and Sivian,)
Slx, Dale M., Los Angeles, Calif. Lubricating means for
automobile chassis, 1,631,650; June 7.
Slxt, Frederick C. (See Frackelton, R. J., and Sixt.)
Sixta, Emil C., La Habra, Calif. Structure building card,
1,623,641; Apr. 5.
Sizaire, Maurice, assignor to Societe des Automobiles
Sizaire, Courbevoie, France. Vehicle with independent
wheels. 1,650,644; Nov. 22.
Sizelove, Loren L., Oxford, Ohlo. Corn turner. 1,613,486;
Stoberg Sidney T. (See Payme H. D. De Classes and

Jan. 4. Sjoberg, Sidney T. (See Payne, H. D., De Clerque, and Sjoberg.)
Sjoberg, Prank V. Janustown, Kans. Reel attachment for automobile wheels. 1.642,630; Sept. 18.
Sjölin, Bengt. (See Broberg, I., Eriksson, and Sjölin.)
Sjöman, Cari F., and C. G. Pettersson, assignors to J. & C. G. Bolinders Mekaniska Verkstads Aktlebolas, Stockholm, Sweden. Fuel-Injecting nozzie. 1.642,260;

Stockholm, Sweden, Fuel-Injecting nozate, Loracov, Sept. 13.
Sjöman, Carl F., and C. G. Pettersson, assignors to J. & C. G. Bolinders Mckanista Verkstads Aktiebolae, Stockton Stockton

Jan. 4.

Skaer, Arthur H., and O. E. Clark, assignors to The Denver Rock Drill Manufacturing Company, Denver, Colo. Drill sharpener. 1,617,225; Feb. Skaer, Arthur H., and O. E. Clark, assignors to The Denver Rock Drill Manufacturing Company, Denver, Colo. Lubricating system for rock-drill sharpeners. 1,687,012; July 26.

Skaer, Arthur H. and E. J. Downing, assignors to The Denver Rock Drill Manufacturing Company, Denver, Colo. Lubricator for winding drums. 1,654,100; Dec. 27.

Dec. 27.

Skaer, James A., Wichita, Kans. Hose supporter. 1,629,811; May 24.

Skaggs, James A., Canton, Ohlo. Reserve-gasoline tank and filter. 1,617,868; Feb. 15.

Skaggs, Mert C., assignor of one-half to C. Mallette, Crocker, Mo. Combination brace and nut lock for auttomobiles and the like. 1,651,569; Dec. 6.

Skaggs, Mert C., and F. Hammock, Crocker, Mo. Radiusrod brace. 1,647,375; Nov. 1.

Skaletzky, Benjamin. New York, N. Y. Finger ring. Des. 7,3587; Oct. 4.

Skayef Ball Bearing Company, The. (See Runge, Robert

Skayef Ball Bearing Company, The. (See Runge)

E. assignor)
Skedgell, David E. assignor to Millville Manufacturing
Company, Millville, N. J. Filling stop motion for
looms, 1,643,931; Sept. 27.
Skedgell, John A. Reading, Pa., assignor to Draper Corporation, Hopedale, Mass. Builder mechanisms for
splnning or winding machines, 1,646,561; Oct. 25.
Skeels, Henry E., Rochester, N. Y. Ladder and platform support, 1,645,679; Oct. 18.
Skeed, Samuel T., assignor of one-half to C. E. Stead,
Centrolia, Ill. Drill. 1,640,810; Aug. 30.
Skehna & Sweeny, Inc. (See Terhune, Herman R., assignor.)

signor.)
Skelley. Charles L., New York, N. Y. Safety razor.
1,635,642; July 12.
Skelly. Allan D., South Lawrence, and D. M. Skelly.
Methuen. Mass. Fishing lure. Re16,636: May 24.
Skelly. Bernard H., assignor to American Specialty Co.,
Inc., Bridgeport, Conn. Vacuum-tube mounting for
radio apparatus. 1,614,636: Jan. 18.
Skelly, David M. (See Skelly, Allan D. and D. M.)
Skelly, David M. (See Skelly, Allan D. and D. M.)
Skelly, David M. (See Skelly, Allan D. and D. M.)
Skelly, John S., Monomachela, Pa., assignor to Intermonth. Y. A. Skelly. Allan D. and D. M.)
Skellon, M. Y. A. Skellon, M. Cotton die. 1,643,263:
Nov. 15.

Skelton, Earl W. (See Knotwell, Glenn R., assignor.) Skelton, Earl W., assignor to G. R. Knotwell, Wauneta, Nebr. Tractor guide. 1,618,233; Feb. 22. (See Millian, Archibalt, assignor.) Skelton Shovel Co. (See Skelton, Walter E., assignor.)

Skelton, Walter E., Hamilton, Ontario, Canada, assignor to Skelton Shovel Co., Inc. Making shovels. 1,614,498; Jan. 18.
Skidmore, Benjamin, Jr., Chicago, Ill. Flexible coupling 1.646,427; Oct. 25.
Skiff, Bessle N., Boulder, Colo. Book end or similar article. Des. 72,245; Mar. 15.
Skillnen, William T., Bolies, Idaho. Hose connection. 1,619,439; Mar. 1. T. Bolies, Idaho. Hose connection. 1,619,439; Mar. 1. Skillman, Newton, Highland Park, Mich. Combined spring shackle and shock absorber 1,646,844; Oct. 25.
Skinner, Albert M., Watertown, N. Y. Wall plus. 1,647,891; Nov. 1.
Skinner Automotive Device Co. (See Skinner, Raiph L., assignor.)
Skinner Automotive Device Co. (See Weaver, Ira A., assignor.)

Skinner Automotive Device Co. Inc. (See Garland, Ralph C., assignor.)

Skinner Automotive Device Co. Inc. (See Garland, Raiph C., assignor.)
Skinner, Burr R., Aberdeen, S. Dak. Heating boiler-feed water. 1641;476; Nov. 1.
Garden and Carlon, assignor of twelve and one-balf per cent to H. Barnett, San Quentin, and twelve and one-balf per cent to H. Lybeck, Alameda, Calif. Well-drilling apparatus. 1,652,059; Dec. 6.
Skinner, Edward B., Flint, Mich. Combined costumer and wardrobe. 1,641,852; Sept. 6.
Skinner, Edgine Company. (See Mueller, Herman G., assignor of the control of the cont

Skinner Engine Company. (See Mueller, Herman G., assignor.).
Skinner, Frank W. (See Norton, E. K., and Skinner.)
Skinner, Frank W., West Norwood, N. J. Liquid indicator. 1,626,881; May 3.
Skinner, Fed A. C., St. Louis, Mo. Radiator. 1,618,485;
Feb. 22.
Skinner, Harry A., New York, N. Y. Facial-wrinkle-removing device. 1,629,469; May 17.
Skinner Irrigation Company, The. (See Coles, Walter II.,

Kinner Irrigation Company, The. (See Coles, Walter II., assignor.)

Skinner Irrigation Company, The. (See Coles, Walter II., assignor.)

Skinner, Milton D., Toronto, Ontario, Canada. Casement-window mounting. 1.648,744; Nov. 8.

Skinner, Mortimer B., Wilmette, III. Pipe clamp. 1.618,234; Feb. 22.

Skinner, Roth T. E., Newark, Ohio. Fife. 1,618,892; Edited. Schot. T. E., Newark, Ohio. Fife. 1,618,892; Skinner, Ralph L., assignor to Skinner Automotive Device Co., Inc., Detroit, Mich. Internal-combustion-engine lubrication system. 1,640,856; Aug. 30.

Skinner, Ralph L., assignor to Skinner Automotive Device Co., Inc., Detroit, Mich. Lubrication system for internal-combustion engines. 1644,034; Oct. Device Skinner, Ralph L., assignor to Skinner Automotive Device Co., Inc., Detroit, Mich. Internal-combustion-engine oil rectifier. 1,650,773; Nov. 29.

Skinner, Ralph L., assignor to Skinner Automotive Device Co., Inc., Detroit, Mich., assignor to Skinner Automotive Device Co., Inc., Detroit, Mich., Apparatus for purifying lubricating oil. 1,650,774; Nov. 29.

Skinner, Ralph L., assignor to Skinner Automotive Device Co., Inc., Detroit, Mich., Apparatus for purifying lubricating oil. 1,650,774; Nov. 29.

Skinner, Ralph L., assignor to Sminer Automotive Device Co., Inc., Detroit, Mich., Apparatus for purifying lubricating viny in the Montreal, Quebec., Canada. Manufacturing viny esters. 1,638,713; 1,638,713; 4,744.

Aug. 9. dit, January of the Manufacturing vinyl esters. 1,688,713; Aug. 9. ditt, James H., assignor to Smith, Drum & Co., Philadelphia, Pa. Cylinder construction. 1,615,240; Jan. 25.

25.

Skitt, James H., assignor to Smith, Drum & Company, Philadelphia, Pa. Paddle for dyeing machines. 1,622,928; Mar. 29, Skitt, James H., assignor to Smith, Drum & Company, Philadelphia, Pa. Dyeing machine. 1,627,347; May 8, Skitt, Ass., assignor to Deere & Company, Moline, St. Charlett, John. (See Karthin, M., Skoezlek, and Mandi.).

oczlek, Mandl.)

Mandl.)
Skogiund, Charles, Lynn, Mass., assignor to General Electric Company. Making tubing, 1,631 631; June 7, Skoglund, Leonard B., Fremont, Nebr., Sawing machine, 1,635,290; July 12.
Skogmark, John, New York, N. Y., assignor of one-half to M. F., Chase, Process and apparatus for extracting Skouner, Enable 4, 1,630,317; May 31.
L630,317; May 31.
L630,317; May 31.
L640,317; May 31.
L640

Skok, Lawrence, assignor to The Apex Spring Cover Company, Cleveland, Ohio. Metal casing for leaf springs. 1,624,683; Apr. 12. Skolet, James, Brooklyn, N. Y. Lap robe. 1,640,098;

Skillings, 102,000 Apr. 12. Lap robe, 1,640,098; Skillings, 102,000 Apr. 12. Lap robe, 1,640,098; Aug. 23. Skolnik, Max, assignor to The Skolnik Patents, Incorporated, Scopt. 6. Skolnik, Max, assignor to Skolnik Patents, Incorporated.

Sept. 6. colorly Max. assignor to Skolnik Patents, Incorporated, Minneapolis, Minn. Woodworking apparatus. 1,641,646; Sept. 6. colork Patents, Incorporated. (See Skolnik, Max. associated).

Skolnik I Skonberg, Eric K. (See Mickelson, E. H., and Skonberg.)

Skonier, Frank J., Altoona, Pa. Lightning arrester, 1,652,913; Dec. 13,

Skoog, Harry E., Cleveland, Ohio. Can tester. 1,640,911;

Skong, Harry E., Cleveland, Ohio. Can tester. 1,640,911; Alis. 30.
Skorepa. Joseph F. New York, N. Y. Key case. 1,642,791; Sept. 20.
Skoy, Henry, assignor to Dansk Pressefabrik A/S, Copenhagen, Denmark. Device for producing counterpressure in pressing tools. 1,614,404; Jan. 11.
Skoy, Henry A., assignor to Dansk Pressefabrik A/S, Copenhagen, Denmark. Dansk Pressefabrik A/S, Dansk Pressefa

Co., Inc., Newark, N. J. Outlet receptacle. 1,631,507; June 7.
Sinde, Harold E., assignor to Beaver Machine & Tool Company, Inc., Newark, N. J. Electric-lamp socket. 1,643,790; Sept. 27.
Lidd, John S. C., Lidd, J. L. Lidd, J. L. Lidd, J. Sinde, Louise, L. C. L. Lidd, J. L. Lidd, J. Lidd, J. Lidd, J. Lidd, J. L. Lidd, J. L. Lidd, J. L. Lidd, J. Lidd, J.

Slasher Kolls Co. (See McGann, George J.)
Slate, Thomas B., Glendale, Calif. Airship. 1,642,270;
Sept. 13.
Sept. 13.
Ster, Thomas B., assignor, by mesne assignments, to International Patents Fiscal Corporation. New York, 1975.
Ster, Thomas B., asparatus I., 634,683; June 28.
Volume Co. 1986.
Ster T. Thomas B., asparatus I., 634,683; June 28.
Volume Co. 1987.
Ster T. More Manager Grant Gr

Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Blowing device, 1,637,203; July 26.
Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Blowing device, 1,637,203; July 26.
Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Tube connection for rock Company, Jersey City, N. J. Pneumatic tool. Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer, 1,646,773; Oct. 25.

18 West Palm Beach, Fla. Portable

Company, Jersey City, N. J. Steel retainer. 1.646.773;

Morr. 26.6 corge F. West Palm Beach, Fin. Portable building, 1.630.577; Aug. 16.

Slater. Harry. Hawthorne, Calif. Air-operated device, 1.624.018; Apr. 12.

Slater. Nar. Company, Limited, The. (See Cassels, Charles Sinter. N., Company, Limited, The. (See Cassels, Charles Sinter. N., Company, Limited, The. (See Cassels, Charles Sinter. Sons, Incorporated. (See Schlatter, Carl, assignor.)

Slater. Waiter G. Dodge City, Kans. Safety cut-off device for gas service. 1.615.776; Jan. 25.

Slattery, Donald W., East Cleveland, Ohio. Butterfly Slattery, Long, B., Sept. 27.

Slattery, Donald W., East Cleveland, Ohio. Butterfly Slattery, Long, B., Sept. 27.

Slattery, Lancold W., New York, N. Y. Gas heater. Des. 72.288; Mar. 29.

Slauson, Harold W., New York, N. Y. Electrical signaling means. 1.633.043; June 21.

Slauson, Louis E., Rock Island, Ill. Traction wheel. Slauson, Louis E., Moline, assignor to Grid-Iron Grip Company, Rock Island, Ill. Traction wheel. 1,629.126; May 17.

Slauson, Stephen A., assignor, by mesne assignments, to Vec Products Company, Cedar Rapids, Iowa. Take-up device. 1,615,145; Jan. 18. Slavik, John F., New York, N. Y. Copyholder. 1,615,959; Feb. 1.

Slavin, Andrew, et al. (See Rex, Harry II., assignor.) Slavin, Francis R., et al. (See Rex, Harry H., assignor.)

signor.)
Slawson, Marion G., Girard, Kans. Grave marker.
1.651,780; Dec. 6.
Slayton, W. L., Toledo, Ohio. Reminder for card players.
1,627,208; May 3.
Slayton, W. H., Toledo, Ohio. Air-operated signal Stayton, W. H. (1988).
Slayton, W. H. (1988).
Slayton, W. H. (1988).
Slayton, W. H. (1988).
Slayton, W. (Pratt July 5.

Steman, William C. Birmingham, Ala, Railway-car (1992), 1644,497, Oct. (1992), 1644,947, Oc

signor.)

Sleeper & Harriey, B. M. (See Sleeper, Frank H., assignor to signor.)

Sleeper, Harvey P., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Temperature-indicating device. 1,626,633; May 3.

Sleith, Samuel W., Louisville, Ky., assignor to Great Lakes Golf Corporation, Milwaukee, Wis. Golf club. 1,043,751; Sept. 27.

Stemmer, Wilkiam Cittsburgh, Pa., assignor to Westing-house Electric & Manufacturing Company. Resistor material. 1,638,588; Aug. 16.

Slepian, Joseph, Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Vacuum-tube oselliator. 1,65,660; Jan. 25.

Slepian, Joseph, Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Voltage regulator. 1,624,637; Mar. 15.

Slepian, Joseph, Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Voltage regulator. 1,624,6370; Apr. 12.

Slepian, Joseph, Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Electro-house Electric & Manufacturing Company. Transmitter. 1,626,635; May 3.

Slepian, Joseph, Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Glow-discharge transmitter. 1,626,636; May 3.

Slepian, Joseph, Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Glow-discharge transmitter. 1,626,636; May 3.

Slepian, Joseph, Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Glow-discharge microphones. 1,642,091; Sept. 13.

Slepian, Joseph, Swissvale, Pa., assignor to Westing-house Electric & Manufacturing Company. Glow-discharge microphones. 1,642,091; Sept. 13.

Slepian, Joseph, Swissvale, Pa., assignor to Sesting-house Electric & Manufacturing Company. Glow-discharge microphones. 1,642,091; Sept. 13.

Oct. 11.

Stepian, Joseph, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Magnetic amplifer and self modulator. 1,645,301; Oct. 11.

Slepian, Joseph, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Magnetic amplifer and self modulator. 1,645,302; Oct. 11.

Slepian, Joseph, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmissipal, and C. R. Hanna, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Acoustic horn. 1,623,561; Apr. 5.

Sletten, Albert. (See Hallum, O. F., and Sletten.) Sleven. William E. New York, N. Y. Book hanger. 1,649,619; Nov. 15.

Stezak, Vincent, Chicago, Ill. Measuring and welghing Stezak, Vincent, Chicago, Ill. Measuring and welghing

Siczak, Vincent, Chicago, III. Measuring and weighing device. 1.624.019; Apr. 1.624.018; Apr. 1.624.019; Apr. Slezak, V. Feb. 1.

ezak, Vincent F., Chicago, Ill. Sealing device. 1.616.423; Feb. 1.

Slezak, Vincent F., assignor, by mesne assignments, to The American Ticket Scale Company, Chicago, III. Actuating mechanism for cola-controlled ticket-print-ing weighing scales. 1,644,752; Oct. 11. Slick, Edvin E., Pittsburgh, Pa. Rolling mill. 1,621,284;

ing weighing scales. 1,644,752; Oct. 11.
Slick, Edwin E., Pittsburgh, Pa. Rolling mill. 1,621,284;
Mar. 15.
Mar. 15.
Slick, Edwin E., Pittsburgh, Pa. Conveyer pan.
1,637,137; July 5.
Slick, Edwin E., Pittsburgh, Pa. Continuous leer.
1,637,137; July 5.
Slick, Edwin E., Pittsburgh, Pa. Continuous leer.
1,637,139; June 7.
Slipper City Wood Heel Company. (See Kinney, NorMartin M., Sassano, Jos Angeles, Calif. Machine for making ornamental crushed linings. 1,639,972; Aug. 23.
Slivinski, Hugo R., Chicago, Ill. Sand cutting and mixing
machine. 1,645,625; Oct. 18.
Sloan, Alfred J., Kansas City, Kans., assignor to Sinclair
Refining Company, Chicago, Ill. Pressure still.
1,619,440; Mar. 1.
Sloan, Harry E., Hartford, Conn. Rack-tooth-cutting machine. 1,625,402; Apr. 19.
Sloan, Harry E., Hartford, Conn. Chuck. 1,628,476;
May 10.
Sloan, Harry E., Hartford, Conn. Chuck. 1,628,476;
May 10.

May 10.

Sloan, Harry E., assignor to The Cushman Chuck Company, Hartford, Conn. Chuck. 1,633,828; June 28.

Sloan, John F., Feoria, Ill. Heater for internal-combustion engines. 1,615,049; Jan. 18.

Sloan, Theodore H., Charlerd, assignor to Macbeth-Evans Glass Company, Pittsburgh, Pa. Glass-forming machine. 1,614,682; Jan. 18.

Sloane William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Explosionproof fuse. 1,619,640; Mar. 1.

Company, Chicago, Ill. Expression.

Mar. 1.

Sloane, William W., assignor to Goodman Manufacturing
Company, Chicago, Ill. Power shovel. 1,628,071.

May 10.

May 10.

May 10.

May 10.

May 10.

Sloane, William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Power shovel. 1,640.055;

Company, Chicago, III. Power shovel. 1,640.055; Aug. 23.
Aug. 23.
Saug. 25.
Superson, Chicago, III. Power shovel. 1,653,739; Chicago, III. Power shovel. 1,653,739; Sloate, Alfred C., Wynnewood, assignor to Congoleum-Nairm. Inc., Philadelphia, Pa. Fibor covering. 1,649,750; Nov. 15.
Slocum. Benjamin A., assignor to Ansco Photoproducts, Inc., Binghamton, N. Y. Grooving machine. 1,637,501; Aug. 2.

Aug. 2.
Slocum, Benjamin A., assignor to Ansco Photoproducts,
Inc., Bingbamton, N. Y. Identifying means for photographic films. 1,649,621; Nov. 15.
Slocum, James, Detroit, Mich. Spark-arresting device.
1,641,102; Aug. 30.
Slocumb, Mary L., Shelby, Miss. Pitcher for sterilized
water. 1,640,733; Aug. 30.
Sloc, Joseph E., et al. (See Ginsburg, Marcus O., assignag.)

signor.)
Slomecker, Abiram J., Trenton, Mo. Universal joint.
1.616,336; Feb. 1.
Slomecker, Abiram J., Trenton, Mo. Wire splice.
1.616,337; Feb. 1.
Sloper, Charles A. (See Thompson, F. L., and Sloper.)
Sloss, Perfect of See Lambert, Victor, assignor.)
Sloss Perfect of the Maker, Inc. (See Reckard, Henry

L., assienor.).

Slosser, Alger J., assignor to Pompeian Flooring Company, Williamsport, Pa. Plastic composition product and producing articles of manufacture. 1,627,296; May 3.

Many 5.

Slote, Reuben, Mount Vernon, N. Y. Belt buckle.

Slough, Frank M., assignor to The Stromberg-Carlson
Telephone Mfg. Co., Rochester, N. Y. Automatic exchange system. 1,617,869; Feb. 15.

Slowik, Albert, Chicago, Ill. Vehicle bumper. 1,640,222;
Aug. 23.

Aug. 26.
Slowinski. Edward. and J. Zelasko, Bayonne, N. J.
Boiler rack. 1.652.687; Dec. 13.
Slunicko, Julius, and J. A. Nixon, Omaha, Nebr. Pencil
sharpener. 1,635.562; July 12.
Slusher, Frank. (See Cadden, C. C. Slusher, and Evans.)
Sly. W. W., Manufacturing Company, The. (See Boesger,
George A. assicnor.) Small

George A., assignor.)
mall, Adlina, New York, N. Y. Table, 1,634,218;
June 28.
mall, Alfred B., et al. (See House, Samuel G., assignor.)

Small, Arthur E., Onk Park, assignor to Union Metal Products Company, Chicago, Ill. Centering device for car couplers. 1,631,295; June 7.

Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Uncoupling device for car couplers, Indeed on the Indeed of the Indeed of the Indeed of the Indeed of I

Toledo, Ohio. Drawing sneet gusss. 1,00-2,00-1, 2011 of snmly sneets of snmly snmly

Company, Waynessorto, 1...

Mar. 8.

Small, Norman M., assignor to Frick Company, Waynesboro, Pa. Basket for ice-making systems. 1.648,830;
Nov. 8.

Small, Stirley E., Brockton, Mass. Tool. 1,640,256;
Aug. 23.

Aug. 23.

Small, Shirley E., Brockton, Mass. Tool. 1,624,250; Aug. 28.
Small Vivoster J., Seattle, Wash. Door fastener. Small. William E., Brooklyn, N. Y. Reenforced shank. 1,652 420; Dec. 18
Small William J., Port Townsend, Wash., assignor of one-half to L. E. Becker, Portland, Oreg. Cushion tre. 1,638,370; Aug. 9.
Smallbrook, Richard, Kansas City, Mo. Floor drain. 1,648,701; Nov. 8.
Smalley, Edwin L., South Orange, N. J., assignor to Electric Hungare. 1014,521; Drange, assignor to Electric Hungare. 1014,521; Drange, assignor to Electric Heating Apparatus Company, Newark, N. J. Cut-out for electric furnaces. 1,651,972; Dec. 6.
Smallman, William H. M., assignor, by mesne assignments, to J. F. Riley, San Francisco, Calif. Building construction. 1,651,072; Nov. 29.
Smallwood, Horace W. (See Lister, J. F., and Smallwood, Horace W. (See Lister, J. William H. 1,629,091).

struction. 1.651.072; Nov. 29.
Smallwood, Horace W. (See Lister, J. F., and Smallwood.)
Smallwood, Horace W. (See Lister, J. F., and Smallwood.)
Smaltz, John C., Short Hills, N. J. Winch. 1.623,021;
Mar. 29.
Smart, Berjamin M., assignor to General Motors Corporations of the Company of the C

Smidth, F. L., & Co. (See Herbst, Peter, assignor.) Smidth, F. L., & Co. (See Jensen, Robert, assignor.) Smidth, F. L., & Co. (See Lindhard, Povl T., assignor.) Smidth, F. L., & Co. (See Pontoppidan, Carl, assignor.) Smidth, F. L., & Co. (See Vogel-Jorgensen, Mikael, as-

Smittin, F. L., & Co. (See Voget-Jorgensen, Mikael, asSmittin, F. L., & Co. (See Voget-Jorgensen, Mikael, asSmittin, F. Co. (See Voget-Jorgensen, Mikael, asSmittin, F. Co. (See Voget-Jorgensen, Mikael, asSmittin, Lemuel H., Knoxville, Tenn. Control switch for
the A batteries of radio receiving sets. 1,639,539;
Smittin, Orvall, Indianapolis, Ind. Medicine cartridge and
applicator therefor. 1,638,293; June 21.
Smittin, Charles M., Morgan Park, Minn. Marking stake.
1,616,147; Feb. 1.
Smittin, Charles M., Assignor.)
Smitling Charles Ind.
Smitting Charles Ind.
Sm

Smillie, C. M., & Company. (See Cross, Lester H., assignor.)
Smillie, C. M., & Company. (See Cross, Lester H., assignor.)
Smillie, C. M., & Company. (See Cross, Lester H., assignor.)
M. E. Winans, Irvington. N. J.; said Hanana and Winans assignors to said Smily. Calendar bank.
1.633,873; June 28.
Smith, Frank, New York, N. Y. Wire cutting and stripping device. 1.618.734; Feb. 22.
Smith, A. O., Corporation. (See Andren, Birger T., assignor.)
Smith, A. O., Corporation. (See Langstroth, C. B., and Wunder, assignors.)
Smith, A. O., Corporation. (See Mikesh, Martin A., assignor.)
Smith, A. O., Corporation. (See Mikesh, Martin A., assignor.)
Smith, A. O., Corporation. (See Mikesh, Martin A., assignor.)
Smith, A. O., Corporation. (See Palm, Frederick, assignor.)

O., Corporation. (See Palm, Frederick, as-Smith, A. signor.)

O., Corporation, (See Reichold, Ludwig, as-

Smith, A. O., Corporation. (See Reichter, Walter E., assignor.)
Smith, A. O., Corporation. (See Smith, Charles S., assignor.)
O., Corporation. (See Smith, Charles S., assignor.)

signor.)

Smith, A. O., Corporation. (See Smith, Lloyd R., assignor.)

Smith, A. O., Corporation. (See Smith, Reuben S., assignor.)

Smith, A. O., Corporation. (See Stresau, Richard, assignor.)

Smith, A. O., Corporation. (See Stresau, R., and Wood-Massignor.)

Smith, A. O., Corporation. (See Wetmore, Charles P., assignor.)

assignor.) nith, A. O., Corporation. (See Yeomans, Lucien I.,

assignor. Smith. A. O., Corporation. (See Yeomans, Lucien I., assignor.) Smith. A bram E., Huguenot Park, N. Y., assignor to Union Tank Car Company, Jersey City, N. J. Railrond cer. 1,643,629; Oct. 18.
Smith. Abert I., Gee Almasy, L. M., and Smith.) Smith, Albert I., See Almasy, L. M., and Smith.) Smith, Albert K., Midland, Mich., and C. F. Prutton, East Cleveland, Ohio, assignors to The Dow Chemical Company, Midland, Mich. Treating brine, 1,627,068; May 3.

nith Alexander P., Macon, Ga. Basket. 1.642,181: Sept. 13.

Sept. 13.

Smith. Alfred A., New York, N. Y. Wall bracket. Des. 73.947; Nov. 22.

Smith. Alfred H., deceased, Chappaqua, N. Y.; M. E. Smith and E. H. Smith executors, assignors to The Less Carload Lots Company, Willminston, Del. Sec. 19.

Smith. Alfred H., deceased, Chappaqua, N. Y.; M. E. Smith. Alfred H., deceased, Chappaqua, N. Y.; M. E. Smith. Alfred H., and E. H. Smith, executors, New York, N. Y., assignors to The Less Carload Lots Company, Wilmington, Del. Transportation car and container.

1645,259 or H., deceased, Chappaqua, N. Y.; M. E. and E. H. Smith. executors, assignors to The Less Carload Lots Company, Wilmington, Del. Compartment freight car. 1,650,661; Nov. 29.

Smith, Alfred H., Chappaqua, and E. G. Miner, Rechester, Smith Alfred H., Chappaqua, and E. G. Miner, Rechester, Smith, Alfred H., Co. (See Vegler, John J. assignors).

Smith, Alfred H., Co. (See Vegler, John J. assignors).

Smith, Alfred H., Co. (See Vogler, John J., assignor.) Smith, Alfred J., Mount Vernon, N. Y., Display device. 1,639,764; Aug. 23. Smith, Alfred L., Kansas City, Mo. Cook and heat stove. 1,615,900; Feb. 1.

Smith, Alice M., et al., executrices. (See Smith, Christian

Smith, Allan G. (See Dorer, Primus O., assignor.)
Smith, Allan G. London. England. Combination artiSmith, Allan G. London. England. Combination artiSmith. Allan A. 2. to S. Smith & Sons (Motor
Accessories) Limited. London. England. Instrumentboard panel. Des. 73.347; Aug. 23.
Smith, Allen A., Great Notch, N. J. Temperature-controlled fluid-mixing device. 1,620.238; Mar. 8.
Smith, Alva T., Waterbury, Conn. Electric range. Des.
71.851; Jan. 11.

Smith, Alva T., Winsted, assignor to The Fitzgerald Mfg. Company, Torrington, Conn. Curling Iron. 1,630,078; Smith, Amos C., Elberton, Ga. Headband attachment, 1,649,551; Nov. 15.
Smith, Amos C., Elberton, Ga. Headband attachment, 1,624,513; Nov. 15.
Smith, Andrew, Milwaukee, Wis. Clutch control. Smith, Andrew, assignor to Smith Laboratories, Inc., Milwaukee, Wis. Oiling system for internal-combustion engines. 1,653,470; Dec. 20.
Smith, Archibald B. F., Calcutta, British India Door 1,624,612; Smith, Archibald B. F., Calcutta, British India Door 1,644,285; Oct. 4.
Smith, Archibald C., Rochester, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lining trimming machine. 1,618,235; Feb. 22.
Smith, Arthur B., Evanston, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Telephone system. 1,623,320; July 19.
Smith, Arthur B., Evanston, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Substation telephone electric inc., Chicago, Ill. Smith, Arthur B., Evanston, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,649,494; Nov. 15.
Smith, Arthur B., Evanston, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,643,494; Nov. 15.
Smith, Arthur B., Evanston, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,643,494; Nov. 15.
Smith, Arthur B., Evanston, assignor, by mesne assignments, to Automatic Teletone system. 1,643,494; Nov. 15.
Smith, Arthur B., Los Angeles, Calif. Closure for collapsible tubes. 1,650,966; Nov. 29.
Smith, Arthur B., Los Angeles, Calif. Closure for collapsible tubes. 1,650,966; Nov. 29.
Smith, Arthur J., Tappan, assignor to James F. Doolan Manufacturing Corporation, New York, N. Y. Tie Clisp. 1,624,514; Apr. 12.
Smith, Brithur M., Cleveland,

signor.)
Smith Brothers. (See Smith, Delos H., assignor.)
Smith, Bryan H., Berkeley, Calif. Luggage carrier.
1,626,078; May 8.
Smith, Bryce A. Glendale, Calif. Blotter holder.
1,617,351; Feb. 5.
Smith, Burgess W., assignor to The Todd Company. Incorporated, Rochester, N. Y.
Safety paper, 1,627,254; May 3.

May 3.

Smith, Calvin, Somerville, N. J. Lock for gas-stove valves and other valves. 1,633,233; June 21.

Smith, Carl G., Stockholm, Sweden. Machine for splitting of stones or the like. 1,651,973; Dec. 6.

Smith, Carl L., Hood River, Oreg. Orchard ladder. 1,641,906; Sent. 6.

Smith, Carlisle F., Jersey City, assignor to Bournonville-Rotary Valve Motor Company, Hoboken, N. J. Rotary Smith, Carlot G. C. Carlot, N. J. assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Concentrating ores and minerals by flotation. 1,652,060; Dec. 6.

1.682.069; Dec. 6.
Smith, Charles, Providence, R. I. Adjustable supporting standard for the attractive display of floral designs. 1.617.332; Feb. 15.
Smith, Charles, and F. Yorke, Bradford, Brajkand. Twisting machinery. 1.642.218; Sept. 13.
Smith, Charles A. (See Bowers, W. G., and Smith.) Smith, Charles A. (See Gross, C. S., and Smith.) Soc. 2.
Smith, Charles A., Philadelphia, Fa. Pencil. 1.647.059; Smith Charles A., Philadelphia, Fa. Pencil. 1.647.059; Smith, Charles A.

Oct. 25.
Smith, Charles A., assignor to S. A. Smith Manufacturing Company, Brattleboro, Vt. Wheel. 1,649.552;
Nov. 15.
Smith, Charles C. (See MacLaurin, R. D., and Smith, Smith, Charles C., Claremont, N. H., assignor to Snillvan Machinery Company. Safety apparatus. 1,642.182;
Sept. 13.

Smith, Charles E., assignor to The Acme Machinery Company, Cleveland, Ohio, Floating punch for nut machines, 1,652,742; Dec. 13. Smith, Charles E., et al. (See Williamson, Aubrey C., as-

Company, teverand, one. Footing Foliation Footing Foliations. 1.652.742; Dec. 13.

Smith, Charles E., et al. (See Williamson, Aubrey C., assmith, Charles E., et al. (See Williamson, Aubrey C., assmith, Charles E., Brooklyn, assignor to Remington Typewriter Company, Illon, N. Y. Typewriting machine. 1.631.434; June 7.

Smith, Charles E., Brooklyn, assignor to Remington Typewriter Company, Illon, N. Y. Typewriting machine. 1.645.842; Nov. 1.

Smith, Charles E., Edeneva, and J. N. Karp, Farmingdale, Y. Aug. 9.

Smith, Charles F., Forest Park, Ill. Musical instrument. 1.615.961; Feb. I. Nw. York, N. Y., assignor, by mesne and G. H. Frew, Jr. Manufacture of tobacco pipes. 1.628.617; May 10.

Smith, Charles F., and C. Edwards, assignors to Landers, Frary & Clark, New Britain, Conn. Cooker. 1.624.989; Apr. 18.

Mith, Charles F., Los Angeles, Califf. Nail stripper. 1.645.938; Oct. 18.

Smith, Charles G., Medford, assignor by mesne assignments to Raytheon Manufacturing Company, Cambridge, Mass. Production of electrical variations. 1.617.172; Feb. 8.

Smith, Charles G., Medford, assignor, by mesne assignments to Raytheon Manufacturing Company, Cambridge, Mass. Production of electrical variations. 1.617.172; Feb. 8.

Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Production of electrical variations. 1.617.172; Feb. 8.

Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus and method. 1.617.174; Feb. 8.

Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus and method. 1,617,174; Feb. 8.
Smith, Grand Manufacturing Company, Cambridge, Mass. Electrical apparatus. 1,617,175; Feb. 8.
Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus. 1,617,176; Feb. 8.
Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus. 1,617,176; Feb. 8.
Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus. 1,617,179; Feb. 8.
Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus. 1,617,179; Feb. 8.
Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus. 1,617,179; Feb. 8.
Smith, Charles G., Medford, assignor, by mesne assignments, to Raytheon Manufacturing Company, Cambridge, Mass. Electrical apparatus. 1,617,180; Feb. 8.
Smith, Charles M., Cuff. 1,648,918; Nov. 15.
Smith, Charles M., Newton, Kans. Box. 1,646,665; Nov. 15.
Smith, Charles M., Newton, Kans. Box. 1,646,665; Nov. 15.

Oct. 25.
Smith. Charles M., assignor of 51 per cent to F. M.
Compton, Waco, Tex. Vaive guide for flushing tanks.
Smith. Charles R., Chicago, Ill. Hydrocarbon burner.
1,613,060; Jam. 4.
Smith, Charles S., assignor to A. O. Smith Corporation,
Milwaukee, Wis. Rear-axle bousing and gear casing for
antomobiles and manufacturing the same. 1,613,562;

Jan. 4.

Charles S., assignor to A. O. Smith Corporation. vaukee, Wis. Making axle housings. 1,643,225:

Smith, Charles S., assignor to A. O. Smith Corporation. Milwaukee, Wis. Making axie housings. 1,643.225 Sept. 20.
Smith, Charles W., Banner, Okla. Body lifter and carrier. 1,620,298; Marx 8.
Smith, Charles W., Grand Rapids, Mich. Curtain pull. Smith, Christian N., Eigin, Ill., deceased; A. M. and L. I. Smith, exceutrices. Machine for bending printing plates. 1,640,582; Aug. 30.
Smith. Christian N., deceased, Eigin, Ill.; A. M. and L. I. Smith, exceutrices, Machine for bending metallic printing plates. 1,640,582; Aug. 30.
Smith. Christian N., deceased, Eigin, Ill.; A. M. and L. I. Smith, exceutrices, assignors of one-half to W. P. Topping, Eigin, Ill., deceased, Eigin, Ill.; A. M. and L. I. Smith, exceutrices, assignors of one-half to W. P. Topping, Eigin, Ill. Heating and bending metallic printing plates, such as stereotype and electrotype plates. Smith, Christian N., deceased, A. M. and L. I. Smith, exceutrices, assignor of one-half to W. P. Topping, Eligin, Ill. Machine for heating and bending metallic printing plates, such as electrotype and stereotype plates. 1,640,580; Aug. 30.
Smith, Christian N., deceased, A. M. and L. I. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one-half to W. P. Topping, Eligin, Ill. Smith, exceutrices, ussignor of one

Rubber Company, Akron, Ohlo. Treating balatas and guttta-perchas. 1,614,541; Jan. 18.

Smith, Clinton F., Attleboro, and J. B. Sabourin, Norton, Mass. Ornamenting machine. 1,626,014; Apr. 20.

Smith & Crosby. (See Klinke, Oscar, assignor.)

Smith & Crosby. (See Klinke, Oscar, assignor.)

Smith & Daniel A., Chevy Chase, Md., and C. P. Stirling, Washington, D. C., assignors to District of Columbia Paper Manufacturing Company, Washington, D. C., assignors to District of Columbia Paper Manufacturing Company, Washington, D. C., Machine for making decorated paper, 1,622,280; Apr. 5, Machine for making decorated paper, 1,622,281; Apr. 5, Smith, Daniel W., Malone, Tex. Spraying machine. 1,632,047; June 14.

Smith, Daniel W., Malone, Tex. Spraying machine. 1,632,047; June 14.

Smith, Davie Mg. Angeles, Calif. Concrete-form tie the paper, 1,622,047; June 14.

Smith, Davie Mg. Co. (See Duvall, William J., assignor.)

Smith, Davis Mg. Co. (See Duvall, William J., assignor.)

Smith, Denis Ontario, assignor to H. A. Smith, Balbon, Calif. Orchard heater. 1,644,048; Oct. 4.

Smith, Dennis W., Wilmette, assignor to Colborne Manufacturing Company, Chicago, Ill. Ple-making machine. 1,645,027; Oct. 18.

See Cook, T. R., and Smith. Down & See Cook, T. R., and Smith. Dennis W., Wilnette, assignor to Colborne Manufacturing Company, Chicago, Ill. Ple-making machine. 1,619,275; Mar. 1.

Smith, Denum & Company. (See Kohout, Addison S., assignor).

Smith, Drum & Company. (See Konout, Addison S., assignor.)
Smith, Drum & Company. (See Skitt, James H., assignor.)
Smith, Dudley, Oakland, Calif. Bedpan shield. 1,623,602;
Apr. 5.

Apr. 5.

Smith, Duncan C., Rockaway, N. J. Recovery of platinum. 1,649,786; Nov. 15.

Smith, Earl H., Oak Park, assignor of one-half to C. H. Jenkins, Chicago, Ill. Circulating system for internal-combustion engines. 1,646,079; Oct. 18.

Smith, Earle C., assignor to Central Alloy Steel Corporation, Masilion, Ohio, Hot top. 1,654,057; Dec. 27.

Smith, Early B., Tampa, Fla. Float-operated switch. 1,628,003; May 10.

Smith, Edgar J., Cardiff, Wales. Loading hopper. 1,626,122; Apr. 26.

Smith, Early B., Tampa, Fia. Float-operated switch.
1.622,003; May 10.
Smith, Edgar J., Cardiff, Wales. Loading hopper.
1.620,122; Apr. 26.
Smith, Edgar J., Cardiff, Wales. Loading hopper.
1.620,122; Apr. 26.
Smith, Edgar W., Edinburgh, Scotland, assignor to R. W.
Crabrice & Sons, Limited, Leeds, England. Printing machine. 1.645,539; Oct. 18.
Smith, Edgar W., Edinburgh, assignor of one-half to R.
W. Crabrice & Sons, Limited, Water Lane, Leeds, England. Apparatus for printing late news in newspaper-printing machines. 1.654,068; Dec. 27.
Smith. Edward A., Valdosta, Ga. Rosin dipper.
Smith, Edward C., Des Moines, Iowa. Radiorecord.
1.638,277; Aug. 9.
Smith, Edward D., Eric, Pa. Milk-bottle cover and receptacle. 1.630,287; May 31.
Smith, Edward M., Los Angeles, Calif. Perforated pipe
Smith, Edward M., Los Angeles, Calif. Perforated pipe
Smith, Edward M., R. Rice, and J. R. Jackson. Fitchburg, Mass., assignors, by meane assignments, to Federal Addressing Machine Corporation, Euffalo, N. Y.
Sheet-feeding mechanism. 1,646,117; Oct. 18.
Smith, Eggleston, Sloux City, Iowa, assignor, to EgglesSmith, Eggleston, Sloux City, Iowa, assignor, to EgglesSmith, Eggleston, Sloux City, Iowa, assignor, to Eggles-

signor.)

Smith, Ergleston, Sioux City, Iowa, assignor to Eggleston Spiral Drill Corporation, New York, N. Y. Method and apparatus for drilling wells. 1612,889; Jan. 4.

Smith, Eggleston, Sioux City, Iowa, assignor to Eggleston, Spiral Corporation, 1612,880; Jan. 4.

Smith, Elins A. C., assignor to Guggenheim, Brothers, New York, N. Y. Metallurgy of tin, 1,620,580; Mar. 8.

Smith, Elmer H., Minneapolis, Minn. Making oxyfuel torch tips.

Smith, Elmer H., Minneapolis, Minn. Making torch tips.

Smith, Elmer H., Minneapolis, Minn. Making torch tips.

1.644.157; Oct. 4.

Smith. Elmer H., Minneapolis, Minn.

and process of making. 1.646.602; Oct. 25.

Smith, Elmer H., Minneapolis, Minn.

Making torch tips.

1.601.232; Nov. 29.

P. B., Fuller, assignors to Package Machinery Company, Springfield, Mass. Wrappling machine. 1.653.830; Dec. 27.

Smith, Elmer L., and A. B. Phelon, assignors to Package Machinery Company, Springfield, Mass. Stack forming and feeding mechanism. 1.645.460; Oct. 11.

Smith, Elmer H., et al., executors. (See Smith, Alfred H.)

Smith, Eric D., Chicago, and W. H. Perkine, Oak Park, assignors, ly unsue a signments, to Authorite Electrolistics of the Chicago and Chic

Smith, Ermy R., Maplewood, N. J., assignor, by mesne assignments, to Western Eletric Company, Incorporated, Telephone-exchange system 1,629,007; May 17.

Smith, Ermy R., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.

Telephone system. 1,629,008; May 17.

Smith, Ernest W. N. Ascramento, Calif. Lock for hotelguest-room doors. 1,642,313; Sept. 13.

Smith, Ernest W. New York, N. Y. Game device.

Smith, Ernest W. New York, N. Y. Game device.

Smith, Street W., and T. C. Finlayson, assignors of onethird to Woodail-Duckham Limited, London, England.

Removal of sulphureted hydrogen from gas and apparatus therefor. 1,628,477; May 10.

Smith, Ethel D., Vidalia, Ga. Deflecting shade for headlights. 1,638,967; Aug. 16.

Smith, Ethel G., et al. (See Dougherty, Charles T.,
assignor.)

lights. 1,638,967; Aug. 16.

Smith, Ethel G., et al. (See Dougherty, Charles T.,
assignor.)

M. and S. B., Chicago, Ill. Ice cycle.
1,632,692; July 12.

Smith, Eugene W., New York, N. Y. Combination level.
1,623,634; Apr. 12.

Smith, Evander A., and Edward R. Frinch Houston, Tex.

Smith, Evander A., and Edward R. Frinch Houston, Tex.

Smith, Evander A., and Edward R. Frinch Houston, Tex.

Ogden. Mountainville, N. Y. Control mechanism for

doors. 1,646,460; Oct. 25.

Smith, F. H., Manufacturing Company. (See Sasseman,
10xid C., assignor).

Smith, Francis J., Gary, Ind. Spring. 1,628,561;

May 10.

Smith, Francis X., New York, N. Y.

Smith, Francis X., New York, N. S.

Smith, Francis X., New York, N. T.

Smith, Frank A., G. Kerrison, R. S.

Smith, Frank A., Union City, Conn. Tire chair.

Smith, Frank A., Union City, Conn. Tre chain, 1631.296; June J. Foldalb bedspring. 1,620.317; May 17.
Smith, Frank A., Union City, Conn. Tre chain, 1.631.296; June J. Conn. Tree chain, 1.631.296; June J. Conn. Tree chain, 1.631.296; June J. Conn. Tree chain, 1.645.636; Nov. 1.
Smith, Frank B., Scottdale, Pa. Roller for belt conveyers and making the same. 1,648,026; Nov. 1.
Smith, Frank H., and C. L. Sheely, Eric, Kans. Golf-course maintainer. 1,647.586; Nov. 1.
Smith, Frank H., Cleveland, Ohio, assignor to South-steam Jahan. 1,633.440; Aug. 167, Fhiladelphia, Pa. Steam platen. 1,633.440; Aug. 167, Fhiladelphia, Pa. Smith, Frank In. (See Clark, J., Smith, and Meese.)
Smith, Frank In. S. Brooklyn, N. Y., assignor to Products Protection Corporation. Art and apparatus for welding transformer tanks. 1,613,661; Jan. 4.
Smith, Frank In. S., Brooklyn, assignor to The Products Protection Corporation, New York, N. Y. X-ray-beam generator. 1,647.477; Nov. 1.
Smith, Frank In. S., Brooklyn, assignor to The Products Protection Corporation, New York, N. Y. X-ray-beam generator of high power. 1,647.479; Nov. 1.
Smith, Frank In. S., Brooklyn, assignor to The Products Protection Corporation, New York, N. Y. X-ray-beam generator of high power. 1,647.479; Nov. 1.
Smith, Frank In. S., Brooklyn, assignor to The Products Protection Corporation, New York, N. Y. X-ray-beam generator of high power. 1,647.479; Nov. 1.
Smith, Franklin S., Brooklyn, assignor to The Products Protection Corporation, New York, N. Y. X-ray-beam generator of high power of the Products Protection Corporation, New York, N. Y. X-ray-beam generator of high power of the Products Protection Corporation, New York, N. Y. X-ray-beam gene

brake. 1,625,103; Apr. 19.
Smith, Garrett M., Fort Worth, Tex. Wrench. 1,651,162;
Nov. 29.
Smith, George, Richmond, Va. Pan-preparing mechanism. 1,615,727; Jan. 25.
1,615,727; Jan. 25.
1,615,727; Jan. 25.
1,615,727; Jan. 25.
Smith, George, Richmond, Va. Preparing pans for balding. 1,616,007; Feb. 1.
Smith, George A., Elichmond, Va. Pan-treating apparatus. 1,639,540; Aug. 16.
Smith, George A., Baltimore, Md., assignor to Eastman Kodak Company. Rochester. N. Y. Photographic-printing machine. 1,639,5104; Smith, Louis J., and G. B. M.)
Smith, George E., Jenkintown, assignor to American Engineering Company. Philadelphia, Pa. Control mechanism. 1,638,786; Aug. 9.
Smith, George E., Toledo, Ohic. Bed lamp. 1,654,148; Dec. 27.
Smith, George I., Los Angeles, Calif. Mold. 1,634,047; Smith, George I., Los Angeles, Calif. Mold. 1,634,047; Smith, George I., Los Angeles, Calif. Mold. 1,642,564; Sept. 13.
Smith, George M. (See Forrest, A., and Smith, George M. (See Forrest, A.) and Smith, Intensifier for electric currents. 1,623,982; Apr. 12.

Smith, George M., Milwaukee, Wis. Swing. 1,647,587;

Smith, George M., Milwubacc, vis.
Nov. 1.
Smith, George O., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y.
Alloy, 1,633,343; July B. Hitsburgh, Pa. Wringer-roll guard. 1,643,475; Kept. 27.
Smith, Guy A., and E. L. Evans, Kansas City, Knns.
Safety signal, 1,618,681; Feb. 22.
Smith, Guy W., Detroit, Mich. Mud puller for automobiles, 1,635,645; July 12.
Smith, H. Leslie, et al. (See Wilson, John H., as-signor.)

Smith, Guy W., Defroit, Mich. Mud puller for automobiles. 1,635,645; July 12.

Smith, H. Lesile, et al. (See Wilson, John H., assignor.)

Smith, N. (See Roof, Frederick, assignor.)

Smith). Harold A., Passaic, assignor to The Hamersley
Manufacturing Company, Garifield, N. J. Paper and
making same. 1,644,451; Oct. 4.

Smith. Harold J., Chicago, Ill. Machine for handling,
cooling, and drying materials. 1,648,330; Nov. 8.

Smith. Harrison A., Neenah, Wis, assignor, by mesne assignted, the state of the state of

Nov. 22.
Smith, Harry B., assignor to Lightship Cloth Board Corporation, Brooklyn, N. Y. Paper-ware manufacture.
1,620,239; Mar. 8.
Smith, Harry B., Brooklyn, N. Y., assignor, by mesne assignments, to Hoague-Sprague Corporation, Lynn, Mass. Producing boxes and box blanks. 1,627,811;
May 10.
Smith, Harry B., Brooklyn, N. Y., assignor, by mesne assignments, to Hoague-Sprague Corporation, Lynn, Mass. Producing boxes and box blanks. 1,627,812;
May 10.

Mily 10.

Smith, Harry B., assignor to Lightship Cloth Board Corporation, Brooklyn, N. Y. Producing cloth boards. Smith, Harry B., assignor to Lightship Cloth Board Corporation, Brooklyn, N. Y. Making paper structures. 1,630,050; Nov. 22.

Smith, Harry B., assignor to X. Making paper stream poration, Brooklyn N. Y. Making paper stream poration, Brooklyn N. Y. Cloth board, winder, or similar article. 1,650,051; Nov. 22.

Smith, Harry B., assignor to Lightshy's Cloth Board Corporation, Brooklyn, N. Y., Cloth board, winder, or similar article. 1,650,051; Nov. 22.

Smith, Harry B., New York, N. Y., assignor, by mesne assignments to thoque-by-pague Corporation, Lynn, Mass. Box. 1,650,052; Nov. 22.

Smith, Harry B., assignor to Bridgman & Rubin, Inc., New York, N. Mechanism and method for strip-covering boxes. 1,651,233; Nov. 29.

Smith, Harry C., Los Angeles, Calif. Drink dispenser. 1,639,619; Aug. 16.

Smith, Harry F., assignor to The Gas Research Committee Committe

Should structure to the Gas Research Company, Dayton, Ohio. Apparatus for effecting heat transfer. 1.617,609; Feb. 15. Smith, Harry F. assignor to The Gas Research Company, Dayton, Ohio. Gas-generating apparatus. 1,619,441; Mar. 1.

Smith, Harry F., assignor to The Gas Research Company, Dayton, Onlo. Heating apparatus. 1,639,414; Aug. 16.
Smith, Harry F., assignor to The Gas Research Company, Dayton, Onlo. Heating apparatus. 1,639,141; Aug. 16.
Smith, Harry F., assignor to The Gas Research Company, Dayton, Onlo. Store. 1,639,115; Aug. 16.
Smith, Harry G., Omaha, Nebr. Wind indicator for night aviation. 1,645,647; Oct. 4.
Smith, Harry G., Comaha, Nebr. Wind indicator for light aviation. 1,645,647; Oct. 4.
Smith, Harry J., Lakewood, Obio. Speed changer. 1,629,180; May 17.
Smith, Harry J., and B. A., Lakewood, assignors to Hill Clutch Company, Cleveland, Ohlo. Self-olling bearing. 1,653,377; Dec. 20.
Smith, Harry J., and B. A., Lakewood, assignors to Hill Clutch Company, Cleveland, Ohlo. Self-olling bearing. 1,633,377; Dec. 20.
Smith, Harry M., Valley, Nebr. Stream deflector and river-bank protector. 1,627,623; May 10.
Smith, Harry M., Valley, Nebr. Stream deflector and river-bank protector. 1,627,623; May 10.
Smith, Harry M., Valley, Nebr. Stream deflector and river-bank protector. 1,627,623; May 10.
Smith, Henry W., Valley, Nebr. Stream deflector and river-bank protector. 1,627,623; May 10.
Smith, Henry M., Valley, Nebr. Stream deflector and river-bank protector. 1,627,623; May 10.
Smith, Henry, Chicago, Ill. Control for curtain and awning rollers. 1,630,770; May 31.
Smith, Henry, C., St. Mayrs, Ohio. Device for supplying Smith, Henry R., Dixon, Ill., assignor to J. I. Case Threshing Machine Company, Racine, Wis. Plow-lift mechanism. 1,643,644; Sept. 27.
Smith, Henry M., Schoth, Hillsborn, Oreg. Combined toy and exerciser. 1,048,77 (See Patterson, Luther, assignor.) Smith, Henward W., Ellwood City, Pa. Pipe-threading die. 1,625,830; Apr. 26.

Smith, Hubert C., St. Louis, Mo. Mattress-filling machine. 1,026,434 : Apr. 26.

11,026,434 : Apr. 26.

11,026,434 : Apr. 26.

11,026,434 : Apr. 26.

11,026,434 : Apr. 26.

11,026,435 : Apr. 26.

11,026,539 : Apr. 26.

12,026,539 : Apr. 26.

12,026,539 : Apr. 26.

12,026,539 : Apr. 26.

12,026,539

1,630,975; May 31.

Smith, Irving R., assignor to Sterling Wheelbarrow Company, Milwaukee, Wis. Wheelbarrow, 1,645,666; Oct. 18.

Smith, J. Clifford, Belidower, Calif. Brake-operating Smith, J. Clifford, Belidower, Calif. Brake-operating Company, New York, N. 2.

Smith, J. Clifford, Belidower, Calif. Charles S., assignor, Smith, Jack R. C., Victoria, British Columbia, Canada. Valve-core extractor, 1,630,976; May 31.

Smith, James E., Swern, C. 1,630,976; May 31.

Smith, James D., Overall, Tenn. Game. 1,620,399;

Smith, James T., Newark, N. J. Method and machine for coating leather and the like. 1,625,484; Apr. 19.

Smith, James T., Newark, N. J. Method and machine for coating leather and the like. 1,625,484; Apr. 19.

Smith, Jesse A. B., Stamford Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,613,549; Jan. 25.

Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,616,555; Feb. 8.

Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,616,555; Feb. 8.

Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,623,445; Apr. 5.

Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,623,445; Apr. 5.

Feb. 15.
Smith, John D., and C. R. Phillips, assignors of one-third to W. F. Lee and T. Jardine, Richmond, Va. Sealing machine, 1.616.671; Feb. 8.
Smith, John B., East Grange, assignor to The Lite-Rays Coaker Cornotation, Plainfield, N. J. Electric cooker, 1.630.237; May 24,
Smith, John H. assignor, by mesne assignments to The Edipse Interchangenhic Counterbore Company, Detroit, Mich. 1, Reaming and counterboring tool. Re16.817; Dec. 13.

Smith, John H., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,621,698; Mar. 15.
Smith, John H., assignor to The Wesson Sales Company, Detroit, Mich. Tool holder. 1,629,547; May 24.
Smith, John P., (See Tuttle, J. C., Smith, and Wiener.) Smith, John P., Nov. 1.
Smith, John P., Nov. Haven, Conn. Gate. 1,647,549; Nov. 1.
Smith, John W., Philadelphia, Pa. Device for vaporizing unatomized fuel. 1,629,975; May 24.
Smith, John W., Renovo, Pa. Car coupler. 1,645,459; Cot. 1,040, Market Company, Philadelphia, Pa. Koll for making fanged. Maker deliphia, Pa. Koll for making fanged.

Smith, John W., Renovo, Pa. Car coupler. 1,645,459; Oct. 11.

Smith, John W., assignor to Budd Wheel Company, Philadelphia, Pa. Roll for making tapered disks. Roll for making tapered disks. Smith, Joseph A. Attleboro, Mass. Nursing nipple. 1,653,787; Occ. 27.

Smith, Joseph B., Sait Lake City, Utah. Brooder stove. 1,642,565; Sept. 13.

Smith, Joseph B., Fort Wayne, Ind. Railway-rail anchor. Smith, Joseph I., Ogden, Utah. Combined case and table. 1,614,261; Jan. 11.

Smith, Joseph I., Ogden, Utah. Combined camp box and bench. 1,628,072; May 10.

Smith, Joseph I., Ogden, Utah. Combined camp box and bench. 1,628,072; May 10.

Marysville, Mch. Rail steep 1,643,321; Sept. 27.

Marysville, Mch. Rail steep 1,643,321; Sept. 27.

Smith, Joseph M., Gee Moore, M. F. and Smith.) Smith, Joseph M., Co. (See Mulligan, Leonard A., assignors, Joseph M., Co. (See Mulligan, Leonard A., assignors, Sept. 7, Peterson, N. J. Molding, device.

Smith, Joseph N., Co. Signor)
Smith, Joseph T., Paterson, N. J. Molding device, 1,635,232; Dec. 20.
Smith, Jules A., Pine Orchard, Conn. Ash tray. Des. 73 984; Nov. 29.
Smith, Julius B., assignor to The American Mills Co., Waterbury, Conn. Covered elastic thread or cord.

Smith, L. C., & Corona Typewriters Inc. (See Armstrong, Fank H., assignor to The American Mills Co., Waterbury, Conn. Covered elastic thread or cord. 1,627,255; May 3, Smith, Kenneth L. Lansing, Mich. Building block. 1,652,748; Dec. 13. Smith, L. C., & Bros. Typewriter, Inc. (See Gabrielson, Smith, L. C., & Corona Typewriters Inc. (See Armstrong, Frank H., assignor.) Smith, L. C., & Corona Typewriters, Inc. (See Armstrong, Frank H., assignor.) Smith, Landerstories, Inc. (See Smith, Andrew, assignor.) Smith, Lawrence F., assignor of one-eighth to L. P. Larkle and one-eighth to A. Faulkner, C. C. Dale, and A. Mercer, Hazard, Ky. Coal care. 1,627,265; May 3. Smith, Lee Company, The. (See Chaplin, Walter L., assignor) with Smith, Lee Company, The. (See Chaplin, Walter L., assignor)

signor.)

Smith. Loyd R. assignor to A. O. Smith Corporation, Milwauke, Wis. Surgical syringe. 1,624,990; Apr. 19.

Smith, Leonard, Basignor to British Dyestuffs Corporation Limited, Manchester, England, Discharge effect on lose, 1,651,639; Dec. 6.

Smith, Leonard, Bastrop, La, assignor to M. A. Mummert, Chicago, Ill. Grain-door table, 1,652,802; Dec. 18.

Smith, Leonard, Bastrop, La, assignor to M. A. Mummert, Chicago, Ill. Grain-door table, 1,652,802; Dec. 18.

Smith, Loyd R., assignor to A. O. Smith Corporation, Milwauke, Wis. Flexible automobile frame and tubular cross bar therefor, 1,630,036; May 24.

Smith, Loyd R., assignor to A. O. Smith Corporation, Milwauke, Wis. Flexible automobile frame and tubular cross bar therefor, 1,630,036; May 24.

Smith, Louis A., Auburn, N. Y. Confection-coating ma-Smith, Louis A., Auburn, N. Y. Confection-coating ma-Smith, Louis A., Auburn, N. Y. Confection-coating ma-Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Danger signal for firearms, 1,624,876; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator, 1,624,878; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator, 1,624,878; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator, 1,624,878; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator, 1,624,878; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator, 1,624,878; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator, 1,624,878; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator in 1,624,878; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator in 1,624,878; Apr. 12.

Smith, Louis P., assignor to Ithaca Gun Company, Ithaca, N. Y. Hammer position indicator in 1,624,878; Apr. 12.

Smith, Louis P., ass

H., assignor.). Casper, Wvo., assignor of one-half to C. E. Ross, Fort Worth, Tex. Boller-control device. 1.629.055; May 17.
Smith, Marlon R., Portland, Oreg. Toy dog. Des. 72.193; Mar. 8.

Smith Mark E. assigner to Union Iron Works, Eric, Pa. Holp 1, 164,648; Oct. 25.
Smith Mary P. (See Hind, William M., assignor.)
Smith Markins, San Francisco, Calif. Cigar or cigarette holder. 1,616,396; Feb. 1.
Smith, Mande E., et al., executors. (See Smith, Alfred

Smith, Maurice R. (See Wilford, Edward B., assignor.) Smith, Mildred A., Albany, N. Y. Chemical heating pad. 1,620,581; Mar. 8. Smith, Myrl D., New Orleans, La. Safety stop signal. 1,633,441; Dec. 20.

Smith, Myrtle . E., Glenwood, Wash, Cap. 1,620,400;

Smith, Myrtle, E., Glenwood, Wash. Cap. 1,620,400;
Mar. 8.

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Smith. Percy, Glenwood, Wash. Support. 1,615,728; Jan. 25.
Smith. Percy C., Chicago, Ill. Coin counter and stacker. Smith. Percy C., assignor to J. F. Meyer, Chicago, Ill. Amusement device. 1,630,098; May 24.
Smith. Percy C., assignor to J. F. Meyer, Chicago, Ill. Coin chute. 1,633,234; June 21.
Smith, Philip. 1. (See Reichel, Alvin S., assignor.) S. 1,613,416; Jan. 4., Philadelphia, Pa. Belt loop. 1,613,416; Jan. 4., Philadelphia, Pa. Belt loop. 1,613,416; Jan. 4., Philadelphia, Pa. Belt loop. Smith. Ralph B., Endicott, N. Y. Adhesive paste. 1,640,136; Aug. 23.
Smith, Ralph B. (See Gay, J. C. Smith. and Quirk.) Smith. Ralph B. (See Gay, J. C. Smith. and Quirk.) Smith. Ralph W., Tekon, Wash. Assembling tool. 1,613,655; Feb. 22.
Smith. Ralph W., Tekon, Wash. Assembling tool. 1,613,655; Feb. 22.
Smith. Ralph W., Tekon, Wash. Assembling tool. 1,618,655; Feb. 22.
Smith. Raymond C. (See Springfield, Garland P., assignor, Santha Raym

Smith, Ray M., New York, N. Y., assignor to Union Tank Car Company, Jersey City, N. J. Dome for tanks and Car Company, Jersey City, N. J. Dome for tanks and Car Company, Jersey City, N. J. Dome for tanks and Smith, Rensselaer J., South Bethlehem, assignor.)

Smith, Rensselaer J., South Bethlehem, assignor to The Ratles-Lite Co., Albany, N. Y. Flash light. 1,624,686; Smith, Rebben S., assignor to A. O. Smith Corporation, Milwankee, Wis. Apparatus for forming metal elements. 1,628,761; May 17.

Smith, Richmond W., Walpole, Mass. Shutter control for cameras. 1,631,365; June 7.

Smith, Rittenhouse M., Mobile, Ala. Filing device. 1,626,884; May 3.

Smith, Rittenhouse M., Mobile, Ala. Filing device. 1,626,886; May 3.

Smith, Rittenhouse M., Mobile, Ala. Filing device and card attachment. 1,626,885; May 3.

Smith, Rittenhouse M., Mobile, Ala. Filing device. 1,626,886; May 3.

Smith, Robert. (See Gifford, A. M., and Smith.)

Smith, Robert. (See Gifford, A. M., and Smith.)

Smith, Robert. (See Gifford, A. M., and Smith.)

Smith, Robert. M. Moon, Ga., assignor to Smith & Serrell, Newark, N. J. Clutch. 1,615,814; Jan. 25.

Smith, Robert B., Macon, Ga., assignor to fone-half to Holley and the service of the servic

Smith, Samuel B. (See Smith, Ethel M. and S. B.) Smith, Samuel T., Los Angeles, Calif. Pipe tongs. 1,658,371; Aug. 9. Smith and Serrell. (See Serrell, John J., assignor.) Smith & Serrell. (See Smith, Robert A., assignor.) Smith Separator Company. (See Waters, Millard F., as-

Smith & Serrell. (See Smith Robert A., assignor.)
smith & Serrell. (See Smith Robert A., assignor.)
smith Seymour L., Brooklyn, N. Y. Controlling switch.
1.653.517; Dec. 20.
Smith, Sidney B., Chelmsford, England, assignor to Radio Corporation of America. Thermionic amplifier.
1.622.851; Mar. 2. Sognor, and G. M. Wright, Chester1.624.851; Mar. 2. Sognor, and G. M. Wright, Chester1.624.851; Mar. 2. Sognor, and G. M. Wright, Chester1.625.851; Mar. 2. Sognor, and G. M. Wright, Chester1.625.851; Mar. 2. Sognor, and G. M. Wright, Chester1.626.851; Mar. 2. Sognor, and G. M. Wright, Chester1.626.851; Mar. 2. Sognor, and G. M. Wright, Chester1.627.851; Mar. 2. Sognor, and G. M. Wright, Chester1.628.851; Mar. 2. Sognor, Mar. 2. Sognor

assignor.) Smith, T. L., Company, The. (See Rybeck, Adolph W., assignor.)

Smith, T. L. Company, The. (See Rybeck, Adolph W., assignor.). Ir. (See Meifernan, John E. assignor.) Smith, Thomas J., Ssee Meifeman, John E. assignor.) Smith, Thomas J., Ssignor to The Firestone Tire and Rubber Company, Akron, Ohio. Apparatus for unwrapping and stripping inner tubes. I.642,566, Sept. 13.
Smith, Thomas J., Cleburne, Tex. Three-row stalk cutter. 1,650,472; Nov. 22.
Smith, Thomas J., Cleburne, Tex. Three-row stalk cutter. 1,650,472; Nov. 22.
Smith, Thomas J., Cleburne, Tex. Three-row stalk cutter. 1,650,473; Nov. 22.
Smith, Thomas T. Gedington, and J. H. Dowell, assignors to Adam Hilger, Limited, London, England. Method and apparatus for testing and inishing optical elements. 1,652,233; Dec. 20.
Smith, Thomas, Teddington, and J. H. Dowell, assignors to Adam Hilger, Limited, London, England. Testing to Adam Hilger, Limited, London, England. Testing 1.630,453; May 31.
Smith, Ulysses G., et al. (See Larsh, John M., assignor.) Smith, W. W., et al. (See Lorsh John M., assignor.) Smith, W. W., et al. (See Doughterty, Charles T., assignor.)

signor.)

Signor.)
Smith, Waldorf A., assignor to Carter Radio Company,
Chicago, Ill. Variable high resistance and making
same. 1,648,990; Nov. 22.
Smith, Walter H., Tulsa, Okla. Sign. 1,637,626; Aug. 2.
Smith, Walter H., assignor to Miller Saw-Trimmer Company, Pittsburgh, Pa. Form-cleaning device. 1,616,556;
Feb. 8.

Smith. Walter H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective system for motors. 1,687,356; Aug. 2.
Smith. Walter L., New York, N. Y. Golf club. 1,639,864;

Aug. 23. ith. Walter M. C., et al. (See Erb, Lanious P., Smith.

assignor.)
Smith Walter S., Columbus, Ohio, Weight holder for secties. Des. 74,077; Dec. 13.
Smith Walter S., Blizabeth, N. J., assignor to Willye Corporation, New York, N. Y. Automobile door and securing panels thereto. 1,643,295; Sept. 27.
Smith, Ward S., Long Beach, Calif. Concrete form. 1,647,202; Nov. 1.
Smith, Warren S., Bangor, Pa. Magnetically-operated signal. 1,645,628; Oct. 18.
Smith, Washington S. (See Cleage, T. D., Smith, and Murray.)

Murray.)

Smith, Wesley T., Ranger, Tex. Muffler. 1,614,633; Jan. 18.

Jan. 18.

Smith. William, Yonkers, N. Y. Diagnostic analysis,
1.622 887; Mar. 29.

Smith. William A., Athens, Pa., assignor to IngersollRand Company, Jersey City, N. J. Rock drill.
1.616.470; Feb. 8.

Smith. William A., Clertsen, N. Y. Preparing food subSmith. William A., Clertsen, N. Y. Preparing food subSmith. William A. Sayre, York, N. Y., assignor to
Ingersoll-Rand Company, Jersey City, N. J. Valve for
pneumatic tool. 1.636.651; July 19.

Smith. William A., Sayre, Pa., assignor to IngersollRand Company, Jersey City, N. J. Water and air tube
connection. 1.653.071; Dec. 20.

Smith. William B., assignor to Southern Can Company,
Hattimore, Md. Can-heading machine. 1,617,505;
Feb. 18.

Smith, William B., Hamilton Parish, Bermuda, assignor to H. H. Whetzel, Ithaca, N. Y. Apparatus for application of nowdered disinfectants. I, 363,331; July 19. Smith, William C. Ger Pieratt, James S., assignor; J. G. S. William C., Cheago, III. Roller-shade bracket. 1,650,744; Nov. 29. Smith, William D., Chicago, III. Roller-shade bracket. 1,650,744; Nov. 29. Lumber Bridge, N. C. Combined Smith, William D., Lumber Bridge, N. C. Combined Government and the People of the United States of America. Limit switch. 1,641,647; Sept. 6. Smith, William E., See Reynolds, Charles L., assignor of America. Limit switch. 1,641,647; Sept. 6. Smith, William E., assignor of one-half to H. A. Schatz, Foughkeepsie, N. Y. Agricultural implement. 1,634,728; July 5. Smith, William F., Brooklyn, assignor of one-half to H. A. Schatz, Poughkeepsie, N. Y. Agricultural implement. 1,634,728; July 5. Smith, William F., Brooklyn, N. Y., assignor of one-half to H. A. Schatz, Poughkeepsie, N. Y. Tractor. 1,640,621; Aug. 30. Smith, William F., Brooklyn, N. Y., assignor of one-half to H. A. Schatz, Poughkeepsie, N. Y. Tractor. 1,640,621; Aug. 30. Smith, William F., assignor of one-half to H. A. Schatz, Poughkeepsie, N. Y. Tractor. 1,640,621; Aug. 30. Smith, William F., assignor of one-half to H. A. Schatz, Poughkeepsie, N. Y. Internal-combustion engine. Smith, William F., assignor of one-half to H. A. Schatz, Poughkeepsie, N. Y. Internal-combustion engine. Smith, William F., Schada Calif. Tank-filling means.

Smith, William Poughkeepsie, 1.640.622: Au

Smith, William F., Oakland, Calif. Tank-filling means.
1,640,622; Aug. 30.
Smith, William H., Oakland, Calif. Tank-filling means.
Smith, William H., Detroit, assignor to Ford Motor Company, Highland Park, Mich. Mold for casting metals.
1,621,472; Mar. 15.
Smith, William J., assignor to R. J. McCaffrey, Philadelphila, Pa. Pump. 1,520,484; Apr. 26.
Smith, William J., assignor to R. J. McCaffrey, Philadelphila, Pa. Pump. 1,520,484; Apr. 26.
Smith, William J., assignor to R. J. McCaffrey, Wills, Smith, Philam J., assignor to R. J. McCaffrey, Wills, Smith, Philam J., assignor to R. J. McCaffrey, Wills, Smith, Philam J., assignor to R. J. McCaffrey, Wills, Smith, Philam J., assignor to R. J. McCaffrey, Philadelphila, Philam J., assignor to R. J. McCaffrey, Philadelphilam J. McCaffrey, Philadelphilam J. A. S. Power senerator.

School McCaffrey, Philadelphilam J. S. Power senerator.

phila ra.
Smith, William L., Jr., Susage.
Nashville, Tenn. Stop motion for knitting.
1.637,662; Aug. 2.
Smith, William M., Turtle Creek, Pa. Power generator.
1.631,669; May 31.
Smith, William M., Bemidji, Minn. Sprayer. 1,632,515;
Smith, William M., Bemidji, Minn. Condiment holder. 1.631.001.
Smith, William M., Bemidji, Minn.
June 14.
Smith, William P., Tucson, Ariz. Condiment holder.
1.646.322; Oct. 18.
Smith, William R., Hillsboro, Tex. Garter. 1.643.183:

Suith. William P., Tucson, Ariz. Condiment holder. 1,646,322; Oct. 18.

Smith. William R., Hillsboro, Tex. Garter. 1,643,182; Sept. 20.

Smith, William B., Cambridge, Mass. Signaling system for elevations. 1,635,586; July 12.

Smith, William W. (See Woodin. C. K., and Smith.)

Smith, William W. (See Woodin. C. K., and Smith.)

1,641,996; Sept. 13.

Smith, Willoughby S., Benchams, N-poppleford, and H. J. Garnett, Lymne, Solefields, Sevenoaks, England. Magnetic alloy. 1,622,008; Mar. 22.

Smith, Willoughby S., Newton Poppleford, and A. D. Shuter, Harrow-on-the-Hill, England. Manufacture of Smith, Willoughby S., Newton Poppleford, and A. D. Smith, Willoughby S., N-poppleford, and H. J. Garnett, Sevenoaks, England. Manufacture of cables loaded with alloys of high-magnetic permeability. 1,635,443; July 12.

Smith, Wilmar T., Baltimore, Md. Artificial teeth. Smith, Wilmar T., Baltimore, Md. Artificial teeth. Charles 1,647,203; Nov. 1.

Smith, Young L., Kuttawa, Ky. Tool-grinding machine. 1,647,203; Nov. 1.

Smith, Young L., Kuttawa, Ky. Tool-grinding machine. 1,647,203; Nov. 1.

Smither, T. L., Machine Company. (See Novick, A., and Fish, assignors.)

Smither, Vernon L., Akron. Ohio. Dust cap for tire valves. 1,628,440; May 10.

Smither, Vernon L., Akron. Ohio. Dust cap for tire valves. 1,628,440; May 10.

Smither, Harrow-remember of the popular of the valves. 1,628,440; May 10.

Smither, Marvin, Lawreneeville, Va. Meter. 1,623,562; Apr. 5

Smithfield, Emil A. (See Noelting, W. H., Smithfield, and

Noteting.; Sons Company. (See Knowlton, Eugene W., assignor.) Smitmans, John A., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Shear. 1,634,275: July 5.

Smitt, 10. Smitt, 10. Smitt, 10. Smitt, 10. Smitt, 10. Smitt, 1.653, 740; Dec. 27. Smits, Theodorus, The Hague, Netherlands. Packing device for use with pistons and piston valves. 1,622.888; Mar. 29.

Mar. 29.

Smoak, George F. (See Smoak, Joseph W. and G. F.)

Smoak, Joseph W. and G. F., Meggett, S. C. Knockdown barrel. 1.648, 786; Nov. S.

Smock, Elizabeth M. Asheville, N. C. Automobile driverheel protector. 1,620,401; Mar. S.

Smock, William C., Burrows, Ind. Indicator and automatic water supply for storage batteries. 1,618,894;

Smokador Manufacturing Co. (See Fleming, Robert G.,

assignor)
Smokeless Oil Burner Company. (See Ryder, P. II., and Moore, assignors.)
Smolezyk, Eduard, Blesdorf-Sud, near Berlin, Germany, Imparting to drying means a large superficial area. 1,633,969; June 28.

Smolens, Abraham M., Brooklyn, N. Y. Figure wheeled toy Des. 72,194; Mar. S. S. Smot. Charles H., Maplewood, N. J. Centrifugal governor. 1,616,512; Feb. 8. Smoot. Charles H., Maplewood, N. J. Flow regulator. 1,620,240; Mar. 8. Smoot. Charles H., Maplewood, N. J. Furance regulations. 1,630,671; May 31. Smoot. Charles H., Maplewood, N. J. Furance regulations. 1,630,671; May 32, May 32, May 33, May 34, May

Smyth Manufacturing Company. (See Blachof, Ulrich, assignor.)
Smythe, Thomas A., Faterson, N. J. Gasoline strainer for automobiles. 1,638,066; Aug. 9.
Snadecki, William J., Westover, Va., assignor to R. Crane. Rudder for boats. 1,638,675; Aug. 23.
Snader, Earl E., Webster Groves, Mo. Automatic temperature actuated refrigerant-regulating valve. 1,626,874; July 26.
Snapp. Rair 1,146,466; Oct. 25.
Snap-O-Stat Company. (See Schnepp, Louis W., assignor.)

Sapons 1,040,25, Oct. 26. Schnepp, Louis W., assapons and Company. (See Schnepp, Louis W., assapons and Company. (See Schnepp, Louis W., assapons and Sapons and Sapo

Mar. 40.
Snavely, John C., Covina, Calif. Furrow tapper.
1,649,622; Nov. 15.
Snead & Company. (See Macdonald, Angus S., assignor.)
Snee, Michael, Los Angeles, Calif. Ball-bearing rall.
1,652,461; Dec. 13.
Snell, Charles B., Fort Plain, N. Y. Bloomers. 1,652,914;
Dec. 13.

Snell, Charles E., Fort Plain, N. 1. Discourts showing fine. 13.
Snell, Commodore P., St. Petersburg, Fla. Curbing section. Des. 72,289; Mar. 22.
Snell, James C., Oak Park, assignor to Premier Electric Company, Chicago, Ill. Rheostat. 1,638,599; Aug. 9.
Snell, Lyle K., Detroit, Mich. Gauge. 1,621,759; Mar.

Schulbury, Chango, In. Aneostat., 1,022,023,024, 8.

Seell, Lyle K., assignor to The Willys-Overland. Company, Toledo, Ohio. Coupling for pipes. 1,620,924; Mar. 15.

Snell, Lyle K., assignor to The Willys-Overland Company, Toledo, Ohio. Cowl ventilator and motor vehicles. Snell, Lyle K., assignor to The Willys-Overland Company, Toledo, Ohio. Cowl ventilator and motor vehicles. Snelling, Walter O., Allentown, Pa. Extraction of gold from dilute solutions. 1,617,352; Feb. 15.

Snelling, Walter O., Allentown, Pa. Extraction of gold from dilute solutions. 1,617,352; Feb. 15.

Snelling, Walter O., Allentown, Pa. Making hollow rayon Snelling, Walter O., Allentown, Pa. Contact-rectifying device. 1,638,278; Aug. 9.

Snelling, Walter O., Allentown, Pa. Concentration of tin minerals. 1,638,278; Aug. 9.

Snelling, Walter O., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Ammonlum-nitrate explosive. 1,617,182; Feb. 8.

Snelling, Walter O., Allentown, Pa., assignor to Gaseline Products Company, Inc., New York, N. Y. Cordeau connecter. 1,632,634; Aur. 12.

Of olis. 1,624,848; Aur. 12.

Powder Company, New York, N. Y. Cordeau connecter. 1,632,636; Dec. 13.

Snelling, Walter O., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Cordeau connecter. 1,632,631; Dec. 13.

Snelling, Walter O., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Cordeau connecter. 1,632,631; Dec. 13.

Snelling, Walter O., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Mcthod of and apparatus for transporting pulveruler materials. 1,652,660; Dec. 13.

Snider, Charles A., Atlanta, Ga. Cushion tire. 1,617,870; Feb. 15.

Snider, John F., Weston, Oreg. Weeder. 1,653,518; Dec. 2.

Snider, John F., Weston, Oreg. Weeder. 1,653,518; Dec. 20.

Sniffen, George W., Woodcliff, N. J., assignor to Bigelow Hartford Carpet Company. Carpet. Des. 72,041; Snodgrafts, Joseph C., assignor of three-eighths to A. R. Tallman and two-eighths to B. R. McKinnie, Nashville, Tenn. Automatic braking mechanism for motor cars. Re16,032; May 24.

Snodgrass, Joseph C., assignor of three-eighths to A. R. Tallman and two-eighths to B. R. McKinnie, Nashville, Tenn. Automatic braking mechanism for motor Snodgrass, Joseph C., assignor of one-third to L. V. Lienbard, Amarillo, Tex. Casing head for oil wells. 1,625,378; Apr. 19.

Snodk, William F. Chicago, Ill. Street-car barn. 1,613,332; Jan. 4.

Snook, Charles W., 1,654,436; Dec. 27.

Snook, Diamond A., Taft, assignor of two-fifths to P. G. Cumming, Long Beach, Callf. Combination crane and motor stand. 1,614,697; Jan. 18.

Snook, Homer C., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Low-impedance electric descared the care of the control of the control of the control of the care of the

May 17.

Snook, Homer C., South Orange, N. J., assignor to Receive Company, Incorporated, New York, N. Y. Apparatus for varying the wave form of alternating current. 1.653.881; Dec. 27.

Snow, A. Elwood, administrator. (See Wilcox, Merril) M.)

Snow, Barton S., Batavia, assignor to T. W. Snow Construction Co., Chicago, Ill. Storage tank. 1,621,959; Mar. 22.

Snow, Barton S., Battvia, assignor to T. W. Snow Construction Co., Chicago, Ill. Storage tank. 1,621,959; Snow, Benjamin H., Winchester, assignor to Bernitz Furnace Appliance Company, Boston, Mass. Furnace wall. 1,627,349; May 3.
Snow, Charles S. H., Croydon, assignor to N. I. C. E. Limited, London, England. Two-stroke cycle internat-combustion engine, 1,628,520; May 10.

Oli Company, New York, N. Y. Receptacle holder. 1,645,562; Oct. 25.
Snow, Isaac, Lawrence, Mass. Thread guide for shuttles. 1,613,487; Jan. 4.
Snow, Isaac, Lawrence, Mass. Shuttle-eye guide plate. 1,635,728; July 12.

May 31.

Snow, Norman L., assignor to Dismond Power Snoelsty.

Snow, Norman L., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,645,307;

Snow, Robert R. assignor to The Superior Foundry Company, Cleveland, Ohio. Method and apparatus for molding engine sleeves. 1.650,305; Nov. 22.

Snow, T. W., Construction Co. (See Snow, Barton S.,

assignor.)

Snow, William N., Beloit, Wis. Ventilated milk-can cover.

1.625.287; Apr. 19.

Snow, Wilmer S., Oak Park, assignor to Unique Lamp
& Casting Company, Chicago, III. Electric-light
bracket. Des. 72.886; May 17.

Snowdon, Charles, and F. Brown He. 1625.053; Apr. 19.

Snowmobile Company, Gee White, 1625.053; Apr. 19.

Snowmobile Company, Gee White, 1771, D., assignor.)

Snyder, Almond H., Lancaster, assignor, by mesne assignments, to Gould Storage Battery Company, Inc., New York, N. Y. Apparatus for ventilating rectifiers, batteries, and the like. 1.632,137; June 21.

Snyder & Black, Incorporated. (See Viscount, Joseph L.,

Snyder, Caleb H., Winnsboro, La. Piston piu. 1,637,247;

July 26.

Snyder, Clabrles L. (See Northun H. R. and Snyder.)

Sayder, Caleb H., Winnsboro, La. Piston pin. 1,637,247; July 26.

Sayder, Charles L. (See Northup, H. R., and Sayder.)

Sayder, Charles O., Richmond, Ind. Sound amplifier for Sayder, Charles O., Richmond, Ind. Sound amplifier for Sayder, Chester R. (See Rystedt, Ingemar K., assignor.)

Sayder, Calude R., Elmira, N. Y. Antiglare device. 1,640,299; Aug. 23.

Sayder, Elwood S. (See Eyer, G. H., and Snyder.)

Sayder, Elwood S. (See Eyer, G. H., and Snyder.)

Sayder, Elwood S. (See Eyer, G. H., and Snyder.)

Sayder, Elwood S. (See Eyer, G. H., and Snyder.)

Sayder, Eugene, Barberton, Ohlo, assignor to The Diamond Match Company, Chicago, III. Block-feeding mechanism for match machines. 1,629,977; May 24.

Snyder, Harry L., West Los Angeles, Calif. Paper-bax Snyder, Harry V. N., Clifton, N. J., assignor to The Manhattan Rubber Mg. Company, Winding bobbin. 1,627,932; May 10.

Snyder, Herbert C., (See Brice, N. D., and Snyder.)

Snyder, Herbert G., (See Brice, N. D., and Snyder.)

Snyder, Herbert T., assignor to Upressit Products Corporation, New York, N. Y. Receptacle closure. 1,630,360; May 31.

Sayder, Herbert W., Lima, Ohio. Seat. 1,621,520;
Mar. 22.
Sayder, Howard F., assignor, by mesne assignments, to
The Maytar Company, Newton, Iowa. Washing ma
chine. 1,615,413; Jan. 25.

Sayder, Howard F., assignor, by mesne assignments, to The Markay Company, Newton, Iowa. Washing ma-chine. 1,644,559; Oct. 11. Snyder, James R., Pittsburgh, assignor of one-third to F. W. Dible, Turtle Creek, and one-third to G. Getzie, Sraddock, Fa. Automobile appliance. 1,015,509;

Jan. 25. Snyder, Joe, Fremont, Nebr. Radiator and cover there-for. 1,613,913; Jan. 11. Snyder, Louis C., Booneville, Ind. Tire. 1,625,750; Apr. 19.

Snyder, Louis C., Booneville, Ind. Tire. 1,625,750; Apr. 19.
Snyder, Rex V., East Orange, N. J., assignor to The American Thread Company, New York, N. Y. Wound Company, New York, N. Y. Wolffer, Simon, assignor to Sprout, Waldron & Co., Muncy, Pa. Feeding and mixing machine connected in gangs. 1625,917; Apr. 26.
Snyder, Speed Company, New York, N. Y. Choung, Speed Company, New York, N. Y. Closure for receptacles. 1,617,690; Peb. 15.
Snyder, Wilbur A., Montoursville, Pa. Vehicle direction signal. 1,617,690; Peb. 15.
Snyder, Wilbur A., Montoursville, Pa. Vehicle direction signal. 1,617,690; June 21.
Snyman, Johannes J., Johannesburg, Transvaal, South Africa, Marking out lawn-tennis courts and other purposes, 1,617,183; Feb. Ses and for other similar purposes, 1,617,183; Feb. Sommes, Alfred. (See Langdon-Davies, W., and Soames, Soap Freder Corporation. (See Halsey, Norman W., assignor.)

Somme, Alfred. (See Languon-Davies, w., and M. Soap Feeder Corporation. (See Halsey, Norman W., assignor.) Sobel, David, Sons, Inc. (See Sobel, Frank, assignor.) Sobel, Frank, Brooklyn, assignor to David Sobel Sons, Inc., New York, N. Y. Display fixture. Des. 73,875; Nov. 15.
Sobel, Frank, Brooklyn, assignor to David Sobel Sons, Inc., New York, N. Y. Display fixture. Des. 73,876; Nov. 15.
Sobel, Joseph, New York, N. Y. Ventilator. 1,630,978; MS. 15.
Sobel, Joseph, New York, N. Y. Scaffold shoe. 1,623,892; Apr. 5.
Sociedad Electroquimica de Flix. (See Müller, Wilhelm, assignor.)

Societa Industria Globeite. (See Sternberg, Alfred, assignor.) Società Italiana Ernesto Breda. (See Soncini, Cesare,

Società Italiana Ernesto Bredo. (Sce Belluzzo, Giuseppe,

Società Haman Ernesto Bredo. (See Belluzzo, Giuseppe, assignor.)

assignor.)

Società Italiana Pirelli. (See Emanueli, Luigi, assignor.)

Società Alsacienns de Produits Chimiques. (See Blum, Henri, assignor.)

Società Alsacienns de Produits Chimiques. (See Blum, Henri, assignor.)

Società Anonyme d'Applications des Gaz Liquéfiés. (See Lumone, Louis, assignor.)

Società Anonyme des Anciens Établissements Cuttat & Cle. (See Sutter, Charles, assignor.)

Società Anonyme des Atellers de Sécheron. (See Meyfarth, Gottlieb, assignor.)

Società Anonyme des Chauas et Cimonts de Lafarge et Società Anonyme des Chauas (Gorges, assignor.)

Società Anonyme des Dispositifs d'Adhérence Guerrini. (See Guerrini, Luigi, assignor.)

Società Anonyme des Etablissements Ed. Jaeger. (See Rodnet, Charles H. H. assignor.)

Società Anonyme des Etablissements Kiblok. (See Outhler, Marcel, assignor.)

Società Anonyme des Etablissements Ed. Jaeger. (See Rodnet, Charles H. H. assignor.)

Società Anonyme des Bathissements Ed. Jaeger. (See Boudin, Louis, assignor.)

Società Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey. (See Boudin, Louis, assignor.)

Società Anonyme des Prosignor.)

Società Anonyme des Prosignor.)

Società Anonyme des Telegraphes Edouard Belin. (See Montellet, Anonyme des Prosignor.)

Società Anonyme des Telegraphes Edouard Belin. (See Montellet, Anonyme des Prosignor.)

Società Anonyme des Telegraphes Edouard Belin. (See Montellet, Anonyme des Cherchander)

Società Anonyme des Telegraphes Edouard Belin. (See Montellet, Anonyme des Gee Roirant, Emile, as Japon.)

Società Anonyme des Gee Roirant, Emile, as Japon.)

Società Anonyme d'Eurdes et de Constructions d'Apparells Algon.)

Società Anonyme d'Eurdes et de Constructions d'Apparells Algon.) signor.)

signor.)
Société Anonyme d'Ougree-Marihaye. (See Trasenster,
Gustave, assignor.)
Etablissements Brackers. (See
Francart, Remy, assignor.)
Société Anonyme: Etablissements Ed. Jaeger. (See
Société Anonyme: Etablissements Ed. Jaeger. (See
Société Anonyme: Etablissements Samga et Bavox Reunis.
(See Voreaux Paul, assignor.)
Société Anonyme Jean Patou. (See Huret, Georges, assignor.)

Societe Anonyme John Cockerlll. (See Cousin, Arthur Signor.).
Société Anonyme John Cockerlll. (See Cousin, Arthur J. F. J., assignor.).
Société Anonyme in Precision Moderne. (See Le Prieur, Yves P. G., assignor.).
Société Anonyme le Carbone. (See Oppenheim, René,

Societé Anonyme le Cattoure des Opperaissignor. Societé Anonyme le Coulte & Cie. (See Rodanet. Charles H. H., assignor). Societé Anonyme pour l'Exploitation des Brevets Künzer. (See Künzer, Marcel, assignor.)

Société Anonyme pour l'Exploitation des Procédés Mau-rice Leblanc-Vickers. (See Leblanc, Charles L. A. M., assignor.) assignor.)
Societe Anonyme Servo-Frein Dewandre. (See Dewandre,
Albert, assignor.)
Societe Belge des Produits Rationnels. (See Gougnard,
Henrl C. L., assignor.)
Societe Ch. M., Stein & Cie. (See Stein, Charles, as-

Societe Ch. M. Stein & Cle. (See Stein, Charles, as-signor.)
Soffired F. S., assignor.)
Societé De Strarincrie & Savonucrie de Lyon. (See Berthon, Paul, assignor.)
Societe des Appareiis Mephisto Jules Manfredi & Cle. (See Fontana, Paul F. M. A., assignor.)
Societe des Films en Couleur Keller Dortan. (See Audibert,

Société d'Etudes Chimiques pour l'Industrie. (See Breslauer, J., and Goudet, assignors.)
Société d'Etudes Chimiques pour l'Industrie. (See Breslauer, J., and Goudet, assignors.)
Société d'Exploitation des Procédés Hidoux. (See Hidoux,

cette d'Exploitation des Procedes Hidoux. (See Hidoux, Georges, assignor.) cette d'Hygiene l'ratique. (See Habault, Sylvain R., assignor.) ciette des Automobiles Sizaire. (See Sizaire, Maurice, assignor.)

assignor.)
Societe du Carburateur Zenith. (See Baverey, François, assignor.)
Societe du Carburateur Zenith. (See de Boischevalier, Henri, assignor.) Societe du Carburateur Zenith. (See Heftler, Victor R.,

Societe Electromecanique d'Appareillage pour l'Essence. (See De Salamanca, Marquis, assignor.) Societe Electrometallurgique de Montricher. (See Miguet,

Paul L. J., assignor.) Society Elektrizitätswerk Lonza. (See Lüscher, Emil, assignor.) Société Etablissements Ducellier. (See Lanquetin, Léon,

Societé Fraisse Freres et al. (See Navarre, Placide, Société Fraisse Freres et al. (See Navarre, Placide,

Société Fraisse Feres et al. (See Navarre, Placide, assignor.)
Société Francaise des Produits Alimentaires Azotes. (See Kahn, Maurice, assignor.)
Societe Industrielle des Matteres Plastiques, The. (See Larthéleury, Henri, assignor.)
Societe Industrielle des Marcheles W. A. Loth. (See Loth, William A., assignor.)
Societe Paria Liquide (es Procédés Prudhomme. (See Prudhomme. Eugène A., assignor.)
Societe Paria Liquide (Societe Anonyme pour l'Etude et l'Exploitation des Procédes Georges Claude). (See Societe Partir Liquide (Societe Anonyme pour l'Etude et l'Exploitation des Procédes Georges Claude). (See Jordan. Eugène, assignor.)
Societe l'Air Liquide (Societe Anonyme pour l'Etude et l'Exploitation des Procédes Georges Claude.) (See Jordan. Eugène, assignor.)
Societe l'Air Liquide (Societe Anonyme pour l'Etude et l'Exploitation des Procédes Georges Claude. (See Jordan. Chemical Industry in Basle. (See de Montmollin. G., and Bonhôte, assignor.)
Société Pavarre et Flis et al. (See Navarre, Placide, assignor.)

Société Parisienne de Confection. (See Jalbert, Georges,

assignor.)
Société pour la Fabrication de la Sole Rhodiaseta.
(See Lehousse. Joseph E. G., assignor.)
Société Renard Frere ct Fils. (See Renard, Pierre and F., assignors.)
Société Schender & Cie., et al. (See de Courseulles, Robert, assignor.)
Société Schender & Cie., et al. (See Dersol, Eugène, assertey Freres Kocchlin. (See Ebersol, Eugène, as-

Society of Chemical Industry in Basle. (See Fritzche, H., Krummenacher, Gubler, and Kaiser, assignors.) Society of Chemical Industry in Basle. (See Gams, A., and Girard, assignors.) Society of Chemical Industry in Basic. (See Gams, A., and Girard, assignors).
Society of Chemical Industry in Basic.
Society of Chemical Industry in Basic. (See Gubler, H., Society of Chemical Industry in Basic. (See Hartmann, Max, assignor.)
Society of Chemical Industry in Basic. (See Hartmann, M., and Seiberth, assignors.)
Society of Chemical Industry in Basic. (See Minnich, Society of Chemical Industry in Basic.
Society of Chemical Industry in Basic. (See Posternak, Swigel, assignor.)

Society of Chemical Industry in Basic. (See Fosternam. Swiged, assignor.)
Society of Chemical Industry in Basic. (See Straub, Fritz, assignor.)
Society of Chemical Industry in Basic. (See Straub, F., and Schneider, assignors.)
Society of Chemical Industry of Basic. (See Tobler, Richard, assignor.)
Society: Le Textilon Central. (See Itier, Jules A. H.,

assignor.)
assignor.)
active T. R. Gelgy S. A. (See Noz, H., Bernoulli, and

assignor, 7 Society T. R. Geigy S. A. (See Noz, H., Bernoulli, and Link, assignors.) Sodastream Limited. (See Hucks, William, assignor.) Soderberg, Andrew W., Monhall, Pa. Regenerative fur-nace, 1,629,056; May 17.

Soderberg, Carl R. (See Trumpler, W. E., and Solder-

Soderberg, Carl R. (See Trumpler, W. E., and Solderberg.)
Soderberg, Carl R., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vibration absorber. 1,638,889; Aug. 16.
Soderberg, Carl R., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vibration absorber. 1,638,508; Aug. 16.
Soderberg, Carl R., Edgewood, Pa., assignor to Westingmachine. 1,649,138; Nov. 15.
Soderberg, Carl R., Edgewood Park, Pa., assignor to Westingmachine. 1,649,138; Nov. 15.
Soderberg, Carl R., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Balancing Soderberg, Carl R., Edgewood Park, Pa., assignor to Soderberg, Carl R., assignor to Det Norske Aktiessleab for Elektrokemisk Industrie, Christiania, Norway. Making channeled continuous electrodes. Söderberg, Sten B. B., assignor to Area Regulators, Inc., New York, N. Y. Regulation. 1,616,557; Feb. 8.
Soderholm Arthur, Chicago, Ill. Coin-operated soap dispenser. 1,643,941; Oct. 4.
Söderlund, Olof, and T. Boberg, Clapham Park, and N. Testrup, Westminster, assignors to Techno-Chemical Latoratories. Limited, London, England. Removal of water from peat and the like. 1,624,769; Apr. 12.
Willy, assignor.
Somen, John O., Newark, N. J. Exit latch. 1,630,141; May 24.

Soemer, J. May 24.

Seenens, Maurice, assignor to Robert Boby Limited, St. Andrews Ironworks, Bury St. Edmunds, England, Machine for harvesting flax and other plants. 1,645,684; Sept. 27. Andrews Ironworks, Bury St. Edmunds, England, Machine for harvesting flax and other plants. 1,643,684; Sept. 27.
Soenksen, Andreas F., De Witt, Iowa. Chain fastener. 1,643,694; Nov. 1.
Soling, Chain Company, Chain Ch

Sokolov, J. July 12 Jacob, Detroit, Mich. Spare-tire lock, 1.635,228:

Sokolov, Jacob, Detroit, Mich. Spare-wheel lock. 1,635,229; July 12. Sokolow, Samuel. Brooklyn, N. Y., assignor to Bright Star Battery Company. Shock-absorbing support for cheetric lamps. 1,621,610; Mar. 2,217. Sokolowski, Peter, assignor of one-half to M. Strack, Cherorkville, Pa. Vegetable and fruit silier. 1,020,138;

Solfa. Emilio C., Flix, Spain. Apparatus for cinemato-graphic projections. 1,634,697; July 5. Soland. Emerson L., assignor of one-third to J. Kasperals, Wells, and one-third to W. L. Hlutz, Alden, Minn. Pneumatic elevator. 1,644,160; Jan. 11. Solanet, Louis J. H. (See Bertrand, J. J. M., and Colonat.

Lighting Fixture Co. (See Bardwell, Ralph S., nssignor.) lar Lighting Fixture Co. (See Shardlow, Harry, Solar Ligh assignor.)

Solar-Polar Storm Sash and Screen Co. (See Gillman,

Solar-Polar Storm Sash and Sercen Co. (See Gillman, John J., assignor.)
Solary, John, Chicago Heights, Ill. Drawing implement.
Solberg, John C., Arlington, assignor of one-half to F. C.
Langenberg, Cambridge, Mass. Fluid-pressure intensifier. 1.025,751; Apr. 198
Soldan, Otto, Berlin Siemensstadt, assignor to Siemens & Halske Attiengesselbschaft Wenperwerk Siemensstadt, noar Berlin, Germany. Hand telephone. 1.631,607; June T.

June 7.
Solem, Peter A., Rockford, Ill. Endless bed sander, 1,653,741; Dec. 27.
Solenberger, Dean M., assignor to Simplex Piston Ring Company, Cleveland, Ohio, Piston ring, 1,651,163; Nov. 29.

Soles, Fred A., Platteville, Wis. Sanitary sealed carton. 1.636,390; July 19.
Soliani, Nabor, assignor to "Ansaldo" Societa Anonima, Genoa, Italy. Internal structure for large submarines with twin-screw propellers. 1,634,220; June 28.
Solidarity Watch Case Company. (See McGrevy, Jerminh, assignor.)
Solinger, Leo, assignor to Eagle Penell Company, New York, N. F. Penell, Des. 72,503; Mar. 22.
Solidary Tester K., assignor to Basedi Carpet Sweeper Company, Foster K., assignor to Basedi Carpet Sweeper Company, Grand Rapids, Mich., Suction-hose attachment for nozzles of vacuum cleaners. 1,648,466; Nov. 8.

New St. Accessed to the control of t

Solomon. Yulius, Oberlin, Ohio. Footwear. 1,640,857; Aur. 30.

Aur. 30.

Solomon, Max B., et al. (See Rice, John A., assignor.) Solomon, Samuel, New York, N. Y. Brief case. 1,641,871; Sept. 6.

Solomon, Samuel N. (See Warren, A., and Solomon.) Solomon, Philip O., Oakland, Calif. Auto spring suspensolvay Process Company, The. (See Sundstrom, C., and Terziev, assignors.) Somac Traffic Signal Co. (See Soper, Harold H., assignor.) Soman Michael E., assignor to Greenberg & Schwartz, New York, N. Y. Finger ring. Des. 73,107; July 19.

Somenfleck, Herman, New York, N. T. Massignonstruction for serving trays, frames, and the like. 1,640,011; Aug. 23.

tion for as vine Aug. 23. Somerford, Walter W., Rosslyn, Va. Refining bee honey. 1,638,719; July 26. Somers, Claude G. (See McFarland, Joseph E., as-

1,636,719; July 26.

Somers, Claude G. (See McFarland, Josepu 26.

Somers, Fred F., Sturgis, Mich. Bracket. 1,651,297;

Nov. 29.

Somers, Fred F., Sturgis, Mich. Bracket. 1,651,297;

Nov. 29.

Somers and brasslere. 1,638,787; Aug. 9.

Somers and, George, Providence, R. I. Radio apparatus.

1,620,609; Mar. 8.

Somers and, George A., New York, N. Y. Preventing retroactive effects in audion amplifier circuits. 1,633,421;

June 21.

June 21.

Base for time-

1.641,935; Sept. 6.

Sommer, Karl G., assignor to American Steam Pump Company, Battle Creek, Mich. Centrifugal vacuum pump. Some Static Creek, Mich. Centrifugal vacuum pump. Some Static Creek, Mich. Centrifugal vacuum pump. Some Static Creek, Minn. Reversing mechanism for hoisting drums. 1,639,151; Aug. 16.

Sommer, William H., Peoria, III., assignor, by mesne assignments, to The Union Trust Company, Cleveland, Tachment for clerin, Chicago, III., trustees. Attachment for clerin, Current Company, Hackensack, N. J. Sommer, William R., R. Ree, and C. Kerkhof, assignors in Jiffy Wire Connector Company, Hackensack, N. J. Sommer, Competer. 1,635, 293; July 12.

Some Company, Lagrand C

Nov. 1.

Soncial, Cesare, Brescia, assignor to Società Italiana Ernesto Breda, Milian, Italy. Removable barrel mounting for automatic frearms. 1,639,277; Aug. 16. Hy. Automatic frearm with recolling barrel. 1,613,205; Jan. 4, Sondack, Abrabam, Broux, M. Y. Receptacle for ironing boards. 1,621,090; Mar. 15.

Sonen, Clayton L., assignor to The Basslek Manufacturing Company, Chicago, Ill. Flexible conduit. 1,649,139; Nov. 15.

Sonin, Sam, Kansas City, Mo. Removable trunk holder. 1,621,176; Mar. 15.
Sonneborn, John R., Willow Grove, assignor to Stokes and Smith Company, Philadelphia, Pa. Box-wrapping system. 1,646,563; Oct. 25.
Sonnefeld, August, assignor to the Firm of Carl Zelss, Jena, Germany. Photographic objective. 1,616,765;

Jena, Feb. 8.

Feb. 8.
Sonnenthal, Irving, New York, N. Y. Dust guard for watches, 1,633,551; June 21.
Sonning, Bose Oddsmith, H. and Sonnetts, Sonning, Eugene, Astoria, N. Y. Window seat, 1,642,792; Sept. 20.
Sonoco Products Company, (See Dunlap, Charles K., assignor.)
Sonoco Products Company (See Edwards, Howard A.,

assignor.)
Sonora Phonograph Company. (See Gruber, Morris M.,
assignor.)
Sonora Phonograph Company. (See Oberst, Frank, assignor.)
Sonora Phonograph Company. (See Wolff, Joseph, as-

Sonora Phonograph Company, teste Joses, assignor, Signor.)
Sonora Phonograph Company. (See Wolff, Joseph, assignor Phonograph Company. (See Wolff, Joseph, assocy, Norman H., Kansas City, Mo. Power-transmitting apparatus. 1,617,506; Feb. 15.
Sooy, Norman H., Kansas City, Mo. Power-transmitting Research Phonograph Company. (Sooy, Norman H., Kansas City, Mo. Power-transmitting Sooy, Norman H., Kansas City, Mo. Power-transmitting Sooy, Norman H., Kansas City, Mo. Power-transmitting Company. (Sooy, Norman H., Kansas City, Mo. Pump-rod support. 1,621,286; Mar. 16.
Soper, Harold H., Medford, assignor to Somac Traffic Signal Co., Boston, Mass. Direction indicator for Soper, Roy M., St. Joseph, Mo., assignor to Union Special Machine Company, Chicago, Ill. Filled-bag-sewing machine. 1,613,140; Jan. 4.
Sopher, Ted L., assignor of one-half to W. Johnson and A. Johnson, Abilene, Kans. Display case. 1,638,461; Sovable, Carl, Urbana, Ohio. Stylus mounting for sound boxes. 1,636,715; July 26.
Soracio, Carmelo, Boston, Mass. Oil cleaner and rectifier. 1,641,239; Sept. 6.
Master Lock Company, Mil. Sovall, Alfred H., assignor to The Smith & Egge Mfg. Co., Bridgeport, Conn. Lock clamp for cords. 1,658,335; Dec. 20.
So Relle, Walter B. assignor to Yardsmore Colf Club Rell. 1,646,441; Oct. 25.
Sorensen, Andrew J., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for transmitting coded currents. 1,620,169; Mar. 8.

Union Swatch as a surface of the design of the surface of the surf

Sorensen, Brie N. (See Emergensen, v. 1980).

Sorensen, Henning L., Allentown, Pa. Boat-launching device. 1,629,419; May 17.

Sorensen, Henry, San Francisco, Calif. Fireproof building. 1,620,139; Mar. 8.

Sorensen, Henry, San Francisco, Calif. Construction of freproof buildings. 1,626,164; Apr. 26.

Sorensen, Henry, San Francisco, Calif. Fireproof building. 1,641,566; Sept. 8.

Sorensen, Jens, Harlan, Iowa. Sales-display cablnet. 1,622,466; Sept. 36.

Sorensen, Luther, Whittier, Calif. Swab. 1,652,744; Dec. 13.

1,642,400 Sept. Whittier, Calif. Swape.
Dec. 13.
Sorensen, Luther, Whittier, Calif. Swape.
Dec. 13.
Sorensen, Peter, Brooklyn, N. Y. Cut-out. 1,631,988;
June 14.
Sorensen, Sam, Houston, Tex. Rail anchor plate.
1,641,299; Sept. 6.
Sorenson, Chris, Tacoma, Wash. Piston. 1,631,073;

May 31.

Soresi, Angelo L., New York, N. Y. Surgical apparatus.
1,627,714; May 10.

Soresi, Angelo L., New York, N. Y. Tire nir valve.
1,628,441; May 10.

Sorgan, Robert, Jersey City, N. J. Scal for can covers.
1,649,328; Nov. 15.

Sörgel, Waldemar, assignor to Kämmer & Reinhardt A.-G.,
Waltershausen, Thuringen, Germany. Doll's eyes with
locking mechanism. 1,621,139; Mar. 15.

Sorgius, Isaac. Indianapolis, Ind. Automobile dash lamp.
1,638,448; Dec. 20.

Solotic, Alfonzo, Brooklyn, N. Y. Cane. Des. 73,948;

Novice, Charles and M. G. Bertes, New York, N. Y. Cale.

Sortelle, Edna, and V. C. Porter, New York, N. Y. Tele-phone mouthpiece. 1,622,061; Mar. 22. Sortwell, Harold H. assignor to The Star Porcelain Com-pany, Trenton, N. J. Ceramic insulating material. 1,633,462; June 21.

1,053,402; June 21.

Sosa, Augustus M., assignor to The American Tool Works Company, Cheinnati, Ohio. Freeling mechanism for Sosdian, Lorenz, Bradley Park, M. J. Threading machine. 1.616,284; Feb. 1.

Soseman, Glenn S. (See Allen, C. H., and Soseman.)

Soss, Joseph, Brooklyn, N. Y. Hinge. 1,614,262; Jan. 11.

Soss, Joseph, Brooklyn, N. Y. Hinge. 1,614,324; Jan. 11.

Soss, Joseph, Brooklyn, N. Y. Hinge, 1,643,592; Sept. 27. ss Manufacturing Company. (See Kessler, Charles H.,

assignor.)
Soto, Frank, Sunnyvale, Calif. Water heater. 1,629,844;
May 24.

May 24.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio, Glass feeder. 1,611,936; Jan. 18.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio, Glass feeder. 1,618,313; Feb. 22.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Apparatus for forming glass.

Souther, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohlo. Apparatus for forming glass. 1,626,702: May 3.
Souther, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohlo. Glass-forming machine. 1,622,703; May 3.
Souther, Pennard D., assignor to The Owens Bottle Company, Toledo, Ohlo. Glass-forming apparatus. 1,622,704; May 3.
Souther, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohlo. Glass feeder. 1,626,705; May 3.
Souther, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohlo. Glass feeder. 1,626,706; May 3.
Souther, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohlo. Glass feeder. 1,626,706; May 3.
Souther, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohlo. Glass feeder. 1,621,200; June 7.
Souther, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohlo. Glass feeder. 1,631,230; June 7.

Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Glass-forming machine. 1,632,632;

June 1.
Soubier, Leonard D., assignor to the owns Bottle Company, Toledo, Ohio. Glass-forming machine. 1,632,002, June 14.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Apparatus for feeding molten pany, Toledo, Ohio. Glass Feeder. 1,636,875, July 26.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Glass Feeder. 1,636,875, July 26.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Method and apparatus for producing charges of molten glass. 1,642,904; Sept. 20.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Conveying molten glass to molds. 1,658,477; Dec. 20.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Glass feeder. 1,653,478; Dec. 20.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Glass feeder. 1,653,479; Dec. 20.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Glass feeder. 1,653,479; Dec. 20.
Soubier, Leonard D., assignor to The Owens Bottle Company, Toledo, Ohio. Conveying apparatus. 1,653,480; Dec. 20.

Sovy. Zenon J., Milwaukee, Wis. Tool. 1,649,495;
Nov. 15.
Souder, William A., Shamokin, Pa. Milk-bottle closure.
1,643,322; Sept. 27.
Soulas, Paul-Joseph, Lourdes, France. Reenforced-concrete sleeper. 1,614,405; Jan. 11.
Soule, Arthur C., San Francisco, Calif. Sash hanger.
1,648,331; Nov. 8.
1,648,331; Nov. 8.
Soule, William H. (See Ingolfsrud, L. J., and Soule.)
Soule, William H. (See Ingolfsrud, L. J., and Soule.)
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Soule, William H. (See Ingolfsrud, L. J., and Soule.)
Soule, William H. (See Ingolfsrud, L. J., and Soule.)
South Bend Bait Co. (See Pagin, John B., assignor.)
South Bend Bait Co. (See Rodgers, Claude M., assignor.)
South Bend Bait Co. (See Rodgers, Claude M., assignor.)
South Bend Watch Company. (See Zesinger, William R., assignor.)

assignor.) Southcomb, Robert P., Baltimore, Md. Corrugated-wire articles. 1,620,403; Mar. 8. Southern Acid & Sulphur Company. (See Paugh, Francis H., assignor.)
Southern Can Company. (See O'Brien, Frank J., as-

signor, Southern Can Company. (See Smith, William B., as-Southern Electrical Equipment Co. (See Hardin, Lewis

Southern Electrical Equipment Co. (See Hardin, Lewis H., assgind.)
Southern, William B., Philadelphia, Pa. Automobile seat. 1.640,968; Aug. 30.
Southgate, James F., Chelmsford, England. Blank for bracing brackets. 1.644,899; Oct. 11.
Southmayd, Leon N., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cuslion tire. 1808.739; July 26.
South Metropolitan Gas Company. (See Chandler, Dean,

South Metropolitan Gas Company, (see Unuburer, Dengassignor,)
Southwark Foundry & Machine Company. (See Dinzl, Richard W., assignor.)
Southwark Foundry & Machine Company. (See Smith, Frank H., assignor.)
Southwark Foundry & Machine Company. (See Smith, Frank H., assignor.)
and preparing the same. 1.653.882; Dec. 27.
Southwell, Raymond J., New Rochelle, assignor to Wickwire Spencer Steel Company. New York, N. Y. Composite wire lath. 1.641.872; Sept. 6.
Southwestern Engineering Corporation. (See Hall, E. A., and Sanders, assignors).
Southwestern Engineering Corporation. (See Millard, Earmond B., assignor).

and Sanders, Research Corporation.

Sandhwestern Engineering Corporation.

Raymond E., assignor, College Hill, assignor, by mesne Southwich College Hill, assignor, by mesne Southwich College Corporation, Beaver Falls, Pa. Tile-fettling mediae. 1,648,966; Nov. 15.

Sandhwick, William A. (See Wegman, E. C., and Sandhwick, William College Coll

Souttar, Henry S., London, Engiand. Surgical needle. 1,613.206; Jan. 4.

Sovereiga, Robert J., New York, N. Y. Combustion apparatus and the state of the state of

Dec. 20.
Spafford, Claude L. (See Reed, H. J., and Spafford,)
Spafford, Lewis B., Chicago, Ill. Game. 1,620,742;
Mar. 15.
Spahn, Aggust C., assignor to Bernardin Bottle Cap Com-

Spafford, Lewis B, Chicago, III. Game. 1,620,742; Mar. 15.
Spahn, August C., assignor to Bernardin Bottle Cap Company, Evansville, Ind. Device for applying caps to bottles. 1,640,632; Aug. 23.
Spath. 1640,632; Aug. 23.
Spath. Howard A. Milwaukce, Wis. Electric switch. 1,620,166; Apr. 26.
Spahr, Howard A. Milwaukce, Wis. Electric switch. 1,620,166; Apr. 26.
Spahr, Otto, Philadelphia, Pa. Safety razor. 1,639,441; Aug. 16.
Spahr, Otto, Philadelphia, Pa. Electric sadiron. 1,643,667; Oct. 18.
Spahr, Otto, Philadelphia, Pa., assignor, by mesne assignments, to Milwaukce Gas Specialty Company, Miller, Charles, Charl

Spalding, A. G., & Bros. (See Cruden, George W., assignor.)
Spalding, A. G., & Bros. (See Fitzpatrick, K., and Mullins, assignors.)
Spalding, A. G., & Bros. (See Mullins, Robert T., assignor.)
Spalding, A. G., & Bros. (See Pierce, George L., assignor.)

signor.)
Spalding, A. G., & Bros. (See Pierce, G. L., and Rau, assignors.)
Spalding, A. G., & Bros. (See Rau, Henry V., assignor.)
Spalding, A. G., & Bros. (See Reach, M. B., and MacDonald, assignors.)
Spalding, A. G., & Bros. (See Reach, William F., assignor).

Signor.)
Spalding, A. G., & Bros. (See Rick, George A., assignor.)
Spalding, A. G., & Bros. (See Saunders, Addison T.,
assignor.)
Spalding, A. G., & Bros. (See Schwan, Louis A., assignor.)

Spalding, A. G., & Bros. (See Warner, Glenn S., as-signor.) Spalding, A. G., & Bros. (See Williamson, Frank S., A. G., & Bros. (See Williamson, Frank S.,

Salignor, A. G., & Blos. (See Williamson, Frank S., assignor, Spalding, A. G., & Bros. (See Williamson, Frank S., assignor), Spalding, James E., and R. L. Archer, Collinsville, III. 1.630.079; May 24.
Spalletta, Salvatore, Brooklyn, N. Y., assignor to Voices political states of the control of the control

Spänjers, Amon M. P. (See Spänjers, Amond V. and A. R. P.) Spanjers, Arnold J. and A. R. P., Duluth, Minn. Weather strip. 1,648,787; Nov. 8. Spanjers Johannes J. (See Nickel, Albert P. H., and Spannings, Sroffer A., Joure, Notherlands. Arrangement to protect running trains. 1,615,962; Feb. 1.

Spargo, Edwin E., Brunswick, Melbourne, Victoria, Australia. Artificially graining wood. 1,653,481; Dec. 20. Sparhawk, Charles E., Portland, Oreg, assignor to A. Young, Ketchikan, Alaska. Bed for invalids. 1,648,793; Sept. 27.
Sparkes, Harry P., Pittsburgh, assignor of one-half to B. H. Smith, Swissvale, Pa. Controlling device. 1,622,815; Mar. 29.
Sparkes, Harry P., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Sparkes, Harry P., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. 1,622,931; June 21.
Sparkes, Limited. (See Campbell, Robert H., assignor.) Sparks, Edith M. (See Metcalf, Edwin M., assignor.) Sparks, Robert E. L., Pemberton, W. Va. Grass cutter. 1,633,138; June 21.
Sparks, Roy C., et al. (See Weaver, J. C., and Ames, assignors.)

Sparks, Roy C., et al. (See Weaver, J. C., and C., assignors), assignors, assignors, Stanley W., Summit, N. J., assignor to the Columbus Machine Company, Columbus, Ohio. Gate valve. 1,648,071; Nov. 8. Sparks, William A., Edmonton, Alberta, Canada. Freshair heater. 1,635.729; July 12. Sparks-Withington Company, The. (See Scofield, Theodore J., assignor.) Sparks-Withington Company, The. (See White, George A., assignor.) Sparks-Withington Company, The. Pneumatic horn. 1,627,467; May 3. Sparling, Archbald E., et al. (See Sparling, Frank K., assignor.) Sparling Bros. Machine Company. (See Sparling

assignor.)
Sparling Bros. Machine Company. (See Sparling, Frank K.)
Sparling, Frank K., et al. (See Sparling, Frank K.,
assignor.)
Sparling, Frank K., assignor to F. K., A. E., W. D., fr.,
and f. Sparling, a copartnership doing business under
the sparling fros. Machine Company, New
Bedford, Mas Sparling fros. Machine Company, New
Sparling, Thomas, et al. (See Sparling, Frank K., asstemar.)

Bedford, Mass. brown.

Sparling, Thomas, et al. (See Sparling, Frank
Sparling, William D., Jr., et al. (See Sparling, Frank
K., assignor.) E. assignor of one-half to J. C. Carter,
Chicago, H. Supporting fixture. 1,655,742; Dec. 27.

Sparrow, Joseph C., Cleveland, Ohio. Window refrigerator. 1,637,460; Aug. 2.

Spasse, Charles B., assignor to Brown-Lipe Gear Company,
Syracuse, N. Y. Clutch construction. 1,644,548;

Cor. 4.

Oct. 4.

Spatz, Karl C., Little Rock, Ark. Toy aeroplane. 1,641,607; Sept. 6.

Spaulding, John D., and B. Bouda, assignors to The Collis Company. Clinton, Iowa. Bread rack. 1,638,173; Aug. 9.

Spaulding, Milo H., Bozeman, Mont. Initiating appara-Spaulding, William B., Independence, Kans. Detachable trunk for automobiles. 1,630,142; May 24.

Speaker, Charles, Cherrylade, Va. Wireless telegraph and telephone system. 1,624,991; Apr. 19.

Speakman, Walter E., and G. B. Crockett. Drumright, Speakman, G. B. Crockett. Drumright, Speakman, Walter E., and G. B. Crockett. Drumright, Speakman, Walter E., and G. B. Crockett. Drumright, Speakman, Walter E., and G. B. Crockett. Drumright, Speakman, G. B. Crockett. Drumrig

Spear, Furman D., New York, N. Y. Lantern. Des. 73,877; Nov. 15.

Spear, Thomas S. (See Seymour, J. H., and Spear), Spears, Thomas, Bisbee, Arkz. Blasting-fuse spitter. 1.651,479; Dec. 6.

Speas, John F., Schenectady, N. Y., assignor to General Electric Company. System of electric distribution. Spease, John F., Schenectady, N. Y., assignor to General Electric Company. System of electric distribution. Spects, Heavy M., Pelham, N. Y. Varlable condenser. 1.651,974; Dec. 6.

Specth, Edward H., Oakland, Calif. Trunk rack. 1.651,974; Dec. 6.

Specth, Harry M., Pelham, N. Y. Varlable condenser. 1.651,975; Dec. 6.

Specth, Walter E., Moline, Ill., assignor to The Louden Machinery Company, Fairfield, Iowa. Trolley wheel. 1,617,085; Feb. 8.

Spector, Walter, E., Moline, Ill., assignor to The Louden Machinery Company, Fairfield, Iowa. Trolley wheel. 1,617,085; Feb. 8.

Spector, Javid S., New York, N. Y., assignor to Federal Telegraph Company, San Francisco, Calif. Radiocable Company, San Francisco, Calif. Radiocable Des. 71,934; Jan. 25.

Spector, David S., New York, N. Y., assignor to Federal Telegraph Company, San Francisco, Calif. Radiocable Company, San Francisco, Calif. Radiocable Des. 71,934; Jan. 25.

Spector, David S., New York, N. Y., assignor to Federal Telegraph Company, San Francisco, Calif. Radiocable Des. 73,878; Nov. 15.

Spector, David S., New York, N. Y., assignor to Federal Telegraph Company, San Francisco, Calif. Radiocable Des. 73,878; Nov. 15.

Spector, Walter, assignor, Spector, David S., New York, N. Y., assignor to Federal Telegraph Company, San Francisco, Calif. Radiocable Des. 73,878; Nov. 15.

Spector, Walter, assignor, Spector, David S., New York, N. Y., assignor to Federal Telegraph Company, San Francisco, Calif. Radiocable Des. 73,878; Nov. 15.

Spector, David S., New York, N. Y., assignor, because the Spector, Walter, assignor, New York, N. Y., assignor, because the Spector, Walter, assignor, New York, N. Y., assignor, because the Spector Machinery Corporation. (See Baker, Walter, assignor.)

Speeder Machinery Corporation. (See Baker, Walter, as-

Speegle, Emanuel A., Los Angeles, Calif. Combination excavator and dredge, 1,643,094, Sept. 20. The manual of the control of t

Speer, Minnie L. Fritsourga, Fa. Coults. Apony. 25.

Speer, Victor. (See Litchfield, E. C., Speer, and Hermann.)

Speicher, George J., Miners Mill, Pa. Cover for jars and the like. 1,624,440; Apr. 12.

Speicher, Harold S., assignor to The Cyclone Manufacturing Company, Urbana, Ind. Adjustable feeder. Speicher, John K., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Obtaining nitrofrom the Company, Wilmington, Del. Obtaining nitrogeness. 1,626,362; Apr. 2.

Speicher, John K., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Obtaining nitrogeness. 1,635,319; Dec. 20.

Speicher, John K., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Obtaining nitrogeness. 1,645,519; Dec. 20.

Speidel, Chain Co. (See Speidel, Eugen, assignor.) Speidel, Charles F., assignor to Eastman Kodak Company, Rochester, N. Y. Projection-screen holding clip. 1,616,928; Feb. S.

Speidel, Eugen, Florzheim, Germany, assignor to Speidel Chain Co., Providence, R. I. Chain. 1,621,287; Mar. 15.

Speidel, Firm Fr. (See Speidel, Erledrich, assignor.) Speidel, Firm Fr. (See Speidel, Friedrich, assignor.) Speidel, Mar, 22.

Speidel, Andrew J., Jenks, Okla. Reel Jack. 1,629,644;

assignors.)
Speirs, Andrew J., Jenks, Okla. Reel Jack. 1,629,644;
May 24.
Speirs, Charles W., assignor to Morgan Crucible Company
Limited, Battersea, London, England. Kiln and other
Speirs, George W. (See Blemma, H. C., and Speirs.)
Speller, Frank N., Pittsburgh, Pa. Manufacture of steel.
1,617,726; Feb. 15.
Spelling, Thomas C., New York, N. X. Letter-printing
press. 1,613,417; Jan. 4.
Spellissy, Arthur E., et al. (See Barnett, John B., asSpence, Fred. (See Parker, T. R. G., and Spence.)

press. 1,613,417; Jan. 4.

Spellissy, arthur E., et al. (See Barnett, John B., assignor.)

Spence, Fred. (See Parker, T. R. G., and Spence.)

Spence, Joseph. Maywood, Nebr. Space-adjusting means for ground-engaging implements. 1,620,637; Mar. 15.

Spence, Lewis J., Brooklyn, N. Y. Freight-car construction. 1,630,668; May 31.

Spencer, Abbott K. (See Wilson, E. B., and Spencer.)

Spencer, Alexander C., Sarnia, Ontario, Canada, assignor to Standard Development Company. Continuously cracking and fractionating hydrocarbons. L648,697; Nov. 15.

assignors to G. Spencer, Lutterworth, Leleestershire, England. Driving and supporting means for sewing machines and the like. 1,644,661; Oct. 4.

Spencer, Charles E., Chicago, and O. W. Roberts, Oak Park, assignors to Casement Hardware Co., Chicago, Ill. Casement-whadow operator. Des. 73,617; Sept. 6.

Tark, assignors to Casement Hardware Co., Chicago, Ill. Casement-whadow operator. Des. 73,617; Sept. 6.

Spencer, Charles E., Chicago, and C. W. Roberts, Oak Park, assignors to Casement Hardware Co., Chicago, Ill. Casement-whadow operator. 1,641,649; Sept. 6.

Spencer, Charles H., Los Angeles, Calif. Building storage reservoirs in desert countries. 1,640,099; Aug. 23.

Spencer, Ernest P., Grampian. Pa. Cartridge-reloading machine. 1,642,644; Sept. 6.

Spencer, George. (See Spencer, A. B., and Walker, assignors.)

Spencer, George. Moulton & Company. (See Abbott, W. E., and Eljecy, assignors.)

Spencer, Henry K., Watertown, Mass., assignor to The Cluban American Sugar Co., New York, N. Y. Desugaring articles. 1,628,613; May 10.

Simecer, Hugh M., Newark, N. J., assignor to feeded Chemical Company. Alumina coagulant, 1,643,662; Oct. 4.

Spencer, Ira H., West Hartford, Conn., Internal-combustion engine. 1,649,870; Nov. 15.

Spencer, Isaac N., Follansbee, W. Va. Stacking device or standard. 1,619,641; Mar. 1.

Spencer, John A., Revere, assignor to Spencer Thermostat. Company. Cambridge, Mass. Thermostat. Spencer, John B., Kingsford, Mich. Saw-crack punch. 1,623,816; Apr. 5.

Spencer, John S., Pampa, Tex. Oil-well-tube scraper. 1,655,883; Dec. 27.

Spencer, Lens Company. (See Gary, Charles L., assignor.)

Spencer, Lens Company. (See Gary, Charles L., assignor.)

Spencer, Lens Company. (See Off, Harry G., assignor.)

Spencer, Lens Co. (See Off, Harry W., assignor.)

Spencer, Lens Co. (See Off, Harry W., assignor.)

Spencer, Lens Co. (See Off, Harry W., assignor.)

Spencer, Millard C., East Orange, assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. (1,642,480; Apr. 12)

Spencer, Millard C., East Orange, assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. High-frequency alternating-current amplifier. 1,646,364; Oct. 18.

Spencer, Morman S. (See Mason, William P., assignor.)

Spencer, Norman S. (See Mason, William P., assignor.)

Liguation of the property of the Spencer, Hugh M., Newark, N. J., assignor to Seydel Chemical Company. Alumina coagulant. 1,643,962;

Williams Company, Uttea, N. Y. Sautte. 1,024,010; Apr. 12.

Fpencer, Robert L., Harrisburg, Ark. Railway-track construction. 1,622,288; Apr. 19.

Spencer, Robert M., Waycross, Ga. Fire box for boilers. 1,622,365; Mar. 29.

Spencer Thermostat Company. (See Marshall, Laurence K., assignor.)

K., assignor.)
Spencer Thermostat Company. (See Spencer, John A.,

John Strike Company. (See Marshall, Laurence K., assignor.)

Spencer Thermostat Company. (See Spencer, John A., assignor.)

Spencer, William H., Bogotn, N. Y., assignor to I. P. Frink, Inc., New York, N. Y. Making ornamental P. Frink, Inc., New York, N. Y. Lighting faxture. 1,622,548; Mar. 29.

Spencer, William H., Bogotn, N. J., assignor to I. P. Frink, Inc., New York, N. Y. Lighting faxture. 1,622,548; Mar. 29.

Spencer, William H., Bogotn, N. J., assignor to I. P. Frink, Inc., New York, N. Y. Lighting faxture. 1,644,452; Spencer, William H., Bogotn, N. J., assignor to I. P. Frink, Inc., New York, N. Y. Lighting equipment. 1,651,640; Dec. 6.

Spengler, Arthur F. (See Moran, R. B., and Spengler). Spengler, Grebelling Company. (See Davies, Richard Spengler, assignors). Spengler, George H., assignors, Spengler, George H., assignor, Spengler, George H., assignors, Spengler, George H., assignor, Spengler, George H., aspengler, George

Oct. 11.
Sperty Development Company. (See Sperty, Elmer A., assignor.)
Sperty, Elmer A., Brooklyn, N. Y. Gravity bomb.
1,626,363; Apr. 26.
Sperty, Elmer A., assignor to The Sperty Gyroscope Company, Brooklyn, N. Y. Repeater compass, 1,611,30; Feb. 8.
Sperty, Elmer A., assignor to The Sperty Gyroscope Company, Brooklyn, N. Y. Repeater compass, 1,617,310; Feb. 8.
Company, Brooklyn, N. Y. Gyrocompass relay transmitter, 1,626,123; Apr. 26.

Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Development Company, Dover Green, Del. Yalve mechanism for combustion engines. 1,627,210; Walve mechanism for combustion engines. 1,627,210; Walve mechanism for combustion engines. 1,627,210; Walve Mechanism for combustion of the Sperry Groscope Company, Brooklyn, N. Y. Indicating loss of synchronism in transmission systems. 1,629,236; May 17.
Sperry, Elmer A., Tr., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Telemotor system. 1,633,463; June 21.
Sperry, Elmer A., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y., assignor to Sperry Development Company, Dover Green, Del. Piston for internal-combustion engines. 1,639,062; Aug. 16.
Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Development Company, Dover Green, Del. Cooling the pistons of heat engines. 1,643,968; Nov. 15.
Sperry, Frank E., Batavia, Ill. Rotary pump. 1,622,316; Mar. 24.
Sperry Gyroscope Company, The. (See Bassett, Preston Expressions)

Sperry Gyroscope Company, The. (See Bassett, Preston R., assignor.) Sperry Gyroscope Company, The. (See Hall, Theodore, assignor.) Sperry Gyroscope Company, The. (See Mills, Chester B., Sperry Gyroscope Company, The. (See Patterson, Martin L., assignor.)

Sperry Gyroscope Company, The. (See Schein, Alexander E., assignor.) Sperry Gyroscope Company, The. (See Sperry, Elmer A., assignor.)

Sperry Gyroscope Company, The. (See Sperry, Elmer A., jr., assignor.)

Sperry, Gyroscope Company, The. (See Sperry, Elmer A. Jr., assignor.)
Sperry Gyroscope Company, The. (See Tanner, Harry L., assignor.)
Sperry, Herbert B., Chicago, Ill., assignor to Appleton Alanucaturing Company, Blower pipe for wind Alanucaturing Company, Blower pipe for wind Manufacturing Company, Tongue-supporting truck.

1,625,803; July 12.
Sperry, Herbert B., Chicago, Ill., assignor to Appleton Manufacturing Company, Tongue-supporting truck.

1,625,803; July 12.
Sperry, Herbert B., Chicago, Ill., assignors to Internet L., 1,629,181; May 17.
Sperry, Lawrence B., deceased, Massapequa, The Bank of America, New York, and W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., executors, assignors to W. A. Sperry, Hempstead, N. Y., Executors, R. Y., Lawrence B., assignor, Sperry, Hempstead, N. Y., Executors, R. Y., Hempstead, N. Y., Hempstead, N. Y., Executors, R. Y., Hempstead, N. Y., Hempstea

Mar. 1.

Specy Hanswerner. (See Duttlinger, E., and Speyer.)

Specy Hanswerner. (See Duttlinger, E., and Speyer.)

Spicer, Charles Hans, assignor)

Spicer, Charles R., Hastings, Nebr. Splint. 1,635,230;

July 12.

Spicer, Charles W., Baltimore, Md. Drip catcher.

1,617,968; Feb. W., Plainfield, N. J., assignor to Spicer

Manufacturing Corporation. Welding hollow shafts.

1,629,127; May 17.

Spicer Manufacturing Corporation. (See Macdonald, Angus S., assignor, Spicer Manufacturing Corporation.)

W., assignor.)
Spicer Manufacturing Corporation. (See Spicer, Clarence W., assignor.)
Spick, Fred, Jefferson, Iowa. Button anchor. 1,644.206; Oct. 4.

Oct. 4.

Spieckermann, Karl, Dortmund, Germany. Iron contact rail with copper insert. 1,620,496; Mar. 8.

Spiegel, May, Stern Co. (See Gollnick, Paul A., assignor.)

Spiegel, May, Stern Company. (See Gollnick, P. A., and Toolan, assignors.)

Spiegel, May, Stern Company. (See Kumli, Charles F., assignor.)

Spiegel, May, Stern Company. (See Kumli, Charles F., assignor.)

Spieman, Milton H., assignor to The Domestic Electric Company, Cleveland, Ohio. Vacuum cleaner. 1,613,250;

Spiers, William, Limited. (See Huil, Joseph, assignor.)

Spies, Fred O., Adams, N. Y. Cutter board. 1,616,600;

Feb. 8.

Spless, Georg Lednzie-Placwitz. Germany. Sheat. 6204.

Seless, Georg, Lelpzig-Plagwitz, Germany. Sheet-feed mechanism for folding machines, printing machines, and the like. 1.614.688; Jan. 11. Spiess, Paul. (See Zoelly, A., and Spiess.) Spillane, Arthur J., Toledo, Ohlo. Sick-room outfit. 1.648.686; Nov. 15. Spillman, Edward O. North Toxawanda, assignor to Fischer Motor Company. New York, M. Y. Internat-combustion engine. 1,624,992; Apr. 19.

Spillner, Karl, Hanburg, Germany, Guard and safety devices for motor-driven vehicles, 1,649,939; Nov. 22. Spilman, Ollver P., Houston, Tex. Massaging machine. 1,616,831; Feb. 8. Spilsbury, Beulah G., assignor to The Munsingwear Com-poration, Minneapolis, Minn. Nightgown. 1,623,072;

porteron, market Sapiral Sapira S

Vashing and United and D. Crabtree, Bradford, ink, Alfred, Whitehaven, and D. Crabtree, Bradford, England, Loom for weaving pile fabrics. 1,624,993;

England.

England. Loom for Weaving pile narries. Apr. 19.
Spink, Leiand K. (See Brown, W. C., and Spink.)
Spinka, Edward J. (See Whiteley, John T., aseignor.)
Spinka, William A., & Company. (See Hoskin, Edmund
Spinner, Philip v., Chicago, Ill. Receptacle for smokling materials. 1.646,632; Oct. 25.
Spinney, Andrew G. (See Taber, E. A., and Spinney, J.
Spiral Piston Ring Company. (See Graves, Harry S., assignor.)

Spiral Piston Ring Company. (See Graves, Harry S., assignor.)
Spiral Radiator Company. (See Olson, John O., assignor.)
Spiral-Rolled Products Co., The. (See Williams, Frank
H., assignor.)
Spiro. Charles, New York, N. Y. Parking device.
1,634,803; July 5.
Spiro. Charles, New York, N. Y. Silent type-bar action.
Spiro. Charles, New York, N. Y. Silent type-bar action.
Spiro. Charles, New York, N. Y. Silent type-bar action.
Spiro. Charles, New York, N. Y. Silent type-bar action.
Spiro. Charles, New York, N. Y. Silent type-bar action.
Spiro. Charles, New York, N. Y. Watchcase. 1,638,600;
Aug. 39.

Spiro, Harry, Chicago, Ill. Dental casting flask.

1,633,416; Aug. 16.

Spiro, Max, Sea Gate, N. Y. Watchcase. 1,638,600;

Aug. 3.

Spiro, Max, Sea Gate, N. Y. Watchcase. 1,638,600;

Aug. 3.

Spiro, Max, Sea Gate, N. Y. Watchcase. 1,638,600;

Spira, Frances. (See Guillen, W. E., assignor.)

Spira, George, San Francisco, Calif. Glove and manufacture of the spiral s

Sprague, Alonzo B., Brooklyn, N. Y., assignor of two-thirds to Relief Society for the Aged. Bed and spring therefor. 1,620,404; Mar. 3. Sprague, Clarence A., East Orange, N. J., assignor to Western Biectric Company, Incorporated, New York, N. Y. 1,616,639; Feb. 8.

1,616,639; Feb. 8.

Sprague, Earl D. (See Shipman, Robert L. assignor.)

Sprague, Earl D. (See Shipman, R. L., and Sprague.)

Sprague, Earl V., assignor of one-third to E. C. Wilson and one-third to H. J. Hilson, Davenport, Iowa. Self-closing stopock. 1,631,667; Jun forty-nine non-hundred the self-councily suppock. 1,632,1667; Jun forty-nine non-hundred third to B. K. Dustin, Chicago, III. Method and apparatus for making confections. 1,645,260; Oct. 11.

Sprague, Frank D., Brooklyn, N. Y. Automatic brake-control apparatus. 1,625,586; Apr. 20: Commitcelly-response. Frank N. Holyoke, Colo. 1,731, Dec. 6.

Sprague, Frank P., Firchburg, Mass. Adjustable cuff for garments. 1,616,640; Feb. 8.

Sprague-Hathaway Company. (See Thonet, Joseph R., Sprague, Hathaway Company. (See Thonet, Joseph R., assignor.)

Sprague, Linus K. (See Thompson, A. G., and Sprague.)

Sprague, Robert C., Quincy, Mass. Condenser. 1,616,832;

Feb. 8.

Sprague, Linus K. (See Thompson, A. G., and Sprague, Sprague, Robert C., Quincy, Mass. Condenser. 1,616,832; Sprague-Sells Corporation. (See de Beck, William, assignor.)

Sprague-Sells Corporation. (See Northrup, Elmer C., assignor.)

Sprague-Sells Corporation. (See Northrup, Elmer C., assignor.)

Sprague-Sells Corporation. (See Northrup, Elmer C., assignor.)

Spragy, Lester E., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Thermosensitive relay. 1,631,836; June 7.

Sprecher, Peter W., Milwaukee, Wis. Electric-fixture attachment. 1,643,497; Nov. 15.

Spreckels, Claus, et al. (See Eckles, Noble, assignor.)

Sprecher, Charles C., assignor, by mesne assignments, to Electric Refrigeration Corporation, Detroit, Mich. Mechanical refrigeration Corporation, Detroit, Mich. Mechanical refrigeration 1,647,148; July 5.

Spreen, Charles C., assignor to Electric Refrigeration Corporation, Detroit, Mich. Mechanical refrigeration Corporation, Detroit, Mich. Refrigeration, 1,653,237; Dec. 20.

Spreen, Charles C., assignor to Electric Refrigeration Corporation, Detroit, Mich. Mechanical refrigeration Corporation, Detroit, Mich. Mechanical refrigeration Corporation, Detroit, Mich. Mechanical refrigeration Lifest 239: Dec. 20.

Spreen, Charles C., assignor to Electric Refrigeration Corporation, Detroit, Mich. Mechanical refrigeration Lifest 239: Dec. 20.

Spreen, Charles C., assignor to Electric Refrigeration Corporation, Detroit, Mich. Mechanical refrigeration Detroit, Mich. Mechanical refrigeration Spreen, Charles C., assignor to Electric Refrigeration Lifest 239: Dec. 20.

Spreen, Charles C., assignor to Electric Refrigeration Lifest 239: Dec. 20.

Spreen, Charles C., assignor to Electric Refrigeration Lifest 239: Dec. 20.

beschränker rautum, toe signor.)
Sprenger, Emile, Go'dach, Switzerland. Method and apparatus for mixing, grading, and sorting granular and pulverulent material. 1,636,031; July 19.
Sprenger, George W., Lynn, Mass., assignor to General Electric Company. Telemetric system. 1,620,405;

Mar. 6. James A., North Tonayanda, assignor, by mesne Spring, Bames at North Tonayanda, assignor, by mesne N. Y. Index device. 1,614,021; Jan. 11. Sprenger, Richard, Hennigsdorf, Germany, assignor to General Electric Company. Nonmetallic toothed element. 1,643,145; Sept. 20. Nonmetallic toothed element. 1,643,145; Sept. 20. Spring, Fallon, Nev. Tailboard, Sept. 20. Spring, Germany, Sastjonor to General Electric Company. Suction device for mica-coating machines. 1,631,652; June 7. Spreyer, George S., Fallon, Nev. Tailboard scraper. 1,633,464; June 21. Sprick, Herbert, Lelpzig, Germany. Nut-tapping machine. Sprick, Herbert, Lelpzig, Germany. Nut-tapping machine. Sprick, Herbert, Lelpzig, Germany. Nut-tapping machine. Spring, Daniel T., and S. E., Wheeling, W. Va. assignors of two-thirds to H. D. Scott, Wheeling. W. Va. Scraper for rolled plates. 1,626,435; Anr. 26. Spring, Edward A., Phoenix, Ariz. Mold chill. 1,649,199; Spring, Edward A., Phoenix, Ariz. Mold chill. 1,650,240; Nov. 22.

Spring, Edward A., Phoenix, Ariz. Mold chill. 1,650,249; Nov. 22.

Spring, Marcus T., Pepperell, Mass. Match receptacle. 1,638,222; Aug. 9, Spring, Samuel E. (See Spring, Daniel T. and S. E.)

Spring, Samuel E. (See Spring, Daniel T. and S. E.)

Springer, Samuel E. (See Spring, Daniel T. and S. E.)

1,615,477; Jan. 25.

Springer, John E. and R. Princeton, Ill. Gear shift. 1,615,477; Jan. 26.

Springer, John E. and R. A. Harry, Baltimore, Md. Springer, John E. and R. A. Harry, Baltimore, Md. Springer, John E. and R. A. Harry, Baltimore, Md. Springer, John E. and R. A. Harry, Baltimore, Md. Railway-crossing safety device. 1,631,387; June 7.

Springfield Metallic Casket Company, The. (See Alien, Francis K., assignor.)

Springfield Mfg. Co., The. (See Brandes, P. H., and Adams, assignors, Springfield Mfg. Co., The. (See Brandes, P. H., and Adams, assignors, Springfield Mfg. Co., The. (See Brandes, P. H., and Adams, assignors, Springfield Mfg. Co., The. (See Brandes, P. H., and Geivie, I. 622,549; Mar. 29.

Springhorn, Charles, New York, N. Y. Musical Instrument, 1,622,609; Mar. 29.

Springthorpe, Isaac, Philadelpha, assignor, by mesne as
Apr. 5016, 7a. Warp-knitting machine, 1,623,603; Apr. 5016, 7a. Warp-knitting machine, 1,623,603; Apr. 5016, Machine Company, Springshorn Textile Machin

Apr. 5.

Springthorpe Textile Machine Company. (See Springthorpe, Isaac, assignor.)

Sproesser, William C., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Incandescent electric lamp.
1.624.077: Apr. 12.

Sproesser, William C., Bloomfield, N. J., assignor to
Westinghouse Lamp Company. Getter for controlling
crystal growth. 1.626.637; May 3.

Sproesser, William C., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Introduction of cleanagents into evacuated ressells. 1,626,638; May 3.

Sproesser, William C., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Application of getters to electric incandescent lamps and the like. 1,626,639;

May 3.
Spresser, William C., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Evacuation of bulbs and the Hilliam C., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Viscosity gauge. 1,651,416; Dec. 6.
Sprong, Severn D., Brooklyn, N. Y., assignor to General Electric Company. Cooling transformers. 1,641,702;

Sept. 6. Sproul, E. W., Company. (See Sproul, W. R., and Layer,

sproul. E. W., Company. (See Sproul, W. R., and Layer, assignors.)

Sproul, Wilford R., Chicago, and H. Layer, Winnetka, assignors to E. W. Sproul Company, Chicago, Ill. Form for concrete wall construction. 1628,752; May 17.

Sprout, Waldron & Co. (See Sayder, Simon, assignor, Sprout, Willis F., Lebanon, Kans. Proportional dividers. 1,626,939; May 3.

Sprug Edwin G., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,629,746; May 24.

Spurgeon, Glenn, Hillisburg, Ind. Storage-battery terminal connection. 1,635,351; July 12.

Spurgeon, Ghern, Hillisburg, Ind. Lautomobile body. Des. 73,212; Aug. 2.

Spurge, Karles, De Kalb, Ill. Automobile body. Des. 73,212; Aug. 2.

Spurgeon, Glenn, Hillisburg, Ind. Storage-battery terminal connection. 1,635,351; July 12.

Spurger, Starles, De Kalb, Ill. Automobile body. Des. 73,212; Aug. 2.

Spurger, William B., Scottsbluff, Nebr. Seed huller. 1,651,641; Dec. 6.

Spurrier, Harry. (See Berge, Godskalk, assignor.) Spurrier, Harry. (See Berge, Godskalk, assignor.) Spurrier, Harry. (See Horton, Bryson D., assignor.) Squibb, E. R., & Sons. (See Boyd, R., Nitardy, and Lewis, assignors.) (See Nitardy, Ferdinand W., Suilbb, E. R., and Sons. (See Nitardy, F. W., Bartlett, Suilb, E. R., and Sons. (See Nitardy, F. W., Bartlett, Suilb, E. R., and Sons. (See Nitardy, F. W., Bartlett.

Squibb, E. R., and Sons. (See Nitardy, F. W., Bartlett, assignor.)
Squibb, E. R., and Sons. (See Nitardy, F. W., Bartlett, and Berg, assignors.)
Squibb, Lloyd Y. Camden, N. J., assignor to Victor Talking Machine Company, Stop mechanism for talking machines, 1,615,243; Jan. 25.
Squier, Geo. L., Mfg. Co., The. (See Faber, Otto, assignor, Geo. L., Manhorgne, Co. J. C. Manhorgne, Co. J. C

Steel, Henry M., Chillicothe, Ohio. Clgarette holder, 1648,073; Nov. S. 1648,073; Nov. S. Stants-Gels, Rudolph C. G., Brooklyn, N. Y. Safety razor, 1,633,139; June 21. Stabile, Louis, Brooklyn, N. Y. Lock for steering wheels, 1,630,979; May 31.

1.630,979; May 31.
Stabler, Julia, New Brunswick, N. J. Rug. Des. 72,533; Nay 31.
Stabler, Julia, New Brunswick, N. J. Rug. Des. 72,533; Apr. 28.
Liebtric Company, Bridgeport, Conn. Electric fitting. 1,639,541; Aug. 16.
Stack, George E., Ballston Spa, N. Y., assignor to General Electric Company. Time element control and apparatus therefor. 1,638,547; Aug. 9.
Stack, John W., Springfeld, Mass. Ventilator for loco-time control and apparatus the control and apparatus therefor. 1,638,547; Aug. 9.
Stack, John W., Springfeld, Mass. Ventilator for loco-time continuous bats into upholstery plaits. 1,628,927; May 17.
Stackhouse & Allen. (Sea Stackhouse J. II. 1628,927; May 17.

Stackhouse & Allen. (See Stackhouse, J. H., and Allen,

Stackhouse, George A., Oakland, assignor of one-balf to C. W. Peek. San Leandro, Calif. Oven-door apring control. 1.016.471; Feb. 8. Stackhouse, Howard L. (See Schwenzer, G. A., and Stackhouse,)

Stackhouse, Howard L. (See Splain, W. E., and Stack-

Nouse., Stackhouse, George A., Hayward, assignor to Pacific Spring Company, Oakland, Calif. Bed-spring-supporting bracket, 1,647,072; Nov. 1. Stuckhouse, John H., Wilmette, and J. R. Allen, assignors to Stackhouse & Allen, Chicago, Ill. Electrical screw plant. 1,615,60; Dec. 6. Stackhouse, W. H., et al. (See Einfeldt, Ernest E., assignose, W. H., et al. (See Ei

Signor.)
Stacy, Eugene C., Tiffin, Ohio. Swirel link. 1,624,441;
Apr. 12.
Stacy, Grover C., Dallas, Tex. Telescoping suction pipe.
1,625,576; Apr. 19.
Stacy, Ray H., East Orange, N. J., assignor to Brandes
Lahoratorles Inc., Newark, N. J. Machine for testing
cictriomagnetic sound reproducers. 1,043,428; Nov. 8.

Stader, Otto, and J. B. Olson, assignors to James Manufacturing Company, Fort Atkinson, Wis. Operating Stall for animals. 1,621,760 Mar. 25.

Stall for animals. 1,621,760 Mar. 25.

musical instruments. 1,646,118; Oct. 18.

Staege, Stephen A. (See Alexander, J. E., and Staege.) Staege, Stephen A. (See Alexander, J. E., and Staege.) Staege, Stephen A. Apr. 12.

Staege, Stephen A. Apr. 12.

Staege, Stephen A. Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Drying machine. 1,624,371; Apr. 12.

Staege, Stephen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Papermaking device. 1,633,960; June 28.

Staege, Stephen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Dynamo-electric machine. 1,638,890; Aug. 16.

Staelle, Gustav, Stuttgart, Germany, assignor to Cyklop Akt. Ges., Schaffhausen, Switzerland. Tool for use in like surfaces. 1,652,915; Dec. 13.

Staf, Axel H., assignor to Gorham Mfg. Company, Providence, R. I. Spoon or similar article. Des. 73,149; July 26,

Staf, Axel H., assignor to Gorham Mfg. Co., Providence, R. I. Spoon or similar article. Des. 74.030; Dec. 6. Stafford Company, The. (See Jackson, Simeon S., as-

R. I. Spoon or similar article. Des. 74.030; Dec. 6. Stafford Company, The. (See Jackson, Simeon S., astafford, Earl C., Philadelphia, Pa., System of control for marine engines. 1.643.624; Sept. 27. Stafford, Earl C., Philadelphia, Pa., assignor to The United States Train Signal Company, Portland, Me. Train-signal system. 1.614.406; Jan. 11. Stafford, Earl C., Philadelphia, Pa., assignor to The Stafford, Earl C., Philadelphia, Pa., assignor to The Stafford, Floyd H., Eastland, Tex. Fishing tool. Automatic train-control system. 1.628.634; May 10. Stafford, Floyd H., Eastland, Tex. Fishing tool. 1.645.461; Oct. 11. Stafford, Henry L., Long Beach, Callf. Machine to decapitate and clean fish. 1.932.200; June 14. Stafford, Jones G. (See Fallips, E. B., and Stafford). 1.649.553; Nov. 18. Stafford, Rogers T. (See Eallou, F. A., and Stafford). Stafford, Rogers T. (See Eallou, F. A., and Stafford, Stafford, william F., Hornersville, Mo. Composition for removing scales from stram boliers. 1.638.373; Aug. 9. Stage, Clarence I., Rockford, III. Hand stamp, 1,641,507; Sept. 6.

Stabel, Hermann. (See Gubler, H., Stabel, and Straub.)
Stabel, Hermann. (See Gubler, H., Stabel, and Straub.)
Stabil, August H., Grafton, Nebr. Horse-collar cushion.
1,623,210; Apr. 6.
Stabil, Edward C. M., Yonkers, N. Y., assignor to Pitts-burgh Transformer Company, Polyphase transformer.
1,641,61; Jan. 11.
Stabil, Edward C. M., Stignor to The Baker-Raulang Company, Cleveland, Ohio. Vehicle, 1,622,240; Mar. 22.
Stabil, Frederick W., Philadelphia, Pa. One-way pull latch. 1,631,229; June 7.
Stabil, Kari, and K. Siller, assignors to Luftschiftbau Zerporlin Gesellschaft mit beschränkter Haftung, Frederick M., Stiller, assignors to Luftschiftbau Zerporlin Gesellschaft mit beschränkter Haftung, 1,635,195; July 12.
Stabil, Laca M., Los Angeles, Calif. Hair curler. 1,643,035; Sept. 20.
Stabil, Leon Terr, Bast Molourne, R. G. Wilson, Park-Stabil, Kari, H. (161), and D. M. Hull, Melbourne, Victoria, Australia, Holding and printing mechanism for wrapping paper and other rolls. 1,617,086; Peb. 8.
Stablecker, Wilhelm, Stuttgart, Germany, Spinning machina, 1,643,655; Sept. 27.
Stabiluth, Arthur H. (See Farker, G. E., and Stabilatin)

Stainbrook, Charles M., Bowling Green, Ky. Vehicle sunshade. 1.631.074; May 31. Stainbrook, William H., Wimfield, Kans. Wire-rope swivel socket. 1.614.407; Jan. 11. Stair, William D., Mount Union, Pa. Seat pad for sportsmen's coats. 1,626,166; Apr. 26. Starkleen Burner Company. (See Tate, Harry F., as-Starkleen Burner Company. (See Tate, Harry F., as-Starkleen Burner Company.

signor.) Staley, Allen C., La Fayette, Ind. Control system for liquid fuel burners. 1,633,502; June 21. Staley, Earl B., Seattle, Wash. Tank. 1,640.471; Aug. 30.

Aug. 50.

Aug. 5

1.653,419; Dec. 20. Stalker, Frederick W. (See Foote, E. B., and Stalker.) Stallman, Otto. (See Gubelmann, I., Welland, and Stall-

man.) Stambaugh, Henry J. (See Adamson, K. F., and Stam-

Stamford Rubber Supply Company. (See Gillespie, Wil-

liam F., assignor.) Stamm-Scheele Manufacturing Co. (See Johnston, James

H., assignot., Stamos, Harry N. and A. N., and Brown.)
Stamos, Harry N. and A. N., and T. W. Brown, Centerville, lowa, Rail anchor. 1,622,613; Mar. 29.

Stames, Harry N. and A. N., and T. W. Brown, Centerville, Iowa, End-post protector, 1,622,614; Mar. 29, Stamp, Burnie A., assignor, by meane assignments, to Stamp Rightway Conveyor Company, Brooklyn, N. Y. Poultry crate, 1,624,517; Apr. 12, Stamp Rightway Conveyor Company, (See Stamp, Burnie A., assignor), W. Shibay, Le. Glerachield, 1,626,681. A., assignor.)
Stampley, Henry E., Sibley, La. Glareshield. 1,926,981;
May 3.
Stambrough, William M., Newburgh, N. Y. Metallic layer
for upper dentures. 1,622,683; Mar. 29.
Loss, 601; Ang. 3.
Stancill, Ciliton L., Bakersfield, Calif. Torch mechanism for welding machines. 1,623,603; Apr. 5.
Standard Arch Company. (See Benson, Davisson A., assignor.) signor.)
Standard Automatic Machine Company. (See Pennock, T. E., and Gregg, assignors.)
Standard Automatic Machine Company. (See Pennock. Theodore E., assignor.)
Standard Cap & Seal Corporation. (See Tevander, Olof N., assignor.)
Standard Car Tuck Company. (See Barber, Franklin L., assignor.)
Standard Chain Company. (See Kittelson, Halmer C., Standard Compositor Aktiengesellschaft. (See Buswell, Standard Compositor Aktiengesellschaft.
Waiter, assignor:)
Standard Compositor Aktiengesellschaft.
Falmedo, David, assignor:)
Talmedo, David, assignor:)
Standard Computing Scale Company.
Standard Computing Scale Company.
Standard Conveyor Company. (See Beull Standard Conveyor Company. (See Taylestandard Conveyor Company.) (See Petri-(See Stern, The. (See (See Beulke, G. W., and (See Taylor, William J., assignor.)
Standard-Coosa-Thatcher Company. (See Clark, Robert ., assignor.) Standard Corset Company, The. (See Von Halle, Millard, assignor.) Standard Coupler Co. (See Goodwin, Ernest G., as-Signor.) Standard Development Company. (See Allan, David M., assignor.) Standard Development Company. (See Becker, Arman Standard Development Company. (See Becker, Arman E., assignor.)
Standard Development Company. (See Buc, Hyym E., assignor.)
Standard Development Company. (See Burgess, Louis, as-Standard Development Company. (See Carringer, James R., assignor.) Standard Development Company. (See Clark, Edgar M., assignor.)
Standard Development Company.
Loomis, and Howard, assignors.)
Standard Development Company. (See Clark, E. M., (See Cobb, Ernest B., assignor.)
Standard Development Company.
A., assignor.) (See Howard, Frank Standard Development Company, Clark, and Carringer, assignors.) Standard Development Company. (See Howard, F. A., (See Howard, F. A., and Loomis, assignors.)
Standard Development Company.
and Wright, assignors.)
Standard Development Company. (See Howard, F. A., (See Hudson, Claude S., assignor.)
Standard Development Company. (See Johnson, Herbert L., assignor.)
Standard Development Company. (See Kraus, C. A., and Callis, assignors.) Standard Development Company. K., assignor.) (See Lewis, Warren Standard Development Company. (See Loomis, N. E., and Lewis, assignors.)
Standard Development Company.
G., assignor.)
Standard Development Company.
and Coleman, assignors.)
Standard Development Company. (See Messenger, Otis (See Parsons, L. W., (See Ranney, Leo, assignor.) Standard Development Company. (See Saybolt, John W., Standard Development Company. (See Spencer, Alexander C., assignor.) Standard Development Co. (See Zaikowsky, Wladimir M., assignor.) Standard Electric Products, Inc. (See Weiscopf, Marcus Standard Electric Products, Inc (See Weiscopf, Marcus W. assignor.)
Standard Electric Stove Company, The. (See Pierson, Charles A., assignor.)
Standard Fire Equipment Corporation. (See Johnston, Charles O., assignor.)
Standard Four Tire Co. (See Bierman, Edwin W., assignor.)

Standard Gas Equipment Corporation. (See O'Dowd, Henry W., assignor.) Standard Gas Equipment Corporation. (See Pittman, Ernest W., assignor.) Standard Machine Company. (See Bergsten, John, assignor.)
Standard Mailing Machines Company. (See Storck,
Frederick W. assignor.)
Standard Manufacturing Company. (See Elmstrom,
Robert M., assignor.)
Standard Manufacturing Company, The. (See Young,
James V., assignor.)
Standard Metal Spinning Co. (See Horowitz, Leon J., assignor.) Standard Mirror Company. (See La Hodny, William, assignor.)
Standard Mirror Company. (See La Hodny, W., and Standard Airror Company. (See La Hoony, W., and Standard Signor, Sonstruction Company, (See Smith, Henjamin C., assignor.) Standard Neckwear Company, (See Weinstein, Otto, as-signor.) Standard Oil Company. (See Atwell, Harold V., as-Oil Company. (See Atwell, Harold V., as-Oil Company. (See Bartels, Edward E., as-Standard Oil Company. (See Brinker, Jesse E., as-Standard Oil Company. (See Engbrecht, Herman J., as-Standard Oil Company. (See Humphreys, Robert E., as-Oil Company. (See Lockhart, Luther B., as-Oil Company. (See Nicholson, Stanley, assignor.)
Standard Oil Company. (See Paulus, Max G., assignor.)
Standard Oil Company. (See Paulus, M. G., and Brewster, Standard Oil Company. (See Rogers, F. M., and Bransky, assignors.) Standard Oil Company. (See Rogers, F. M., and Wilson, assignors.)
Standard Oil Company.
Wendt, assignors.)
Standard Oil Company.
signor.) (See Rogers, F. M., Grimm, and (See Thompson, Walter N., as-Oil Company. (See Wilkin, Robert E., assignor.)
Standard Oll Company.
signor.) (See Wilson, Robert E., as-Standard Oil Company, (See Wilson, R. E., and Atwell, assignors.)
Standard Oil Company. (See Wilson, R. E., and Bahlke, assignors.) Standard Oil Company of California, (See Anfenger, Maximilian B., assignor.)
Standard Oil Company of California. (See Bessonett, Leland S., assignor.)
Standard Oil Company of California. (See Bly, Edwin Standard Oil Company of California. (See Bly, Edwin Standard Company of California. (See Christopher, Harold S., assignor.) Standard Oil Company of California. (See Dicely, Lee W., assignor.) Standard Oil Company of California. (See Evans, John M., assignor.)
Standard Oil Company of California. (See Hanna,
Richard W. and R. J., assignors.)
Standard Oil Company of California. (See Kuhl, John, Standard Oil Company of California. (See Kuhl, John, assignor.).
Standard Oil Company of California. (See Thompson, Standard Oil Company of California. (See Thompson, Standard Oil Company of California. (See Williams, Philip S., assignor.)
Standard Oil Company of California. (See Williams, Philip S., assignor.)
Standard Oil Company of California. (See Williams, George O., assignor.) of New York. (See Rather, J. Standard Oil Company of New York. (See Rather, J. Standard Oil Company of New York. (See Rather, J. M., assignor.) Standard Oil Development Company. (See Brown, Henry M. assignor.)
Standard Oil Development Company. (See Burgess, Louis, assignor.)
Standard Oil Friction Burner Company. (See Hoag, Charles I., assignor.)
Standard Oil Friction Burner Company. (See Hoag, Charles I., assignor.)
Standard Plate Glass Company. (See Stilwell, R. O., and Christie. assignors.)
Standard Plate Glass Company. (See Stilwell, R. O., and Christie. assignors.)
Standard Pneumatic Action Company. (See Fiala, Joseph B., assignor.)
Standard Procobold Corporation. (See Watson, Philip Harder Company). (See Watson, Philip Standard Radio Corporation. (See Cohen, M., and Stenman, assignors.) Standard Radio Corporation. (See Dutcher, Frank, assignors.)
Standard Railway Fusee Corporation. (See Dutcher, Frank, assignor.)
Standard Safety Appliance Company. (See Benson, Henry Standard Sately pp.
R., assignor: Standard Series, Standard Series, Standard Series, Standard Sealing Equipment Corporation. (See Kimball, W. D., and Ridcout, assignors.) Standard Gage Co. (See Aldeborgh, Erik H., assignor.) Standard Gage Company. (See Ritchey, P. D., and Holt,

Standard Scaling Equipment Corporation. (See Kimball, W. D. Rideout, and McFuill, assignors.)
Standard Scaling Equipment Corporation. (See Mo-Faull, M., and Rideout, assignors.)
Standard Silk Dyeling Co. (See Seyer, Joseph, assignor.)
Standard Spray Pump Company. (See Costello, Frank (See Kimball, T., assignor.)
Standard Steel and Bearings Incorporated. (See Gamble, Robert E., assignor.)
Standard Steel Can Company. (See Lindsay, G. W., and Nordenmalm, assignors.)
Standard Steel Car Company. (See Anderson, Harry T., assignor.)
andard Steel Car Company. (See Christianson, An-Standard Standard Steel Car Company. (See Christianson, Andrew, assignor.)
Standard Steel Propeller Company. (See Caldwell, Frank W., assignor.)
Standard Stoker Company. (See Hunt, Andrew M., assignor.) Standard Thermometer Company. (See Adair, Thomas Standard Thermometer Company. (See Adair, Thomas D., jr., assignor.)
Standard Tobacco Stemmer Company. (See Bronander, Wilhelm B., assignor.)
Standard Trump Brothers Machine Company. (See Fay, Frederick I., assignor)
Standard Trump Brothers Machine Company. (See Standard Underground Cable Company. (See Standard Underground Cable Company. (See Fisher, Henry W., assignor.)
Standard Underground Cable Company. (See Fisher, H. W., and Atkinson, assignors.)
Standard Underground Cable Company. (See Schooley, Claude O., assignor). (See Company. (See Simons, Donald M., assignor).
Standard Varnish Works. (See Hirsh, J. E., and Robson, assignors.)

Johand M., assignor.

Standard Varnish Works. (See Hirsh, J. E., and Robson, Standard Varnish Works.)

Standard Varnish Works. (See Hirsh, J. E., and Robson, Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Regulating means for elastic-fluid turbines. 1,629,318; May 17.

Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Regulating means for elastic-fluid turbines. 1,629,319; May 17.

Standerwick, Reginald G., Marblehead, Mass., assignor to the like. 1,652,879; Dec. 13.

Standfest, George, jr., Rochester, N. Y. Rail structure. 1,640,858; Aus. 30.

Standing, Amos W., Houston, Tex. Bill clasp. 1,636,254; July 30.

Standing, Amos W., Houston, Tex. Bill clasp. 1,636,254; July 30.

Standing, Amos W., Houston, Tex. Bill clasp. 1,636,254; July 30.

Standing, Amos W., Houston, Tex. Bill clasp. 1,536,254; July 30.

Standing, Amos W., Houston, Tex. Bill clasp. 1,536,254; July 30.

Standing, The Mark Marker M., Stander, Stander, L., 1642,273; Sept. 13.

Stander, Harvey R., Thisa, Okla. Packer. 1,642,273; Sept. 13.

Standlee, Harvey R., Tulsa, Okla. Packer. 1,642,273; Sept. 13.
Standlee, Harvey R., Tulsa, Okla. Packer. 1,642,273; Sept. 13.
Standlee, Harvey R., assignor to Paul Arbon & Company, Tulsa, Okla. Combined socket and Jar. 1,620,985; Mar. 16.
Stanfeld, William R., Union, Iowa. Supporting and 1,651,642; Dec. 6.
Stanford, Forrest G. (See Korner, J. H., and Stanford.) Stange, Christopher L. assignor to The Grand Council of the Order of De Molay, St. Louis, Mo. Ring. Des. 73,108; July 19.
Stange, Goorge H. Portland, Orec. Theft alarm for Stanger, Goorge H. Ortland, Orec. Theft alarm for Stanger, Orlot C. (See Miner, C. S., and Stanger.) Stanger, Orlot C. (See Miner, C. S., and Stanger.) Stanger, Group of the Stanger, Company, Bridgeport, Conn. Attachling non-metallic facings to working clutch members. 1,620,043; Mar. 8.

Mar. S.
Stanley, George P., assignor to Berst-Forster-Dixfield
Company, Dixfield, Me. Machine for making toothpicks
and the life, 1618,623; Jan. 11.
Stanley, Irving, assignor, by mesne essignments, to Scaled,
for making receptacles, 1,628,674; May 10.
Stanley, Isaac F., Manset, Me. Tire chain. 1,617,034;
Feb. S.
Stanley, Malcolm S. (See Innes, W. R. D., and Stanley,
Stanley, Stanley J., New York, N. Y. Bottle or bag
Stanley, William, Chlengo, Ill. Fish balt. 1,615,963;
Feb. 1, 1640,430; Aug. 30.

Stanley,

Stanley Works, The. (See Bodmer, C., and Cook, as-Stanley Works, The. (See Cook, Harris J., assignor.) Stanley Works, The. (See Parsons, Stuart W., assignor.) Stanley Works, The. (See Raymond, Horace H., assignor.) Stanley Works, The. (See Schade, Edmund A., as-

Stannard, Winfield H. (See Klopsteg, P. E., and Stan-

Stansbury Harry B. St. Louis, Mo. Pneumatic chassis support. 1,045,235; Oct. 18.

1,051,209; Nov. 20.

Stansfield. William H., Auburn, N. Y. Display rack. 1,632,401; July 5.

Stant. Kyle E. Cennersville, Ind. Radiator cap. 1,652,061; Dec. 6.

Stanton Arthur G., Fargo, N. Dak. Fastener. 1,637,502;
Aug. 2.

1.634,805; July 5.

Staples, Charles F., Detroit, Mich. Washing machine.
1.634,890; July 5.

Staples, Earle I., New York, N. Y. Liquid-fuel burner,
1.641,017; Aug. 30.

Staples, Edden I., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing company. Motorstaples, Edden I., East Pittsburgh, Pa., assignor to American
Telephone and Telegraph Company. Electrical transmitting system. 1.622,367; Mar. 29.

Staples, Horace A., Plainfield, and H. K. Beach, Roselle,
N. J., assignors to American Copper Products Corporation, New York, N. Y. Machine for pickling colds of
wire or roots. 1.643,186; Sept. 20.

1.616,766; Feb., Sulsa, Otla. Safety connecting link.
1.616,766; Feb., Sulsa, Otla. Safety

Stapleton, Glenn T. (See Smith, Herbert C., assignor.)
Stapp. Frederick, Denver, Colo. Riveting mandrel.
1,634,521; July 5.
Star Chandelier Co. (See Boehringer, John A., assignor.)
Star Drilling Machine Company, The. (See Krupp, Leo
A., assignor.)
Star Porrelain Company, The. (See Sortwell, Harold H.,

assignor.) ar, Richard, Brooklyn, N. Y. Ship's log. 1,641,907;

ar, Richard, Francis F., as-sept. 6. ar Shutter Company. (See Hansen, Francis F., assignor.)

signor.)
Star Sprinkler Corporation. (See Griffith, William B., assignor.)
Star, Wyatt C., Lake Wales, Fla. Flexible-tread wheel. 1.634.048; June 28.
Starbuck, James R., Tampa, Fla. Garter. 1.636.720; July 26.
Starck, John E. E. (See Turner, F. J., and Starck.)
Starck, William A., assignor to Badger Manufacturing Corporation, Milwaukee, Wis. Automobile bumper. Des. 71.852; Jan. 11.
Starita, Frank. C., al. (See Kurz. Robert F., assignor.)
Starita, Frank E., Chicago, Ill. Yentliator. Reif6.812; Dec. 6.
Stark, Frederick W., assignor to International Silver Care.

Stark, Frank R., Chicago, Ill. Ventilator. Re16,812; Dec. 6.
Stark, Frederick W., assignor to International Silver Corn. Spoon or similar article Dec. 7:2,583; Oct. 4.
Stark, George W., Mason, Mich. Dirt conditioner. 1,650,400; Nov. 22.
Stark, Harold M., Highland Park, Mich. Apparatus and process for leeching, filtering, and absorbing gases and the like. 1,625,831; Apr. 30.
Surface for highways, 1000 miles of the condition of the like. 1,625,831; Apr. 30.
Surface for highways, 1000 miles of the condition of the like. 1,635,831; Apr. 30.
Stark, John W., Kensington, Minn. Grass-seed scarifler. 1,651,300; Nov. 29.
Stark, Nathan I., Philadelphia, Pa. Scouring device. 1,645,359; Oct. 11.
Successful of the condition of the Stibium Products of the company, Elyria, Ohio. Making precipitated antimony sulphide. 1,633,764; June 28.
Stark, Theodore H., assignor to C. Bruno & Son, Inc., New York, N. Y., Volin case. 1,624,394; Apr. 19.
Stark, Vester, Fairfield, Iowa. Gambrel. 1,641,508; Sept. Wite E. (See Evg. Q. and Stark).

New York, N. Y. Violin case. 1.624.994; Apr. 19. Stark, Vester, Fairfield, Iowa. Gambrel. 1.641,508; Sept. 6. End. 0. Ok Park. assignor to The Rudolph Warlitzer Company. Chicago, Ill. Harp damper. 1.637,539; Aug. 2. Starke, Ernest F., Red Cloud, Nebr. Rim tool. 1.632,248; June 14. Starke, Otto R., assignor to The Ferdinand Strauss Correct Company. Chicago, Ill. Harp damper. 1.037,539; Aug. 2. Starke, Otto R., assignor to The Ferdinand Strauss Correct Company. The Property of the Property o

Starkey, William C., assignor to L. G. S. Devices Corpora-tion. Indianapolis, Ind. Starter for automobiles. I,617,775; Feb. 15. Starkey, William C., assignor to L. G. S. Devices Cor-poration, Indianapolis, Ind. Multiple-spring clutch. I,629,420; May 17. Starkey, William C., assignor to L. G. S. Devices Cor-Starkey, William C., assignor to L. G. S. Devices Cor-

key, William C., assignor to L. G. S. Devices Corration, Indianapolis, Ind. Friction clutch. 1,640,472; 18. 30.

poraton, Inmanapous, Ind. Friction cutch. Accounts, Aug. 30.

Starkie, John W., East Elmhurst, N. Y., assignor to The Acolian Company. Keyboard for organs and the like.

1,623,211; Apr. 5.

Starkin, Arthur C., Paterson, assignor of one-third to Starkin, Arthur C., Paterson, assignor of one-third to 1,648,032; Nov. 8.

Starkweather, George B., Washington, D. C. Aircraft, 1,645,779; Oct. 18.

Starner, Otis H., Carlisle, Pa. Corrective shoe and arch support therefor. 1,618,684; Feb. 22.

Starr, Charles E., Oakland, Calif., assignor to Perfecto Gear Differential Co., Seattle, Wash. Transmission mechanism. 1,623,213; Apr. 5.

Starr, Charles M., South Bend, Ind. Automatic cut out. 1,628,339; May 10.

Starr, Frank F., assignor to Delco-Light Company, Dayton, Ohlo. Engine. 1,628,349; Apr. 26.

Starr, Frank F., assignor to Delco-Light Company, Dayton, Ohlo. Engine. 1,628,349; Apr. 26.

Starr, Frank F., assignor to Delco-Light Company, Dayton, Ohlo. Engine. 1,628,349; Apr. 26.

Starr, Fred, et al. (See Pennebaker, George B., assignor.)

Starr, Fred, et al. (See Penneusau, Starr, Fred, et al. (See Jones, George A. E., assignor.)

signor.)
Starr, Howard D., Long Beach, Calif. Maintaining a reserve supply of fuel in fuel tanks. 1,633,046; June 21.
Starr, Morton, St. Johnsbury, Vt. Weighing machine. 1,627,124; May 3.
Starr, Morton H., assignor to E. & T. Fairbanks and Company, St. Johnsbury, Vt. Scale. Re16,540; Dec. 27.
July 21. Johnsbury, Vt. Scale. Re16,540; Dec. 27.
July 21. J. Detrit, Mich. Lathe, attempted.

Company, St. Johnsbury, Vt. Scale. Rei6,840; Dec. 27.
Starr. Peri L., Detroit, Mich. Lathe attachment. St. 16,19,823; Mar. 8.
Apr. 12.
Latter, Chicago, Ill. Grinding tool. 1,624,634; Apr. 12.
Starr. Fend. C., Chicago, Ill. Cylinder-grinding tool. 1,624,635; Apr. 12.
Starr Flano Company. Ches Mayer, Fred G., assignor.) Starr Flano Company. Green Selected, Sakakatchewan, Canada. Reigner, Starrett, Henry F., assignor to Starrett Manufacturing Company, Chicago, Ill. Panel board and panel-board construction. 1,629,645; May 2, Starrett, Manufacturing Company. The. (See Simpson, Robert Starrett Manufacturing Company. (See Starrett, Henry F., assignor.)

F., assignor.)

Starrett, Wendelin D., Oakland, Calif. Slope-stake calculator. 1,035,646; July 12.

Startup, Kenneth S. (See Young, Frank A., assignor.)

Stassart, Joseph D., Berkeley, assignor of one-fourth to W. A. Harter, San Francisco, Calif. Direction indicator for motor trucks and the like. 1,635,587; July 12. Radolph B., wilber, Nebr. Dandelion grubber, State England, 442; Apr. 12. Wilber, Nebr. Dandelion grubber, State England, & Trust Company, trustee, The. (See Schaffer, Lewis D., assignor.)

Stateler. Ernest S. (See Kohman, H. A., Irvin, and Stateler.)

Stathakis, Sam. (See Bellamy, William D., assignor.) Stathes, George A. (See Stathes, Nicholas A. and G. A.) Stathes, Nicholas A. and G. A., New York, N. Y. Auto-matic closure. 1,629,747; May 24. Statler, Charles, et al. (See Peterman, Henry, as-

signor.)
Stauber, Max. (See Herrmann, J., and Stauber.)
Staubily, John, assignor to Eagle Pencil Company, New
York, N. Y. Display container. 1,628,439; May 10.
Stauber, S. St

Dec. 6.
Stauffer, Wallace W., Akron, Ind. Dough cutter, 1.618.685; Feb. 22.
Staunton, Le Roy W. (See Rypinski, M. C., Staunton, Stunnton, Le Roy W., Jackson Heights, N. Y., assignor to Brandes Laboratories, Inc., Newark, N. J. Electro-Staupie, Alton W., Foxboro, Wis. Screw-driver attachment, 1.625.227; Apr. 19.
Stauss, John, New Orleans, La. Keyboard-indicating device and registering performance. 1,644,960; Oct. 11.
Stauss, Walter J., Cincinnati, Ohlo, assignor to Union Special Machine Company, Chicago, Ill. Walstband Stavrum, Maurice W., Chicago, Ill. Loop antenna. Des. 723.18; Mar. 1.

Stay, Theron D., and C. O. Tessier, Cleveland, Ohio, assignors, by mesue assignments, to Aluminum Company of America, Pittsburgh, Pa. Apparatus for reclaiming metals, 1,630,331; May 31.

May 3

Aug. 30.
Stazak, Michael B., assignor to Kellogg Switchboard and
Supply Company, Chicago, III. Electric rectifier.
1,637,418; Nov. 1.
Stead, Charles E. (See Skeen, Samuel T., assignor.)
Stead, Lawrence A. (See Carlson, E. E., and Stead.)
Stead, Lewis H., Los Angeles, Calif. Plumbing fixture.
1,613,251; Jan. 4.
Stead Rail Anchors Incorporated. (See Cooper, Francis
W assignor)

Stead, Charles & A. (See Carlson, E. and Stead, Stead, Lewis H., Los Angeles, Calif. Plumbing fixture. 1,612.251; Jan. 4.

Stead, Lawis H., Los Angeles, Calif. Plumbing fixture. 1,612.251; Jan. 4.

Stead Rail Anchors Incorporated. (See Cooper, Francis W., assignor.)

Steam, Franklin A., Paterson, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., Machine-Switching Selector-switch circuit. 1,648,009; Nov. 8.

Steam, Franklin A., Paterson, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., Machine-Switching Selector-switch circuit. 1,648,009; Nov. 8.

Steams, Franklin A., Paterson, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., Machine-Switching Selector-switch Company, Incorporated, New York, N. Y., Counting-relay operation. 1,650,4745; Nov. 29.

Steams, Frank B., Shaker Heights Village, Ohio. Fluid Steams, Jason C., Worcester, Mass. Tail and signal lamp. 1,629,549; May 24.

Steabins, Haver E., Los Angeles, Calif. Screen. 1,638,388; Aug. 16.

Stebbins, Albert H., Los Angeles, Calif. Screen. 1,618,473; Feb. 8.

Stebbins, Albert H., Los Angeles, Calif. Concentrator-stebbins, Albert H., Los Angeles, Calif. Operating means. Stebbins, Albert H., Los Angeles, Calif. Operating means. 1,627,673; May 10.

Stebbins, Albert H., Los Angeles, Calif. Operating means. 1,627,673; May 10.

Stebbins, Albert H., Los Angeles, Calif. Operating means. 1,627,673; May 10.

Stebbins, Albert H., Los Angeles, Calif. Concentrator. 1,650,248; May 24.

Stebbins, Albert H., Los Angeles, Calif. Concentrator. 1,628,285; Nov. 8.

St

Steel, Benjamin F., East Orange, and H. D. Kelly, Bloomfield, N. J., assignors to Westinghouse Lamp Company, Machine for treating wire. 1,617,657; Feb. 8.
Steel, Benjamin F., East Orange, N. J., assignor to Westinghouse Lamp Company, Making bimetallic wire. 1,653,378; Dec. 20.
1,653,378; Dec. 20.
Steel, Charles W., and R. T. Griffiths, assignors to The Miller Rubber Company, Aknon, Ohio. Method of and apparatos for making hollow articles. 1,624,849;

appnratus for making hollow articles. 1,624,849; Apr. 12.
Steel Construction Company Limited. (See Davies, Frederick A., assignor.)
Steel, Donald, Jarbidge, Nev. Dredge sluice jig. 5,651,946; N. C. Steel Corporation. (See Rahling, Henry D., assignor.)
Steel Heddle Manufacturing Company. (See Kaufmann, Jacob, assignor.)
Steel Products Company, The. (See Crawford, Frederick C., assignor.)

C., assignor.) Company, The. (See Crawford, F. C., Steel Froduce assignors).

Steel, Samuel T. (See Durnell, Harold G., assignor.)

Steel Saffolding Company, The. (See Goodwin, James R., assignor.)

Steel Scaffolding Company, The. (See Goodwin, Percy Steel Scaffolding Company, The. (See

E., assignor.) Stamping Company, The. (See Bregman, Harry,

assignor.)
Steel and Tubes, Incorporated. (See Bregman, Harry, assignor.) V., assignor.)
Steel Wheel Corporation. (See Forsyth, George H., as-

Wheel Corporation. (See Putnam, Alden L., as-

Steel W Wheel Corporation. (See Schoenthal, Fred C., as-

signor.)

eel Wheel Corporation, The. (See Tuttle, W. W., and
Hirvonen, assignors.)

eel Wheel Corporation. (See Williams, William E.,

Steel, William E., assignor to The Miller Rubber Company, Akron, Ohio, Strip-applying attachments for tire-building machines. 1,632.151; June 14.
Steele, Edwin G. Semonth Strip-applying attachments for tire-building machines. 1,632.151; June 14.
Steele, Edwin G. (See Sutton H. M., Steele, and Steele, Steele, Edwin G. (See Sutton H. M., Steele, and Steele, Steele, Herbert H., Lyphrook, N. Y. Educational device for teaching spelling. 1,619,160; Mar. I.
Steele, Edwennec C. Pittisburgh, Pa. Feeding mechanism Steele, Roscoe, Rockway, Y. J., assignor to Wirebounds Patents Company. Machine for use in making boxes, 1,634.049; June 28.
Steele, Marter L. (See Sutton H. M., Steele, and Steele.) Steelemith, F. R., trustee. (See Stocking, Bert A., assignor).

Steelsmith, F. R., trustee, (See Stocking, Bert A., assignort), Steen, Carl W., Norwood Ohio, assignor to Allis-Chalmers Manufacturing Chapter (1925, 620), Michael W. S. Adjustable Machine Support 1, 1625, 620, Michael W. Norwood, Ohio, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis, Alternating-current motor, 1,641,704; Sept. 6. Steen, James C., assignor to The Reynoids Machine Company, Milwand Machine Company, Milwand Machine Company, Milwand Machine Company, Milwand Machine Company, Steenrod, William J., assignor to Baker-Vawter Company, Benton Harbor, Mich. Loose-leaf binder, 1,619,589; Mar. 1.

Mar. I. Assignor to Baker-Vawter Company, Benton Harber, Mich. Locking mechanism for Steenrod, William J., assignor to Baker-Vawter Company, Benton Harber, Mich. Locking mechanism for Steenrod, William J., assignor to Baker-Vawter Company, Benton Harbor, Mich. Binder. 1,630 500; May 31. Steenrod, William J., assignor to Baker-Vawter Company, Botton Harbor, Mich. Lock for losse-leaf binders. Steensen, Lulu E., West Salem, Wis. Knicker supporter. 1,643,643; Sept. 27. Steenstra, George, assignor of one-Sixth to H. B. Seligstein, one-sixth to M. F. Seligstein, and one-sixth to C. Seligstein, St. Louis, Mo. Airplane, 1,644,453; Steenstrup, Christian, Schenoctade, N. V. Astignor, St. Steenstrup, Christian, Schenoctade, N. V. Astignor, S. Steenstrup, S. Steenstrup, Christian, Schenoctade, N. V. Astignor, S. Steenstrup, Christian, S. Steenstrup, Chri

Oct. 4.
Steenstrup, Christian, Schenectady, N. Y. Artificial fish bait. 1,622,063; Mar. 22.
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Electric furnace. 1,645,118; Oct. 11.
Steere Engineering Company. (See Steere, George R., assignor.)

assignor.)
Steere, Ernest C., Sydney, New South Wales, Australia.
Electric water heater, 1.630,909; May 31.
Steere, Gorge R., assignor to Steere Engineering Company, Detroit, Mich. Gate or valve operating system.
1,019,003; Mar. I.
Steere, Samuel A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Pheumatic tire, 1,632,201;

June 14.
Steere, Samuel A., Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Cord the fabric. 1,835,194; July 12.
Steers, Newton L., assignor to E. I. du Pont de Nomours & Company, Wilmington, Del. Safety blasting cap. 1,339,906; Aug. 23.
Steeren, Godfrey. (See Miner, C. S., and Steerup.)

Steese, Marcus C., Duluth, Minn. Life-saving apparatus, 1,630,501; May 31. Steffan, William C. (See Ackermann, F. B., Steffan, and Greiner.) Steffen, Adolf, Pittsburgh, Pa., assignor to Adams

and Greiner.)
Steffen, Adolf, Pittsburgh, Pa., assignor to Adams
Brothers Manufacturing Company, Inc. Gas heater.
Des. (4.078; Dec. 13.
Des. (1.078; Dec. 13.
Steffen, Raymond A.S. Darlington, H. T., and Steffen.)
Steffen, Raymond A.S. Hamilton, Ohio, Paper formation
and weight indicator. 1,634,344; July 5.
Steffens, Calvin B., Allenton, Mo. Auxiliary Ford starter
switch and switch-operating mechanism. 1,621,288;
Mar. 15.
Start. 15.
Start. 16.
Start. 17.
Start. 18.
Start. 19.
Star

Stemens, George V., Company. (See Witheek, Destord, massignor.) and the state of th

Steffens, Henry C. San Francisco, Culif. Electric perforating machine. 1,631,074; Nov. 29.

Steffens, Mathew J., Chicago, Ill. Fishbook. 1,649,140; Nov. 15.

Stegemann. Louis A., Irvington, assignor to Cinema Advertising Corporation, Newark, N. J. Zubinet for prostage and patched and the company of the co

Stein-Davies Company, The. (See Fackler, Louis, assignor.)
Stein, Fred W., Atchison, Kans. Variable condenser for radiocircuits. 1,616,093; Feb. 1.
Stein, Fred W., Atchison, Kans. Badio interference eliminator. 1,630,980; May 31.
Stein, Gerhard, Neusornewitz, near Meissen, Germany. Stein, Gerlard, Neusornewitz, near Meissen, Germany. Stein, Gerlard, Reusornewitz, near Meissen, Germany. Stein, English Reusornewitz, 1,625,436; Apr. 19.
Stein, Harry B., Chicago, III. Window construction. 1,627,410; May 8.
Stein, Harry B., Chicago, III. Window construction. 1,637,881; Dec. 27.
Stein, Herbert E., New York, N. Y. Surgical retractor Stein, Herbert L., New York, N. Y. Surgical retractor Stein, Herbert L., New York, N. Y., assignor to American Machine and Foundry Company. Winnowing device for cigarctte machines. 1,647,255; Nov. 1.
Stein, Lou. (See Stein, Michael H., and L.)

Stein, Louis H., Chicago, Ill. Measuring gauge. 1,619,834; Mar. 8. Stein, Louis H., assignor to Stromberg Motor Devices Company, Chicago, Ill. Universal multiple operation machine. 1,627,834; May 10. Stein, Michael H. and L., Chicago, Ill.; said Michael H. Stein assignor to said L. Stein. Brief case. 1,638,753; Alg. 9.

Stein, Michael H. and L. Chicago, Ill.; said Michael H. Stein assignor to said L. Stein. Brief case. 1,638,753; Aug. 3.

Aug. 3.

Aug. 3.

Aug. 3.

Aug. 4.

Anderson, S. C. Circuit-controlling exparatus. 1,625,852; Apr. 26.

Stein, Samuel A., Los Angeles, Callf. Radiumator. 1,648,746; Nov. 8.

Stein, Samuel F., Williamsport, Pa. Belt tightener. 1,640,623; Aug. 30.

Stein, Samuel F., Williamsport, Pa. Belt tightener. 1,640,623; Aug. 30.

Stein, Theodor, Berlin, Tricdenau, Germany, assienor, by Stein, Theodor, Berlin, Tricdenau, Germany, assignor, 1.

Stein, William D. (See Block, David J., assignor.)

Stein, William D. (See Block, David J., assignor.)

Stein, William D. (See Block, David J., assignor.)

Stein, William G., Canton, Ohlo. Deflector and light filter. 1,643,187; Sept. 20.

Steinback, Edward P., Bloomington, Minn. Poultry-feeding device. 1,623,879; May 24.

1,614,576; Jan. 18.

Steinberg, Carl, New York, N. Y. Straw hat. 1,643,138; Sept. 20.

Steinberg, Irving C., assignor to J. Steinberg, Sons, Newark, N. J. Skylight, 1,638,018; July 10.

Steinberg, Cari, New York, N. Y. Straw fat. 1,043,08; Steinberg, Irving C. assignor to J. Steinberg & Sons, Newark, N. J. Skylight. 1,636,018; July 19. Steinberg, Samuel, and E. J. Boyler, New Haven, Con.; said Boyler assignor to said Steinberg. Target. 1,652,088; Dec. 13. Steinberg, Soi S. Steinberg, Cassignor.) Steinberg, Soi S. Steinberg, Irving C. assignor.) Steinberg, Soi S. Steinberg, Irving C. assignor.) Steinberger, Louis, Brooklyn, N. Y. Loud speaker. Des. 73,715; Oct. 25. Steinberger, Louis, Brooklyn, N. Y., and G. Hill, Washington, D. C., assignors to Wired Radio, Inc., New 1,645,462; Oct. 11. Steinbergert, 1,625,62; Oct. 11. Steinbergert, William J. (See Beegle, Raymond E., assignor.)

Signor.)
Amos P., assignor to Landis Tool Company,
the very respective to the Company,
1,643,262; Sept. 20.
Stehner, Amos P., assignor to Landis Tool Company,
Waynesboro, Pa. Control valve. 1,649,866; Nov. 22.
Steiner Electric Corporation. (See Long, George F.,

assignor.)
Steiner Electric Corporation. (See Piel, Gottfried, jr.,

Minn., as-Steiner, Frank M., and G. Olson, Minneapolis, Minn., assignors, by mesne assignments, to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,636,155; signors, by mesne assignments, to sterner sates com-pany, Salt Lake City, Utah. Towel cabinet. 1,636,155; July 19. Steiner, Fred W. et al. (See Johnstone Samuel, as-signor.)

signor.)
Steiner, George A., assignor to Steiner Sales Company,
Still Sales City, Utah. Towel-folding machine
Steiner, George A., assignor to Steiner Sales Company,
Salt Lake City, Utah. Attachment for towel cabinets.
1,621,669; Mar. 22.
Steiner, George A., assignor to Steiner Sales Company,
Salt Lake City, Utah. Towel cabinet. 1,643,996;
Salt Lake City, Utah. Towel cabinet. 1,643,996;

Sait Lake City, Utah. Towel caoinet. 1,625,090; Sept. 20. Steiner, George A., Salt Lake City, Utah, and G. Olson. Minneapolis, Minn., assignors to Steiner Sales Company, Sait Lake City, Utah. Towel cabinet. 1,643,095; Sept. 20.

Sept. 20.
Steiner, John, Poughkeepsie. N. Y. Polishing wheel.
1.619,442; Mar. 1.
Steiner, Oscar, Philadelphia, Pa., assignor to General
Electric Company. Supporting and driving films.
1.614,214; Jan. 11.
Steiner Sales Company. (See Leute, Karl M., assignor.)
Steiner Sales Company. (See Mortensen, J., and Tropp.

assignors.)
Steiner Sales Company. (See Overholt, Albert L., as signor.)
Steiner Sales Company. (See Steiner, F. M., and Olson,

Steiner Sales Company. (See Steiner, George A., as-signor.) Steiner Sales Company. (See Steiner, G. A., and Olson,

Steiner Sies Company. Gee Steiner, C. A., and Oson, assignors.)
Steinert, Alexander. (See Perron, Samuel H., assignor.)
Steinhardt, Sigmund, New York, N. Y. Hold-up alarm.
1,639,578; Aug. 16.
Steinhicke, Frank H. (See Gilbert, V. G. W., and Steinsteinke, Frank

Lawn sprinkler.

Stere, William, Berwyn, III. Lawn spri Steriou (1972), Nov. 22. Steinke, Leroy O., Spokane, Wash. Heating (1947), 1947, Heating device.

Feb. J. Steinkraus, John C., Cicero, Ill. Map or display rail. 1.628.860; May 17. Steinkritzer, Max, Donnacona, Quebec, Canada. Nut lock. 1.616.338; Feb. 1.

Steinle, Adolf, and O. Eppenstein, assignors to the Firm of Carl Zeiss, Jena, Germany, Apparatus for testing toothed wheels. 1,642,219; Sept. Japaratus for testing toothed wheels. 1,642,219; Sept. Japaratus for Steinle, William J. Flyshing, N. Y., assignor to The Hartford Rubber Works Company, Method and apparatus for making tire casings. 1,654,251; Dec. 27. Steinman, Samuel, Brooklyn, N. Y. Latch device for hand bass. 1,634,918; July 5. Steinman, Saul, Shelton, Conn. Sign holder. 1,627,350; May 3.

May 3.

band bags. 1,634,918; July 5. Steinman, Saul, Shelton, Conn. Sign holder. 1,627,350; May 3. Steinman, Saul, Shelton, Conn. Sign holder. 1,627,350; May 3. Steinmay, Saul, Shelton, Conn. Sign holder. 1,627,350; May 3. Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Choke coil. 1,646,502; Oct. 25. Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Choke coil. 1,646,502; Oct. 25. Steinmetz, May 1,647, N. Y., assignor to General Electric Company. Protective system. 1,646,265; Oct. 18. Steinmetz, George, Charlottenburg, near Berlin, Germany. Paper clip. 1,613,179; Jan. 18. Steinmetz, George, Charlottenburg, near Berlin, Germany. Paper clip. 1,613,179; Jan. 18. Steinmetz, Herman, assignor to Steinmetz, May 11. Steinmetz, Herman, assignor to Radorth May 11. Steinmetz, Joseph A., Philadelphia, Pa. Gripping member for cylinders. 1,639,786; July 5. Fa. Moorting diright ble aircraft. 1,634,964; July 5. Steinmetz, Stefan, Berlin, Germany. Removal of the cerealins and drying of grain moistened for this pursuing the steinmeyer, Harry A., and J. H. Voss, Chicago, Ill. Cooling system. 1,649,931; Nov. 22. Steinruck. Herman, assignor to Sterling Aluminum Company, Eric, Pa. Dispay case, 1,640,683; Aug. 30. Stella, Edward F. (See Rizer, Darl A., assignor.) Steller, Arthur, assignor to Allsopp Bros., Newark, N. J. Stellmach, Paul. Brooklyn, N. Y. Paper fastener. 1,641,936; Sept. 6. Stellmach, Paul. Brooklyn, N. Y. assignor to Scoyill Manufacturing Company, Waterbury, Conn. Display stand. 1,644,359; Oct. 4, Pierce, Howard W., assignor.) Steller, Arthur, assignor to Allsopp Bros., Newark, N. J. Stellmach, Paul. Brooklyn, N. Y. assignor. Steller, Arthur, assignor to Scoyill Manufacturing Company, Waterbury, Conn. Display Stalm. 1,641,359; Oct. 4, Pierce, Howard W., assignor.) Steller, Arthur, assignor to Allsopp Bros., Newark, N. J. Stellmach, Paul. Brooklyn, N. Y. Baper fastener. 1,641,645; July 19. Santary tollet cover. 1,636,199; July 19. 19. 20. 19. 20

Stembridge & Braun. (See Signor.)
Stemen, Charles M., Johnstown. Ohio. Sanitary milk pail cover. 1,636,199; July 19.
Stemme, Henry. (See Grady, James T., assignor.)
Stemah, Louis, and E. Hanson, Zimmerman, Minn. Pump-operating device. 1,642,274; Sept. 13.
Stene, Thomas W. (See Kennedy, J. J., and Stene.)
Steneck Trust Company, trustee. (See Lowy, Otto, assignor.) eneck signor.)

Stense, Taomas w. tee Acameay, a. Bac Script, as Signor, ust Company, trustee. (See Lowy, Otto, as Signor, Stenser, Ed C. (See Lewis, Matthew M., assignor.)
Stenser, Ed C. (See Lewis, Matthew M., assignor.)
Stenser, Ed C. (See Lewis, Matthew M., assignor.)
Stenser, Bould and the Company of the Company of

bination hair comb and brush. 1644-208; Oct. 4. Stephens, John R., et al. (See Prator, Ernest P., assignor.) Stephens, John R., et al. (See Prator, Ernest P., assignor.) Stephens, Percy W., Chicago, Ill. Auxiliary air intake for motors: 1615-527; Jan. 25. Stephens, Percy W., Chicago, Ill. Auxiliary air intake for motors. 1615-627; Jan. 25. Calif. Hairdressing article. 1.652-462; Dec. 1.3626-62. Calif. Hairdressing article. 1.652-462; Dec. 1.5626-62. Dec. 1.6526-62. Dec. 1.6 Mass. Composing-room cabinet. 1.630,678; May 31. Stephenson, Charles H. (See Howard, B. J., and StephenStephenson, Herman, (See Stephenson, Thomas E., assignor.)

signor.)
Stephenson, James E., assignor to General Railway Signal Company, Rochester, N. Y. Snubbing circuit for semaphore signal. 1,630,981; May 31.
Stephenson, Robert, Blackburn, England, Garment suspender. 1,628,305; Apr. 26.
Stephenson, Samuel E., et al. (See Harding, Joseph G., assignor.)

Thomas E., Harrisburg, Pa.

Stephenson, Thomas E., Harrisburg, Pa. Pipe vise. 1644,75; Oct. 11.
Stephenson, Thomas E., Harrisburg, assignor of forty one-hundredths to H. Stephenson, Wyomissing, Pa. Pipe wrench. 1,620,170; Mar. 8.
Stepp, William C., Penelope, Tex. Tire-inflating apparatus. 1,628,813; May 17.
Sterlenz, John W. Los Angeles, Calif. Panel-fastening means. 1,645,120; Oct. 11.
Strgios, Alexander. (See Wilson, V. L., and Stergios.)
Sterling Aluminum Company. (See Steinruck, Herman, assignor.)

Sterling Aluminum Company. (See Steinruck, Herman, assignor.)
Sterling Advantic Machinery Company. (See Bellows, Sterling, Company.)
Sterling Advantic Machinery Company. (See Bellows, Citerling, Bernard A., Chicago, Ill. Fastening device, 1,012.992; Jan. 4.
Sterling Blower Company, The, et al. (See Christoph, George W., assignor.)
Sterling Bronze Company. (See Derujinsky, Gleb W., as-

Sterling Bronze Company. (See Berujinsky, Gleb W., assignor.)
Sterling Bronze Company. (See Roth, Louis, assignor.)
Sterling, Frank H., Minneapolis, Minn. Double-entry and
trial-balance book. 1,625,105; Apr. 19.
Sterling, Harry C., assignor to McMilian Book Company,
Syracuse, N. Y. Loose-leaf binder. 1,625,752; Apr. 19.
Sterling, Harry C., assignor to McMilian Book Company,
Syracuse, N. Y. Flyleaf for loose-leaf binders,
1,634,361 clephone & Electric Company. (See Hearne,
Sterling Wheelbarrow Company. (See Smith Irvine R.,
Sterling Wheelbarrow Company. (See Smith Irvine R.,

Sterling Wheelbarrow Company. (See Smith, Irving R.,

Stering Telephone & Electric Company. (See Hearne, Aice E., assignor.)
Sterling Wheelbarrow Company. (See Smith, Irving R., Stern, Allan G. (See Hirshfeld, H. A., and Stern.)
Stern, Bernard G., Cleveland, Ohio. Combination sink and faucet. 1,651,164; Nov. 29.
Stern, Carl L. (See Bower, W. M., Burdon, and Stern.)
Stern, Carl L. (See Bower, W. M., Burdon, and Stern.)
Stern, Carl L. (See Bower, W. M., Burdon, and Stern.)
Stern, Carl L. (and A. V. Bugler, assignors to Linotype and delivering mechanism for printing machines. 1,617,656; Feb. 15.
Stern, Carl L., and A. V. Bugler, assignors to Linotype and Machinery Limited, London, England. Sheet feeding and delivering mechanism for printing machines. Stern, Charles, See Feley, M. R., Stern, and Braden.)
Stern, Charles, Gee Feley, M. R., Stern, and Braden.)
Stern, Charles, Jersey City, N. J., and R. W. Braden, New York, N. Y., assignors to B. & S. Manufacturing Froducts Corporation, Jersey City, N. J. Attachment Stern, Emil. Cres. 1,622,478; May 10.
Stern, Lighacz, I. Roth, and J. Markowitz, New York, N. Y., Sanitary milk urn. 1,645,308; Oct. 11.
Stern, Isidor, Newark, N. J.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; July 19.
Stern, Isidor, Newark, N. J. Combination gem and setting. Des. 73,109; Jul

Signor.) Stern, Louis, Company. (See Jones, Percival W., as-signor.) Stern, Louis, Company. (See Valccurt, Louis E., as-

Stern, Louis, Company, (see Fanction)
Stern, Ludwig, New York, N. Y. Pipe, Des. 74,079;
Stern, Ludwig, New York, N. Y. Dinthermic electrode, 1,633,649; June 28.
Stern, Otto, assignor to the Firm: Standard Compositor Aktiengesellschaft, Berlin, Germany, Matrix-setting and line-easting machine. 1,633,422; June 21.
Stern, Sidney J., Chicago, Ill. Book puller. 1,635,864; July 12.

Stern, Sidney J., Chicago, III. Book puner. A., 200, 211, 12. Stern, William J., Palmers Green, London, England. Rofary pump machine. 1,616,285; Feb. 1. Sternaman, John. (See Weaver, I. A., and Sternaman, Sternberg. Affred. Berlin-Grunewald, Germany, assignor to Societa Industrin Globeite. Milan, Italy. Blood-treating process. 1,622,321; June 14. Sternberg. Herman J., St. Louis, Mo. Feed-water heater. Sternberg. Harm. New York, N. Y., assignor to Arctle. Nu. Air. Corporation, Chicago, Ill. Casing for the discharge mouth of building-ventilating systems. Des. 73,949; Nov. 22. Sternberg, Max. (See Baskin, L., and Sternberg.)

Sternbergh, Harry S., assignor to W. W. Blakely, Detroit, Mich. Hold-down device. 1,623,762; Apr. 5.
Sternkopf, Christian J., Rittersgran, Germany, Process
and apparatus for the production of wood pulp.
1,619,004; Mar. 1.
Sterrett, James R., et al. (See Carpenter, Charles U.,
assignor.)

Stertzbach, Harry W. (See Johnson, G. T., and Stertz-

bach.)
Stertzbach, Harry W., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Cast side frame for car trucks. 1.642,793; Sept. 20.
Stertzbach, Harry W., and M. R. Hansen, assignors to The Euckeye Steel Castings Company, Columbus, Ohio. The Euckeye Steel Castings Company, Columbus, Ohio. Steelson, Frank H., Methuen, Mass., assignor to U. S. Bobbin & Shuttle Co., Providence, R. I. Shuttle block. 1,621,439; Mar. 15.
Stetson, John, San Francisco, Calif. Skating device. 1,028,004; May 10.
Stetson, 20th. Nan Francisco, Calif. Figure toy. Stetson, Boss Machine Compány. (See Webb, Orra W., assignor.)

1,049,023; Nov. 10.
Stetson-Ross Machine Company. (See Webb, Orra W., assignor.)
Stetson, Warner D., Detroit, Mich. Wire-splicing tool. 1,040,068; Oct. 16.
1,040,068; Oct. 16.
1,042,467; Sept. 13.
Steuart, Douglas S. S., London, England. Telephone accessory. 1,654,193; Dec. 27.
Steuart, William R., Harvey, Ill. Transmission gear. 1,048,968; Nov. 15.
Steude, Ernest E., Saugus, Calif. Resilient wheel. 1,610,349; Jan. 25.
Steuvera, Antonie K., Memphis, Tenn. Garment holder. 1,641,705; Sept. 6.
Stevens, Albert W., Dayton, Ohlo. Airplane view finder. 1,622,125; Mar. 22.
Stevens, Alfred J., London, Ontario, Canada. Game apparatus. 1,631,558; June 7.
Stevens, Altred J., London, Ontario, Canada. Game apparatus. 1,631,558; June 7.
Stevens, Blamey, Temascalfepec, Mexico. Hydraulically-operated diaphragm pump. 1,627,267; May.
Stevens, Blamey, Temascalfepec, Mexico. Hydraulically-operated diaphragm pump. 1,627,267; May.
Stevens, Burt D., Evanston, assignor of three-fourths to W. V. Kelley, Chicago, Ill. Carburetor. 1,646,043; Oct. 18.
Stevens, Charles E., San Rafael, Calif. Paper box and

Stevens, Edward W., Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Pheumatic Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Pheumatic Tool Company, New York, N. Y. Thottle Stevens, Edward W., Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Thottle Stevens, Edward W., Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Thottle Stevens, Edward W., Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Fluid-pressure hammer. 1,617,969; Feb. 15.
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Fluid-pressure hammer. 1,617,969; Feb. 15.
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Fluid-pressure-operated hammer. 1,634,729; July 5.
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Tool retainer. 1,651,417; Dec. 6.
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pheumatic Tool Company, New York, N. Y. Tool retainer. 1,651,417; Dec. 6.
Stevens, Errancis M. (See Stevens, Augustus R. and F. M.)

Stevens, Francis M. (See Abrams, H. J., Liddicoat, and Stevens, Frank H. (See Abrams, H. J., Liddicoat, and

Stevens, Frank H. (See Abrams, H. J., Liddicoat, and Stevens, Frank W., assignor to H. C. Veno, Newton, Mass. Form for concrete structures. 1,621,563; Mar. 22. Stevens, Frank W., assignor to H. C. Veno, Newton, Mass. Form for concrete structures. 1,625,583; Apr. 26. Stevens, Frederick A., Providence, R. I., assignor, by mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y. Ophthalmic mounting. 1,636,334; July 19. X. Ophthalmic mounting. 1,636,334; July 19. Stevens, Frederick A., Providence, R. I., assignor, by mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y. Ophthalmic mounting. 1,636,337; July 19. Stevens, Frederick A., Providence, R. I., assignor, by mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y. Spectacle temple and making the same. 1,649,737; Nov. 15. Stevens, Frederick A., Providence, R. I., assignor, by mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y. Spectacle temple and making the same. 1,649,737; Nov. 15. Stevens, Frederick A., Providence, R. I., assignor, by mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y. Ophthalmic mounting. 1,649,789; Nov. 15.

Stevens, Frederick A., Providence, R. I., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Making ophthalmic mountings. 1,643,790; Nov. 15.

Stevens, Frederick A., Providence, R. I., assignor to Development, Rochester, N. Y., Ophthalmic mounting. 1,649,794; Nov. 15.

Stevens, Frederick A., Providence, R. I., assignor to Bausch and Lomb Optical Company, Rochester, N. Y., Ophthalmic mounting. 1,649,796; Nov. 15.

Stevens, Frederick A., Providence, R. I., assignor to Bausch and Lomb Optical Company, Rochester, N. Y., Ophthalmic mounting. 1,649,796; Nov. 15.

Stevens, Frederick A., and J. W. Welsh, Providence, R. I., assignors, by messe assignments, to Bausch and Lomb Optical Company, Rochester, N. Y., Ophthalmic mounting. 1,649,706; Nov. 15.

Stevens, Frederick A., and J. W. Welsh, Providence, R. I., assignors, by messe assignments, to Bausch and Lomb Optical Company, Rochester, N. Y., Ophthalmic mounting, 1,649,308; July 13, J. W. Welch, Providence, R. I., assignors, by mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y., Ophthalmic mounting, 1,649,308; May 19.

Stevens, Harry, Bangor, Me., Music-leaf turner, 1,617,185; Feb. 8.

Stevens, Harry, E., See Veelkel, George W., assignor.) Stevens, Harry, Bangor, Me., Music-leaf turner, 1,617,185; Feb. 8.

Stevens, Harry, Bangor, Me., Music-leaf turner, 1,617,185; Feb. 8.

Stevens, Horace D., assignor to D. Durham, Los Angeles, Calif. Floor polisher, 1,616,767; Feb. 8.

Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tube-stock-cutting apparatus, 1,622,257; Mar. 22.

Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Apparatus for deflating tubes. 1,629,128; May 17.

Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Apparatus for deflating tubes. 1,629,128; May 17.

Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Machine for wrapping the turner and Rubber Company, Akron, Ohio. Apparatus for deflating tu

Stevens, & E. E., Compoury, The. (See Frisbie, Russell A., assignor.)
Stevens, James L., Hayden, Ariz. Concentration of ores.
1,614,089; Jan. 11.
Stevens, Jerry W., assignor to Northwest Paper Company, Cloquet, Minn. Apparatus for and method of December of the Company of the

assignor.)
Stevens, Nathaniel D., Hazleton, Pa., and L. H. Rosbein, assignors to M. H. Detrick Company, Chicago, Ill. Furnace-arch construction. 1,628-284; May 16.
Stevens, Percy H., assignor to Smith, Major & Stevens Limited, Abbey Works, Northampton, England. Control of polyphase electromotors. 1,645,627; Oct. 18.
Stevens Froducts Company. (See Stevens, John A.,

assignor.; Stevens, Robert C., Erie, Pa. Releasing poppet-valve gear. 1,613,581; Jan. 4. Stevens, Royale H. (See Gepp, H. W., Hey, Rigg, Stevens, and Williams.)

and Williams.)
Stevens Sylvester G., Duluth, Minn. Pyrothechnic.
1.645,206; Oct. 11.
Stevens, Virgil A., Green Cove Springs, Fla. Garment
presser and creaser. 1,629,230; May 17.
Stevens Walden-Worcester, Incorporated. (See McGuckin,
John J., assignor.)
Stevens, Walter E., Akron, Ohio. Automobile heater.
1,642,631; Sept. 13.
Stevens, William C., assignor to The Firestone Tire and
Rubber Company. Akron, Ohio. Bead-placing device.
1,630,722: May 31.

Stevens, You and You are the first one of the and Rubber Company, Akron, Ohio. Bead-placing device. 1.630,722: May 31. Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. The stripping machine. 1,634,920: July 5. Stevens, William C., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Machine for covering tire beads. 1.635,647; July 12. Stevens, William G., jr., New York, N. Y. Coupling. 1.635,647; July 12. Stevens, Mulliam G., jr., New York, N. Y. Coupling. 1.635,647; July 16. Stevenson, Clarence M., Los Angeles, Calif., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic test-lens frame. 1,631,559; June 7. Stevenson Company. (See Hibbins, Thomas A., assignor.) Stevenson Company. The. (See Hibbins, Thomas A., assignor.)

signor.)
Stevenson, Donald M., Portland, Oreg. Load moving and raising and lowering means. 1,646,119; Oct. 18.

Stevenson, Earl P., Newton, assignor to Arthur D. Little, Inc., Cambridge, Mass. Producing sodium finoride. I,6634,122 June 28. Stevenson, Edward E. (See Scott, William R., assignor.) Stevenson, Edward E. (See Burgess, L. P., and Steven-

Stevenson, Edward E. (See Burgess, L. F., and Stevenstevenson, George Toronto, Ontario, Canada. House construction. 1,632,421; June 14.
Stevenson, George H., assignor to Western Electric Company, Incorporated, New York, N. Y. Radio receiving apparatus. 1,612,952; Jan. 4.
Stevenson, George M., Baltimore, Md. Process of and machine for making ferrules. 1,629,813; May 24.
Stevenson, George M., Baltimore, Md. Process of and machine for making ferrules. 1,629,813; May 24.
Stevenson, Response M., Baltimore, Md. Process of and the control of the c

Stevenson, Thomas K., assignor to Francis Van Biarcom, Cot. 18.

Stevenson, Thomas K., assignor to Francis Van Biarcom, Oct. 18.

Stevenson, William, Dunedin Otago, New Zealand. Fuel atomizer. 1,630,410; May 31.

Stevenson, William, Morriston, N. J. Tappet for internal-combustion engines. 1,634,270; July 5.

Stevenson, William, B. Philadelphia, P.a., assignor to Victorson, William B. Philadelphia, P.a., assignor to Victorson, William B. Philadelphia, P.a., assignor to Victorson, Milliam B. Philadelphia, P.a., assignor to Steward, Alden A., Rutland, Vt. Burner igniter. 1,646,503; Oct. 25.

Steward, Alden A., Rutland, Vt. Burner igniter. 1,646,503; Oct. 25.

Harry B., assignor).

Steward, John M., Salem, Oreg. Planter. 1,613,542; Jan. 4.

Steward, William J., Boston, Mass. Collapsible chair and ensel. 1,619,381; Mar. 1.

Steward, William J., Boston, Mass. Collapsible chair and ensel. 1,619,381; Mar. 1.

Steward, Albert D., Gee Cumfer, Harry A., assignor, Stewart, Alexander, Denver, Colo. Rotary bit for drilling wells. 1,637,594; Aug. 2.

Stewart, Alexander, Roselle, assignor to C. L. Constant Company, Hoboken, N. J. Treating discarded lead battery plates. 1,627,351; May 3.

Stewart, Alexander, Roselle, assignor to C. L. Constant Company, Hoboken, N. J. Treating discarded lead battery plates. 1,627,351; May 3.

Stewart, Alonzo L., Rushville, Ind. Self-guiding and riding cultivator. 1,626,888; May 3.

Stewart, Archie A. and J. E., Waterioo, Iowa. Censtewart, Cecella H., Plrisburgh, Pe. Cover casing for mary educational work and play, 1,627,211; May 3.

Stewart, Archie A. and J. E., Waterioo, Iowa. Censtewart, Charles D., Jacksonville, Ala. Rim for automobile wheels. 1,637,880; Aug. 2.

Stewart, Charles M., Gee Peelle, Al. B., Alexander, More Research, 1,648,788; Nov. 8.

Stewart, Charles P., Pee Dec, N. C. Compensating mobile wheels. 1,637,880; Aug. 2.

Stewart, Charles P., Pee Dec, N. C. Compensating mobile wheels. 1,637,880; Aug. 2.

Stewart, Charles P., Pee Dec, N. C. Compensating mobile wheels. 1,648,788; Aug.

Stewart, Charles P., Fee Dee, N. C. Compensating mechanism for concrete-pipe machines. 1,648,788; Nov. 8.
Stewart, Charles, and W. A. Russell, Rushville, Ind. Traffic guide: 1,653,301; Nov. 8.
Stewart, Charles, and W. A. Russell, Rushville, Ind. Traffic guide: 1,653,301; Nov. 9.
Stewart, David. (See Thrans. 1,400; A. Stewart, David. (See Rummer, John C., assignor.)
Stewart, David. 4., Listowel, Ontario, Canada. Internal-combustion encine. 1,645,309; Oct. 11.
Stewart, David. H., and G. W. Nelson, assignors to Stewart, Brank H., Philadelphia, Pa., assignor to L. B. Eppstein, J. Wilzin, and J. B. Gordatowski, New York, N. Y., syndicate managers of The Cum-Art Syndicate, New York, N. Y. Apparatus for building tire casings. Stewart, Frank T. and W. W., Sacramento, Calif. Liquid sprayer. 1,622,213; Mar. 22.
Stewart, Frank T. and W. W., Sacramento, Calif. Liquid sprayer. 1,622,213; Mar. 22.
Stewart, Frank T. and W. W., Sacramento, Calif. Liquid sprayer. 1,622,213; Mar. 22.
Stewart, Gradellow, M., Sacramento, Calif. Liquid sprayer, 1,622,213; Mar. 24.
Stewart, Gayle D., assignor to United States Glass Company, Philadelphia, Pa. Light shade or similar article. Stewart, Gayle D., assignor to The American Bottle Company, Toledo, Ohio. Bottle. Des. 7,2,873; June 14.
Stewart, George B., Ottawa, Ontario, Canada. Geometrical Gevice. 1,615,180; Jan. 18.
Stewart, Henry C., assignor to The Westmoreland Chemical & Color Company, Philadelphia, Pa. Manufacturstwart, Lanes A., assignor to Merchand Chemical & Color Company, Philadelphia, Pa. Manufacturstwart, James M., Minneapolis, Minn. Rolling window screen. 1,613,967; Jan. 14.
Stewart, James M., Sasignor to Merchand A. Australia. Flareless lamp. 1,637,429; Ang. 2.
Stewart, James M., Sanimeapolis, Minn. Rolling window screen. 1,613,967; Jan. 11.
Combined pep head and neck for a stringed musical instrument. Des. 71,936; Jan. 25.

Stewart, John, New York, N. Y. Cleaning device for distributor heads. 1,636,083; July 19. Stewart, John H. (See Bailey, Charles W., assignor.) Stewart, John H. (See Bailey, Charles W., assignor.) Stewart, John H., Cincinnati, Ohio. Control system for fuel burners. 1,654,194; Dec. 27. Stewart, John M., Clarendon, Va. Electrical condenser. 1,632,362; June 14. Stewart, Laurence G., St. Louis, Mo. Ring. Des. Stewart, Leuon K., Newkirk, Okla. Camper's apartment.

1,632.352; June 14.
Stewart, Laurence G., St. Louis, Mo. Ring. Des. 73.676; Oct. 18.
Stewart, Lemon K., Newkirk, Okla. Camper's apartment. 1.644,406; Oct. 4.
Stewart, Lincoin E., Guerneville, Calif. Baseball-game apparatus. 1,642,093; Sept. 13.
Stewart, M. R., et al. (See Patterson, Roy G., assignor.)
Stewart Machine Co. (See Stewart, D. H., and Nelson, assignors.) Stewart Manufacturing Corporation. (See Carlson, Eric,

assignor.) Stewart Manufacturing Company. (See Groves, Lucian S., assignor.)

Stewart Manufacturing Company. (See Groves, Lucian S., assightor.)
Stewart Manufacturing Corporation. (See Snyder. Herbert C., assignor.)
Stewart, Chobert. New York, N. Y. Dispensing container.
Stewart, Robert. New York, N. Y. Liquid dispenser and applicator. 1.646.324; Oct. 18.
Stewart, Robert D., deceased, Cleveland, N. Dak., The First National Band, administrator, Arlington, S. Dak. Gate lock. 1.642.576; Sept. 20.
Stewart, Robert H., Vancouver, British Columbia, Canada, N. Y. Mining of sulphur. 1.615.05; Jan. 18.
Stewart, Robert H., Vancouver, British Columbia, Canada, assignor to Texas Gulf Sulphur Company, New York, N. Y. Mining of sulphur. 1.615.05; Jan. 18.
Stewart, Robert M., (See Nelson, Heber S., assignor.)
Stewart, Walter W. (See Stewart, Frank T. and W. W.)
Stewart-Warner Speedometer Corporation. (See Chase, Wilfred O., assignor.)
Stewart-Warner Speedometer Corporation. (See Hedemark, Edward L., assignor.)
Stewart-Warner Speedometer Corporation. (See Olsen, John K., assignor.)

John K., assignor.)

John K., assignor.)
Stewart-Warner Speedometer Corporation. (See Parker,
Leonard E., assignor.)
Stewart-Warner Speedometer Corporation. (See Rockstewart-Warner Speedometer Corporation. (See Ross,
Frank A., assignor.)
Stewart-Warner Speedometer Corporation. (See Schulze,
Stewart-Warner Speedometer Corporation. (See Schulze,
Stewart-Warner Speedometer Corporation. (See Schwistthal, Fred G., assignor.)
Stewart-Warner Speedometer Corporation. (See Searles,
Volney A., assignor.)
Stewart-Warner Speedometer Corporation. (See Searles,
Volney A., assignor.)

assignor.)

Stewart-Warner Speedometer Corporation. (See Van Guider, Walter, assignor.)

Stewart-Warner Speedometer Corporation. (See Wheeler, Stewart-Warner Speedometer Corporation. (See Wheeler, Stewart William E., Nashville, Tenn. Fountain pen. 1,651,047; Nov. 29.

Stewart, William E., Nashville, Tenn. Fountain pen. Stewart, William E., Nashville, Tenn. Fountain pen. 1,651,047; Nov. 29.

Stewart, William E., assignor to Eisele & Company, Nash-Jan. 11, Stepart William E., Stepart

Jan. 11.

Stewart, William E., assignor to Eisele & Company, Nashville, Tenn. Fastening means for clinical-thermometer to the company, Nashville, Tenn. Fastening means for clinical-thermometer faucet, 162,868; May 17.

Steint, William G., Cleveland, Ohio. Compression faucet, 1628,689; May 17.

Stibin Products Company, The. (See Stark, Rawson E., assignor.)

Stich, Ferdinand, New York, N. Y. Wave motor. 1.647,023; Oct. 25.

Sticht, Claude M., Detroit, Mich. Dispensing carton. Sticklon, Robert, Munich, Germany. Flush device for water-closets. 1,629,421; May 17.

Stickle, Tederick, Chicago, Ill. Air gauge. 1,613,582; Jan. 4.

Stickle, Frederick A., assignor to The National Screen & Manufacturing Company, Chemnant, Ohio. Window-screen holder. 1,636,255; July 19. Stickler, Eugene N., New York, N. Y. Gauge. 1,654,388; Dec. 27. Stickless Fan Company. (See Lichter and Jacobs, as-

Alpheus B. (See Stickney, Charles A. and

Stickney, Burnham C., Rutherford, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Stryewriting machine. I. 626,124; Apr. 26.

Sither Student C. Rutherford, N. J., assignor to Cheek Burnham C. Rutherford, N. J., assignor to The Company, New York, N. Y. Typewriting machine. I. 626,641; May 3.

Stickney, Burnham C., Rutherford, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. I. 621,129; May 17.

Typewriting machine. I. 621,140; Dec. 6.

Stickney, Burnham C., Portsmouth, N. H., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. I. 651,178; Dec. 6.

Stickney, Burnham C., Portsmouth, N. H., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. I. 651,178; Dec. 6.

Stickney, Charles A., assignor to Rockford Drilling Machine. Company, Rockford, Ill. Shock absorber. Stickney, Charles A., assignor to Rockford Drilling Machine. Company, Rockford, Ill. Shock absorber. Stickney, Charles A., assignor to Rockford Drilling Machine. Company, Rockford, Ill. Shock absorber. Stickney, Charles A., assignor to Rockford Drilling Machine. Company, Rockford, Ill. Shock absorber. Stickney, Charles A., Rockford, Ill., Shock absorber. Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Stickney, Charles A., Rockford, Ill., and A. B. Stickney, Charles A., Rockford, I

Rotatable work support for machine tools. 1,633,318; Dec. 20.
Stickney, Charles A., Rockford, Ill., and A. B. Stickney, New Haven, Com. Maintaining a predetermined temperature of the common of the c

Stierl, Otto. (See Heimgartner, C., and Stierli.) Stiffel, Theophile A., assignor to Ornamental Iron Products Co., Chiengo, Ili. Lamp. Des 73.111; July 19. Stigall, William H. (See Chandler, T. H., and Stigall, William H. (See Chandler, T. H., and Stigall, Stigers, Chesley B., Marshall, Okla. Rim. 1,641,399; Sept. 6. Stept. 6. Charles, Altoona, Kans. Signal. 1,639,907;

Aug. 23.

Aug. 23.
Stiles, Charles A. (See Largent, W. W., and Stiles.)
Stiles, George H., Spokane, Wash. Vehicle lamp.
1.643.963: Oct. 4.
Stiles, Thomas G., Arlington, N. J. Rail bond. 1.648.755;
Sept. 27.
Stile: Charles Glenn W., Shepherd, Mich. Cultivator.
1.626.834; Apr. 26.
Still, Carl, assignor to the Firm: Carl Still, Reckling-hausen Germany. Saturating receptacle. 1,639,709; hausen, Aug. 23,

Aug. 20.
Still, Elmer G., Livermore, Calif. Aviation device, 1.634,239; June 28.
Still, Firm: Carl. (See Still, Carl, assignor.)
Stillesen, Job M. A., Niagara Falls, N. Y. Preparing Urea. 1.614,638; Jan. 18.
Stillesen, Job M. A., Niagara Falls, N. Y. Treatment of lime nitrogen. 1,633,200; June 21.
Stillman, G. Wayne, et al. (See Wardell, John W., assignor.)

Stillman, John, et al. (See Wardell, John W. assignor.) Stillwell, Abert G., Coscob, Conn. Producing fertilizer. 1,622,684; Mar. 29. Stilwell, Richard O., and C. H. Christle, assignors to Standard Plate Glass Company, Butler, Pa. Process of and apparatus for making sheet glass. 1,637,881;

or and apparatus for maning succe grass. A,051,064, Aug. 2.
Stilz, Joseph. (See Viezzi, Luigi, assignor.)
Stimmel, Frederick C., assignor to The Casey-Hedges Co., Chattanoga, Tenn. Water tube boller, 1,628,005; May 10.

MAY 10.
Stimpson, Charles J., Bronxville, N. Y. Sash-cord fasfener. 1.854.274; Dec. 27.
Stimpson, Edward B., Company. (See Rau, Henry V.,
assignor.)
Stimpson, Edwin B., Company. (See Stimpson, Edwin B.,
Stimpson, Balaire, W.

Assignor.)
Stimpson, Edwin B., assignor to Edwin B. Stimpson
Company, Brooklyn, N. Y. Riveting machine,
1.614.937 Jan. 18.
Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Bolt and nut assembly,
1.616.286; Feb. 1.

Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Riveting machine. 1.629,847; May 24.

Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Rivet-setting machine. 1.635,865; July 12. sasignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Rivet-setting machine. 1.646,072; Oct. 18.

Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Rivet-setting machine. 1.651,976; Dec. 6.

Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Rivet-setting machine. 1.651,977; Dec. 6.

Stimpson, Edwin B., assignor to Edwin B. Stimpson Edwin B., and H. V. Rau, assignors to Edwin B. machine pocket. 1,629,946; May 24.

Stimpson, Edwin B., and H. V. Rau, assignors to Edwin B. Stimpson, Edwin B., and Rau, 163,6347; Dec. 27.

Stimpson, Wallace I., assignor to Draper Corporation, Hopedule, Mass. Loom temple roll. 1,621,177; Mar. 15.

Stimpson, Wallace I., assignor to Draper Corporation, Hopedule, Mass. Bobbin-cleaner attachment for relimpson, Wallace I., assignor to Draper Corporation, Hopedule, Mass. Bobbin-cleaner attachment for relimpson, Wallace I., assignor to Draper Corporation, Hopedule, Mass. Bobbin-cleaner attachment for relimpson, Wallace I., assignor to Draper Corporation, Cleaner. 1,654,473; Dec. 27.

Stimpson, Wallace I., assignor to Draper Corporation, Cleaner. 1,654,473; Dec. 27.

Stimpson, Wallace I., assignor to Draper Corporation, Cleaner. 1,654,473; Dec. 27.

Stimpson, Wallace I., assignor to Draper Corporation, Cleaner. 1,654,473; Dec. 27.

Stimpson, Wallace I., assignor to Draper Corporation, Cleaner. 1,654,473; Dec. 27.

Stimpson, Wallace I., assignor to Draper Corporation, Cleaner. 1,654,473; Dec. 27.

ignor.) mpson. Walter F., Louisville, Ky. Scale. 1,624,995;

cieaner. 1.654,473; Dec. 27.
Stimpson, Walter F., Cou Hartman, Charles H., assignor.)
Stimpson, Walter F., Louisville, Ky. Scale. 1,624,995;
Apr. 13.
Apr. 13.
Apr. 14.
Apr. 15.
Apr. 15.
Apr. 16.
Apr. 17.
Apr. 18.
Apr. 18.
Apr. 19.
Apr. 1

Stift, Walter C., et al. (See Nesmith, Samuel D., assignor.)
Stoakes, Harry A. T., Claverdon, near Warwick, England.
Grass-cutting machine. 1,549,868: Nov 22.
Safety Furnace Pipe Company. Producing ornamented eaves. 1,642,903; Sept. 20.
Stobbe, Rudolph H., St. Clairsville, Ohio. Automobile top and curtain construction. 1,529,935; May 24.
Stoble, John W. (See Poirier, Ernest, assignor.)
Stock, Anthony T., assignor to Delec-Light Company, Dayton, Ohio. Refrigerating apparatus. 1,631,345; June 7.

June 7.

Stock, George H., Falmouth, England. Vacuum jacketed flask. 1,648,512; Nov. 8.

Stock, John E., Detroit. Mich. Reversible fan for cooling systems. 1,650,776; Nov. 29.

Stock, John E., Detroit. Thumb-hole-cutting machine. 1,620,299; Mar. 8.

Light Stock, Julius A., Cicero, assignor to W. C. Ritchie & Company, Chicago, Ill. Capping machine. 1,624,286; Apr. 12.

Stock and toppfug Aktiengesellschaft. (See Jereczek. Viktor, assignor.)

Stock, Pauline. (See Wittek, Hermann, assignor.) Stockade Building System, Inc. (See Fuller, Richard B.,

Stock, Pauline. (See Wittek, Hermann, assignor.)
Stockade Building System, Inc. (See Huler, Richard B.,
assignor.)
Stockade Building System, Inc. (See Huler, Richard B.,
assignor.)
Stockade Building System, Inc. (See Huler, Richard B.,
subject of the Stockade Building System, Inc.
Stockamer, Ealph W., Dierks, Ark. Holding device for
saw-mill carriages. 1,622,059; Mar. 22.
Stocker, Ensst. Lucerne, Switzerland. Door closer.
1,622,599; May 24.
Stocker, Ensst. Lucerne, Switzerland. Door closer.
1,623,599; May 24.
Stocker, Ensst. Lucerne, Switzerland. Door closer.
Volk N. Stockade Stock

Apr. 19.

Stockfieth, Berger, Berrien Springs, and F. W. Burger, Niles. assignors to Clark Tructractor Company, Buchanan, Mich. Muffler for gas engines. 1,653,934;

Change Mich. Humer for gles Capital.

Dec. 27.

Stockford, Alexander E., Los Angeles, Calif. Heavy duty trailer for trucks. 1.629,597; May 24.

Stockholder, John H., New Orleans, La. Float-controlled valve. 1,641,240; Sept. 6.

Stockholders Syndicate. (See Blumenberg, Henry, fr., assignor).

Stockholders Syndicate. (See Bumenvers, assignor, assignor, 2 assignor, 2 focking, Bert A., Andubon, assignor to F. R. Steelsmith, trustee, Des Moines, Iowa. Washing machine. 1,633,140; June 2 for york, N. Y. Photo-engraving process. 1,643,520; Sept. 27.
Stockman, Maxwell, Kansas City, Mo. Radiator cap. Des, 72,972; June 2 Stockmans, Charles, Antwerp, Belgium. Loose-leaf ledger. 1,624,020; Apr. 12.
Stockmayer, Max. (See Loewenherz, S., and Stockmayer, See Loewenherz, S., and Stockmayer, See Loewenherz, S., and Stockmayer, See Lo

Stockmayer, Max. (See Loewenherz, S., and Stockmayer), Max, New York, N. Y. Wardrobe trunk. Stockov, Max New York, N. Y. Wardrobe trunk. 1,613,732; Jan. 11. Stockstad, Harold E., Duluth, Minn. Safety hook. Stockstad, Harold E., Duluth, Minn. Stove Company, St. Louis, Mo. Oven heat regulator. 1,617,871; Feb. 15.

Feb. 15.
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Gas range and burner therefor. 1,648,789; Nov. 8.
Stockstrom, Louis, assignor to American Stove Company, St. Louis, Mo. Hydrocarbon stove and burner therefor. 1,614,854; Jan. 18.
Stockton Box Company, (See Goff, Henry J., assignor.)
Stockton, Charles G. (See Winters, Charles D., assignor.)

Stockton Box Company. (See Goff, Henry J., assignor.)
Stockton, Charles G. (See Winters, Charles D., assignor.)
Stockton, Charles G. (See Winters, Charles D., assignor.)
Stockton, Lichard, New York, N. Y. Combined cigarette holder and ash tray. 1,614,265; Jan. 11.
Stockwell, Herbert C., Los Angeles, Calif. Mechanical Stockwell, Herbert C., Los Angeles, Calif. Mechanical Stoddard, Charles F., assignor to American Piano Company, New York, N. Y. Equalizer for automatic player pianos. 1,638,419; Aug. 9.
Stoddard, Charles F., assignor to American Piano Company, New York, N. V. Dust-collecting valve mechanism. 1,638,40; Aug. 9.
Stoddard, Charles F., assignor to American Piano Company, New York, N. V. Dust-collecting valve mechanism. 1,652,467; Nov. 8.
Stoddard, Charles F., assignor to American Piano Company, New York, N. Y. Pneumatic-valve mechanism. 1,652,464; Dec. 13.
Los California, M. Y. Forming sodium tungstate. 1,652,464; Dec. 13.
Stoddard, Billiott J., Detroit, Mich. Radiator. 1,624,565; Apr. 12.
Stoddard, Elliott J., Detroit, Mich. Radiator. 1,624,565; Apr. 12.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,664; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Change-sped friction gearing. 1,637,644; Ang. 2.
Stockicht, Wilhelm, Munich-Solin, Germany. Cha

Stoer, Charles E., London, England, Suspending and drawing curtains and the like. 1,649,371; Nov. 15. Stoetzel, Joseph J., Queens Village, assignor to G. & G. Atlas Systems, Inc., New York, N. Y. Pneumatic-tube apparatus. 1,624,078; Apr. 12. Stoetzel, Joseph J., Queens Village, assignor to G. & G. Atlas Systems, Inc., New York, N. Y. Single-tube pneumatic-dispatch unit. 1,626,214; Apr. 26. Stoetzel, Joseph J., New York, N. Y. Air-regulating valve. 105; Nov. 1. Stoewnene, Pritz. (See Januek, J., Wietzel, and Stoewener, Pritz.

Stoeweder, Fritz. (See Sames, W. Cherry, Stoffel, Fernand, Parls, France. Process and apparatus for the dysing of bell-shaped felt pieces employed in for the dysing of bell-shaped felt pieces employed in the control of the control

Stoffel, Oskar, Baden, Germany. Packing ring. 1,631,654;

June 7
Stoglin, Clarence L., San Antonio, Tex. Shine stand.
1.611.507: Feb. 15.
Stohlgren, Carl O., Rockton, Ill. Button-making machine. 1.641.402; Sept. 6.
1.613.805. Feb. 22.
Stoblerg, Anders J., assignor of forty-nine one-hundredths to Bair-Collins Company, Roundup, Mont. Railroad tie.
1.645.629; Oct. 18.
Stokely, Ray L., Holl Park, assignor to Western Electrical Stokely, Ray L., Holl Par

tric Company, Incorporated, New York, N. Y. Machine-switching telephone-exchange system. 1,613,624; Jan. 11.
Stokely, Ray L., Floral Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Selectorswitch circuits for step-by-step systems. 1,547,256; Nov. 1.
Stokely, Ray L., Floral Park, N. Y., assignor, by mesne Stokely, Ray L., Floral Park, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated Telephone exchange system. 1,653,789;

Dec. 27.
Stokes, Hiram. (See Taylor, J. G., and Stoker.)
Stokes, Charles L., Los Angeles, Callf. Descriptive mallStokes, Ane G., Larchmont, assignor to Jane Gray Company, Inc. New York, N. Y. Doll or similar article.
Des. 72,502; Apr. 19.
Stokes, John S. (See Novotny, E. E., and Carry, assignors.) S. (See Novotny, E. E. and Carry, as-

signors.)
Stokes, John S. (See Novotny, E. E., and Romieux, assignors.)
Stokes, John S., Huntington Valley, assignor to Stokes and Smith Company, Philadelphia, Pa. Assembling, tabbins, and applying composite box wrappers.
1,622,577, Ap. 18.
1,623,577, Ap. 18.
1,623,577, Ap. 18.
1,623,577, Ap. 18.
1,624,481; Nov. 1.
1,647,481; Nov. 1.

Signors.) Scoar E., Streator, Ill. Bumper. 1,631,653; Stokes. Oscar E., Streator, Ill. Washing machine. 1,642,700; Sept. 20. Stokes & Smith Company. (See Bridgman, Harry, assignor.). Smith Company. (See Stokes & Smith Company.)

signor.)
Stokes and Smith Company. (See Sonneborn, John R., assignor.)
Stokes and Smith Company. (See Stokes, John S., as-

Stokes and Smith Company. (See Streeper, William H.,

Stokes and Smith Company. (See Streeper, William H., assignor.)
Stokes, Thomas J., assignor of one-half to H. O. Nelson, Jefferson, Tex. Air vaive. 1,624,021; Apr. 12.

Lefterson, Tex. Air vaive. 1,624,021; Apr. 12.

County, Ind. Pipe coupling. 1,646,663; Oct. 25.

Stoll. Arthur, Arlisheim. near Basel. and W. Kussmaul.
Basel. assignors to the Firm Chemical Works formerly Sandoz. Basel. Switzerland. Uxidation of aldoses.

1,648,368; Nov. 8.

1,648,368; Nov. 8.

1,631,367; June 7.

Stoll. Churles A., Kane. Pa. Warm-air generator. 1,632,265; June 14.

Stoll. Churles A., Kane. Pa. Warm-air generator. 1,632,265; June 14.

Stoll. Frank M., assignor to Stoll Manufacturing Company. 1,632,265; June 14.

Stoll. Frank M., assignor to Stoll Manufacturing Company. 1,632,285; May 10.

Stoll. Herman. Detroit. Mich. assignor to General Motors (19,993; Mar. 8).

Stoll. Karl. Manaronneck. and E. C. Meyer. Larehmont. 1,632,993; Mar. 8.

Stoll. Karl. Manaronneck. and E. C. Meyer. Larehmont. 1,681,993; Mar. 8.

Stoll. Karl. Manaronneck. and E. C. Meyer. Larehmont. 1,681,993; Mar. 8.

Stoll. Karl. Manaronneck. and E. C. Meyer. Larehmont. 1,681,993; Mar. 8.

Stoll. Karl. Manaronneck. and E. C. Meyer. Larehmont. Stoll. Refrance of the Maria Stoll. Refrance of the Mar

Stellberg, Carl, Berlin, Germany. Coupling for railway cross. 1629-551: May 24. Stellberg, Charles, assignor to American Can Company, New York, N. Y. Can body and forming the side etam therto. 1,655,229; Apr. 19.

Stoller, Hugh M., Mountain Lakes, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Dynamo-electric machine. 1613,625; Jan. 11. Stoller, Hugh M., Mountain Lakes, N. J., assignor to Western Electric Company, Incorporated, New York. Stoller, Hugh M., Mountain Lakes, N. Jr. ssignor to Western Electric Company, Incorporated, New York, N. Y. Dynamo-electric machine. 1,641,839; Sept. 6. Stolly, Frank H. (See Fedders, J. M., and Stolp.) Stolp, Frank H., Geneva, N. Y. Radiator, 1,613,253; Jan. 4. Stolp, Frank H., Geneva, N. Y. Radiator, 1,613,253; Jan. 4. Stolp, Freak H., Geneva, N. Y. Radiator, 1,613,253; Jan. 4. Stolp, Frederick J., Chicago, Ill. Shock-absorbing means. 1,626,643; May 3. Stolpe, Frederick J. Chicago, Ill. Shock-absorbing means. 1,628,522; July 5. Stoltz, Benjamin, and D. A. Lillie, Montpelier, Ind. Apparatus for making packing cups. 1,622,685; Mar. 25. Stoltz, Charles E., assignor to Mancha Storage Battery 1,616,148; Feb. 1,718; Louis, Mo. Multiple fuse. Stolz, Joseph Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Leading-in bushing for high voltages. 1,651,234; Nov. 29. Stone, Andrew J., Parls, France. Golf tee. 1,633,686; Stone, Andrew J., Parls, France.

Stone, B. A., et al. (See Nix, Neely, assignor.) Stone, Bertha E., Great Falls, Mont. Feeder. 1,630,982;

June 28.
Stone, B. A., et al. (See Nix, Neely, assignor.)
Stone, Bertha B., Great Falls, Mont. Feeder. 1,630,982;
Stone, Charles B. (See Clark T. B., and Stone.)
Stone, Charles B. (See Clark T. B., and Stone.)
Stone, David, New Rochelle, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Winding machine.
1,627,213; May 3.
Stone, David, New Rochelle, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Winding machine.
1,627,213; May 3.
Stone, State Company, Philadelphia, Pa. Screen wall for centrifugal baskets. 1,624,287; Apr. 12.
Stone, Edward N., Ogden, Utah, assignor to Cresson-Morris Company, Philadelphia, Pa. Screen wall for centrifugal baskets. 1,624,288; Apr. 12.
Stone, Edward N., Ogden, Utah, assignor to Cresson-Morris Company, Philadelphia, Pa. Screen wall for centrifugal baskets. 1,624,288; Apr. 12.
Stone, Fred G., Manchester, N. H., assignor to Stone Surface washer. 1,620,698; Mar. 15.
Stone, Frederick W., Montreal, Quebec, Canada, assignor to Central Commercial Company. Sound record.
Stone, George, assignor to M. T. Stevens and Sons Company, North Andover, Mass. Apparatus for cleaning cloth. 1,628,690; May 17.
Stone, George F. A., London, England. Electrical condenser. 1,623,653; Apr. 5.
Stone, George W., assignor to Matonal Auto Body Works, San Francisco, Calif. Tractor coupling device. 1,637,665; Aug. 2.
Stone, Gunnard, assignor of one-half to H. Jacobson, New York, N. Y. Safety switch control. 1,645,628; Oct. 11.
Stone, Harry, assignor of one-half to H. Jacobson, New York, N. Y. Safety switch control. 1,645,628; Oct. 11.
Stone, J. Company, (See Darker, Alfred H., assignor.)

Stone, Herbert A., Chicago, Ill. Aquarium. 1,643,527; Sept. 27.
Stone, J., & Company. (See Darker, Alfred H., assignor.) Stone, Jacob M., assignor to L. F. Stone, Breckenridge, Tex. Dust cap. 1,622,355; Mar. 29.
Stone, John M., assignor to The Operadio Corporation, Chicago, Ill. Loop aerial. 1,613,333; Jan. 4. Merican Telephone and Telegraph Company. Directive antenna Telephone and Telegraph Company. Directive antenna array. 1,645,323; Sept. 27.
Stone, John M., Stone, Jacob M., assignor, 1,620,469; Mar. Stone, Leonore, F. (See Stone, Jacob M., assignor) Stone, Leoster V., Augusta, assignor of one-fourth to J. R. Good and one-fourth to M. C. B. Holley, Augusta, Ga. Gauge cock. 1,616,287; Feb. 1.
Stone, Peter, Detroit, Mich. Internal-combustion engine. Stone, Peter, Detroit, Mich. Internal-combustion engine. Stone, Peter P., et al. (See Blane, Adolph I., assignor, Stone, Rufus M., Oklahoma City, Okla, Burner. 1,644,617; Oct. 4.
Stone, Samuel, Miles City, Mont. Draining handle for stew kettles. 1,615,414; Jan. 25.
Stone Surface Washer Company. (See Stone, Fred G., 1988)

Stone Surface Washer Company, (See Stone, Fred G., assignor).
Stone, Thomas L. Newark, N. J., assignor to Hampden Glazed Paper and Card Company, Holyoke, N. Y. Cover paper or the like, Des. 72,291; Mar. 22.
Stone, Thomas L. Newark, N. J., assignor to Hampden Glazed Paper & Card Company, Holyoke, Mass. Cover paper or the like, Des. 73,807; Nov. 8.
Stone, Thomas W., assignor to Western Gas Construction Company, Fort Wayne, Ind. Gas-purifying apparatus, 1,632,251; June 14.
Stone, Thomas W., assignor to Western Gas Construction Company, Fort Wayne, Ind. Oil-spraying device, 1,646,839; Oct. 25.

Stone & Webster, Inc. (See Klein, August C., assignor.)
Stone & Webster, Inc. (See Shippee, Allen E., assignor.)
Stonebraker, Harold E., Rochester, N. Y. Gear-cutting
machine. 1,647,257; Nov. 1.
Stoneham, Ceeli D., Lewisham, England. Apparatus for
predicting the movements of moving bodies. 1,649,870;
Nov. 22.

Soviet Winalce U. Cincinnati, Ohio. Automobile Union. 1, 144,698; Oct. 11.
Stonequist, Arthur J. (See Stonequist, L. W., Rottum, and Stonequist, Lawrence W., C. Rottum, and A. J. Stonequist, Lawrence W., C. Rottum, and A. J. Stonequist, Chicago, III. Advertising device. 1,641,609;

Stonequist, quist, Chicago, III. Advertising quist, Chicago, III. Advertising per to The Wolf Company, Stoneth Exchange M., assignor to The Baker-Ruulang Company, Cleveland, Ohio. Receptacle. 1,646,266; — Pauloment Co., The.

Chambersburg, Pa, Pulverizer. 1,648,747; Nov. 8. Stoner, Frank, Lakwood, assignor to The Baker-Raulang Company, Cleveland, Ohlo. Receptacle. 1,646,266; Oct. 18. Stones Foundry Engineering and Equipment Co., The. Stoney, John T., Cleveland, Ohlo. Automatic valve mechanism. 1,645,828; Oct. 18. Stoney, John T., Cleveland, Ohlo. Apparatus for forming sand molds. 1,653,675; Dec. 27. Stoney, John T., and Purwin, assignors to The Stoney Foundry Engineering and Equipment Co., Cleveland, Ohlo. Apparatus for forming sand molds. 1,653,675; Dec. 27. Stoney, John T., and K. Purwin, assignors to The Stoney Foundry Engineering and Equipment Co., Cleveland, Stoney, John T., and E. Stoney, Winston F., assignor, Stoody Company. See Stoody, Winston F., assignor, Stoody Company. See Stoody, Winston F., assignor, Stoody Company, Whitter, Callf. Machine for making weeding rods. 1,640,859; Aug. 30. Stoody, Winston F., assignor to Stoody Company, Whitter, Callf. Making welding rods and the resulting product. 1,622,445; May 24. Weehanism for product. 1,622,445; May 24. Weehanism for product. 1,622,447; May 24. W. Va. Normalizing fur nace. 1,634,458; July 5. Stoop, William J., Wheeling, W. Va. Machine for opening sheet-metal packs. 1,647,061; Oct. 25. Stoppel, Albert W., Chicago, Ill. Blade-stropping device. 1,652,447; Dec. 13.
Stopperless Water Bottle Company. (See Reach, Milton Ling assignation of the Stoney Company at Lachander Company).

1,652,647; Dec. 13.
Stopperless Water Bottle Company. (See Reach, Milton E., assignor.)

8., and the transparent of the transp

orm, Adolph, assignor of one-half to C. G. Strand. Minneapolis, Minn. Lead sight for firearms. 1,625,060; Apr. 19.

Storms, Roy B., Indianapolis, Ind. Anti-mouth-breath-ing device. 1,528.832; May 24.

Storms, Roy B., Boseman, Mont. Grease gun. 1,647.941; Nov.

Stos. Frank F., assixnor of one-half to J. Krajewski, East Cleveland. Ohio. Curtain and shade support. 1,653,591; Dec. 20.

Stotesbury & Miner. (See Hughes, Joseph D. E., as-

Stofesbury & Miner. (See Hughes, Joseph D. E., assignor.)
Stott, John H., Glen May, England. Laminated spring.
1,628,371; May 10.
Stotz, G. m. b. H. Abt. der Brown, Boveri & Cie., A.-G.
(See Schachiner, Heinrich, assignor.)
Stoutes, S. M. L. S. M. Kingview, Pa. Road macbine.
Stough, Sylvester L. (See Ashford, Alfred J., assignor, Stough, Sylvester L. (See Ashford, Alfred J., assignor to Burrows Magnetic Equipment Corporation, Jersey City, N. J. Apparatus for testing magnetizable objects. 1,638,174; Aug. 9. Aug

Stout, Edward E. (See Weydell, Jarl M., assignor. Stout, William B., Detroit, Mich. Gasoline ta 1,618,008; Feb. 1.

Stout, William B., Detroit, Mich. Toy. 1,616,513; Feb. 8. Stovall, William M., Fort Angeles, Wash. Wrench. 1,638,891; Aug. 16. Stover, George H., New York, N. Y. Apparatus for handling bricks. 1,628,644; May 3. Stover Lang Company, (See Lang, George H., assignor.) Stover Lang Company, Raiche, Wis. Rear signal light for automobiles. 1,629,231; May 17. Stover, Paul A., assignor to The Stover Signal Engineering Company, Rache, Wis. Rear signal light for automobiles. 1,629,232; May 17. Stover Signal Engineering Company. (See Seidel, Emory P., assignor.)

Stover Signal Engineering Company, The. (See Stover, Paul A., assignor). Stover Signal Engineering Company, The. (See Stover, Paul A., assignor to E. S., White Called N. J. Brake for mine cars and other vehicles 1, 640,474; Aug. 30.
Stow, Audley H., Charleston, W. Va., assignor to E. S., White, Caldwell, N. Y. Mine and other car. 1,643,687; Sept. 27.

Stowe, Loyd R., St. Louis, Mo. Stoker. 1,627,715;
May 10.
Stowe, Loyd R., St. Louis, Mo. Water tube boiler.
1,627,871; May 10.
Stowe, Loyd R., St. Louis, Mo. Heat-exchanging mechanism. 1,650,242; Nov. 22
M. Isaacs, Redding, Calif.
Socket weach. 1,615,201; Jan. 18.
Stowell, Francis H., et al. (See Stowell, Francis H., assigno.)

assignor.)

Stowell, Francis H., et al. (See Stowell, Francis H., assignor, to F. H. Stowell and H. H. Stowell, Francis H., assignor to F. H. Stowell and H. H. Green, and the stowell, Francis H., assignor to F. H. Stowell and H. H. 1643, 614; Sept. 27.

Stowell, Freston D., South Braintree, Mass. Wrench. 1,639,710; Aug. 23.

Stowers, John L., Habana, Cuba. Device for opening and closing windows, shutters, and similar appliances. 1,614,500; Jan. 18.

Glossing John L., Habana, Cuba. Device for opening and closing windows, shutters, and similar appliances. 1,627,580; May 10.

Strabelle, Irene, Atlantic City, N. J. Hair waver. 1,648,225; Sept. 20.

Strachan, James M., North Acton, London, England, Sliding, windows of motor and other vehicles. Strachan, James M., North Acton, London, England, Spring suspension of motor and other vehicle bodies. 1,652,841; Dec. 13.

Strachan, Robert. (See Traill, R., and Strachan.) Strachan, Robert. (See Traill, R., and Strachan.) Chio. Shiping attachment for weighing scales. 1,623,137; Apr. 6.

Strachan, Thomas H., assignor to Dayton Scale Company, Dayton, Ohio. Shiping attachment for weighing scales. 1,650,243; Nov. 22.

Strachan, Thomas H., assignor to Dayton Scale Company, Dayton, Ohio. Spring scale. 1,650,913; Nov. 29.

Strachan, Thomas H., assignor to Dayton Scale Company, Dayton, Thomas H., assignor to Dayton Scale Company, Dayton, Ohio. Spring scale. 1,650,913; Nov. 29.

Strachan, Thomas H., assignor to Dayton Scale Company, Dayton, Clarence, A., assignor to Liptak Fire-Brick Arch Company, Chicago, III. Fire-Strachan, Clarence, A., assignor to Liptak Fire-Brick Arch Company, Chicago, III. Fire-Strachan, Clarence, A., assignor to Liptak Fire-Brick Arch Company, Chicago, III. Fire-Strachan, Stee Sokolowski, Peter, assignor.)

Aug. 23.

Strack, Herman. (See Hansmann, P., and Strack.)

Strack, Mat. (See Sokolowski, Peter, assignor.)

Strader, Sansbury, Los Angeles, Calif. Scrubbing machine. 1644,859; Oct. 11.

Stradley, Early E. (See Ferrier, J. P. and Stradley).

Tayats, Juney, Chicago, Ill. Toothbrush. Des. 73,245; Aug. 9.

Straebly, Royden E., Chicago, Ill. Toothbrush. Des. 1632,859; June 21.

Strahly, Royden E., Chicago, Ill. Toothbrush. 1,632,859; June 21.

Strahly, Royden E., Chicago, Ill. Toothbrush. 1,632,859; June 21.

Strahan, Harry J., New York, N. Y. Terminal testing unit for spark plugs. 1,650,546; Nov. 22.

Strahan, James L., assignor to The Louden Machinery Company, Fairfield, Jowa. Air control for ventilating systems. 1,623,286; Apr. 5.

Systems. 1,623,286; Apr. 5.

Systems. 1,623,286; Apr. 5.

Straight, Halver R., Adel, Iowa. Mechanism for transferring plastic blocks from one conveyer to another. 1,615,966; Feb. 1.

Straight, Halver R., Adel, Iowa. Title cutter. 1,615,966; Feb. 1.

Straight, Halver R., Adel, Iowa. Continuous pugging.

Straight, Halver R., Adel, Iowa. Continuous pugging wet pan. 1,623,287; Apr. 5.
Straight, Halver R., Adel, Iowa. Tunnel kiln. 1,633,829; June 28.

Straight, Halver R., Adel, Iowa. Mechanism for handling building blocks and the like. 1,650,053; Nov. 22. Straightline Radio Corporation. (See Herman, Henry F.,

assignor.) Strait. Hosea H., Overland, Mo. Quoin. 1,632.422; June 14.

Strait Hydro Carbon Oil Burner Company, The. (See Strait, Lacelle C., assignor.) Strait, Lacelle C., assignor to The Strait Hydro Carbon Oil Burner Company, Sacramento, Calif. Hydrocarbon oil burner. 1,639,064; Aug. 16.

Straits, Joseph A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire-regrooving tool. 1531,941; June 7. Straitz, John F., assignor to National Airoil Burner Company, Philadelphia, Pa. Fluid-control cock. 1,648,513; Nov. 8.

Nov. 8.
Strand, Andrew, Minneapolis, Minn. Milk-bottle cover.
1,634,806; July 5.
Strand, Andrew, Minneapolis, Minn. Internal-combustion
engine. 1,643,645; Sept. 27.
Strand, Carl, Mitchell, S. Dak.
1,642,701; Sept. 20.
Strand, Carl, Mitchell, S. Dak.
Hopple. 1,649,200;

Strand, (Nov. 15 Strand.

Strand, Carl, Mitchell, S. Dak. Hopple. 1,649,200; Nov. 15.
Strand, Charles A., Chicago, Ill. Blade-sharpening mechanism. 1,628,754; May 17.
Strand, Charles G. (See Storm, Adolph, assignor.)
Strand, Eirc J. (See Olson, Gustaf, assignor.)
Strand, Henry, Leveland, Ohio. Portable honing or lapStrand, Joseph. Los Angeles, Calif. Plaster board. 1,640,736; Aug. 30.
Strand, Joseph. Los Angeles, Calif. Plaster board. 1,640,736; Aug. 30.
Strand, Joseph, assignor to Klinch Lath Corporation, Los Angeles, Calif. Wall construction and metal member therefor. 1,612,993; Jan. 4.
Strand, Joseph, assignor to Klinch Lath Corporation, Los Angeles, Calif. Wall-board-retaining member. 1,039,948; A. Eranston, Ill. Polishing or buffer wheel. 1,654,275; Dec. 27.
Strandberg, Alvin C., assignor of one-half to O. S., Wiard, Kansas City, Mo. Brand, 1,654,436; July 5.
Stranders, Julien, London, England, assignor to H. B. Kruger, New York, N. X. Display stand. 1,625,436; Apr. 19.

Kruger, New Yofk, N. I. Assistance, Turbine-wheel propeller and motor. 1,633,908; Aug. 23.

Strandlund, Carl G., Moline, assignor to Deere & Company, Moline, Ill. Cultivator. 1,626,215; Apr. 26.

Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Combined gauge wheel and colter. 1,628,372; May 10.

Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Lister plow and planter. 1,640,625; Aug. 20.

Moline, Ill. Lister plow and personal Aug. 30. Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Wheeled plow. 1,641,706; Sept. 6. Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Cultivator. 1,644,042; Oct. 4. Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Drart device. 1,653,677; Dec. 27. Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Draft-control mechanism for plows. 1,655,678; Dec. 27. Strandlund, Carl G., and T. Brown, assignors to Deere & Company, Moline, Ill. Draft device. 1,653,676; Dec. 27.

Dec. 27.

Strang, John M., assignor to Barr and Stroud, Limited. Anniesland, Glasgow, Scotland. Eyepiece-prism combination for use in range finders of the self-contained to the

burger,

Strasser, Albert, Rorschach, Switzerland, Manufacture
of lead electrode for accumulators. 1,641,241; Sept. 6.

Strassmann, Paul G. Crefeld, Germany. Closure for
vertical retorts. 1.646,325: Oct. 18.

The strain of the

Stratman, Joseph W., assignor to The Chas. W. Brene-man Company, Cincinnati, Ohio. Window-shade cloth and constituting. 1,653,592; Dec. 20. Stratmore Company, The. (See Stratford, Herbert R.,

Stratton John F. O., Chicago, Ill. Furnace. 1,640,056; Aug. 23; Tratto, John F. C., Chicago, Ill. Furnace. 1,640,056; Aug. 25; Tratton, John F. O., Chicago, Ill. Furnace. 1,640,056; Aug. 23; Tratton, John F. O., Chicago, Ill. Furnace. 1,640,056; Aug. 23; Tratton, John F. O., Chicago, Ill. Furnace. 1,640,056; Aug. 23; Tratton, John F. O., Chicago, Ill. Furnace. 1,640,158; Tratton, John F. O., Chicago, Ill. Furnace. 1,640,158; Stratton, John F. O., Chicago, Ill. Furnace. 1,640,158; Stratton, John F. O., Chicago, Ill. Furnace. 1,640,158; Stratton, John F. O., Chicago, Ill. Furnace. 1,650,158; Stratton, John F. O., Chicago, Ill. Furnace. 1,650,158; Jan. 25. Stratton, Christopher, East Elmburst, N. Y., assignor, by messne assignments, to Astoria Importing and Manufacturing Co. Inc. Veneer-cutting machine. 1,626,365; Apr. 26.

Straub, Christopher, East Elmhurst, N. Y., assignor to Astoria Importing and Manufacturing Co. Inc. Comstant of the Company of

tailing caronium and Apr. 26.

Straub, Fitz, assignor to the Firm: Society of Chemical Straub, Fitz, assignor to the Firm: Society of Chemical making same. 1,626,168; Apr. 26.

Straub, Fritz, assignor to the Firm: Society of Chemical Industry in Basle, Basel, Switzerland. Duestuffs containing chromium and making same. 1,626,169;

And stry in Basle, Basel, Switzerland Duestuffa containing chromium and making seme. 1,626,169; Apr. 26.

Straub, Fritz, Basel, and H. Schneider, Riehen, near Basel, assignors to the Firm: Society of Chemical Industry in Basle, Basel, Switzerland. Dyestuffs and making same. 1,617,872; Feb. 15.

Straub, Fritz, Basel, and Hermann Schneider, Riehen, near Basel, assignors to Society of Chemical Industry same. 1,624,637; Apr. 22.

Straub, Fritz, Basel, and H. Schneider, Riehen, near Basel, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Chromable azo dyestuffs derived from formaldehyde sulphurous acid and intrated 1-(azo naphthol)-2-hvdroxy-naphthalene-4-sulphonic acid and unking same. 1,635,74; June 28.

Straub, John, Ashley, N. Dak, Bottle stopper. 1,654,389;

aub, Joseph C., Berkeley, Calif., assignor to Hall-Scott Motor Car Co. Packing joint. 1,653,884;

Straub, Otto H., Kudalstadt, assignor to the Firm F. Ad. Richter & Cie. A. G., Bankastenfabrik, Rudolstadt, Thuringi, Germany, Roof-tile beam for toy structures. 1,621,178; Mar. 15.
Straube Plano Company. (See Betz, William G., as-

signor.) C. A., Company. (See Meyers, Julius R., as-

Straubel, C. A., Company. (See Meyers, Junus A., assignor.)
Strauch, Eugen, assignor to Harley-Davidson Motor Co.,
Milwaukee, Wis. Electric switch 1.615,245; Jan. 25.
Straus, Harry H. (See Grupe, William F., assignor.)
Straus, Joseph K., Jamaica, assignor to The Ulliam,
Straus, Joseph K., Jamaica, assignor to The Ulliam,
Frame for photographs, display cards, and the like.
1,634,921; July 5.
Straus, Nathan, & Sons, Inc. (See Rampfel, Heinrich, assignor).

Strauss, Charles, Paris, France. Foldable comb.
1.616,930; Feb. 8.
Strauss, Ferdinand, Corporation, The. (See Arden,
Thomas R., assignor.
Strauss, Ferdinand, Corporation, The. (See Starke, Otto

Strains, Ferdinand, Corporation, The. (See Starse, Oct. R., assignor.)
Strauss, Ferdinand. Corporation, The. (See Strauss, F., and Starke, assignors to The Ferdinand, and O. R. Starke, assignors to The Ferdinand Strauss Corporation, New York, N. Y. Tail-strauss, Joseph B., Chicago, Ill.
Bascule bridge. 1,615,941; Feb. 1.
Strauss, Joseph B., Chicago, Ill. Yielding barrier for vehicles. 1,652,186; Dec. 13.
Strauss, Joseph B., assignor of one-half to C. Weinfeld, Chicago, Ill. Concrete vehicle body. 1,635,441; June 21.
Strauss, Nathan, & Sons, Inc. (See Kauffmann, Lou B., Assignor).

Straus, Nathani, & Sons, int. (See Raminani, Lou B., assignor.)

Strauss, N. Horter F., Milwaukee, Wis. Electric water Strauss, Siegmund, and W. Brandt, Vienna, Austria, Method and means for measuring electrical resistance. 1,649,753; Nov. 15.

Straussler, Nicholas, Piccadilly, England. Collapsible floating structure such as a beat pontoon, seaplane float, and temporary bridge. 1,630,914; Nov. 29.

Strawn, Erivi E., assignor to L. S. Gliman, Cleveland, Strawn, Marlon L. (See Ray, W. H., and Strawn.)

Strawn, Marlon L. (See Ray, W. H., and Strawn.)

Strawn, Nella B., Antonito, Colo. Washing machine. 1,632,741; Aug. 9.

Strawn, Gear W., Forest, Ind. Nest. 1,638,374; Aug. 9.

Strawn, Gear W., Forest, Ind. Nest. 1,638,374; Aug. 9.

Strawn, Carlon, J., Rent, Ohio. Aeronautic toy. 1,627,872; May 10.

Strayer, Lawronce H., Kent, Ohio. Sounding-toy film burster. 1,632,518; June 14.

Streator, Henry D., Galesbudg, Mich. Payement. 1,636,113; July 19.

Streator, Henry D., Galesburg, Mich. Pavement. 1.636.114; July 19. Strecker, Andrew M., Phroso, Okla. Press-wheel boxing for grain deills. 1,624,022; Apr. 12. Streckfuss, Elmer G., assignor to The Cincinnati Time Recorder Company, Clacinnati, Ohio. Meat clamp. Streepir, Epit C., Normal, Ill. Cymbal holder for drums. 1,641,558; Sept. 6. Streeper, William H., assignor to Stokes and Smith Company, Philadelphia, Pa. Structure for feeding cut-out sheets. 1,644,549; Oct. 4. Structure for feeding cut-out sheets. 1,644,549; Oct. 4. Structure for feeding cut-out sheets. Louis L. Structure for Gunder L., assignor.) Streeper, George G., mssignor. J. Structure for Gunder L., Gunde

Streit, Harou R., St. Fab, ann.
Mar. S.
Streift, Rudolph A., assignor to F. Keiper, Rochester,
N. Y. Automobile mirror. 1,650.161; Nov. 22.
Streine, Frank H., assignor to The Streine Tool and
Manufacturing Company, New Bremen, Ohlo. Automatic plate and sheet trimming and squaring machine.
1,629.232; May 17.
Streine Tool and Mfg. Co., The. (See Streine, Frank H.,

Streine Tool and Mfg. Co., The. (See Streine, Frank H., assignor.)
Streit, Frank J., Cincinnati, Ohio. Can opening and closing device. 1,623 251; June 14.
Streit, Max, Breslau, Germany. Change-spur gearing. 1,622,264; Mar. 22.
Streitwolf, Karl, Frankfort-on-the Main, and J. Hallens-industrie Aktiongcelischaft, Frankfort-on-the-Main, Germany. Complex metallic arsenobenzene compounds and making same. 1,616,204; Feb. 1.
Streitz, George B. (See Blume, H., and Streitz.)
Streiow, Walter, Berlin-Halensee, Germany. Swimming ring or belt. 1,648,870; Nov. 15.
Streitz, George B. (See Blume, H., and Streitz.)
Streiow, Walter, Berlin-Halensee, Germany. Swimming ring or belt. 1,648,870; Nov. 15.
Strempel, Julius J., assignor of one-half to N. Strempel, Julius J., assignor of one-half to E. Foster, Leander, Tex. Adjustable roller bearing. 1,650,728; Nov. 29.

Non-26 Non-26 Stressin, Richard, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electrically-welded bub-ble tower. 1.630.037; May 24. Stressau, Richard, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Are welding. 1,638,592:

Corporation, Milwaukee, 1... Aug. 16.
Stresan, Richard. Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Metallic are welding, 1... Aug. 10.
Stresan, Richard. Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Self-anchoring rivet. 1. 10.20 no. 2. Oct. 25.

Stresan, Richard, Wauwatosa, assignor to A. O. Smith Corporation. Milwaukee, Wis. Self-anchoring rivet. 1,647,062; Oct. 25.

Stresan, Richard, Wauwatosa, and H. Woodhead, assignors to A. O. Smith Corporation, Milwaukee, Wis. Self-anchoring rivet. 1,647,062; Oct. 25.

Stresan, Richard, Wauwatosa, and H. Woodhead, assignors to A. O. Smith Corporation, Milwaukee, Wis. Electrical Corporation, Milwaukee, Wis. Electrical Corporation, Milwaukee, Wis. Electrical Corporation, Milwaukee, Wis. Electrical Corporation, 1,637,818; July 26.

Stretch, Charles B. Brockton, Mass. Fringe and making in 1,637,818; July 26.

Streum, John A., assignor to Hardwicke-Etter Company, 3,630,638; May 31.

Strickler, William A., assignor of one-half to A. Levingston, Kansas City, Mo. Drier. 1,642,223; Oct. 18.

Strickler, William A., New Haven, Conn., assignor to The Geometric Tool Co. Self-opening die head. Strickler, George, Boise, Idaho, Repeating shotgun. 1,648,831; Nov. 8.

Strickler, William H., Philadelphia, Pa., assignor of one-half to W. H. Dentzel, Philadelphia, Pa. Coaster-track structure. 1,642,276; Sept. 13.

Strid, Syen J., assignor to Fred Mathews, Chicago, Ill. Hand-brake booster. 1,642,276; Sept. 13.

Strid, Syen J., assignor to Fred Mathews, Chicago, Ill. Drop Strieby, Maurice E., Milburn, N. J., assignor to American Telephone and Telegraph Company. Program-selecting circuits, 1,623,652; May 24.

Stridely, Maurice E., and C. Erebone and Telegraph Company. Program-selecting circuits, 1,623,652; May 24.

Stridely, Maurice E., and C. Erebone and Telegraph Company. Program-selecting Circuits, 1,623,652; May 24.

Stridely, Maurice E., and C. Erebone and Telegraph Company. Program-selecting Circuits, 1,624,023; Apr. 12. pany Equalization of transmission. 1,624,023; pany Equalization of transmission. 1,624,023; Striffer, Gottlieb Chicago, III. Heating furnace or stove. 1,626,054; Apr. 26. Strigl, Karl J., New York, N. Y. Roundabout. 1,641,707;

Strigl, Karl J., New York, N. Y. Roundabout. 1,641,707; Sept. 6.
Stringer, Alfred E., Chicago, Ill. Pipe and testing plug therefor. 1,615.316; Jan. 25.
Stringer, Alfred E., Chicago, Ill. Testing cover support and pipe therefor. 1,640.057; Aug. 23.
Stringer, Alfred E., Chicago, Ill. Soil-pipe drainage system. 1,640.058; Aug. 23.

Stringer, Hubert L. Rockbeare Hill. near Exeter, England. Apparatus for converting vibratory motion into rotary motion. 1616,389; Peb. 1. Stringer, Melvin, Pottstown, Pa. Forming band brakes, 1.619,549; Mar. 1. Stringer, Melvin, Pottstown, Pa. Angle split rings, 1,621,961; Mar. 22. Stringer, Melvin, New York, N. Y. Spring action. 1,621,962; Mar. 22. Stringer, Melvin, New York, N. Y. Spring action. 1,621,962; Mar. 22. Stringer, Tactor, 1,643,098; Stripling, John. (See Burkhalter, W. T., and Stripling, Sept. 20. Stripling, Leslie D., Big Spring, Tex. Tractor, 1,643,098; Sept. 20. Stripling, Leslie D., Big Springs, Tex. Axle for tractors. 1,648,076; Nov. 8. Stripling, Luke S., assignor of one-half to R. L. Gragg, Burkburnett, Tex. Windmill. 1,632,322; June 14. Strite, George T., et al. (See Travers, Charles J., assignor).

Strike, George T., et al. (See Travers, Charles J., asStrike, George T., Minneapolis, Minn., assignor of onethird to H. W. Bolens, Port Washington, and onethird to P. D. Durant, Milwaukee, Wis. Cultivating
means., 1641,207; Sept. 6.
Strizich, Thomas H. (See Heinson, Ernest T., assignor.)
Strobel, Francis J., Philadelphia, Pa. Muffler attachment
for telephones. 1,628,076; May 10.
Strobel, Parneis J., Philadelphia, Pa. Muffler attachment
for below Wis. Tool. 1,635,968; July 12.
Strodel. Norbert
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Strodel. Norbert
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Stromer Stromer Stromer Stromer
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Strom Gustav, assignor of forty one-bundrectinis to P. D. Johnston, Pontiac, Mich. Poured-wall form. 1,636,256; July 19.

Strom Gustav, assignor of forty one-bundrectinis to P. D. Johnston, Pontiac, Mich. Poured-wall form. 1,636,256; July 19.

Stromberg-Carlson Telephone Manufacturing Company, The. (See Beach, John M., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Beyland, S. A., and Reynolds, assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Longworth, Arthur, assignor.)

Stromberg-Carlson Telephone Manufacturing Company, Thouserg-Carlson Telephone Manufacturing Company, The. (See Olney, Benjamin, assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Fowlet, Winfred T., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Fowlet, Winfred T., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Fowlet, Hunfred T., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Fednak, Engene A., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Meinke, Hughen) Manufacturing Company, The. (See Meinke, Hughen) Manufacturing Company, (See Williams, John D., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Williams, John D., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, (See Williams, John D., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, (See Williams, John D., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, (See Williams, John D., assignor.)

Stromberg Motor Devices Co. (See Chandler, Milton E.,

Stromberg Electric Company. (See Ostler, Ernest S., assignor.)
Stromberg Motor Devices Co. (See Chandler, Milton E., assignor.)
Stromberg Motor Devices Company. (See Gustafson, Stromberg Motor Devices Company. (See Holt, Frank, assignor.)
Stromberg Motor Devices Company. (See Holt, Frank, assignor.)
Stromberg Motor Devices Company. (See Mock, F. C., Gustafson, and Chandler, assignors.)
Stromberg Motor Devices Company. (See Mock, F. C., Gustafson, and Chandler, assignors.)
Stromberg Motor Devices Company. (See Stein, Louis Stromberg Motor Devices Company. (See Mock, Frank C., assignor).
Stromberg Motor Devices Company. (See Mock, Frank C., assignor).
Stromberg Research Corporation. (See Mock, Frank C., assignor).
Stromp Athur L., assignor to L. A. Molten, Hoboken, N. J. Fuel saver. 1.642.831; Sept. 20.
Refrigerating Company, Inc., Queens County, N. Y. Refrigerating Company, Inc., Queens County, N. Y. Refrigerating apparatus. 1.646.712; Oct. 5.
Strong, Arthur P., Chicago, Ill. Grate link. 1.648.514; Strong, Arthur P., Chicago, Ill. Grate link. 1.648.514; Strong, Gueene H., Pearsall, Tex. Electric target practice apparatus for fireamrs. 1.645.831; Oct. 4.
Strong, James B. (See Hoffman, P., and Strong.)
Strong, John E., Grand Rapids, Mich. Combined table and seat structure. 1.644.939; Oct. 25.
Strong, Milted, S. (See Strong, Robert L., assignor.)
Strong, John E., Grand Rapids, Mich. Combined table and seat structure. 1.644.939; Oct. 25.
Strong, Sumed M., Garden City, N. Y. Respiration and pulse recorder. 1.619.005; Mar. 1.
Strongs, Sumed M., Garden City, N. Y. Respiration and pulse recorder. 1.619.005; Mar. 1.
Strongs, One-man L., New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1.644.310; Oct. 4.
Strong, Gueener, P. A. Flauser, and J. Hummer, Pet. Strong, Milton, Company, A. Respiration, and pulse recorder. 1.619.005; Mar. 1.
Strong, Son, Herman L., New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1.644.310; Oct. 4.
Strong, Ont. Reman L.,

Charles M., assignor of one-half to L. H. es, Minneapolis, Minn. Oll burner. 1,652,803; Stroud, David H., Jenkintown, Pa. Rug. Dec. 6. Des. 74,032;

Stroud, David H., Jenkintown, Pa. Rug. Des. 74,033; Dec. Stroud. David H., Jenkintown, Pa. Rug. Des. 74,034;

Dec. Stroud, David H., Jenkintown, Pa. Rug. Dcs. 74,035; David H., Jenkintown, Pa. Rug. Des. 74,036;

Stroud, David H., Jenkintown, Pa. Rug. Des. 74,036; Dec. 6.

Stroud, Paul G., Belmont, and Walter A. Simond, Franklin, assignors to Aeme Knitting Machine & Needle Company, Franklin, N. H. Knitting machine. 1,624,373;

Stroup, Everett P., and W. A. Cook, assignors to Marion
Machine, Foundry & Supply Company, Marion, Ind.
Soot blower. 1,649,001; Nov. 16.

Strouse, Albert F., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Delivering Coul. to hopers of continuous fuel-feed stokers.

Strouse, Charles H., Indianapolis, Ind. Interior fortress.
1,634,508; July 5.

Strout, Robert W., Brooklyn, assignor, by mesne assignments, to E. W. Bliss Company, New York, N. Y. CanStruble, Clarence H., and S. W. Hall, Chleago, Ill.

Brush. 1,631,560; June 7.

Struble, James F., Hutchinson, Kans. Antifreezing device. 1,626,763; May 3.

Struble, Lew Ong, and G. L., Chleago, Ill., assignors to
Toledo Scale Company, Toledo, Ohlo. Indicator actuating and controlling device for scales. 1,636,257;
July 10.

Struble, Charles G. and G. L., Chleago, Ill., assignors to
Toledo Scale Company, Toledo, Ohlo. Indicator actuating and controlling device for scales. 1,636,257;
July 10.

Struble, Charles G. and G. L., Chleago, Ill., assignors to
Toledo Scale Company, Toledo, Ohlo. Indicator actuating and controlling device for scales. 1,636,257;
July 10.

Strube, Otto, Dwight, Ill. Refrigerator. 1,617,552;

assignor:
Struie, Otto, Dwight, Ill. Refrigerator. 1,617,552;
Feb. 15.
Strughold, Peter, St. Louis, Mo. Thermostatic safety switch or cut-out. 1,640,300; Aug. 23.
Strum, Max, Jr., Kepport, N. J. Leveling attachment for cameras. 1,618,237; Feb. 22.
Strunack, Michael, Fortstown, F. Tool retainer for Strunack, Michael, Fortstown, F. Tool retainer for Strunack, Carl F., Hemersonville, N. C. Display stand. 1,638,767; May 31.
Strupe, Cecil H., assignor to Leedy Manufacturing Company, Indianapolis, Ind. Snare drum. 1,638,106; Aug. 9.
Strupe, Cecil H., assignor to Leedy Manufacturing Com-

Aug. 9.
Strupe, Cecil H., assignor to Leedy Manutacturing Company, Indianapolis, Ind. Baujo. 1,633,593; Dec. 28.
Strupp, Herbert A., Evansville, Ind. Connecting-rod attachment. 1,625,965; Apr. 26.
Struthers Manutacturing Co. (See Struthers, William G.,

Strubers 1.623.665, Apr. 26.

Strubers 1.623.665, Apr. 26.

Strubers Manufacturing Co. (See Struthers, William G., assignor.)

Strubers, William G., Oakland, Calif., assignor to Struthers, William G., Oakland, Calif. Clamp. 1,621.691, Mar. 22.

Stryke, Mark H., Brooklyn, N. Y. Garment. 1,632.424; June 14.

Strubers, T. 1,632.424; June 14.

Strubers, Mark H., Brooklyn, N. Y. Bedstead end frame. Des. 72.733; May. 24.

Start, Charles A., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Bedstead end frame. Des. 72.734; May 24.

Strubert, Charles A., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Bedstead end frame. Strubert, Markey Markey, Markey Markey, Markey Markey, Mark

Council Bluffs, Iowa. Toy vehicle.

Neuhann Hanwate F., Feb. 8, Stuart, Frank T., Maplewood, N. J., assignor to The R. Neumann Hardware Co. Bag frame. 1,617,553; F-b. 15.
Stuart Frank T., Maplewood, N. J., assignor to The R. Neumann Hardware Co. Bag lock. 1,620,171; Mar. 8. 1,617,553;

Stuart. Frank T., Maplewood, N. J., assignor to The R. Nouman Introduce Co. Hinge for bag frames. R. Nouman Introduce Co. Hinge for bag frames. Stuart. Harve R., assignor to The Bauer-Stuart Company, Springfield, Ohio. Shock absorber. 1,615,654; Feb. 1. Stuart. Harve R., assignor to The Bauer-Stuart Company, Springfield, Ohio. Shock absorber. 1,615,855; Feb. 1. Stuart, Harve R., assignor to The Bauer-Stuart Company, Springfield, Ohio. Shock absorber. 1,615,855; Feb. 1. Stuart, Harve R., assignor to The Bauer-Stuart Company, Stuart, Harry P., Seattle, Wash. Amplifying and detecting tube. 1,644,796; Oct. 11. Stuart, Hoseph, assignor to Lobdell Car Wheel Company, Wilnington, Del. Calipers. 1,635,908; July 12. Stuart, Stuart, Edgenth E., Magnar Falls, assignor Electrolytic method and apparatus. 1,630,224; May 24. Stuart, Lillian, New York, N. Y. Protector. 1,620,743; Mar. 15. Stuart, Robert J., deceased, Poughkeepsie, N. Y.; E. B. Stuart and T. H. Stuart, executors. Table. 1,624,770; Stuart, Wallace A., Cleveland, Ohio, assignor of one-halt to B. L. Jarrett, Sewickley, Pa. Blast furnace. Re16,641, Aug. 3. Stuart, Robert Stuart, Robe

Stubbs, Joseph I. Limited. (See Stubbs, Joseph H., assignor.)
Stubbs, Joseph H., assignor to Joseph Stubbs Limited, Ancoats, Manchester, England. Reel or swift for use the winding of textile yarns. 1.649.771; Nov. 15.
Stubbs, Marie M., executiv. (See Stubbs, Robert C.)
Stubbs, Moster C., Dallas, Tex. Vibrating machine. Stubbs, Robert C. Dallas, Tex. Whenting for making compressed concrete. 1.638,667; Aug. 9.
Stubbs, Robert C., Dallas, Tex. Measuring device for street and road paving and the like Text Messuring device for street and road paving and the like Text Messuring concrete and other plastics. 1.650.74; Nov. 22.
Stubbs, Robert C., Deceased Dallas, Tex.; M. M. Stubs, executrix. Machine for compacting and solidifying concrete and other plastics. 1.650.761; Nov. 29.
Stubbs, Robert C., deceased, Dallas, Tex.; M. M. Stubs, executrix. Self-adjusting and self-advancing roller for finishing concrete and the like. 1.650.746; Nov. 29.
fastoner. 1.636.6392; July 19.
Stubens, Adolpi, assignor to Eastman Kedak Company Rochester. N. Y. Self-threading winding means. Stuber, John Alma Wis. Her's nest. 1.613.207; Jan. 4.
Stuber & Kuck Co. (See Koll. Louis, assignor.)
Stuber & Kuck Co. (See Koll. Louis, assignor.)
Studenker Comparation, The. (See Eauren, Joseph Joseph

Studebaker Corporation, The. (See Bourgon, Joseph H., Corporation, The. (See Brenner, Frank A.,

studebaker Corporation, The. (See Davenport, George R., assignor.)
Studebaker Corporation, The. (See Fuller, Gla R., assignor.)

Studebaker Corporation, The. (See Henry, Guy P., as-

signor.) Studebaker Corporation, The. (See Herrmann, Karl L., assignor.)
Studebaker Corporation, The. (See Hoffer, J. G., Sullivan,

and Bourgon, assignors.)
Studebaker Corporation, The. (See Link, Vincent, as-

Studebaker Corporation, The. (See Longgood, Eugene A., assignor.) Studebaker Corporation, The. (See McIntyre, Elmer L.,

assignor.) Studebaker Corporation, The. (See Mose, Carl C., as-

Studebaker Corporation. The. (See Paton, Clyde R., as-

Studebaker Corporation, The. (See Pierce, Hodgson S., as-

Studebaker Corporation. The. (See Smith, Sydney, as-

Studebaker Corporation, The. (See Sprung, Edwin G.,

Studebaker Corporation, The. (See Wagner, Edward F., assignor.)
Studebaker Corporation, The. (See Williams, Clarence Studebaker Cor H., assignor.)

Studebaker Corporation, The. (See Wise, Karl M., as-

signor.)

Studebaker, John W., Des Moines, Iowa. Educational device. 1,617,657; Feb. 15.

Studevaker, John W., Des Moines, Iowa. Educational device. 1,617,657; Feb. 15.

Studevant, L. M. (See Waterworth, Robert J., assignor.)

Studiengesellschaft für Wittschaft u. Industrie m. b. H.

(See Waterle, Ferdinand, assignor.) Latch. 1,658,319;

Dec. 20. Latch. R. Kath Grange. N. J., assignor to The

State Weckers, Ferdmand, assignor.)

State in the first washington, D. C. Latch. 1,653,319; Den. Den. State in the first washington, D. C. Latch. 1,653,319; Den. Den. State in the first washington, D. C. Latch. 1,653,319; Den. State in the first washington, D. C. Latch. 1,653,319; Studener, Gustav. (See Masonick J., and Stuebner.)

Studener, John. (See Menoissen J., Market, John. (See J.)

Studener, John. (See J., and Stuebner.)

Studener, John. (See J., and Stuebner.)

Studener, John. (See Holmberg, C. G., jr., and Stull.)

Stull, Ray T., Columbus, Ohio, assignor to Stull Process Company, Seannah, Ga. Whirlpool classifier and classifying process. 1,629,182; May 17.

Stulls, Delos B., Decatur, Ill. The plate and rail fastening. 1,635,124; Jan. 4. Warring, R. T., and Stult.)

Stump, Daniel M., assignor to The Albert Dickinson Company, Seannah, Ga. Whirlpool classifier and classifying process. 1,629,182; May 17.

Stulls, Delos B., Decatur, Ill. The plate and rail fastening. 1,635,124; Jan. 4. Warring, R. T., and Stult.)

Stump, Daniel M., assignor to The Albert Dickinson Company, Seannah, Ger Grounder Containers.

Stump, Daniel M., assignor to The Albert Dickinson Com-pany, Chicago, Ill. Closure for culture containers. 1,641,400; Sept. 6.

Stump, Daniel M., assignor to The Albert Dickinson Company, Chiego, Ill. Closure for culture containers. 1,641,400; Sept. 6.
Stump, Earl R. (See Stump, Oscar C. and E. R.)
Stump, Horace E. (See Luomis, C. C., and Stump.)
Stump, Horace E. (See Luomis, C. C., and Stump.)
Stump, Horace E. (See Luomis, C. C., and Stump.)
Stump, Horace E. (See Luomis, C. C., and Stump.)
Stump, Horace E. (See Luomis, C. C., and Stump.)
Stumpen, John C. R., Seattle, Wash. Collisionsignal switch. 1,625,505; Anr. 19.
Stumpen, Johann, Berlin, Germany, Delivering preheated
feed water. 1,616,259; Feb. 1.
Stumpf, Johann, Berlin, Germany, Valve gear for steam
engines, 1,625,632; Apr. 1.5.
Stumpf, Johann, Berlin, Germany. Connecting rod.
1,644,736; Oct. 11.
Stumpf, Johann, Germany, Pocket stand.

1,944,750; Oct. 11.

Stumpf. Otto. Mannheim, Germany. Pocket stand. 1,632,717; June 14.

Stumpf. Walter. Baltimore, assignor to The Black & Decker Manufacturing Company, Towson, Md. Electric tool. 1,633,389; June 21.

Stuntz, John E., Central Estrella, Cuba, assignor to The Hooven, Owens, Rentschler Company, Hamilton, Ohio. Sugar-mill machinery. 1,640,059; Aug. 23.

Sturbelle, Locien C., Brussels, Belgium. Mechanical converter. 1,613,543; Jun. 4.

Sturdy's, J. F., Sons Co. (See Eklund, George, assignor.)

Sturdy's, J. F., Sons Co. (See Nelson, Nels T., assignor.)

signor.)
Sturgeon, Harold M., assignor of one-half to L. W. Hottel,
Erie, Pa. Molding press apparatus. 1,623,022;
Mar. 29.
Sturgeon, Robert A., Brighouse, England. Centriques
separating apparatus. 1,648,790: Nov. 8.
Sturges, Charles E. (See Fiorcy, Edward C., assignor.)
Sturgis, Herbert M., Kansas City, Mo. Mop. 1,633,830;

Sturgis, Herbert M., Kansas City, Mo., assignor to Sturgis Mop Company, Mop. 1.637,595; Aug. 2. Sturgis Mop Company, (See Sturgis, Herbert M., as-

Sturk is Mop Company. (See Sturgis, Herbert M., as-signor.) Sturk, Evald E., Altadena, Calif. Holder for tubes of tooth paste, shaving cream, and the like. 1,637,883; Aug. 2.

nany, Chicago, Ill. Pitman connection. 1,646,464; Oct. 25. Sturt, Alfred T., Flint. Mich., assignor to Durant Motors Incorporated. Motor-vehicle frame. 1,629,320; May 17.

Sturt, Alfred T., Flint, Mich., and W. F. Pfander, Yonkers, N. Y., assignors to Durant Motors Incor-porated. Motor-vehicle frame. 1,629,234; May 17.

Sturt, Alfred T., Flint, Mich., and W. F. P. Yonkers, N. Y., assignors to Durant Motors porated, Muffler and motor-vehicle frame. 1,6 May 17.

Sturtevant, B. F., Company. (See Allen, George W., as-

Stortevant, B. F., Company. (See Allen, George W., assignor.)
Sturtevant Mill Company. (See Sturtevant, Thomas J., assignor.)
Sturtevant, Thomas J., Wellesley, assignor to Sturtevant Mill Company, Boston, Mass. Air separator.
1.611,538; Jan. 23.
1.611,538; Jan. 25.
1.611,638; Jan. 25.
1.611,638; Jan. 25.
1.611,638; Jan. 26.
1.631,638; Jan. 26.
1.631,639; Jan. 26.

assignor.) Signal Company. (See Fay, Richard D., assignor.) Submarine Signal Company. (See Hayes, H. C., and Mason, assignors.)

Sullins, Harold L., assignor of one-fourth to W. D. Gray, Taft, Calif. Quick-connecting sucker rod. 1,622,064;

Taft, C Mar. 22 Mar. 22.
Sullins, Harold L., and J. E. Mustain, Taft, Calif.;
said Mustain assignor of one-fourth to said Sullins
and one-fourth to W. D. Gray, Sucker rod and lock.
1.626.307; Apr. 26.
Sullivan, Albert V. (See Heinbockel, J. F., and Sulli-

van.)
Sullivan, Albert V., Alameda, assignor to California Packing Corporation, San Francisco, Calif. Combination peach pitter. 1.629,131: May Colorado Springs, Colo. Steam, air, and signal line connection. 1.643,229: Sept. 20. Sullivan, Elizabeth. (See Suvan, Betty, assignor.) Sullivan, Elizabeth J.. Minneapolis, Minn. Flour improver. 1.630,143; May 24. Sullivan, Eagenc J. (See Whitchead, A. G., and Sullivan,

Sullivan, Francis W., Los Angeles, Calif. Valve action for organs and the like. 1.623,367; Apr. 5. Sullivan, Frank A., Bethlehem, Pa. Game board. 1,637,922; Aug. 2.

Sullivan, Freda D., New York, N. Y. Heating device, 1,624,030; Apr. 12, Sullivan, Frederick B., Oakland, Calif. Fly swatter, 1,650,548; Nov. 22. Stellivan, George M. (See Johnston, W. D., and Sullivan, George M. Sullivan, George M. (See Johnston, W. D., and Sullivan.)
Sullivan, James M., assignor to Safety Hone Company,
Chicago, III. Razor-blade sharpener, 1,653,484;
Dec. 20.
Sullivan, John J., Bridgeport, Conn. Hedge trimmer.
1,627,258; May 3.
Sullivan, John L., Berkeley, Calif. Furring and fastening
device. 1,649,625; Nov. 15.
Sullivan, Soseph H., Fortage Wis. Incandescent-electricSullivan, Josephine W., New York, N. Y. Folding back
rest. 1,625,106; Apr. 19.
Sullivan Machinery Company. (See Blom, Hjalmar T.,
assignor.) assignor.) Sullivan Machinery Company. (See Cartlidge, Frank, Sullivan Machinery Company. (See Clarp, Lewis J., assignor.)
Sullivan Machinery Company. (See Clapp, Lewis J., assignor.)
Sullivan Machinery Company. (See Cundy, Oscar R., assignor.)
Sullivan Machinery Company. (See Dee, Thomas L., assignor.) Sullivan Machinery Company. (See Ferguson, Alexander Sullivan Machinery Company.

D. assignor.)
Sullivan Machinery Company.
(See Gartin, Elmer G., assignor.)
Sullivan Machinery Company.
(See Halleck, Frank A., Sullivan Machinery Company. (See Halleck, Frank A., assignor, Sullivan Machinery Company. (See Holdsworth, Fred D., assignor, Sullivan Machinery Company. (See Holdsworth, Fred D., assignor). assignor assignor.)
Sullivan Machinery Company. (See Johansen, Harry C., assignor.)
Sullivan Machinery Company. (See Lee, Frank M., as-Signor.)
Sullivan Machinery Company. (See Lobbey, Fred T., assignor.)
Sullivan Machinery Company. (See London, Jacob M., assignor.) Sullivan M assignor.) Machinery Company. (See Madsen, Norman, Sullivan Machinery Company. (See Maxson, Louis A., assignor.)
Sullivan Machinery Company. (See Mercer, Henry H., assignor.)
Sullivan Machinery Company. (See Mitchell, Joseph S., assignor.) Sullivan Machinery Company. (See Nelson, Sven T., assignor.)
Sullivan Machinery Company. (See Officer, Charles B., assignor.)
Sullivan Machinery Company.
signor.)
Sullivan Machinery Company. (See Oliphant, John, as-(See Osgood, Charles F., assignor.)
Sullivan Machinery Company. (See Osgood, Robert C., assignor.)
Sullivan Machinery Company. (See Richey, George H., assignor.) Sullivan Machinery Company. (See Rundqvist, Thore R. E., assignor.)
Sullivan Machinery Company. (See Simmons, Leon E., assignor.)
Sullivan Machinery Company. (See Smith, Charles C., assignor.)
Sullivan Machinery Company. (See Smith, Charles C.,
assignor.) signor. Sullivan Machinery Company. (See Whinnen, Eugene, assignor assignor.)
Sullivan Machinery Company. (See Wilcox, Raiph, assignor.)
Sullivan Machinery Company. (See Wineman, Wade H., assignor.)
Sullivan Machinery Company. (See Wyman, Charles W., assignor.) Sullivan, Maurice, Brooklyn, N. Y. Valve shield. 1.631.438; June 7. Sullivan, Patrick. (See Wendel, Frans B., assignor.) Sullivan, Perry W. (See Hoffer, J. G., Sullivan, and Sullivan, Perry W. Lees Bourgon, Bourgon, Bourgon, Sullivan, William B., Detroit, Mich., assignor to Chrobattle Tool Company. Carburizing box. 1,643,756; Sept. 27.
Sulborger, Nathan, New York, N. Y. Apparatus and an appropriate of the Company of Sulzhegger, Nathan, New York, N. Y. Process and appara-tus for binding, 1,636,970, 1419, 500, Sulzer, Albert E., assignor to Eastman Kodak Company, Rochester, N. Y. Lessening cutting tendencies of pho-tographic films, 1,644,401; Sept. 6. Sulzer Frieres Société Anonyme. (See Wirth, Elias, as-

signor.) Sulzer Frères Société Anonyme. (See Zbinden, Eugen. assignor.) Suman, John R. (See Lewis, W. W., and Suman.)

Sumbling, William H., Toronto, Ontario, Canada. Ironing machine. 1,634,523; July 5.

Summer, Frank S. (See Summer, Samuel, assignor). Summer, Samuel, Alsany, assignor of one-half to F. S. Summer, Samuel, Alsany, assignor of one-half to F. S. Summer, New York, N. Y. Internal-combustion engine. Summers, Bertrand S., Port Huron, Mich. assignor to The Locomotive Terminal Improvement Co., Chicago, Ill. Flating metal. 1,619,385; Mar. Sept. 27.

Summers, Bertrand S., Port Huron, Mich. assignor to The Locomotive Terminal Improvement Co., Chicago, Ill. Flating metal. 1,619,385; Mar. Summers, Caleb E., assignor to General Motors Research July 12.

Summers, Caleb E., assignor to General Motors Research July 12.

Summers, Daniel A. (See Walker Harvey A., assignor, 1019, 12.

Summers, Prank E., near Memphis, Mo., assignor to The Magnovox Company, San Francisco, Calif. Electrostatic detector and amplifier. 1,619,316; Mar. I.

Summers, Louis C., Shady Point, Okla. Cultivator hopple. 1,644,757; Oct. 11.

Summers, Louis C., Shady Point, Okla. Cultivator hopple. 1,644,757; Oct. 11.

Summers, Louis C., Shady Point, Okla. Cultivator hopple. 1,644,757; Oct. 11.

Summers, Louis C., Springfield, assignor to Leader Iron Works, Decautr, Ill. Boiler. 1,636,391; July 19.

Summers, David L., assignor to Franz and Summers, 1,442,794; Sept. 20.

Summers, David L., assignor to Scovill Manufacturing Company, Waterbury, Com. Furnace lining. 1,643,425; Summit Thread Company. (See Ham, Robert L., assignor.)

Summer, Arthur D., (See Wilson, R. Q., and Summer.) signor.)
Summer, Arthur D. (See Wilson, R. O., and Sumner.)
Summer, Ernest, New York, N. Y. Train-lighting apparatus. 1,645,207; Oct. 11.
Summer Iron Works. (See Dorman, George W., asratis. 1,945,207; Oct. 11.
Summer Iron Works. (See Dorman, George W., assignor.)
Sumner Iron Works. (See Lutth, Paul F., assignor.)
Sumner Iron Works. (See Lutth, Paul F., assignor.)
Sumner, John B., Fort William, Ontario, Cannda. Bottlecap remover. 1,640,382; Aug. 30.
Sumpier, John E. Minneapolis, Minn. Disconnect alrbreak line switch. 1,652,689; Dec. 13.
Sumpter, Owen H., and J. G. Sheffer, Nov. 8.
Sumpter, Owen H., and J. G. Sheffer, Nov. 8.
Sund. Owen J., Taoma Kura, 1,645,664; Nov. 8.
Sund. Owen J., Taoma Kura, 1,645,664; Nov. 8.
Sunday, Irvin R., Reading Pa. Paper-cutting cabinet.
Sunday, Irvin R., Reading Pa. Paper-cutting cabinet.
Sunday, James J., Detroit, Mich., assignor, by mesne
assignments, to Kelch Ventilating Heater Company.
Heater for automobiles. 1,628,891; May 17.
Sundaya, Gideon, assignor to Hookless Fastener Company, Minneapolis, Minn. Rocking toy. Des. 72,874; Sundbeck, Adolph, assignor to The Photo Plating Company, Minneapolis, Minn. Rocking toy. Des. 72,874; June 14.
Sundbeck. Adolph, assignor to The Photo Plating Company, Minneapolis, Minn. Rocking toy. Des. 72,876; June 14.
Sundberg, Elizabeth L., administratrix. (See Sundberg, William) William,
Sundberg, Elizabeth L., trustee.

assignor,
Sundberg, William, deceased, by E. L. Sundberg, administratrix, assignor to E. L. Sundberg, trustee, Chinistratrix, assignor to E. L. Sundberg, trustee, Chinistratrix, assignor to E. L. Sundberg, administratrix, assignor to E. L. Sundberg, trustee, China and China May 3
Sundblad, Uno L., assignor of one-half to C. W. Wells, New Haven, Conn. Electrically-wound timepiece. 1,650,662; Nov. 29
Sundblorg, Axel, Sacramento, Calif. Combination step plate and lugsage carrier. 1,641,510; Sept. 6.
Sunde, Apsalon A., Ute, lowa. Antiskid device. 1,625,017; July 5.
Sunderland, Affred E. (See Niederhauser, F. C., and Sunderland, Alfred E. (See Niederhauser, F. C., and Sunderland, Charles C., assignor to John A. Roebling's Sons Company, Treuton, N. J. Rope-tension-testing de-vice. 1,619.093; Mar. 1.
Sunderland, Charles C., assignor to John A. Roebling's Sons Company, Trenton, N. J. Rope socket. 1,639,236; Aug. 16. Aug. 16.

May 16.

Sunderland, James C., and J. F. Costelow, Kansas City, Mo. Broiling apparatus. 1,631,655; June T. Sunderland, John P., Port Chester, N. Y., assignor to The Calorae Electric Corporation. Electric heating apparatus. 1,643,025; Oct. 11.

Sunderland, John P., Port Chester, N. Y., assignor to The Calorae Electric Corporation. Electric heating apparatus. 1,643,025; Oct. 13.

Sunderlin, Frank R., assignor to Central Advertising State of the Calorae Chemical Company of the Calorae Chemical Chemical Company of the Calorae Chemical Che

Sundstrand, Gustaf D., assignor, by mesne assignments, to Sundstrand Machine Tool Co., Rockford, Ill. Lathe. 1,639,765; Aug. 23.
Sundstrand Machine Tool Co. (See Sundstrand, Gustaf D., assignor.)
Sundstrand, Oscar J., Rockford, Ill., assignor, by mesne assignments, to Sundstrand Corporation, Wilmington, Del. Adding and listing machine. 1,620,889; May 5.
Del. Adding and listing machine. 1,620,889; May 5.
To The Solvay Process Company, Solvay, N. Y. Production of hydrated sodium of carbonate. 1,650,244; Nov. 22.

duction of hydrated sodium of carbonate. 1,000,221.
Nov. 22.
Sundstrom. Leonard E., Rockville, Nebr. Timer. 1,650,729; Nov. 29.
Sundat, Edward V., Chicago, Ill. Low-capacity fuse, 1,626,106; Apr. 26.
Sunfast Hats, Incorporated. (See Mansbendel, Fritz P., Sunland Sales Cooperative Association. (See Pitts, Edmund M., assignor.)
Sun-Maid Raisin Grovers of California. (See Forrest, Thomas W. w., assignor.)
Sun-Maid Raisin Grovers of California. (See Nichols, Paul F., assignor.)
Sun-Maid Raisin Grovers of Talifornia. (See Nichols, Paul F., assignor.)
Sun Oil Company. (See Clayden, Arthur L., assignor.)
Sun Oil Company. (See McKee, James, assignor.)
Sun Oil Company. (See Pew, A. E., jr., and Thomas, assignors.)

signora)
Sun Oll Company. (See Thomas, Henry, assignor.)
Sun-Ray Lighting Products Co. (See Jaret, Joseph T.,
assignor.)
Sun-Ray Lighting Products, Inc. (See Amdur, Noah W., assignor.)
Sun-Ray Lighting Products, Inc. (See Brieloff, Joseph,

assignor.) Sun Rise Lamp Mfg. Co. (See Cricchio, Paul, assignor.) Sun Rise Lamp Mfg. Co. Inc. (See Hecht, Leo, as-Sun Rise Lamp Mfg. Co. (See Zweig, Louis, assignor.) Sun Rubber Company, The. (See Lower, Melvin S.,

Sun kunder Company, assignor, assignor, Sun Shipbuliding & Dry Dock Company. (See Howitz, Alfred A., assignor.), Super Coal Process Company. (See Bowen, Richard,

Diesel Tractor Corporation. (See Scott, Philip L., assignor.)
Super Gas Corporation. (See Poignand, Francis N., as-

er-Rubber Lining Corporation. (See Leoni, Hugo, as-

signor.)
Super-Safety Switch Company. (See Luther, Martin P., assignor.) Superheater Company, The. (See Broido, Benjamin, as-

signor.)
Superheater Company, The. (See Broido, Benjamin N. assignor.)
Superheater Company, The. (See Griffin, Joseph F., as-

Superheater Company, The. (See Hard, Malcolm, as-

Superheater Company, The. (See Hardy, Charles R., as-Superheater Company, The. (See McKee, Neal T., as-

Superheater Company, The. (See Ryder, Gilbert E., as-

Superheater Company, The. (See Thom, R. A. and J.,

sugnor.)

Superhearr Company, The. (See Thom, R. A. and J.,
Superhearr Company, The. (See Snow, Robert R.,
assignor.)

Superior Foundry Company, The. (See Snow, Robert R.,
assignor.)

Superior Hard Rubber Company. (See Gurnee, I. Q., and
Smith, assignors.)

Superior Hard Company. (See Witteoff, Edward, assignor.)

Superior Type Company, The. (See Willard, Maurice
L., assignor.)

Superior Type Company, The. (See Willard, Maurice
L., assignor.)

Superior Valve Company, (See Wilson, C. A., Gocke, and
Supermarine Ariation

Works, Limited, The. (See
Mitchell, Reginald J., assignor.)

Superior Machinery Corporation. (See Flam, Stephen,
assignor.)

Superior S

T., assignor.)
Surdi, Tommase, Rome, Italy. Manufacture of artificial wood and product obtained by said process. 1,634,346; July 5.
Sure-Guard Corporation. (See Schauman, K. O., Yancey, and Mitsud, assignors.)
Suren, Nathan H., Needham, assignor, by mesne assignments, to The Gamewell Company. Newton, Mass. Signaling mechanism. 1,616,879; Feb. 8.
Surface Combustion Company. (See Manker, Forrest W.,

Surface Combustion Company. (See Manker, Forrest W., assignor). Surico, Carmine. assignor to Clermont Machine Co., Inc., New York, N. Y. Machine for making macaroni. 1,627,297; May 3.
Surlemont, Henri, Verviers, Belgium. Automatic inflater arranged on and actuated by internal-combustion engines. 1,621,179; Mar. 15.

Surles, Lawrence O., Atlanta, Ga. Spotlight, 1,638,716; Surprenent, Oscar, et al. (See St. Jacques, Emile J. M., assignor.) Surtees, Robert, Gateshead, England. Machine for emulsifying, mixing, or grinding materials. 1,614,409; Jan. 11.

Jan. 11.
Sudoif, Henry M., Rantoul, Ill. Valve tool. 1,647,204;
Nov. 1.
Susman, John G., Indianapolis, Ind. Art-glass joint,
1,620,300; Mar. 8.
Susong, Jacob A., Newport, Tenn. Hot-water heater,
1,641,997; Sept. 18.
Susquehanna Silk Mills. (See Bunting, James H., as-

Susquehanna Silk Mills. (See Rothschild, Max, assignor.) Sussin, Victor, assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Car heater. 1,623,215;

Sussin, Victor, assignor to Stewart-Warner Speedometer Apr. Settlon, Chicago, Ill. Car heater. 1,623,215; Apr. Settlon, Chicago, Ill. Car heater. 1,623,215; Apr. Settlon, Chicago, Ill. Car heater. 1,623,215; Apr. Settlong, Arthur G. (See Frank, J. M., and Sutcliffe, Sutcliffe, Edgar R., Leigh, England. Froducing activated carbonaceous substances and the product of the method. 1,629,237; May 17.

Sutcliffe, Edgar R., Leigh, England. Fleetric heater for waving or curling the hair. 1,613,208; Jan. 4.

Suter, Eugène F., London, England. Electric heater for waving or curling the hair. 1,617,138; Feb. 8.

Sutherland, Andrew E., Madrid, Jowa. Plow hitch. 1,623,642; Apr. 5.

Sutherland, Balabridge P., Del Norte, Colo. Potato feeder. Sutherland, Boyd C., North Garden, Va. Fruit cleaning and polishing machine. 1,630,993; May 31.

Sutherland, Daniel W., fr., Stoux, Falls, S. Dak. Butterland, Donald W., fr., Stoux, Falls, S. Dak. Butterland, Donald W., fr., Stoux, Falls, S. Dak. Butterland, Donald W., fr., Stoux, Falls, S. Dak. Butterland, Ernest E., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Terminal for electric heating units. 1,615,661; Jan. 25.

Sutherland, Ernest E., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Terminal support. 1,645,261; Oct. 11.

Sutherland, Ernest E., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Resistoringhouse Electric & Manufacturing Company. Resistor

Sutherland, Holton M. (See Sumerian, v. ...)

H. M.)

Sutherland, John G., Oakwood, Obio. Combination the carrier and signaling means. 1,645,830; Oct. 18.

Sutherland, John H., H. J., and H. M., Swampscott. Mass. Template holder for pattern-grading machines. 1,633,295; June 21.

Sutherland, William F., Toronto, Ontario, Canada. Electrical measuring instrument. 1,646,634; Oct. 25.

Sutherland, William F., Toronto, Ontario, Canada. Electrical measuring instrument. 1,651,482; Dec. 6.

Sutherland, William F., Toronto, Ontario, Canada. Electrical measuring instrument. 1,651,482; Dec. 6.

Sutherland, Milliam F., William F., 1,651,106; Nov. 29.

Nov. 29.
Sutter, Louis, Brooklyn, N. Y. Roller bearing for silding doors. 1,619,443; Mar. 1.
Suthhen, Robert M., Newark, N. J., assignor to J. F. Boorsem, Greenwich, Conn. Mural decoration. 1,627,21; May G. A. Pettit, New Orleans, La. Lubricating device. 1,640,012; Ang. 28.
Sutter, Charles. Suresnes, assignor to Societe Anonyme des Anciens Etablissements Hotchkiss & Cle., St. Denis, France. Feed strip for firearms. 1,620,408; Mar. 8.
Sutter, Ernest, assignor to Alpina Kåse A.-G., Burgdorf, Bern, Switzerland. Packing and preserving food produced to the processing strip of the

Surge Johert, St. Imier, Switzerland. Device for re-triling and measuring liquors. 1,612,809,1an, 4. Suttis, Alfred E., Dauvers, and D. Edgar, Lynn, Mass, assignors to The Turner Tanning Machinery Company, Portland, Me. Splitting machine. 1,644,961; Oct. 11. Sutton-Abramen, Engineering Company. (See Wise,

FORTIBILITY, MESS AND THE PROPERTY OF THE PROP

Sutton Shops, Inc. (See Sutton, William V., assignor.) Sutton, William H., assignor to J. & P. Coats, Limited, Paisley, Scotland. Cop or cone holder or stand for use in the unwinding of yarns and threads. 1,653.520; Dec. 20.

Sutton, William S., Rockford, Ill. Rheostat. 1,634,050; June 28.
Sutton, William S., Rockford, assignor to American Radiator Company, Chicago, Ill. Valve. 1,630,362; Sutton, William V., assignor to Sutton Shops, Inc., Rockford, Ill. Cap. 1,651,562; Dec. 6.
Suvan, Betty, Chicago, Ill., assignor to Elizabeth Sullivan, Detroit, Mich. Stationery holder. 1,623,004; Apr. 5.
1,539,900; Aug. 23.
Suzuki, Chujiro, Tokyo, Japan. Cera-lewelling machine. 1,647,483; Nov. 1.
Suzuki, Masuichi, Los Angeles, Calif. Lock. 1,621,036; Mar. 15.
Suzuki, Chujiro, Tokyo, Japan. Cera-expansion machine. 1,647,483; Nov. 1.
Suzuki, Masuichi, Los Angeles, Calif. Lock. 1,621,036; Mar. 15.
Suzuki, Chujiro, Tokyo, Japan. Cera-expansion machine. 1,647,483; Nov. 1.
Suzuki, Masuichi, Los Angeles, Calif. Lock. 1,621,036; Mar. 15.
Suzuki, Masuichi, Los Angeles, Calif. Lock. 1,621,036; Mar. 15.
Suzuki, Mayiri, M

Svenska Aktiebolager Loss. (See Rodhe, Olof, assignor.)
Svenska Aktiebolager Mono. (See Rodhe, Olof, assignor.)
Svenska Aktiebolager Mono. (See Rodhe, Olof, assignor.)
Svenson, Svenso

Au Lac, Wis. Paperdu Lac, Wis. Paperdu Lac, Wis. Sweden. Bogic for railway cars
Swess. Carl A., Falun, Sweden. Bogic for railway cars
on the like. 1,640.626; Aug. 30.
Svensson, Carl A., and T. Collin, Falun, Sweden. Bogic
for railway cars and the like. 1,635.694; July 12.
Svensson, Carl A., and T. Collin, Falun, Sweden. Bogic
for railway cars and the like. 1,635.695; July 12.
Svensson, Gustaf. (See Svensson, Oskar and G.)
Svensson, Karl J., Lidingo Villastad, and K. A. P. Norling.
Sodertorns Villastad, Sweden. Apparatus for lifting
out and cleaning centrifugal drums. 1,635,233;
out and cleaning

July 3.0 Section of Computational Conference of Computation Conference of Computation Comp

N. Y. Automatic fastener affixing machine. 1,615,195; Jan. 18.

Swab, Jay G., Baldwin, assignor to Tension Envelope Co. Inc., New York, N. Y. Making envelopes. 1,018,787; Feb. 22.

Swab, Jay G., Baldwin, assignor to Tension Envelope Co. Inc., Brooklyn, N. Y. Fastener for envelopes and the like. 1,619,382; Mart. Harleston, W. Va. Meter lock Cock. 1,615,181; Jan. 18.

Swain, Britton W. (See Delfeld, G. J., and Swain.) Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Resilient wheel. 1,630,226; May 24.

Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Manufacturing wire wheels. 1,630,226; May 24.

Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Wheel and demountable rim. 1,643,188; Sept. 20.

Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Wheel and demountable clim. 1,643,188; Sept. 20.

Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Wheel and demountable sim. 1,643,188; Sept. 20.

Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Wheel and demountable sim. 1,632,465; June 14.

Swan, Charles, Long Beach, Calif. Forming paving compositions. 1,632,465; June 14.

Swan, Charles, Long Beach, Calif. Forming paving compositions. 1,632,465; June 14.

Swan, Charles, Long Beach, Calif. Forming paving compositions. 1,632,465; June 14.

Swan, Charles, Long Beach, Calif. Forming paving compositions. 1,632,465; June 14.

Swan, Charles, Long Beach, Calif. Swan, Fred, Wichita, Kans. Underreamer bit or cut-

Mar. 15.

Swan, Fred, Wichita, Kans. Underreamer bit or cutter: 1,620,700; Mar. 15.

Swan, Harold A., Coronado, Calif. Portable belt sander.
1,631,898; June 7.

Swan, Harry B., and J. L. Crawford, Detroit, Mich. Poppet valve for air-Joited moiding machines, 1,643,427; Sept. 27.

Swan, John P., Plymouth, Fla. Sprinkler system.
1,651,563; Dec. 6.

Swan, John W., Stamford, Conn. Carburetor. 1,630,723;

Swan, John W., Stamford, Conn. Manifold. 1,636,721;
July 26.

Swan Metallic Scal & Can Company. (See Tryander.

July 26, Martille Scal & Cap Company. (See Tevander, Swan Merialle Scal & Cap Company. (See Tevander, Swanberg, Floyd L. (See Scoville, Eugene M., assignor, Swanberg, Julius, Chicago, Ill., assignor, by mesne assignments. to R. Chelton, Chicago, Ill. Pencil, 1,629,766; May 24.

Swanfeldt, Andrew, Los Angeles, Calif. Ornamental awning fabric and making the same. 1,625,690; awning Apr. 19.

awning fabric and making the same. 1,625,680; Apr. 19.
Swangren, Edwin V., Maywood, assignor to A. J. Deniston, fr., Chicago, Ill. Soft-metal washer for nails.
Swann, Herbert. (See Baddiley, J., Shepherdson, Swann, Herbert. (See Baddiley, J., Shepherdson, Swann, Herbert. (See Baddiley, J., Shepherdson, Swann, James S., assignor to Union Metal Products Company, Chicago, Ill. Hopper door for railway cars.
1,638,603; Aug. 8.
Closet reenforcing flange. 1,648,665; Nov. 8.
Swanson, August, New Lexington, Ohio. Vehicle signal-light casing. Des. 73,150; July 26.
Swanson, Bernhard M., Los Angeles, Calif. Instrument for gauging internal tapers. 1,637,757; Aug. 2.
Swanson, Garl A. S., assignor to C. A. S. Swanson, as trustee, Malden, Mass. Conserving header plugs. 1,621,648; Mar. 22.
Swanson, Carl A. S., assignor to C. A. S. Swanson, Carl O., Moline, Ill. Clothesline reel. 1,648,628; Nov. 8.
1,624,648; Mar. 22.
Swanson, Halmar, assignor to Cummins Perforator Company, Chicago, Ill. (heck-indorser machine. 1,617,874; Feb. 15.

Swanson, Hjalmar, assignor to Cummins Perforator pany, Chicago, Ill. Inking mechanism. 1,61 any,

Seet. 16. Hjalmar, assignor to Cummins Perforator Com-wanson Chicago, Ill. Adjustable type carrier. 1,617,876; Feb. 15. Swanson, Hjalmar, assignor to Cummins Perforator Com-pany, Chicago, Ill. Clutch mechanism. 1,617,877; Feb. 15.

pany, Chicago, Ill. Cuten meenanism, 1,61,611, Feb. 15.
Swanson, Hjalmar, assignor to Cummins Perforator Company, Chicago, Ill. Inking mechanism. 1,617,878;
Swanson, Hjalmar, assignor to Cummins Perforator Company, Chicago, Ill. Check-indorser-inking mechanism. 1,617,879; Feb. 15.
Swanson, John A., Waltham, Mass., and A. A. Pollak, Waterbury, Conn. Bandage-dispensing device. 1,626,257; Apr. 26.
Swanson, Patrick. (See Jackson, J. A., and Swanson.) Swanson, Peter, Ely, Minn. Gravity lock. 1,647,484; Swanson, Swan A., New York, N. Y. Electrical switch. 1,646,797; Oct. 25.
Swanstrom, Carl G., Buffalo, Minn. Valve mechanism. 1,618,687; Feb. 22.
Swanstrom, Charles J., Coronado Beach, Calif. Sawing device. 1,616,880; Feb. 8.
Swarens, Chester A., et al. (See Hobson, John H., assignor).

Sugnot Clarence A. (See Williams, T., and Swart, Sorge R., & Company. (See Albrecht, William, jr., assignor.)
Swart, George R., & Company. (See Belluche, Elmer W., assignor.)
Swart, George R., & Company. (See Ehlig, Harry, assignor.)

Swart, George R., & Company. (See Linig, Harry, assignor.)
Swarthout, Leon, Rochester, N. Y. Handy case for car
and bus conductors and others. 1,629,322, May 17.
Swarts of the Company of the Company of the Company
Swartwout, Denton K., Cleveland, Ohlo. Ventilating and
heating means for conveyances. 1,643,966; Oct. 4.
Swartwout, Everett W., White Plains, N. Y. Smoking
pipe. 1,632,100; June 14.
Swartwart, Everett W., White Plains, N. Y. Rogenerator
engine. 1,641,830; Sept. 6.
Swartz, Hug E., Detroit, Mich. Drill bushing. 1,617,554;
Swartz, Hugry H., Bell, Pa. Rock Grill. 1,614,216;
Jan. 11.
Swartz, Hugh, and P. C. Mulligan, assignors to Dual Oil
Burner. Inc. Seattle, Wash. Oil-burner system.
1,613,969; Jan. 11.
Swartz, Hugh, and P. C. Mulligan, assignors to Dual Oil
Burner Company. Steam generator. 1,630,546;
May 31.

Burder Casses May 31.
Swartz, Ira T. (See Baker, Arthur R., assignor.)
Swartz, Ira T., trustee. (See Swartz, Ira T., assignor.)
Swartz, Ira T., trustee. (See Weaver, Albert E., as-

signor.)
Swartz, Ira T., assignor, by mesne assignments, to
I. T. Swartz, trustee, Indianapolis, Ind. Carburctor.
I.619,894; Mar. S.,
Swartz, Nies P., Dalton, Pa. Brake. 1,623,817; Apr. 5.
Swartz, Orio E., assignor to The Ohio Match Company,
Wadsworth, Ohio. Transfer device for conveyers.
I.629,323; May 37;
Swartz-baugh Manufacturing device for match
machines. 1,638,876; July 28.
Swartz-baugh Manufacturing Company. (See Ziola,
Henry A., assignor.)
Swartz-lander, James W. (See Fernald, Charles F., assignor.)

Swasey, George T., Raymond, Wash. Penholder. 1,641,511; Sept. 6.

Swathmey, Joseph H. (See Haynes, William J., as-

Swathmey, Joseph H. (See Haynes, Whiliam J., Signor.)
Swayze, William W., Wilmington, Del. Pin-locking means.
1.644,618; Oct. 4.
Swearingen, Fred. Pueblo, Colo. Automatic gate.
1.624,813; Apr. 12.
Swedia, Edward J. (See Law, R., and Sweda.)
Swedenborg, John H., Ashtebula, Ohio. Structural eleSwedenborg, John H., Ashtebula, Ohio. Structural eleSwedenborg, John H., Whin Falls, Idaho. Shot cartridge.
1.613,143; Jan. 4.
Sweeney, Andrew J., Bayonne, N. J. Rotary pump.
1.636,259; July 19.
Sweeney and Boland. (See Fogarty, John G., assignor.)
Sweeney Holoise, Richmond, Va. Combined mattress
and bedpan. 1.631,656; July 19.
Sweeney, Morgan L., Los Angeles, Callit., assignor to
Union Tank & Pipe Co. Casing head. 1,629,749;
May 24.

May 24.

Sweeney, Orland R., Ames, Iowa. Elaborating corn stalks into pulp for use in paper making and the like. 1,639,152; Aug. 16.

Sweeney, Usases G., Mount Builion, Calif. Combined caliper and divider, 1,633,875; June 28.

Sweet, Alvin H., Loss Angeles, Calif. Brake-band lining. 1,615,490; Jan. 25.

Sweet, Athur, Salt Lake City, Utah. Confection pack. Sweet, Candy Company. (See Cassidy, Willis W., assignor.)

sweet, Cecil H. (See Erwin, W. C., and Sweet.) Sweet, Cecil H. (See Erwin, W. C., and Sweet.) Sweet, Donald H., Evanston, III. Lubricating system. 1,062,807; June 21. 1,062,807; June 21.

Sweet, Edna, Wilmetan, I. Sanuel B., assignor.)
Sweet, John A. (See Helbach, H. L., and Sweet.)
Sweet, John A. (See Helbach, H. L., and Sweet.)
Sweet, John A. (See Helbach, Mass. Heating drum.
Sweet, Marie A., Highland Park, III. Cane toy. 1,041,057;
Aug. 30.

Aug. 30. Sweet-Orr & Co. (See Sweet, Stanley A., assignor.) Sweet, Robert C., et al. (See Cooper, William D., as-

Sweet, Robert C., et al. (See Cooper, William D., assignor.)

Sweet, Roger J., Buffalo, N. Y. Internal-combustion engine. 1,649,554; Nov. 15.

Sweet, Staniey A., New York, assignor to Sweet-Orr &
Co. Inc., Wappingers Falls, N. Y. Bib pocket.

Co., Inc., Wappingers Falls, N. Y. Combined hammer
loop and pocket for garments. 1,649,932; Nov. 22.

Sweet, Staniey A., New York, assignor to Sweet-Orr &
Co., Inc., Wappingers Falls, N. Y. Combined hammer
loop and pocket for garments. 1,649,932; Nov. 22.

Sweet, Staniey A., New York, S. E., and Sweet
Arica. Rotary fluid-expansion or internal-combustion
engine. 1,647,758; Nov. 1.

Sweet, Willis M., Niles, Mich. Dirigible headlight
1.633-865; Aug. 23.

Sweetlang, Enris M., Montclair, N. Y. Umbrella attachSweetland, Ernest J., Montclair, N. J. Lubricating system of internal-combustion engines. 1,624,689;
Apr. 12.

Apr. 12.

Apr. 12.

Sweetland, Ernest J., Hazleton, Pa., and G. H. Greenhalgh, Newark, N. J., said Greenhalgh, assignor to said Sweetland. Renewable filter unit. 1,646,377; Oct. 18.

Sweetland. Ernest J., Hazleton, Pa., and G. H. Greenhalgh, North Arlington, N. J., said Greenhalgh assignor to said Sweetland. Renewable filter unit. 1,646,378; Oct. 18.

Sweetland, Lewis, Corunna, Mich. Attachment to leaf spring for lubricating same. 1,648,702; Nov. 8.

Sweitzer, Henry G., Detroit, Mich. Radiator wall shield. 1,624,937; Apr. 19.

Swendy, J. D. Lewis, May 17.

Swem, Daniel D., assignor to The Artistic Bronze Company, Bridgeport, Conn. Bracket hinge. 1,629,183; May 17.

Swem, Daniel D., assignor to The Artistic Bronze Company, Bridgeport, Conn. Refrigerator latch. 1,650,398; Nov. 22.

Swendsen, Willard L., Chicago, Ill. Radiator cap. Des. 73,985; Nov. 29. Sweney, Harry K., Evansville, Wyo. Conduit coupling. 1,632,064; Dec. Sweningson, Louis, Cleveland, Ohio. Wringer. 1,640,627; Aug. 30.

Swenson, Carl E., assignor of one-fourth to C. L. Ander-son, one-fourth to L. Faust, and one-fourth to E. S. Ekstrow, Rockford, Ill. Universal joint. 1,615,317;

Swenson, Carl E., assignor of one-fourth to C. L. Anderson, one-fourth to L. Faust, and one-fourth to E. S. Ekstrom, Rockford, Ill. Propeller shaft. 1,627,936;

bkstrom, Rockford, II. Propener Small, Alvardour, May 10.
Swenson, Carl E., assignor of one-fourth to C. L. Anderson, one-fourth to L. Faust, and one-fourth to E. S. Bistrom, Rockford, III. Universal-joint assembly.
Swenson, Carroll E. Clifton, Tex. Direction and temperature indicating device. 1,628,006; May 10.

Swenson Evaporator Company. (See Badger, Walter L.,

Swenson Evaporator Company,
assignor;
Swenson, Lester, Deerfield, Wis. Steam-heated iron.
1,629,555; May 24.
Swett, Caswell D., assignor to F. J. Lasar, San Francisco, Calif. Washing machine, 1,653,321; Dec. 20.
Swett, Charles E., Boston, assignor to H. H. Beckwith,
Brookline, Mass. Box toe. 1,623,073; Apr. 5.
Swett, Lewis E., assignor to Pennsylvania Stamping,
Corporation, York, Pa. Making saws. 1,631,657;
Corporation, York, Pa. Making saws. 1,631,657;

Swett, Lewis E., assignor to Pennsylvania Stamping Corporation, York, Pa. Making saws. 1,631,637; June 7.

June 7.

June 7.

Wadyslaw, Lublin, Poland. Device for dropping bombs from aircraft. 1,623,835; Apr. 5.

Swickard, Frank, Clarinda, assignor of one-half to W. A. Blakely, Grant Center, Iowa. Mower cutting apparatus. 1,644,962; Oct. 11.

Swickard, Frank, assignor to Titanic Double Cutter Trust. Oxidia. Iowa. Cutting apparatus. 1,649,002; Novinda. Iowa. Swift. Edward S. Seattle, Wash. Ship's anchor. Swift. Movement S. Seattle, Wash. Ship's anchor. Swift. Movement S. Seattle, Wash. Ship's anchor. Swift. George C. C. See Geiger, F., and Swift. Oxidia. Swift. George W., Ir., Bordentown, N. J. Machine for Swift. George W., Ir., Bordentown, N. J. Cap-making machine. Swift. George W., Jr., assignor to George W. Swift, Jr., Inc. Bordentown, N. J. Sheet-feeding mechanism. 1,647,819; Nov. 1.

Swift. George W., Jr., assignor to Taylor Instrument Com-Swift. Reachaster. N. Y. Beordine. New Papering Movements. 1,620,620.

Swift, George W., Jr., He. (See Swift, Acord.)
sasignor.)
Swift, Lewis B., assignor to Taylor Instrument Companies, Rochester, N. Y. Recording mechanism, panies, Rochester, N. Y. Recording mechanism, Chapter and Company, New York, N. Y. Paint and varnish remover. 1,620,409; Mar. 8.
Swift, Virginia. (See Swift, Ernest L. assignor.)
Swift, William S. (See Corriston, Katherine, assignor.)
Swift, William S. (See Corriston, Katherine, assignor.)
Swift, William S. (See Swift, Ernest L. Assignor.)
Swigert, Ernest G., Portland, Oreg. Cast-steel ladle.
1,633,876; June 28.
Swinder, March C. (See Nicon, Clarence R., assignor.)
Swinderl, Brothers. (See Nicon, Clarence R., assignor.)
Swindell Brothers. (See Nicon, Clarence R., assignor.)
Swindell Brothers. (See Nicon, Clarence R., assignor.)
W., assignor.)
Rect. George. N. J. Bottle or similar with the control of the control o

Swindell Brothers. (See Nixon, Clarence R., assignor.)
Swindell, William and Brothers. (See Brooke, Frank
W., assignor.)
Swindell, William E., East Orange, N. J. Bottle or similar container. Des. 71,937; Jan. 25.
Swindell, William E., East Orange, N. J. Bottle or similar container. Des. 73,716; Oct. 25.
Swindell, William E., East Orange, N. J. Bottle or similar container. Des. 74,080; Dec. 13.
Swindewsky, Walter. San Antonio, Tex. Shock absorber.
Swindewsky, Walter. San Antonio, Tex. Shock absorber.
Swindersky, Walter. San Antonio, Tex. Shock absorber.
Swindersky, Walter. San Antonio, Tex. Shock absorber.
Swindersky, Walter. San Antonio, San Swindersky, Walter. San Antonio, Tex. Shock absorber.
Swingier, Charles W., and H. Miller. St. Louis, Mo.
Downdraft hot-air furnace. 1,618,315; Feb. 22.
Swingrite Co., The. (See Nicholls, Gilbert E., assignor.)
Swiningston, Lawrence G., Los Angeles, Calif. Blotteredge guard and paper cutter. 1,640,100; Aug. 23.

Swingspout Measure Co. (See Wiswell, Ozro N., assignor.)
Swinlingston, Lawrence G., Los Angeles, Calif. Blotteredge guard and paper cutter. 1.640,100; Aug. 23.
Swinney, Alonzo N., Macon, Mo. Automatic motor stop.
Swint, William It. (See Conlon, Charles S., assignor.)
Swisher, Earl D., Des Moines, Iowa. Barking toy.
1.652,832; Dec. 13.
Swisher, Lamont. Decatur, Ill. Side and end wall of sectional buildings. 1.649,872; Nov. 22.
Swister, R. D., Mfg. Co. (See Corey, Matt M., asSwitzer, Charles A., Des Moines, Iowa. Sanitary baby
foliet seat. 1.648,791; Nov. 8.
Switzer, Charles A., Des Moines, Iowa. Sanitary baby
foliet seat. 1.648,791; Nov. 8.
Switzer, Elmer E., Beaumont, Tex. Asbestos crowntype packing. 1.626,436; Apr. 26.
Switzer Henry W., Hamilton. Ontario. Canada, assignor
Switzer, Judson D. (See Miles, F. H., and Switzer).
Switzer, G. S., & Co. (See Switzer, Russell M., assignor.)
Switzer, O. S., & Co. (See Switzer, Russell M., assignor.)
Switzer, Mussell M., assignor to O. S. Switzer & Co.,
Chicago.
Ill. Cover attachment for receptacles.
Swooda Adolph R., Newark, N. J., assignor, by meane
assignments, to Western Electric Company, Incorporrated. Switching device. 1.624,374; Apr. 12.
Swoboda, Conrad, assignor to The McCaskey Register
Company, Alliance, Ohio. Filing cabinet. 1,650,663;
Nov. 29.

Swoboda, H. O., Inc., et al. (See Newsham, A. S., Viersen, and Misch, assignors.)
Swoboda, H. O., Inc. (See Swoboda, H. O., and Richards,

Swoboda, H. O., Inc., et al. (See Newsham, A. S., Viersen, and Misch, assignors.)
Swoboda, H. O., Inc. (See Swoboda, H. O., and Richards, assignors of the control of the c

nust for drying cylinders and such-like. 1,629,598; May 24.

Symanzik, Franz, Schweinfurt, Germany. Thrust ball bearing, 1,622,665; Mar. 22.

Symington Company, The. (See Anderson, Gustaf A., assignor.)

Symington Company, The. (See Barrows, Donald S., as-

Symington Company, The. (See Couch, Glenn F., assignor.) Symington Company, The. (See Hankins, Cyrus, as-

Symington Company, The. (See Kadel, Byers W., as-Symington Company, The. (See Knapp, Raleigh T., as-

Symington Company, The. (See Martin, Mark H., as-

Symington Company, The. (See Symington, Thomas H., assignor.)

Symington Company, The. (See Symington, Thomas II., assignor.)
Symington, Scott, Passaie, N. J. Separation of solids from liquids. 1,641,708; Sept. 6.
Symington, T. H., and Son, Inc. (See Symington, T. H., Symington, T. H., and Son, Inc. (See Symington, T. H., Symington, Thomas H., Baltimore, Md., assignor, by mesue assignments, to The Symington Company. Side frome and journal box thereof. 1,620,498; Mar. 8.
Symington, Thomas H., and P. R. Drenning, assignors, by mesue assignments, to T. H. Symington and Son, Inc., and Symington, Thomas H., and P. R. Drenning, assignors, by mesue assignments, to T. H. Symington and Son, Inc., but the symington and Son, Inc., Sattlmore, Md. Truck bolster with absorption mechanism. 1,642,761; Sept. 20.
Symmeton, I. 1644,701; Sept. 20.
Symmeton, II. 1644,701; Sept. 20.
Symme

pany, Wilmington, Del. Ammonium-nitrate explosive 1.613.335: Jan. 4. Symons Brothers Company. (See Symons, Edgar B.

Symons Brothers Company, assignor; to Symons Brothers Company, Milwaukee, Wis. Disk crusher. 1.616,240; Feb. 1.
Symons, Edgar B., Los Angeles, Calif., assignor to Symons Brothers Company, Milwaukee, Wis. Crushing disk. 1.630.502; May 31.
Symphonner Co., The. (See Winder, Charles F., assignor).

Symphonaer Co., The Use Winder, Charles Eq. 108-signor.) Synck, Henry, assignor, by mesne assignments, to The New Idea Spreader Company, Coldwater, Ohlo. Trans-planter. 1,651,851; Dec 6. Syntheth. Edward Company, assignor to G. Sattler, New York, N. Y. Fixing artificial hair for the Company of the Company, assignor to G. Syraenes, Michael, Chicago, 111. Airplane construction, 1,637,498; Aug. 2.

Syracuse Industrial Gas Co. (See Henderson, Nelson H.,

Syracuse Ornamental Company. (See Holstein, Adolph Syracuse Ornamental Company. (See Hoistein, Adolph M., assignor.)
Syracuse Washing Machine Corporation. (See Bliss, Donald M., assignor.)
Syracuse Washing Machine Corporation. (See Geldhof,

Syracuse Washing Macline Corporation. (See Geldhof, Donald M., assignor.)
Syracuse Washing Macline Corporation. (See Nelson, Peter E. assignor.)
Syracuse Washing Machine Corporation. (See Nelson, J. C., and Geldhof, assignors, New Castle, Pa. Automatic railway switch. 1,622,989; Mar. 29.
Szakács, Joseph, assignor of one-third to N. Genslor, Wood, and one-third to W. I. Evans, Brond Top, Pa. Tool. 1,643,861; Sept. 27.
Szakacs, Miklos. (See Zorgo, Desider, assignor.)
Szako, John, New York, N. Y. Bench plane. 1,645,781; Szalli, Dezső, North Tonawanda, N. Y. Automatically-operated garage door. 1,624,814; Apr. 12.
Szandrowsky, Anton, New York, assignor to C. H. Durfee, Forest Hils, N. Y. Valve lifter, 1,615,053; Jan. 18.
Szantay, Daniel. (See Sinko, J., and Szantay.)
Szekely, Ernest, Evanston, assignor of one-half to Drying Systems Inc., Chicago, Ill. Alr-filter drive. 1,635,067; Aug. 9,

Szantay, Daniel. (See Sinko, J., and Szantay.)
Szekely, Ernest, Evanston, assignor of one-half to Drying Systems Inc., Chicago, III. Alr-filter drive.
1.638,067; Aug. 9.
Szekely, Otto E., Moline, III. Internal-combustion engine.
1.622,087; Mar. 29.
Szekely, Otto E., Moline, III. Washing machine.
Szepesk, Eugene, Boston, Mass. Instrument for graphic control. 1,622,216; Apr. 5.
Szigethy, Stephen, New York, N. Y. Candelabrum.
1.631,232; June 7.
Szigethy, Stephen, New York, N. J. Bag holder.
1.632,308; Csee Szuch, Vincent and J.)
Szuch, Vincent and J., Ravenna, Ohio. Gate for railway crossings. 1,639,866; Aug. 23.
Szuch, Vincent and J., Ravenna, Ohio. Gate for railway crossings. 1,639,866; Aug. 23.
Szuchy, Joseph, Perth Amboy. N. J. Train signaling and controlling system. 1,638,754; Aug. 9.
Szuchsyk, Paul, Niugara Falls, Ontario, Canada.
Folding bench. 1,654,437; Dec. 27.
Folding bench. 1,654,437; Dec. 27.
Folding bench. 1,654,437; Dec. 27.
Taffe, George R., assignor to United Iron Works. Inc., Jopin, Mo. Adjustable bearing mechanism for drums, June 14.
Tabb, Warner T., Mahwah, N. J. Hair curier. 1,631,989; June 14.

Tabb, Warner T., Mahwah, N. J. Hair curler, June 14.
Taib. Warner T., Mahwah, N. J. Clamp. 1,631,991; June 14.
Tabb, Warner T., Mahwah, N. J. Clamp. 1,631,991; June 14.
Taber, Edward A., and A. G. Spinney, Portland, Me. Pilot-light control. 1,616,706; Feb. 8.
Taber William F., Adran Ohio. Supporting roof strata Taber, William F., Adran Ohio. Supporting roof strata Taber, Harry B., Everett, Mass. Chart. 1,613,488; Jan. 4.

Tabor Manufacturing Company, The. (See Lewis, Wilfred, assignor.)
Tabor Manufacturing Company, The. (See Williams, Henry H., assignor.)

Tabulating Machine Company, The. (See Brandt, Martin F., assignor.)

Tabulating Machine Company, The. (See Brandt, Martin F., assignor.)

W., assignor.)
Tabulating Machine Company, The. (See Carroll, Fred M., assignor.)

M., assignor.)
Tabulating Machine Company, The. (See Ford, Eugene A., assignor.)
Signor to H. Schultz & Company, Chicago. Ill. Feed attachment for stapling and other machines. 1,852,883; Dec. 13.
Tacketr, August T., Brawley, Calif. Fuel vaporizer. 1,642,795; Sept. 20.
Taft. Edward A., trustee. (See Barker, Robert W., assignor.)

Taft. John A., Cincinnati, Ohio. Cotton condenser. 1645-630: Oct. 18.
Taft, John A., Birmingham, Ala., assignor, by mesne assignments, to The Dixie Gin Compress Company. Inc., New Orleans, La. Round-bale compress. 1, 4842-246;

Taft-Peirce Manufacturing Company, The. (See Simmons, Frank L., assignor.)
Taggart Brothers Company Inc. (See Taggart, Joseph W., assignor.)

Targart Brothers Company Inc. (See Targart, Joseph W., assignor). W., assignor to Targart, Joseph W., assignor to Targart Brothers Company Inc. (See Targart). Nov. 8.

Targlabue, Charles J., Mfg. Co. (See Bast, Frank J., assignor).

Tagliabue, Charles J., Mfg. Co. (See Irant, Lawrence C., assignor).

Tagliabue, Charles J., Mfg. Co. (See Irant, Lawrence C., assignor).

Tagliani, Giovanni. (See Leemann, H., and Tagliani.)

Tagliani, Giovanni, assignor, by mesne assignments, to Chemical Works, formerly Sandoz, Basel, Switzerland, Trenting cotton or other threads containing cellulose, 1,633,617; June 28.

Tahan, Tole A., Union City, N. J. Lug-strap support. 1,041,873; Sept. 6, 10. 11,041,873; Sept. 11,04

Permutation lock for savings banks. 1,649,372; Nov. 15.
Takamine, Jokichi, jr., and N. Fujita, Cliffton, N. Making a yeast stimulant. 1,634,310; July 5.
Takeuchi, Masayoshi, assignor of one-half to Y. Yasuda, Los Angeles, Calif. Treating tobacco. 1,617,727;

Tabot. Benjamin, Midlesbrough, England, assignor to Talbot. Benjamin, Northalterton, England, assignor to Talbot. Benjamin, Northalterton, England, assignor to Talbot. Benjamin, Middlesbrough, England, Metallurgical furnace, 1,648,247; Nov. 8.
Talbot. Benjamin, Middlesbrough, England, assignor to Talbot. Benjamin, Middlesbrough, England, assignor to Talbot. Benjamin, Northalterton, England, assignor to Talbot. Benjamin, Northalterton, England, Sasignor to Talbot. Benjamin, Northalterton, England, Philadelphia, Pa. Lined pipe, 1,644,361; Oct. 4a.

Talbot. Benjamin, Northalterton, England, assignor to Talbot. Benjamin, Northalterton, England, Philadelphia, Ph. Water pipe and making the same, 1,644,360; Oct. 4.

Talhot Non-Corrosive Linings Company, Philadelphia, Pa. Water pipe and making -the same. 1,644,360; Oct. 4. Talhot, Benjamin, North Allerton, England, assignor to Talhot, Son-Corrosive Linings Company, Philadelphia, Talhot, Conn. Corrosive Linings Company, Philadelphia, Talbot, George Linings, Linings, Campany, New Britain, Conn. Automatic sash fastener. 1,651,048; Nov. 29.
Talbot, George W., Bloomington, Ind. Scored veneer and making same. 1,637,164; July 26. Talbot, James A., assignor of one-faif to S. V. Davin, Walla Walla, Wash. Weeder. 1,625,169; Apr. 19.
Talbot, James A., assignor of one-faif to S. V. Davin, Walla Walla, Wash. Weeder. 1,625,169; Apr. 19.
Talbot Talhot, Conn. Corrosive Linings Company. (See Talbot, Benjamin, assignor.) Talbott, Harry G., Baltimore, Md. Wall furniture. 1,633,423; June 21.
Talcott, Morton C., assignor to The Billings & Spencer Company, Hartford, Conn. Drop hammer. 1,631,483;

Dec. 6.

Talevich, Tom J., Sapulpa, Okla. Locomotive-driving-wheel truing and flange-reducing device. 1,617,036;

Talevich, Tom J., Sapulpa, Okla. Locomotive-driving-wheel truing and flange-reducing device. 1,617,036;

Taliaferro, John C., Baltimore, Md., assignor to Continental Can Company, Inc., New York, N. Y. Friction-top container. 1,616,288; Feb. 1.

Taliaferro, John C., Baltimore, Md., assignor to Continental Can Company, Inc., New York, N. Y. Metal Continent. 1,635,21; Dec. 20.

1,618,516; Feb. 8.

Taliaferro, Thomas L., Chicago, Ill. Jar closure. 1,616,517; Feb. 8.

Taliaferro, Thomas L., Chicago, Ill. Jar closure. 1,616,517; Feb. 8.

Taliaferro, Thomas L., Chicago, Ill. Jar closure. 1,616,517; Feb. 8.

1,611,6518, Teb. 8.

Taliaferro, Thomas L., Chicago, Ill. Jar closure. 1,618,517; Feb. 8.

Taliaferro, Thomas L., Chicago, Ill. Jar-closing machine. 1,628,007; May 10.

Taliaferro, Thomas L., Chicago, Ill. Jar-closing machine. 1,628,007; May 10.

Taliaferro, Thomas L., Chicago, Ill. Jar-closing machine. 1,628,007; May 10.

Taliaferro, Thomas L., Chicago, Ill. Jar-closing machine. 1,628,008; May 10.

Taliaferro, Thomas L., Chicago, Ill. Jar-closing machine. 1,644,209; Oct. 4 East St. Louis, Ill. Drum or pulley. Talian, Stefan A, Esta St. Louis, Ill. Drum or pulley. Taliago, Tal

Tallman, Albert R., et al., assignor.)
Tallman, Allen P., Toledo, Ohio. Rubber mold and treating the molding surfaces. 1,652,218; Dec. 13.
Tam, William D., Jackson, Calif. Combination packing and display box. 1,641,709; Sept. Growth and Market Mar

Tamboniza Manuacturing Company, (cc. Principal Adolph, assignor.)
Tamen Brothers et al. (See Friedland, Moshe, assignor.)
Tamini, Mario, Milan, Italy. Driving arrangement for
machines installed on automobiles. 1,627,126; May 3

Tammen, Henry C. (See Ash, L. R., Tammen, and Hunter, Ido. Genon, Italy. Wing structure for aircraft. 1,628,625; May 10.

Tanaka, Frank W., New York, N. Y. Amusement device. 1,622,981; Mar. 29.

Tandel, Fritz, assignor to C. G. Haubold A. G., Chemnitz, Savana, Gaemana, Kabric-Geeding apparatus. 1,615,416;

Tandel, Fritz, assas, Saxony, Germany, Fabre, Saxony, Germany, German, Gertigeration, 1,621,741; Dec. Retrigeration Corporation, Detroit, Mich. Refrigeration corporation, 1,631,741; Dec. Campaine, Olof. Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, Gauge, Tanguay, Arthur G., Chicago, Ill., assignor to Badger Tool & Mig. Co. Cutting tool. 1,625,836; Apr. 26.
Tangye, Roy M., Denver, Colo. Carburetor. 1,620,925; Mar. 15.

Mar. 15.

Mar. 15.

Mar. 16.

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Mar. 17.

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Mar. 19.

Ma

Mar. 15.
Tangye, Roy M., Denver, Colo., assignor, by mesne assignments, of one-fourth to The Colorado Carburetor Company, Carburetor, Rel6,838, Dec. 27.
Submarine life-switch of the Colorado Carburetor Company, Carburetor, Rel6,836, Dec. 27.
Saving, Carburetor, Carburet

billed floor lamp and sound amplifier. Des. 72,322; Mar. 29.

Tannehill, Vernon L. (See Astrom, J., and Tannehill.) Tannehill, Vernon L., assignor to Fort Wayne, Ind. Water softener. 1,626,055; Apr. 28.

Tannehill, Vernon L., assignor to Fort Wayne, Ind. Water softener. 1,626,055; Apr. 28.

Tannehola Heroid J. and J. Bown, New York, N. Y., Decorate luncheon mat for hot plates. Des. 72,876; June 14.

Tanneholz, Melville, Brooklyn, N. Y. Decorate luncheon mat for hot plates. Des. 72,876; June 14.

Tannenholz, Melville, Brooklyn, N. Y. Luncheon mat for hot plates. Des. 72,876; June 14.

Tannenholz, Melville, Brooklyn, N. Y. Luncheon mat for hot plates. Des. 72,871; Aug. 16.

Tanner, Arnold J., North Haven, Conn. Display container, 1,616,708; Feb. 8.

Tanner, Arnold J., North Haven, Conn. Display container, 1,625,171; Apr. 19.

Tanner, Arnold J., North Haven, Conn. Display container, 1,625,171; Apr. 19.

Tanner, Arnold J., North Haven, Conn. Display container, 1,625,171; Apr. 19.

Tanner, Charles H., St. Cloud, Minn. Card-holder attachment, 1,628,2170; Apr. 19.

Tanner, Charles H., St. Cloud, Minn. Card-holder attachment, 1,628,2170; Apr. 19.

Tanner, De Witt C., Glen Ridge, M. J., assignor to Western and the manual containers of pletures by electricity, 1,613,970; Janner Engineering Company, The. (See Tanner, Harry Tanner Engineering Company, The. (Se

Jan. 11.

Tanner Engineering Company, The. (See Tanner, Harry L., assignor.) The third that the transfer of the transfer of

Mar. 1.

Mar. 1.

Tanner Larry L. Brooklyn, N. Y. assignor to The Cattor. I.62(1.29) Mar. 15.

Tanner Engineering Company, Inc. Position indicator. I.62(1.29) Mar. 15.

Tanner, Harry L., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Liquid-centrolled gyrocompass 1.647(419; Nov. 1.

Tanner, Harry L., Brooklyn, assignor to Ford Instrument Company, Inc., New York, N. Y. Damping gyro-Tanner, Hubert D., Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Gear-tooth grinder. I.62(890; May 3.

Tanner, Inca B., assignor to Joseph E. Nelson & Sons, Chicago, Ill. Tank. 1.613,916; Jan. 11.

Tanner, Incs H., assignor to Joseph E. Nelson & Sons, Chicago, Ill. Tank. 1.613,916; Jan. 11.

Tanner, M. H. Nelson. Tank. 1.617,355; Feb. 15.

Tanner, Oscar A., Verona, Pa., assignor to Artstone Burial Vault Co., Inc. Manufacturing artificial stone. 1.617,927; Feb. 15.

ADDITIONAL PROPERTY OF THE PRO

Mar. 19.
Tanner, Wellington L., Panasoffkee, Fla., assignor to The Grasselli Chemical Company, Cleveland, Ohio. Insecticide and applying same. 1,852,291; [bc. 1].
Tanner, William G., New Castle, Pa. Porch swing. 1,613,544; Jan. 4.
Tannewitz, Carl E., Grand Rapids, Micb. Band-saw wheel. 1,645,554; Oct. 18.
Tanquary, Anita K., Los Angeles, Calif. Holder. 1,632,544; [bc. 18.

Tansill, Charles M., White Hall, Md. Gas mixing gasket for internal combustion engines. 1,620,410; Mar. 8.

Manufacturing Company, Hartford, Conn. Magasine safety device for automatic pistols. 1,638,608; Aug. 9.

Tanzy, Benjamin W. (See Evans, John R., assignor.)

Tape, William H., Lethbridge, assignor of one-half to R. Barrowman, Lethbridge, Alberta, Canada. Brake.

Taplin, Genterot Y. (See Anderson, G. T., and Taplin.)

Taplin, George C., Boston, Mass. Operating-table attachment. 1,618,609; Feb. 22.

Taplin, George C., Boston, Mass. Operating table. 1,635,588; July 12.

Taplin Manufacturing Company, The. (See Lienhard, Taplin, Genter, Lewis, Brooklyn, N. Y. Safety razor. 1,618,695; Feb. 22.

Tapp. John C., Broomfield, Colo. Gauge. 1,623,643; App. 5.

Lobos of the Leave Thombeld, Colo. Gauge. 1,623,643; Tapping John C., Broomfield, Colo. Gauge. 1,623,643; Tapping, Frank F. (See Thornley, F. C., Tapping and Reynard.)

Tar & Petroleum Process Company. (See Knowles, A. S., and McIntire, assignors.)

Taranto, John, Waitham, Mass. Magazine for box looms. Taranto, John, Waitham, Mass. Magazine for box looms. Taranto, Gondon L., North Plainfield, N. J. Universal Joint. 1,643,644; Sept. 27.

Tarbox, Gurdon L., North Plainfield, N. J. Universal Joint. 1,643,648; Sept. 27.

Tarbox, Gurdon L., North Plainfield, N. J. Universal Joint. 1,643,648; Nort. 15, N. Y. Method and system of vibratory signal control. 1,628,077; May 10.

Tarbox, John P., assignor to Budd Wheel Company, Philadelphia, Pa. Double nut for dual wheels. 1,637,666; Aug. 2.

Tarbox, John P., assignor to Edward G. Budd Manufacturing. Co., Philadelphia, Pa. Latch mechanism. Tarbox, John P., assignor, Washington, D. C. Balancing system for aircraft. 1,644,745; Oct. 11.

Tarbox, John P., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Latch mechanism. 1,645,340; Oct. 11.

Tarbox, Gompany, Philadelphia, Pa. Latch mechanism. 1,645,340; Oct. 11.

Tarbox, Gompany, Philadelphia, Pa. Latch mechanism. 1,645,340; Oct. 11.

Tarbox, Safety Aircraft Company. (See Tarbox, John P., assignor). Tarbox, John P., assignor to Emlenton Refining Carbox, Safety Aircraft Company, (See Tarbox, John P., assignor).

Tarnows, Sarety Aircraft Company. (See Tarbox, John P., Tardiff, Henry, Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,653,240: Dec. 20.

Tarlel, Roy A. Sacramento, Calif. Spare-tire advertising sign. 1,645,940: Oct. 18.

Tark, Marcus E., Philadelphia, Pa. Screening appara-Tarnan, Ediller, Opincy, Pa. Shipping crate for animals. 1,619,895; Mar. 8.

Tarnowski, Joseph, Detroit, Mich. Sliding window. 1,616,709; Feb. 8.

Taromino, Bennie A., New Brunswick, N. J. Time-controlled lightling switch. 1,638,604; Aug. 9.

Taromino, Bennie A., New Brunswick, N. J. Time-controlled lightling switch. 1,638,604; Aug. 9.

spreading device. 1,633,238; Aug. 16.

Tarratine Manufacturing Co. Inc. (See Hanson, Hugo H., assignor).

Spreading and the spreading spreading spreading assignor.

assignor.

Assignor.

Assignor.

Maisons-Laditte, France. Liquid-Tartais, Dughae II. Maisons-Laditte, France. Liquid-Tartais, Dughae II., Maisons-Laditte, France. Freesup-ply means for heavy-oll engines. 1,623,074; Apr. 5.

Tartrais, Eugène II., Montmorency, France. Lubricating arrangement for the cylinders of two-stroke cycle engines. 1,630,547; May 31.

Tascarella, Salvatore, Brooklyn, N. Y. Step for surgical tables. 1,632,665; Dec. 6.

Tasker, Fred E. (See Rice, John V., Ir., assignor.)

Tasker, Richard H. Liverpool. England. Knife for use in flaying cattle and like purposes. 1,630,871; May 31.

Tasman, George, Brooklyn, N. Y. Adjustable seat for vehicles. 1,615,246; Jan. 25.

Tasman, George, Brooklyn, N. Y. Joint. 1,619,836; Mar. 8.

Mar. 8. Tate, Charles R., Omaha, Nebr. Shipping box. 1,612,891;

Tate, Charles R., Omaha, Nebr, Shipping box, 1,612,891;
Jan. 4.
Tate, Harry F., assignor to Sta-Kleen Burner Company,
Tate, Harry F., assignor to Sta-Kleen Burner, 1,643,967;
Oct.
Tate, James R., Lowell, Ariz. Spring-clip hanger,
1,622,308; Apr. 5.
Tate, Joseph T., et al. (See Greenstreet, Oliver P., assignor.)

signor.)
Tate, Kenneth L. (See Norwood, H. Y., and Tate.)
Tate, Kenneth L., assignor to Taylor Instrument Companies, Rochester, N. F. Apparatus for measuring the Tate, Kenneth L., assignor in Taylor Instrument Companies, Rochester, N. F. High-temperature ynaperpressure recorder and regulator, 1,632,L52; June 14.
Tate, Kenneth L., assignor to Taylor Instrument Companies, Rochester, N. Y. Gas-analysis apparatus 1,653,562; June 21.

Tate, Lionel C., Newburgh, Ind. Plug. 1,614,975; Jan. 18. Tate Safety Window Scaffold Corporation. (See Tate, Ind. 18. Company, Children Company, Chilego, Ill. Tate, Laurel G. Wasilington, D. C., assignor to Union Special Machine Company, Chicago, Ill. looper mechanism for sewing machines. 1,650,306; Nov. 22:

hooper mechanism of several se

Taub. Alex. assignor to General Motors Corporation, Detroit, Mich. Diame plate in valve chamber. 1,623,322; ADr. 5.

Taub. Alex, assignor to General Motors Corporation, Detroit, Mich. Olling system for internal-combustion engines. 1,634,123; June 28.

Taub. Alex, assignor to General Motors Corporation, Detroit, Mich. Clutch. 1,634,785; Oct. 11.

Taub, Raphael, Newark. N. J. Collapsible-tube paste filler and closer. 1,653,322; Dec. 20.

Taubel, Clarence H., Riverside, N. J., assignor to Hemphil Company, Central Falls, R. I. Seamless knit, clocked Company, Central Falls, R. I. Seamless knit, clocked Merchandise Co., Inc., New York, N. Y. Shoe. Des. 73,450; Sept. 13.

Taudevin, Raiph E. (See Bean, T. R., and Taudevin.)

Taumac Corporation, The. (See Zuschlag, Theodor, assignor).

signor.)
Taunton Pearl Works, Inc. (See Palmer, James A., as-

signor.)
Taurman, Alphonso, Birmingham, Ala., assignor to Metal & Thermit Corporation, Cateret, N. J. Rail-clamping apparatus. 1.620,172; Mar. 8.
Tausch, Ernst, Wilmersdorf, near Berlin, Germany, Resilient-ring element. 1.641,059; Aug. 30.
Tauschek, Gustav, Vienna, Austria. Tabulator, particularly for calculating wages. 1.617,058; Feb. 8.
Charles, Gustav, Vienna, Austria. Funching machine. Tauschek, Gustav, Vienna, Austria. Funching machine. Tauschek, Gustav, Vienna, Austria. Artrangement for sorting perforated cards used for statistics, book-keeping, and the like. 1,639,443; Aug. 16.
Tavannes Watch Co., S. A. (See Varaud, André, assignor.)

signor.)

Tavis Samuel. (See Furst, E., and Tave). Rende de M. Elizabeth, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Treating hydrocarbons. 1,645,553 oct. 18, Tavender, Walter K. (See Reimers, A. E., and Tavender, Tawa, Mike A., et al. (See Sabbag, Litfallah G., as-

signor.)

Tawa, Mike A., et al. (See Sabbag, Liffallah G., assignor.)

Taylor, Albert H., Washington, D. C. Apparatus for recording electrical signals. 1,630,227; May 24.

Taylor, Albert H., Washington, D. C., assignor to Wired Radio. Inc., New York, N. Y. Radio signal circuits. 1,613,733; Jan. 11.

1,613,733; Jan. 11.

1,613,733; Jan. 11.

1,628,009; May 10.

Taylor, Albert H., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Piezo-electric crystal system. 1,629,817; Aug. 23.

Taylor, Albert H., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Three-phase oscillator. 1,639,817; Aug. 23.

Taylor, Albert H., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Three-phase oscillator. 1,621,037; Mar. 15.

Taylor, Albert H., and L. C. Young, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Radio signaling circuit. 1,639,816; Aug. 23.

Taylor, Albert H., and L. C. Young, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Radio signaling circuit. 1,639,816; Aug. 23.

Taylor, Albert H., and L. C. Young, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Modulos of System for frequency multiplier circuits. Taylor, Albert W., Peckville, Pa. Line pulley. 1,635,146; Taylor, Albert W., Peckwille,

nosthers to wired Radio, Inc., New York, N. Y. Mod-ulation system for frequency multiplier circuits, 1.654.195; Dec. 27. Taylor, Albert W., Peckville, Pa. Line pulley. 1,635.145; July 5.

ylor, Alfred M., Erdington, Birmingham, England, Electric power transmission system. 1,638.647;

Taylor, Alfred M., Erdington, Birmingham, England, Electric power transmission. 1,639,473; Aug. 16. Taylor, Arch B., Charlette, C. T. Long, Winston-Salem, N. 1,640, 1,640

Taylor-Long Company, Charlotte, N. C. Bottle. Des. 72,459; Apr. 12.
Taylor, Arch B., Charlotte, C. T. Long, Winston-Salem, N. C., and A. C. Solm, Pittsburgh, Pa., assignors to 72,563; Apr. 19.
Taylor, Arthur E., assignor of one-half to S. Himman, Elyrla, Ohio. Nail-driving implement. 1,621,761; Mar. 22.
Taylor, Pariamin. (See Major, J. L., and Taylor.) Taylor, Benjamin. (See Major, J. L., and Taylor.) Taylor, Burt E., Mount Vernon, assignor to The Borden Company, New York, N. Y. Sterllizing apparatus. 1,646,713; Oct. 26.

Taylor, Burt E., Mount Vernon, assignor to The Borden Company, New York, N. Y. Transfer mechanism. 1,646,714; Oct. 25.
Taylor, Surt E., Mount Vernon, assignor to The Borden Company, New York, N. Y. Sterilizing apparatus. 1,646,715; Oct. 25.
Taylor, Geol. H. 2, and B. B. Neuteboom, Detroit, Mich. Alphane. 1,622,242; Mar. 29.
Taylor, Cecil H., and B. B. Neuteboom, Detroit, Mich. Aeroplane. 1,622,242; Mar. 29.
Taylor, Cecil H., and S. M. Udale, assignors to G. M. Holley, Detroit, Mich. Vaporizer. 1,648,515; Nov. 8.
Taylor, Charles B., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Prime-mover control system. 1,628,621; May J. J. Flexible coupling. 1,634,966; July 5.
Taylor, Charles R., Moccasin, Mont. Grain-drill attachment. 1,642,908; Sept. 20.
1,634,968; July 19.
Taylor, Charles W., assignor to E. C. F. Hartmann and D. Saylor, Charles W., Hendon, London, England. Pulley. 1,636,432; July 19.
Taylor, Charles W., assignor to E. C. F. Hartmann and D. Taylor, Chase, Washington, D. C. Signaling device. 1,028,756; May 17.
Taylor, Chase, Washington, D. C. Signaling device. 1,028,756; May 17.
Taylor, Charence E., Watseka, Ill. Self-thawing radiator for motor vehicles. 1,630,872; May 31.
Taylor, Charence E., Watseka, Ill. Self-thawing radiator for motor vehicles. 1,630,872; May 31.
Taylor, Charence E., Watseka, Ill. Self-thawing radiator for motor vehicles. 1,630,872; May 31.
Taylor, Charence T., Harlington, Kans. Fruit-picker's bag. Taylor, Crus. (See Bergmann, C. N., and Taylor.)
Taylor, Chare. E., Company. (See Peabody, George M., assignor.)

Taylor, Doe G., Baytown, Tex. Anticnattering device. 1.619.44; Mar. I.
Taylor, E. E., Company. (See Peabody, George M., asTaylor, Edward C. (See Castricum, M., and Taylor.)
Taylor, Edward C. New York, N. Y. Stolen-car signal.
1.648,886; Oct. 25.
Taylor, Edward N., Upper Montelair, assignor to De
Forest Radio Company, Jersey City, N. J. Electric assembling machine. 1.648,010; Nov. 8.
Taylor, Engene S., and Hugh E. Young, Chicago, III.
Taylor, Engene S., and Hugh E. Young, Chicago, III.
Taylor, Forest W. Lordingles, Calif. Toolholding attachment for pockets. 1.618,492; Feb. 22.
Taylor, Frank F., Cheinnati, Ohio. Toy wagon.
1.650,163; Nov. 22.
Taylor, George A., Boston, Mass. Tack. 1,618,239;
Feb. 22.
Taylor, George A., Weehawken, N. J., assignor to National

Feb. 22.
Taylor, George A., Weehawken, N. J., assignor to National
Biscuit Company, New York, N. Y. Display cover.
1,628,204; May 10.
Taylor, George L., Rochester, assignor to Kopygraph, Incorporated, Batavia, N. Y. Cutting mechanism.
1,628,204; Dec. 20.
Tabor, George N. See Parks, E. F., Brink, and

Luds, 129; Dec. 20.

Taylor, George N. (See Parks, E. F., Brink, and Taylor, George N. (See Parks, E. F., Brink, and Taylor, George W. fr., Leavittsburg, Ohio. Signal for toy electric trains. 1.649.043; Nov. 15.

Taylor, Guy B., Wilmington, Del., and A. S. Richardson. Cincinnati, Ohio, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Nitration process and nitrating mixture therefor. 1.640,737; Aug. 30.

Taylor, Halsey W., Warren, Ohio. Drinking fountain. 1.624.081; Apr. 12.

LOSA, 104, 104, 12.

Taylor, Harry T., assignor to Taylor-Johnston Manufacturing Company, Monroe, La. Grease gun. 1,616,997; Feb. 8.

Taylor, Harvey B., Philadelphia, Pa. Annular-jet turbine.

furing Company, Monroe, La. Grease gun. 1,612,947; Feb. 8.
Taylor, Harvey B., Philadelphia, Pa. Annular-jet turbine. 1,613,971; Jan. 11.
Taylor, Harvey B., Philadelphia, Pa. Impulse turbine. 1,613,971; Jan. 11.
Taylor, Herbert E., See Highfield, F. W., and Taylor, Taylor, Herbert E., Coventry, England, assignor to Gleason Works, Rochester, N. Y. Method of and machine for hobbing gears. 1,618,240; Feb. 22.
Taylor, Herbert M., Rochester, N. Y. Kitchen utensil. 1,740,874; Nov. 22.
Taylor, Herbert M., Rochester, N. Y. Kitchen utensil. 1,649,874; Nov. 22.
Taylor, Hughand S., Landell, M. Transportation system. 1,623,263; June 14.
Taylor, Hughaukee, Wis. Testing apparatus for solenoids and the like. 1,637,662; July 26.
Taylor, Hugh S., assignor to Western Electric Company, Incorporated, New York, N. Y. Socket. 1,642,517; Sept. 13.

Incorporated, New 10ts, N. A. Social Sept. 13.
Taylor, Huston, Detroit, Mich. Impact bar for automobile bumpers. 1,633,011; Aug. 16.
Taylor Corporation, Detroit, Mich. Demountable rim carrier. 1,644,159; Oct.
Taylor Instrument Companies. (See Amdursky, Samuel

s., assignor.)

assignor.)

assignor.)

assignor.)

aylor Instrument Companies. (See Ely, James, assignor.) Taylor Taylor gnor.)

signor.)
Taylor Instrument Companies. (See Foote, Edward B., assignor.)
Taylor Instrument Companies. (See Foote, E. B. and Stalker, assignors.)

Taylor Instrument Companies. (See Heesch, Henry W., assignor.)
Taylor Instrument Companies. (See Heesch, H. W., and

Taylor Instrument Companies.
Schofield, assignors.)
Taylor Instrument Companies.
Soule, assignors.)
Taylor Instrument Companies. (See Ireland, G. B., and (See Jameson, Percy R.,

assignors.)
Taylor Instrument Companies.
Signor.)
Taylor Instrument Companies.
Assignor.)
(See Norwood, Harry Y.,
Assignor.)
Taylor Instrument Companies.
(See Norwood, H. Y.,
And Tate, assignors.)
(See Olson, Raymond E.,

Instrument Companies. (See Swift, Lewis B., ssignor.) rlor Instrument Companies. (See Tate, Kenneth L.,

Taylor Instrument Companies
assignor.)
Taylor, Irving A., assignor to S. Riley Stoker Corporation, Worcester, Mass. Furnace-wall air plate.
Taylor, Irving A., assignor to Riley Stoker Corporation,
Worcester, Mass. Furnace-wall air plate.
Taylor, Irving A., assignor to Riley Stoker Corporation,
Worcester, Mass. Fuel-feeding mechanism for underfeed stokers. 1,685,234; July 12.
Taylor, Irving A., and C. H. Rich, assignors to Riley
Stoker Corporation, Worcester, Mass. Ash-discharge
mechanism for mechanical stokers. 1,651,484;

Dec. 6.
Taylor, James A., Portland, Me. Connecting tubes.
1,633,798; June 28.
Taylor, James H., Oak Park, Ill. Steam boiler. 1,634,056;
June 28.

May 10.
Taylor, John, assignor of one-half to Mather & Platt
Limited, Manchester, England. Automatic sprinkler or
fire extinguisher. 1.689,911; Aug. 23.
Taylor, John B., assignor to The Anglo-American Mill
Company, Owensboro, Ky. Vibrating scalper. 1,614,810;

fire extinguisher. 1,639,611; Aug. 23.
Taylor, John E., assignor to The Anglo-American Mill Company, Owensboro, Ky. Vibrating scalper. 1,614,810; Man. 18.
Taylor, John G. and H. Stoker, Lovelock, Nev. Hay Index. 1,623,447; Apr. 5.
Taylor, John M., assignor to Diamond State Fibre Company, Bridgeport, Pa. Noiseless gear. 1,613,489; Taylor, John M., assignor to Diamond State Fibre Company, Bridgeport, Pa. Moiseless gear. 1,613,489; Taylor, John M., assignor to Diamond State Fibre Company, Bridgeport, Pa. Mechanical element and making same. 1,623,894; Apr. 5.
Taylor, John M., assignor to Diamond State Fibre Company, Bridgeport, Pa. Mechanical element and making same. 1,623,894; Apr. 5.
Taylor, John M., and E. Wood, Sawtelle, Calif. Expansion core. 1,640,013; Aug. 23.
Taylor, John R., and E. Wood, Sawtelle, Calif. Expansion core. 1,640,013; Aug. 23.
Taylor, John R., and E. Wood, Sawtelle, Calif. Expansion core. 1,640,013; Aug. 23.
Taylor, Lawrence P., Los Angeles, Calif. Apparatus for core. 1,640,013; Aug. 23.
Taylor, Lawrence P., Los Angeles, Calif. Apparatus for core. 1,624,090; Apr. 12.
Taylor, Lawrence P., Los Angeles, Calif. Shoemaker's last. 1,622,894; Web. 190; Apr. 12.
Taylor, Martine P., Los Angeles, Calif. Apparatus for core. 1,624,090; Apr. 12.
Taylor, Martine P., Los Angeles, Calif. Shoemaker's last. 1,622,894; Dec. 13.
Taylor, Lawrence P., Los Angeles, Calif. Shoemaker's last. 1,622,894; Dec. 13.
Taylor, Lawrence P., Los Angeles, Calif. Shoemaker's last. 1,622,894; Dec. 13.
Taylor, Lawrence P., Los Angeles, Calif. Shoemaker's last. 1,622,894; Dec. 13.
Taylor, Martine P., Los Angeles, Calif. Shoemaker's last. 1,624,895; Apr. 12.
Taylor, Martine C. (See Guyer, J. A., and Taylor, Taylor, Maurice C. (See Guyer, J. A., and Taylor, Taylor, Maurice C., Nigara Falis, assignor to The Mathleson Alkali Works, Inc., New York, N. Y. Hypochlor, June 14, 100, and J. W. Cooper. Flytrap. 1,632,635; June 14, 100, and J. W. Cooper. Flytrap. 1,632,635; June 14, 100, and J. W. Cooper. Flytrap. 1,632,635; June 14, 100, and J

Taylor, Roy, assigner of one-half to D. A. Cant, Los Angeles, Calif. Swivel. 1,617,776; Feb. 15.

Taylor, Roy, assignor of one-half to D. A. Cant, Los Angeles, Calif. Swivel. 1,627,873; May 10.
Taylor, Roy M., Richmond, Ind. Air sanding device. 1,640,288; Aug. 23.
Taylor, Samuel G. (See Westmoreland, E. E., and

Taylor, Samuel W., Baltimore, assignor to Poole Engineering and Machine Company, Woodberry, Baltimore, Md. Single-seat throttle valve. 1,616,289; Feb. 1. Taylor, Stanley A. (See Falk, George F., assignor.) Taylor, Theodore A., and A. J. Yeager assignors to Frentiss-Wabers Stove Company, Wisconsin Rapids, Wis. Portable stove. 1,638,223; Aug. 9.
Taylor, Thomas A., Bonbam, Tex. Rotary store structuring Thomas F., San Francisco, Calif. Dirigible headilight. 1,640,738; Aug. 30.
Taylor, Thomas M., assignor to Keystone Roofing Manufacturing Company, York, Pa. Drip sheet. 1,630,639; May 31.

May 31.

Taylor, Thomas P., Co. (See Hammond, Myron B., assignor.)

Taylor Tilting Light Company, The. (See Pfelfer, Ferdinand, assignor.)

Taylor-Wharton Iron and Steel Company. (See Andrews, Charles B., assignor.)

Taylor-Wharton Iron & Steel Company. (See Hopfield, Lewis D., assignor.)

Taylor, William, and F. W. Preston, Leicester, England. Method of and apparatus for polishing. 1,624,290; Apr. 12.

Mathor William C., assignor to Corning Glass Works.

Taylor, William C., assignor to Corning Glass Works, Corning, N. Y. Glass composition, 1,615,247, Jan. 25. Taylor, William C., assignor to Corning Glass Works, Corning, N. Y. Glass composition, 1,652,259; Dec. 13. Taylor, William E., East Orange, N. J., assignor to American Can Company, New York, N. Y. Method and apparatus for making can bodies, 1,622,529; May 17 Taylor, William J., North Chicago, III., assignor to Standard Conveyor Company, St. Paul, Minn. Portable elevator, 1,645,545; Oct. 18. Taylor, William J., North Chicago, III., assignor to Standard Conveyor Company, St. Paul, Minn. Portable elevator, 1,645,545; Oct. 18. Taylor, William L., Cincinnati, Ohio. Multiplex bag and making H. 1,632,621; June 4. Seeler Co., Ltd., Sattle Creek, Mich. Filling and weighing machine, 1,648,077; Nov. 8. Taylor, William M., et al. (See Larsh, John M., assignor, William M., et al. (See Larsh, John M., assignor, 10).

Taylor, William M., et al. (See Larsn, John M., assignor, Daylor Wordsworth and Company. (See Layland, W. E., and Whitehead, assignors, Teaby, Garvin, assignor, Oscar W. (See Haman Heights, assignor to The White Motor Company, Cleveland, Ohio. Folding top for vehicles. 1,627,716; May 10.

Teague, Merwyn C., Elmburst, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Machine for dispersing various solids and liquids. 1,624,567; Apr. 12.

Taylor and Stabilizing Latex and Jaylor and American Rubber Company, East Cambridge, Mass. Thickening and stabilizing latex and product. 1,634,124; June 28.

Teanen, James M., Detroit, Mich. finghing tarks. 1,634,524; July 5.

Tearre. Albert R., Lakewood, assignor to J. C. Miles, Reifc751; Sept. 71.

Te Aroha Dairy Company Limited, The. (See Murray, Henry L., assignor). Tebaldi, Alessandro, Milan, Italy. Valve piston. 1,642,596; Sept. 13.

Technical Class Company, The. (See Anderson, William Peterson Stees of Stees Company).

A., assignor.)
Technical Glass Company. (See Netschert, Franz, as-

Technicolor Motion Picture Corporation. (See Andrews, Jarvis M., assignor.)
Technicolor Motion Picture Corporation. (See Ball,

Jarvis M., assignor.)

Jechnicolor Motion Picture Corporation. (See Ball, Technicolor Motion Picture Corporation. (See Comstock, Daniel F., assignor.)

Technicolor Motion Picture Corporation. (See Troland, Leonard T., assignor.)

Technicolor Motion Picture Corporation. (See Troland, Leonard T., assignor.)

Technicolor Motion Picture Corporation. (See Troland, O., Boberg, and Testrup, assignors.)

Technicolor Motion Picture Corporation. (See Söderlund, O., Boberg, and Testrup, assignors.)

Technicolor Motion Picture Corporation. (See Söderlund, O., Boberg, and Testrup, assignors.)

Tedeschi, Virgillo, Buenos Aires, Argentina. Circuit closer, 1,650,968; Nov. 29.

Tedman, Hudson A., assignor to Winslow Boiler & Enternation, 1988, 1

Teel, Vernen, Trousdale, Okla. Cushion for chair rock-ense, 1,636,290; up 1 Toto, Hagerstown, Ind. Mechanism for slotting piston-ring castings, 1,621,1890; Dec. 6. Teetor, Daniel C., Tipton, Ind. Piston ring. 1,622,710; Apr. 5.

Tector, Baiel C., Tipton, Ind. Piston ring. 1,623,710; Apr. 5.
Tefft, Ivan D., assignor to The Wahl Company, Chicago, Ill. Fountain pen. 1,624,190; Apr. 12.
Teich, Ernest L., assignor to The American Hardware Corporation, New Britain, Conn. Hinge. 1,620,701; Mar. 15.
Telch, Ernest L., assignor to The American Hardware Corporation, New Britain, Conn. Door closer. 1,643,932, Sept. 27.
Teich, Ernest L., assignor to The American Hardware Corporation, New Britain, Conn. Knob or handle lock. 1,654,149; Dec. 27.
Teich, Ernest L., assignor to The American Hardware Corporation, New Britain, Conn. Knob or handle lock. 1,654,149; Dec. 27.
Teich, Ernest L., assignor to The American Hardware Corporation New Britain, Conn. Knob or handle lock. Telchmann, Albert, Zeitz, Germany. Safety device for elevators, conveyers, and like apparatus. 1,645,883; Oct. 18.

Corporation, New States of the Archael Hardware Lost-Assay Dec. 27. Teichmann. Albert, Zeitz, Germany. Safety device for elevators, conveyers, and like apparatus. J.645,883; T. Oct. 18.

1. Cett. 18

Tenney, Charles I., Ames, Iowa, and P. W. Thayer, Minne-apolis, Minn., said Thayer assignor to American Gas Construction Company, Newton, Iowa. Gas-pourifying Tenney, James A. (See Fletcher, O. H., and Tenney, Jensfeldt, Ernst, Charlottenburg near Berlin, Germany, Appliance for storing type bars. 1,648,203; Nov. 8. Tension Envolope Co. Inc. (See Swab, Jay G., assignor.) Teppenin, Jan, assignor to The Goodyear Tire & kubbar Aug. 2, Adren, Ohlo. Vulcanizing rubber. 1,627,780; Aug. 2, 200.

pema, Jan, assignor to The Goodyear Tire & Rubber ompany, Akron. Ohio. Vulcanizing rubber. 1,637,791;

Tepper, Sidney M., Cleveland, Ohio. Saw.

Oct. 4.
Teragawa, Takeo, Los Angeles, Calif. Dental vibratory matrix. 1,621,762; Mar. 22.
Terasawa, Takeo, Los Angeles, Calif. Dental vibratory Teragawa, Takeo, Los Angeles, Calif. Dental vibratory matrix. 1,634,059; June 28.
Ter Cock, Chris, Naarden, Netherlands. Automatic lighting device for motor cars. 1,652,888; Dec. 13.
Tereau, Russell, St. Paul, Minn. Nozzle. 1,631,167; June 7.

June 7.

Terbune, Herman R., Ridgewood, N. J., assignor to Skehan & Sweeny, Inc., New York, N. Y. Printed fabric or similar article. Des. 72,076; Feb. 22.

Terkelsen, Andrew. (See Derry, Jasper, assignor.)

Ter Meer, Gustaw, Hanover-Linden, Germany. Centrifugal separator. 1,651,421; Dec. 6.

Terna, Gea L., Detroit, Mich. Drafting and lay-out instrument. 1,618,788; Feb. 22.

Strument. 1,618,788; Feb. 22.

Grew C., assignor.)

Ternstedt Manufacturing Company. (See Archer, Thomas P., assignor.)

, assignor.)

P., assignor.)
Ternstedt Manufacturing Company. (See Archer, T. P., and Edgar, assignors.)
Ternstedt Manufacturing Company. (See Archer, T. P., and Heintz, assignors.)
E., assignors.)
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Terraz, Symphorian, assignor to the Trustees of Assumption College, Worcester, Mass. Sun dial.
Terrell, Charles A., et al. (See Wood, Joseph E., assignor.)

Terrell, C signor.)

regul, John. (See Vaughan, J. B., and Terrell.)
Terrill, John. (See Vaughan, J. B., and Terrell.)
Terrill. Earl B., Colchester, Ill. Ammonia compressor.
1,651,255; Nov. 29.
Terrisse, Henri, ana M. Lévy, Geneva. Switzerland. Recovering hydrochloric acid. 1,633,577; June 25.
Terry, Charles H., Cluchnati, Ohio. Collapsible core.
1,631,864; June 7.

1,631,838; June 7.

Terry, Charles H., Cincinnati, Ohio. Mold for forming hollow panels. 1,631,839; June 7.

Terry, Charles M., (See Cory, R. C., and Terry.)

Terry, Charles M., assignor to A. W. Cash Company, Decatur, III. Automatic regulating means for steam plants. 1,653,324; Dec. 20.

Terry, E. (See Winge, William W., assignor.)

Terry, Frank G., Salinas, Calif. Thrashing machine. 1,636,578; July 13.

Terry, Frank G., Salinas, Calif. Thrashing machine. 1,636,578; July 13.

1,636,578; July 19.
Terry, Frederick P., Alameda, Calif. Furnace igniter, 1,631,348; June 7.
Ferry, George A., Buffalo, N. Y. Dental handpiece wrist-joint guard. 1,632,860; June 21.
Ferry, George A., Buffalo, N. Y. Dental handpiece. 1,638,175; Aug. 9.
Ferry, Joseph T., Leadville, Colo., assignor of one-half to T. H. Sheridan, Chicago, Ill. Treatment of ores. 1,627,882; May 10.

Terry, Matson C., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Balancing machine. 1.639.444: Aug. 16.
Terry, Roger V., Hilton Village, Va., assignor to Newport News Shipobuiding and Drydock Company. Hydraulic turbine. 1.647.156; Nov. 1.
Terry, Walter K. (See Stahle, L. R. D., Wilson, Terry, and Hull.)

and rull.)

Tersh. Edward W. (See Kloss, Vitalis M., assignor, of Tershilliger, Charles O., Beacon, assignor to F. v. Briesen, trustee, New York, N. Y. Resin and making the same. 1,624,082; Apr. 12.

Terwilliger, Charles O., Beacon, assignor to F. v. Briesen, trustee, New York, N. Y. Resin and making the same. 1,624,638; Apr. 12.

Terwilliger, Gerald D. (See Moses, E. Q., Terwilliger, and Hammond.)

and Hammond.)
Terwilliger, Laura E. M., executrix. (See Moses, E. Q.,
Terwilliger, and Hammond.)
Terwilliger, Seely M., and W. T. Sevener, Los Angeles,
Calif. Direction signal. 1.647,880; Nov. 1.
Terwilliger, William G., Highland, N. Y., and J. Scudder,
Brookline, Mass. Carton. 1.652,746; Dec. 13.
Terziev, George N. (See Sundstrom, C., and Terziev.)

Tesche, Heinrich, and A. Job, Elberfeld, near Cologne, Germany, assignors to Grasselli Dyestuff Corporation, New York, N. Y. Anthraquinone-nitrosamine compound. 1.643,428; Sept. 27. Tescher, Samuel, Denver, Colo. Unit for crushing and distributing powdered stone in coal mines. 1,631,233; June 7.

June 7.
Tesk, John A., Chicago, Ill. Bracket. 1,634,162; June 28.
Tessier, Charles O. (See Stay, T. D., and Tessier.)
Tessier, Julien, assignor to Eastman Kodak Company,
Rechester, N. Y. Light-modifying device for cameras.
1,613,263 Jan. 4.
Tessier, Julien, assignor to Eastman Kodak Company,
Robieter, N. Y. Motion-picture apparatus. 1,623,506;

Rochester, N. Y. Motion-picture apparatus, 1,623,505; Apr. 52.
Tessky, Karl, Esslingen-on-the-Neckar, Germany. Clutch. 1,623,025 Apr. 42.
1,624,025 Apr. 42.
Test, Rocholas, New York, assignor to Intertype Corporation, Brooklyn, N. Y. Typographical machine, 1,622,982; Mar. 29.
Testin, Nicholas, New York, assignor to Intertype Corporation, Brooklyn, N. Y. Typographical machine, 1,622,982; Mar. 29.
Testing, Nils. Gee Groeniger, W. C., and Testrup, Nils. Gee Söderlund, O., Boberg, and Testrup, Nils. Gee Söderlund, O., Boberg, and Testrup, Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, Testrup, General Motor Company. Gee Zolleis, John G., assignor, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 15.
Testrup, Nils. Gee, Söderlund, O., Boberg, and Testrup, 1649,265; Nov. 1649,265;

Techaff, Esplania A., Berwyn, Ill., assignor to Witter, Manufacturing Co. (Electric switch. 1,644,797; Oct. 11.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Bottle-capping machine. 1,622,599; May 24.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Bottle closure and producing the same. 1,635,511; July 12.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Bottle closure and producing the same. 1,635,512; July 12.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Bottle closure and producing the same. 1,635,512; July 12.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Closure-applying machine. 1,635,513; July 12.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Closure-applying machine. 1,635,514; July 12.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Closure-applying machine. Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Bottle-capping machine. Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Bottle-capping machine. 1,649,206; Nov. 15.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Conveyer. 1,649,267; Nov. 15.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill.

Nov. 15.

Tevander, Olof N., assignor to Standard Cap & Seal Corporation, Chicago, Ill. Conveyer. 1,651,981;

Corporation, Chicago, Ill. Conveyer. 1,651,981; Corporation, Chicago, Ill. Cop for covering the opening ends of Jars, cans, etc. 1,618,393; Feb. 22.

Tevander, Swan N., Maywood, Ill., assignor to American Components, New York, N. Y. Apparatus for and process of lining can ends. 1,614,023; Jan. 11.

Tevander, Swan N., Maywood, Ill., assignor to Swan Metallic Seal & Cap Company. Machine for sealing caps to Jars and cans. 1,646,564; Oct. 25.

Tew, James D., Hudson, Ohlo, assignor to The B. F. Good-rich Company, New York, N. Y. Making rubber to the Company, New York, N. Y. Vulcanizing method and apparatus. 1,631,707; June 7.

Tew, William W., Banks, Ala. Spring wheel. 1,618,689; Feb. 22.

and apparatus. 1,631,707; June 7.
Tew, William W., Banks, Ala. Spring wheel. 1,618,689;
Feb. 22.
Tew, William W., Brundidge. Ala. Safety device for
vehicles. 1,637,133; July 26.
Tewksbury, Dana S., and A. E. Newton, Kankakee, III.
Furnace-door-operating device. 1,613,490; June 7.
Tewksbury, Dana S., and A. E. Newton, Kankakee, III.
Furnace-door mounting. 1,631,840; June 7.
Texas Company, The. (See Bader, Joseph P., assignor.)
Texas Company, The. (See Burlingham, James H., assignor.)

Texas Company, The.
Texas Company, The. (See de Florez, Luis, assignor.) (See Dimmig, Howard, assignor.) (See Drake, Rollin L., assignor.) (See Fitzpatrick, John, assignor.) (See Hadaway, William S., jr., as-

Texas Company, The. (See Hall. Frank W., assignor.) Texas Company, The. (See Holmes, Ralph C.,

signor.)
Texas Company, The.
Behimer, assignors.)
Texas Company, The. (See Holmes, R. C., Manley, and (See Manley, Frederick T., as-Texas Company, The. (See Noel, Frank C., assignor.)

Texas Company, The, (See Tayeau, René de M., as- l signor.)
Texas Company, The. (See Walker, George D., assignor.)
Texas Company, The. (See White, George D., assignor.)
Texas Company, The. (See Wolcott, Edson R., assignor.)
Texas Gulf Sulphur Company. (See Kobbe, William H., Texas Gulf Sulphur Company. (See Schwab, James W., assignor.) exas Gulf Sulphur Company. (See Stewart, Robert H., xas Iron Works Sales Corporation. (See Grattan, Joseph G., assignor.) oh G., assignor.)
Electric Sign Co. (See Wineburgh, Henry H.,

assignor.)
Textile Machine Works. (See Brumbach, Alvin L., as-

restrice Machine Works: (See Janssen, Henry, assignor.)
Textile Publishing Company. (See Hurst, Albert E., as-Textile Rubber Company, The. (See Teed, Earl S., as-

Texto* Metal Art Products Co. (See Goldberg, Abraham, assignor.) a. Goldschmidt A.-G. (See Guertler, W., and Sander,

assignor.)
Th. Goldschmidt A.-G. (See Guertler, W., and Sander, assignors.)
Th. Goldschmidt A.-G. (See Teller, S. J., and Thacher.)
Thacher, John J. (See Teller, S. J., and Thacher.)
Thacher, John J., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Chip and blank separator for lathes. 1.616,151; Feb. 1.
Thacher, John J., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Forming attachta the thing Company, New York, N. Y. Automatic Lathe. 1.616,153; Feb. 1.
Thacher, John J., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Automatic Thacher, John J., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Automatic Thacher, John J., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Bushing-turning attachment for automatic lathes. 1,645,123; Thacher, John J., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Bushing-turning attachment for automatic lathes. 1,645,123; Thachen, Gerbard M., Reading, Pa. Bell 1,651,303; Nov. 29.
Thaden, Gerbard M., Reading, Pa. Bell 1,651,303; Nov. 29.
Thaden, Gerbard M., Reading, Pa. Bell support. 1,653,688; June 28.
Thacard, George E., Home Gardens, Calif. Unpluggable Thacard, George F., Home Gardens, Calif. Unpluggable

That the state of the state of

Thal, Adolph F., Chicago, Ill. Treating soap. 1,633,689;

Thal. Adolph F., Chicago, III. Treating soap. 1,633,689; June 28.

Thai, Paul E., Chicago, III. Cyllnder and valve testing device. 1,649,094; Nov. 22.

Thailhammer, Karl W., Los Angeles, Callif. Tripod construction. 1,650,744; Nov. 29.

Thailheimer, Nicholns C., assignor to Union Metal Products Company, Chicago, III. Diaphragm buffer mechanism of the company Chicago, III. Diaphragm buffer mechanism construction. Thailmeimer, Nicholas C., Chicago, III., assignor, by mesne assignments, to Railway Metal Products Company, Sliding door opening and closing mechanism. 1,649,622; Nov. 15.

Thartaldsen, Ellip, Christiania, Norway. Electric smelting, 1,648,622; Nov. 18.

The Chicago, Chicago, III., assignor to Dibue powder, 1,647,381; Nov. 1.

Thatcher, David, Cleveland, Ohlo. Liner. 1,614,326; Jan. 11.

Jan. 11.

Thatcher, Harry S., assignor to The Celite Company, Los Angeles, Calif. Filter aid and making same. 1,632,458; June 14.

Thatcher, J. H. (See Miller, Jesse P., assignor.)

Thatcher, Milo E., Los Angeles, Calif. Toilet-paper receptacle. 1,626,308; Apr. 26.

Thate, Herman. (See Mehler, A., and Thate.)

Thau, Walter B., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. System of control. 1,632,504; Dec. 13.

Thayer, Cecil A., Gary, Ind. Fishing reel. 1,632,522;

June 13.

There I. A., Gary, III. Fishing Feel. 1,652,522 .

There Fibrence J., Eddyville, Jowa. Curtain stretcher. 1538,9691; Aug. 9.

Thayer, Fred I., Farmington, N. H. Knot supporter for four-in-hand neekties. 1,623,448; Apr. 5.

Thayer-Loyd Corporation. (See Horn. Max, assignor.)

Thayer, Paul W. Minneapolis, Minn. Soot receptacle. 1,628,521; May 10.

Theiand, Victor E., and S. Wesselins. Grand Rapids Township, Kent County, Mich. Machine for mashing Theiand, Victor E., and S. Wesselins. Grand Rapids Township, Kent County, Mich. Machine for mashing Theiand, Oncome I., assignor to The Hooven, Owens, Reutschler, Company, Hamilton, Ohlo. Sugar-mill machinery. 1,640,060; Aug. 23.

Theilignand, Hoiger, Chicago, Ill., assignor to Electrograph Advertising Service, Chicago, Ill. Printing mechanism. 1,628,078; May 10.

Theis, Hugh H., Taylor, Tex. Automobile signal. 1,629,057; May 17. Theis, John et al. (See Cobros, John M., assignor.) Theiss, John H., Parlin, N. J. Dipping apparatus. 1,616,397; Feb. 1. Theleen, Oscar H., assignor to Frost Manufacturing. Company, Kenosha, Wis. Flushing mechanism. Themak. Edward, New York, N. Y. Liquid applicator. 1,633,424; June 21. Thener, Arthur F., assignor to Cupples Company Manufacturers, St. Louis, Mo. Silcing tubular articles. 1,654,021; Dec. 27. Manufacturers, St. Louis, Mo. Apparatus for counting and packing rings. 1,654,022; Dec. 27.

Apparatus for counting and packing rings. 1,654,022; Dec. 27.
Theobald, George A., and T. A. Olson, assignors to Pollock Pen Company, Boston, Mass. Die-casting machine. 1,645,167; Oct. 11.
Theobold, Charles H., St. Louls, Mo. Swimmer's hand paddle. 1,621,693; Mar. 22.
Theonett & Co. (See Netter, Jacob, assignor.)
Theophiledes, Aris, Jeannette, Pa. Cooking apparatus. 1,636,393; July 19.
Theirault, Alfred, Detroit, Mich. Caster. 1,649,087; Thermal Industrial and Chemical (T. I. C.) Research Company Limited. (See Morgan, John S., assignor.)
Thermal Industrial and Chemical (T. I. C.) Research Company Limited. (See Morgan, John S., assignor.)

Thermatomic Carbon Company. (See Uhlinger, Roy H., assignor.)
Thermic Generating Company. (See Carter, Mitchell,

assignor.) Thermo Electric Battery Company. (See Hermann, Otto.

Thermo Instrument Company, The. (See Bitzel, Andrew, assignor.)
Thermokept Corporation. (See Bach, Niels P., assignor.)
Thermokept Corporation. (See Malmquist, Adolph K.,

Thermokept Corporation. (See Rooney, Walter E., as-

signor.)
Thermokept Corporation. (See Willison, Walter W., as-

signor.) saley, assignor to Union Special Machine Com-hero, Chicago, Ill. Machine for overcasting the edges of fabrics. 1,625,633; Apr. 19. Theroz Company, The. (See Schaub, Jacob, assignor.) Therrien, A. J., & Co. (See Therrien, Adelard J., as-signor.)

signor.)
Therrien, Adelard J., assignor to A. J. Therrien & Co., Inc., Lynn, Mass.
Pattern holder for grading machines. 1.641,303 for 1.611,303 for 1.611,30

Oct. 18.
Thiel, Anton, and W. Schmidt, Bremen, Germany, Apparatus for measuring limbs. 1,622,899; Mar. 29.
Thiel, Louis, Cincinnati, Ohio, assignor to The Cincinnati Lathe and Tool Company. Lathe. 1,614.049; Jan. 11.
Thiel, Otto, Detroit, Mich., assignor to Silient Automatic Corporation. Motor-controlled valve. 1,642,291;

Sept. 13.
Thiel, Theodore. (See Fountain, A., Balzarini, and Thiel. Incourse. (See Fountain, A., Baizarini, and Thiel.)
Thiele. Adolph, Espanola, Wash. Support. 1,618,493;
Feb. 22.

Thiem. 2. Apr. 12.
Thiemsen, C., Rochester, N. Y. Anchoring flange.
Thieman, John H. (See Suek, A., and Thieman, Jinh H. (See Suek, A., and Thieman, Thieman, William B., Albert City, Iowa, Portable pneumatic elevating device. 1,619,277; Mar. 1.
Thieme, Otto, Hartford, Conn., assignor to Underwood Computing Machine Company, New York, N. X. Typewriting machine. 1,617,728; Peb. 15.

Thieme, Otto, Hartford, Conn., assignor to Underwood Computing Machine Company, New York, N. Y. Typewriting machine, 1,623,217; Apr. 5.
Thieme, Otto, Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Typewriting machine, 1,649,329; Nov. 15.

Thienemann, Heinz. (See Lueg, P., Drucker, and Thiene-

main.)
Thienemann, Heinz, Leverkusen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-theMain, Germany. Process for the prevention of adhesion
of the charge, during the activation of adhesion
of the charge, during the activation of carbon.
1,638,707; Aug.

Cowden, receiver, Dayton, Ohio. Partition unit and
construction, 1,629,367; May I. Die-casting machine.
1,638,717; Aug. 9.
Thiess, Karl. (See Wagner, H., Langbein, Beck, and
Thiess, Karl. (J. Müller, and E. Runne, Hochst-on-theThiess, Karl. (J. Müller, and E. Runne, Hochst-on-the-

Thiess, Karl, C. J. Müller, and E. Runne, Hochst-on-the-Main, and A. Schaeffer, Marxheim-on-the-Taunus, Ger-many, assignors to Grasselli Dyestuff Corporation, New York, N. Y. Thiolndigo vat dyestuffs and making same, 1,632,252 june 14. Thiessen, John F. Los Angeles, Calif. Combined ash tray and cigarette and cigar extinguisher. 1,640,584;

tray and together the Aug. 30 Thiese of the Aug. 31 Thiese of the Aug. 31 Thiese of the Aug. 32 Thiese of the

tachment for seed planters. 1,632,861; June 21. Thietten, William S., et al. (See Thietten, Frank, assignor.) Thieten, William S., et al. (See Thietten, Frank, assignor.) Control of the Control of the

pany, New York, N. Y. Steam Jany, New York, N. Y. Apr. 5.
Thom, Winzel W., A. S. T. Lagaard, and A. M. Walzer, Minneapolis, Minn., said Thom and said Lagaard, assignors to said Walzer. Game board. Des. 73,764;

Minneapolls, Minn., Said. 1998.

signors to said Walzer. Game board. Des. 73,764;
Nov. 1.

Thoma. Engen. Pforzheim, Germany. Soldering articles.

1,630,771; May 31.

1,630,771; May 32.

Thoma. Game bordland, Oreg. Instantaneous setting of glue between surfaces. 1,624,691; Apr. 12.

Thoma, Hans, Munich, assignor to Neufeldt & Kuhnke Betriebsgesellschaft m. b. H., Kiel, Germany. Relayarmature suspension. 1,629,324; May 17.

Thoman, Charles J. (See Hinckley, B. C., Thoman, and Holton.)

Thoman, Emile. (See Nuhrah, G. A., Thoman, and Rose-Thoman, George C., Columbus, Ohio. Gate valve. 1,650,969; Nov. 29.
Thoman, Frederick A., East Moline, assignor to Deere & Company, Moline. III. Plask for casting metallic experiments of the control of the cont

Sept. 6.
Thomas, Albert G. Lynchburg, Va.
Tube circuits. 1,652,880; Dec. 13.

Thomas, Albert J., Clinton, Ind. Reversible door latch and lock. 1,627,420; May 8.

Thomas & Armstrong Company, The. (See Pfelfer, Ferdinand A., assignor.)

Thomas, Arthur, Mont-sur-Marchienne, assignor to Ateliers de Constructions Electriques de Charlerol, Societe Anonyne, Brussels, Beiglum. Foundry-ladic crane.

Thomas, Arthur C., assignor to The Little Red Wagon Mfg. Co., Omaha, Nebr. Tractor dump wagon. 1,619,094; Mar. 1.

Thomas, Arthur E., Black Rock, Victoria, Australia. Thomas, Arthur E., E., London, Eagland. Spanner. 1,640,383; Aug. 30.

Thomas, Arthur E., Wayne, Mich. Door-operating mechanism. 1,645,168; Oct. 1,625,634; Apr. 19.

Thomas, Benjamin J., Shamokin, Pa. Self-adjusting valve lifter. 1,622,534; Apr. 19.

Thomas, Benjamin J., Shamokin, Pa. Self-adjusting valve lifter. 1,622,536; Apr. 5.

Thomas & Betts Co., The. (See Church, Lewis H., assignor.). Retris Co. The. (See Church, Lewis H., assignor.).

Signor.)
Thomas & Betts Co., The. (See Davis, A. P., and Buchanan, assignors.)
Thomas & Betts Co., The. (See Ledbetter, James C., as-

signor.) Thomas & Betts Co., The. (See McMurtrie, Adnah, as-

lomas & Betts Co., The. (See Strongson, Herman L., assignor.)
Thomas & Betts Co., The. (See Thomas, George C., jr., assignor.)

Thomas & Betts Co., The. (See Thomas, G. C., jr., and Church).
Thomas, Bruno, Seattle, Wash. Furnace for electrical treatment of gases for the purpose of oxidation of atmospheric nitrogen or for other purposes. 1,634,311; July 5.

Thomas, Burel, St. Louis, Mo. Safety device for rail-way crossings, 1,615,529; Jan. 25.

Way crossings, 1,615,529; Jan. 25.

Local College of the college o

Feb. 1.

Thomas, Durward D., Beckwith, Calif. Swage and raker gauge. 1.622/145; Mar. 29.

Thomas, Edward, Cleveland, Ohio, assignor to The American Steel and Wire Company of New Jersey. Take-up block. 1.625,506; Apr. 19.

Thomas, Edward G., assignor to Toledo Scale Company, Toledo, Ohio. Device for weighing sheet material. 1.619,163; Mar. 1.

Thomas, Edward G., assignor to Toledo Scale Company, Toledo, Ohio. Testing device. 1.619,164; Marc. 1.

Toledo, Ohio. Testing device. 1.619,165; Mar. 1.

Thomas, Edward G., assignor to Toledo Scale Company, Toledo, Ohio. Weighing scale. 1.619,165; Mar. 1.

Thomas, Edward G., assignor to Toledo Scale Company, Toledo, Ohio. Testing device. 1.639,818; Aug. 23.

Thomas, Edward G., assignor to Toledo Scale Company, Toledo, Ohio. Testing device. 1.639,818; Aug. 23.

Thomas, Edward G., assignor to Toledo Scale Company, Toledo, Ohio. Indeating device. 1.647,820; Nov. 1.

Thomas, Edward J. (See Grant, W. C., Thomas, and Drew.)

signor.)
Thomas Elevator Company. (See Wilson, Alexander H., assignor.)
Thomas, Elmer R., assignor of one-half to V. Harris, Shidler, Okla. Combination clamp. 1,645,463; Oct. 11.
Thomas, Elmer R., and P. E. Langitt, Shidler, Okla. Pump inck. 1,628,692; May 17.
Thomas, Errold B., Newton, assignor to Thomas Products, Inc., Boston, Mass. Sanitary napkin or the like. Rel5,663; Apr. 19.
Thomas, Frederick, Philadelphia, Pa. Steam trap. 1,619,898; Mar. 8.

1.619,989; Mar. 8.
Thomas, Frederick, Philadelphia, Pa. Creasing and folding machine. 1,620,986; Mar. 15.
Thomas, Frederick, assignor to Rhode Island Braiding Machine Company, Philadelphia, Pa. Hemmer for sewing machines. 1,625,758; Apr. 19.
Thomas, George B. (See Catlin, H., and Thomas)
Thomas, George B. (See Catlin, H., and Thomas)
Thomas, George B., Com. Rotary samp switch 1,621,340; Mar. 15.
Thomas, George B., assignor to The Bryant Electric Company, Bridgeport, Conn. Electric switch. 1,628,480; May 10.

Thomas, George B., assignor to The Bryant Electric Com-pany, Bridgeport, Conn. Electric switch. 1,631,841; June 7.

Thomas, George B., assignor to The Bryant Company. Bridgeport, Conn. Canopy fixture. Thomas, George B., assignor to The Bryant Company. Bridgeport, Conn. Canopy 1,652,066; Dec. 6.
Thomas, George C., Malden, Mass, assignor to Converse Rubber Shoe Co. Arettle or gatter. 1,626,687; Apr. 26.

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Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1.644,292; Co., Elizabeth, N. J. Cable connecter. 1,644,293;

Oct. 4.
Thomas, George C., jr., assignor to The Thomas & Betts
Co., Elizabeth, N. J. Cable connecter. 1,644,293;
Oct. 4.
Thomas, George C., jr., assignor to The Thomas & Betts
Co., Elizabeth, N. J. Cable connecter. 1,644,295;
Oct. 4.
Thomas, George C., jr., assignor to The Thomas & Betts
Co., Elizabeth, N. J. Cable connecter. 1,644,296;

Co., Elizabeth, N. J. Cable connecter. 1942, 1960, Oct. 4. Co., Elizabeth, N. J. Cable connecter. 1,644,297; Oct. 4. Cable connecter. 1,644,297; Oct. 4.

Oct. 4. George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,644,303; Oct. 4. Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,644,304;

Co. Elizabeth, N. J. Cable connecter. 1, Co., Elizabeth, N. J. Cable connecter. 1, Th

Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,644,313; Co., E

Oct. 4.
Thomas, George C., jr., Elizabeth, and L. H. Church, Roselle, assignors to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1.644,699; Oct. 4.
Thomas, George E., Philadelphia, Pa. Fermentation apparatus. 1.633.618; June 28.
Thomas, George J., South Bend, Ind., assignor to Bendix Brake Company. Universal joint. 1,632.202; June 14.
Thomas, George J., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,635,100;

Thomas, George J., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake, 1,635,100; July 5.

Thomas, George M., Philadelphia, Pa. Constant-surface-speed talking machine. 1,827,353; May 2.

Speed talking machine. 1,827,353; May 2.

Speed talking machine. 1,827,353; May 1.

Thomas, George P., Glenshaw, Pa. Metal-punching apparatus. 1,637,013; July 26.

Thomas, Gorge P., Glenshaw, Pa. Metal-punching mathomas, George P., Genshaw, Pa. Metal-punching mathomas, George P., Genshaw, Pa. Metal-punching mathomas, George P., Genshaw, Pa. Metal-punching mathomas, George P., W. P., Wade, and F. B. Ruwwe, Eagle Lake, Tex. Grain loader. 1,618,155; Feb. 15.

Thomas, Guy M., et al. (See Rouse, George M., assignor.) Thomas, Harry W., Indiana, Pa. Dish or analogous article. Des. 72,641; May 10.

Thomas, Henry, Grain George, P., and Thomas, Henry, Riddey Park, assignor to Sun Oli Complex Computer of the Compu

vice f

Oct. 20.

Thomas, Howard L., Circleville, Ohio. Fence post. 1.643.100; Sept. 20.

Thomas, Hubert S., Llandaff, and W. R. Davles, Whitchurch. Wales. Machine for doubling tin plates. 1.617,880; Feb. 15.

Thomas, Hubert S., Llandaff, and W. R. Davles, Whitchurch, Wales. Machinery employed in the shearing of metal plates or sheets. 1.619,884; Mar. 1.

Thomas, I. P., & Son Company. (See Wedge, Utley, as-

Thomas, Idris. (See Yaughn, F. B., and Thomas.)
Thomas, James A., Albert Lea, Minn. Pilot light.
1,613,664; Jan. 4.
Thomas, James A., Albert Lea, Minn. Pilot light.
1,613,664; Jan. 4.
Thomas, James A., Albert Lea, Minn. Pilot light.
1,655,601; Nov. 22:
Thomas, James A., Albert Lea, Minn. Pilot headlight.
Thomas, John C., P. Halliday, and A. Hill, jr., Sulligent, Ala. Heater. 1,652,067; Dec. 6.
Thomas, John (See Wylam, B., Harris, and Thomas.)
Thomas, John C. (See Dyer, J. G., and Thomas.)
Thomas, John W., Woodstock, N. Y. Kindling device.
1,651,165; Nov. 29.
Thomas, Judson R., Hamilton, Mont. Hoe. 1,613,144;
Jan. 4.
Thomas, Laurence II. (See Kuhn, F., and Thomas.)
Thomas, Laurence II. (See Kuhn, F., and Thomas.)
Thomas, Laurence II. and F. Kuhn, assignors to American Electrical Heater Company, Detroit, Mich. Machine for making asbestos-covered wire. 1,645,884;
Thomas-Morse Aircraft Corporation.

Oct. 18:
Thomas-Morse Aircraft Corporation. (See Thomas, Benjamin D., assignor.)
Lotte State Sta

Thomas, Phillips, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Glow-discounting Company. Glow

May 3.

Thomas, Phillips, Edgewood, Pa., assignor to Westing, house Electric & Manufacturing Company. Glow-discharge microphone. 1,262.6348; May 3.

Thomas, Phillips, Edgewood, Pa., assignor to Westing, house Electric & Manufacturing Company. Electrode holder for glow-discharge transmitters. 1,630,454; May 31

May 31.
Thomas, Phillips, Edgewood, Pa., assignor to Westing-house Electric & Manufacturing Company, Glow-discharge microphone. 1,638.893; Aug. 16.
Thomas, Phillips, Edgewood, Pa., assignor to Westing-house Electric & Manufacturing Company. Constant-current glow-discharge microphone. 1.654.352; Dec. 27.
Thomas Froducts, Inc. (See Thomas, Errold B., as-

Thomas Products, Inc. (See Thomas, Errold B., assignor.)
Thomas, R., & Sons Co., The. (See Eckert, Grandon E., assignor.)
Thomas, R., & Sons Company, The. (See Kauffman, Abram E., assignor.)
Thomas, Seth. (clock Co. (See Wehrle, Frank X., assignor.)

Thomas, Sydney E. (See Quick, W., Thomas, and Berwick.)

signor.)
Thomas, Sydney E. (See Quick, W., Thomas, and Berwicks, Thomas C., Evanston, III., assignor to The
Vicks, Thomas C., Evanston, III., assignor to The
Youngstown Sheet and Tube Company, Youngstown,
Ohio. Making well points. 1,625,340; Apr. 19.
Thomas, Thomas H., Edgewood, assignor to The WestInghouse Air Brake Company, Wilmerding, Pa. Trainhouse Air Brake Company, Wilmerding, Pa. Benegency-valve device. 1,612,892; Jan. 4.
Thomas H., Edgewood, assignor to Westinghouse
Air Brake Company, Wilmerding, Pa. EnciThomas Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Loadbrake device. 1,649,044; Nov. 15.
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Loadbrake device. 1,649,044; Nov. 15.
Thomas, Thomas H., Edgewood, assignor to
The Westinghouse Air Brake Company, Wilmerding, Pa. Electroppeumatic brake. 1,652,130; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to The
WestInfomas, Thomas H., Edgewood, assignor to
The Westtroppeumatic brake. 1,652,132; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to
The Westtroppeumatic brake. 1,653,135; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to
The Westtroppeumatic brake. 1,653,135; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to
The Westtroppeumatic brake. 1,653,135; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to
The Westtroppeumatic brake. 1,653,135; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to
The Westinghouse Air Brake Company, Wilmerding, Pa. Electroppeumatic brake. 1,653,135; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to
The Westinghouse Air Brake Company, Wilmerding, Pa. Electroppeumatic brake. 1,653,135; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to
The Westinghouse Air Brake Company, Wilmerding, Pa. Electroppeumatic brake. 1,653,135; Dec. 20.
Thomas, Thomas H., Edgewood, assignor to
The Westinghouse Air Brake Company, Wilmerding, Pa. Electroppeumatic brake. 1,653,135; Dec. 20.
Thomas, Thomas H., Edgewood, assignor

Thomas, Thomas H., Eugewood, assigner to the inghouse Air Brake Company, Wilmerding, Pa. Filadinghouse Air Brake Company, Wilmerding, Pa. Filadinghouse Thomas T. See Marden, J. W., Thomas, and Conley, Thomas, Walter H., Spencer, Iowa. Foot throttle control. 1,619.319; Mar. I. Freiliand Fin. Combined airplane Thomas, Walter L., 160,787; Mar. 15.
Thomas, Welley A., Memphis, Tenn. Combined airplane Thomas, Welley A., Memphis, Tenn. Combined airplane Thomas, Welley A., Memphis, Tenn. Combination ladder and seat. 1,618,357; Feb. 22.
Thomas, William, assignor to Dempster Mill Manufacturing Company, Beatrice, Nebr. Twin-pump unit. 1,613,401; Mar. A., assignor to Central Machine Company, Inc., Philadelphia, Pa. Quick-recharging top for grease guns. 1,653,594; Dec. 20.
Thomas, William C., assignor to The John W. Brown Manufacturing Company, Columbus, Ohio. Vehicle head anny. 1,659,550 Nasignor, Science, Science, Science, C., Thomas, William C., (See Turrell, J. E., and Thomas.) Thomas, William H., 3d, Little Falls, N. Y. Automatic temperature control valve for liquids or steam. 1,634,528; July 5.
Thomas, William T., (See Dowd, Raymond E., assignor,) Thomas, William T., assignor, by mesne assignments, to Jimmond Power Specialty Corporation, Detroit, Mich. Boller cleaner. 1,644,517; Aug. 23.

1,646,887; Oct. 25.
Thomason, John T., Carlton, Oreg. Fruit drier. 1,624,630;
Thomason, John P., Phoenix, Ariz. Vibration check for automobiles. 1,612,540; Jan. 4.
Thomason, Pierce H., Los Angeles, Calif. Wall partition. 1,618,768; Feb. 8.
Thomilison, Williamson, Villagor, Calif. Wall partition. 1,618,768; Feb. 8.
Thommel, Georg. (See Colditz, W., and Thommel.)
Thompson, Aksel R., New York, N. Y., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill.
Bowling-alley pin spotter. 1,621,566; Mar. 22.
Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Segregating packaged goods undergoing treatment. 1,612,693; Jan. 4.
Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Can feeder. 1,621,611;
Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Can derson-Barngrover Mfg. Co., San Jose, Calif. Can derson-Barngrover Mfg. Co., San Jose, Calif. Vertical cooler. 1,651,912; Dec. 6.

Thompson, Albert W., Miami, Fla. Fruit-juice extractor. 1,649,755; Nov. 15. Thompson, Allison G., et al. (See Ward, Andrew W., as-

Thompson, Arthur A., assignor of one-half to E. R. Mc-Ginnis, Oakland, Calif. Ear protector. 1,619,772;

Hillings, Oakland, Calif. Ear protector. 1,615,772; Mar. 1, Mar. 1, Mar. 1, Mar. 1, Mar. 1, Mar. 1, Mar. 2, Mar. 1, Mar. 2, Mar. 3, Mar. 2, Mar. 3, Mar. 3, Mar. 3, Mar. 1, Mar. 2, Mar. 2, Mar. 1, Mar. 2, Mar. 2, Mar. 3, Mar. 1, Mar. 2, Mar. 3, Ma

Dec. 13.

Thompson, Charles F., Youngstown, Ohio. Eye shield.
1.637,092; July 26.

Thompson, Charles H., Ojal, Calif. Cuspidor. 1,615,729;
Jan. 25.

Thompson, Charles H., assignor to Yarnall-Waring ComThompson, Christian J., Peshtigo, Wis. Boat-hull construction. 1,637,973; Aug. 2.

Thompson, On N., Syracuse, assignor to Pass & Seymore fac. Solay, N. Y. Electric-lamp socket.

Thompson, Donald C. (See Miles, F. J., and Thompson,
Drompson, Douald C. (See Miles, F. J., and Thompson,
Eugene A., et al. (See Ruoff, Leroy R., assignor.)

signor.)
Thompson, Fayette L., Portland, and C. A. Sloper, Rainier, Oreg. Toy and operating mechanism therefor. 1,621,140; Mar. 15.
Thompson, Fearing S., Springfeld, III. Multiple spacer, 1,643,988; Oct. 4.
Thompson, Frank E., Pierson Station, III. Snowplow. 1,621,040; Mar. 15.
Thompson, George K., Summit, N. J. Roof-gutter bracket.
Thompson, George K., Summit, N. J. Car truck.
1,616,134; Feb. 1.

Thompson, George K., Maplewood, N. J., assignor to American Telephone and Telegraph Company. Time-announcing system. 1,618.242; 79b. 22. Thompson, George K., Maplewood, N. J., assignor to American Telephone and Telegraph Company. Clean-ing device for dials of telephone instruments. 1,639,819; Aug. 23.

Thompson. George T., Lake City, Colo. Tent support. 1,645,855, Cor. 18, W., Pittsburgh, Fa. Pipe wrench. 1,626,985, May 3.
Thompson, George W., Cheboygan, Mich., assignor to Blifex Products Company. Controlling means for ignition cut-offs. 1,629,554; May 24.
Thompson, Haroid D. (See Curne, G. O., Jr., and

Biffex Products Company. Controlling means for quartion cut-offs. 1,628-654; May 24.

Thompson, Harroid B. (See Curme, G. O., fr., and Discount of the Company of the Compa

June 21.
Thompson, Howard A., Edgewood Borough, and C. W. Failor, Pittsburgh, assignors to The Union Switch & Signal Company, Swiswaie, Pa. Railway-traffic-controlling apparatus. 1,638,379; Dec. 20.
Thompson, James H., Bollidays Cove, W. Va. Electron-discharge device. 1,627,127; May 3.
Thompson, James H., Trenton, assignor to Hussong Dyeling Machine Company, Groveville, N. J. Yarn rack for dyeing machines. 1,614,410; Jan. 11.
Thompson, James J. (See Ellenburg, Joseph N., assignor.)

signor.)
Thompson, Jink, Huntington, W. Va. Ice-cream disher.
1.645.208; Oct. 11.
Thompson, John A. (See Whitchurst, Calvin A., assignor.)

Signor.)

Thompson, John L. Waterbury, Conn. Shoe-polishing machine. 1,623,218; Apr. 5.

1,613,364; Jan. A., Edgewood, Iowa. Glareshield. 1,613,364; Jan. Thompson, John M. Thorpe, Iowa. Gate-supporting means. 1,616,558; Feb. 8.

Thompson, John M. and W. H. Buffalo, N. Y. Pipe-cleaning apparatus. 1,612,842; Jan. 4.

Thompson, John M. and W. H., Buffalo, N. Y. Device for passing cables through pipe lines. 1,620,788; Thompson, John M. and W. H., Buffalo, N. Y.

for passing cables through pipe lines. 1,626,788; Mar. 15.
Thompson, John M. and W. H., Buffalo, N. Y. Pine-line-cleaning device. 1,631,562; June 7.
Thompson, Kenworthy J., Mansfield. Ohio. Tread-band-building machine. 1,649,933; Nov. 22.
Thompson, Lexier M., Taylorville, Ill. Tractor. 1,613,681; Jan. 11.
Thompson, Lexier M., Taylorville, Ill. Tractor. 1,613,681; Jan. 11.
Thompson, Lewis I., Portland, Oreg. Machine for separating threads from fabric. 1,628,373; May 10.
Thompson, Lincola, Naugatuck, and J. B. Marshall, Westport, assignors to The Bristol Company, Water-and Company, Water-and Company, Carlon, 1,613,691, Jan. 18.
Thompson, Lincola, Naugatuck, Jan. 18.
Thompson, Lindsay, Toronto, Ontario, Canada. Collapsible display box. 1,614,811; Jan. 18.
Thompson, Louis B., Marshall, Mich. Watch holder. 1,613,492; Jan. 4.
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Flow meter and the like.
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Induction voltage regulator. 1,635,060; July S.
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Moisture meter. 1,645,077; Oct. 11.
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Moisture meter. 1,645,077; Oct. 11.
Thompson, Louis W., Schenectady, N. Y., assignor by Messac assignments, to Balley Meter Company. Flow

Oct. 11.
Thompson, Louis W., Schenectady. N. Y., assignor, by mesne assignments, to Balley Meter Company. Flow meter. 1.650.664; Nov. 29.
Thompson Manufacturing Company. (See Thompson, Walter V. E., assignor.)
Thompson, Milton D., Fairhaven, Mass. Propeller. 1,628,086; Apr. 26.

Thompson, Ole W., Durkee, Oreg. Crank shaft, 1,630,038; May 24.
Thompson, Olof, New York, N. Y., assignor, by mesne assignments, to Splitdorf-Bethlehem Electrical Company, Newark, N. J. Magneto generator, 1,626,367; Apr. 26.
Thompson, Orville W., assignor to Jas. P. Marsh & Company, Chicago, III. Gauge, 1,634,102; Dec. 27.
Thompson, Otto W., Chicago, III. Lawn rake, 1,612,894; Jan. 4.

Thompson, Otto W., Chicago, Ill. Lawn rake. 1,652.260;

13. son, Paul H. (See Bradford, R. H., La Barr, and Thompson, P.

Thompson, Perce D., Tulsa, Okla. Tongs. 1,614,328; Jan, 11. Thompson Products Inc. (See Bissell, Richard E., as-

signor.)
Thompson Products Inc. (See Graham, Matthew P., as-

signor.)
Thompson Products Inc. (See Hufferd, George H., as-

signor.)
Thompson, Ray A., assignor to Alumoyd Sign & Signal Co., Chicago, Ill. Sign. 1,648,268; Nov. 15.
Thompson, Robert et al. (See Moore, S., and Sheets, assignors.)
Thompson, Robert D. (See Penrod, John, assignor.)

signors.)
Thompson, Robert D. (See Penrod, John, assignor.)
Thompson, Robert D. (See Penrod, J., and Thompson.)
Thompson, Robert G., et al. (See Bell, Frank M., assignor.)

signor.)
Thompson, Roy S., Bay Village, Ohio. Greenhouse-bar painter. 1,645,976; Oct. 18.
Thompson, Russell G., and C. W. Crumrine, assignors, by mesne assignments, to North East Appliances, Inc., Rochester, N. Y. Power mechanism. 1,646,465;

Phompson, Russell G., and C. W. Crumtine, assignors, by mesne assignments, to North East Appliances, Inc., Rochester, N. Y. Power mechanism. 1,646,465; Thompson, Theodore, assignor of one-half to A. V. Brown, Ely, Minn. Razor-strop stretcher. 1,624,851; Apr. 12. Thompson, Thomas Brightton, Iowa. Ladder. 1,643,649; Sept. 27.
Thompson, Thomas E., Los Angeles, Calif. Self-checking test device. 1,644,160; Oct. 4.
Thompson, Thomas E., assignor of one-half to A. B. Wilson, Control of the Armonic Control of

Thompson, Willam D., Dorchester, Mass., assignor, by mesne assignments, to Holophane Company, Inc. New York. N. Y. Illuminating appliance. 1,654,150; Dec. 27.
Thompson, The Quay, Wexford, Ireland. Division of feeding troughs for tied cattle. 1,652,068; Dec. 6.
Thompson, William D., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Carbody construction. 1,630,648; May 31.
Thompson, William D., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Carchody Company, Detroit, Mich. Carchody Company, Detroit, Mich. Carwall construction. 1,642,050; Dec. 1,640,912; Aug. 30.
Thompson, William D., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Carwall construction. 1,642,760; Detroit, Mich. Running-board saddle. 1,644,760; Oct. 11.
Thompson, William D., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Running-board saddle. 1,644,760; Oct. 11.
Thompson, William D., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Carthonpson, William D., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Carfigerator-car roof. 1,647,882; Nov. 1.
Thompson, William H. (See Thompson, John M. and W. H.)

W. H.).
William H., Berkeley, Calif. Pump.
Thompson, Villiam H., assignor of one-third to F. S.
Reaser, and one-third to J. W. Dunean, Wielbita Falls.
Tex. Cotton-dusting machine, 1,646,224; Oct. 18.
Thompson, William R. (See Thompson, William and Thompson,

Thompson, Willsie A. S. (See Gunn, R. W., and Thompson.)
Thoms, Alexander P. (See Buck, N. II., Roper, and

Thomas.)
Thomsen, Laura K. H., San Francisco, Calif. Dancing toy. 1,619,446; Mar. 1.

Thomsen, Peter, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshobe, Germany. Steam boiler. 1,619,447; Mar. 1. Thomsen, Theodor, jr. (See Thomsen, Theodor, sr., and

Thomsen, Peter, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany. Steam boiler. 1,619,447; Mar. 1.
Thomsen, Theodor, r., (See Thomsen, Theodor, r., and T., jr., Wittorf, near Neumun-1,652,332; Dec. 13.
Thomsen, Theodor, sr., and T., jr., Wittorf, near Neumun-1,652,332; Dec. 13.
Thomsen, Thomas C., assignor to Messrs. Koefoed, Hauberg, Marstrand & Helweg, Aktieselskabet Titan, Copenhagen, Denmark. Centrifugal separator. 1,625,919; Apr. 26.
Thomsen, Hilliam A. V., Plainfield, N. J. Flexible Thomsen, Hilliam A. V., Plainfield, N. J. Flexible 1,628,929; May 17.
Thomson, Albert E., Derby, Conn. Antiskidding device. 1,628,929; May 17.
Thomson, Albert E., Derby, Conn. Tread member for antiskidding devices. 1,628,930; May 17.
Thomson, Alexander, Summit, and J. W. Eskholme, Glen Ridge, N. J.; said Eskholme assignor to said Thomson. Ridge, N. J.; said Eskholme assignor to said Thomson. Charles H., J. Cummiskey, C. J. Miller, and A. L. Jones, Liverpool, England. Fluid-controlling valve. 1,622,069; Mar. 22.
Thomson, David P., Lynn, Mass., assignor to General Electric Company. Inclosed dynamo-electric machine. 1,632,134; Dec. 6. London, England. Heat-insulation lining for cold-storage chambers, 1,614,411; Jan, 11.
Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Electric welding. 1,637,063; July 26.
Thomson, Herbert G., New York, N. Y., assignor to Anchor Post Fence Company, Garwood, N. J. Fence construction. 1,643,147; Aug. 23.
Thomson, Herbert G., New York, N. Y., assignor to Anchor Post Fence Company, Garwood, N. J. Fence construction. 1,643,147; Nor. 23.
Thomson, Herbert G., New York, N. Y., assignor to Anchor Post Fence Company, Garwood, N. J. Fence construction. 1,643,247; Sept. 6.
Thomson, Herbert G., New York, N. Y., assignor to Anchor Post Fence Company, Gerwood, N. J. Fence construction. 1,643,242; June 7.
Thomson, Herbert G., New York, N. Y., assignor to Anchor Post Fence Company, Gerwood, N. J. Fence construction. 1,643,247; Sept. 6.
Thomson, Herbert

Arthur M. assignor.

Thomson Machine Company. (See Parsons, Edward T., assignor, Tomoson Machine Company, New York, N. Y. Construction for head-free rall joints. 1,635,648; July 12.

Thomson, McLeod, Atlantic City, N. J., assignor to The Rail Joint Company, New York, N. Y. Convertible rail-joint structure. 1,650,551; Nov. 22.

Thomson, Norman W., Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilnington, Del. Condensation. 1,651,63; Dec. 27.

Thomson, Roy E. Entieage, Ill. Bottle-filling device. 1,633,648; June 21.

Thomson, Roy W., Wallace, Idaho, assignor of one-half to R. Berg, Spokane, Wash. Friction brake. 1,643,354; Sept. 27.

Thomson, S. H., Manufacturing Company, The. (See Hummert, Robert H., assignor.)

Hathaway Company. Flatesinking die. 1,612,841; Jan. 4.

Jun. 2.

Thorburn, Clyde D. (See Bingham, Harold E., assignor.)

Thordarson. Chester H., Chicago, Ill. Electric jumpspark coil. 1,629,132: May 17.

Thordarson, Chester H., Chicago, Ill. Amplifying transformer. 1,632,101; June 14.

Thoren, Josef H. E. (See Hultgren, A. G. E., and

Thoren.)

Dec. 13,

Dec. 13.
Thoresen, Einar, Pittsburgh, Pa. Apparatus for sky-writing, 1,632,153; June 14.
Thorley, Ira O., Denyer, Colo.
1,640,628; Aug. 30.
Thorley, Raymond M., Cleveland, Ohio. Wick for oil stoves. 1,633,333; June 21.
Thorn, Charles C., Camden, N. J. Switch throwing and locking mechanism. 1,654,023; Dec. 27.
Thorn, J. S., Company. (See Doering, Albert L., as-

Thorn, J. S., Company. (See Renton, Henry N., as-signor.) Thorn, J. S., Company. (See Renton, Henry N., as-

signor.)

Thorn, J. S., Company, (See Rupp, Charles, assignor.)

Thorniblad, Arel R., Stockhoim, and G. W. Nordenswan,
Appelviken, Sweden. Perachute, 1,649,934; Nov. 22.

Thörniblad, Thor G., Stockhoim, Sweden. Mechanical
date indicator. 1,649,142; Nov. 15.

Thornbrugh, Alvin, assignor of one-half to C. H. Hass,
Manly, Iowa. Lubricating device. 1,621,644; Mar. 22.

Thorne, Carl B., Hawkesbury, Ontarlo, Canada. Plant
for bienching and like purposes. 1,634,385; July 6.

Thorne, Garl B., Hawkesbury, Ontarlo, Canada. Bleaching and the Sweden Sweden Control Canada. Bleaching and the like purposes. 1,643,568; Sept. 27.

Thorne, George E., Trenton, N. J. Temperature regulator. 1,621,816; Mar. 22.

Thorne, James L., Columbus, Ohio. Painter's scaffold.

1,615,182; Jan. 18.
Thorne, Lawrence C., assignor to Frantz Manufacturing Co., Steffing, H. Welding door, 1,625,764; May 3.
And forming the Same. 1,625,508; Apr. 19.
Thorne, Yelvor C. (See Lehmann, Otto P. R., assignor, Thorner, Walter, Berlin, Germany. Apparatus for projecting multicolor images in cinematography.

1,634,760; July 5.
Thorniey, Albert B., assignor to Narragansett Machine Company, Pawtucket, R. I. Refrigerating apparatus. 1,636,877; July 26.
Thorniey, Albert B., assignor to Narragansett Machine Company, Pawtucket, R. I. Pump. 1,636,878; July 26.
Thorniey, Albert B., assignor to Narragansett Machine Company, Pawtucket, R. I. Pump. 1,636,878; July 26.
Thorniey, Ellen S., executrix (See Nolan, John W.)
Thorniey, Ellen S., executrix (See Nolan, John W.)
Thorniey, Ellen S., executrix (See Nolan, John W.)
Thorniey, Blen S., executrix (See Nolan, John W.)
Thorniey, William H. (See Nolan, John W., assignor.)
Thorniey, William H. (See Nolan, John W., assignor.)
Thorniey, Lilabeth, Lerroit, Mich. Mixing device for internal-combustion engineses, 1,635,026; Dec. 20.
Thornion, Frank C., East Cleveland, Ohio. Metal-container sealing-closure-fastening apparatus. 1,640,555; Aug., 30.
Thornton, Frederick, Huntington, W. Va. Trolley wheel.

Talorton, Frank C., Essar Ceveland, Ohio. Metal-container. 1615.65. Jan. 18.

Talner sealing-closure-fastening apparatus. 1,640,585; Aug. 30.

Thornton, Frederlek, Huntington, W. Va. Trolley wheel. 1,622,295; Mar. 29.

Thornton, George H., Patterson, Ill. Apparatus for use in packing fruit and the like. 1,643,429; Sept. 27.

Thornton, George H., Patterson, Ill. Apparatus for use in packing fruit and the like. 1,643,429; Sept. 27.

Thornton, Jonn E., London, England. Manufacture of cinematograph positive films. 1,649,756; Nov. 15.

Thornton, John E., West Hampstead, London, England. Optical system for cameras, cinematograph projectors, and similar apparatus. 1,664,361; Dec. 27.

Talme. 1,615,491; Jan. 25.

Thornton, Roy A., North Weymouth, Mass. Combined pump and can opener. 1,632,935; June 21.

Thornton, Roy A., North Weymouth, Mass. Combined pump and can opener. 1,632,935; June 21.

Thornton, William, Sait Lake City, Utah. Flexible wheel. William, Sait Lake City, Utah. Flexible wheel. Thornton, Flexible wheel. Thornton, Flexible wheel. Sait Complexible of the sept. 20.

Thorp, Fred W., assignor to Northern Corrugating Company, Green Bay, Wis. Napkin dispenser. 1,646,121; Thorp, James M., Alameda, Calif. Multiwheel propelling mechanism for motor vebicles. 1,643,476; Sept. 27.

Thorp, Jones M., Alameda, Calif. Multiwheel propelling mechanism for motor vebicles. 1,643,476; Sept. 27.

Thorp, Jones M., Alameda, Calif. Multiwheel propelling mechanism for motor vebicles. 1,643,476; Sept. 27.

Thorp, Jones M., Alameda, Calif. Multiwheel propelling mechanism for motor vebicles. 1,643,476; Sept. 27.

Thorp, Joseph M., San Francisco, Calif. Furring nail.

Thorpe, Frederick W. (See Krueger, A. G., and Thorpe.)

Jan. 18.
Thorpe, Frederick W. (See Krueger, A. G., and Thorpe.)
Thorpe, Joseph M., San Francisco, Calif. Furring nail.
1.641,303; Sept. 6.
Thorpe, Walter W. (See Hochstetter, F. W., and Thorpe.)
Thorpe, Willard G., Los Angeles, Calif. Burglar detector.
1.634,472; July 5.
Thorsby, Karl J., assignor to California Corrugated Culvert Company, Oakland. Calif. Convertible automatic floodgate and controllable headgate. 1.634,697; July 5.
Thorsen, F. S., & Company. (See Bullard, Maurice L.,
assignor: M. and K. B. Ward Chicage. Ul. Con-

Thorsen, F. S., & Company. (See Bullard, Maurice L., Tassignob, Tars M., and K. B. Ward, Chicago, III. Com-bination warm-air cleaner and heat converter. 1,638,605; Aug. 9. Thorsten, Thorleif, Pittsburgh, Pa. Conveyer. 1,627,354; May 3.

Thortwork, Goodwin, Glyndon, Minn. Tractor potato digger. 1,681.234; June 7. Thrill, Wayne E., Worcester, Mass. Carburctor tester. 1,615.000; Jan. 18. Thrasher, Charlle, et al. (See Gregory, B., and Mitchell, assignors.)

Sissions: Sissions: Sissions: Sissions: Sissions: Sissions: Sissions: Threaded; Milliam A., Miami, Fla. Concrete block mold. 1,631,901; June 7.

Three C Davenport Company. (See Konrad, Otto, assignor.)

augnor.)
Threefoot, Frederick M., et al. (See Threefoot, L., and Elkin, assignors.)
Threefoot, Gladys L., et al. (See Threefoot, L., and Threefoot, Henry M., et al. (See Threefoot, L., and Elkin, assignors.)
Threefoot, Louis, et al. (See Threefoot, L., and Elkin, assignors.)

Threefoot, Louis, and G. W. Elkin, Meridian, Miss., one-signors of one-tenth to L. Threefoot, one-tenth to f. L. Threefoot, one-tenth to F. M. Threefoot, one-tenth to G. L. Threefoot, one-tenth to H. M. Threefoot, one-sixth to G. W. Elkin, one-sixth to C. H. Elkin, and one-sixth to M. Elkin. Conveyer system. 1,632,203;

June 14. Louis, and G. W. Elkin, Meridian, Miss, as-fracefoot, done-tenth to L. Threefoot, one-senth to G. L. Threefoot, one-tenth to F. M. Threefoot, one-tenth to G. L. Threefoot, one-tenth to H. M. Threefoot, one-sixth to G. W. Elkin, one-sixth to C. H. Elkin, and one-sixth to M. Elkin. Conveyer system. 1,632,204; sixth to M. June 14. Thrift, Homer

June 14.

Thrift, Homer C., Burkburnett, Tex. Apparatus for screwing together and unscrewing joints of pipe and the like. 1,617,509; Feb. 15.

Thrift, Homer C., Burkburnett, Tex. Rotary. 1,642,220;
Thrift, Homer C., Houston, Tex. Pump mechanism. 1,645,670; Oct. 18.

Thrixton, William D., Belmar, N. J. Portable collapsible crate. 1,633,425; June 21.

Thronses Bayurd, Diagonated, New York, N. Y. Method of and mechanism for winding strand material. 1,639,676; Aug. 23.

crate. 1,633,425; June 21.

Thronsen, Sigurd, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and mechanism for winding strand material. 1,633,676; Aug. 23.

L633,676; Aug. 23.

L633,676; Aug. 23.

L633,676; Aug. 23.

L633,676; Aug. 23.

L642,515; Sept. 13.

L642,515; Mar. 15.

L642,515; Mar. 16.

L642,514; Mar. 16

Thum, Water a.

Dempsey, Ernst J., and H. G. A. Åkerlind, Trollhattan, Sweden. Detachable coupling for lifting ropes and the like. 1.618,851; Feb. 22.

Thurber, Harry F. (See Carmichael, A. J., and Thurber.) Thurber, Harry F., assignor to The Greist Manufacturing Company, New Haven, Conn. Lamp. Des. 74,681; A. J. 20. 1.12.

Dec. 10.

Thurchak, Theodore, Chicago, Ill. Smoke washer, 1.640,018; Aug. 30.

Thurley, Arthur J., London, England. Adjustable single-lever pipe and not wrench with ratchet-like control. Thurlow, William E., et al. (See Frost, Walter E., assignor).

Thurlow, William E., et al. (See Frost, Walter E., assignor).

Fred A., Apache, Okla. Box. 1,625,920; Thurman

Apr. 26.

Thurman, Tandy B., Kansas City, Mo., assignor to The Arteraft Company, Hinge, 1,622,617; Mar. 29.

Arteraft Company, Hinge, 1,622,617; Mar. 29.

Thursmann, Otto, Berlin, Germany, Ccoca and chocolate grinder. 1,620,702; Mar. 15.

Thurstensen, Søren, assignor to Henry Vogt Machine Co., Louisville, Ky. Return bend and terminal fitting. 1,647,821; Nov. 1. Freeport, assignor, by messe assigned, and the company, Inc., Garden City, N. Y. Airplane and Motor Company, Inc., Garden City, N. Y. Airplane radiator. 1,650,665; Nov. 29. Apr. 26.

Mc., Garden City, N. 1. Arphane radiator. According Nov. 29.

Thurston, Charles B., assignor of one-third to W. S. Buchner and one-sixth to R. B. Thurston, Olidale, C. M. Charles B., assignor to The Houghton Elevator & Machine Co., assignor to The Houghton Elevator & Machine Co., Toledo, Ohio. Control mechanism. Re16,858: June 14.

Thurston, Ernest B., assignor to The Haughton Elevator & Machine Co., Toledo, Ohio. Switch mechanism, Re16,810: Dec. 6.

Thurston, Ernest B., assignor to The Haughton Elevator & Machine Company, Toledo. Ohio. Controller for electic Clevators. 1,652,443: Dec. 20.

Thurston, Ernest B., assignor to The Haughton Elevator & Machine Company, Toledo. Ohio. Controller for electic Clevators. 1,652,443: Dec. 20.

Thurston, Herman B. (See Roby, Frank M., assignor.) Thurston, Herman B., Cleveland Heights, Ohio. Lowwater alarm. 1,617,928; Feb. 15.

Thurston, Herman B., Cleveland Heights, Ohio. Lowwater alarm. 1,619,222; Mar. 1.

Thurston, Herman B., Cleveland Heights, Ohio. Lowwater alarm. 1,629,936; May 24.

Thurston, Herman B., Cleveland Heights, Ohio. Low-water alarm. 1,629,837, May 24.
Legan Barrier, 1,629,847, May 24.
Legan Barrier, 1,629,847, May 24.
Thurston, Howard, Beechhurst, and H. Jansen, New York, N. Y. Method of and apparatus for producing theatrical illusions. 1,613,224; Jan. 4.
Thurston, Robert B., et al. (See Thurston, Charles B.,

Thurston, Robert B., et al. (See Thurston, Charles B., assignor.)
Thurston, Tennis R., Spokane, Wash. Bath cabinet. 1,643,528; Sept. 27.
Thurte, Fred E., Butte, Mont. Folding tent. 1,623,507;
Thuss, Charles F., Great Cacapon, W. Va. Automobile speedway device. 1,630,229; May 24.
Thust, George J., Appleton, Wis. Expanding mill. 1,644,552; Oct. 4.
Thwing, Charles B., assignor to Thwing Instrument Company, Philadelphia, Pa. Electric temperature control. 1,651,236; Nov. 27. Company. (See Thwing, Charles B.,

Thwing Instrument Company. (See Thwing, Charles B., assignor.) Thyogen Company, The. (See Horton, Daniel T., assignor.)
Thyssen & Co. Aktiengesellschaft. (See Glaubitz, Arthur,

assignor.) Thyssen & Co. Aktiengesellschaft. (See Laszlo, Franz,

Bassand Co. Aktiengesellschaft. (See Laszlo, Franz, Drssen & Co. Aktiengesellschaft. (See Laszlo, Franz, Drssen & Conrad, Aachen, Germany. Feeding articles. 1,637,030; July 26. Tibbels, Myron B., assignor to The Herbrand Company, Fremont, Ohio. Flash winder. 1,615,892; Feb. 1. Tibbens, Samuel K., assignor of one-half to W. F. Martin, Harrisburg, Pan. Safety hook. 1,627,470; May 3. Tibbets, Ennest R. (See Pleasant, C., and Tibbets, Tibbets, Charles L., New Castle, C., 1,650,705; Nov. 29. Tibbetts, Milton. (See Andrew, F. W., and Tibbetts.) Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle, 1,620,744; Mar. 15. Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Lock mechanism. 1,626,106; Apr. 26.

2 hours, petroit, Mich. Louis pany, 26 Thomas 28, 28 Miton, assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,627,753; pany, Detroit, Mich. Hydrocarbon motor. 1,627,753;

Tibletts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,627,753; May 10.
Tibbetts, Robert M., Long Beach, assignor of seventy-two and one-half per cent to W. L. Burrough and twenty-seven and one half per cent to D. G. Lorraine, Los Angeles, Calif. Rod rack. 1,634,858; July 5.
The Brackets, Grand Rapids, Mich. Faucet. Tibnies, Worley A., et al. (See Hudson, A. D., and Smith, assignors, J. Tice, Francis A., assignor to The Electric Railway Equipment Company, Cincinnati, Ohio. Hanger for trolley views, 1,623,868; May 17.
Tice, Marines Y., Bloomfeld, N. J. Ash receiver. 1628,868; May 17.
Tice, Merlin E., Wappingers Falls, assignor to Dutchess Bleachery, Inc., New York, N. Y. Dyeing, 1,652,649; Dec. 13.
Tichenor, Carl M., (See Tichenor, Harry M, and C. M.)

Tice. Merlin E., Wappingers Fatis, hassing.

Bleachery, Inc., New York, N. Y. Dyelig. 1,652,649;
Dec. 13.

Tichenor, Carl M. (See Tichenor, Harry M. and C. M.)

Tichenor, Harry M. and C. M.. Detroit, Mich. Windowcontrol mechanism. 1,651,003; Nov. 29.

Tichenor, Paul B., et al. (See Zimmer, Samuel B., assignor.)

Tichenor, August, Dodge, Nebr. Adjustable seat.

1,623,818; Apr. 5.

Tichota, Rudolph, Dodge, Nebr. Antifrost vision appliance. 1,636,879; July 26.

Tichota, Vencel J., Dodge, Nebr. Draft equalizer.

1,650,883; Nov. 29.

Tickel, Walter D., Okiahoma City, Okia. Figure toy.

1,626,892; May 8.

Tidwell, William A., Indianapolis, Ind. Toy gun.

1,626,892; May 8.

Tidwell, William A., Indianapolis, Ind. Missile for toy
guns. 1,646,122; Oct. 18.

Tiede, Hans F., Saginaw, Mich., assignor to Baker Perkins Company. Incorporated, White Plains, N. Y.

Tieden A. Allon H., Wechawken, N. J. Caster.

1,645,123; Allon H., Wechawken, N. J. Caster.

1,645,131; Allon H., Wechawken, N. J. Caster.

1,645,131; Allon H., Wechawken, N. J. Caster.

1,645,131; Allon H., Wechawken, N. J. Caster.

Tledke, Hans F., Saginaw, Mich., assignor to Baker Perkins Company. Incorporated, White Plains, N. Y.
Flour duster. 1,642.519; Sept. 13.
Hedemann, Anton H., Wechawken, N. J. Caster. 1,643.531; Oct. 1.
Georgia Company. Incorporated, Company. County, Colino. Adjustable cot. 1,644.043; Oct. 4.
Hedemann, Robert, Munich, Germany. Bearing and direction indicator with section map for vehicles. 1,644.454; Oct. 4.
Hedemann, Robert, Munich, Germany. Bearing and direction indicator with section map for vehicles. 1,644.454; Oct. 4.
Hedemann, Robert, Munich, Germany. Gernflation-preventing apparatus. 1,619.883; Mar. 1.
Hefel, Charles G., Rochester, N. Y. Overinflation-preventing apparatus. 1,626.649; May. 3.
Herenbacker, N. Y. Work-ejecting model Company, Inc., Inc. Adjustable Company. 1,626.649; May. 3.
Herenbacker, Thomas B., Blizabeth, N. J. Boring-tool holder. 1,647,590; Nov. 1.
Helekemeyer, Henry, St. Louis, Mo. Curtain and drape Tleikemeyer, Henry, St. Louis, Mo. Furnace. 1,650,749; Nov. 29.
Herney, John E., St. Paul, Minn. Over attachment for bathtubs. 1,615,351; Jan. 25.
Herney, Miles A., Minneapolis, Minn. Fixture-attaching strap. 1,618,610; Feb. 22.

Tierney, Miles A., Minneapolis, Minn. Fixture-attaching strap. 1.621,566; Mar. 22.
Tlerney, Miles A., Minneapolis, Minn. Fixture-attaching strap. 1.622,766; Sept. 20.
Tell, 1.622,660; Sept. 20.
Tell, 1.623,662; Minn. H., Washington, D. C. Swing. 1.624,662; Minn. H., Washington, D. C. Swing. 1.629,600; May 24.
Tletz, Walter M., Newark, N. J. Razor-blade holder. 1,622,640; Apr. 12.
Tletz, Walter M., Newark, N. J. Razor-blade holder. 1,622,640; Apr. 12.
Tletz, Walter M., Newark, N. J. Razor-hone and strop. Tiffany & Company. (See Barney, Arthur L., assignor.) Tiffany & Company. (See Barney, Arthur L., assignor.) Tiffany & Company. (See Mitchell, Walter L., assignor.) Tiffany & Company. (See Barney, Arthur L., assignor.) Tiffany Manufacturing Company. (See Joyce, Harold L., 483, 1907).
Tiffany, Harry J., assignor to Reynolds Spring Company, Jackson, Mich. Spring structure. 1,618, 562; Feb. 22.
Tiffany Manufacturing Company. (See Joyce, Harold L., 483, 1907).
Tilli, Henry, Los Angeles, Calif. Creating a hydraulic head. 1,623, 369; Apr. 5.
June 7.
Till, Steven L., Chicago, Ill. Boiler feed trap. 1,631,708; June 7.
Tilley, Erdwin F., jr., Plainfield, N. J. Oven. 1,615,183:

Till, Steven L.,
June 7.

Tillberg, Erik W., assignor to S. Hellström, Studenton, Oct. 25.

Tillberg, Erik W., assignor to S. Hellström, Studenton, Oct. 25.

Tilley, Edwin F., jr., Plainfield, N. J. Oven. 1,615,188;
Jan. 18.

Tilling-Stevens Motors Limited. (See Whitehorn, Harold H., assignor.)

Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Eye-testing cablest. (1,630,281; May 31,281; May 32,281; May 31,281; May 31,281; May 31,281; May 31,381; May 3

Till, L. L. Loy W., Bultimore, Md. Drain guard for wash-ing suchines. 1,626,125, apr. 28.
Timbs, Edward, Los Angeles, assignor to Union Tool Com-pany, Torrane, Calif. Draw works with cooling appa-ratus. 1,613,680; Jan. 11.
Timbs, Edward, Los Angeles, assignor to Union Tool Company, Torrance, Calif. Underreamer. 1,634,001; June 28.

June 28.

Timbs, Edward, Los Angeles, assignor to Union Tool Company, Torrance, Calif. Pulley support for crown blocks. I.639,116; Aug. 16.

Timbs, Edward, Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y. Crown-block bearing-sheave unit. I.649,995; Nov. 22.

Timbs, Edward, Los Angeles, and L. E. Zerbe, Moneta, assignors to Union Tool Company, Torrance, Call. Unitary structure for crown sheaves. I.642,978;

signors to Unitary st Sept. 20.

Sept. 20.
Timbs, Edward, Los Angeles, L. E. Zerbe, Moneta, and
F. von Schlegell, Pasadena, assignors to Union Tool
Company, Torrance, Calif., Sand reel for well-drilling rigs. 1,645,123; Oct. 18.
Time-O-Stat Corporation. (See Gauger, Frank A., as-

Time-O-Stat Corporation. (See Gauger, F. A., and John-

Time Detroit Axle Company, The. (See Alden, Her-mkeu-Detroit Axle Company, The. (See Alden, Her-

Timken-Detroit Axle Company, The. (See Alden, Herbert W., assignor.)
Timken-Detroit Axle Company, The. (See Alden, H. W., and Hufferd, assignora.)
Timken-Detroit Axle Company, The. (See Morgan, Mathew R., assignor.)
Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)
Timken Roller Bearing Company, The. (See Lothrop, Marcus T., assignor.)

Timken Roller Bearing Company, The. (See Miller, George L.) mken Roller Bearing Company, The. (See Sanders, Timken Roller Bearing Company, The. (See Sanders, Walter C., assignor).
Timken Roller Bearing Company, The. (See Schlaugit, O, and Schum, assignors, Ompany, The. (See Scribner, William L., assignor).
Timken Roller Bearing Company, The. (See Wallin, Philip, assignor).
Timm, Ellen V. (See Loftus, Thomas L., assignor.).
Timme, Albert F., Kenosha, Wis. Revaporizer. 1,650,246;
Nov. 22.

Timmerman, Frank J. (See Kelly, William A., assignor.) Timmis, William W., Jamaica, N. Y., assignor to M. E. Conran & Co. Inc. Level 1, 1612,548; Jan. 4. Timmons, J. S., Inc. (See Coggeshall, Thellwell R., as-signor.)

Timmons, J. S., Inc. (See Forrester, Melvyn B., as-

signor.)
Timmons, John S., Philadelphia, Pa. Loud-speaking telephone. 1,650,474; Nov. 22.
Timmons, Lindsay H., assignor to A. C. Hoffner, Des Timmons, Radio. Humidfler. 1,618,243; Feb. 22.
Timmons, Radio. Freducts Corporation. (See Fisher, Roy S., assignor.)

Timpson, Lewis G. M. (See Ferguson, G. E., and Timpson.)
Timpson, Thomas W., assignor to R. H. Macy & Co., Inc., New York, N. Y. Display table. 1,644,289; Oct. 4.
Tin Decorating Company, The. (See Hermani, Heary,

assignor.)
Tin Decorating Company of Baltimore, The. (See Hermani, Henry, assignor.)
Tindail, Carl A., assignor to J. R. showers, Shelby-Tindail, Carl A., assignor to J. R. showers, Shelby-Tindail, Shure H., assignor to The Dalton Adding Machine Company, Cincinnati, Ohlo, Automatic shuttle-control mechanism for adding machines. 1,625,291; Apr. 19.
Tingley, Leonard C., assignor to Federal Products Corporation, Providence, R. I. Cylinder gauge. 1,619,771;

Mar. 1.

Tingley, Philo B., Glen Ridge, N. J. Cigarette holder.
1,820,302; Mar. 8.

Tingley, Stephen L., Nitro, W. Va. Apparatus for cracking and distilling hydrocarbon oils. 1,627,937; May 10.

Tingles, The Conference of the Co

Tacob, assignor.)

Tinker, Frank, Sutton Coldfield, England. Production of petrol. 1,652,011; June 14.

Tinker, Herbert W., assignor to Federal Pressed Steel Company, Milwaukee, Wis. Bumper structure for vehicles. 1,614,503; Jan. 18.

Tinkess, Aifred S., Stockton, Calif. Combination lunch box and table. 1,615,500; Jan. 25.

Tinnerman, Albert H., Cleveland, Ohio. Stove-leg connection. 1,640,267; Oct. 18.

Tinnerman, Albert H., Cleveland, Ohio. Manifold for gas ranges. 1,631,160; Nov. 29.

Tinkew York, N. J. Yending display support. 1,639,787; Aug. 23.

Tinsley, Edward O., assignor to Robert Gair Company, New York, N. Y. Polygonal container. 1,649,085; Nov. 15.

Tinsley, Thomas G., Portland, Oreg. Percolator. 1,638,969; Aug. 16.

1.638,969; Aug. 16.
Thisman, Samuel H., Morris, III. Riding cultivator.
1.630,772; May 31.
Thinter, George L. (See Hill, C. B., and Thinter, Sorrie L. (See Hill, C. B., and Thinter, 1.262,310; Apr. 26.
Thyton, Edna S., New York, N. Y. Beauty compact.
1.626,311; Apr. 26.
Thion, Edna S., New York, N. Y. Beauty compact.
1.626,312; Apr. 26.
Thion, Edna S., New York, N. Y. Beauty compact.
1.626,312; Apr. 26.
Thismy Julippe H. L. (See Conti, J. T. F., and Thranty, Julippe H. L. (See Conti, J. T. F., and Thranty, Julippe H. L. (See Conti, J. T. F., and

Tiranty, Philippe H. L. Tiranty, Philippe H. L. Tiranty, Tiranty, Tranty, Tranty, Tranty, 1649,424;

Tiregage Valve Corporation. (See Welton, Park T., assignor).
Tirone, Charles, Buffalo, N. Y. Door lock. 1,649,424;
Nov. 15
Tische, Rolland W., Grand Rapids, Mich. Bird house,
Tische, Rolland W., Grand Rapids, Mich. Bird house,
Tische, Rolland W., Gee Bridges, F., Firman, Tisdale,
and Hoskins,)
Tischell, William M., and L. S. Puls, Los Angeles, Calif.
Garment sleeve with detachable and reversible culf.
1,648,763, Nov. 8.
Tisching, The Company of the Com

narch, Titanic Double Cutter Trust. (See Swickard, Frank, as-signor.)
Titanium Alloy Manufacturing Company, The. (See Kinzie, Charles J., assignor.)

Titcomb, Lee R., Brooklyn, and H. S. Ashmun, New York, N. Y. Device for extinguishing ares. 1,644,290;

Oct. 4.
Titcomb, Lee R., Brooklyn, and H. S. Ashmun, New York, N. Y. Device for cleaning pipes. 1,647,759; Metal Hose Co. (See Fulton, William H., as-

signor.)

titeflex Metal Hose Co. (See Herbst, William K., assignor.)

titgen, Harry W., Philadelphia, Pa. Tumbling mill.

1.642.632; Sept. 13.

tittemore, Frank A., and C. S. Renwick, Richmond, assignors to Hopkins Spray Equipment Company, San
Francisco, Calit. Controlling the distribution of liquids.

Taktenington, Morris M., et al. (See Titterington, Morris
M., assignor.)

Titterington, Morris M., et al. (See Titterington, Morris M., assignor,)
Titterington, Morris M., nassignor to C. H. Colvin and M. M. Titterington, Brooklyn, N. Y. Stabilizer, 1.645,079; Oct. 11.
Titterington, Morris M., Brooklyn, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Steam press. 1,654,858; Dec. 27.
Titus, Alfred E., Trenton, N. J. Refrigerator door look, 1,616,998; Feb. 8.
Titos, Alfred E., Trenton, N. J. Door hinge. 1,645,977;
Titus, Alfred E., Trenton, N. J. Door hinge. 1,645,977;
Titus Batter & Company. (See Sign. Lucian assignor.)

Titus Blatter & Company. (See Biva, Lucien, assignor.) Titus, Edwin A., Moline, Ill. Coal-chute gate. Re16,633;

Titus, Edwin A., Moline, III. Confeculte gaus. READ, 100, 1 May 24.
Titus, Helena J., New York, N. Y. Hexagoval cosmetic box. Des. 72,642; May 10.
Titus, John E., Chicago, III.
Automatic adjuster for push rods. 1,631,563; June 7.
Titusville Forge Company, et al. (See Davidson, William D., assignor.)
Titusville Forge Company.
A. assignor.)

Titusville Forge Company. (See Montgomery, Gustavus A., assignor.)
Titusville Forge Company. (Montgomery, G. A., and Driscoll, assignors.)
Titusville Forge Company, et al. (See O'Brien, Frederick

Triusville Forge Company, et al. (See O'Brien, Freuente Triusville Forge Company, et al. (See O'Brien, Freuente Triusville Forge Company, et al. (See O'Brien, Freuente Triusville Forge Company, Elizabeth, N. J. Tivendale, William, Clydebank, Scotland, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Needle-straightening machine. 1,625,691; Apr. 19. Toole Singer Manufacturing Company, Elizabeth, N. J. Toole Ellers, Jan., assignor. 1,638,9013; Aug. 16. Toole Company, and Arnold, assignors. Toole Forge Company, and Arnold, assignors. Toole Forge Company, and Arnold, assignors. Toole Forge Company, and Arnold, assignors. 1,635,909; July 12. Toole Forge Company, and Arnold, assignors of Company, and Arnold, assignors of General Forge Company, and the Company, Braiding machine. 1,638,633. July 12. Tooley, Harry W., Pittsneld, Mass., assignor to General Biectric Company. Blectric welding. 1,637,031; July 26.

Tobey, Harry W., Pittsher.
Diectric Company. Diectric weiting.
July 26.
Tobey, Thomas J. (See Shuell, F. W., Ledbetter, and
Tobey.)
Tobias, Edward, et al. (See Butterbaugh, Ralph B.,

Tobias, Edward, et al. (See Batterbaugh, Ralph B., assignor).
Tobias, Maurice J., Hudson, Wis. Display cabinet.
1.647.485; Nov. 1
Tobia, James M., Somerville, assignor to William M.
Bailey Company, Boston. Mass. Making floors.
1.646.667; Oct. 25
Tobin. Joseph V., Wissahickon, Pa. Sled brake.
1.628.693; May 17.
Tobita, Toshio, assignor to Konishi Kotakudo Company,
Inc., New York, N. Y. Watch-crystal tray. 1,628,764;
Tobler, Blebard, assignor, to Society of Chemical Hudstry.

Apr. 19.
Tobler, Richard, assignor to Society of Chemical Industry of Basle, Basel, Switzerland. Manufacture of 2:3-aminonaphthoic acid. 1,629,584; May 24.
Tobold, Ewald F. (See Bronson, A. E., and Tobold, Tobold, Ewald F. (See Bronson, A. E., and Tobold, Ewald F., assignor to The Dill Manufacturing Company. Dust cap. 1,625,694; May 17.
Tobold, Ewald F., assignor to The Dill Manufacturing Company, Cleveland, Ohio. Sheet-metal article. 1,645,832; Oct. 18.
Tobolla, Victor. (See Eichhorn, Charles, assignor.)
Tobolia, Victor. Chicago, Ill. Belt-book lacking. 1,653,791; Dec. 27.

Dec. 27.
Tockwin, Gregory J., Boston, Mass. Signal switch.
1,634,3347; July 5.
Todd. Albert E., Seattle, Wash. Folding ironing board.
1,622,403; Mar. 29.
Todd. Albert E., Seattle, Wash. Folding ironing board.
1,622,404; Mar. 29.
Todd Company, The. (See Lindemuth, William E., as-

signor.)

Signor.)
Todd Company, The. (See Smith, Burgess W.)
Todd Company, The. (See Triefel, Charles G., assignor.)
Todd Dry Dock, Engineering & Repair Corporation. (See
Haynes, George F., assignor.)
Todd, Guerin. (See Powell, E. B., and Todd.)
Todd, James A., Attalia, Ala., assignor to Compress
Buckle Company, Fort Worth, Tex. Bale-tie buckle.
Todd, John S., Hawley, Pa. Loom. 1,629,849; May 24.

Todd, John S., Hawley, Pa. Let-off means for looms. 1,682,205; June 14.
Todd, Paul H., Kalamazoo, Mich., assignor to Renard, Inc., Kalamazoo, Mich. Treating waxed and printed papers. 1,628,931; May 17.
Todd, Raiph R. (See Lannon, J. D., and Todd.)
Todd Shipyards Corporation. (See Meston, J. R., and

Lawn Strain C., and J. Traveling mw., Columbia, Canada. Traveling mw., Little F. S. and J. W. Pomeroy, Victoria, British Tool William C., and J. W. Pomeroy, Victoria, British Golumbia, Canada. Traveling lawn sprinkler. 1,620,588;

Columbia, Canada. Travenng a.m. Mar. S. 1988. S. 1988. S. 1988. S. 1989. S. Todd, Wilna Columbia,

redd. William C., and J. W. Abmoorfieler. 1,632,303, June 14.

Todt, Edward G., Chicago, Ill. Railway-tank-car bottom outlet. 1,644,861; Oct. 11.

Toenniessen, Ernst, Unterhausen, Germany. Four-cylinder drawhead. 1,624,815; Apr. 12.

Toepfert, Henry J., assignor to White and Wyckoff Manufacturing Company. H. 196,768, Oct. 25.

Toepfert, Henry J., assignor to White and Wyckoff Manufacturing Company, Holyoke. Mass. Ervelope-tion of the Company. Holyoke. Mass. Method and apparatus for hot stamping with full automatic presses. 1,550,666; Nov. 29.

Toewe, Fritz, Berlin, Germany, assignor to General Electric Company. Multiple receiving device. 1,617,970; Feb. 15.

Tofficen, Olof A., Chicago, Ill. Oxygenator and smoke

Feb. 15.

Toffteen, Olof A., Chicago, Ill. Oxygenator and smoke eliminator. 1, 517,336; Feb. 15.

Toffteen, Olof A., Chicago, Ill. Burner. 1,621,092; Mar. 15.

Toffteen, Olof A., Chicago, Ill. Fire-box Inner casing. 1,636,761; July 26.

Toffteen, Olof A., Chicago, Ill. Oil burner. 1,637,064; July 26.

Tofficen, Utof A., Chicago, Hi. July 26.
Tofficen, Olof A., Chicago, Hi. Fire arch. 1,639,117;
Tofficen, Olof A., Chicago, Hi. Fire arch. 1,639,117;
Togami, Nobufumi, Saga, Japan. Electromagnetic switch. 1,625,609; Apr. 19.
Togami, Nobufumi, Saga-Ken, Japan. Distribution system for selective connections thereto of feeders. 1,634,601;
July 5.
Tohlin, Theodor. (See D'Olier, W. L., and Tohlin.)
Toledo Automatic Brush Machine Company, The. (See Clas. Angelo R., assignor).
Toledo Automotive Products Company, The. (See Clas. Angelo R., assignor.)
Toledo Machine and Tool Company. (See Byerlein, Arthur A., assignor.)
Toledo Machine and Tool Company, The. (See Dorman, N. W., and Hatch, assignors.)
Toledo Fire Threading Machine Company, The. (See Vosper, William W., assignor.)
Toledo Fressed Steel Company, The. (See Close, Lyman W., 1832, 2017)

assignor.)
Toledo Rex Spray Company, The. (See Hedenburg, O. F.,
and Fratt, assignors.)
Toledo Seale Company.
Toledo Seale Company.
Toledo Seale Company.
(See Hapgood, Clarence H., asToledo Seale Company.

Signor.)
Toledo Scale Company,
Toledo Scale Company. (See Hem, Halvor O., assignor.)
(See Marshall, Charles O., as-

signor.)
oledo Scale Company. (See Reeves, Orwell C., as-Signor. Scale Company. (See Reeves, Orwell U., as-Toledo Scale Company. (See Strubler, Charles G. and G. L., assignors.) (See Thomas, Edward G., as-

oledo Scale Company. (See Wetzel, Lewis C., as-oledo Scale Company. (See Wetzel, Lewis C., as-Signor.)
Toler, William E., Pawnee, Okla. Stove. 1,619,166;
Mar. 1.

Tolhurst Machine Company. (See Bryson, Tandy A., as-

signor.)
Tohlurst Machine Works. (See Bryson, T. A., and Williams, assignors.)

Tolman, Roy D., Worcester, Mass. Registering and indorsing ballot box. 1,618.691; Feb. 22. administrator, Tolman and the season of the season

York, N. Y. Plate or similar article. Des. 71,854; Jan. 11.

Tomita, Uzrasaburo, assignor to Morimura Bros. Inc., New York, 3t. Y. Plate or similar article. Des. 74,898. Tomita, Urasaburo, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 74,083; Dec. 13.

Tomita, Urasaburo, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 74,084; Dec. 13.

Tomkinson, Charles C. (See Ogden, R. E., and Tomkin-

Tomkinson, Charles C. (See Ogden, R. E., and Tomkinson, Charles C. (See Ogden, R. E., Tomkinson, and Van Tassell.)

Tomkinson, Charles C., Plainfield, N. J., assignor to J. E. Ogden, Mountainville, N. Y. Expansion shield.

Tomkinson, Charles C., Plainfield, N. J., assignor to J. E. Ogden, Mountainville, N. Y. Pipe hanger, 1,642,131; Sept. 13.

Tomkinson, Charles C., Plainfield, N. J., assignor to J. E. Ogden, Mountainville, N. Y. Bolt anchor.

Tomkinson, Charles C., Plainfield, N. J., assignor to J. E. Ogden, Mountainville, N. Y. Bolt anchor.

Tomkinson, Charles C., Plainfield, N. J., assignor to J. E. Ogden, Mountainville, N. Y. Door mechanism. 1,646,432; Oct. 25.

Tomkinson, Charles C., Plainfield, N. J., assignor, by messne assignments, to J. E. Ogden, Mountainville, N. Y. Door mechanism. 1,646,432; Oct. 25.

Tomkinson, Charles C., Plainfield, N. J., assignor, by messne assignments, to J. E. Ogden, Mountainville, N. Y. Door mechanism. 1,646,542; Oct. 25.

Tomkinson, Charles C., Plainfield, N. J., assignor, by messne assignments, to J. E. Ogden, Mountainville, N. Y. Door mechanism. 1,645,631; Oct. 11.

Tominson, Charles H., assignor to The Tomlinson Coupler Company, Mansfield, Ohio. Spring draft gear. 1,645,645; Oct. 11.

Tomlinson, Charles H., assignor to The Tomlinson Coupler Company, Mansfield, Ohio. Draft gear. 1,645,605; Oct. 11.

Tominison, Charles H., assignor to The Tominison Coupler Company, Mansfield, Ohio. Oraft geat. 1,646.408;
Tominison, Charles H., assignor to The Tominison Coupler Company, Mansfield, Ohio. Car-truck stabilizer. 1,646.438; Oct. 25.
Tominison Coupler Company, The. (See Tominison, Confice H., assignor.)
Tominison, James E., Indianapolis, Ind. Spotlight.
Tominison, James E., Indianapolis, Ind. Spotlight.
Tominison, Kenneth C., Berkeley, Calif., assignor to American Meter Company, Inc., New York, N. Y. Index-glass inclosure. 1,637,093; July 26.
Tommel. Paul., jr., Needesha, Kans. Vulve grinder. 1,631,389; Feb. 1.
1,616,389; Feb. 1.
1,620; Gey, May 3.
Tompkins, John D., Valatie, N. Y. Method and apparatus for treating fibrous materials. 1,622,769; May 3.
Tompkins, John D., Valatie, N. Y. Method and apparatus for treating fibrous materials. 1,622,769; May 3.
Tompkins, Lewis R., Atlantic City, N. J., assignor of one-half to G. H. Shea, Quarryville, Fa. Closure membustion engine. 1,618,692; Feb. 22.
Tome, Frank J., assignor to The Carborundum Company, 1,622,163; May 17.
None, Frank J., assignor to The Carborundum Company, Ningara Falls, N. Y. Grinding wheel and holder therefor. 1,644,791; Sept. 6.
Tomchi-Robitschek Co., German Med. Morris, assignor.)
Tomchistockek Co., German Med. Morris, assignor.)
Tomchist

Apr. 26.
Tonguette, Corey E., and R. A. McBean, asignor of onefourth to I. P. Pomeroy, Seatle, Wash. Folding ironing board. 1,618.857; Jan. 11.
Tonlolo, Carlo, Milan, Italy.
Amufacture of nitric
acid. 1,623,606; Apr. 5.

Tonks Brothers Co. (See Tonks, Russell A., assignor to Tonks, Russell A., South Orange, assignor to Tonks Brothers Co., Newark, N. J. Baby's tooth cutter. Des. 72.292; Mar. 2.

Tonne, Joseph A., Cincinnati Ohio. Automobile apparatus, 1628,374, May 19. signor to W. D. James, Kansas Ciry, Mo. Pump. 16.19,320; Mar. 1.

Tooker, John N., and J. F. Harley, assignors to Arkell & Smiths, Canajoharle, N. Y. Multi-ply bag. 1,633,296; June 21.

Toomas, James M., ir., Webster Grove, Mo. Roller bearing car wheel. 1,626,765; May 3.

Toomey, Howard C., Philadelphia, Pa. Spreading or sowing machine for root planting. 1,636,536; July 19.

Toomey, John F., New York, N. X., assignor to American Telephone and Telegraph Company. Telephone-read Telephone and Telegraph Company. Subscriber's equipment for program transmission. 1,288,695; May 17.

Toomey, John F., New York, N. Y., assignor to American Telephone and Telegraph Company. Frogram-selecting Telephone and Telegraph Company. Program-selecting Creatis. 1,632,695; May 17.

Toomey, John F., New York, N. Y., assignor to American Telephone and Telegraph Company. Signaling system of the program transmission over wires. 1,628,697; May 17.

Toomey, John F., New York, N. Y., assignor to American Telephone and Telegraph Company. Signaling system of the program transmission over wires. 1,628,697; May 17.

Toomey, John F., New York, N. Y., assignor to American Telephone and Telegraph Company. Signaling system of the program transmission over wires. 1,628,697; May 17.

Toomey, John F., New York, N. Y., assignor to American Telephone and Telegraph Company. Signaling system for the program transmission over wires. 1,628,607; May 17.

Toomey, John F., New York, N. Y., assignor to American Tel

Corporation, Faterson, N. J. Snoe machine. 1,616,714; Feb. 8.

Topham, Laurence E., Swampscott, and A. R. Morrill, Beverly, Mass., assignors to United Shoe machine. 1,616,719; Feb. F. Cleveland, and O. J. Welchart, East Cleveland, Ohlo. Cheese cutter. 1,623,288; Apr. 5.

Toplitz. Samson L. New York, N. Y. Mop holder. 1,544,799; Oct. 11.

Topper, Pius A. assignor to Dill and Collins Co., Philadelphia, Pa. Controlling means for electrical apparatus. 1,652,229; Dec. 13.

Topping, Charles P., assignor to Buffalo Bolt Company, method. (1,615,492; Jan. 25

Topping, Frank J., Clifton Forge, Va. Headlight shield. 1,621,181; Mar. 15.

Topping, William P. (See Smith, Christian N., assignor.) Torbert, William R., Kansas City, Mo. Awning. 1,620,045; Mar. 8.

Torbert, William R., Kansas City, Mo. Awning structure. 1,620,500; Mar. 8. Torchia, Alberto. Brooklyn, N. Y. Exchangeable sole for shoes. 1,640,301; Aug. 23.

Torchia, Alberto, assignor of one-fourth to J. Bruno, Brooklyn, N. Y. Automatic letter-distributing system. 1,648,4364; Dec. 27.
Torchio, Philip, Bronxville, assignor to T. E. Murray, Brooklyn, N. Y. Electric distribution system. Torchweld Equipment Co. (See Morrison, George A., as-

1,652,261; Dec. 13.
Torchweld Equipment Co. (See Morrison, George A., assignor.)
Torian, Thomas H. (See Phillips, G. F., and Torian.)
Torian, Thomas H. (See Phillips, G. F., and Torian.)
Torian, Thomas H. (See Phillips, G. F., and Torian.)
Torian, Thomas H. (See Phillips, G. F., and Torian.)
Torian, Thomas G. (See Phillips, G. F., and Torian, Corona, C. (See Phillips, G. H.)
Torian, Coronas, Corona, N. Y. Shoe. 1,629,325; May 17.
Torkelson, Theodore, Mabel, Minn. Draft attachment for vehicles, Rel(3,769; Oct. 4.
Torme, William D., assignor to A. E. Hirsch, Chicago, III. Detachable cuff. 1,645,633; Oct. 18.
Tornsjo, Gustaf E., Columbia, Mo. Screw cap for containers. 1,644,637; Oct. 11.
Torner The Foundry Company Limited. (See Lawson, Torpin, Richard, Superior, Mont. Machine or device for labeling X-ray dental films. 1,632,154; June 14.
Torrance, Daniel M., Garwin, Iowa. Egg supporting and turning device. 1,643,102; Sept. 20.
Torrance, Henry, New York, N. Y., assignor to The Carbondale Machine Co., Carbondale, Pa. Refrigerating apps. The New York, N. Y., assignor to The Corriant, Angelo, Pavia, Italy. Thermoelectric heater. 1,651,644; Dec. 6.
Torrington Company, The. (See Kennedy, Edward C., Parrineton Company, The. (See Kennedy, Edward C., Parrineton Company, The. (See Kennedy, Edward C., Parrineton Company, The.

Torrington Company, The. (See Kennedy, Edward C.,

Torrington Company, The. (See Kennedy, Edward C., assignor.)
Torsion Balance Company, The. (See Munzner, Max, Torsion Balance Company, The. (See Munzner, Max, Torulf, Heige G., Stockholm, Sweden. Sintering fine ores or pulverous ores. 1,618,116; Feb. 15.
Tostado, Trinidad, New York, N. Y. Automatic railway switch. 1,618,300; Feb. 22.
Toth, Gabriel, and B. A. Brandt, Far Rockaway, N. Y. Hinge. 1,618,736; Feb. 26.
Tother Charlet, March 11, Shield. 1,649,996; Nov. 22.
Totter Charlet, March 11, Shield. 1,649,996; Nov. 22.
Totter Charlet, March 11, Shield. 1,649,996; Nov. 22.
Totty Trunk Joliet, H. Shield. 1,649,996; Nov. 22.
Totty, Robert A., assignor to Totty Trunk & Bag Co., Petersburg. Va. Trunk. 1,651,645; Dec. 6.
Totty Trunk & Bag Co., (See Totty Trunk & Bag Co., Petersburg. Va. Trunk. 1,651,645; Dec. 6.
Totty Trunk & Bag Co., (See Totty Robert A., assignor.)
Touclstone, Burt W., Eldorado, Ark. Fence post. 1,646,000; Oct. 18.
Last Company, Portsmouth, Ohio. Last. 1,631,709; June 7.
Toupet-Taylor Engineering Company. (See Taylor, Robert L., assignor.)
Tourist Supply Company. (See Gilmore, Lou S., assignor.)

Tourist Supply Company. (See Gilmore, Lou S., assignor, signor.)
Tournier, Julius C., Schenectady. N. Y., assignor to General Electric Company. Fuse plug. 1.623,752; June 28.
Tovalin, Angel, Monterey, Mexico. Thermoglue vessel. 1,623,763; Apr. 5.
Tower, Charles H., Cleveland, Ohlo, assignor, by mesne assignments, to Splitdorf-Bethlehem Electrical Company, Newark, N. J. Magneto. 1,642,704; Sept. 20.
Tower, Herschel E., assignor to The Baldwin Company, and the struments. 1,617,279; Feb. 8.
Tower, Herschel E., assignor to The Baldwin Company, Cincinnati, Ohlo. Expression mechanism for mechanical musical instruments. 1,646,001; Oct. 18.
Tower Manufacturing Co. (See Ulmann, Edgar A., assignor

signor. Tower Manufacturing Corporation. (See Fischer, Hermann, assignor.), Cleveland, Ohio. Disappearing win-Towers, Arthures. 1,685,394; July 19.
Towers, John H., Balsam Lake, Wis. Dead-center device. 1,636,395; July 19.
Towers & Sullivan Manufacturing Co. (See Dean, Henry A, assignor.) Huntington, H. H., and Towle.)
Towle, Imer E. (See Huntington, H. H., and Towle.)
Towle, Assignor.) (See Nock, Huroid E., assignor.)

Towle Manu assignor.)

assignor.)
Towle, Owen C., assignor to E. M. Brown, Los Angeles,
Calif. Automobile storage battery. 1,622,550; Mar. 29,
Towles, Eugene L. (See Towles, William J., E. L., and
Towles, George M. (See Towles, William J., E. L., and
G. M.)

G. M.)

Towles, William J., E. L., and G. M., Los Angeles, Calif.
Water heater. 1,628,341; May 10.

Towner, Heber F., Santa Ana, Calif. Disk harrow.
1,627,355; May 3.

Towner, Heber F., Santa Ana, Calif. Disk cultivator.
1,627,356; May 3.

Townley, Julian W., assignor of two-thirds to L. E.

Weber, Kansas City, Mo. Electric circuit-controlling
Townley, Wheeler E. (See Nougherty, J. W., and Townley, Wheeler E. (See Nougherty, J. W.)

Towns, Pete, Ansley, Nebr. Quick-adjusting fender or shield-lifter attachment for cultivators. 1,625,292; Apr. 19.

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Townsend, Arthur J. (See Naugle, H. M., and Townsend.)
Townsend Envelope Machine Company. (See Town-

Townsend Envelope Machine Company. (See Townsend, Joseph M., assignor.)
Townsend, George H., Greenwich, Conn. Motor-heat-indicating instrument. Des. 73.392; Aug. 30.
Townsend, George R., Schenectady, N. Y., assignor to General Electric Company. Motor controller. 1,633.833;
June 28.
Townsend Happy E. Brooklyn N. V. Scallag meables.

Townseud, Harry E., Brooklyn, N. Y. Sealing machine. 1,635,237; July 12. Townsend, James R. (See Eggers, W. M., and Mabr, as-

June 28.
Townsend, James R. (See Eggers, W. M., and Mahr, assignors, July 12.
Townsend, James S., Sacaton, Ariz., and W. B. Camp, Signors.)
Townsend, James S., Sacaton, Ariz., and W. B. Camp, Signors.)
Townsend, James S., Sacaton, Ariz., and W. B. Camp, Sharter, Calif., declared, by mesne assignments, to the citizens of the United States. Attachment for cotten of the Company Sharter, Calif., declared, by mesne assignments, to the citizens of the United States. Attachment for cotten of the Company Sharter, Calif., declared by the Company. Beacon-light casing. Des. 72,916; June 21.
Townsend, John R., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Lamp support. Des. 73,960; Nov. 22.
Townsend, John R., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Lamp support. Des. 73,960; Nov. 22.
Townsend, John R., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Shade holder. 1,628,863; May 17.
Townsend, John R., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Shade holder. 1,628,863; May 17.
Townsend, John R., South Bend, Ind., assignor, by mesne manufacturing Company. Estate Electric & Manufacturing Company. Estate Prowned Britishurgh. Pa. Mine-locomotive headlight. 1,635,564; July 12.
Townsend Joseph M., Worcester, Mass., assignor. Yownsend Bredope Machine Company. Envelopemaking machine. 1,638,863; Aug. 16.
Townsend Bredope Machine Company. Envelopemaking machine. 1,638,863; Aug. 16.
Townsend Shade Milliam S., assignor to Guarantee Liquid Méasure Company, Rochester, Pa. Liquid-dispensing-pump cising, Des. 73,881; Nov. 15.
Townsend, William S., assignor to Guarantee Liquid Méasure Company, Rochester, Pa. Liquid-dispensing-pump cising. Des. 73,881; Nov. 15.
Townsend, Shade Milliam S., assignor to Guarantee Liquid Measure Company, Rochester, Pa. Liquid-dispensing-pump cising. Des. 73,881; Nov. 15.
Townsend, Shade Milliam S., assignor to Guarantee Liquid Milliam S., assignor to Guarantee Liquid Milliam S., assig

Traffic Control, Inc. (See Schulz, P. H., and Jessen, asSignors.)
Traban, Amédée P. Waterville, Me. Printing machine.
1,635,322; Dec. 20.
Trail-1f Company. (See Greer, Edward R., assignor)
Traill-Robert, and R. Strachan, assignors to The Fairfield Shipbuilding & Engineering Company, Limited,
Glasgow, Scotland. Abstraction of lubricating oil from
the oil vapor in crank cases of Diesel engines.
1,628,932; May 17.
Trailmobile Company, The. (See Jones, Rufus B., assignor.)

Trailmobile Company, The. (See Shipley, C. W., and Jones, assignors.)

Trailograf Company, The. (See Citron, William J., as-

signor.)
Trainor, Edward J., Cohoes, assignor to Asbestos Spinning
and Weaving Corporation, New York, N. Y. Apparatus
for weaving asbestos cloth. 1,629,850; May 24.
Trainor, Edward J., Brooklyn, assignor to Asbestos Spinning and Weaving Corporation, New York, N. Y. Fabric
for gaskets. 1,640,486; Oct. 25.
Trammell, Earli M., assignor to El Paso Sash & Door
Company, El Paso, Tex. Telephone cabinet. Des.
73,718; Oct. 25.

Tramp. Kari, Chicago, Ill. Fiuid-heating faucet. 1,637,205; July 26.

Tranaas, Emil L., assignor to Koehring Company, Milwaukee, Wis. Charge-synchronizing means for converte mixers. 1,652,151; Dec. 6. CT. Brewer, Council Blunds, Iowa, Blunch, 1,614,812; Jan. 18.

Tranides, Elias, New York, N. Y. Detachable heel. 1,631,710; June 7.

Traphagen, Harry R., assignor to Emerson-Brantingham Company, Rockford, Ill. Drill and check control for Traphagen, Harry R., assignor to Emerson-Brantingham Manufacturing Company, Rockford, Ill. Adjusting mechanism for plows. 1,626,368; Apr. 26, Traphagen, Harry R., assignor to Emerson-Brantingham Corporation, Kockford, Ill. Pole truck 1,649,787; Traphagen, Harry R., assignor to Emerson-Brantingham Corporation, Kockford, Ill. Pole truck 1,649,787; Traphagen, William, Weston, W. Va. Power hammer. 1,047,554; Nov. 1.

Trapp. Fatrick A., Shelby, Mont. Jerk-line connection. Trapp. Patrick A., Shelby, Mont. Jerk-line connection. Trasenster, Gustave, assignor to Société Anonyme d'Ougree-Carlarlaye, Ougree-lez-Liege, Belgium. Böller furnace. 1,651,646; Dec. 6.

Tratsch, Walter A., Chicago, Ill. Coin chute. 1,641,304; Sept. 6.

Tratsch, Waiter A., Chicago, III. Coin cutte. 1,641,304; Sept. 6.
Traub, Alexander S., Yonkers, N. Y. Exhibit mount for stamps, etc. 1,627,624; May 10.
Traub, Charles J., Cincinnati, Ohio.
Truss. 1,639,910; Aug. 23.

Stillings, etc., 1,021,022, May 10.
Truub, Charles J., Cincinnati, Ohio. Truss. 1,639,910; Aug. 22 Emil, Newark, N. J. Time-controlled device. 1,448,748; Nov. 8.
Traudt, William F., Buffalo, N. Y. Apparatus for cementing soles to shoe uppers. 1,627,355; May 3.
Trauger, Guy A., Livermore, Iowa. Binder hitch. 1,632,013; June 14.
Traut, Frederick A., Buffalo, N. Y. Trap for conductor pipes. 1,641,538 Sept. 6.
Truder, 1,641,538 Sept. 6.
Truder, 1,641,538 Sept. 6.
Truder, Nicholas W., St. Paul, Minn. Grease retainer. 1,624,552; Apr. 12.
Trauther, Nicholas W., St. Paul, Minn. Grease retainer. 1,624,552; Apr. 12.
Trauther, Nicholas W., St. Paul, Minn. Grease retainer. 1,632,334; June 21.
Trauther, William L., Milwaukee, Wis. Grease retainer. 1,635,378 Willy 6.
Traver William L., Milwaukee, Wis. Grease retainer. 1,635,378 Willy 6.
Travagelin, Frank, Philadelphia, Pa. Stringed musical instrument. 1,634,730; July 5.
Travagelin, Frank, Philadelphia, Pa. Paintbrush holder or handle. 1,654,392; Dec. 27.
Traver, Greorge W., Chicago, Ill. I. Ge-cream-cone server. Des. 72,917; June 21.
Traver, George W., Chicago, Ill. I. Ge-cream-cone server. Des. 72,917; June 21.
Traver, Harry G., Beaver Falls, Pa. Amusement apparatus. 1,610,476; Feb. 8.
Traver, Oliver C., Schenectady, N. Y., assignor to General Electric Company. Synchronizing device. Rel6,554; Feb. 8.

Traver, Oliver C., Schenectady, N. Y., assignor to General Electric Company. Automatic reclosing circuit-breaker system. 1,635,061; July 5.
Traver, Oliver C., Schenectady, N. Y., assignor to General Electric Company. Protective device. 1,637,032;

Travers, Charles J., assignor of one-third to G. T. Strite and one-third to H. W. Bolens, Port Washington, Wis. Power-driven implement. 1,650,667; Nov. 29. Travers, Chorles J., assignor to Glison Manufacturing Company, Port Washington, Wis. Tractor. 1,650,668;

Nov. 29.

Travers, Henry A., Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transformer-tap-changing device. 1,630,363; May 31.

Travers, Henry A., Forest Hills Borough, Pa., assignor to Westinghouse Electric & Manufacturing Company. Travis, Henry A., Forest Hills Borough, Pa., assignor to Westinghouse Electric & Manufacturing Company. Company. Travis, Hertram C., Los Angeles, Calif. Pipe-perforating machine. 1,635,590; July 12.

Travis, Bom C., assignor to Simmons Company. Kenosha, Wis. Folding couch. 1,643,627; Nov. 15.

Travis, John M., St. Louis, Mo. Beverage-dispensing apparatus. 1014

Lightener. 1,634,698; July 5.

Travis, Regnind S., Unton Mills, Wash. Oar lock. 1,627,122; May 8.

Travis, Rimon E., Jr., Hattlesburg, Miss. Truck body.

Travis, Simeon E., fr., Hattiesburg, Miss. Truck body. 1,014,412; Jan. 11.
Travis, Simeon E., fr., Hattiesburg, Miss. Truck-body mount. 1,630,145; May 24.
Travis, Simeon E., fr., Hattiesburg, Miss. Side-rail truck body. 1,052,069; Dec. 1

Travnicek, Frank, also known as Frank Griness, East. St. Louis, III. Vacuum propeller. 1.638,071; Aug. 9. Travnicek, Frank, also known as F. Griness, East St. Louis, III. Reaction vacuum propeller. 1.643,862; Sept. 27.

Louis, III. Reaction vacuum propeller. 1.643,862; Sept. 27. Sept.

assignors.)

Trbojevich, Nikola, Detroit, Mich. Friction differential gear. 1,612,954; Jan. 4.

Trbojevich, Nikola, Highland Park, Mich. Cross-word puzzle. 1,629,601; May 24.

Trbojevich, Nikola, Detroit, Mich. Generating gears. Trbojevich, Nikola, Detroit, Mich., assignor to Gleason Works, Rochester, N. V. Machine for generating gears. 1,638,564; May 17.

Trbojevich, Nikola, Detroit, Mich., assignor to Gleason, Nikola, Detroit, Mich., assignor to Gleason, 1,647,157; Nov. 1.

Trbojevich, Nikola, Highland Park, Mich., assignor to Gleason Works, Rochester, N. V. Producing gears. 1,647,158; Nov. 1.

Trendwell, Engineering Company. (See Mikaelson, Erik W., assignor.)

Trendwell Engineering Company. (See Mikaelson, Erik W., assignor.)

Treadwell, M. H., Company. (See Astrom, Carl P., as-

Treduveli, M. H., Company, tsee astrom, Carl P., assignor, Sarlow S. Ward D., Pittsfeld, Mass, assignor to General Electric Company, Radiator tank. 1,631,711; June 7. Trebes, Bruno M. A., Oak Park, III, assignor to Western Electric Company, Incorporated, New York, N. Y. Supporting device. 1,615,149; Jan. 18.

Treck, Gastave, Detroit, Mich. Cooling device. 1,640,162; Aug. 28.

Tredway, Alfred P., Shoals, Ind. Gear shift for motor vehicles. 1,646,464; Oct. 11.
Tredwell, Charles A., assignor to Winchester Repeating A. (25,510), Apr. 13 aven, Conn. Telescopic fishing rod. 1,625,510; Apr. 13 aven, Conn. Telescopic fishing rod. 1,625,510; Apr. 13 aven, Conn. Telescopic fishing rod. 1,625,610; Apr. 13 aven, Conn. Self-scraping hearth for assignmental for a segmentators and other furnaces. 1,645,671; Trees Joseph C. (See McConn.)

Trees, Joseph C. (See McCurdy, R. P., and Hochstetter, assignors.)

assignors.)
Treffer, Frederick A. (See Peterson, J. A., and Treffer.)
Treffer, Friedrich. (See Treffe, Gustav and F.)
Treffe, Friedrich. (See Treffe, Gustav and F.)
Treffer, Friedrich. Grossapach, near Backnang, Germany.
Automatic starting and stopping arrangement for turbines. 1,652,007; Dec. 6.
Treffer, 1652,007; Dec. 6.
Treffer, 1652,007; Dec. 6.
Treffer, Herbert, Melrose Park, Ill., assignor to The Richardson Company, Lockland, Obio. Loading battery boxes. 1,631,658; June 7.
Treganowan, Thomas. Pittsburgh. Pa. Built-in chimney Incharate 1,643,020; Ctc. 111. Forged grating and manufacturing same. 1,650,655; Nov. 22.
Tregillus, Harold G. Barrington, Ill. Trussed structure. 1,654,151; Dec. 27.
Tregillus, Harold G. Park Ridge, Ill. Trussed structure.

1.654.151; Dec. 27.
Tregillus, Harold G., Park Ridge, Ill. Trussed structure. 1.654.152; Dec. 27.
Treichler, Howard L., Newfane, N. Y. Coin-controlled apparatus. 1.649.425; Nov. 15.
Tremain, James G., Port Huron, assignor of one-half to J. Tremain, Detroit, Mich. 1.630.550; May 31.
Tremain, Oseph. (See Tremain, James G., assignor.)
Tremaine, Glenville S., Westeld, N. J. Combination Clock and calendar. 1.623.076; Apr. 5.
Tremaine, Glenville S., Westeld, N. J. Combination and the calendar. 1.623.076; Apr. 5.
Tremper, Charles W., assignor, by mesne assignments, to The Tremper-Shields Company, New Haven, Conn. Suction sheet-pick-up mechanism. 1.625.578; Apr. 19.
Tremper-Shields Company, The. (See Tremper, Charles W., assignor.) assignor.)

Trenchard, Henry, Jr. (See Swab, Jay G., assignor.) Trenck, August J., Milord, Conn. Wire-covering ma-chine. 1,616,668; Feb. 1. Trenner, Simeon, assignor to the Firm of C. A. Hausser & Son, Philadelphia, Pa. Hæmacytometer. 1,630,146; May 24.

May 24.

Trenor, Albert D.. Gloucester, assignor to J. H. Hammond, 1r.. Gloucester, Mass. Synchronizing mechanism. 1638, 2627. July 19.

1638, 2627. July 19.

The system of control by impulses of predetermined different durations. 1,620,987; Mar. 15.

Trenor, Albert D.. New York, N. Y., assignor to J. H. Hammond, fr., Gloucester, Mass. Variable-speed repeating mechanism. 1,651,852; Dec. 6.

Trenor, Henry M. (See Baldwin, H. M., and Trenor.)

Trent, Harold E., Lansdowne, assignor to J. Struthers Dunn, Philadelphia, Pa. Relay switch. 1,646,888; Oct. 25. Trent Process Corporation. (See Trent, Walter E., as-

Trent Process Corporation. (See Trent, Walter E., assignor, Distilling oil in presence of community of the Machine of the Mach

mine explosions. 1,642,912; Sept. 20. assignor.)
The Company. (See Metz, Samuel 20. assignor.)
Tresider, Tolmie J., Upper Norwood. Brighad. Instrument for measuring angles. 1,650,553; Nov. 22.
Tresise, Raleigh E. (See Scott, W. M., and Tresise.)
Tresider, Donald K., Pittsburgh, P.A., assignor to Instrument of Detaine hydrochloride, etc. 1,634,221; June 28.
Tressler, Donald K., Pittsburgh, P.A., assignor to Larrowe Construction Company, Detroit, Mich. Preparing betaine hydrochloride. 1,634,221; June 28.
Tressler, Charles C., Lawrenceburg, Ind. Crank. 1,640,163; Tressler, Berault A., assignor to Metal Forms Corporation, Milwauke, Wis. Road form. 1,440,739; Aug. 30.
Trevinc, Alel C., San Antonio, Tex. Gas producer. Trevor, Joseph. (See Boucek, J., and Hallek, assignors.) Trevor, John B., ir., New York, N. Y. Voltage regulator. 1,621,448; Mar. 15.
Trevor Manufacturing Company. (See Trevor, W. W., and Trevor, assignors.)
Trevor Manufacturing Company. (See Trevor, W. W., Trevor, Manufacturing Company. (See Trevor, W. W., and Berean, assignors.)
Trevor, William W., (See Berean, D. A., and Trevor.)
Trevor, William W., and H. L. Abbott, assignors to Trevor Manufacturing Company. (See Trevor, W. W., and Graphes and grooves in barrel staves and the like. 1,648,527; Nov. 8.
Trevor, William W., Lockport, and D. A. Berean, Barker, assignors to Trevor Manufacturing Company, Lockport, N. Y. Machine for cutting tongues and grooves in barrel staves and the Paris, France. Device for projecting stationary or moving pictures in broad daylight, 1,624,816; Apr. 12.
Triana, Rodrigue J. A. (See Triana, André E. L. and R. J. A., and Ortiz-Decofet.
Triny, Edward J., Jr., Jacksonville, Fla., and P. L. Farmer, R

Tribine Company, The. (see Sanders) Signort, Signort, Signort, Trickey, John P., Evanston, assignor to The Quaker Oats Company, Chicago, III. Coloring material. 1,627,939; Trico Products Corporation. (See Folberth, Fred G.,

Trico Products Corporation. (See Folberth, Frederick G. and W. M., assignors.)

Trico Products Corporation. (See Malouf, Beshara I., Products Corporation. (See Pierce, Earl F., as-

dec Products Corporation. (See Polk, Thomas B., assignor.) A.-G. (See Vogt, H., Engl and Massalle, as-

Tri-Ergon, signors.) Limited. (See Massolle, J., Engl, and Vogt.

assignors.)

Tri-Ergon Limited. (See Massolle, J., Vogt, and Engl, assignors.)

Tri-Ergon Limited. (See Vogt, H., Engl, and Massolle, assignors.)

assignors.)
Trimble, Charles P., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa. Bed spring and the like.
1.631,076: May 31.
Trimble, Charles P., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa. Pneumatic clamping tool.
1.635,827; Dec. 27.
Trimble, E. M., Mig. Company. (See Baxter, William C., assignor.)

Trimble, Edward M. (See Baxter, William C., assignor.)
Trimble, Edwin S., Atchison, Kans. Collapsible chicken
coop. 1,620,143; Mar. 8.
Trimble, Frank H., Lankershim, Calif. Lighting-fixture

Trimble, Buwin S., Archivon, coop. 1620,143; Mar. Shim, Calif. Lighting-fixture plate. Des. 72.042; Feb. 15.

riable, Frank H., Lankershim, Calif. Lighting-fixture wall plate. Des. 72.106; Mar. S. Trimble, Henry G., Kansas City, Mo. Fire box. 1,629,012; May 17.

Trimmer, John W., Cleveland, Ohio. Treating reflectors for headlights, etc. 1,623,711; Apr. 5. Trimming, George A. R., Lucknow, British India. Tran-gition coupling for railway or like vehicles. 1,647,486;

Trimming.

sition coupling for rankway.

Nov. 1.

Trimont Manufacturing Company. (See Keneraum.

Joseph E., assignor.)

Trinity Wheel Corporation. (See Baker, Frederick W.,

Cauth Pasadena, assignor to Western

Joseph B., assignor,
Trinity Wheel Corporation. (See Baker, Frederick W.,
assignor.)
Trinkaus, Alphons, South Pasadena, assignor to Western
Blind & Screen Co., Los Angeles, Calif. Venetian-blind
tilting-rali fixture. 1,639,239; Aug. 16.
Trinka, William W., assignor to Puliclean Manufacturing
Corporation, Bridgeport, Conn. Laundering machine.
Trinks, William W., assignor to Puliclean Manufacturing Corporation, Bridgeport, Conn. Laundering machine.
1,623,077; Apr. 5.
Trinks, Willibaid, Pittsburgh, assignor to Homestead
Valve Manufacturing Company, Homestead, Pa. Rotary valve .1,645,631; Oct. 18.
Triolo, Louis, Brooklyn, N. Y. Box-making machine and
the making of boxes. 1,627,874; May 10.
Tripp, Leslie R., Topeka, Kans. Fluid brake. 1,616,770;
Feb. 8.
Tripp, Valentine W., Blue Hill, Nebr. Gauge. 1,632,637;
June 14. Oneste Nebr. Radiator. 1,628,288;

Tripp, Valentine W., Live June 14. Triska, Joseph, Omaha, Nebr. Radiator.

Tripp, Valentine W., Blue Hill, Nebr. Gauge. 1,632,637; June 14.
Triska, Joseph, Omaha, Nebr. Radiator. 1,628,288; May 10.
Trist, Januar R., London, Barland, Control device opTrist, Edward, Pittsburgh, Pa. Brake-band-lining-securing means. Rel6,573; Mar. 29.
Trist, Ronald & Company. (See Butler, Arthur, assignor.)
Tritchler, William F., Fargo, N. Dak. Display bracket. 1,613,917; Jan. 11.
Gerlieb, Deansboro, N. X. Necktie frame. 1,617,717; Feb. 15.
Triumph Cycle Company Limited. (See Parnell, Frank G., assignor.)
Tritude, Gottlieb, Deansboro, N. X. Necktie frame. 1,617,717; Feb. 15.
Triumph Cycle Company Limited. (See Parnell, Frank G., assignor.)
Tritude, Gutlieb, Deansboro, N. X. Necktie frame. 1,617,717; Feb. 15.
Triumph Cycle Company Limited. (See Parnell, Frank G., assignor.)
Troast, William F., assignor to I. P., Reese, Lancaster, Pa. Sliding shackle lock. 1,627,259; May 3.
Trooner, Arthur M., Trakoma Park, Md. assignor to Trooner, Arthur M., Trakoma Park, Md. assignor to 17 col., Arthur E., Osakiand, Calif. Grouting. 1,628,933; May 17.
Troicl, Arthur E., Osakiand, Calif. Grouting. 1,628,933; May 17.
Least 2364; June 21.
Berkeley, Calif. Baking oven. 1832,236; June 21.

May 17,
Troid Arthur E., Berkeley, Calif. Baking oven.
Troid, Arthur E., Berkeley, Calif. Baking oven.
Troid, Arthur B., Berkeley, assignor to Montague Range
and Furnace Co. San Francisco, Calif. Rotary roasting range. 1,630,644; May 31.
Trojan Powder Company. (See Bredt, Otto P. C., assignor.)

rojan Powder Company. (See Nellis, Edwin L., as-signor.) Trojan Powder Company. (See Snelling, Walter O., as-

Trojan Powder Company. (See Snelling, W. O., and Rupp, assignors.)

Assignors.)

Troland, Leonard T., Malden, assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass. Cinematographic-film stretching. 1,613,300; Jan. 4.

Troland, Leonard T., Malden, and J. M. Andrews, Wollaston, assignors by Technicolor Motion Picture Corporation, assignors by Technicolor Motion Picture Corporation, assignors by Technicolor Motion Picture Corporation, assignor to The Loadometer Company, Baltimore County, Md. Load indicator for motor vehicles. 1,621,032, Mar. 15.

Trolly, Rationard, Company, Baltimore County, Md. Load indicator for motor vehicles. 1,621,038, Mar. 15.

Tromahauser, Jesse H., Toronto, Ontarlo, Canada. Locating, placing, and leveling berth seats for concrete cribs. 1,635,730; July 12.

Trombey, Arthur A., Plainville, Conn. Tire spreader. Trompeter, Herman F., and J. P. Brown, Topeka, Kans. Swivel for telephone receivers. 1,620,703; Mar. 15.

Tronolone, Dominick. (See Kelley, W. V. D., and Tronolone,

Tronstad, Ole, Eau Claire, Wis. Float for bath soaps. 1,617,466; Feb. 15.
Trootnerf, Michael, and J. Gromeeko, San Francisco, Calif. Disinfecting apparatus. 1,646,774; Oct. 25.
Tropp. Leopold. (See Mortensen, J., and Tropp.)
Troskl, Peter, Arista, W. Va. Bird house. 1,634,763; July 5.

July 6.
Trosper, Charles L. (See Laxton, L., and Trosper.)
Trott. Harvey B. (See Broden, E. H., and Felerabend,
Trott. Rolland S., Denver, Colo. Steering drive wheel.
1.613.065; Jan. 4.
Trotter, Henry R., Morton, Pa., assignor to Westinghouse Electric & Manufacturing Company. Temperature-regulator system. 1.645.263; Oct. 11.

Trotter, Henry R., Swarthmore, and H. F. Schmidt, Lansdowne, Pa., assignors to Westinghouse Electric and Manufacturing Company. Turbine-blade fastening. 1.638,648; Aug. 9.
Trotter, Lester R., Augusta, Kans. Pneumatic thre. Trotter, Lester R., Augusta, Kans. Pneumatic thre. Trotter, Walter F., Cincinnati, Ohio, assignor to Detroit Stoker Company. Detroit, Mich. Underfeed stoker. 1.640,164; Aug. 23.
Trottier, Emile N., North Adams, Mass. Gas-stove valve-locking device. 1,652,216 Dec. 13.
Aug. 16.
Trout, Albert K. (See Avery, U. Sherman, and Trout.) Trout, Charles W., Overland, assignor to N. S. T. Automobile Polish Mfg. Co., St. Louis, Mo. Polish. 1,639,315; Aug. 16.
1063,315; Aug. 16.
1062, 138; Aug. 18.
1064, 138; Aug. 18.
1064, 138; Aug. 18.
1064, 138; Aug. 18.
1065, 138; Au

Trout, Harry E., et al. (See Witmyer, Harry M., as

Trout, Harry E., et al. (See Witmyer, Harry M., as signor.)
Trout, Oliver C., Los Angeles, Calif., assignor to Emaso Derrick & Equipment Company, Galvanized pipe and making same. 1.618,611; Feb. 22.
Trout, Philip H., Roanoke, Va. Welded composite corrugated sheet. 1,625,061; Apr. 19.
Frout, Sheridan W., Jeannette, Pa. Toy target 1,652,843; Dec. 13.
Trout, Walter C., Lufkin, Tex. Make-up post. 1,644,862; Oct. II.
Tot. II.
Tot. Maker M., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Motor vehicle. 1,628,133; May 17.

Company, Philadelphia, Pa. Motor vehicle. 1,629,133; May 17.

Trout. Walter M., and C. B. Des Jardins, assignors to Budd Wheel Company, Philadelphia, Pa. Metal vehicle Budd Wheel Company, Philadelphia, Pa., and C. B. Des Jardins, Washington, D. C. assignors to Budd Wheel Company, Philadelphia, Pa. Metal vehicle wheel. 1,646,889; Oct. 25.

Trout, William A. Los Angeles, Calif. Blow-out pre-Trout, William A. Los Angeles, Calif. Blow-out pre-Trout, William A., Los Angeles, Calif. Circulating head. 1,625,172; Apr. 19.

Trout, William A., Los Angeles, Calif. Circulating head. 1,625,172; Apr. 19.

Trout, William A., Los Angeles, Calif. Circulating head. 1,625,172; Apr. 19.

Trout, William A., Los Angeles, Calif. Oil-well derrick and the company of the company of the company of the company of the company. The company of the co

bridge.)

Dringer, Boy S., Butler, N. J. Unloading device for rubber refiners. 1,629,240; May 17. Troxell, Harvey B., assignor to Harris & Troxell, Seattle, Wash. Loud-speaker horn. Des. 73,951; Nov. 22. Troxell, Rew, Los Angeles, Calif. Wheeled toy. 1,622,862; Mar. 29.

assignor.)
Troy Laundry Machinery Co. (See Schenck, Le Roy C., assignor.)

Try Metal Products Company, The. (See Akers, Milton Sasignor.)

Try Metal Products Company, The. (See Dillingham, Fredericy assignor.)

Try Metal Sasignor.)

Try Metal Register Sasignor.

Try Metal Sasignor.

Truax, William T., assignor to United States Register Company, Battle Creek, Mich. Register-front fastener.

1.643,683, Sept. 27, 190.

Truck, Joseph A. V. (See Felt, D. E., and Truck.)

Truck, Joseph A. V. (See Felt, D. E., and Truck.)

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Truck Joseph A. V. (See Felt, D. E., and Truck.)

signor.)

signor.)
Truemper, John C., Indianapolis, Ind. Portable building,
1,622,746; Mar. 29.
Truesdell, Arthur E., Pittsfield, Mass., assignor of onehalf to Doberty Research Company, New York, N. Y.
Limekin and burning lime. 1,627,215; May 3.
Trullinger, Herbert A., Clackamas County, Oreg. Coaster
wagoon. 1,620,926; Mar. 15.
Truester, 1,620,926; Mar. 15.
Truester, 1,620,826; Mar. 15.
Truester, 1,620,826; Mar. 1,641,610; Sept. 6.
Trulove, John C., Shoals, N. C. Tobacco barvester.
1,629,422; May 17.
Truester, Face Pawteck R. I. assignor, to North Ameri-

Truman, Fred. Pawtucket, R. I., assignor to North American Lace Company, Philadelphia, Pa. Lace center Truman, George C. See Borbeck, R. E., and Truman, Joseph, Hanover, N. H. Dry powdered cleaning composition 1.640.740; aux. 30.

Trumble, John T., Detroit, Mich. Clutch, 1,631,285: June 7.

Trumble, Milon J., Alhambra, Calif. Apparatus for recovering the volatile products from carbonaceous material. 1,651,647; Dec. 6.

Trumble, Milon J., Los Angeles, Calif. Removable-cover construction. 1,653,137; Dec. 20.

Trumble Blectric Manufacturing Company, The. (See Hanny, Charles E., assignor.)

Trumbull Electric Manufacturing Company, The. (See Hanny, Charles E., assignor.)

Trumbull Flectric Manufacturing Company, The. (See Wheeler, Frank T., assignor.)

Trumbull Frank S., Providence, R. I. Spoon or similar article. Des. 72,877; June 14.

Trumbull-Yanderpoel Electric Manufacturing Company, (See Mason, Ralph K., assignor.)

Trumpk, Syracuse, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Trumpc, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Balancing machine. 1,652,505; Dec. 13.

Trumpler, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Balancing machine. 1,652,505; Dec. 13.

Trumpler, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Balancing machine. 1,652,505; Dec. 13.

Trumpler, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Balancing machine. 1,652,505; Dec. 13.

Trumpler, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Flexible coupling. 1,654,512; Dec. 27.

Trumpour, Frederick J., Forest Glen, Md. Blue-printing

Manuscuring company. reactive coupling. 1,033,903 Tumpon; Prederlek 1, Forest Glen, Md. Blue-printing machine. 1,646,331; Oct. 18. Trunck, Clyde J., Eaton, Ohio. Mechanical shifting means for speed-transmission mechanism. 1,653,072; Dec. 20.

Dec. Joseph, Postal. Control of the Murphy, Date of the Control of assignors.)
Truscon Steel Company. (See Daykin, Edward W., as-

assignor.)
ruscon Steel Company. (See Groh, M. S., and Halls,

Steel Company. (See Halls, Joseph A., as-

sugnor.)
Truslow, Wallace B., et al. (See Gardner, William R.,
assignor.)
Truslow, Carence D. (See Trussell, Emory A., assignor.)
Trussell, Clarence D., assignor to Trussell Manufacturing
Company, Poughkeepsle, N. Y. Loose-leaf binder.
1,634,125; June 28.
Trussell, Emory A., Richmond Hill, assignor of one-third
1,634,125; Trussell, Poughkeepsle, N. Y. Refill book.
Trussell, Homer A., Chicago, Ill.
Trussell, Homer A., Chicago, Ill.
Trussell, Manufacturing Company,
engine. D., assignor.)

Trussell Manufacturing Company. (See Trussell, Clarence D., assignor.)

Trustees of Assumption College, The. (See Terraz, Symphorian, assignor.)

Trustees of Joseph Company, The.

Trustees of Joseph Company, The.

Truttwin, Hans, Vienna, Austria. Metal-iodide-aikaliiodide compounds suitable for use in therapeutics and
manufacturing them. 1,627,359 | May 3.

Tryner, Ben J., Chicago, Ill., assignor to Enterprise
Bolier & Tank Works. Damper regulator for furnaces.

Tryon, Henry C. (See Napier, M. S., Wilkinson, and

Tryon.)

Tryon, H.

Tschappat, Sheridan P., assignor of one-half to H. Calla-han, Tulsa, Okla. Rotatable tubing hanger. 1,650,102; Nov. 22.
Tschappat, William H., Washington, D. C. Expansible sprocket wheel. 1,614,266; Jan. 11.
Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, III. Mop. 1,650,056; Nov. 22.
Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, III. Mop. holder. 1,651,853;

Dec. 6.

Tschopp, Jacob T., Schenectady, N. Y., assignor to General Electric Company, Narrow light aperture and making the same. I,618.117; Feb. 15.

Tschudi, Traugott, New York, N. Y. Rotary engine.
Tsulino, Yonezo, New York, N. Y. Amusement apparatus. 1,652.071; Dec. 6.
Tuba, John, Whiting, Ind. Safety life-saving fender for cars. 1,639.154; Aug. 16.
Tubba, Jesse L., Tacoma, Wash. Floor layer. 1,618,596; Tubb. Jow Patch Commany. (See Patton, Luther, as-

Joy Patch Company. (See Patton, Luther, as-

Tubize Artificial Silk Company of America. (See Naef, Ernest E., assignor.)
Tubular Woven Fabric Company. (See Bryant, Henry E.,

Tubize Artificial Silk Company of America. (See Naef, Ernest E., assignor.)
Tubular Woven Fabric Company. (See Bryant, Henry E., assignor.)
Tucck, Alexander. Detroit, Mich. Wall rack or similar 1902. (See Bryant, Henry E., assignor.)
Tucck, Alexander. Detroit, Mich. Wall rack or similar 1902. (See Bryant, Henry E., assignor.)
Tucck, Alexander. Detroit, Mich. Wall rack or similar 1902. (See Bryant, Henry E., assignor.)
Tucker, C. J., Lees Summit, and L. J. Chapman, Kansas City, Mo. Apparatus for drying hay or other products. 1, 1042.461; Sept. 13.
Tucker, G. J., Lees Summit, and L. J. Chapman, Kansas City, Mo. Apparatus for drying hay or other products. 1, 1042.461; Sept. 13.
Tucker, Henry R., Balboa, assignor of one-half to J. G. Claybourn, Pedro Miguel, Canal Zone. Gold-collecting the composition of the composition of

Tullis, David R., Clydebank, Scotland. Purifying or refining metals and alloys. 1.636,881; July 26. Tullis, Harley A. (See Mee, W. J., and Tullis, J. Tullis, John K., New York, N. Y. Tanning. 1,621,612; Mar, 22.

Mar. 22.
Tullis, John K., assignor, by mesne assignments, to Geltan Company, New York, N. Y. Leather manufacture. 1,640,914; Aug. 30.
Tulloss, Stuart B., Washington, D. C. Sorting case. 1,626,126; Apr. 26.
Tully, George L., assignor to American Optical Company, Southbridge, Mass. Binocular-magnifying-lens holder. 1,633,062; July 5.
Tully, George L., assignor to American Optical Company, Southbridge, Mass. Goggets. 1,633,807; July 12.
Southbridge, Mass. Goggets. 1,635,807; July 12.
Southbridge, Mass. Goggets. 1,631,488; Dec. 6.
Tully, Marks J., Long Island City, N. Y. Double wrench. 1,629,895; May 24.
Tulsa Valve Company. (See Shaffer, J. C., and Mankin, assignors).

Tulsa Valve assignors.)

assignors.)
Tunison, Burnell R. (See Leslie, E. H., and Tunison.)
Tunison, Murray C., Los Angeles, Calif. Automobile
roadster body. Des. 73,214; Aug.
Tunison, Murray C., assignor to the Firm of Nunn & Tunison, Oakland, Calif. Garage. 1.614,905; Jan. 18.
Tunstall, Harry M., Corpus Christi, Tex. Tongs.
1.645,509; Oct. 11.
Tuomi, Unno E., Dallas, Tex. Sash-operating mechanism.
1,613,167; Mar. I., Fquanac, N. J. Mouth-spraying device. 1,646,642; Oct. 25.

Tupper, Frank H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Molding strain insulators. I, 621,042; Mar. 16.

Tupper, Frank H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Molded panel and making sanc. 1,637,302; Aug. 2.

Tupper and making sanc. 1,637,302; Aug. 2.

Mesne assignments to The Satety Car Heating and Lighting Company, New York, N. Y. System having combined automatic switch and lamp regulator. 1,624,999; Apr. 19.

Turbuyen, William A., assignor to U. S. Light & Heat Car and generating system. 1,628,079; May 10.

Turbine Patents Corporation. (See Klinek, Gustav A., assignor, Jurck, Albert G., Milwaukee, Wis., assignor, to American

assignor.)
Turck, Albert G., Milwaukee, Wis., assignor to American
Signal Corporation, Washington, D. C. Electrical voting apparatus. 1,680,247; Nov. 22.
Türck, Eugen, Barmen-Langerfeld, Germany. Machinebraided lace insertion and making the same. 1,637,716;

Aug. 2.

Turcott, David, assignor to P. B. Yates Machine Company, Beloit, Wis. Turning machine. 1,650,669;

Threoft, David, assignor, pany, Beloit, Wis. Turning machine: 1,000, 29, Turcotte, Adelard, St. Just of Bretonnieres, Quebec, Canada. Saw tool. 1,616,340; Feb. 1. Tures, William, assignor to The Oro-Tone Co., Chicago, III. Sound-box coupler. 1,648,080; Nov. 8. Turl, Steve, New York, N. Y. Skate sharpener. 1,622,476; Mar. 29. Turk, Anton, Johnstown, Pa. Safety blasting cap box. 1,629,423; May 17. Turnac. Turking Turking Macedonia Tobacco Co. (See Natura, Pernand, assignor).

T. (259.428; May 17.

"Turmau" Turkish Macedonia Tobacco Co. (See Kabus, Fernand, assignor.)

Turnbaugh, Ora W., Cambridge, Ohio. Wheel chock. Turnbaugh, Ora W., Cambridge, Ohio. Wheel chock. Turnbaugh, Ora W., Cambridge, Ohio. Wheel chock. Turnbaugh, Can. 1, 622,853; Mar. 29.

Turnbull, Percy S. (See Weichelt, F. C., and Turnbull.) Turnell, Ernest H., Chicago, Ill. Milk bottle and cream separator for use therewith. 1,645,632; Oct. 18.

Turner, Albert W., Hamburg, Germany. Device for closing the albert of the company, Worcester, Mass. Sprindle mounting. 1,619,995; Mar. 8.

Turner, Albert W., Hamburg, Germany. Device for closing the alr bladders of sport balls of any kind. 1,620,245; Mr. S.

1,620,245; Mr. S.

1,620,245; Mr. S.

1,620,245; Mr. S.

1,621,043; Mar. 15.

Turner, Archibald J., assignor to Wilson-Western Sporting Goods Company, Chicago, Ill. Inflatable ball. 1,621,043; Mar. 15.

Turner, Archibald J., assignor to Wilson-Western Sporting Goods Company, Chicago, Ill. Inflatable ball. 1,621,043; Mar. 15.

Turner, Archibald J., assignor to Wilson-Western Sporting Goods Company, Chicago, Ill. Easchall glove. 1,624,696; Apr. 12.

App. 12. (24,696; Agenya, assignor to United States

Turner, Chanles We We York: N. Y. and J. P. Hallian,

M. Turner, Channer, Seattle, Wind Engles & Pourse,

Wind Engine & Pourse,

William, Battle,

William,

Oct. 201.

Oct. 201.

M. Turner, Claude A. P., Minardiges and the nac.

M. Turner, Truss for bridges and the nac.

M. Turner, Truss for bridges and the nac.

M. Turner, Claude A. P., Minardiges and J. P. Hallihan, Detroit, Mich.

Betroit, Mich. Highway construction. 1,628,934;

May 17.

On A. J. P. Hallihan, Detroit, Mich.

Turner, Douglas, assignor to The Measuregraph Company, and winding machine. 1,624,173. Apr. 19. Turner, Douglas, assignor to the deauwage and winding machine. 1,631,440; June 7. The Measuregraph Company, and winding machines. 1,615,184; Jan. 18. Turner, Douglas, assignor to The Measuregraph Company, St. Louis Mo. Ribbon measuring, cost computing, and winding machine. 1,624,173. Apr. 19. Turner, Edgart A., Chicago. III. Heater for automobile water-county after the description of the Measuregraph Company, and winding machine. 1,624,173. Apr. 19. Turner, Edgart A., Chicago. III. Heater for automobile water-county after the description of the Measuregraph Company. The Measure of the Stoke Company. Locomotive Stoker L., 1,647,159; Nov. 1.

Turner, Figure 2. Lecomotive stoker. 1,647,189; tive Stoker Company. Locomotive stoker. 1,647,189; tive Stoker Company. Locomotive stoker. 1,647,189; tired wheel. 1,629,814; May 24.

Turner, Francis L., Charlotte, N. C. Magnetic sweeper. 1,630,987; May 31.

Turner, Frances M., assignor of one-half to J. E. Cardarelle, Minneapolis, Minn. Drying rack for bathtubs. 1,628,936; May 17.

Turner, Frank A., New York, N. Y. Reslient wheel. 1,632,809; June 21.

Ling 131; Jan. 18.

Turner, Frederick J., and J. E. E. Starck, Elstree, assignors of one-four to J. R. Craig, London, and one-fourth to P. J. Packman, Higbbury, London, and one-fourth to P. J. Packman, Higbbury, London, England. Record and the manufacture thereof for talking machines. 1,614,413; Jan. 11.

Turner, George, Parramatta, and J. E. Bishop, Mosman, near Sydney, New South Wales, Australia. Construction of wheels for road vehicles. 1,624,771; Apr. 12. Turner, George A., Stockton, Calif. Inductance-coll frame. 1,624,447; Apr. 12. Introduction of the collection of the collecti

Turner Glass Company. (See Edwards, Wilson D., assignor.)
Turner, Harry A., Ferriday, La. Cross-row cotton chopper. 1,642,277; Sept. 13.
Turner, Harry G., Chicago, Ill. Engraving machine. 1,625,062; Apr. 19.
Turner, John J., Batavia, N. Y., assignor to Universal Gypsum & Lime Co., Chicago, Ill. Apparatus for shaping the edges of wall board or the like. 1,654,023; Dec. 27.

Turner, Aug. 2 John T., Exmore, Va. Protector.

Aug. 2.
Turner, John X., Ocean Park, Calif. Shock-absorbing seat support. 1,629,593; May 24.
Turner, Joseph N., Brooklyn, N. Y., assignor to Eberhard Faber Pencil Co. Display package. 1,614,635; Jan. 18.
Turner, Laurence B., Cambridge. England, assignor, by meane assignments, to Westinghouse Electric & Manniecuting Company. Electric relay. 1,642,661, Sept.

Turner, Nelson C. (See Voress, C. L., and Turner.) Turner, Orval M., and H. W. Cannon, Long Beach, Calif. Sleeve pump valve. 1,648,204; Nov. 8. Turner, Ralph R., jr. (See Turner, Ralph R. and R.

Turner, Nelson C. (See Voress, C. L., and Turner.)
Turner, Orval M., and H. W. Cannon, Long Beach, Calif.
Sleeve pump vaive. 1.644,204; Nov. 8.
Turner, Raiph R., jr. (See Turner, Raiph R. and R.
Turner, Raiph R., and R. R., jr., Charlotte, N. C. Electric fan. 1,650,165; Nov. 22.
Turner, Richard G. (See Cederlund. A. and Turner.)
Turner, Richard G. assignor to Compton & Knowles Loom
Works, Worcester, Mass. Uniformly-tensioned loom let.
Grant Composition of the Compton of Composition of Composition

Turner, William F., Newark, Del. Combination furniture. 1.618,737; Feb. 22.
Turner, William M. (See Turner, Claude A. P., assignor.)
Turner, William S., Detroit, Mich., assignor to The Paine and Williams Company, Cleveland, Ohio. Door-pocket strap. 1,616.009; Feb. 1.
Turney, Barbara E. (See Sadler, Frederick W., as-Turney, signor.)

signor.)
Turney, Harry L., Portland, Oreg. Logging engine.
1,64,329; Jan. 11.
Turnquist. Alexander N., Glen Ellyn, Ill. Oll regulator.
1,62,444; Mar. 15.
Turpin, George M., Murray City, Utah. Egg-turning device.
1,638,072; Aug. 9.
Turrell, James E., Noxen, and W. G. Thomas, West
Pitrston, Pa. Dust cap for tire valves. 1,640,863;
Aug. 30.

Tuska, C. D., Company, The, (See Tuska, Clarence D., assignor.) Tuska, Clar Hartford, Conn. Variometer. 1,630,873; Tuska, Clarence D., assignor to The C. I pany. Hartford, Conn. Mold for D. Tuska Com-or variometers.

Party Hartford, Cohn. Variometer. 1,030,243, Parks, Clarence D., assignor to The C. D. Tuska Company. Hartford, Cohn. Mold for variometers. 1,630,874; May 31.

Tuska, Clarence D., assignor to The C. D. Tuska Company. Hartford, Cohn. Hinding post. 1,646,896; Oct. 25.

Tuska, Clarence D., assignor to The C. D. Tuska Company, Hartford, Cohn. Hinding post. 1,646,896; Oct. 25.

Tuska, Mark, Campbell, Califf. Body support. 1,640,586; Aug. 30.

Tuthil, Henry G., Los Angeles, Calif. Signal. 1,627,625; Aug. 30.

Tuthil, Henry G., Los Angeles, Calif. Signal. 1,627,625; Aug. 30.

Tuthil, Just C. Boston, Mass. Mixing trough. 1,614,436; Jan. 11.

Tuthil, Albert E., assignor to Blue Diamond Materials Co., Boston, Mass. Apparatus for making plaster and mortar. 1,613,682; Jan. 11.

Tuthil, Henry A., Upton, Mass. Brake mechanism. 1,640,524; Feb. 1.

Tuttle, Henry A., Upton, Mass. Brake mechanism. 1,640,525; Oct. 13.

Tuttle, Henry A., Upton, Mass. Reversing gearing. 1,646,125; Oct. 18.

Tuttle, Henry A., Upton, Mass. Reversing gearing. 1,640,125; Oct. 18.

Tuttle, Henry A., Upton, Mass. Reversing gearing. 1,640,125; Oct. 18.

Tuttle, Henry A., Upton, Mass. Reversing gearing. 1,640,125; Oct. 18.

Tuttle, Henry A., Upton, Mass. Reversing gearing. 1,640,125; Oct. 18.

Tuttle, Henry A., Upton, Mass. Reversing gearing. 1,640,125; Oct. 18.

Tuttle, Henry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,125; Oct. 18.

Tuttle, Honry A., Upton, Mass. Reversing gearing. 10,640,1

Jan. 25.

Tuttle, Roy X., assignor to Sanitarium and Hospital Equipment Company, Battle Creek, Mich. Therapeutic lamp. 1,643,430; Sept. 27.

Tuttle, Roy X., Battle Creek, Mich. Therapeutic lamp. 1,654,313; Dec. 27.

Tuttle, Roy X., Battle Creek, Mich. Therapeutic lamp. 1,654,314; Dec. 27.

Tuttle, Roy X., Battle Creek, Mich. Therapeutic lamp. 1,654,314; Dec. 27.

Tuttle, Roy X., Battle Creek, Mich. Therapeutic lamp. 1,654,747; Nov. 1.

Tutton, Therapeutic lamp. 1,654,647; Sept. 1,654,647; Apr. 5.

Twedt, Carl I., and M. Hegg. Leonard, N. Dak. Grainweit, Carl I., and M. Hegg. Leonard, M. Dak. Grainweit, Carl I., and M. Hegg. Leonard, M. Carl I., and M. Hegg. Leonard, M. Carl I., and M. He

Mar. 29.
Tweeddale, John. Torrance, Calif. Liner for oll wells.
1,620,412; Mar. 8.
Tweedie. Charles, Jefferson City, Mo. Footwear.
1,632,570; June 14.
XXth Century Heating and Ventilating Company. (See Diehm, Ernst E, assignor.)
Twigg. Phyllis M., Vention; England. Hat stand. Des.
1,642,568; Sept. 13.
Twight, Edmund H., Fresno, Calif. Food product.
Twight, Edmund H., Fresno, Calif. Food product.
Twight, Cale Sept. 22.
Twight, Cale Company. (See Brown, William K.,
assignor.)

The control of the co

assignor.)
vo Vest Sign Company. (See Vest, Thomas F., assignor.)

2-Way Window-Shade Company. (See Conner, Benjamin

2-Way Window-Shade Company. (See Conner, Benjamin G., assignor.).
Twyman, B. Wickliffe, Columbus, Ohló. Lifting jack.
1,614,679; Jan. 18.
Twyman, B. Wickliffe, Marysville, Mich. and S. Paul,
1,616,206; Feb. 1.
Twyman, B. Wickliffe, Marysville, Mich. and S. Paul,
Lima, Ohlo. Automobile body-ventilating system.
1,626,893; May 3.
Twyman, B. Wickliffe, Columbus, Ohlo, and R. B. Burton,
Indianapolis. Ind. Automatic brake for vehicles.
1,631,002; June 7.

Tyberg, Oluf, Point Loma, Calif. Typewriter accessory. 1,647.674; Nov. 1.
Tyberg, Oluf, Point Loma, Calif. Typewriter. 1,652,463; Dec. 13.

Dec. 13.
Tyberg, Oluf, Point Loma, Calif. Typewriter keyboard.
1,662,464; Dec. 13.
Tyden, Emil, Hastings, Mich. Dry-pipe-valve accelerating device. Ref6,678; July 12.
Tyden, Emil, Evanston, Ill. Dry-pipe-valve accelerating device. 1,615,066; Jan. 18.
Tyden, Emil, Evanston, Ill. Car seal. 1,615,057; Jan. 18.
Tyden, Emil, Evanston, Ill. Tank gauge. 1,616,934; Feb. 8.

Tyden, Emil, Evanston, III. Valve-seat cutter. 1,632,354; June 14. Tyden, Emil, Evanston, III. Valve device. 1,635,295; July 12.

July 12.
Tyden, Emil, Evanston, Ill. Dry-pipe valve. 1,636,263;
July 19.
Tygart Valley Glass Company. (See Noble, Olbert C.,

July 19.
Tygart Valley Glass Company. (See Noble, Olbert C.,
Tygart Valley Glass Co. (See Reese, Arthur S., assignor.)
Tygart Valley Glass Co. (See Reese, Arthur S., assignor.)
Tygart Valley Glass Co. (See Reese, Arthur S., assignor.)
Tygart Valley Glass Co. (See Reese, Arthur S., assignor.)
Tygart Valley Glass Co. (See Reese, Arthur S., assignor.)
Tyler, Alway C., assignor to Universal Gyspum & Lime Co.,
Chicago, Ill. Clamping means for wall board or the
Ilke. 1,029,555; May 24.
Tyler, Alway C., Clamping means for wall board or the
Ilke. 1,029,555; May 24.
Tyler, Thewis L., Tacoma, Wash. Logging system.
1,642,568; Sept. 13.
Tyler, Kalph S., Cleveland Heights, assignor to The
Chandler & Frice Company, Cleveland, Ohio. Ink
Tyler, Russell P., 18a Freese, 1613,255; Jan. 4.
Tyler, W., Company, The. (See Disbro, Roger W., asTyler, Thaddeus F., Haverhill, Mass. Adjustable handie for machine dies. 1,630,988; May 31.
Tyler, W. S., Company, The. (See Disbro, Roger W., asTyler, W. S., Company, The. (See Disbro, Roger W., asTyler, W. S., Company, The. (See Disbro, Roger W., asTyler, W. S., Company, The. (See Disbro, Roger W., asTyler, W. S., Company, The. (See Disbro, Roger W., asTyler, Tyler, Tyle

mechanism. 1,636,158; July 19. Bodding-braking
Tyra, Joseph, Minneapolis, Minn. Metal Spanish tile.
1,638,755; Aug. 9.
Tyra, Joseph, Minneapolis, Minn. Metal German tile.
1,648,031; Nov. 8.
1,748,041; No

Tyrman Electric Corporation. (See Tyrman, Ernst, assignol, allower H., Washington, D. C. Michaol of and mechanism for perforating plastic material. 1,628,342; May 10.

Tyson, Calvin W., Prairie Depot, Ohio. Shocker attachment. 1,624,966; July 5.

Tyson, Frank, Canton, Ohio. Freezing mechanism. Tyson, William M., Lanett, Ala., assignor of one-fourth to R. J. Jennings, West Point, Ga. Filling-end clearer. 1,622,565; May 10.

Tyson, William M., Lanett, Ala., assignor of one-fourth to R. J. Jennings, West Point, Ga. Filling end clearer. 1,628,565; May 10.

Tyson, William M., Janett, Ala., assignor of one-fourth to R. J. Jennings, West Point, Ga. Filling end clearer. 1,643,727; Sept. 27.

Tytus, John B., assignor to The American Rolling Mill Company, Middletown, Ohio. Rolling-mill screw-down. 1,628,602; May 24.

U. G. I. Contracting Company, The. (See Brady, Edward U. G. I. Contracting Company, The. (See Fulweller, W. H., and Jordan, assignors.)

U. S. F. Powder Company. (See du Pont, Francis and B., assignors.)

E., assignors.)

E., assignors.)
Ubbelohde, Leo, Karlsruhe, Germany, Treating fibers for spinning purposes. 1,629,241; May 17.
Udale, Stanley M. (See Anderson, R. M., and Udale.)
Udale, Stanley M., (See Taylor, C. H., and Udale.)
Udale, Stanley M., (See Taylor, C. H., and Udale.)
Udale, Stanley M., (See Taylor, C. H., and Udale.)
Internal-combustion engines. 1,633,447; JungUdale, Stanley M., assignor to G. M. Holley, Detroit, Mich. Carburetor. 1,618,244; Feb. 22.
Udale, Stanley M., assignor to E. Holley, Detroit, Mich. Pipe-molding machine. 1,618,245; Feb. 22.
Ude, Franz E., and G. D. Webster, Springdeld, Mass.
Udetad, Sivert, Aurora, III., and W. T. Owens, Lycan, Colo. Broomcorn-harvesting machine. 1,648,749; Nov. 8.

Ubelmesser, Charles, New York, N. Y. Liquid-level in-dicator. 1.613,418; Jan. York, N. Y. Tire-carrying means for automobiles, etc. 1.616,155; Feb. 1. Ubelmesser, Charles, New York, N. Y. Steam boiler. 1.653,828; Dec. 27. Uffert, Walter B., Lynbrock, N. Y. Automatic shaft lock for automobiles. 1.631,843; June? Ufford, Edith H., Salina, Kans. Doll. Des. 72,782; May 31.

Uhl, George R. (See Brown, H., and Uhl.) Uhl, Robert L., Chino, Calif. Safety gas device or cock. 1,633,504; June 21.

Uhlemann, Theodore F., assignor to Nicholas Power Company, Inc., New York, N. Y., Framing mechanism for motion-picture machines, 1,619,651; Mar. 1.
Uhlik, John L., Los Angeles, Callf. Universal fruit-tree-prop line support. 1,634,004; June 28.
Uhlinger, Roy H., Mount Lebanon Township, Allegheny County, assignor to Thermatomic Carbon Company, Pittsburgh, Pa. Rubber composition. 1,638,421;

County, assignor to Thermatomic Carbon Company, Pittsburgh, Pa. Rubber composition. 1,638,421; Aug. 9. Ultimann, otto E., Grand Rapids, Mich. Signal light for automobiles. Des. 72,185; Mar. 8. Uor automobiles. Des. 72,185; Mar. 8. Uor automobiles. Des. 72,185; Mar. 8. Uor automobiles. Des. 72,185; Mar. 8. United and the like. 1,620,303; Mar. 8. Ultime for like for the like. 1,620,303; Mar. 1,92; Mar. 1,93; Mar. 1,94; Mar

azine. 1.634.473; July 5.

Ulich, Waiter E. (See Ulich, Harald E. and W. E., and
Riethelmer.)

Uline Ice-Scoring Machine Company, The. (See Happel,
Albert W., assignor.)

Uline Ice-Scoring Machine Company, The. (See Jobst,
Conrad, assignor.)

Uline, Michiel J., Toledo, Ohlo. Device for lifting ice
cans. 1,639,788; Aug. 23.

Uligren, Johan D., Stocksund, assignor to Aktiebolaget
Karlstads Mekaniska Verkstad, Karlstad, Sweden.

Fulp grinder. 1,626,015; Apr. 26.

Ulin, Carl G., Centralla, Wash. Dry Kiln. 1,637,166;

July 26.

Manufacturing Company, The. (See Straus,

Uliman Manufacturing Company, The. (See Straus, Joseph K., assignor, Ulion, Lewis O., Ellwood City, Pa. Removing wall paper from walls. 1,646.177; Oct. 18.
Ulirich, Emil H. W., New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company, Switch mechanism. 1,626,650; May 3.
Ulirich, Emil H. W., New York, assignor to Kinesthetic Process Co. Inc., Long Island City, N. Y. Painting. 1,654,277; Dec. 27.
Ulirich, Georg, Magdeburg, assignor to the Firm Fried.
Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Magnetic separator. 1,617,971; Peb. 15.

United. Actions in adiabute, assignor to the Firm Fried. Krupp Grusonwerk Aktiengeselschaft, Magdeburg, Buckau, Germany. Magnetic separator. 1,617,971; Feb. 15.
Ulrich, Peter M., Waverly, Iowa. Device for holding registration cards on automobiles. 1,626,107; Apr. 26, Ulmann, Edgar A., Los Angeles Chille, assignor, Apr. 19.
Ulrann, Edgar A., Los Angeles Chille, assignor, Apr. 19.
Ulrey, Clayton T., East Orange, N. J., assignor to Westinghouse Lamp Company. Destruction of the electrical conductivity of films. 1,616,010; Feb. 1,625,000; Apr. 19.
Ulrey, Clayton T., East Orange, N. J., assignor to Westinghouse Lamp Company. Destruction of the electrical conductivity of films. 1,616,010; Feb. 1,625,000.
Ulrich, Charles B., Jamestown, N. Y. Filing safe. 1,651,788; Dec. 20.
Ulrich, Charles B., Jamestown, N. Y. Filing safe. 1,616,1784; Dec. 6.
Ulrich, Charles B., Jamestown, N. Y. Hunting boat. 1,616,1784; Dec. 6.
Ulrich, Horace W., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,647,258; Nov. 1.
Ulrich, Horace W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,647,258; Nov. 1.
Ulrich, Horace W., East Orange, N. J., assignor to Palmer Bros. Engines, Inc., Coscob. Conn. Transmission mechanism. 1,635,063; July 5.
Ulrich, Tomey D., Sharpsville, Ind., assignor to Palmer Bros. Engines, Inc., Coscob. Conn. Transmission mechanism. 1,635,063; July 5.
Ulrich, Tomey D., Sharpsville, Ind., assignor to General Electric Company. Power-transmitting system. 1,637,357; Aug. 2.
Umansky, Leonid A., Schenectady, N. Y., assignor to General Electric Company. Electric measuring apparatus. 1,637,015; July 20.
Umsted, Bruce T., and E. N. Harris; said Harris assignor for forty-five one-hundredths of the entire right to John H. Johnson and Sons, Jackson, Tenn. Current Feb. 1,638,010; July 20.
Umsted, Bruce T., and E. N. Harris; said Harris assignor of forty-five one-hundredths of the entire right to John H. Johnson and Sons, Jack

July 26. Una Welding and Bonding Company. (See Austin, John B., assignor.) Una Welding and Bonding Company. (See Copland, James P., assignor.)

Uncas Manufacturing Company. (See Rowan, Albert J.,

Uncas Manufacturing Company. (See Rowan, Albert J., assignor.)

Underwood Computing Machine Company. (See Thieme, Otto, assignor.)

Underwood, Ernest B., assignor to Eastman Kodak Company, Rochester, N. Y. Decorative covering for cameras and producing same. 1,613,365; Jan. 4.

Underwood, Ernest E., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-camera construction. 1,620,364; Mar. 8.

Underwood, Ernest E., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-camera construction. 1,620,364; Mar. 8.

Underwood, Ernest E., assignor to Eastman Kodak Company, Boston, Mars. Obtaining glue and gelatin. 1,629,556; May 24.

Underwood, Harris F. (See Wright, J. W., and Underwood, Harris F. (See Wright, J. W., and Underwood, Harris F. (See Newhall, H. B., and Underwood, Harris F. (See Newhall, H. B., and Underwood, Underwood, Harold R. (See Newhall, H. B., and Underwood.)

derwood.)
Underwood, Jesse J., assignor of one-half to J. B. Antonette, Tacoma, Wash. Electric water heater. 1,627,875; May 10.
Underwood, Norman. (See Hopkins, M. S., and Underwood, Norman. (See Hopkins, M. S., and Underwood, Typewriter Company. (See Barker, Benjamin F., assignor.)
Underwood Typewriter Company. (See Baskerville, Edward A., assignor.)
Underwood Typewriter Company. (See Bates, James H. S., assignor.)

S., assignor.) Underwood Typewriter Company. (See Becker, Fred, as-Underwood Typewriter Company. (See Bryant, William

O., assignor.)
Underwood Typewriter Company. (See Campbell, George W., assignor.)
Underwood Typewriter Company. (See Corcoran, Cornellus B., assignor.)

Underwood Typewriter Company. (See Corcoran, Cornellus B., assignor.)
Underwood Typewriter Company. (See Crews, Clarence Underwood Typewriter Company. (See Cripe, Harry E., assignor.)
Underwood Typewriter Company, The. (See Daniel, Royal G., assignor.)
Underwood Typewriter Company. (See Davis, John W.,

assignor.)
Underwood Typewriter Company. (See Dobson, William

Underwood Typewriter Company. (See Engelslepen, John W., assignor.)
Underwood Typewriter Company. (See Fuerth, Sydney W., assignor.)
Underwood Typewriter Company. (See Hanus, Raymond, Underwood Typewriter Company.

Underwood Typewriter Company. (See Helmond, Wil-liam F., assignor.)
Underwood Typewriter Company. (See Hilsee, Charles M., assignor.)
Underwood Typewriter Company. (See Knee, Walter J., Underwood Typewriter Company.

assignor.) Typewriter Company, (See Kupetz, Adolph G., assignor.)

Old Assignor.)
Under Mark Typewriter Company. (See Kurowski, Alfred
Underwood Typewriter Company. (See Lane, William E.,
assignor.)

(See Lane, William E.,
assignor.)

(See Latta, Empit G.,

Underwood Typewriter Company. (See Latta, Emmit G., assignor.)
Underwood Typewriter Company. (See Lindburg, Joseph,

Underwood Typewriter Company. (See Murphy, Gerald H., assignor.)
Underwood Typewriter Company. (See Neahr, Jacob E.,

Underwood Typewriter Company. (See Norin, Carl E.,

assignor.)
Underwood Typewriter Company. (See Oswald, Alfred E., assignor.) Underwood Typewriter Company. (See Pitman, Henry L.,

Underwood Typewriter Company. (See Rothermund. Werner F., assignor.)
Underwood Typewriter Company. (See Rowley, Edward G., assignor.)
Underwood Typewriter Company. (See Smith, Jesse A. B.,

Underwood Typewriter Company.

Underwood Typewriter Company.

Underwood Typewriter Company.

Underwood Typewriter Company.

H, assignor.

Company.

(See Vickers, Harry H, assignor.)

Underwood Typewtier Company.

H. assignor.)
Underwood Typewtier Company.
See Waldhelm, John,
assignor.
Underwood. Walter O. assignor of one-third to Ralph E.
Automobile body. 1,644.405; Oct. 4.
Underwood, Weeden B. assignor to Wilmot Castle Company, Rochester, N. Y. Bedpan cleaner and sterliger.
1,653.242; Dec. 20.
Underwood, Western, Los Angeles, Calif. Street lighting
post. Des. 71,556; Jan. 11.
Underwood, Western, Los Angeles, Calif. Lighting post.
Des. 73,348; Aug. 23.

Underwood, Western, Los Angeles, Calif. Capital for lighting posts. Des. 73,719; Oct. 25. Underwood, Western, Los Angeles, Calif. Lighting post. Des. 73,952; Nov. 22. Underwood, Western, Santa Monica, Calif., assignor to Westinghouse Electric & Manufacturing Company. Lighting standard, Des. 71,855; Jan. 11. Unger, Ernest, New York, N. Y. Chandeller. 1,636,723; Unger, Ernest G. Now, York, N. Y. Chandeller. 1,636,723; Lighting standard. Des. 71,805; Jan. 11.
Unger, Ernest, New York, N. Y. Chandeller. 1,636,723;
Unger, Ernest G. New York, N. Y. Hair-waving apparatus. 1,653,792; Dec. 27.
Unger, Ernest G. New York, N. Y. Automatic locking clamp. 1,653,793; Dec. 27.
Unger, Ernest G. New York, N. Y. Automatic locking clamp. 1,653,793; Dec. 27.
Unger, Louis, Elyria, Ohio. Metal safety seal for envelopes and the like. 1,651,664; Dec. 6.
Unger, Louis, Elyria, Ohio. Metal safety seal for envelopes and the like. 1,651,664; Dec. 6.
Unger, Louis, Elyria, Ohio. Metal safety seal for envelopes and the like. 1,651,664; Dec. 6.
Unger, Magnus, Pittsfield, Mass., assignor to General Electric Company. Induction furnace. 1,626,485;
Apr. 26.
Unger, Magnus, Pittsfield, Mass., assignor to General Electric Company. Apparatus for refining metals. 1,628,375; May 10.
Unger, Nils A., Vinterviken, Aspudden, Sweden. Process and device for the development, fixing, washing, etc., of photographic os cinematographic films or the like in the company of the like in the company of the like in the company of the like in L., assignor.)
Union Bag & Paper Corporation. (See Avery, True M., assignor.)
Union Bag & Paper Corporation. (See Kischel, E. L., and Seitzlinger, assignors.)
Union Bank of Chicago, trustee. (See Cowles, Irving, assignor.)
Union Bed and Spring Company. (See Ford, Ben K., Union Bed and Spring Company. (See Motschman, Henry H., assignor.) Union Bed & Spring Company. (See Powers, George G., assignor.)
Union Carbide & Carbon Research Laboratories, Inc. (See St. John, Ancel, assignor.)
ilon Draft Gear Company. (See Canfield, Lewis T., assignor.) Union Draft Gear Company. (See Cardwell, James R., assignor.)
Union Draft Gear Company. (See Cotton, many assignor.)
Union Dry Battery Corporation of America. (See Apostoloff, Serge, assignor.)
Union Electric Manufacturing Company. (See Campbell, Harry E., assignor.)
Union Electric Manufacturing Company. (See Campbell, H. E., and Mekelburg, assignors.)
Union Gear Co. (See Canfield, Lewis T., assignor.)
Union Iron Works. (See Smith, Mark E., assignor.)
Union Machinery Company. (See Johnson, Harvey F., assignor.) gnor.) on Draft Gear Company. (See Cotton, Walter H., Junion Metal Manufacturing Company, The. (See Ebel, G. F., and Zink, assignors.) Union Metal Manufacturing Company, The. (See Frahm, Union Metal Manufacturing Company, The. (See Framm, Carl A., assignor.) Union Metal Manufacturing Company, The. (See Rastetter, Harry O., assignor.) Union Metal Products Company. (See Bonsall, Charles D., assignor.)
Union Metal Products Company. (See Cooke, George T., assignor.)
Union Metal Products Company. (See Coutant, George E., assignor.) Union Metal Products Company. (See Dodds, Ethan I., assignor.) Union Metal Products Company. (See Gilpin, Garth G., Union Metal Products Company. (See Murphy, Walter P., assignor.) Union Metal Products Company. (See Sisson, Vinton E., signor.)
n Metal Products Company. (See Small, Arthur assignor.)
n Metal Products Company. (See Swann, James S., Union Metal Products Company. (See Swann, James 3., assignor.)
Union Metal Products Company. (See Thalheimer, Nicholas C., assignor.)
Union Metal Products Company. (See Williams, William gnor.) Metal Products Company. (See Wolff, Frank W., assignor.)

Union Railway Equipment Company. (See Hall, William B., assignor.)
Union Railway Equipment Company. (See O'Connor,
Arthur F., assignor.)
Union Simplex Train Control Co. (See Miller, Monroe
Basignor.)
Union Simplex Union Company. (See Ericsson, Arvid, assignor.) nion Special Machine Company. (See Foster, William Union Union Spécial Machine Company. (See Foster, William B., assignor.)
Union Spécial Machine Company. (See Le Roy, Walter E., assignor.)
Union Spécial Machine Company. (See Long, William B., assignor.)
Union Spécial Machine Company. (See Moffatt, James R., assignor.)
Union Spécial Machine Company. (See Rubel, C. F., and Knogra, assignors.) Union Special Machine Company. (See Rubel, C. F., and Krucera, assignors.)
Union Special Machine Company. (See Soper, Roy M., assignor.)
Union Special Machine Company. (See Stauss, Walter J., assignor.)
Union Special Machine Company. (See Tate, Samuel G., assignor.) assignor.)
Union Special Machine Company. (See Thero, Charley, assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, Union Special maschinerroute, d. in b. 11 Karl, assignor.) Union Spring & Manufacturing Company. (See Gibson Charles, assignor.) Union Steel Products Company. (See Bitney, Dewey Union Steel Products Company,
assignor.)

On Mary Carl, assignor.) Union Suiphur Company. (See Marx, Carl, assignor.)
Union Suiphur Company. (See Wilkinson, Henry H., assignor.)
Union Suiphur Company. (See Wilkinson, Henry H., assignor.)
Union Switch & Signal Company, The. (See Beall, C. R., and Gilson, assignor.)
Union Switch & Signal Company, The. (See Beall, C. R., and Gilson, assignor.)
Union Switch & Signal Company, The. (See Bossart, Paul N., assignor.)
Union Switch & Signal Company, The. (See Bossart, and Raymer, assignor.)
Union Switch & Signal Company, The. (See Coleman, John P., assignor.)
Union Switch & Signal Company, The. (See Edmonds, Courtenry H. W., assignor.)
Union Switch & Signal Company, The. (See Fisher, A. W., assignor.)
Union Switch & Signal Company, The. (See Fisher, A. W., assignor.)
Union Switch & Signal Company, The. (See Fisher, A. W., assignor.)
Union Switch & Signal Company, The. (See Fisher, A. W., assignor.)
Union Switch & Signal Company, The. (See Gilson, Lars O., assignor.)
Union Switch & Signal Company, The. (See Gilson, Union Switch & Signal Company, The. (See Gilson, Lars O., assignor.)
Union Switch & Signal Company, The. (See Hobson, Union Switch & Signal Company, The. (See Holson, Union Switch & Signal Company, The. (See Leens, Larnet R., assignor.)
Union Switch & Signal Company, The. (See Locate, H., assignor.)
Union Switch & Signal Company, The. (See Locate, H., assignor.)
Union Switch & Signal Company, The. (See Perrod, Herry M., assignor.)
Union Switch & Signal Company, The. (See Perrod, Herry M., assignor.)
Union Switch & Signal Company, The. (See Perrod B., assignor.)
Union Sulphur Company. (See Marx, Carl, assignor.)
Union Sulphur Company. (See Wilkinson, Henry H., as-

Union Switch & Signal Company, The. (See Vencill, Albert L., assignor.)
Union Switch & Signal Company, The. (See Wallace, Herbert A., assignor.)
Union Switch & Signal Company, The. (See Wyant, Union Switch & Signal Company, The. (See Young, Henry S., assignor.)
Union Switch & Signal Company, The. (See Zierdt, Conrad H., assignor.)
Union Yank and Fipe Company. (See Furey, Fred M., Union Yank and Fipe Company.) assignor.) nion Tank Car Company. (See Smiley, Arthur B., assignor Tank Car Company. (See Smith, Abram E., assignor.)
nion Tank Car Company. (See Smith, Ray M., assignor.)
Union Tank & Pipe Co. (See Sweeney, Morgan L., assignor.) ion Taxi Owners Association. (See Gerson, Meyer I., ssignor.)
ion Tool Company. (See Goeser, Edward W., as-Union Tool Company. (See Timbs, Edward, assignor.)
Union Tool Company. (See Timbs, E., and Zerbe, as-Union Tool Company. (See Timbs, E., Zerbe, and von Schlegell, assignors.) Union Trust Company, The. (See Melanowski, Leo, as-Union Trust Company, The. (See Melanowski, Leo, assignor.)
Union Trust Company, executor. (See Paupa, Joseph.)
Union Trust Company, operating trustee, The. (See
Melanowski, Leo, assignor.)
Union Trust Company, The, operating trustee. (See
Melanowski, Leo, assignor.)
Union Trust Co. of Pitisburgh, et al., executors. (Sce
Laughin, Alexander, Ir.
Union Trust Co. of Pitisburgh, et al., executors.
Union Trust Co. of Pitisburgh, et al., executors.
Unique Spark Piug Cleaner Co. (See Floyd, Roy C.,
assignor.) assignor.)
United Ammonia Company. (See Dolan, J. R., and Shea, United Ammonia Company. (See Doian, J. R., and Snea, assignors,)
United Autographic Register Co. (See Barker, W. R.,
United Autographic Register Company. (See Barker,
W. R., and Jensen, assignors,)
United Autographic Register Company. (See James,
Charles H., assignor.)
United Autographic Register Company. (See James,
Louis, assignor.)
United Cigarette Machine Co. Inc. (See Koerner, Ewald,
United Cigarette Machine Co. Inc. (See Koerner, Ewald, assignor.) United Color Pictures, Inc. (See Shaw, J., and Berwick, United Conveyor Corporation. (See Ayling, Henry S., as-United Conveyor Corporation. (See Tolman, Edgar B., jr., assignor.)
United Electric Co. (See Dowdell, Noble G., assignor.)
United Electric Company, The. (See Serva, Adam A., assignor.) assignor.)
United Blectric Railways Company. (See Wright, William D., assignor.)
United Engineering and Foundry Company. (See Pennington, Harley D., assignor.)
United Engineering & Foundry Company. (See Austin, Ned M., assignor.)
United Engineering & Foundry Company. (See Johnson, Lane, assignor.)
United Engineering & Foundry Company. (See Kiein, Clarence augment of Foundry Company. (See Kiein, Clarence augment)
United Engineering & Foundry Company. (See Smitmans, John A., assignor.)
United Engineering & Foundry Company. (See Walters, Harry E., assignor.) United Engineering & Foundry Compuny. (See Watters, Harry E., assignor.)
United Filters Corporation. (See Genter, A. L., and Mc-Caskell, assignors.)
United Fly Salt Company. (See Nelson, Charles O., assignor.)
United Iron Works. (See Brown. Walter E., assignor.)
United Iron Works, Inc. (See Brown, Walter E., as-United Iron Works, Inc. (See Taaffe, George R., assignor.)
United Kingdom Optical Company, Limited. (See Watson, F. B., and Culver, assignors.)
United Metal Box Co. Inc. (See Hammer, Samuel, assignor.) * United Metal Hose Company. (See Levitt, Samuel, assignor.)
United Products Company. (See Glaze, H. L., and
Humphrey, assignors.)
United Products Corporation of America. (See Biddle,
Arthur, assignor.)

Union Switch & Signal Company, The. (See Sorensen, Andrew J. assignor.)
Union Switch & Signal Company, The. (See Spray, Lester E., assignor.)
Union Switch & Signal Company, The. (See Thompson, H. A. and Failor, assignors.)
Union Switch & Signal Company, The. (See Thompson, Howard A., assignor.)
Union Switch & Signal Company, The. (See Vencill, Union Switch & Swi United Rim Company, The. (See Johnston, Clarence S., assignor,)
United Royalties Corporation. (See Humphrey, Ernest N. John to Angers, Corporation. (See Angers, Charles S., assignor.)
United Shoe Machinery Corporation. (See Ashton, Ernest, assignor.)
United Shoe Machinery Corporation. (See Ballard, Milton United Shoe Machinery Corporation. (See Ballard, Milton H, assignor.)
United Shoe Machinery Corporation. (See Ballard, Harrie A., assignor.)
United Shoe Machinery Corporation. (See Barclay, W. H., and Keall, assignors.)
Int. and Keall, assignors.)
United Shoe Machinery Corporation. (See Barclay, W. United Shoe Machinery Corporation. (See Bertrand, Frederic E., assignor.)
United Shoe Machinery Corporation. (See Bilss, Charles A., assignor.)

A., assignor.)
United Shoe Machinery Corporation. (See Bowle, Derwin, Wr., wy., assignor.)
United Shoe Machinery Corporation. (See Bowle, Derwin, Wr., assignor.) United Shoe Machinery Corporation. (See Bresnahan, Maurice V., assignor.)
United Shoe Machinery Corporation. (See Bresnahan, Maurice V., assignor.)
United Shoe Machinery Corporation. (See Brogan, Michael F., assignor.)
United Shoe Machinery Corporation. (See Bunker, D. W., and Cummings, assignors.)
United Shoe Machinery Corporation. (See Cooper, Basil United Shoe Machinery Corporation. (See Cosprove, Passir P., assignor.)
United Shoe Machinery Corporation. (See Cosgrove, John W., assignor.)
United Shoe Machinery Corporation. (See Cross, Garrett P. S., assignor.)
United Shoe Machinery Corporation. (See Davis, Rossida Shoe Machinery Corporation. (See Davis, Rossida Shoe Machinery Corporation.) well, assignor.)
United Shoe Machinery Corporation. (See Elliott, Harry D., assignor.) D., assignor.)
United Shoe Machinery Corporation. (See Erickson, Edward, assignor.)
United Shoe Machinery Corporation. (See Estey, Arthur C., assignor.)
United Shoe Machinery Corporation. (See Flickinger, William F., assignor.)
United Shoe Machinery Corporation. (See Fowler, Edward)
United Shoe Machinery Corporation. (See Frye, Robert P., assignor.) United Shoe Machinery Corporation. (See Frye, Robert P., assignor.)
United Shoe Machinery Corporation. (See Furber, Frederick M., assignor.)
United Shoe Machinery Corporation. (See Glass, Perley R., assignor.) United Shoe Machinery Corporation. (See Goddu, George, United Shoe Machinery Corporation. (See Goddu, George, assignor.)
United Shoe Machinery Corporation. (See Goddu, G., and Mackenzle, assignors.)
United Shoe Machinery Corporation. (See Gouldbourn, Joseph, assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, Joseph, assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, Joseph, assignor.)
United Shoe Machinery Corporation. (See Hadaway, John D., assignor.)
United Shoe Machinery Corporation. (See Hadaway, John D., assignor.)
United Shoe Machinery Corporation. (See Hamilton, Harry D., assignor.)
United Shoe Machinery Corporation. (See Haworth, John T., assignor.)
United Shoe Machinery Corporation. (See Hood, Charles Lasting Machinery Corporation. (See Hood, Charles Lasting Machinery Corporation. (See Hood, Charles Lasting Machinery Corporation. (See Hopper, Lester B., assignor.)
United Shoe Machinery Corporation. (See Hopper, Lester B., assignor.)
United Shoe Machinery Corporation. (See Hopper, Lester B., assignor.)
United Shoe Machinery Corporation. (See Horne, Albert J., assignor.)
United Shoe Machinery Corporation. (See Horne, Albert J., assignor.) J. assignor.)
United Shoe Machinery Corporation.
James E., assignor.)
United Shoe Machinery Corporation. (See Jorgensen,
Bernhardt, assignor.)
United Shoe Machinery Corporation. (See Julian, Gideon,
United Shoe Machinery Corporation. (See Keall, Frank assignor.)
d Shoe Machinery Corporation. (See Jackson, United Shoe Machinery Corporation.

B, assignor.)
United Shoe Machinery Corporation.

Inited Shoe Machinery Corporation.

A, assignor.)
United Shoe Machinery Corporation.

Fred N., assignor.)
United Shoe Machinery Corporation.

Fred N., assignor.)
United Shoe Machinery Corporation.

United Shoe Machinery Corporation.

M., assignor.)
United Shoe Machinery Corporation.

United Shoe Machinery Corporation.

(See Leveque, Bernard M., assignor.)

United Shoe Machinery Corporation.

(See Long, Austia University Stanley N., assignor.)

United Shoe Machinery Corporation. (See Lund; Thomas, United Shoe Machinery Corporation. (See MacArthur. United Shoe Machinery Corporation. (See MacArthur. United Shoe Machinery Corporation. (See Mackenzle, F. L., and Goddu, assignors.)
United Shoe Machinery Corporation. (See Mackenzle, The Mackenzle, Third Lagastrophy Corporation. (See Mackenzle, Third Lagastrophy Corporation. (See Mahler, J. J., and Webb, assignors).
United Shoe Machinery Corporation. (See Marshall, David O., assignor). United Shoe Machinery Corporation. (See Marsnau, David O., assignor.)
United Shoe Machinery Corporation. (See Matthews, Algernon W., assignor.)
United Stoe Machinery Corporation. (See Morrick, United Shoe Machinery Corporation. (See Molyneux, Denys W., assignor.)
United Shoe Machinery Corporation. (See Morley, Denys W., assignor.)
United Shoe Machinery Corporation. (See Mondis, Napoleon A., assignor.)
United Shoe Machinery Corporation. (See Mondis, Topical Shoe Machinery Corporation. (See Mondis, Topical Shoe Machinery Corporation. (See Mondis, Napoleon A., assignor.) United Shoe Machinery Corporation. (See Morrill, Charles H., assignor.)
United Shoe Machinery Corporation. (See Norden, Carl United Shoe Machinery Corporation. (See Norden, Carl S., assignor.)
United Shoe Machinery Corporation. (See Nutt, William H. assignor.)
United Shoe Machinery Corporation. (See Pearson, Chester L., assignor.)
United Shoe Machinery Corporation. (See Phelan, Merton D., assignor.)
United Shoe Machinery Corporation. (See Pope, Elmer Machinery Corporation.)
United Shoe Machinery Corporation. (See Pope, Joseph H., assignor.) United Shoe Machinery Corporation.

He, assignor, United Shoe Machinery Corporation.

F, assignor, United Shoe Machinery Corporation.

J, assignor, See Pym, Charles Corporation.

Gee Pym, Charles Corporation.

Gee Ray, Eugene Corporation.

Gee Ray, Eugene Corporation.

Gee Read, James H. assignor.)
United Shoe Machinery Corporation. (See Reld, R. G.,
Bates, and Ricks, assignors.)
United Shoe Machinery Corporation. (See Richardson,
John H., assignor.)
United Shee Machinery Corporation. (See Ricks, Fred, United Shoe Machinery Corporation. (See Ricks, F., and Burgoyne, assignors.) United Shoe Machinery Corporation. (See Rising, Harry United Shoe Machinery Corporation. (See Rising, Harry Lander Shoe Machinery Corporation. (See Roberts, Willenstein Shoe Machinery Corporation. (See Robinson, George R., assignor.)
United Shoe Machinery Corporation. (See Sabin, Ernest E., assignor.)
United Shoe Machinery Corporation. (See Sabin, Ernest E., assignor.) H., assignor.) United Shoe Machinery Corporation. (See Simmons, Ralph C., assignor.)
United Shoe Machinery Corporation. (See Smith, Archibid C., assignor.)
United Shoe Machinery Corporation. (See Standish, United Shoe Machinery Corporation. (See Standish, assignor.)
noe Machinery Corporation. (See Standish, United Shoe Machinery Corporation. (See Standish, John F, assignor.)
United Shoe Machinery Corporation. (See Thibaudeau, Charles E., assignor.)
United Shoe Machinery Corporation. (See Topham, Laurence E., assignor.)
United Shoe Machinery Corporation. (See Topham, L. E., and Morrill, assignors.)

He assignor.) United Shoe Machinery Corporation. (See Webster, Charles C., assignor.) United Shoe Machinery Corporation. (See Winkley, Eras-United Shoe Machinery Corporation. (See Winkley, Erastus E., ussignor.)
United Diver March (assignors.)
United Shoe Machinery Corporation. (See Woodcock, R. B., and Hope, assignors.)
United States Air Compressor Company, The. (See Bacher, Rollin L., assignor.)
United States Air Compressor Company, The. (See Bacher, Rollin L., assignor.) assignor.)
United States Asbestos Company. (See Obetz, G. U., and Walter, assignors.)
United States Asbestos Company. (See Rohrer, John D., United Satisfaction Automatic Fire Alarm Company, The United Satisfaction, John M., assignor.)

(S. S. Bedding Company. (See Brown, Jefferson F., as-U. S. Bedding Company, signor.) U. S. Bobbin & Shuttle Co. (See Allen, Robert N., as-(See Heyman, Samuel, as-

U. S. Bobbin & Shuttle Company. (See Buffington, Edwin C., assignor.) S. Bobbin & Shuttle Co. (See Davol, Harry A., assignor.) S. Bobbin & Shuttle Co. (See Stetson, Frank H., as-U. U. S. Bottlers Machine Company. (See Risser, Arthur an, assignor.)
United States Cast Iron Pipe & Foundry Company. (See Losey, Aithur, assignor.)
United States Chain & Forging Company. (See Bremer, Frederick C., assignor.)
Gowen, William R., assignor.)
United States Electrical Manufacturing Company. (See Johnson, Carl E., assignor.)
United States Electrical Manufacturing Company. (See Johnson, Carl E., assignor.)
United States Engineering Company. (See Law, Edward F., assignor.) Bottlers Machine Company. (See Risser, Arthur I., United States Finishing Company, The. (See Mowry, Harold B., assignor.)
United States Finishing Company, The. (See Witte, William, assignor.)
United States Fire Protection Company. (See Newton, George F., assignor.)
United States Grueg Company. (See Ingham, Robert A., United States Gauge Company.) assignor.) United States Gauge Company. (See Manuel, C. J., and Lentz, assignors.)
United States Gauge Company. (See McClelland, Bert, assignor.)
United States Glass Company. (See Loomis, Virgil V., assignor.)
United States Glass Company. (See Northwood, Charles O., assignor.) United States Glass Company. (See Stewart, Fred W., assignor.) United States Gypsum Company. (See Armstrong, Morgan K., assigner.). United States Gypsum Company. (See Birdsey, Charles R., assignor.) United States Gypsum Company. (See Brookby, Harry R., assignor.)
United States Gypsum Company. (See Brookby, Harry E., assignor.)

E., assignor.)

E., assignor.)

E., assignor.)
United States Gypsum Company. (See Brookby, H. E., and King, assignors.)

United States Gypsum Company. (See Utzman, Clarence W., assignor.)

E., assignor.) sign Industrial Alcohol Co. (See Backhaus, Arthur A., assignor. Industrial Alcohol Co. (See Carter, Ray M., assignor U. Industrial Alcohol Co. (See Clapp, Elwood I., assignor.)
S, Industrial Alcohol Co. (See Cochrane, William F., ssignor.) S. Industrial Alcohol Co. (See Hammond, John A. S., assignor.) S. Industrial Alcohol Co. (See Mitchell, Harry G., U. U.S. Industrial Alcohol Co. (See Schreiber, Walter T., assignor.)
U.S. Light & Heat Corporation. (See Carpenter, Campbell C., assignor.)
U.S. Light & Heat Corporation. (See Kyle, George L., assignor.)
U.S. Light & Heat Corporation. (See Turbayne, Willassignor.)
U.S. Light & Heat Corporation. (See Green, S. G., and Hatcher, assignor.)
United States Machine Gun Company. (See Green, S. G., and Hatcher, assignors.)
United States Machine y Manufacturing Company. (See Woodward, Charles L., assignor.)
U.S. Manufacturing Corporation. (See Le Pere, John G., assignor.)
U.S. Manufacturing Corporation. (See Marks, August, assignor.)
United States of America. (See Jordan, L., and Quick, assignors.) U. Industrial Alcohol Co. (See Schreiber, Walter T., United States of America, (See Jordan, L., and Quick, assignors.)
United States Paper Mills, Inc. (See Rosenthal, D. A., and Whiter, assignors.)
United States Playing Card Company, The. (See Fournier, Oscar, assignor.)
United States Pump Corporation.
and Statchouse, assignors.)
United States Pump Corporation.
Statchouse, assignors.
United States Pump Corporation.
United States Pump Corporation.
Statchouse, assignors.
United States Pump Corporation.
United States Pump Corporation.
(See Splain, W. E., and States Pump Corporation.
United States Pump Corporation.
(See Splain, W. E., and States Pump Corporation.
United States Pump Corporation.
(See Splain, W. E., and States Pump Corporation.
United States Pump Corporation.
(See Splain, W. E., and States Pump Corporation.
(See Gilligan, George H., assignor.)

United States Sand Paper Company. (See Canada, Chauncey M., assignor.) United States Sand Paper Company. (See Joseph, Henry, united States Sanitary Manufacturing Company. (See Henricks, Henry E., assignor.) United States Serve & Stamping Co. (See Royal, Ellery E., assignor.) U. S. Shutter Lens Company. (See Radford, Herbert A., assignor.) S. Slicing Machine Company. (See Nyhus, Sverre, assignor.) . S. Slicing Machine Company. (See Stukart, Hendrik, . S. Sheing auto-assignor.)
S. Slicing Machine Company. (See Van Berkel, U. S. Slicing Machine Company. (See Van Berkel, assignor.)
United States Smelting, Refining & Mining Company. (See Hamilton, E. H., and Kirk, assignors.)
United States Smelting, Refining & Mining Company. (See Kiresbom, Gustaf N., assignor.)
United States Smelting, Refining & Mining Company. (See Milock, Fred S., assignor.)
United States Smelting, Refining & Mining Company. (See Wichman, F. M., and Hattlapp, assignors.) U. S. Specialty Company. (See Clauson, William, assignor.)
United States Specialty Corporation. (See Lundquist. United States Specially Corporation.
United States Stoneware Company, (See Chamberlain, John J., assignor.)
United States Tent & Awning Company. (See Leffert, Charles B., assignor.)
U. S. Tool Company. (See Cahusac, Clarence N., as-Charles B., assignov.

S. Tool Company.

S. Tool Con Company.

J. S. Tool Co. (See Dester, William F., assignor.)

J. S. Tool Co. (See Hopkins, Arthur C., assignor.)

J. S. Tool Company.

J. See Wilson, W. J., and Carlton, assignor.)

J. S. Tool Company.

J. See Woods, Walter T., assignor.)

J. Seaford.

Seaford. U. S. Tool Company. (See Wilson, W. S. and Sasignors, assignors, Company. (See Woods, Walter T., assignor.)
U. S. Tool Company. (See Stafford, Earl C., assignor.)
United States Train Signal Company. (See Stafford, Earl C., assignor.)
United Steel Block Corporation. (See Dickinson, Walter H., assignor.)
United Steel Block Corporation. (See Dickinson, Walter H., assignor.)
United Steel and Wire Company. (See Jarvis, Charles H., assignor.) assignor.)
United Tool and Manufacturing Co., et al. (See Gries, Lester M., assignor.)
United Wire and Supply Company. (See Hughes, Thomas F., assignor.) Unitrol Condenser Corporation. (See Kent, Frank J., Universal Battery Company. (See Mowry, Robert D., assignor.) Universal Broadcaster Mfg. Co. (See Bailey, James G., Universal Broadcaster Mfg. Co. (See Balley, James G., assignor.)
Universal on the massignor. (See Universal Candy and Chocolate Machinery Company. (See Chase, Earle M., assignor.)
Universal Candy and Chocolate Machinery Company. (See Chase, Earle M., assignor.)
Universal Candy and Chocolate Machinery Company. (See Segrin, O. E., and Chemens, assignors.)
Universal Cooler Corporation. (See Thompson, Harry E., assignor.)
Company, The. (See Deucher, Eugene G., assignor.) Universal Crane Company, i.e. (See Deutster, Eugene G. 2007). The Company of the assignor.)
Universal Draft Gear Attachment Co. (See Wrigley, Universal Draft Gear Attachment Company, The. (See Camp, Percy B., assignor.) Universal Electric Stage Lighting Company. (See Linnebach, Adolph.)
Universal Electric Welding Company. (See Lachman, Universal Electric Welding Company. (See Lachman, Laurence S, assignor.) Universal Electric Welding Company. (See Lachman, Universal Darit Genr Attachment Co. (See Camp, P. B., and Wilson, assignors.) Universal Draft Genr Attachment Company. (See Camp, Percy B., assignor.) Universal Drypuum & Lime Co. (See Turner, John J., assignor.) assignor.) Universal Gypsum & Lime Co. (See Tyler, Alva W.,

assignor.)
Universal Harvester Company, The, et al. (See Inghram,
Howard T., assignor.)
Universal Incherator Corporation. (See Isenberg, H. O.
C., and Piernay, assignors.)
Universal Industrial Corporation. (See Feige, Adolf E.,

Universal Jacks & Hoist Corporation. (See Hahn, Otto W., assignor.)
Universal Jewelry Case Co. (See Flier, Leo, assignor.)

Universal Lamp Company. (See Sherman, Jacob S., as-Universal Leather Goods Co. (See Fingerman, Ira, ag-Universal Milking Machine Co. (See Beaty, Bruce F., Milking Machine Company. (See Bork, Otto Universal J., assignor.) Universal Milking Machine Company, The. (See Schmitt, Universal Milking Machine Co., The. (See Shurts, Englebert, assignor.) Universal Oil Products Company. (See Dubbs, Carbon D.P., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Egloff, G., and Alther, assignors.)
Universal Oil Products Company. (See Egloff, G., and Oniversal Oil Products Company. Henser, assignors.)

Universal Oil Products Company. (See Egloff, G., and Howard, assignors.)

Universal Oil Products Company. (See Egloff, G., and Pollock, assignors.)

Universal Oil Products Company. (See Halle, Hiram J., Universal Oil Products Company.) assignor.) Universal Oil Products Company. (See Howard, William R., assignor.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Kirschbraun, L., and Pollock, assignors.)
Universal Oil Products Company. (See Morrell, Jacque C., assignor.)
Universal Oil Products Company. (See Morrell, J. C., and Comay, assignors.)
Universal Oil Products Company. (See Morrell, J. C., and Egloff, assignors.)
Universal Oil Products Company. (See Pollock, Robert Universal Oil Products Company. (See Seguy, Jean D., Universal Oil Products Company. assignor.)
niversal Optical Corporation. (See Beattey, Earley, Universal Optical Corporation. (See Beattey, Earley, J. R., assignor.)

Universal Optical Corporation. (See Nelson, John N., assignor.) Universal Optical Corporation. (See Searles, Wayne S ... assignor.)
Universal Postal Frankers Limited. (See Kinnard, Edward H., assignor.)
Universal Pulors (Manchester 1923) Limited. (See Gaisman, L., and Brown, assignors.)
Universal Rock Eliminator, Inc. (See Shaw, Samuel H., oniversal since Financia, assignor.)
Universal Specialty Company. (See Mumaw, J. H., Schnieders, and Haas, assignors.)
Universal Steel Company. (See German, Howard M., assignor.) Universal Tiller Corporation, The. (See Shields, Frank S., assignor.)
Universal Tobacco Machine Company. (See Schussler, Walter H., assignor.)
Universal Veneer Products Company. (See Pointer, Henry V., assignor.)
Universal Winding Company. (See Anderson, Johan A., assignor.)
Universal Winding Company. (See Beckman, Gustaf S., assignor.)
Universal Winding Company. (See Blair, Harry R., assignor.)
Universal Winding Company. (See Lee, Harry P., as-Universal Winding Company. (See Parks, E. F., Brink, and Taylor, assignors.)
Universal Winding Company. (See Sands, Thomas J., Universal Winding Company. (See Sands, Thomas J., assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Graupner, Paul L., assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co. (See Hohn, Max P. E., assignor.)
"Universelle" Cigaretten-Maschinen-Fabrik J. C. Müller & Co. (See Muller Carl W., assignor.)
"Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co. (See Rüber, Constantin F., assignor.)
University of Tennessee. (See MacDonald, Margaret B., assignor.) assignor.) assignor.) Unke, Herman A., Cleveland, Ohlo. Pipe-thread protector. 1,621,647; Mar. 22.
Unke, Herman A., Cleveland, Ohlo. Pipe-thread protector.
Unkle, Charles W., Baltimore, Ohlo. Apparatus for papermanufacture. 1,644,620; Oct. 4.
Unné. Ernst, Harrogate, England. Massaging apparatus. 1,636,139; July 19.
Unrath. Gotthilf, Pforzheim, Germany. Apparatus for May 2.
May 2. erfouse containing precious metal. 1,627,129; May 2. May 3 Unruh, Daniel F., assignor of one-half to E. Unruh, Goessel, Kans. Thrashing machine. 1,621,445; Goesser, Kans. Thrashing machine. 1,621,440; Mar. 15. Unruh, Ed. (See Unruh, Daniel F., assignor.) Untledt, Frederick H., Washington, D. C. glycok. 1,641,710; Sept. 6.

Unwin, Kenneth J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Let-back mechanism for loom let-offs. 1,616,477; Feb. Sunwin, Kenneth J., Shrewshury, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Combined latch and wett detector for loom transferrers. 1,621,044; Mar. 15.

1,621,044; Mar. 15.

Inwin, Kenneth J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Balanced let-off for looms. 1,627,813; May 10.

Inwin, Kenneth J., Shrewsbury, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Multipleneedle defector for looms. 1,633,650; June 28.

Inwin, Kenneth J., Shrewsbury, assignor to Weight-controlled defector for looms. 1,633,651; June 28.

Inwin, Kenneth J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Laterally-movable detector in loom transferrer. 1,639,869; Aug. 23.

Unwin, Kenneth J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft defector Knowles Loom Works, Worcester, Mass. Finger separating and leveling device for loom dobbies. 1,653,193; Dec. 20.

separating and 1 1,653,193; Dec. 20.

separating and leveling device for loom doodles. 1,653,193; Dec. 20.

Unwin, Kenneth J., Snrewsbury, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread & Knowles Loom Works, Worcester, Mass. Thread of Strowles Loom Works, Worcester, Mass. Mounting for loom spindles. 1,654,226; Dec. 27.

Unwin, Kenneth J., and W. H. Wakefield, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for Axminster looms. 1,633,668; Aug. 23.

Thube frame for Axminster looms. 1,633,668; Aug. 23.

Thube frame for Axminster looms. 1,633,668; Aug. 24.

The first of the first look of the first loom works, Worcester, Mass. Device to check needle motion of Axminster looms. 1,643,431; Sept. 27.

Opdegraf, Alpha D., Valley Center, Kans. Frost-exterminating menns for windshields. 1,628,514; May 17.

Updegrave, Charence A., Orwigsburg, and W. R. Shollenberger, Schwijkin Haven, assignors of twenty per windshields. 1,647,943; Nov. 1.

Determination of the first look of th

Upham, Preston, Brookline, Mass., assignor, by mesne as-signments, to The Bassick Manufacturing Company, Chicago, III. Leaf-spring-lubricating device. 1,635,696; July 12.

July 12:
Upham, Preston, Brookline, Mass., assignor, by mesne assignments, to The Bassick Manufacturing Company, Chicago, Ili. Oli cup., 1644,210; Oct. 4.
Uphoff, Leo P., and F. A. Sims, San Jose, Calif. Valve. 1630,285; Oct. 4.
Local Company, Assignor to American Proceedings of the Company, Radio signaling system. 1,617,467; Feb. 15.
Upjohn Company, The. (See Little, William F., assignor)

Diploin, Hubert S., Los Angeles, Calif. Filing and shipping receptacle. 1,634,699: July 5.
Uppercu, Inglis M. (See Williams, Thomas F., assignor.)
Upressit Products Corporation. (See Sayder, Herbert T.,

assignor.)

Upright, Charles H., Edmonton, Alberta, Canada. Gas burner. 1.634.292; Apr. 12. Upson, Maxwell M., Englewood, N. J. Apparatus for mak-ing concrete piles. 1,640,101; Aug. 23. Upson, Ralph H., Brooklyn, N. Y. Dirigible. 1,648,630; Nov. 8.

Nov. 8.

Urbach, Gustave A., Pittsburgh, Pa. Spraying machine.

1.654.059; Dec. 27.

Urbahns, Allen G., assignor to McGill Manufacturing Company, Valparaiso, Ind. Lamp guard. 1,634.439; July Ciban, Bruon, er., Ludwigshafen-on-the-kline, Germany.

1.622.071; Mar. 22.

Urban, Franz, Berlin-Steglitz, assignor to the Firm of Optische Anstalt C. P. Goerz Aktiengesellschaft, Friedman, near Berlin, Germany. Spherically, chromatically, and astigmatically corrected three-lens central company. Charles Charles (1,402; Sept. N. 1,620,789; Mar. 15.

Urban L. Galslaus, Roselle Park, N. J. Phone miller (1)

Urban, Ladislaus, Roselle Park, N. J. Phone pillar, 1648,832; Nov. 8. Urch, Raymond G., Allegan, Mich. Universal joint, 1,627,940; May 10. Ure, Colin M., Bishopbiggs, Glasgow, Scotland. Manufacture, centrifugally, of pipes, columns, and the like. 1,622,012; Mar. 22.

Urie, David A., Chicago, Ill. Machine for attaching color chips to cards. 164.044; Oct. 4. Urner, Frank A., et al. (See Mason, Frank R., assignor.) Urovsky, Nathan, New York, N. Y. Portable therfproof box. 1.643,189; Sept. 20. Urquhart, Ubet. (See La Jole, H. J., and Urquhart.)

Urquhart, Ubert, assignor to The Auto Pneumatic Action Company, New York, N. Y. Tension-controlling mechanism for musical instruments. 1.653.935;

Urquhari, Ubert, assignor to Tan.

tion Company, New York, N. Y. Tension-controlling
mechanism for musical instruments. 1,653,935;
Dec. 27.

Urdicago, Hilliam B., Los Angeles, Calif, C. W. Post,
Urghorg, Milliam B., Los Angeles, Calif, C. W. Post,
C. C. Van Artsdele, assignors to The Goodyear Tire &
Rubber Company, Akron, Ohlo, Treating rubber articles. 1,631,948; June 7.

Ursbruck, Frank C., assignor to Underwood Typewriter
Company, New York, N. Y. Typewriting machine.
1,618,517; Feb. 22.

1,618,317; Feb. 22. Ursbruck, Frank C., assignor to Underwood Typewriter Company, New York, N. Y. Typewriter word register. 1,646,799; Oct. 25. Wiling Green, Ohio. Broaching ma-Urschel, Bertis H., Bowling Green, Ohio. Connecter sleeve for telescoping shafts. 1,644,800; Oct. 11. Urschel, William E., Valparaiso, Ind. Building form. 1,636,396; July 19. Valparaiso, Ind. Building form. 1,636,396; July 19. Valparaiso, Ind. sasignor to Estable Pic Copposition, Foolsville, Ky. Automatte ice-cream cutting and conting machine. 1,648,835; Oct. 18.

18.

Visco, Frank, New York, N. Y. Combined crib and baby walking device. 1,642,184; Sept. 13.

Livin, Norman W., Anniod Pishi, England. Protector Common W., Anniod Pishi, England. Protector Common W., Armature for distant control indicators for continuous and alternating current. 1,630,503; May 31.

Usher, John J., assignor to St. Helens Iron & Marine Works, St. Helens, Oreg. Cable clamp. 1,635,747;

Dec. 27.

Usigil, Bruno, assignor to the Firm Instrumenti di Misura C. G. S. Secieta Anonima, Milan, Italy. Electrical measuring instrument of the type employing a control motor. 1,630,889; May 31.

Usnik, John, Los Angles, Calif. Photo-printing cabinet. 1,620,927; Mar. 15.

Usoskin, Joseph, New York, N. Y. Display device. 1,619,095; Mar. 1.

Utansils Company. (See Brown, Thomas N.. assignor.)

Utility Manufacturing Co. (See Hutchens, Edward, assignor.)

Uttenthal, Folmer S., Buffalo, assignor to K. Uttenthal, New York, and T. Nielsen, Buffalo, N. Y. Soldering iron. 1,614,090; Jan. 11. Uttenthal, Karen, et al. (See Uttenthal, Folmer S., as-

Utterhial, Raten, et al. (1988). Signori, and manufacturing the signori, and an anomal signori and manufacturing the same, 1982, 1989, 1981, 201

Gummed-tape-serving machine. 1,633,144; June 21.
Utz. John G., Detroit, Mich. Motor-vehicle construction. 1,641,242; Sept. 6.
Utz. John G., Detroit, Mich., assignor to The Warford Construction. 1,614,688; Jan. 110,1819 support for Detroit of the Construction of the Prelief of the Company, Hamilton, Ohio. Sterilizing and washing machine. 1,624,026; Apr. 12.
Utzler, Elimer W., Corliss Station, Pa. Nut lock. 1,644,654; Oct. 4.

Utzman, Clarence W., assignor to United States Gypsum Company, Chicago, Ill. Bound-edge plaster wall board. 1,631,108; May 31.
Utzman, Clarence W., Buffalo, N. Y., assignor, by mesne assignments, to United States Gypsum Company. Fabricated board. 1,638,280; Aug. 9.
Uzmann, George J., Bloomfeld, N. J. Textile comb and making the same. 1,634,105; Dec. 27.
Uvalde Rock Asphalt Company. (See Frazier, John W.,

Uytjens,

tiens, Hendricus F. H., Spaubeek, Netherlands, hange-speed gear for rotation in two directions and rith direct coupling, neutral position, and brake. 842,346; Sept. 13. Asten Eduard, Eupen, Belgium. Asbestos drier felt. 638,721; Aug. 9.

1,022,046; sept. 18. Asten. Eduard, Eupen, Belgium. Asbestos drier feit. 1,638,721; Aug. 9. Briesen. Fritz, trustee. (See Terwilliger, Charles O., assignor.)

V. L. Oil Processes Limited. (See Lucas, O. D., and Lomax, assignors.) Yacuum Oil Company. (See Atwood, E. H., Wanner, Kiehle, and Wright, assignors.) Yacuum Oil Company. (See Martin, Charles E., as-

signor.) Vacuum Oil Company. (See Snow, Edward J., assignor.) Vacuum Pulp Products Corporation. (See Louisot, Felix,

assignor.)
Vacuum Refrigerating Company. (See Batterman, John J., assignor.)

Vadersen, Herbert, Elizabeth, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Variable coupler. 1,616,643; Feb., assignor to Bel. Vadersen; Herbert, Elizabeth, N. J., assignor to Bel. Telephone Laboratories, Incorporated, New York, N. Y. Adjustable coil. 1,647,239; Nov. 1. Valle-Kimes Company, The. (See Masters, John H., as-

Vaile-Kimes Company, The. (See Masters, John H., assignor.)
Vaisey, Harold C., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 73,720; Oct. 25.
Vaisey, Harold C., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 73,721; Oct. 25.

Oct. 25.
Vaisey, Harold C., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 73,722;
Oct. 25.
Valtulis, Charles, Detroit, Mich, Toothbrush holder.
1,633,384; June 28.
Valberg, Gustaf E., Stockholm, Sweden. Nut-locking washer. 1,012,955; Jan. 4.
Valcourt, Louis E., Pawfuckef, assignor to Louis Stern App. 1937, Providence, R. I. Bracelet hook. 1,625,063;
App. 1937, Providence, R. I. Bracelet hook. 1,625,063;

washer, 1.612,955; Jan. 4.

Valcourt, Louis E., Pawtucket, assignor to Louis Stern Company, Providence, R. I. Bracelet hook, 1,625,663; Apr. 19.

Valded, Salustic, Westminster, London, England, Jet-propagation, Jet-propagation,

signor.)

Vallat, André, Paris, France, assignor to M. S. Lesser,
Los Angeles, Calif. Booth game. 1,640,259; Aug. 23.

Vallat, André, Paris, France, assignor to M. S. Lesser,
Los Angeles, Calif. Cabin for light-producing devices. 1,662,590; Dec. 13.

Vallen, Earl J., Akron, Ohlo. Curtain-supporting device.

Vallen, Earl J., Akron, Ohlo. Curtain-supporting device.

Vallens, Engene, New York, N. Y. Breaker and stopper
extractor. 1,615,150; Jan. 18.

Vallet M. Afréd, Chicago, Ill. Silo. 1,617,555; Feb. 15.

Vallet Electric Company. See Bullivant, Francis J., assignor.)

valley becent company signor.)
Valley Iron Works. (See Smitham, James A., assignor.)
Valley Mould & Iron Corporation. (See Perry, John E.,

assignor.)

Valley Mould and Iron Corporation. (See Ramage, William H., assignor.)

Valler, Elijah G., assignor to Western States Envelope

Co., Milwankee, Wis. Attachment for envelope blanker printing machines. 1.613,918; Jun. 11.

Vallier, Orvis W., assignor to J. B. Wise Incorporated,

Watertown, N. Y. Shut-off for sink faucets. 1,612,644;

Jan. 4.

Vailler, Orvis W., assignor to J. B. Wise Incorporated, Watertown, N. Y. Mixing and distributing mechanism. 1.615,730; Jan. 25.

Vailler, Orvis W., assignor to J. B. Wise Incorporated, Watertown, N. Y. Mixing and distributing mechanism. 1.615,792; Jan. 29.

Vailler, Orvis W., assignor to J. B. Wise Incorporated, Jan. 20.

Flow regulator for faucets. Plow regulator for faucets. 1.625,792; Jap. 29.

Vaillere, John L., Skowhegan, Me. Freight hook. 1.640,102; Jan. 23.

Vailler, Jan. 20.

Vailler, Orvis W., assignor to Reminigton valvet, Martin Chem. N. Y., assignor to Reminigton Valview, Martin Chem. 20.

Valvie, Martin Chem. 20.

Valve Bag Company of America, The. (See Hartman, Louis H., assignor.) Vana, Rudolipb, Brownsville, Tex. Musical instrument, 1,653,241; Dec. 20. Van Ackeren, Joseph, assignor to The Koppers Company, Pittsburgh, Pa., Coking retort oven, 1,613,068; Jan. 4.

Van Ackeren, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Discharge-pipe apparatus. 1,616,561;

Van Ackeren, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Coking retort oven. 1,633,911; June 28.

Van Amburg, Otto H., Bridgeport, Conn., assignor to General Electric Company. Fives plug, 162,8,19; Apr. 5.

Van Arkel, Anton E., and J. H. De Boer, assignors to N. V. Philips Glosilampentabricken, Eindhoven, Netherlands. Process for dissolving a mixture of hafnium and zirconium, 1,618,494; Feb. 2.

Van Arkel, Anton E., and J. H. De Boer, assignors to N. V. Philips, Glosilampentabricken, Eindhoven, Netherlands. Dissolving a mixture of hafnium and zirconium phosphates and for separating hafnium and zirconium phosphates and for separating hafnium and zirconium 1,636,493; July 19.

Van Arsdale, Clarence C. (See Urquhart, W. R., Post Humphrey, and Van Arsdale, V. Y. Combined plow and cultivator. 1,643,567; Sept. 27.

Van Ausdal, James H., and J. T. Blackburn, Vinita, Okla, Governor, 1,633,505; June 21.

Van Berkel, Wilhelmus A., Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Van Berkel, Wilhelmus A., Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Van Berkel, Wilhelmus A., Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Van Berkel, Wilhelmus A., Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Van Berkelot, Steches, 1,630,909; May 24.

Van Berkelot, Steches, Gee Stevenson, Thomas K., assignor.)

an Bommel, Pierre, Antwerp, Belgium. ing socket for electric filament lamps. Shock-absorb-

ing socket for electric filament lamps, 1,626,108; Apr. 26.
Van Brunt, John, Flushing, assignor to International Combustion Engineering Corporation, New York, N. Y.
Van Brunt Manufacturing Company, (See Van Brunt, Willard A., assignor).
Van Brunt Manufacturing Company, The. (See Van Brunt, Willard A., assignor).
Van Brunt Manufacturing Company, Horicon, Willard A., assignor).
Van Brunt Manufacturing Company, Horicon, Willard A., assignor to Yan Brunt Manufacturing Company, Horicon, Willard A., Los Angeles, Calif., assignor to The Van Brunt Manufacturing Company, Horicon, Wils. Machine for sowing fertilizers. 1,650,808; Nov. 29.
Van Buren, Elmer M., Bronxville, N. Y. Traific light. 1,653,653; July 19.
Van Camp Edward. (See Pfeifer, F. M., and Van Camp.) Van Camp Edward. (See Pfeifer, F. M. and Van Camp.) Vance, Arthur J., assignor to The Coe Manufacturing Company, Painesville, Ohlo. Drier for sheet material 1,632,750; June 14.
Vance Engineering Company. (See Buckman, H. W., and Prentice, assignors).

Prontice, assignors, (see Buckman, H. W., and Prontice, assignors, Vance, George E., Springfield, Ohio. Ring-wheel grinder and making same. 1,642,065; Sept. 13. Vance, Hazen C., Boise City, Idaho. Hay piler, 1,647,064;

Vance, Hazen C., Boise City, Idano. Hay pilet. 1,047,048, Oct. 25.
Vance. Howard C., Detroit, assignor to Whitehead & Kade Company, River Rouge. Mich. Safety device for riveting machines, 1,643,765; Sept. 27.
Vance, Morton L. (See Heyer, T. A., and Vance.)
Vance, Waiter N., Chicago Heights, assignor to Durand Steel Locker Company, Chicago, Ill. Fender rack.
Van Cleave, Charles N. (See Gayle, Norman W., assured Charles N. (See Gayle, Norman W., assured Charles N. (See Gayle, Norman W.)

signor.) an Cleave, Edwin E. (See Benz, C. A., and Van

Van Cleave, Euwu E. Cleave, Cleave, Cleave, Cleave, Van Coeverden, Marshail H. (See Mann, John J. and Van Coeverden, N. Y. Automobile wheel. 1,623,645; Apr. 6. Van Daam, Gerrit, Buffalo, N. Y. Supplying heated air to combustion chambers. 1,639,014; Aug. 16. Van Degritt, Thomas C. (See Lee, C. L., and Van Degrift,

Vandenberghe, Charles, assignor of 15 per cent to R. L. Kelly, New York, N. Y. Latch for electric water heaters. 1,640,225; Oct. 18.

Van den Heuvell, Abraham Van L., Zwelle, Netherlands, Weighing screw jack for determining the wheel pressure of vehicles, 1,621,911; Mar. 22.

Nan den Heuvell, Abraham Van L., Zwelle, N. J., and J. Bortolin, assignors of one-third to W. R. Hackwell, deceased, Brooklyn, N. Y.; F. Lampe, executor. Aerial illuminating device. 1,633,540; June 21.

Van der Bill, Hendrik J., assignor to Western Electric Company, Incorporated, New York, N. Y. Space disconding the company of the company of

Vandergaw, Edward B., Brooklyn, and J. Heinrich, New York, N. Y., assignors to Fred Butterfield & Co. Inc., New York, N. Y. Flocked voile fabric. Des. 72,294;

Yandergaw, Edward B., Brooklyn, and J. Heinrich, New York, N. Y., assignors to Fred Butterfield & Co. Inc., New York, N. Y. Flocked voile fabric. Des. 72,295; Mar. 22.

Mandergaw, Edward B., Brooklyn, and J. Heinrich, New York, N. Y., assignors to Fred Butterfield & Co. Inc., New York, N. Y. Flocked volle fabric. Des. 72,297; Mar. 22.

Andergaw, Edward B., Brooklyn, and J. Heinrich, New York, N. Y., assignors to Fred Butterfield & Co. Inc., New York, N. Y. Flocked voile fabric. Des. 72,298; Mar. 22.

Mar. 22.

Vandergaw, Edward B., Brooklyn, and J. Heinrich, New York, N. Y., assignors to Fred Butterfield & Co. Inc., New York, N. Y. Flocked volis fabric. Des. 72,299;

Vandergaw, Edward B., Brooklyn, and J. Heinrich, New York, N. Y., assignors to Fred Butterfield & Co. Inc., New York, N. Y. Flocked voile fabric. Des. 72,300;

Mar. 22.

Mar. 2.2. Proced volle labric. Des. 72,300; Vanderjan, Frank C., assignor to The Williams Foundry 1,638,242 Aug. 9.
Van Derhoet, Henry E., assignor to Eastman Kodak Company, Rochester, N. Y. Process and apparatus for uniting strips of material. 1,641,403; Sepf. 6.
Van Derhoet, Henry E., assignor to Eastman Kodak Company, Rochester, N. Y. Process and apparatus for uniting strips of material. 1,611,403; Sepf. 6.
Van Derhoet, Henry E., assignor to Eastman Kodak material. 1,651,744; Dec. 6.
Handling strips of sheet material. 1,651,744; Dec. 6.
Van der Kamp, Martin C., San Jose, Calif. Finishing metal walls. 1,637,793; Aug. 2.
Vanderlaan, Albert, Larchmont, N. Y. Perpetuating human semains and article made thereby. 1,640,680; Van der Lang, Lange, Lahaman A.

Aug. 30.

Van der Lande, Johannes A. L., Devanter, Netherlands, assignor, by mesne assignments, to Novadel Process Corporation, Buffalo, N. Y. Stable peroxidized compositions, and the stable process of the stable process

Sept. 13.

Van Der Pyl, Edward, assigner to Norton Company, Worcester Mass. Safety-tread unit. 1,619,773; Mar. 1.

Vanderstein, Ewald Dulken, Germany. Furnace with blast heater. 1,649,201; Nov. 15.

Vanderver, David E., assignor of one-half to C. W. Link, Los Angeles, Calif. Adjustable wind and storm shield for vehicles. Rel6,657; Feb. 22.

Vanderveld, Anthony, Grand Rapids, Mich. Vard indicator for measuring machines. 1,617,881; Feb. 15.

Vanderveld, Anthony, Grand Rapids, Mich. Shutter for computing machines. 1,638,514; Jun. 9.

Vandervoort, Francis M. (See Crooks, C. L., and Vandervoort,

voort.)

Vandervoort, Francis M., assignor to The Positive Lock Company, Pueblo, Colo. Latch and keeper means. 1,634,634; July 5.

Vandervoort, Francis M., assignor to The Positive Lock Company, Pueblo, Colo. Latch 1,634,637; July 5.

Vandervoort, Francis M., assignor to The start of Company, Pueblo, Colo. Latch. 1,634,637; July 5.

Vanderwerhe Limited. (See Zortkowski, John, assignor.)

Van dee Werff, Auke H., assignor to N. V. Maatschappit, ASS, 480; Carlotte M. V. Whatschappit, ASS, 480; Carlotte M. V. Whatschappit, ASS, 480; Carlotte M. V. Wanderwerp, Henry. (See Minogue, Roland E., assignor.)

Van der Woude, Derk, Groningen, Netherlands. Central heating installation. 1,646,629; Aug. 30.
Van Derwyk, John D., assignor to T. A. Wells, Los Angeles, Calif. Vehicle brake. 1,621,912; Mar. 22.
Van Deusen, Henry M., Westfield, Mass. Mop. 1,624,641; Apr. 12.
Van Deventer, Harry R., assignor to Dubiller Condenser Corporation, New York, N. Y. Condenser. 1,619,223; Mar. 1.

Maf. 1.

Van Deventer, Harry R., assignor to Radio Patents Corporation, New York, N. Y. Telephone attachment for phonographs and the like. 1,619,384; Mar. 1.

Van Deventer, Horace, Knoxville, Tenn. Fuel-feeding system for internal-combistion engines. 1,645,836; Oct. 18.

Van de Water, John W., Hastings-on-the-Hudson, and B. R. Blair, Jackson Heights, assignors to Western Riegard, Jackson Heights, assignors to Western Riegard, 1,632,048; June 14.

Van Diest, Edmond C., and F. Glipin, Colorado Syrings, Colo. System of lightning protection. 1,617,691; Feb. 15.

Colo.

Van Diest, Edmond C., and F. Glipin, Colorado Springs, Colo. System of lightning protection. 1,617,691; Feb. 15.

Van Diest, William, Minneapolis, Minn. Display plaque and making. 1,620,046; Mar. 8.

Van Diest, William, Minneapolis, Minn. Display plaque and making. 1,620,046; Mar. 8.

Vennootschap: Octroot Mastschappij "Ve66" Amsterdam, Netherlands. Manufacture of a textile material from vegetable raw material. 1,653,188; Dec. 20.

Van Dijk, Louis H. G., The Hague, Netherlands. Hair waving or curing device. 1,638,369; Aug. 15c. 20.

Van Dorn Curing device. 1,638,369; Aug. 15c. 20.

Van Doorn, Frank E., and E. W. Feld, assignors to The Van Doorn Company, Quincy, III. Elevator car. 1,616,096; Feb. 1.

Van Doorn Company, Quincy, III. Elevator car. 1,616,096; Feb. 1.

Van Doorn Company, Quincy, III. Elevator car. 1,616,096; Feb. 1.

Van Doorn Electric Tool Company, The. (See Connell, Edwin L., assignor).

Van Doorn Herbert E., Chicago, III. Switch and valve control in air and electric coupling systems for cars. 1,621,292; Mar. 15c.

Van Dorn, Herbert E., Chicago, III. Draft gear. Van Dorn Iron Works Company, The. (See Barker, Percy E., assignor.)

E., assignor.)

E., assignor.)

Van Dorn Iron Works Company, The. (See Pennington, Gordon R., assignor.)

Van Dorn, William E., Chicago, Ill. Metal wall for railway cars and the like. 1.621,293; Mar. 15.

Van Duzer, Joseph, Firthcliffe. N. Y. Clothes-hanging and the like. 1.621,293; Mar. 15.

Van Ext. Schill, V. W. N. Y., assignor to Radio Corporation of America. Electrical system and signaling method. 1.652,155; Dec. 6.

Van Eck. Jacob, Middleburg, Netherlands. Open-end wrench of the adjustable-jaw type. 1.643,633; Sept. 27.

Vanek, John S., Oklahoma City, Okla. Short-burered pen and peucil holder for second finger. 1,652,072; Van Emon, Burton C., San Francisco, assignor to J. M.

an Emon, Burton C., San Francisco, assignor to J. M. Koford, trustee, Oakland, Calif. Elevator. 1,615,318;

an Emon, Burton C., San Francisco, assignor to J. M. Koford, trustee, Oakland, Calif. Elevator. 1,620,305; Mar. 8.

laboratories, Inc. (See Goodall, Fred E., asan Ess Laboratories, Inc. (See Goodall, Fred E., assignor.)

Essen, Pieter D., The Hague, Netherlands, and C. H. roelich, Bethlehem, Pa. Breech mechanism. 1,626,651;

Van Heusen, John M., New York, N. Y. Fastener. 1,638,073; Aug. 9. Van Heusen, John M., Boston, Mass. Shoulder strap. 1,600,916; Nov. 29. Van Heusen Products, Inc. (See Bacon, R. F., and Kid-

Van Hoffen, William A., Brooklyn, N. Y., assignor to Irving Iron Works Company. Continuous grating structure. 1,629,134; May 17. Van Hoofstadt, Edward. (See Greenbaum, L., and Van

Hoofstadt.)
Vanhoren, Jules J. (See Appelian, H. G., and Van-

horen.)

Van Horne, John S., Franklin, Ohio. Exhausting electrical bulbs. 1,644,002; Oct. 4.

An Houten, Erskine B., South Nyack, N. Y. Beverage

Van Houten, Frances B., Detroit, Mich. Tie straightener.

1,637,399; Aug. 2.

Van Houten, Frank H., assignor to Dutchess Tool Company, Beacon, N. Y. Dough molder. 1,631,592;

van Houten, Frank H., assignor to Brutchess 100 Company, Beacon, N. Y. Dough molder. 1,631,992; Van Hove, Desire H., assignor to Reynolds Spring Company, Jackson, Mich. Spring structure. 1,632,936; June 21.

an Huffel, Isadore J., Warren, Ohio. Electric pipe-welding method and apparatus. 1.648,921; Nov. 15. an Husen, Norman. (See Jandus, H. S., and Van Van Husen.)

Husen.)

Vanick, James S. (See Merica, P. D., and Vanick.)

Vanick, James S. (See Merica, P. D., and Vanick.)

Vanice, Francis N., Indianapolis, Ind. Convertible vehicle body.

1626, 2055, 205

Leunen.)

Van Meter, James W., San Antonio, Tex., assignor to B. A. Singer, Washington, D. C. Composition of matter and producing the same. 1,654.025; Dec. 27.

Vann, David J. St. Thomas, Ontario, Canada. Pivot Van Ness, Henry E., Elmira, N. Y. Yarn cleaner. 1,625,692; Apr. 19.

Van Ness, Henry E., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Stop-motion device for spinning frames. 1,636,945; July 26.

Van Ness, William E. (See Brady, H. T., Benway, and Van Ness, William E.)

Van Ness, Niman E. (See Brady, H. T., Behway, and Van Ness, Niman E. (See Brady, H. T., Behway, and Van Nieukerken.)

Nam Nieukerken, Jan M. (See Riley, L. G., Meyer, Jan Norman, Frederick D., and G. W. Fleming, assignors to Van Norman Machine Tool Company, Springfield, Mass. Grinding machine. 1,646,801; Oct. 25.

Van Norman Machine Tool Company. (See Van Norman, F. D., and Fleming, assignors, Van Nortwick, John, Batavia, Ili., assignor to Appleton Manufacturing Company. Corn-harvesting machine.

Van Nostrand, Arleigh N., Flushing, assignor to Telautograph Corporation, New York, N. Y. Telautograph Van Nostrand, Arleigh N., Flushing, N. 4, assignor to Telautograph Corporation, Richmond, Va. Telautograph Corporation, Richmond, Va. Telautograph Corporation, New York, N. Y. Paperwinding mechanism. 1,625,343; Apr. 19.

Van Nostrand, Arleigh N., Flushing, assignor to Telautograph Corporation, New York, N. Y. Paperwinding mechanism. 1,625,343; Apr. 19.

Van Nostrand, Arleigh N., Flushing, assignor to Telautograph Corporation, New York, N. Y. Field-magnet mechanism for telautograph receivers. 1,640,384; Aug. 30.

Aug. 80.

an Nuys, Claude C., Cranford, N. J., assignor to A;
Reduction Company, Incorporated, New York, N. Y.
Apparatus for separating the constituents of gaseous
mixtures. 1,619,168; Mar. 1,
an Nuys, Harry V., Chicago, Ill. Exhibitor. 1,638,464;
Aug. 9.

Yan Nuys, Harry V., Chicago, III. Exhibitor. 1,638,464; Aug. 9.
Van Orman, Wart T., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Leakproof-tank cover. 1,620,415; Mar. 8.
Yan Chien, C. C., Chien, C.

Van Roo, Elizabeth F., executrix. (See Bethune, J., and Van Roo.)

Van Root, G. (See Bethune, J., and Van Roo.)

Van Sont, Kobert H., Chicago, Ill., assignor, by menne assignments, to Gold Dust Corporation, New York, N. Y. Applicator cap. 1,621,567; Mar. 22.

Van Sant, Robert H., Chicago, Ill., assignor, by mesne assignments, to Gold Dust Corporation, New York, N. Y. Glass-cleaning applicator. 1,625,174; Apr. 19.

Van Schack, Robert H., Jr., Evanston, L. Connecting device for rock crushers. 1,646,672; Oct. 18.

Van Schaack, Robert H., Jr., Evanston, Ill. Ester of buttyl alcohol. 1,613,366; Jan. 4.

Van Schaack, Robert H., Jr., Evanston, Ill. Esters of normal-samyl alcohol. 1,646,128; Oct. 18.

Van Schaack, Robert H., Jr., Evanston, Ill. Esters of normal-samyl alcohol. 1,646,128; Oct. 18.

Van Schaack, Robert H., Jr., Evanston, Ill. Exters of normal-samyl alcohol. 1,646,128; Oct. 18.

Van Schaack, Robert H., Jr., Evanston, Ill. Exters of normal-samyl alcohol. 1,646,282; Oct. 18.

Van Scoyoc, Guy, Salt Lake City, Utah, H. L. Wehrbein and H. A. Shonle; said Shonle assignor to Elil Lilly and Company, Indianapolis, Ind. Calcium-sugar preparation. 1,642,200; Nov. 18.

Van Sickle, Frank B. (See Brown, C. A., and Van Sickle, Van Sickle, Frank B. (See Brown, C. A., and Van Sickle, Frank B. (See Brown, C. A., and Van Sickle, Van Siskle, Nar, Y. Hollis, assignor to Euras Deatal Capture, Capture,

Van Tassel, John R., assignor, by mesne assignments, to The Standard Optical Company Geneva, N. Y. Leas-frame measuring and expanding device, 1,615.601; Van Tassel, William, Redwood, N. Y. Horseshoe. 1,622.748; Mar. 29.
Van Tott, Ernest, Chicago, Ill. Fan and fan blower. 1,614.601; Jan. 11.
Vantine, A., & Co. (See Poses, Jack I., assignor.)
Van Tott, Ernest, Chicago, Ill. Fan and fan blower. 1,614.601; Jan. 11.
Vantine, A., & Co. (See Poses, Jack I., assignor.)
Van Tott, Ernest, Chicago, Ill. Air-cooled engine. 1,634.61; Jan. 11.
Van Valkenberg, Eber H., McKeesport, Pa., assignor of one-half to O. Silverstein, Spokane, Wash. Engine mounting for aeroplanes. 1,641.711; Sept. 6.
Van Valkenberg, Eber H., McKeesport, Pa., assignor of one-half to O. Silverstein, Spokane, Wash. Rear alight-tube closure, 1,621.294; Mar. 15.
Van Valkenburg, Earl C., Holyoke, Mass. Collapsible-tube closure, 1,621.294; Mar. 15.
Van Valkenburg, Hermon L., assignor to Industrial Controller Company, Miwaukee. Wis. Sectional cabinet for electrical apparatus. 1,620.047; Mar. 8.
Van Valkenburgh, Richard M. (See Redies, E. F., and Van Valkenburgh, Richard M., assignor to Irving-Pitt Manufacturing Company, Kansas City, Mo. Loose-leaf binder. 1,641.711; Sept. 6.
Van Valkenburgh, Richard M., assignor to Irving-Pitt Manufacturing Company, Kansas City, Mo. Loose-leaf binder, 1,646.69; June 14.
Van Valkenburgh, Richard M., assignor to Irving-Pitt Manufacturing Company, Kansas City, Mo. Loose-leaf binder, 1,646.69; Oct. 25.
Van Valkenburgh, Richard M., assignor to Irving-Pitt Manufacturing Company, Kansas City, Mo. Loose-leaf binder, 1,646.69; Oct. 25.
Van Valkenburgh, Richard M., assignor to Trying-Pitt Manufacturing Company, Kansas City, Mo. Loose-leaf binder, 1,646.69; Oct. 25.
Van Valkenburgh, Richard M., assignor to Trying-Pitt Manufacturing Company, Kansas City, Mo. Loose-leaf binder, 1,646.69; Oct. 25.
Van Valkenburgh, Richard M., assignor to Trying-Pitt Manufacturing Company, Kansas City, Mo. Loose-leaf binder, 1,646.69; Oct. 26.
Van Valkenburg

van Veen, Anton, assignor to The Fuller Brush Company, Hartford, Conn. Winding machine. 1,638,074; Aug. 9.

Van Veen, Anton, New Britain, assignor to The Fuller Brush Company, Hartford, Conn. Wire-bending machine. 1,630,248; Nov. 22.

Van Veen, Anton, New Britain, assignor to The Fuller Brush Company, Hartford. Conn. Heat-branding machine. 1,630,248; May 31.

Van Voorhis, Cletus C., East Orange, N. J., assignor to Westinghouse Lamp Company, Electrical device matter into lamps and the like. 1,623,323; Apr. 5.

Van Voorhis, Cletus C., Princeton, N. J., assignor to Westinghouse Lamp Company, Introducing volatile matter into lamps and the like. 1,623,323; Apr. 5.

Van Voorhis, Cletus C., Princeton, N. J., assignor to Westinghouse Lamp Company, Gaseous-discharge lamp. 1,647,591; Nov. 1.

Van Voorhis, Cletus C., Wilkinsburg, Pa., assignor to Westinghouse Lamp Company. Ground detector. Van Vulpen, John. (See Parks, P. B., and Van Vulpen.) Van Wasgenen, Donald S., Brocklyn, N. Y., assignor, by mesne assignments, of one-half to B. F. Watkins, Philadelphia, Pa. Grate structure. 1,617,186; Feb. 8.

Van Way, Fred Covina, Callf. utomatic rallway-cross-van Westpenbergh. Emile. (See Glover, W. H., and Van Way, Servenbergh.)

Van Willems B., Long Beach, Callf. Building construction. 1,637,430; Aug. 2, Ohio. Diagonal-bottom-section Ruckdown, Westbury, N. Y. Filling tree cavities and the filling itself. 1,624,820; Apr. 12.

Van Zandt, Hubert, Hinsdale, and B. Eyman, Winnetka, Ill. Washing device. 1,686,022; July 19. Vapor Car Heating Company. (See Clegg, William H., assigno.)

assignor.)
Vapor Car Heating Company. (See Frumveller, Joseph,

assignor.)
Vapor Car Heating Company. (See Gillick, Lawrence H., assignor.)
Vapor Car Heating Company. (See Gold, E. H., and

Russell, assignors.)
Vapor Car Heating Company. (See Parks, Paul B., as-

Signor.)
Vapor Car Heating Company, Inc. (See Parks, P. B., and Van Vulpen, assignors.)
Vapor Car Heating Company. (See Russell, Edward A.,

vaport Car theating Company. (See Russell, Edward A., and Parks, assignors.)

Parks, assignors.)

Vaporator Mig. Co. (See Meikle, John, assignor.)

Varaud, André, Geneva, Switzerland. Clockwork for mechanical fuses for artillery projectiles. Re16,708;

Varaud, André, Geneva, Switzerland. Clockwork for mechanical fuses for artillery projectiles. Rel6,703; Aug. 16.

Varaud, andré, Geneva. Switzerland. Apparatus for timpuration of the projectiles. 1,615,602; Jan. 25.

Varaud, André, Geneva, Switzerland. Mechanical fuse for artillery projectiles. 1,641,939; Sept. 6.

Varaud, André, Geneva, assignor to Tavannes Watch Co. S. A., Tavannes, Bern, Switzerland. Mechanical fuse for artillery projectiles. 1,642,520; Sept. 13.

Varaud, André, La Capite sur Vesenas, near Geneva, astrono of Berne, Switzerland. Clockwork-operated mechanical fuse for shells and the like projectiles. 1,646,165; Aug. 23.

Varble, Albert B., assignor to A. L. Zent, Dayton, Ohio. Vending machine. 1,653,678; Dec. 27.

Varder, Holger, New York, N. Y. Car bumper. 1,651,424; Dec. 6, 165,567; Dec. 27.

Varga, Alexander, Dunglen, Ohio. Musical dancing toy. 1,651,424; Dec. 6, 1617,729; Feb. 15.

Varga, Alexander, Dunglen, Ohio. Nonskidding device for automobiles. 1,617,729; Feb. 15.

Vargo, Mike, Yukon, Pa. Gasoline strainer. 1654,438; Dec. 27.

Variable Speed Gear Limited, The, et al. (See Ingoldby, Variable Speed

Dec. 21.

Variable Speed Gear Limited, The, et al. (See Ingoldby, Maurice K., assignor.)

Maurice K., assignor.)

Maurice K., assignor., by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1.644,211, Oct. 4.

Variety Fire Door Company. (See Gervais, Wainwright B., assignor.)

Variety Machinery Company. (See Greenfield, Hugh G.,

assignor.) arley Duplex Magnet Company. (See Scott, Archibald Varley

Varley Duplex Magnet Company. (See Scott, Archinaid D., assignor: Magnet Company. (See Varley, Richard. assignor: Magnet Company. J., assignor to Varley Ruchard. Englewood, N. J., assignor to Varley Duplex Magnet Company. Magneto. 1,630,645; May 31.

May 31.

Analogy Thomas W., New York, N. Y., assignor to The Safety Car Heating & Lighting Company. Switch construction. 1,618,495; Feb. 22.

Varnado. Samuel W., Baton Rouge, La. Spreader. 1,639,203; Aug. 16.

Varnes, Samuel K., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Recovering giyeerin from fermented molasses mash. 1,626,986; May 3.

Varney, Theodore, Sewickley, assignor to Aluminum Company of America, Pittsburgh, Fa. Method of and apparatus for protecting aerial cables. 1,639,820; Jun. 24.

Des. 74,127; Dec. 20.

Vartabedian, Kalusd N., Chicago, Ill. Dispensing devige. 1,618,118; Feb. 15.

Raslamp Manufacturing Corporation. (See Cary, Melbert B., assignor.)

Vaughan, Conrad, assignor to The Permoid Company, Cleveland, Ohio. Mold. 1,645,732; Oct. 18. Vaughan, James B., Lacy Springs, and J. Terreil, Taylors-ville, Ala. Attachment for cultivators. 1,627,298; ille, 3

May 3.

May 3.

May 3.

May 4.

May 5.

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May 6.

burgh, Pa. Cohlectures.

Mar. 1. Thomas M., Salem, Ohio. Shears. 1,639,677;

Aug. 22. Victor G. East Pittsburgh, Pa., and C. C.

Harpster, Mansfield, Ohio, assignors to Westinghouse Electric and Manufacturing Company. Electric percolator. 1,647,323; Nov. 1.

Yaughan, Victor G., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermostatic material. 1,652,645; Dec. 13.

Vauchan, 1838,897; Aug. 18.

Yaughan, William. (See Kriegsheim, H., and Yaughan, Vaughan, William. (See Kriegsheim, H., and Yaughan, Vaughan, Pred B., Maywood, and I. Thomas. Whittier, Calif. Well-production apparatus. 1,626,057; Apr. 26.

Vaughan, Fred B., Maywood, and I. Thomas. Whittier, Calif. Well-production apparatus. 1,626,057; Apr. 26.

Vaughan, Janes B., Lagsinghally-extensions Company. Newton Company. 1,630,231; May. 24.

Vaughn, Janes R., et al. (See Bilbrey, George L., assignor.)

Vaughn, James R., et al. (See Bilbrey, George L., assignor.)
Vaughn, John H., assignor of one-half to C. L. Martin,
Winston-Salem, N. C. Trimmings conveyer for sewing
machines. 1,613,419; Jan. 4.
Vaughn, Joshua E., Los Angeles, Calif. Pivoted-closure
operating means and circuit closer. 1,639,581; Aug. 16.
Vautier, Jules, Noisy-le-Grand, France. Device for protecting liquid containers from bursting: 1,648,467;
Nov. 8.
Nov. 8.

Nov. 8.

Vawter, Charles E., Philadelphia, Pa., assignor to Weston Electrical Instrument Corporation, Newark, N. J. Indicating ohnmeter. 1,633,912; June 28.

Veaco, James F., Oakland, Callf. Continuous-tone plano action. 1,653,221; June 21.

Veaco, James F., Oakland, Callf. Continuous-tone plano action. 1,653,221; June 21.

Veaco, James F., Oakland, Callf. Continuous-tone plano action. 1,653,221; June 28.

Eaton Axie & Spring Company, Cleveland, Ohio. Bumper. 1,651,005; Nov. 29.

Veale, George W., Cleveland Heights, assignor to The Eaton Axie & Spring Company, Cleveland, Ohio. Bumper. 1,651,006; Nov. 29.

Veale, George W., Cleveland Heights, assignor. On the Call of the

Vec Products Company, (See Shusson, Stephen signor.)
Vecchio, Luigi, assignor to Electrical Inventions & Development Company, Schenectady, N. Y. Fuse plug. 1,618.771; Feb. 8.
Veco Mrg. Company, The. (See Volk, Joseph A., Jr., Vedder, Wilhelm, Essen-on-the-Ruhr, Germany. Burner for gaseous and powderous solid fuel. 1,647,675; Nov. 1.
Vedetta, Anthony, Chicago, Ill. Clasp for barbers' hair cloths. 1,617,089; Feb. 8.

Veeder, Curtis H., assignor to The Veeder Manufacturing Company, Hartford, Conn. Counting machine.

Company, Hartford, Conn. Counting machine. 1,617,730; Feb. 15.
Veeder, Curis H., Hartford, Conn. Shutter-operating device. 1,845,673; Oct. 18.
Veeder Manufacturing Company, The. (See Veeder, Curveeder Manufacturing Company, The.)

Veeder Manufacturing Company, America H., assignor.)
Vegega, Silverlo, Buenos Aires, Argentina, Attachment for motor cars. 1,653,973; Dec. 27.
Vegley, Albert and Silverlo, Bondon Combination discovery and the like. 1,635,911; July 12.
Veigel, Louis A., ir., Newark, N. J. Chain link. 1,620,048; Mar. 8.
Vellion, Raymond A. (See Roubaud, E. C. C., and Vellion).

Veillon, R Veillon.) Veit, Fred.

Veillon.)
Veit, Fred. (See Mayer, P., and Veit.)
Veitch, Alexander, McKeesport, Pa., assignor to Westinghouse Electric & Mannfacturing Company. Transformer-coil-spacing device. 1.624.896; Apr. 12.
Veide, Ernest A., Cedar Rapids, Iowa. Bed davenport.
1.625.437; Apr. 19.
Velepee, Rudolph J., assignor to Haines Mannfacturing
Corporation, Rochester, N. Y. Screw driver. 1.641.307;
Sept. 6.

Sept. 6. Velissaropulos, John, executor. (See Zalocostas, Demetrius G.)

trius G.) Vell, John H., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York. N. Y. Duplex telegraph system. 1,637,171; July 26.

Vello, Nicola, Akron, Ohio. Combination tool. 1,625,064;

veno, Nicola, Astron, Onio. Combination tool. 1,023,004; Apr. 13. Apr. 13. L633,015; Aug. 15. Velten, Hugo, Halberstadt, Germany. Method and appara-tus for separating matter of different specific gravities. 1,646,566; Oct. 25. Venable, William M., Pittsburgh, Pa., assignor to Blaw-Knox, Company. Batching apparatus. 1,624,122;

Apr. 12.

Venable, William M., Pittsburgh, Pa., assignor to Blaw-Knox Company. Batching apparatus. 1,624,376; enable, Knox

APJ. 12:
Venable, William M., Pittsburgh, Pa., assignor to BlawKnox Company, Bin. 1.632,103; June 14;
Venable, William M., Pittsburgh, Pa., assignor to BlawKnox Company, Batching apparatus. 1,550,249;

Knox Company. Batching apparatus. 1,650,249; Nov. 22.
Venable, William M., Pittsburgh, Pa., assignor to Blaw-Knox Company. Road rail. 1,651,787; Dec. 6.
Vencill, Albert L., Pittsburgh, assignor to The Union Switch & Signal Company, Swissyate, Pa. Railway signaling apparatus. 1,620,704; Mar. 15.
Vend Ads Corp. (See Chandler, Daniel L., assignor.)
Vendrell, Jacinto, Barcelona, Spain. Loom. 1,628,569; Apr. 26.

Venegas, Jose P., Laredo, Tex. Key lock. 1,626,987; May 3. Venn-Severin Machine Co. (See Severin, Frank W., as-

Apr. 20. Vennegas Jose P., Laredo, Tex. Key lock. 1,626,987: Vennegas Jose P., Laredo, Tex. Key lock. 1,626,987: Vennum. George C., Westfield, N. J. Water-tube boiler. 1,615,141; Feb. 15. Westfield, N. J. assignor to Edge Moritor of Company, Edge Moor, Del. Water heater. 1,615,141; Feb. 15. Westfield. N. J. assignor to Edge Moor Incon Company, Edge Moor, Del. Water heater. 1,652,188; Dec. 13. Vennum. George C., Wilmington, assignor to Edge Moor Incon Company, Edge Moor, Del. Soci-blowing system. 1,652,843; Dec. 13. Vennum. George C., Wilmington, assignor to Edge Moor Del. Soci-blowing system. 1,652,844; Dec. 13. Venum. Jules H., New York, N. Y. Goblet or similar article. Des. 72,247; Mar. 16. Vennum. Jules H., New York, N. Y. Goblet or similar article. Des. 72,248; June 21. Ventolino, Giovanni, Brocklya, N. Y. Construction of reenforced-concrete foors, etc. 1,617,929; Feb. 15. Venturini, Guillermo, Santiago, Chile. Electric lamp. 1,626,315; Apr. 26. Venus Brassiere Co. (See Lipman, Adolph, assignor.) Venus Lighting Fixture Corporation. (See Rabinowitz, Gedella, assignor). Philadelphia, Pa. Building construction. 1,612,896; Jan. 4. Venzie, Frederick M., Philadelphia, Pa. Building construction construction formed thereof. 1,632,233; Venzie, Herbert F., Boyertown, Pa. Radio tuning device. 1,637,923; Aug. 2. Verans, Bugene, Paris, France, assignor to Golo Slipper Co., New York, N. Y. Feather-trimmed shoe. Des. 73,809; Nov. 8. Verba, James, assignor to Lennox Furnace Company, Marshalltown, Jova. Furnace damper device. 1,633,923; Aug. 2. Verans, Eugene, Paris, France, Co., New York, N. Y. Feather-trimmed shoe. Des. 73,809; Nov. 8. Verba, James, assignor to Lennox Furnace Company, Marshalltown, Jova. Furnace damper device. 1,634,911; Apr. 12. Verlan, Eugene, Paris, France, Co., New York, N. Y. Feather-trimmed shoe. Des. 73,809; Nov. 8. Verba, James, assignor to Lennox Furnace Company, Marshalltown, Jova. Furnace damper device. 1,635,439; Dec. 27. Verein fur chemische Industrie Aktiengesellschaft. (See Purlacher, Herma

ereinigte Celluloidwarenfabriken Gesellschaft mit beschräukter Haftung. (See Durlacher, Hermann, as-

Vereinigte Stahlwerke Aktiengesellschaft. Rudolf, assignor.) (See Schenck.

Vereinigté Stahlwerke Aktlengesellschaft. (See Schenck, Rudolf, assignor,)
Veress, Kalman, New York, N. Y. Filter-plate-removing tool for pipes. 1,651,790; Dec. 6.
Vergara, Gaspar B., New York, assignor to Remington Typewriter Company, Illon, N. Y. Automatic type lifting and lowering device for portable typewriters. 1,650,750; Nov. 29.
Vergara, Juan. Buenos Aires, Argentina. Flushing apparatus. 1,652,674; Oct. 11.
Verhey, Hubert C., et al. (See Bowes, Thomas D., assignor.)

Serior Local C., et al. (See Bowes, Thomas D., as-verity, William J., and P. A. Van Skele, Brantford, Ontarlo, assignors to Massey-Harris Company, Limited, Toronto, Canada. Power lift for plows. 1,462,521; Sept. 13. Veritys Limited. (See Lister, J. F., and Smallwood, as-

signors.)
Vermont Spool & Bobbin Company. (See Wilson, William H., assignor.)

Vermot, Henry E., Sag Harbor, assignor to Joseph Fahys & Company, New York, N. Y. Watchcase. 1,644,802; Oct. 11.

Vermot, Henry E., Sag Harbor, assignor to Joseph Pahys & Company, New York, N. Y. Watchcase. 1,644,802; Oct. 11.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Method of and apparatus for secret electrical transmission of ple-Vernam, Gilbert S., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Printing-telegraph exchange system. 1,619,897; Mar. 28.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Printing-telegraph system. 1,649,897; Mar. 28.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Printing-telegraph system. 1,648,922; Nov. 15.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Printing-telegraph-exchange system. 1,648,974; Nov. 16.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Printing-telegraph-exchange system. 1,648,975; Nov. 15.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Printing-telegraph-exchange system. 1,648,975; Nov. 15.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Printing-telegraph exchange system. 1,648,976; Nov. 15.

Vernam, Gilbert S., River Edge, N. J., and D. B. Perry, Yonkers, N. Y., assignors to American Telephone and Telegraph Company. Printing-telegraph system. 1,642,048; Sept. 13.

Vernam, Joan B., Villeurbanne, France. Drying drum. Vernet, Sergius, Brooklyn, N. Y. Making radiator shutters. 1,621,696; Mar. 22.

Vernam, Gilbert S., River Edge, N. J., and D. B. Perry, Yonkers, N. Y., assignors to American Telephone and Telegraph Company. Printing-telegraph system. 1,642,648; Sept. 13.

Vernam, Joan B., Villeurbanne, France. Drying drum. Vernet, Sergius, Brooklyn, N. Y. Making radiator shutters. 1,621,696; Mar. 22.

Vernam, Gilbert S., River Edge, N. J., and D. B. Perry, Yonkers, N. Y., assignors to American Telephone and Telegraph system. 1

signor.) erona Tool Works, The. (See Hart, William F., as-

Verona Tool Works, The Signor.

Verry, Irving H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop motion. 1,652,591;

Dec. 16.

Dec. 1

Vesta Battery Corporation. (See Morrison, William, assignor.

Vestal, Albert H. (See Malone, Adolph W., assignor.) Vestar, Alfred, Sons, Inc. (See Kantack, Walter W., assignor.) Shocking attachment

assignor.)
Vetter, George W., Commerce, Mo. Shocking attachment
for grain binders, 1,637,668; Aug. 2.
Vetter, Ignatius J., New York, N. Y., assignor to Bigelow
Hartford Carpet Company, Carpet. Des. 72,198; Mar. 8

Vetter. Ignatius J., New York, N. Y. Phonograph. 1,623,451; Apr. 5. Vetter, Otto, Stuttgart, Germany. Device for lubricating pneumatic tools. 1,650,856; Nov. 29. Vetterlein, Henry M., assignor of one-half to H. P. Burke, Philadelphia, Pa. Shutter or door. 1,636,200; July 19.

Vezsani, Alberto, Genoa, Italy. Cartridge for fire ex-tingulshers. 1,623,289; Apr. 5. Vial, Frederick K., La Grange, and G. S. Evans. Oak Park, assignors to Griffin Wheel Company, Chicago, Ill. Process of and apparatus for operating cupolas.

Park, assignors to Griffin Wheel Company, Chicago, Ill. Process of and apparatus for operating cupolas. 1,827,536; May 3. Viale, Spirito M. (See Smith, F. R., and Viale, Viale, George K., assignor to Chain Belt Company, Milwaukee, Wis. Clutch and brake control mechanism. 1,639,543; Aug. 16, www. London, Conn. Conduit-bushing Wiench, 41,632,237; June 21. Wrench, 41,632,237; June 21. Canada. Bolster, 1,615,857; Feb. 1. Vicars, Edward L. (See Vicars, Thomas and E. L.)

Vicars, Edward L., Earlestown, England. Biscuit-making and the like machine. 1,631,441; June 7, Vicars, Thomas and E. L., Earlestown, England. Bis-cuit or like embossing and cutting machine. 1,627,679; May 10.

Vicars, Thomas and E. L., Earlestown, England. Hiscuit or like embossing and cutting machine. 1,627,679; May 10.

Vick, Albert F. W., Cynwyd Pa. Composition for filling cavities in trees. 1,632,222; Dec. 13.

Vick and the composition of the

Vickers-Petters Limited. (See Petter, E. W., and Hut-

ton, assignors

ton, assignors.) Vickery, Frank E., Davenport, Iowa, assignor, by mesne assignments, to Gold Dust Corporation, New York, N. Y. Liquid-cleaner container. 1,615,603; Jan. 25. Victor, Alexander F., Davenport. Iowa. Intermittent film feed. 1,625,065; Apr. 19. Victor Casket Hardware Co. (See Pahlow, Gustav C., assignor.)

assignor.) ctor Chemical Works. (See Boynton, Arthur J., as-

Victor Chemical Works. (See Boyanou, Arthur Wagga-signor.)
Victor Chemical Works. (See Brassert, H. A., Wagga-man, and Easterwood, assignors.)
Victor Chemical Works. (See Waggaman, W. H., and Victor Engineering Co. (See Wortuba, Charles.)
Victor Manufacturing & Gasket Co. (See Oven, Frank J.,

assignor.) Victor Shoe Machinery Company. (See Hansen, Sinius

Victor Talking Machine Company. (See Hansen, Sinius M., assignor.)
Victor Talking Machine Company. (See Buckle, Horace L. T., assignor.)
Victor Talking Machine Company. (See La Rue, Wilton Talking Machine Company. (See O'Malley, Thomas, assignor.)
Victor Talking Machine Company. (See Squibb, Lloyd Y., assignor.)
Victor Talking Machine Company. (See Squibb, Lloyd Y., assignor.)
Victor Talking Machine Company. (See Stevenson, William B., assignor.)
Victor Talking Machine Company.
Victor Talking Machine Company.
Victor Talking Machine Company.
Victor X-Ray Corporation. (See Wismer, S. H., and Tholigaman, assignors.)

signor.)

Vietusahn, Morris, Brooklyn, assignor to Victorson, Manufacturing Corporation, New York, N. Y. Closure check and adjuster, 1,635,566; July 12. Victorson Manufacturing Corporation. (See Victorsohn, Morris, assignor.) Victory Spatkler & Specialty Co. (See Kohn, Koby, as-

Victory Signor.) signor.)
Victory. William J. (See Brown, R. S., and Victory.)
Vida, Frank J., Staten Island, N. Y. Bed-spring attachment. 1,630.813; May 31.
Vidina, Joseph, Chicago, Ill. Window. 1,629,186;
May 17.
Vidinghoff, Charles A., assignor of one-half to A. R.
Patierson, Rochester, N. Y. Work clamp. 1,637,134;
July 26.

Vidor, or, Armin, Budapest, Hungary. Machine for forming unded corners upon rectangular material. 1,646,986;

rounded corners upon rectangular materials, 2,000,000, Oct. 25.
Vieau, Harold F., Leverpool, Roy C. Higby, Big Moose, and E. J. O'Neill. Syricuse, N. Y. Rinsing and drying apparatus Reif,827; Dec. 20.
Viebrock. Carl H., Douglas, Wash. Jar wrench. 1.647,802; Nov. 1.
Viebrock. Carl H., Douglas, Wash. Jar wrench. 1.1643,804; Sept. 27.
Viel, Louis L., Billancourt, France. Carburetor. 1.1643,804; Sept. 27.
Vierkötre, Panl. Munich, Germany. Flash-light lamp. 1.625,108; Apr. 19.

Vierling, Frank J., and W. E. Cook, Minneapolis, assignors to Louis F. Dow Company, St. Paul, Minn. Calendar, 1,617,731; Feb. 15. Vierling, Margaretha A. (See Iseman, Minnie, assignor, Vierengel, M., Machine Co. Inc. (See Vierengel, Matthew, assignor; to M. Vierengel Mathew, assignor to M. Vierengel Mathew, assignor, N. Y. Bavelope machine, 1,649,760; Nov. 15.

Viscon, Paul A. (See Newsham, A. S., Viersen, and Misch.) Viersen, Tiete, Ter Apel, Netherlands. Making decorative material from peat. 1,825,066; Apr. 19. Viet, Paul, Billancourt, France. Automatic starting de-vice for internal-combustion engines. 1,639,582; Jug. 16.

Viets, Floyd H., Alhambra, assignor to International Precipitation Company, Los Angeles, Calif. Fluid-pressure regulator. 1,622,689; Mar. 29.
Viewegh, John H., Indianapolis, Ind. Plant stand, 1,639,318; Aug. 16.
Viezzi, Luigi, North Bergen, assignor of one-half to J. Stiiz, West New York, N. J. Spike holder and driver. Stiiz, West New York, N. J. Spike holder and driver. Vigginal Peter, Shinnston, W. Va. Vase. 1,617,280; Feb. 8.
Viggino, Henri, Paris, France. Dry cell. 1,654,227; Dec. 27.

Feb. 5.

Yignon, Henri, Paris, France. Dry cen.

Dec. 27 Charles, Balesmes, assignor to Etablissements of Hereux Charles, Balesmes, assignor to Etablissements for Industrial culture of ferments, yeasts, microbes, and the like.

1,623,898; Apr. 5.

Viking Products Corporation. (See Weidner, Victor, assignor.)

Olding Pump Company. (See Petersen, Peter C., assignor.)

Viking P

Viking Yump Company. (See Petersen, Peter C., assignor.)
Vila, Alfonso, Gunnabacoa, Cuba. Clamp for scaffolds. 1,636,930; July 26.
Vila, Aquilino R., assignor to Compania Cubana Economizadora De Combustine S. Compania Cubana Economizadora De Combustine S. A. Habana, Cuba. Heatman Caba. Compania Cubana Economizadora Caba. Compania Cubana Cubana Caba. Vila, Frank G. (See Gates, Elisha A., assignor.)
Vilas, Katherine G., administratrix. (See Vilas, Percival M.)
Vilas, administratrix. Mattress and sleeping bag. 1,648,373; Nov. 8.
Vilas, administratrix. Mattress and sleeping bag. 1,648,373; Nov. 8.
Vilas, Administratrix. Mattress and sleeping bag. 1,648,373; Nov. 8.
Vilas, Administratrix. Mattress and sleeping bag. 1,648,573; Nov. 8.
Vilas, Caba. Caba

Company, Inc. Lighting-fixture ring. Des. 71,888; Jan. 18.
Villaret, Gustave E. Leonia, N. J., assignor to Globe Lighting Fixture Mrg. Co., Brooklyn, N. Y. Chandeller Villaret, Gustave E., Leonia, N. J., assignor to Globe Lighting Fixture Mrg. Co., Brooklyn, N. Y. Chandeller or article of similar nature. Des. 72,121; Mar. I. Villaret, Gustave E., Leonia, N. J., assignor to Globe Lighting Fixture Mrg. Co., Brooklyn, N. Y. Chandeller Villaret, Gustave E., Leonia, N. J., assignor to Globe Lighting Fixture Mrg. Co., Brooklyn, N. Y. Chandeller Villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Backplate for bracket lighting fixtures or similar articles. Des. 72,534; Apr. 26.
Villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Backplate for lighting fixtures or similar articles. Des. 72,536; Apr. 26.
Villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Backplaten plate for lighting fixtures or similar articles. Des. 72,536; Apr. 26.
Villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Excutave Des. 72,536; Apr. 26.
Villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Chandeller. Des. 72,643; May 10.

man, New York, N. 1.

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Gustave E., Leonia, N. J., assignor to H. Hill

man, New York, N. Y. Chandelier. Des. 72,644

villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Chandelier. Des. 72,644; May 10.

villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Adapter for lighting fixtures Villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Adapter for lighting fixture of the villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Fixture body for lighting fixture or similar article. Des. 72,646; May 10.

villaret, Gustave E., Leonia, N. J., assignor to H. Hilfman, New York, N. Y. Canopy ring for lighting fixture Mrg. Co., Brooklyn, N. Y. Lighting fixture bracket or article of similar nature. Des. 72,742; May 24.

villaret, Gustave E., Leonia, N. J., assignor to Globe Lighting Fixture Mrg. Co., Brooklyn, N. Y. Chandelier or article of similar nature. Des. 72,742; May 24.

villaret, Gustave E., Leonia, N. J., assignor to Govill Monufacturing Company, Waterbury. Com. Bracket back for lighting fixtures. Des. 72,919; June 21.

villaret, Gustave E., Leonia, N. J., assignor to Scovill Manufacturing Company, Waterbury. Com. Bracket back for lighting fixtures. Des. 73,015; July 5.

villaret, Gustave E., Leonia, N. J., assignor to walsh Mrg. Co., Inc., New York, N. Y. Base for a Chandelier. Des. 73,016; July 5.

villaret, Gustave E., Leonia, N. J., assignor to Walsh Mrg. Co., Inc., New York, N. Y. Panel for a lighting fixture. Des. 73,115; July 24.

back for lighting fixtures. Des. 73,151; July 28.

villaret, Gustave E., Leonia, N. J., assignor to Walsh Mrg. Co., Inc., New York, N. Y. Bracket back for a wall lighting fixture. Des. 73,152; July 26.

villaret, Gustave E., Leonia, N. J., assignor to Scovill Manufacturing Company, Waterbury. Com. Bracket back for lighting fixture. Des. 73,152; July 28.

Villaret, Gustave E., Leonia, N. J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Bobèche for lighting fixtures. Des. 73.454; Sept. 13.
Villaret, Gustave E., Leonia, N. J., assignor to Scovill Land Control of Control

Dec. 6.
Vincent, Harry S., Ridgewood, N. J., assignor to Frank-lin Railway Supply Company. Driving box. 1,651,789;

Illa Rainwy supp.

Dec. 6,
10, Dec. 6,
Vincut, Sesse G., assignor to Packard Motor Car ComVincut, Detroit, Mich. Airplane 1,622,582; June 21,
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,647,846;

Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,647,845; Nov. 1.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,652,333; Dec. 13.
Vincent, Sidney C., et al. (See Kiefer, Kenneth H., as. Signor.)

Signor.). The sassignor to Manufacturas De Corcho, Orlock, Barcelona, Spain. Manufacturing cork disks and product of the same. 1,617,693; Feb. 15. Vincke, Enrique, assignor to Manufacturas de Corcho, S. A., Barcelona, Spain. Composite cork disk. 1,628,082; May 10.

S. A. Barcelona, Spain. Composite cork disk. 1,028,022; May 10.
Vincom for automatic firearms. 1,648,833; Nov. 8.
Vineberg, Joseph H., Montreal, Quebec, Canada. Strap fastening. 1,617,556; Fcb. 15.
Vinegrad, Cassril, Kingston-upon-Hull, England. Table for attachment to seats, desks, and other articles. 1,649,761; Nov. 15.
Vineyard, Arthur A., Wood River, Ill. Concentrating sludge acids. 1,636,724; July 26.
Vingheroets, Louis, Grand Rapids, Mich. Tool. 1,625,344; Apr. 10.
Vineyardov, Eugene, New York, N. Y. Window-lighting system. 1,632,254; June 14.
Vinson, William A., Baltimore, Md. Spinning top. 1,629,135; May 17.
Vinton, Lindley, et al. (See Dieterich, Ludwig M., assignor.)

Viscotivard W. Minneapolis, Minn. Storm window. 1631.77; June 7. Vlonnet, Madeleine, Paris, France. Bottle or similar container. Des. 72,687; May 17. Virck, Paul. (See Spengler, O., Virck, and Weldenhagen.). Viscose Company, The. (See McKenzie, Donald A., as-

Viscouse Company, The. (See McKenzie, Donald A., as-signor ompany, The. (See Niederhauser, F. C., and Sunderland, assignors.) Viscount, Joseph L., assignor to Snyder & Black, Incorpo-rated, New York, N. Y. Display device. 1,638,177; "Aug. 9.

Aug. 9.
Visi, Stephen. (See Mogyorós, S., and Visi.)
Visible Gasoline Filter Company. (See Fell, William, assignor.) sible Pump Company. (See Kershaw, Henry, as-

Signor.)
Visible Tire Gauge Co. (See Johnson, Frederick G., Visible Fire Gauge assignor.) Visking Corporation. (See Freund, Erwin O., assignor.) Visking Corporation. (See Henderson, William F., as-

Visometer Corporation, The. (See Pulverman, Philip E., assignor.)

assignor.)
Vissat, Anthony L., Jeannette Borough, Pa. Rallway
frog. 1.634.638; July 5.
Vissering, Harry, Kenilworth, Ill. Self-locking device
1.638.788; Aug. 9.
Vissering, Harry, Kenilworth, assignor to The Okadee
Company, Chargo, Ill. Locomotive front end support. 1.621/766; May 1.
Visualatone Company of America. (See Burton, Isaac
F., assignor.)

Vitamin Food Co. Vitapack Corpora Tood Co. (See Prince, Robert K., assignor.) Corporation. (See Rector, Thomas M., as-

Vitable Corporation, Signor.)
Vitable Carmine, Hollis, N. Y. Display device. 1,618,359; Feb. 22.
Vitable Richard, et al. (See Mitkewich, Wladimir W., as-

Virmite Company, The. (See Buebe, Daniel S., assignor.) Wirrolite Company, The. (See Carpenter, A. H., and Huntley, assignors, and J. A., Cedar Rapids, Iowa, Article of furniture. 1,642,633; Sept. 13. Vittengl, 90th A. (See Vittlengl, 45th A.)

Vivatex Processes, Inc. (See White, Clarence B., assignor,)

Vivatex Processes, Inc. (See White, Clarence B., assignor.)
Vivation Victor, New York, N. Y. Cosmetic container.
Vivation of Apr. 5.
Vivation of Apr. 5.
Vivinito, Lawrence, Chicago, Ill. Lamp base. Des.
71.889; Jan. 18.
Vivirito, Lawrence, Chicago, Ill. Spindle for lighting fixtures. Des. 71,890; Jan. 18.
Vivirito, Lawrence, Chicago, Ill. Lamp base. Des.
71.898; Jan. 18.
Vivirito, Lawrence, Chicago, Ill. Spindle for lighting fixtures. Des. 71,892; Jan. 18.
Vivirito, Lawrence, Chicago, Ill. Lamp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Lamp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Lamp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Lamp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Lamp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Lamp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Camp base. Des.
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Visito, Lawrence, Chicago, Ill. Camp base. Des.
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Visito, Lawrence, Chicago, Ill. Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Lawrence, Lawrence, Lawrence, Ill. Lawrence, Ill. Mining machine. 1,632,810; June 21.
Voccoplone, Company, Chicago, Ill. Cutter chain. 1,632,810; June 21.
Voccoplone, Camp base. Des.
71,893; Jan. 18.
Voccoplone, Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Chicago, Ill. Cutter chain. 1,632,810; June 21.
Voccoplone, Camp base. Des.
71,893; Jan. 18.
Visito, Lawrence, Lawrence, Ill. Lawrence, Lawre

Hamburg, Germany, Weighling apparatus, 1,615,248; Jan. 25.

Vozel & Halke. (See Vogel, Frederik C. C., assignor.)

Vogel, Hans E. R., Blankenese, near Hamburg, Germany.

Bringing about physical and chemical changes in dielectric description of the control of th

Feb. 8.

ren. 8.

Vogler, John J., Douglaston, assignor to Alfred H. Smith Co., New York, N. Y. Display stand. 1,618.027; Feb. 15.

Feb. 15. The Augsburg, Germany. Replacing broad or motion holding wires inside of incandescent electric vort. Benedict F. Louisville, Ky. Refrigerator. 1,614.507; Jan. 18.

Vogt. Benedict F., Louisville, Ky. Refrigerator. 1,628.063; May 10.

Vogt Brothers Mfg. Co. (See Petersen, Olaf W., assignor.)

Vogt Bros. & Squier Company. (See Vogt, Clarence, as-

signor.)
Vogt, Charles W. (See Marshall, G. F., and Vogt.)
Vogt, Clarence, Wenonah, N. J., assignor to Vogt Bros.
& Squier Company, Philadelphia, Pa. Latch.
1,619,789; Mar. 1.
Vogt, Frank A. E. Fleisch, and H. Goldsmith, assignors
to The P. Goldsmith Sons Company, Cincinnati, Ohio.
Valve. 1,630,040; May 24.

Vogt, Frank P., and E. C. Dorn, Chicago, Ill. Automobile lock. 1,625,109; Apr. 19.
Vogt, Hans. (See Massolle, J., Engl. and Vogt.)
Vogt, Hans. (See Massolle, J., Engl. and Vogt.)
Vogt, Hans. (See Massolle, J., Engl. and Engl.)
Vogt, Hans. (See Massolle, J., Engl. and J. Massolle, Grunewald, Germany, assignors to Tri-Ergon Limited, Zurich, Switzerland. Controlling amplitude of high-frequency oscillations. 1,628,377; May 10.
Vogt, Hans. Berlin-Wilmersdorf, J. Engl. and J. Massolle, Berlin-Grunewald, Germany, assignors to Tri-Ergon, A.-G., Zurich, Switzerland. Light-modulating device. 1,650,166; Nov. 22.
Vogt, Henry, Machine Co. (See Thurstensen, Soren, Vogt, Theodore B. H., Passale, N. J., assignor to General Electric Company. Locking attachment for incandescent lamps. 1,621,341; Mar. 15.
Vogtlandische-Maschinenfabrik (vorm. J. C. & H. Dietrich) A.-G. (See Wollrabe, Otto, assignor.)
Vogtländische Maschinenfabrik (vormals J. C. & H. Dietrich) Aktlengesellschaft. (See Bretschneider, Max, assignor.)

(See Frieland, Harry, as-

Vogtiliandische Maschinenfabrik (vormals J. C. & H. Dre
trich) Attiengesellschaft. (See Bretschneider, Maz
assignor.)

volles Incorporated. (See Aronson, Louis V., assignor.)

volces Incorporated. (See De Cesare, Matteo, assignor.)

volces Incorporated. (See Grubman, Anton L., assignor.)

volces Incorporated. (See Grubman, Anton L., assignor.)

volces Incorporated. (See Grubman, Anton L., assignor.)

volces Incorporated. (See Konoff, Alexander, assignor.)

volces Incorporated. (See Spalletta, Salvatore, assignor.) (See Aronson, Louis V., assignor.) (See De Cesare, Matteo, assignor.) (See Evans, Fred, assignor.) (See Grubman, Leo J., assignor.) (See Grubman, Leo J., assignor.) (See Konoff, Alexander, assignor.) (See Konoff, Alexander, assignor.) (See Nemcovsky, Lewis A., as-

(See Spalletta, Salvatore, assignor.) Oakland, Calif. Furring plate. Wire fastener.

Apr. 12. Voight, George F., Oakland, Calif., assignor to Economy Products Corporation. Lath spacer. 1,624,193; Apr.

12.
Volght, George F., Oakland, Calif., assignor to Economy
Products Corporation. Wall construction. 1,640,303;
Aug. 23.
Volght, George F., Oakland. Calif., assignor to Economy
Products Corporation. Plasteer's nails. 1,645,674;

Oct. 18. oight, Geor Products George F., Oakland, Calif., assignor to Economy ucts Corporation. Furring staple. 1,648,666;

Nov. 8. Voigt, Alexander E., Topeka, Kans. Marker-light plug. 1.651.489; Dec. 6. Voigt, Emil K. A. (See Konicke, Hildegard, M. G., Voigt, Emi

volgt, Frank, Milwaukee, Wis. Micrometer. 1,625,175; Volgt, Frank, Milwaukee, Wis. Micrometer. 1,625,175; Volgt, Frederick A. Chicago. III. Observation apparatus for vehicles. 1,644,902; Oct. 11. Volt, William J., Los Angeles. Calif. Valve construction for infiniable articles. 1,644,096; Oct. 4. Vokac, Johann, assignor to Eisengiesserei Carl Luber & Sohn, Vienna, Austria. Magazine and slow-burning stove. 1,648,51(T. Schramm, C., and Vokal.) Volare, Fred. Scotch Plains, N. J., assignor to The Aeollan Company. Pneumatic motor. 1,613,146; Volckening, Charles K. (See Volckening, Henry C. assignor, Charles K. (See Volckening, Henry C. assignor, Charles K. (See Volckening, Henry C. assignor, Charles K. (See Volckening, Henry C. assignor). Volckening, Charles K. (See Volckening, Henry G., as-

signor.)
Volckening, Charles K., Brooklyn, N. Y. Dust catcher for radiators. 1,614,580; Jan. 18.
Volckening, Henry G., assignor to C. K. Volckening, Brooklyn, N. Y. Patter. 1,649,089; Nov. 15.
Volcker, Mitton G., Huntington, Ind. Gasoline-dispensing tank. 1,642,634; Sept. 13.
Vold, Lars H., and K. R. Hammerstrom, Butler, Pa. Spacing mechanism for punching machines. 1,633,718; June 28.

June 28. artisek, Vrchlabl, Czechoslovakia. Warp-ten-stoning device for looms. 1,618,246; Feb. 22. Volk, Hattle F., New York, N. Y. Brassière. 1,637,840;

Aug. 2.
Volk, Joseph A., Jr., Norwalk, Conn., assignor to The
Veco Mfg. Company. Electrical fixture. 1,648,704;
Nov. 8.
Volk, Sidney, Benton Harbor, Mich. Skylight. 1,638,668;

Aug. 9.
Volkert, Charles, jr., New Brunswick, N. J.
support and protector. 1,642,279; Sept. 13.
Volkman, Frederick C., et al. (See Kiefer, Kenneth H.,

assignor

assignor.)

Volkmar, Bernhard, New York, N. Y. Timer for internalcombustion engines. 1,625,001; Apr. 19.

Voll, John T. Rochester, N. Y. Arch-supporting shoe.

Vollmecht, Frederick A., Detroit, Mich. Electric toaster.
1,626,894; May 3.

Vollmann, Carl W., Montreal, Quebec, Canada. Rotary
compressor. 1,626,7688; May 3.

Vollmann, Carl W., Montreal, Quebec, Canada. Valve
for gas compressors. 1,627,689; May 10.

Vollmann, Carl W., Montreal, Quebec, Canada. Gas compressor. 1,632,155; June 14.
Vollmann, Carl W., Montreal, Quebec, Canada. Compressor. 1,632,385; June 14.
Vollmer, Frederick, Cranford, N. J. Wire-drawing die. 1,624,027; Apr. 12.
Vollmer, William A. (See Busch, C. H., and Vollmer, Vollmer, William A. (See Busch, C. H., and Vollmer, Vollmer, William A. (See Busch, C. H., and Vollmer, Sept. 20.

Sept. 20.
Volsch, Anna K., et al. (See Paupa, Joseph, assignor.)
Volwiler, Ernest H., (See Vliet, E. B., and Volwiler, O'colwier, Ernest H., assignor to Abbott Laboratories, ChiCarlo III. Abutyl ethyl barbituric substance.
Volwiler, Einest H., Highland Park, assignor to Abbott
Laboratories, North Chicago, Ill. Barbituric-acid derivative, 1,636,201; July 19.
Volz, George A., Cincinnati, Ohio. Reversible heel.
1,636,491; July 19.
Volz, Joseph, Elliott, N. Dak. Grain cleaner. 1,617,187;
Feb. S. George assignor to Gesellschaft für Prablices

Feb. 8.

Feb. 8.

Von Arco, Georg, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Speed governor. 1,645,556; Oct. 18.

Von Arco, Graf G., assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches Ufer 12,713, Berlin, Germany. Receiving arrangement for wireless telegraphy. 1,649,499; Nov. 15.

Von Holle, Manuelle, Manuelle, Manuelle, Sept. 27.

Von Auw, Alwin, assignor to Boorum & Pease Company, Brooklyn, N. Y. Visible card index. 1,649,763; Nov. 15.

Brooklyn, N. Y. Visible card index. 1,649,763; Nov. 15.

Von Boecklin, August E. L., and L. M. Larson, assignors to Washington Manufacturing Co., Tacoma, Wash. Vonder or stricker device. 1,638,400; July 19.

Von Bronk, Device for manufacturing Co., Tacoma, Wash. Vonder or stricker device. 1,638,6400; July 19.

Von Bronk, Otto, assignor to Gesellschaft für Drahlose Telegraphie m. b. H., Berlin, Germany. Arrangement for generating electric oscillations. 1,645,567; Oct. 18.

Von Canon, assignor to Gesellschaft für Drahlose Telegraphie m. b. H., Berlin, Germany. Arrangement for generating electric oscillations. 1,645,567; Oct. 18.

Von Canon, Jassen G. Gesellschaft für Drahlose Telegraphie m. b. H., Berlin, Germany. Arrangement way circuit arrangement for wireless telephony. 1,650,250; Nov. 22.

Von Canon, James B., West End, N. C. Fruit sizer. 1,643,190; Sept. 20.

Von Canon, James B., West End, N. C. Fruit sizer. 1,643,190; Sept. 20.

Von Debrowski, Lother Chicago, Ill, assignor to Ameri-Von der Heide, Mark, Kiel, Germany. Valve-control device. 1,645,311; Oct. 11.

Von der Heide, Mark, Kiel, Germany. Breathing apparatus. 146,312; Oct. 21.

Von der Marwitz, Hugo, Crefeld, Germany. Breathing apparatus. 146,312; Oct. 21.

Von Demming, Hugo, Crefeld, Germany. Device for filing letters and the like. 1,635,206; Von Demming, Hugo, Crefeld, Germany. Changespeed gear for automobiles and the like. 1,635,206; Von Dem. 200,000; utensil and mold. 1627,757; Way 10.

speed gear for automobiles and the like. 1,635,206; July 12.

Von Elm, William, Brooklyn, N. Y. Combined baking pan, cooking utensil, and mold. 1,627,757; May 10.

Vonfelt, Paul, Hermosa Beach Calif. Automobile signal casing. Des. 72,74.2; May 24.

Von General Calif. State of the State of the Calif. Automobile signal casing. Des. 72,74.2; May 24.

Von Frommer. Rudolf. Budapest, Hungary. Cartridge magazine. 1,645,931; Oct. 11.

Von Gizinsky, Casimir, Schenectady, N. Y. Automobile signal. 1,631,910; Sept. 6.

Von Galan, Charles II., Brooklyn, N. Y. Box-making. Of the California of th

Non-Hochstetter, Heinrich, assignor to the Firm Holzver-kohlungsindustrie Aktiengesellschaft, Konstanz, Ger-many. Making anhydrous salts of fatty acids. 1.648.516; Nov. 8. Von Hoff, Carl. Essen, Germany. Oxygen-respiratory ap-paratus. 1,635.101; July 5. Von Hütschler, Gustav, Hindenburg, assignor to F. W. Klein, Gleivitz, Germany. Electromagnetic light bath-ing apparatus. 1,615.295; Jan. 25.

Yon Karman, Theodor, Aachen, Germany, and K. Fromm, Allentown, Pa. Turbo machine, 1,622,930; Mar. 29. Yon Király, Paul, and J. Lovász, Budapest, Hungary. Automatic arm. 1,637,400; Aug. 2. Yon Lepel, Egbert, Berlin-Charlottenburg, Germany. Current converter. 1,613,494; Jan. 4. Yon Lepel, Egbert, Berlin-Charlottenburg, Germany. Current converter for ignition systems. 1,614,906; Jan. 18. Yon Littow, Hans, Chemitz, and F. H. Zehl, Blebrichon-the-Rhine, Germany. Windshield wiper. 1,614,164; Jan. 11. Festimitis F. J. Paristit.

on-the-Rnine, terman, Jan. 11.

Von Mach, Maximilian E., Jr., Detroit, Mich. Concrete-block composition. 1,623,985; Apr. 12.

Von Mihaly, Denes, Budapest, Hungary. Phototelegraphic apparatus. 1,625,967; Apr. 80.

Von Nessen, Walter, New York, N. Y., assignor to Efcolite Corporation. Wall bracket. Des. 73,678; Oct. 18.

Von Nessen, waiter, der Golffe Gorporation. Wall bracket. Des. 73,678; colite Gorporation. Wall bracket. Des. 73,682; Non Nessen, Walter, New York, N. Y., assignor to Efcolite Corporation. Lighting fixture. Des. 73,882; Nov. 15.

Von Nessen, Walter, New York, N. Y., assignor to Efcolite Corporation. Wall bracket or analogous article. Von Pein, Edward J., assignor, by mesne assignments to The National Cash Register Company, Dayton, Ohio. Cash register. 1,624,123; Apr. 12.

Von Pein, Edward J., assignor, by mesne assignments to The National Cash Register Company, Dayton, Ohio. Cash register. 1,630,814; May 31.

Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,636,814; May 31.

Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,645,200; Oct. 11.

Von Plane, Edward J., assignor, by mesne assignments, to Cash register. 1,645,200; Oct. 11.

Von Plane, Baltzar C., and C. G. Munters, C. G., and von Platen.)

von Platen, Baltzar C., See Munters, C. G., and von Platen, Baltzar C., and C. G. Munters, Stockholm. Sweden, assignors, by mesne assignments to Electrolux Sweden, assignors, by mesne assignments to Electrolux Von Platen, Baltzar C., and C. G. Munters, Stockholm, Sweden, assignors to Electrolux Servel Corporation, New York, N. Y. Refrigerator. 1,613,628; Jan. 11. Von Platen, Baltzar C., and C. G. Munters, Stockholm, Sweden, assignors, by mesne assignments, to Electrolux Von Platen, Baltzar C., Ystad, and C. G. Munters, Dala-Jarna, Sweden, assignors, by mesne assignments, to Electrolux Servel Corporation, Absorption refrigerating apparatus. 1620,843; Mar. 15. Von Platen, Baltzar C. and croux Servel Corporation, New York, N. Y. Refrigeration, 1,629,733; May 24. Von Platen, Baltzar C., vstad, and C. G. Munters, Dala-Jarna, Sweden, assignors by mesne assignments to Electrolux Servel Corporation. Refrigerating apparatus of the Corporation of C. Munters, Stockholm, Sweden, assignors by mesne assignments to Electrolux Servel Corporation. Refrigerating approaches the Corporation of C. Munters, Stockholm, Sweden, assignors, by mesne assignments, to Electrolux Servel Corporation. Refrigerator, 1,651,007; Nov. 29. Von Reis, Lambert, Herzogenrath, Germany, Method and device for manufacturing plate glass. 1,621,144; Mar. 16.

device Mar. 15.

Von Retze, Ewald, assignor to Holzverkohlungs-Industrie, A. G., Konstanz Baden, Germany. Production of concentrated accide acid. 1.447.676: Nov. 1.

Von Sazenhofen, Ludwig F., Nuremberg, assignor to the Firm Karl Robrestex, Metallwarenfabrik, Zirndorf bei Nuremberg, Bavaria, Germany. Toy talking machine. 1.649.271: Nov. 15.

Von Schlegell. Frederick. (See Timbs, E., Zerbe, and von Schlegell.)

von Schlegell.) on Schlegell. On Schubert, Erich, Berlin, Germany, assignor to Askania-Werke Aktiengesellschaft vormals Central-werkstatt Dessau und Carl Ramberg-Friedenau, Berlin, Frieder C. Friedenau, Device for taking photographs. Device for taking photographs. On Soden-Frauhofen, Graf A., assignor, by mesne assignments, to the Firm; Zahnradfabrik Aktiengesellschaft, Friedrichshafen, Germany, Change-speed gear. 1,639,174; Aug. 16.
Spreecken, Harry. (See Nash, R. E., and Von Spreecken, Harry.

Spreecken.), Harry. (see Mash, R. E., and von Spreecken.)
Vontobel. Robert, Kilchberg, near Zurich, Switzerland.
Procedure and contrivance for firmly attaching a metal case with a nipple adjusted in the same. 1,652,073; Dec. 6. Dec. 6. on Uffel,

Von Uffer, phorescent June 14. Herman, Philadelphia, Pa. Luminou at and waterproof composition, 1,6

Voohees, Garduer T., Boston, Mas. Cylinder-jacketing process and aparatus. 1,653,749; Dec. 27. Voorhees, Lee J., Binghamton, N. Y., assignor to National Carbon Company, Inc. Illuminating device. 1,613,069; Jan. 4.

Carton Company, Mc. Intuminating device. 1,010,00°; Jan. 4.
Ja

Oct. 18.

Voreaux, Paul, Paris, assignor to Société Anonyme Etablissements Samga et Bavox Reunis, Paris, France, Hand-actuated air compressor, 1,651,913; Dec. 6e.

Vorel, Frank, assignor of one-half to J. E. Moravec, Cleveland, Ohio. Englae valve, 1,647,592; Nov. V. 7.

assignors to dasoline Recover, Charleston, W. V. 7.

recovery, 1,616,242; Feb. 1.

Vorbis, Robert R., et al. (See Egler, Nicklas F., assignor).

Vortex Mfg. Co. (See Anderson, J. W., and Rice, as-

voltex Mfg. Co. (See Anderson, J. W., and Rice, assignors.)
Vortex Mfg. Co., The. (See Barbieri, Cesare, assignor.)
Vortex Mfg. Co., The. (See Curtin, David F., assignor.)
Vortex Mfg. Co., The. (See Curtin, David F., assignor.)
Vortex Mfg. Co. (See Mangold, William B., assignor.)
Vortex Mfg. Co. (See Mangold, William B., assignor.)
Vortex Mfg. Co. (See Mangold, William B., assignor.)
Voshikian, Feter as. See Vosbikian, Thomas S. and P. S.,
mobile bumper. Des. 73,724; Oct. 26.
Vosburgh, Edward, Passaic, N. J. Sorting machine.
1,625,438; Apr. 19.
Voshurgh, John R., Johnstown, N. Y. Traction device for vehicle tires. 1,619,170; Mar. 1.
Vose, Edwin W., Beverly, Mars. S. Snowshoe and manufacturing same. 1,620,641; May 24.
The standard of the sta

Voyatzis, Steve, Detroit, Mich. Bumper. 1,618,394; Feb. 22. Voyer, E. O., et al. (See Auger, Joseph T., assignor.)

Feb. 22. Voyer, E. O., et al. (See Auger, Joseph T., assignor.) Vrengdenhli, Adrianus, Amsterdam, Netherlands. Leunch-Vroman, Erwin C. (See Campbell, C. A., and Vroman, Jewin C. Watertown, N. Y., assignor to The New York Air Brake Company, Speed-responsive device. 1,638,718; Aug. 9. Vroom. Edward. (See Glezen, L. L., Shackleton, and

Vroom, Vroom.

Vulcan Last Company, The. (See Pollard, Carl I., assignor.

Vulcan Last Company, The. (See Questel, W. L., and Rhind, assignors.) Vulcan Last Company, The. (See Toulmin, Harry A., jr.,

assignor.)
Vulcan Radiator Company, The. (See Bergström, Yngve E., assignor.) Vulté, Hermann T., New Rochelle, N. Y. Antiskid chain. 1,619,592; Mar. 1.

W. & T. Avery, Limited, (See Benton, William A., assignor.) W. & T. Avery, Limited. (See Linley, Charles M., as-

Machiel, Michelm, Berlin-Charlottenburg, Germany, Apparatus for transforming gelatinic coliolis into globules or pearls. 1,614,639, 3an. 18.
Wachtel, Wilhelm, assignor to the Firm Aktiengesellschaft für Chemische Produkte vormals H. Scheidemandel, Berlin, Germany, Obtaining solidified granules or pearls from liquids. 1,638,609; Aug. 9.
Wachter, Johann H., New York, N. Y., Pattern for pro-Wachter, Spirt Competing, See Jones, G. W., and Roberson, assignors), Wacker, George W., assignor to Pal Radio Company, North Bergen, N. J. Radio receiving apparatus. 1,631,993; June 14.

Bergen, N. J. Ra June 14. acker, William E.

Narrow

William E. (See Goertz, F., and Wacker).
Weckerman, Charles S., Bridgeport, Conn. Nar
woven trimming. Des. 73,810; Nov. 8.
Wackerman, Charles S., Bridgeport, Conn. Nar
woven trimming. Der. 73,811; Nov. 8.
Wackerow, George L., Mellette, S. Dak. Wre Narrow

Wackerman, Charles S., Bridgeport, Conn. Narrow woven trimming. Der. 73,811; Nov. S. Wackerow, George L., Mellette, S. Dak. Wrench. 1,648,599; Nov. S. Wackman, Louis B., St. Louis, Mo. Closure seat for metaille containers. 1,647,302; Feb. S. hands of the containers of the container

May 3.
ade, William P. (See Thomas, G. E., jr., Wade, and Ruwee.)

Wade, William P. (See Thomas, G. E., jr., Wade, and Ruwee.)
Wadell, Albert H., Newark, N. J. Machine for boring the bearings of connecting rods. 1,634,889; July 5.
Waddigh, Theodore, Somers, Iowa. Conicovate grinder burr. 1,651,425; Dec. 6.
Waddey, Albert W. Yonkers, N. Y. Treeremover.
Waddsworth, Arthur W., Fort Thomas, Ky., assignor to The Wadsworth Watch Case Company, Dayton, Ky. Dustproof guard. 1,627,471; May 3.
Wadsworth Core Machine & Equipment Company, The. (See Hughes, Hugh T., assignor) with the control of the contr

29.

Wadsworth, Frank L. O., Pittsburgh, Pa. Elastic suspension system for vehicles, 1,622,892; Mar. 29.

Wadsworth, Frank L. O., Pittsburgh, Pa. Spring suspension system for vehicles, 1,624,643; Apr. 12.

Wadsworth, Frank L. O., Pittsburgh, Pa. Elastic-support system for vehicles, 1,624,643; Apr. 12.

Wadsworth, Frank L. O., Pittsburgh, Pa. Rqfary drilling tool. 1,635,592; July 10.

Wadsworth, Frank L. O., Pittsburgh, Pa. Lubrication of rotary mechanism. 1,635,593; July 12.

Wadsworth, George B., Covington, Ky. Electrical switch. 1,636,882; July 26.
Wadsworth, George B., assignor to The Wadsworth Electric and Manufacturing Company, Covington, Ky. Electric switch. 1,614,052; Jan. 11.
Wadsworth, George H. (See Welton, P. E., and Wadsworth, George H. (See Welton, P. E., and Wadsworth, George H. (See Welton, P. E.)

Simote-extracting device for tunnels. 1,631,442; June 7.

Wagner, Abraham L., assignor to A. L. Wagner Mfg. Co. Inc., New York, N. Y. Perfume atomizer or article of similar nature.

Des. 73,113; July 19.

Wagner, Abraham L., assignor to A. L. Wagner Mfg. Co. Inc., New York, N. Y. Perfume atomizer or article of similar nature.

Des. 73,114; July 19.

Wagner, Abraham L., assignor to A. L. Wagner Mfg. Co. Inc., New York, N. Y. Perfume atomizer or article of Inc., New York, N. Y. Perfume atomizer or article of Linc., New York, N. Y. Perfume atomizer or article of Similar nature.

Wagner, Abraham L., assignor to A. L. Wagner Mfg. Co. Inc., New York, N. Y. Perfume atomizer or article of similar nature.

Des. 73,116; July 19.

Wagner, Abhert G., assignor to The Wemb Company, Cincinnati, Ohio.

Gear-shifting mechanism. 1,643,728; Sept. 27.

Sept. 27. Wagner, Albert G., assignor to The Wemb Company, Cincinnati, Ohio. Gear-shifting mechanism. 1,643,729:

wagner, Albert G., assignor to The Wemb Company, Cin-cinnat, Julio. Gear-shifting mechanism. 1,643,729; Wagner, Albert H., Bonner, Mont. Ripper head. 1,651,305; Nov. 29. Wagner, A. L., Mfg. Co. Inc. (See Schattman, Harry, assignor.)

Wagner, A. L., Mfg. Co. Inc. (See Wagner, Abraham L., assignor.) Wagner. Alfred. Philadelphia, Pa., assignor to Gotham wassgor; Pred. Philadelphia, Pa., assignor to Gotham Magner.

Magner of the Magner of

Wagner, Aurea D., Atlantic City, N. J. Signal. 1,635,912; July 12.

July 12.
Wagner, Carleton S., Danville, Pa. Supporting structure, 1.621.649; Mar. 22.
Wagner, Charles H., assignor to L. J. Mueller Furnace Company, Milwaukee, Wis, Guide for cutting elbows. 1.646.129; Oct. 18.

Wagner, Clarence, et al. (See Dougherty, Charles T., assignor.) signor.)
Wagner, Claude E., and B. G. Hofer, Los Angeles, Calif.
Marceling iron. 1,625,440; Apr. 19.
Wagner, Clinton D., Cedar Rapids, Iowá. Sheet-metal
shear guide. 1,653,936; Dec. 27.
Wagner, E. R., Mfg. Company. (See Tletjen, Diedrich
W., assignor.)

W., assignor.)
Wagner, Edward A., Pittsfield, Mass., assignor to General
Electric Company. Transformer. 1,635,064; July 5.
Wagner, Edward A., Pittsfield, Mass., assignor to General Electric Company. Electrical-apparatus core.
1,648,705; Nov. 8.
Wagner, Edward F., assignor to The Studebaker Corporation, South Bend, Ind. Wood shaper. 1,615,983;
Feb. 1.
Wagner Electric Corporation. (See Weichsel, Hans, as-

Wagner, Electric Corporation. (See Weichsel, Hans, assignor.)

Wagner, Emanuel, Tokod, Hungary. Stove and furnace.
1,648,976; Nov. 15.

Wagner, Ervin C., Indianapolis, Ind. Basket-ball game.
1,619,279; Mar. I.

Wagner, Felipa J., née Cabezola, et al., executrices.
(See Cabezola, Eusehio F.)

General Cabezola, Eusehio F.)

General Cabezola, Eusehio F.

Galif., assignor to Pitts

Bright Valve and Fittings Company, Barberton, Ohio.
Lighting Fixture. Des. 74,129; Dec. 20.

Wagner, Frank N. (See Fairman, K. C., and Wagner, Magner, Frank N. (See Fairman, K. C., and Wagner, Headerlook, H., assignor to The Bartlett Hayward

Company, Baitimore, Md. Liquid and gas contact apparatus.

General Cabezola, Electric Cabezola, Company, Baitimore, Md. Liquid and gas contact apparatus.

General Cabezola, Electric Cabezola, Company, Faitimore, Md. Liquid and gas contact apparatus.

General Cabezola, Electric Cabezola, Ca

July 12.

Wagner, Hermann, Soden-on-the-Taunus, and A. Funke, Hochst-on-the-Main, Germany, assignors to Grasselli Dyestuff Corporation, New York, N. Y. Greenish-yellow azo dyestuff and making same. 1,644,003; Oct. 4.

Wagner, Hermann, W. Laupkeln, K. Beck, Hochst-on-the-Main, and K. Thiess, Sindlingen, near Hochst-on-the-Main, and K. Beck, Hochst-on-the-Main, and K. Beck, Hochst-on-the-Main, and K. Beck, J. Azo dyestuffs and making same. 1,613,919; Jan. 11.

Wagner, Hush M., Dunlap, Tenn. Self-serving gasoline pump. 1,652,918; Dec. 13.

1,621,235; Mar. 15.

1,621,235; Mar. 15.

1,621,235; Mar. 15.

2,821,235; Mar. 15.

2,821,235; Mar. 15.

2,821,235; Mar. 15.

3,821,235; Mar. 15.

3,82

Wagner, Lawrence, Sedalia, Mo. Fish trap. 1,647,027; Oct. 25.

Oct. 25.

Wagner, Louis, Berlin, Germany, assignor to Whiting-Patterson Co. Inc.
Figured tissue paper. Des. 72,043; Feb 15.

Wagner, Louis, Berlin, Germany, assignor to Whiting-Patterson Co. Inc.
T2,045; Feb. 15.
Wagner, Louis, Berlin, Germany, assignor to Whiting-Patterson Co. Inc.
T2,045; Feb. 15.
Wagner, Louis, Berlin, Germany, assignor to Whiting-Patterson Co. Inc.
T2,047; Feb. 15.
Wagner Manufacturing Germany, assignor to Whiting-Berterson Co. Inc.
T2,047; Feb. 15.
Wagner Manufacturing Company. (See Lang, Philip, assignor).

Wagner Ma

assignor.)

Wagner, Marcel, Mulhouse, France. Roofing fastening.
1,638,671; Aug. 9.
1,638,671; Aug. 9.
1,628,602; App. 19.
Wagner, Norman, Hamilton, Ontarlo, Canada. Structural-steel joist. 1,634,127; June 28.
Wagner, Ray M., et al. (See Dougherty, Charles T., assignor.)

Wassawood Richard, Flint, Mich. Automobile hood latch. 4,621,508; June 7.
Wagner, Rudolf. Himburg, Germany. Counterpropeller for air propeller-driven craft. 1,646,507; Oct. 2.
Wagner, Stephan, New York, N. Y. Electric eigarette lighter. 1,658,761; Dec. 27.

Wagner, Theodore B., Brooklyn, N. X., and C. A. Glabau, Hasbrouck Heights, N. J. Producing leavened dough products. 1,649,144; Nov. 15.
Wagniere, August L., Los Angeles, Callf. Sash-balancing device. 1,626,048, Apr. 20.
device. 1,626,048, Apr. 20.
third to E. H. Maloney and one-third to W. C. Lane, Spokane, Wash. Snow remover. 1,616,685; Feb. 8.
Wagner, Todd L., Salina, Kans. Rug-renovating machine. 1,624,293; Apr. 12.
Wall, Charles F. Wilmington, Del. Screw driver. Wall, Charles F. Wilmington, Del. Screw driver. Wall Company, The. (See Wahl, Leo J., assignor.) Wahl Company, The. (See Back, R., and Cooper, assignors.)

Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
wahl Company, The. (See Back, R., and Cooper, assignors.)
wahl Company, The. (See Funk, Charles J., assignor.)
wahl Company, The. (See Johnson, J. B., assignor.)
Wahl Company, The. (See Johnson, J. B., assignor.)
Wahl Company, The. (See Wahl, John C., assignor.)
Wahl John, Rosedale, and O. Melzer, Hollis, assignor. The Wahl, John, Rosedale, and O. Melzer, Hollis, assignor to A. Schrader's Son, Inc., Brooklyn, N. Y. Gauge.
Wahl, John, Hosedale, and O. Melzer, Hollis, assignor to A. Schrader's Son, Inc., Brooklyn, N. Y. Combined wrench and inflating mechanism. 1.652,845 Dec. 13.
Wahl, John, and O. Melzer, assignors to A. Schrader's Sons, Inc., Brooklyn, N. Y. Wench mechanism. 1.634,4201, Nov. 2. (See Wahl, John C., Brooklyn), N. Y. Wench mechanism. 1.11.
Wahl, John C., assignor to The Wahl Company, Chicago, Ill., Pen and nib and producing same. 1.613,812; Jan. 11.
Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John, C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Chicago, Mandalla, Chicago, Ill., assignor to The Wahl Company, Chicago, Mandalla, Chicago, Ill., assignor to The Wahl Company, Chicago, Mandalla, Chicago, I

John C., Chicago, Ill., assignor to The Wahl Com-y, Wilmington, Del. Fountain pen. 1,624,194;

pany, winning con-ADE. To ADE. ASSESSED TO The Wahl Company, Chicago, Will. Mechanical pencil. 1.637,363; Aug. 2. Wahl, John C., Chicago, Ill., assignor, by meane assign-ments, to Remington Accounting Machine Corporation, New York, N. Y. Calculating machine. 1,648,667; Nov. 8.

Nov. 8.

Wahl, John C., assignor to The Wahl Company, Chicago, Il. Mechanical pencil 1.650,751; Nov. 29.

Wahl, John C., assignor to The Wahl Company, Chicago, Il. Mechanical pencil 1.650,751; Nov. 29.

Sterling, Ill. Motor. 1.615,604; Jan 29.

Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Vibrator mechanism. 1,622,298; Mar. 29.

Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Vibrator. 1,623,987; Apr. 12.

Wahl, Leo J., sterling, assignor to Wahl Clipper Corporation, Sterling, Ill. Vibrator. 1,623,987; Apr. 12.

Wahl, Leo J., sterling, assignor to Wahl Clipper Corporation, Sterling, Ill. Wibrator. 1,623,987; Apr. 12.

Wahl, Leo J., Sterling, assignor to Wahl Clipper Corporation, Sterling, Ill. Wahlberg, Nils E., assignor to Nash Motors Company, Kenosha, Wis. Brake mechanism for steering wheels. 1,624,474; July S. Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator connecter, 1,645,266; Oct. 11.

Wahlberg, Nils A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Linktype insulator. 1,652,506; Dec. 13.

Wahlstrom, Charles O, Dallas, Fex. Triple-acting, force,

Walnerg, Nils A., Wikinsburg, Ph., assignor to Westinghouse Electric & Manufacturing Company. Linkwhistrom, Charles G., Dallas, Tex. Triple-acting, force, Walnistrom, Charles G., Dallas, Tex. Triple-acting, force, Walnt. William, Brooklyn, N. Y. Massage apparatus. 1,630,149; May 24.
Waidanz, Erwin, Chicago, Ill. Combined tollet article. 1,650,167; Nov. 22.
Wainwright, Joseph E., Brooklyn, N. Y. Spring compressor and replacer. 1,614,218; Jan. 11.
Walce, 1,649,997; Nov. 22.
Wainwright, William W., Tacoma, Wash. Electric water heater. 1,620,745; Mar. 15.
Wals, Albert C. (See Wais, Charles C., assignor.)
Wais, Charles C., Cincinnati, assignor of one-half to A. C. Wais, Wyoming, Ohio. Vehicle wheel. 1,646,509; Oct. 25.
Wais, Charles C., Cincinnati, assignor of one-half to A. C. Wais, Wyoming, Ohio. Safety window seat. 1,646,509; Oct. 25.
Wais, Charles C., Cincinnati, assignor of one-half to A. C. Wais, Wyoming, Ohio. Paeumatic tire for vehicle wheels. 1,647,255; Nov. 1.
Walsman, Ak-haham, St. Louis, Mo. Garment retainer. Walt, Bertrand H. New Rochelle, N. Y. Pavement and process of constructing pavements. 1,628,482; May 10.
Walt, Bertrand H. New Rochelle, N. Y. Pavement and constructing pavements. 1,650,554; Nov. 22.
Wait, Justin F. New York, N. Y., assignor to National 1,643,72; Oct. 18.
Waitch, John, Pittsburgh, Pa., assignor of one-half to F. Lasavich, La Porte, Ind. Window lock. 1,620,705; Mar. 15.

Mar. 15. Waite Carpet Company. (See Waite, Philip C., assignor.) p aite, Frank H., Long Island City, N. Y. Muffler and sanding device, 1,646,130; Oct. 18. Waite, Frank H., and G. W. Davey, Long Island City, N. Y. Air-cooled furnace structure. 1,646,603; Oct

X. Y. Air-cooled furnace structure. 1.046,003; Oct 25.
Watte, Frank H., and G. W. Davey, Long Island City, N. Y. Furnace wail. 1,646,944; Oct. 25.
Watte, Frank H., and G. W. Davey, Long Island City, X. Y. Furnace, 1,641,604, Nov. 1. Long Island City, N. Y. Furnace, 1,641,604, Nov. 1. Long Island City, N. Y. Furnace construction. 1,647,161; Nov. I. Waite, Frank H., and G. W. Davey, Long Island City, N. Y. Furnace construction. 1,647,488; Nov. 1. Waite, Parnak H., and G. W. Davey, Long Island City, N. Y. Furnace construction. 1,647,488; Nov. 1. Waite, Philip C., assignor: to Waite Carpet Company, Oshkosh, Wis. Strand for rugs: 1,651,649; Dec. 6.
Waitkus, Vincent, Baltimore, Md. Yarn cleaner. Waite, George J., Buffalo, N. Y. Chaplet for molding. 1,616,772; Feb. 8.
Waite, Walter G. (See Deibel, C. P., and Waitt.)
Wakefield, C. C., & Company, Limited. (See Appleby, James A., assignor: Wakefield, Frank E., assignor to Illinois Watch Case Company Eleft III Watch. 1,645,633; Opt. 184

Wakefeld, Frank E., assignor to Illinois Watch Case Company, Elgin, Ill. Watch. 1645,633; Oct. 18. Wakefield, Frederick W., G. L. Basil, and C. A. Schroeder, assignors to The F. W. Wakefield Brass Company, Ver-milion, Ohio. Lighting fixture. 1,620,306; Mar. S. Wakefield, Watter H. (See Blanchard, H. L., and Wake-

Wakefield, Walter H. (See Hoffman, L. F., and Wake-Wakefield, Walter H.

Wakefield, Walter H. (See Holman, L. F., and Wakefield, Wakefield, Walter H. (See Holmas, E. R., and Wakefield, Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Dobby finger for looms. 1,620,176; Mar. 8.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Dobby finger for looms. 1,620,176; Mar. 8.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Dobby finger for looms. 1,622,645

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works. Worcester, Mass. Balancing let-off for looms. 1,628,815; May 17.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works. Worcester, Mass. Crompton & Knowles Loom Works, Worcester, Mass. Varn-impling lay-actuated weft detector. 1,638,822; Jun. 28.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Trolled by pattern mechanism. 1,638,723; Jun. 28.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Anism. 1,647,718; Nov. 1.

Wakefield, Walter H., assignor to Loom Works, Worcester, Mass. Anism. 1,647,718; Nov. 1.

Wakefield, Walter H., assignor to Loom Works, Worcester, Mass. Anism. 1,647,718; Nov. 1.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Anism. 1,647,718; Nov. 1.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Anism. 1,647,718; Nov. 1.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Anism. 1,647,718; Nov. 1.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Anism. 1,647,718; Nov. 1.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Anism. 1,647,718; Nov. 1.

Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. T

Wacfield, Walter H., assigner to Crompton & Knowles
com Works, Worcester, Mass _ Informly-tensioned
reversing motion for loom let-offs. 1,651,565; Dec. 6,
Wakefield, Walter H., assignor to Crompton & Knowles
Loom Works, Worcester, Mass. Lock for harness jacks
of Knowles looms. 1,652,592; Dec. 13.
Wakefield, Walter H., assignor to Crompton & Knowles
Loom Works, Worcester, Mass. Withdrawing means
for side-silp weft detectors. 1,652,593; Dec. 13.
Walteman, Frank M., Lisbon Falls, Me. Baking ples.
Walteman, Frank M., Lisbon Falls, Me. Baking ples.
Walteman, Frank M., Lisbon Falls, We. Baking ples.
Walters, Samuel J., New York, N. Y. Clothesline connection. 1,620,928; Mar. 15.
Walter, Bernard E., Worcester, Mass. Cigar and cigarette holder. 1,628,937; May 17.
Walch, Cepton C., Syracuse, N. Y. Attachment for
lanterns. 1,650,809; Nov. 29.

79535.—P.—41

Walch, Jacob S., Oakland, Calif. Lifting device. 1,628,084; May 10. Walch, Jacob S., Oakland, Calif. Ditch-digging machine. 1,639,871; Aug. 23. Walcher, Frederich, Chicago, Ill. Swimming board or life preserver. 1,633,974; Dec. 27. Walcker, Paul, Frankfort-on-the-Oder, Germany. Organ. 1,622,931; Mar. 29. Walcker, Paul, Frankfort-on-the-Oder, Germany. Electrical controlling means for organs. 1,630,555; Nov. 22. Walcott, Frank B. (See McFarland, John H., assignor.) Wald Manufacturing Company. (See Pawsat, Ewald F., assignor.)

wälde, Budolf. (See Bauer, G., Wälde, and Kluge.)
Wälde, Budolf. (See Bauer, G., Wälde, and Kluge.)
Walden-Wooster Incorporated. (See Shedd, Charles A.,

Walden-Worcester, Incorporated. (See Bellows, Warren S., assignor.)
Walden-Worcester, Inc. (See Carlberg, August E., assignor.)
Walden-Worcester, Inc. (See Critchley, James V., as-

signor.)
Walden-Worcester, Incorporated. (See Enberg, Stone

Signor.)

Walden-Worcester, Inc. (See Critchley, James V., assignor.)

Walden-Worcester, Incorporated. (See Enberg, Stone I., assignor.)

Rudlen-Worcester, Incorporated. (See Enberg, Stone I., assignor.)

Walden-Worcester, Incorporated. (See Enberg, Stone I., assignor.)

Walden-Worcester, Incorporated. (See Enberg, Stone I., assignor.)

Walden J., Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,651,050; Nov. 29.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Work magazine for typewriting machines. 1,616,071; Feb. 1.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,617,655; Feb. 15.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,617,655; Feb. 15.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,617,655; Feb. 15.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,619,645; Mar. 1.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,619,615; Mar. 1.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,621,618; Mar. 22.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,624,689; May 3.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,624,689; May 3.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,624,689; May 3.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. 1,624,689; May 3.

Waldheim, John, Elizabeth, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Type

assignor.)
ales Adding Machine Company. (See Gleim, Ferdinand,

assignor.)

Wales Adding Machine Company. (See Gleim, Ferdinand, assignor.)

Wales, Charles. (See Fay, J. W., and Wales.)

Wales, Charles. (See Fay, J. W., and Wales.)

Wales, Nathaniel B., New York, N. Y. Refrigeration.

1,613,687; Jan. 11.

Wales, Reginald C., Chlcago, Ill. Compass. 1,616,935; Feb. 8.

Wales, Thomas E., San Francisco, Calif. Manufacturing fluxed solder in wire form. 1,649,628; Nov. 15.

Walinsky, Ossip J., Sea Gate, N. Y., assignor to White Luggage Co. Inc., New York, N. Y. Sultcase. Des.

Walinsky, Ossip J., Sea Gate, assignor to White Luggage Co. Inc., New York, N. Y. Hand bag. Des. 72,403; Apr. 12.

Co. Inc., New York, N. Y. Rand Dag. Des. 12,405; Apr. 12. Walinsky, Ossip J., Sea Gate, assignor to White Lugrage Co. Inc., New York, N. Y. Luggage carrier. 1,624,897; Apr. 12.

Walinsky, Ossip J., Sea Gate, assignor to White Luggage Co. Inc., New York, N. Y. Article of luggage.

Co. Inc., New York, N. Y. Article of luggage.
1.625,439; Apr. 19.
Walinsky, Ossip J., Sea Gate, assignor to White Luggage.
Co. Inc., New York, N. Y. Hatbox. 1.636,615; July 19.
Walinsky, Ossip J., Sea Gate, N. Y., assignor to White Luggage.
Co. Inc., New York, N. Y. Luggage.
Walinsky, Ossip J., Sea Gate, N. Y., assignor to White Luggage.
Walinsky, Ossip J., Sea Gate, assignor to White Luggage.
Walinsky, Ossip J., Sea Gate, assignor to White Luggage.
Co. Inc., New York, N. Y. Sultcase. Des. 75,812:

Walint, Markus, Endicott, N. Y. Refrigerator, 1,620,177; Mar. 8. Walkee Toy & Novelty Co. (See Dahlstrom, John J., as

Walker, Chy & Novelty Co. (See Dahlstrom, John J., as willing to the property of the property

1.648,287; Nov. 8. Gary, Ind. High chair. 1,617,882; Feb. 15. Walker, Clinton L., Piedmont, Calif. Piston. 1.652,385; Dec. 13. Walker & Co. (See Townsend, Otto H., assignor.)

Walker & Co. (See Townsend, Otto H., assignor.) Walker, Cynthia S. C., executrix. (See Walker, Samuel Walker, David D. (See Alkens, Thomas N. assignor.)
Walker, David L. Vancouver, British Columbia, Canada,
Walk construction for refrigerators, 1,650,168; Nov. 22.
Walker, David L., et al. (See Modlin, Frank E., as-

Walter, David L., et al. See abouin, Frank E., as-Walter, Earl, Daykin, Nebr. Automatic water-distribution control. 1,628,698; May 17.

Walker, Edmund, Willows, Calif. Combination screw driver and starter. 1,643,433; Sept. 27.

Walker, Edmund H., New York, N. Y. Draft gear. 1,621,964; Mar. 22.

Walker, Edward C., St. Louis, Mo., assignor to National Lead Company, New York, N. Y. Barrel. 1,652,962; Jec. 18.

Jend Cuppary, New York, N. Y. Barrel. 1,632,902; Wilker, Edwin O., assignor, by mesne assignments, to Antonantic Electric Inc., Chicago, Ill. Selector switch. 1,640,385; Aug. 30.

Walker, Elizabeth M., Minneapolis, Minn., now, by marriage, E. M. Rogers, Builder board., 1,648,706; Nov. 8.

Walker, Enest A. (See Bath, J., and Walker).

Walker, Eugene F., assignor to Ploneer Slaughtering Device Company, Kansas City, Mo. Bleeding appliance. Construction. 1,629,242; May 17.

Walker, Florence R., Marcellus, N. Y. Toy or doll house construction. 1,629,242; May 17.

Walker, Florence R., Marcellus, N. Y. Toy or doll house construction. 1,629,242; May 17.

Walker, Florence R., Marcellus, N. Y. Toy or doll house construction. 1,629,371; Aug. 16.

Walker, George, Newton, Center, Mass. Distance indicators alips, etc. 1,638,971; Aug. 16.

Walker, George, Newton Center, Mass. Distance-measuring apparatus for ships, etc. 1,638,973; Aug. 16.

Walker, George, Newton Center, Mass. Distance-measuring apparatus for ships, etc. 1,638,973; Aug. 16.

Walker, George A., Waukesba, Wis. Ventilating shade. 1,613,295; Jun. 24.

Walker, George L., assignor to Heenan and Froude Limited, Worcester, England. Absorption brake dynamometer. 1,627,586; May 10.

Walker, George L., assignor to Air Reduction Company, Incorporated. New York, N. Y. Cutting tip or the Walker, George L., assignor to Air Reduction Company, Incorporated. New York, N. Y. Torch mixer. 1,651,854; Dec. 6.

Walker, George S. (See Cook, C. C., and Walker, Malker, George S. (See Cook, C. C., and Walker, Malker, George S. (See Cook, C. C., and Walker, Malker, George S. (See Cook, C. C., and Walker, Walker, George S. (See Cook, C. C., and Walker, Malker, George S. (See Cook, C. C., and Walker, Walker, George S. (See Cook, C. C., and Walker, Walker, George S. (See Cook, C. C., and Walker, Malker, Malker, Malker, Walker, Walker, Walker, Walker, Walker, George S. (Se

Walker, George T. Mirouker, Wis Apparatus for crystallizing: liquids, 1,615,151; Jan. 18 walker, George T. Mirouker, Wis Apparatus for crystallizing: liquids, 1,615,151; Jan. 18 walker, George T. Minneapolis, Minn. Crystallizing liquids, 1,644,161; Oct. 4.
Walker, George W. (See Dhume, Ross and R., assign-

ors.)
Walker, Gus, Huntington, W. Va. Brake. 1,641,912;
Sept. 6,
Walker, Harold N. (See Mattern, P. J., and Walker,
Walker, Harold W. (See Gehani, B., and Walker,
Walker, Harold W. Edgewood. Md. Manufacture of
arsenate insecticides. 1,629,557; May 24.
Walker, Harty, assignor to National Manufacturing Company of America, Oil City, La. Coin-controlled apparratus. 1,652,919; Dec. 13.

Walker, Harry, assignor to National Manufacturing Company of America, Oll City, La. Valve for automatic musical instruments, 1,652,963; Dec. 18. Walker, Harry R., St. Louis, Mo. Oll burner. 1,645,559; Oct. 18.

Walker, Harry R., St. Louis, Mo. Oil burner. 1,645,559;
Oct. 18. Harry A., assignor of one-half to D. A. SumBrinkman, Okla. Fortable electric light.
1,652,964; Dec. 13.
Walker, Henry B., assignor to The Fairfield Engineering
Company, Martion, Ohio. Truck. 1,635,918; July 6.
Walker, Henry R., London, England. Hollow pole.
1,638,515; Aug. 9.
Walker, Henry R., London, England. Hollow pole.
1,638,751; Apr. 26.
Walker, Hiram L., assignor to Chandler Cleveland Motors
Corporation, Cleveland, Ohio. Flexible driving coupling. 1,636,725; July 26.
Walker, Homer F., Beaumont, Tex. Butt-cutting machine. 1,626,702; May 3.
Walker, Homer F., Beaumont, Tex. Butt-cutting machine. 1,626,702; May 3.
Walker, Homer F., Beaumont, Tex. Butt-cutting machine. 1,626,702; May 3.
Walker, Homer F., Beaumont, Tex. Butt-cutting machine. 1,626,702; May 3.
Walker, Howard G., Berwyn, and A. T. March, Chicago.

Walker, Howard G., Berwyn, and A. T. March, Chicago, Ill., assignors to Western Electric Company, Incorpo-rated, New York, N. Y. Coating cores. 1,615,416; Jan. 25.

rated, N Jan. 25.

Jan. 25.

Walker, Howard G., La Grange, and A. T. March, Western Springs, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for coating cores. 1,615,418; Jan. 25.

Walker, Howard G., La Grange, and A. T. March, Western Englings, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Mechan for coating cores. 1,615,420; Jan. 25.

Walker, Howard G., La Grange, and A. T. March, Western Springs, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Mechanism for working pulpous material. 1,615,426; Jan. 25.

Walker, James, assignor of One-Jourth to T. O. Connell, Walker, James W. Memphis, Tenn. Cultivator. 1,632,638; June 14.

Walker, Jerome E., Spartanburg, S. C. Segmental fly
Walker, Jerome E., Spartanburg, S. C. Segmental fly-

walker, Jerome E., Spartanburg, S. C. Segmental fly-wheel gear. 1,645,268; Oct. 11.
Walker, John et al. (See Lewis, Claude L., assignor.)
Walker, John C. (See Born S., Bonnette, and Walker.)
Walker, Joseph D., Whitesburg, Tenn. Fountain brush.
1,615,104; Jan. 1,948; Walker, Joseph D., Whitesburg, Tenn. Fluntain brush.
1,616,290; Feb. 1.

Note, 200; Feb. 1.
Walker, Littleton W., Arlington, Va. Combined wheel scraper and brace for wheelbarrows. 1.648,374; Nov. 8.
Walker Manufacturing Company. (See Dearsley, Irwin E., assignor.)
Walker Manufacturing Company. (See McCaughey, Glender)

Walker Manufacturing Company. (See Aucaugney, Green, Sagionariet W., Wyncote, Pa. Baby spoon. 1,625,003 : Apr. 19.
Walker, Maurice, New York, N. Y. Spindle carriage and clutch. 1,620,844 Mar. 15.
Walker, Maurice S., Brookline, Mass. Bottle. Des. 72,973; June 28.
Walker, Milton H., Newark, N. J. Toilet kit. 1,641,650: Sept. 6.

Sept. 6.
Walker, Murphy E., Austin, Tex. Meat grinder. 1,623,141; Apr. 5.
Walker & Fratt Manufacturing Company. (See Patterson, Ralph J., assignor.)
Walter, Richard, Dusseldorf, Germany. Desulphurizing molten metal and briquettes used therefor. 1,651,492; Dec. 6.
Walker, Richard A., Skidmore, Mo. Oli filter. 1,630,504: May 31.

Walker, Robert J. (See Appellan, H. G., and Vanhoren. assignors.)
Walker, Robert J. (See Bernon, Maurice L., assignor.)
Walker, Robert J., Glasgow, Scotland. Golf club. 1,652,594; Dec. 13.

Walker, Robert 1,615,427; Jan. Walker, Robert Winston-Salem, N. C. File 25. N.,

Walker, Robert N., Winston-Salem, N. C. File
1,615,427; Jan. 25.

Walker, Robert N., Winston-Salem, N. C. Vile
1,615,430; Jan. 25.

Walker, Robert N., Winston-Salem, N. C. Vile
1,625,430; Jec. 6.

Walker, Walker V., Fort Ringgold, Tex. Washing machine. 1,647,803; Nov. 1.

Walker, Walter W., Fort Ringgold, Tex. Washing machine. 1,647,803; Nov. 1.

Walker, Walter W., Fort Ringgold, Tex. Washing machine. 1,647,803; Nov. 1.

Walker, Walter W., Fort Ringgold, Tex. Washing machine. 1,647,803; Nov. 1.

Walker, Warren R., Bloomfield, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Slectric switch. 1,632,132; May 24.

Walker, Warren R., Bloomfield, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Rotating cylindrical glass mercury switch. 1,638,133; Aug. 9.

Walker, Warren R., Great Kills, N. Y., assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Electric switch. 1,638,131; Aug. 9.

Walker, Warren R., Great Kills, N. Y., assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Electric switch. 1,638,131; Aug. 9.

Walker, William D., Sacrament, Calif. Casing for diee-threwing Mathia. 1.

Walker, William J., Sacrament, Calif. Casing for dee-threwing Mathia. 1.

Walker, William J., Sacrament, Calif. Casing for dee-threwing Mathia. 1.

Walker, William J., Sacrament, M., and Walker, Walker, William J., assignor of one-half to J. Erickson. 1,645,465; Oct. 11.

Walker, William J., Sacraments, Minn. Window structure. 1,623,078; Apr. 5.

Walker, George M., Minneapolis, Minn. Window structure. 1,623,078; Apr. 5.

Walk, James E., et al. (See France, George E., assignor,)

Wall, James E., et al. (See France, George E., assignor,)

Wall, James E., et al. (See France, George E., assignor,)

Wall, James E., et al. (See France, George E., assignor,)

Wall, William G., See Ctawford, C. S., and Wall, William G., assignor to Rectifier Manufacturing Company, Indianapolis, Ind. Oll rectifier. 1,628,051; Min. 1,630,163; Feb. 1.

Wallace, Claude W. (See Barron, Randoliph M., assignor to The Bassick Manufacturing

Notices of and apparatus for disting oil. 1,005,100, Wallace, Halbert C. Kansas City, Mo. Extension feeder. 1,638,075; Aug. 9. Wallace, Herbert A., Pittsburgh, Pa. Railway-trafficgoverning apparatus. 1,650,675; Nov. 22. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swisswale, Pa. Railway-traffic-controlling apparatus. 1,624,125; Apr.

Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,624,520. Apr.

12.
Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus, 1,626,486 Apr. 26.
Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus, 1,626,895; May 3.

Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling apparatus. 1628,200; May 10. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling apparatus. 1628,200; May 10. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch and Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,636,026; July 19. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,638,173; Aug. 9. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,638,173; Aug. 9. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,638,173; Aug. 9. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,646,122; Oct. 11. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,649,622; Nov. 15. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,649,622; Nov. 15. Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,631,691; Dec. 6. White Company, Swissvale, Pa. Railway-traffic-controlling apparatus. 1,631,693; Aug. 2. Wallace, Hugh, See Hunt, J. H., and Wallace.) Wallace, Hugh, Gee Hunt, J. H., and Wallace, Man. 2. Wallace, Jugh, and J. H. Hunt, assignor to Electro-Laboratories, Inc., New York, N. Y. Radio receiving apparatus. 1,627,758; Min 10. Mallace, Raymo

Signor, A. & Sons Mfg. Co. (See Warren, William S., Wallace, Raymond H., Livermore, Iowa: Supporting life in living organisms in sealed containers and device therefor. 1,621,518; Mar. 22.
Wallace, Robert G., Ben Avon, assignor to National Fire Proofing Company, Pittsburgh, Pa. Wall construction. Wallace, Robert L., Los Angeles, Calif. Means to prevent reverse rotation of a rotary member. 1,641,360; Sept. 6.
Wallace, Robert L. Los Angeles, Calif. Means to prevent reverse rotation of rotary members. 1,641,463; Sept. 6.
Wallace, Robert S., Fitchburg, Mass. Grip for golf cubs. 1,617,972; Feb. 15.
Wallace & Tierman Products. (See Wallace, Charles F., assignor).

Wallace & Tierman Frontes.

assignor. Wallace, William H., Cleveland, Ohio, assignor, by mesne assignments, to The Eaton Spring Corporation, Detroit, assignments of the Eaton Spring Corporation, Detroit, Wallace, William H., Cleveland, Ohio. Pilers. 1.652.223; Dec. 13.

Wallace, William S., et al., trustees. (See Davis, Kenneth,

Dec. 13.

Wallace, William S., et al., trustees. (See Pavis, Kenneth, assignor.)

Wallace, William S., et al., trustees. (See Peale, Richard, assignor.)

Wallace, William T., Webster Groves, Mo. Toy. 1,641,200 Sept. 6, Chicago, Ill., assignor to New York Brick Handling Corporation, New York, N. Y. Inverter. 1,644,407; Oct. 4.

Wallace, William W., Chicago, Ill., assignor to New York Brick Handling Corporation, New York, N. Y. Apparatus for loading brick into box cars. 1,645,363; Oct. 11.

Wallow, William W., Chicago, Ill., assignor to New York Brick Handling Corporation, New York, N. Y. Apparatus for loading brick into box cars. 1,645,363; Oct. 11.

William W., Chicago, Ill., assignor to New York Brick Handling Corporation, New York, N. Y. Lifting fork, 1,651,791; Dec. 6.

Wallbillich, Anthony F., Newark, N. J., assignor to Distance-Speed Recording Company. Drive for speed-responsive instruments. 1,634,565; July 5.

Walle, Ludvig S., Scotia, N. Y., assignor to General Electric Company. Centrifugal mechanism for electric Company. Centrifugal mechanism for electric Wallenbeck and other apparatus. 1634,612; Dec. Wallenberg, Axel E. H., Vasterlosa, Sweden. Thrashim machine. 1,624,126; Apr. 12.

Waller, Affred E., Bronxville, N. Y., assignor to Ward Leonard Electric Company. Rheostat. 1,631,168; June 7.

Waller, Carl R. assignor to De Laval Steam Turbine Company, Trenton, N. J. Control for steam turbines. 1,625,004; Apr. 19.
Waller, Carl R., assignor to De Laval Steam Turbine Company, Trenton, N. J. Governing means for turbines. 1,1625,725 May 1,

Wallgren, Carl G., et al. (See Gerau, George B., assignor, Wallin, Gustaf A., Brooklyn, N. Y., assignor to A. Kimball Company, New York, N. Y. Marking ticket. 1,655,868; July 12.

Wallin, Philip, assignor to The Timken Roller Bearing Company, Canton, Ohlo. Taper-gauging machine. 1,627,360; May 3.

Wallin, Prederick T., Cape May, N. J. Agricultural im-Walling, Frederick J., Eb. 1.

Walling, Henry E., Electra, Tex. Gauge cock. 1,618,119; Feb. 15.

Wallis, Barnes N., assignor to Airship Guarantee Company, Limited, Westminster, London, England. Lighter-than-air aircraft. 1,630,726; May 31.

Walling of the Company Limited, Westminster, London, England. Lighter-than-air aircraft. 1,630,726; May 31.

Walling of the Company Limited. Westminster, assignors to Airship Guarantee Company, Limited. London, England. Lighter-than-air aircraft. 1,637,432.

Aug. 2

Aug. 2.
Wallis, George L., Bromley, England. Motor cycle. 1,631,443; June 7.
Wallis, Henry E., and C. T. Kingston, Detroit, Mich. Boller. 1,619,171: Mar. 1.
Wallman, Hulda, New York. N. Y. Headdress. 1,638,756;

Wallman, Hulda, New Mork, N. Aug. 9.
Walloch, Frank A., Seattle, Wash. Combined hot-air screen and deflector. 1,640,630; Aug. 30.
Walls, Bert 1, Geo. 1,650,603; Nov. 22.
Walls, Bert T. (See Peterson, G. W., and Walls.)
Wallstrom, Ludwig, Lima, Peru. 1,625,331; Apr. 19.
Walp, Charles F., Berwick, Pa., assignor to American Car and Foundry Company, New York, N.-Y. Punch (19,94,227; Nov. 15.
Wallswar, Albert T. (See Thompson, Albert F., assignor.)

Walistaven, Albert T., (See Thompson, Albert F., assignor.)
Walsh, Austin, New York, N. Y. Telescopic hatband.
1,619,007; Mar. I.
Walsh, Ercsie M. Bellingham, Wash. Ear protector.
Walsh, Clarence F., Dickens, Iown. Farrowing house for sows.
1,644,212; Oct. 4.
Walsh, Clarence F., Dickens, Iown. Farrowing house for finishing concrete surfaces.
1,623,142; Apr. 5.
Walsh, Delmar A., Kansas City, Mo. Resilient wheel.
Walsh, Harrie H., assignor to Kay Sign Company, Chicago,
Ill. Advertising-projecting device. 1,619,096; Mar. 1.
Walsh, James J., Kansas City, Mo. Adjustable waist pattern.
1,628,343; May 10.
Walsh, James M., deceased, Miwankee, Wis. K. F. Walsh.
administration of the Company of th

waukee, Wis. Breast-strap silde. 1.619.225; Mar. 1. Walsh, James M., asignor to James M. Walsh Co., Milwaukee, Wis. Throat-strap connecter. 1,639.066; Malsh, James M., assignor to James M. Walsh Co., Milwaukee, Wis. Martingale strap and connecter. 1,639.067; Aug. 16. Walsh, James M., assignor to James M. Walsh Co., Milwaukee, Wis. 1,661.170; Nov. 29. Walsh, James M., Co., Cisee Walsh, James M., assignor; Wish, James M., assignor; W. W. Walsh, James M., Co., Cisee Walsh, James M., assignor; W. W. Walsh, John J., Yonkers, N. Y. Combined hand mirror Walsh, John J., Yonkers, N. Y. Combined hand mirror

Feb. 1. Walsh, John J., Yonkers, N. Y. Combined hand mirror and table mirror. 1,638,672; Aug. 9. Walsh, John J., assignor to Royal Electrotype Company, Philadelphia, Pa. Making electrotypes. 1,649,876;

Nov. 22.
Walsh, John J., Maple Shade, N. J., assignor to Royal
Electrotype Company, Philadelphia, Pa. Royaltype
plate. 1,650,404; Nov. 22.
Walsh, Kitthebelle F., administratrix. (See Walsh,
James M.)

James M.) Walsh, Owen, M'f'g. Co. (See Villaret, Gustave E., as-

Walsh, Owen, Mrig. Co. (See Villaret, Gustave E., as-signor). Hetel H. Newton, assignor to Caro Cloth Carpo-Walsh, article H. Newton, assignor to Caro Cloth Carpo-ming composite fabric, 1,520,307; Mar. 8. Walsh, Patrick J., Morris, Ill. Radiator attachment, 1,628,344; May 10. Walsh, Robert C., St. Louis, Mo. Merchandlse cabinet, 1,631,844; June 7.

Walsh & Weldner Boiler Co. (See Jackson, Percy, as-

Walsh & Weidner Boiler Co. (See Jackson, Percy, assignor).

Walsoe, Sigurd L., Lyndhurst, and J. P. Hill, Norther Plainfield, N. J., assignors to Remington Typewriter Company, Illion, N. Y. Typewriting machine. 1,630.673; Nov. 29.

Walstad, Adolph N., Tacona, Wash. Subgrade template. 1,630.991; May 31.

Walstead, Gustav A., assignor to B. Jones, Chicago, Ill. Device for applying paste to labels. 1,615,778; Jan. 25.

Walston, Joseph A., assignor of forty per cent to A. obstruction. 1,649.677; Nov. 22.

Walstrom, Axel M. (See Williams, G. W., and Walstrom.) Waltermade, Charence J., New York, N. Y. Gas heater. 1,649,035; Nov. 8.

Walter, Ruth B., et al. (See Gallagher, George D., as-Walten, Ruth B., et al. (See Gallagher, George D., as-

1,648,035; Nov. 8. Walten, Ruth B., et al. (See Gallagher, George D., assignor.)

Walter, Arthur, Schweinfurt-on-the-Main, and W. Kuttruf, Selingenstadt, near Wurzburg, assignor to Maschinenfabrik Walter & Kuffer, Schweinfurt-on-the-Main, Germany. Harrow. 1,622,321; Apr. 12.

Walter, Arthur, Schweinfurt-on-the-Main, Germany. Harrow. 1,624,321; Apr. 12.

Walter, Harrow. 1,622,321; Apr. 12.

Walter, Benjamin V., Omaha, Nebr. 1,72; Whiting Coroller, Alley L. C. Kinlock, Mo., assignor to National Lend Company, New York, N. Y. Pressure regulator. 1,642,132; Sept. 13.

Walter, Edward C., Kinlock, Mo., assignor to National Lend Company, New York, N. Y. Pressure regulator. Walter, Frank L. C. Angeles, Calif. Telephone and cap therefor, 1,631,530; June 7.

Walter, Frank L. C. Angeles, Calif. Telephone and cap therefor, 1,631,530; June 7.

Walter, Frank H., assignor to Unico Motor Products Corporation, St. Louis, Mo. Piston ring. 1,636,027; July 19.

Walter, Harrison B., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill. Box. 1,616,014; Feb. 1.

Walter, Harrison B., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill. Box. 1,616,014; Feb. 1.

Walter, Harrison B., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill. Box. 1,616,014; Feb. 1.

Walter, Harrison B., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill. Box. 1,616,014; Feb. 1.

Walter, Harrison B., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill. Box. 1,616,014; Feb. 1.

Walter, Harrison B., assignor, by mesne assignments, 10,017,020; Des Moines, Jown. Scooter vehicles, 1,623,655; June 28.

Walter, Harrison B., assignor, by mesne assignments, 10,017,020; Nov. 15.

Walter, Kowell E., Des Moines, Jown. Scooter vehicles, 1,617,357; Feb. 15.

Walter, Robert C., Sos Moines, Jown. Scooter vehicles, 1,617,357; Feb. 15.

Walter, Robert C., Sos Moines, N. Y. Lock hinge for doors and other movable elements. Rel6,671; July 12.

Walter, Robert C., assignor to United Engineering, 4.

Foundry Company, P

Printing apparatus. 1,639,739; Aug. 23.

Walters, Harry E., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Chilled-fron roll. 1,627,626; May 10.

Walters, Herbert H., Syracuse, N. Y. Educational device. 1,618,566; Feb. 22.

Walters, Joseph C., Waterbury, Conn. Envelope. 1,626,578; Apr. 26.

Walters, Oliver H., assignor of one-half to H. M. Shockley, Tacoma, Wash. Hose coupling. 1,637,095; July 26.

Walters, Omer T., Tabler, Okla. Stalk cutter. 1,652,347; Dec. 13.

Uec. 13.

Walters, Percy, Yonkers, N. Y. Cooling means for internal-combustion engines, 1,618,614; Feb. 22.

Walters, Philip N., New York, N. Y., assignor to Gaco Corporation, East Greenwich, R. I. Bathing boat, 1,625,579; Apr. 19.

Walter, Management, W. V., Transportation of weight of the Computer of two-fifths to R. A. Walter, Frank, Defroit, Mich., Centering calipers, 1,630,505; May 31.

Walther, Frederick, Omaha, Nebr. Crate, 1,820,585; Mar. 8.

Mart. 8.

Walther, George, assignor to The Dayton Steel Foundry Company, Dayton, Ohio. Producing of cast-metal wheels. 1,631,712; June 7.

Walther, George, assignor to The Dayton Steel Foundry Company, Dayton, Ohio. Producing of cast-metal wheels. 1,641,107; Aux. 30.

Walther, Mathias 3,434; Sept. 27.

Walther, Wilhelm. See Schäfer, M., Häbnle, and Walther,

Walton, Charles and O. H., Needham Heights, Mass.; said Charles Walton assignor to said O. H. Walton. Feed-controlling mechanism for circular-knitting machines. 1,648,088; Nov. 8.

Walton, Frank W., East Orange, N. J., assignor to Westinghouse Lamp Company. Base for theftproof lamps. 1,647,593; Nov. I., Walton, Joseph S., Los Angeles, Calif. Combination hair curier and waver. 1,639,357; Aug. 16.
Walton, Oliver H., NeedWalton, Charles and O. H.)
Walton, Oliver H., NeedWalton, Charles and O. H.)
Walton, Oliver H., NeedWalton, Charles and O. H.)
Walton, 1,625,267; Dec. 13.
Walton, 15,141, Warsaw, Ind. Fencepost. 1,617,888;

Wanamaker, John, New York. (See Drevenstedt, Amy, assignor.)
Wanamaker, John, Philadelphia. (See Kratz, Howard L., assignor.)

assignor.)

Wanamaker, John M., Trenton, Mo. Cutter-bar connecting rod. 1,622,299; Mar. 29.

Wanamaker, Seth, Ramsey, N. J. Insulating and indicating covering for containers. 1,633,298; June 21.

Wandel, Kurt, assignor, by mesne assignments, to Arkell crinkling apparatus. 1,630,329; May 31.

Wandel, Kurt, assignor, by mesne assignments, to Arkell Safety Bag Company, New York, N. Y. Paper-creping apparatus. 1,630,329; May 31.

Wanderer-Werek, vorm. Winder E., assignor.)

Wandersleb, Ernst, assignor to the Firm Carl Zeiss, Jenn, Germany. Finder for photographic apparatus. 1,616,723; Feb. 8.

Ges. (See Buschman, Wandersleb, Ernst, assignor to the Firm Carl Zeiss, Jena, Germany. Finder for photographic apparatus. 1,616,728. Feb. 8. (Sioux Center, Iowa. Beet harvester. 1,636,883; July 26. Wanek Abert G., Wabpeton, N. Dak. Washing machine. 1,639,872; Aug. 23. Wanerman, Hyman, New York, N. Y. Liquid refreshment dispenser. Des. 72,301; Mar. 22. Wanerman, Hyman, New York, N. Y. Liquid-refreshment holder. Des. 72,502; May 3. May 1. (Single Person of the Control of the Control

Wantz, Julius B., assignor to Victor X-Ray Corporation, Chicago, III. X-ray apparatus. 1,628,014; May 10. Wantz, Julius B., Oak Park, assignor to Victor X-Ray Corporation, Chicago, III. Stereoscope. 1,649,878;

Nov. 22.
Wantz, Julius B., Oak Park, assignor to Victor Corporation, Chicago, Ill. Stereoscope. 1,6 tor X-Ray

Wappat, Fred W., Pittsburgh, Pa., Portable saw. 1,623,230; Apr. 5. (See Hunter, Samuel, assignor.) Wappler Electric Co. (See Mutscheller, Arthur, assignor.) Wappler Electric Company Inc. (See Wappler, Frederick H., assignor.)

H., assignor.)
Wappler Electric Company. (See Wappler, Reinhold H., assignor.)

Wappler Electric Company. (See Wappler, F. H., and

Wappler Electric Company. (See Wappler, F. H., and Fayer, assignors.)
Wappler Electric Company. (See Wappler, F. H., and Koenitz, assignors.)
Wappler, Frederick II., Flushing, assignor to Wappler Electric Company Inc., Long Island City, N. Y. Clampling electrode. 1,652-804: Dec. 13.
Wappler, Frederick H., and C. Fayer, Flushing, N. Y., assignors to Wappler Electric Company, Inc. X-ray apparatus. 1,628,699; May 17.

Frederick H., Elmburst, and A. C. Koenitz, ork, N. Y. assignors to Wappler Electric Comnc. Attachment for X-ray tables. 1,623,567;

Ward, Henry L., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Forming apparatus. 1642,735; Sept. 2009. Ward, James A., Mallard, Jowa. Wick humidifier for Cigar cases. 1,639,912; Aug. 23.
Ward, James E., Chicago, Ill. Drum. 1,619,046; Mar. 1. Ward, James E., Chicago, Ill. Drum. 1,619,046; Mar. 1, 1111, 2011. Watchuga Falls, N. C. Fence. 1,633,619; June 2011.

June 28.

Ward, John N., Jackson, Tenn. Stringed musical instrument. 1,638,423; Aug. 9.

Ward, Joseph E. (See Fayle, Charles E., assignor.).

Ward, Joseph E. (See Fayle, Charles E., assignor.).

Ward, Kenneth B. (See Bushman, E. L., Curtis, and Ward.).

Ward Kenneth B. (See Thorson, L. M., and Ward.).

Ward Leonard Electric Company. (See Schwagermanne Willism, assignor.).

Ward Leonora H., Weatherford, Okla. Blackboard-craser cleaner. 1,619,899; Mar. 8.

Ward-Love Pump Corporation. (See Johnson, Oscar W., assignor.).

Ward, Marshall H., Brooklyn, N. Y., and B. L. Aurand, ward, Marshall H., Brooklyn, N. Y., and B. L. Aurand.

Wardell. dell. Henry R., Daytona, Fla., assignor to Johns-[anville Incorporated. Shingle fastening. 1,629,558;

May 24.

Wardell, Henry R., assignor, by mesne assignments, to Johns-Manville Corporation, New York, N. Y. Roof. 1,642,316; Sept. 13.

Wardell, John W., Sugar, assignor of one-third to J. Stillman and one-third to G. W. Stillman, Salt Lake City, Utab. Electromagnet spool. 1,616,207; Feb. 1.

Wardhauph, Ralph, Brooklyn, N. Y. Direction indicator for automobiles. 1,629,425; May 17.

Wards Products Co. (See Dissette, John W., assignor, Wards Products Co. (See Dissette, John W., assignor, Wards Charles A., and A. Diechmiller, Pasadena, Md Wards, Charles A., and A. Diechmiller, Pasadena, Md Ware, Charles A., and Sept. 10,100 ft. of F. B. Maxfield Holyoke, Mass. Spring. 1,638,516; Aug. 9.

Ware, Edward M., Haddonfield, N. J. Bedclothes bolder Des. 74,039; Dec. 6.

Ware, Louis, Miami, Ariz. Dispensing container for inbricating grease, etc. 1,625,968; Apr. 26.

Ware, Paul, assignor to Ware Radio, Inc., New Yorl N. Y. Radiotelephony. 1,627,718; May 10.

Ware, Paul, New York, N. Y., assignor to Ware Radio, Inc. Two-way radio communication system. 1,648,835; Nov. 8.

Ware Kaidlo Communication system. 1,648,853; Ware Kaidlo, Inc. (See Ware, Paul, assignor.) Ware, Robert R., Chicago, Ill. Rolley, 1,648,496; Feb. 22. Ware, Rodore R., Wadsworth, Ohio. Beam compass, 1,629,328; May 17. Ware, Theodore C. (See Melcher, Irving W., assignor.) Waream, Charles E., Chachmati, assignor to The American Laundry Machinery Company, Norwood, Ghio Canal Laundry Machinery Company, Norwood, Ghio Waream, Charles E., Norwood, Ohio. Power attachment for pressing machines. 1,640,015; Aug. 23. Warford Corporation, The. (See Utz. John G., assignor.) Warford, James W. (See Northcott, E., and Warford, Wargu, Kalman, assignor to Pyrocolor Corporation, New York Corporation, Marched Hasse Objects and Protecting the decorated surface Hasse Objects and Protecting Warhurst, Thomas J. (See Aniaul, H., and Warhurst.) Warbus, Oliver F., Albany, N. Y., assignor to Versare Corporation. Steering mechanism for vehicles. 1,632,460; June 14.

Warhus, Oliver F., Albany, N. Y., assignor to Versare Corporation. Steering mechanism for vehicles. 1.632,460; June 14. Waring, Edward J., Plainfield, assignor to Pyrene Manu-facturing Company, Newark, N. J. Door latch. 1.634,197; Dec. 27. Waring, Guy H., Orongo, assignor to W. G. Waring, Webb City, Mo. Operation of fume furnaces. 1,052,224;

Dec. 13.

Waring, Horace, Great Crosby, assignor to Associated Lead Manufacturers Limited, London, England. Ap-paratus for the manufacture of lead oxide. 1,649,428; Nov. 15.

Nov. 15.

Waring, John L., Washington, D. C. Tonsil-removing apparatus. 1,615,494; Jan. 25.

Waring, William C. (See Waring, Guy H., assignor.)

Warmack, John, Fort Smith, Ark. Mail-box support. 1,631,694; June 7.

Warman, William H., Pinner, England. Mechanical pipe cleaner. 1,651,651; Dec. 6.

Warmishum, Arthur, Leicester, England. Telescopic attachment for hand cameras. 1,651,493; Dec. 6.

Warmoth, George W., Indianapolis, Ind. Compensating of the compensation of the compensatio

Warner, Albion L., New York, N. Y., assignor to C. L., Russell, Rahway, N. J. Folding table. 1.314.500: Oct. 4.

Warren, Alfred T., New York, N. Y. Keyless lock. 1,654,440; Dec. 27. Warner, Alonzo A., assignor to Landers, Frary & Clark, New Britain, Conn. Electrical connection. 1,631,094;

Wanner, Arthur, Harenford, assignor to R. If. Beaumont Company, Philadelphia, Ph. Skip-boist and tram car equipment. 1.633,299; June 21 Warner, Benjamin S., assignor to Endicott Johnson Cor-poration, Endicott, N. Y. Work holder. 1,622,855; Mar. 29.

Warren Brothers Company. (See Ash, H. W., and Slemmer, assignors.)
Warner Brothers Company, The. (See Nickerson, Ger-

Warner Brothers Company, The. (See Nickerson, Gerwarde L., assignor.)
Warner Bros. Inc. (See Warner, William E., assignor.)
Warner, Chester E., Berwyn, assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Plural plus. I. 631, 1995. Jane 14.
Warner, Clarence. (See Buvinger, G. A., and Warner.)
Warner, Clarence, assignor to Deleo-Light Company, Paymon and the Company of the Company

McCornick Harold V., assignor.)
Warner, Frank A., Los Angeles, Calif. Shift-lock release for typewiters. 1.632.334; Dec. 13.
Warner, Frank E. (See King, G. A., Warner, and Tompkins)

Gear Company. (See Simpson, John M., as-

signor.)

Warner, Glenn S., Palo Alto, Calif., assignor to A. G. Spalding Bros., New York, N. Y. Tackling dummy. 1,022,601; Mar. 29.

Warner, James L., Tulsa, Okla. Pietertum for stringed instruments. 1,643,550; Sept. 27.

Warner, Joseph Assiville, Tenn. Manufacture of ferrophosphorous. 1,646,268; Oct. 18.

Warner, Joseph L., Mayer, Arlz. Extracting gold, 1,021,607; Mar. 22.

Warner, Joseph L., Mayer, Arlz. Extracting gold, 1,622,607; Mar. 22.

Warner, Pauline B., et al. (See Smith, Swan, assignor.) Warner, Percy de F. (See Fenton, Paul E., and Warner, Warner, Percy de F. (See Fenton, Paul E., and Warner, Percy G. F. (See Fenton, Paul E., and Warner, Paul E., and Warner, Percy G. F. (See Fenton, Paul E., and Warner, Percy G. F. (See Fenton, Paul E., and Warner, Paul E., and Warner, Percy G. F. (See Fenton, Paul E., and Warner, Paul E., and Warne

Warner, Ralph M. (See Wright, F. E., and Warner.)

Warner, Raymond M., assignor to The Miller Rubber Com-pany, Akron, Ohio. Vulcanizing rubber. Re16,682; pany, Akron, July 19.

Warner, Rudolph J., assignor to Warner Jewelry Case Company, Buffalo, N. Y. Jewelry box. 1.618.561:

Yell, 227.

Warner, Kusseil A., Schenectady, N. Y., assignor to General Electric Company. Method and apparatus for measuring volt amperes in an alternating-current circuit. 1.614,219; Jan. 11.

Warner, Russeil A., Schenectady, N. Y., assignor to Genzine State of the Company. Electric meter. 1.615,781; Jan. 25.

Warner and Swasey Company, The. (See Burger, William J., assignor.)

Warner and Swasey Company, The., and Van Handersveld, assignors.)

Warner and Swasey Company, The., and Warner and Swasey Company. The. (See Burger, William Warner, All Swasey Company, The., and the s

and Van Hamersveld, assignors.)
Warner, Thomas A. (See Dickens, J. R., Harris, and
Warner, Walter W., Detroit, Mich. Automatic humidifier attachment for water pans. 1.645,566; Oct. 25.
Inc., Newark, N. J.
Hamp for metal receptions.
1.643,675; Oct. 18.
J. Bung for metal receptions.
Warner, William W., Middletown, Ohio. Skater's article.
1.634,061; June 28.
Warnock, Cine W., Bucyrus, Ohio. Combined test bath,
sample warmer, and hot-water reservolr. 1.636,116;
warr, Harold G., Park Ridge, assignor, by mesne assignwarr, Harold G., Park Ridge, assignor, by mesne assign-

sample warmer, and not support the sample warmer, harold G. Park Ridge, assignor, by mesne sssignments, to Maintenance Equipment Company, Chicago, III. Ballast-screening machine. 1,613,420; Jan. 4: Warr, Harold G., Park Ridge, assignor to The P & M Company, Chicago, III. Rail anchor. 1,613,421;

Jan. 4.
Warr, Harold G., Park Ridge, assignor to The P & M
Company, Chicago, Ill. Rail anchor. 1,619,902;

Mar. 8.
arr, Harold G., Park Ridge, assignor to The P & M
Company, Chicago, Ill. Rail anchor. 1,624,028; Warr, Hare Company, Company, 12.

Apr. 12.
Warr, Harold G., Park Ridge, assignor to The P & M
Company, Chicago, Ill. Rail anchor. 1,644,179;

Oct. 4.

Warr, Harold G., Park Ridge, assignor to The Company, Chicago, Ill. Rail anchor. 1, 1,647.325;

Company, Chicago, 11.

Nov. 1.

Warr, Harold G., Park Ridge, assignor to The P & M.

Warr, Harold G., Park Ridge, assignor to The P & M.

Company, Chicago, II. Rall anchor. 1,648,684; Nov. 8.

device. 1,623,765; Apr. 5.

Warren, Arthur, Kennington Cross, and S. N. Solemon,

Westminster, London, England. Treasury-note cabinet. 1,624,772; Apr. 12.

Warren Brothers Company. (See Burdge, Jeffersor S.,

assignor.).

native involuers Company. (See Burdge, Jefferson S., assignor.)
Warren, Clarence A., Independence, Mo. Weeder. 1.644,008; Oct. 4.
Warren Clock Company. (See Warren, Henry E., assignor.)

Warren, Clyde W. (See Russell, Zachary E., assignor.)
Warren, Coleman B., Norfolk, Va. Shouldering attachment. 1,631,444; June 7.
Warren, David, Lewiston, Me. Emulsifier, 1,626,487; Warren, I

Warren, David, Lewisson, Apr. 26, Eghert G. Milwaukee, Wis. Knitted cap. Warren, Frederick A., Flandreau, S. Dak. Stationery and office-appliance assembler. 1,443,477; Sept. 27. Warren, Freed R., Badgett, Tenn. Hame hook. 1,616,013; Feb. 1.

1,616,013; Feb. 1.

Warren, George E., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for use in handling welting. 1,620,790; Mar. 15.

Warren, George E., Swampscott, Mass., assignor to United States, and the Corporation of Company of Company. J. Manufacture of Stones. 1,649,272; Nov. 15.

Warren, Glenn B., Schenectady, N. Y., assignor to General Electric Company. Elastic-full turbine. 1,631,660; June 7.

Warren, Glenn B., Schenectady, N. Y., assignor to General Electric Company. Locomotive. 1,631,661; Warren, Glenn B., Schenectady, N. Y., assignor to General Glectric Company.

Warren, Glenn B., Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine. 1.651.855;

Warren, Henry E., assignor to Warren Telechron Com-pany, Ashland, Mass. Clock movement. 1,615,664; Jan. 25.

Jan. 25.

Warren, Henry E., assignor to Warren Clock Company,
Ashland, Mass. Mercury-tube switch. 1,631,713;
June 7.

Warren, Henry E., Ashland, Mass., assignor to General
Electric Company. Manufacturing gear wheels.
1,640,432; Aug. 30.

Warren, Henry E., Ashland, assignor to Warren Clock

rren, Henry E., Ashland, assignor to Warren Clock ompany, Ashland, Mass. Speed regulator, 1,646,269;

Warren, James A., Denver, Colo. and system. J.516.773; Feb. 8. Warren, James A., Denver, Colo. Pumping mechanism and system. J.516.774; Feb. 8. Warren Jewelry Case Company. (See Warner, Rudolph J.,

Warren, John J., Brownville, N. Y. Truing lathe for wood-pulp grinders. 1,642,053; Sept. 13. Warren, John S., Sun, Miss. Cane stripper. 1,628,087;

May 10.

Warren, Joseph A., Mount Vernon, assignor to Dubilier
Condenser Corporation, New York, N. Y. Supporting
means for electrical device. 1,641,513; Nept. 6.

Warren Leather Goods Company. (See Elliott, Bamford,

Warren Leather Goods Company, assignor, assignor, assignor, warren, Richard Washington, D. C. Display rack. 1615,301, Mar. S. East Orange, N. J. assignor to Dubliler Condenser Corporation. Radiofrequency transformer, 1623,143; Apr. 5.

Warren Telechron Company. (See Warren, Henry E.,

former, 1,923,143; Apr. v. Warren Telechron Company. (See Warren, Henry E., assignor.)
Warren Telechron Company. (See Warren, Warren, Virgil P., Atlanta, Ga. Refrigerator wall. 1,621,386; Mar. 15.
Warren, Virgil P., Atlanta, Ga. Refrigerator-lee-tank support. 1,621,887; Mar. 15.
Warren, William C., Philadelphia, Pa., assignor to S. L. Allen & Co., Inc. Cultivator tooth. 1,622,619; Mar. 29.

29.

Warren, William S., Meriden, assignor to R. Wallace & Sons Mfg. Co., Wallingford, Conn. Spoon or similar article. Des. 72,048; Feb. 18.

Warren, W. Wallingford, Conn. Spoon or similar article. Des. 72,020; June 21.

Warrick, Charles F., assignor to Penberthy Injector Company, Detroit, Mich. Oil burner, 1,648,922; Nov. 15.

Warrick, Charles F., assignor to Penberthy Injector Company, Detroit, Mich. Ignition and control mech-Company, Detroit, Mich. Ignition, Michael K., assignor. 1

warrick, Charles J., et al. (See assignor.)
warrick, James H., Beaver, Pa. Oil gauge. 1,649,375;
warrick, James H., Beaver, Pa. Oil gauge. 1,649,875;

Nov. 15.
Warriner, Robert, Braintree, Mass., assignor to Bethlehem
Shipbuilding Corporation. Feed tank. 1,638,607;
Aug. 9.

Shipbuilding Corporation. Feed tank. 1,638,607; Aug. 9.
Warring, Robert T., and G. W. Stultz, Brooklyn, N. Y. Radiator air valve. 1,619,386; Mar. 1.
Warschau, Hans A. F. L. M., Hamburg, Germany. Engine or pump. 1,618,210; Jan. 4.
Warschau, Hans W. (See Christensen, A., and Warsen, J. W. Christensen, A., and Warsen, J. Warsch, W. L. L. Warth, Albin H., assignor to The Crown Cork & Seal Company of Baltimore City, Baltimore, Md. Apparatus for gas treating articles. 1,641,712; Sept. 6.
Warthen Train Control Corporation. (See Browne, Walter Warwick, Eleanor O. and R. M., Eastlake, Fla. Dispensing device. 1,620,178; Mar. 8.
Warwick, Rogers M. (See Pangborn, L. D., Warwick, and McKNy.)

Warwick, R. M.) Rogers M. (See Warwick, Eleanor O. and

Wasberg, Axel, and W. W. Darrow, assignors to Camel Company, Chicago, Ill. Steel door. 1,627,216; May 3. Waschbusch. Michael, Park Ridge, Ill. Playhouse. 1,649,938; Nov. 22. Waschnack, Adolf, Neu Finkenkrug, assignor to Siemens & Haiske Aktiengosellschaft, Wernerwerk, Stemensstadt, near Berlin, Germany. Telephone system. 1,639,445; Aug. 16.

Wassige Charles, Ruell, France. Speed-reducing gear. 1,619,552; Mar. 1,1619,552; Mar. 1,1619,552; Mar. 1,1619,562; Mar. 1,1619,619; Mar. 1,161

Washburn Company, The. (See Andrews, Charles, jr.,

Washburn Company, The. (See Andrews, Charles, Jr., assignor.)
Washburn, Edwin C., Englewood, N. J. Lever draft gear. 1,626,258; Apr. 26.
Washburn, George P., Portland, Oreg. Construction for the company of the construction for the company of the company. All the company of th

Washington, Irene M., Brooklyn, N. Y. Concrete plaque and making same. 1,641,404; Sept. 6. Washington Manufacturing Company. (See Knott, Harry H., assignor.) Concrete plaque

H., assignor.)
Washington Manufacturing Co. (See Von Boecklin, A. E.
Washinkton, assignors.)
Washinkte, Adolph P. (See Harvey, R., and Washinke,)
Washinkte, Albert P. (See Dudass, A., and Washi), 1,620,502;
Washington, Wachaw, Ludlow, Vt. Rail joint, 1,620,502;

Wasmuth-Goodrich Company. (See Hughes, Earl V., assignor.)

Wasmuth-Goodrich Company. (See Hughes, Earl V., assignor.)
Wass, Andrew G., Minneapolis, Minn. Sash operator. 1,051,494; Dec. 6.
Wass, Angust, Mellerud, Sweden. Rail joint. 1,633,799;
Wassel, Albert, assignor to G. J. Henry, San Francisco, Calif. Vebicle wind wing. 1,625,875; Apr. 26.
Wassel, Albert, assignor to G. J. Henry, San Francisco, Calif. Vebicle wind wing. 1,625,875; Apr. 28.
Wasserkampf, Friedrich R., assignor to the Firm: Neutrony, Marchael Company, Indicator. 1,647,894; Nov. b. H., Kiel, Germany, Indicator. 1,647,894; Nov. b. H., Kiel, Germany, Indicator. 1,647,894; Nov. wasserman, Hyme, Brooklyn, N. Y. Producing fur-bearing sheets used in the manufacture of garments and garment trimmings. 1,637,885; Aug. 2.
Wasserman, Hudolf, New York, N. Y. Marking device.
Wassmuth, Alfred, G. m. b. H. & Co. (See Barthel, H., and Kurth, assignors).
Wasson, Robert B., Cranford, N. J. Horsepower-meter stand. 1,652,225; Dec. 13.
Watcher, Albert K., Cluchmaft, Ohio. Cross-feed mechastand, Labert K., Cluchmaft, Ohio. Cross-feed mechastand, Henry M., Sapulpa, Okla. Tunneling device. 1,650,108; Nov. 22.
Waterbory, Henry M., Sapulpa, Okla. Tunneling device. 1,650,108; Nov. 22.
Waterbory Button Company. (See Kaynor, Warren F., assignor) Button Company. (See Kaynor, Warren F., assignor).

Waterbury Button Company. (See Kaynor, Warren F.,

assignor.)
Waterbury Farrel Foundry and Machine Company, The.
(See Burton, Jesse B., assignor.)
Waterbury Farrel Foundry and Machine Company, The.
(See Candee, Zenas P., assignor.)
Waterbury Farrel Foundry and Machine Company, The.
(See Wilcox, Richard L., assignor.)
Waterbury Burker L., assignor.)

house)

Materhouse, Edgar, South Shields, assignor to A. Reyrolle
& Company Limited, Hebburn-on-Tyne, England, Electric switch gear. 1,448,634; Sept. 27.

Waterloo Saddlery Company. (See Grings, Casper H.,

assignor.)
Waterman, Elizabeth H., Binghamton, N. Y. Game apparatus. 1,630,646; May 31.
Waterman, Elimer E., Remus, Mich. Safety attachment for tractors. 1,625,005; Apr. 19.
Waterman, Harry H., Strasburg Junction, Va. Air-swept ball mill. 1,630,932; May 31.
Waterman, L. E., Company. (See Ferris, William I., as-

Waterman-Waterbury Company. The. (See Cross, John assignor.

H., assignor.)
Waterous Fire Engine Works, Incorporated. (See Storey, Léonidas P., assignor.)
Waters, Charles B., Montelair, N. J. Water-heater casing. Des. 74,086; Dec. 18.
Waters, Charles B., Montelair, N. J. Welding transformer. 1,618,497; Feb. 25.
Waters, George A., New Kirk, Okla. Pin. 1,632,386; Waters, Harry F., St. Lowis, Mo. Necktle. 1,618,134; Feb. 15.
Waters, Harry F., St. Lowis, Mo. Necktle. 1,628,700; May 17.

Waters, Harry F., St. Louis, Mo. Necktie. 1,628,700; May 17. Waters, Harry H. (See Alexander, R. L., Wishart, and

Waters, Harry H., assignor to Climax Engineering Com-pany, Clinton, Iowa. Neutral brake. 1,619,449; Mar. 1. Waters, Henry B., Ann Arbor, Mich. Vehicle signal. 1,635,651; July 12. Waters, John F., Chicago, Ill. Steam cooker. 1,653,243;

Waters, J Dec. 20

Dec. 20. Waters, Millard E., assignor to Smith Separator Company, Tulsa, Okia. Spiral baffle. 1.639.536; Nov. 15. Company of Okmuigee, Okia. Takedown apparatus. 1.638.674; July 28. Waters, Victor J., assignor of one-third to H. S. Mercer, Shittler, Okia. Valved piston. 1.620.416; Mar. S. Watertown Tablesidie Co. (See Drew, Herbert H., as-

signor.)
Waterworth, Robert J., assignor of one-half to L. M.
Studevant, Sidney, Ohlo. Rotary feeder. 1,630.552;

Muy S1.

Watkins, Benjamin F. (See Van Wagenen, Donald S., assignor)

Watkins, Wighten S., Wichita Falls, Tex. Wheel and demonstable rim. 16.12.867; Jan. 4.

Watkins, John and W. E., Milmay, N. J. Swing-operated fan, 16.23.607; Apr. 5.

Watkins, John C., Vancouver, British, Columbia, Canada. Ice-cream cabinet. 1.030,082°, May 31.

Watkins, Joseph, Marysville, Pa. Confection mold. 1,627,421; May 3. Watkins, Lester R. (See Michaels, J. I., and Watkins.) Watkins Manufacturing Company, The. (See Michaels, J. I., and Watkins, assignors.) Watkins, Owen C., Festus, Mo. Weather strip. 1,624,285; Apr. 12. Watkins, Tom, Gateway, Colo. Rein support. 1,642,800; Sept. 20.

1.042,299; Apr. 12.

1.042,299; Apr. 12.

1.042,299; Apr. 12.

1.042,309; Apr. 12.

1.042,309; Apr. 12.

1.042,309; Apr. 12.

1.042,348; Apr. 12.

1.042,348; Apr. 12.

1.042,348; Apr. 12.

1.042,348; Apr. 12.

1.042,343; Apr. 13.

1.042,343; Apr. 13.

1.042,343; Apr. 14.

1.042,343; Apr. 14.

1.042,343; Apr. 15.

1.042,343; Apr. 15.

1.042,343; Apr. 16.

1.042,343; Apr. 17.

1.042,343; Apr. 18.

1.042,343

Maconne (4. Watson, Arthur H., Chicago, Ill., assignor to R. C. Potter, Riverside, Ill. Awning for motor vehicles 1,634,860; July 5.

July 5.

Watson, Charles H., et al. (See Baker, Thomas T., assignor.).

Watson, Charles S. (See Hinchley, J. W., and Watson.)

Watson, Charles W., St. Kilda, Victoria, Australia. Holow structure of plastic material and producing the same centritugally. 1,641,793; Sept. 6.

Watson, Clyde E., Appleton, Wis. Display rack. Des. 72,337; Apr. 26.

Watson Company. The. (See Brown, William T., as-

T2.537; Apr. 26.
Watson Company, The. (See Brown, William T., assignor.)
Watson, Edward F., Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Signaling system, 1629,568, "Boral Park, N. Y. Pneumatic Division of the Company, and the Company, and the Company, the Company of the Watson, Emer E., Hamilton, Ohio, assignor to Herring-Hall-Marvin Safe Company, New York, N. Y. Combination-lock mechanism, 1617,038; Feb. S.
Watson, Emer E., Hamilton, Ohio, assignor to Herring-Hall-Marvin Safe Company, New York, N. Y. Combination-lock mechanism, 1617,038; Feb. S.
Watson, Ernest, Wauwatosa, Wis. Form holder for concrete walls, 1,622,072; Mar. 22.
Watson Experimental Laboratory Company, The. (See Mittendorf, William R., assignor).
Watson, Frank B., and E. Culver, assignors to United Kingdom Optical Company, Limited, London, England, Lens. 1,632,208; June 14.
Watson, George D., Lithgow, assignor to Corkscrew Steel Fences Ldd., Edney, New South Wales, Australia, Stephen Company, Ship propulsion, 1,618,730; Feb. 22.
Watson, George G., Rugby, England, assignor to General Pelectric Company, Ship propulsion, 1,618,730; Feb. 22.

Watson, Harold L., Lynn, Mass., assignor to General Blectric Company. Process and apparatus for producing silica articles. 1,621,446; Mar. 15.
Watson, Harold L., Lynn, Mass., assignor to General Electric Company. Producing silica articles. 1,621,446; Mar. 15.
Watson, Harold L., Lynn, Mass., assignor to General Electric Company. Producing high-grade vitreous assignments, to American Incubators, Inc., New Brunswick, N. J. Fuel-feeding means for oil burners. 1,612,997 Jan. 4.
Watson, Herbert H., Gee Jennings, V. H., and Watson, James, Marinette, Wis. Automobile hood. 1,648,086; Nov. 8.

Watson, Limes Marinette, wis Markon, Limes Marinette, wis Markon, St. W. 8. Watson, St. W. 8. Watson, James A. Silver Spring, Md. Oil-purifying apparatus for hydrocarbon engines. 1,630,876; May 31. Watson, James A. Silver Spring, Md. Oil-purifying apparatus for hydrocarbon engines. 1,651,495; Dec. 6. Watson, James B. Mattapan, assignor of one-third to Lances B. Mattapan, assignor of one-third to E. Cales, Rigition, Mass. Guard for circular saws. 1,664,78;

Eco. 8.
Watson, James B., Mattapan, assignor of one-third to J. C. Reiche, Arlington, and one-third to C. E. Cates, Brighton, Mass. Guard for buzz planers. 1,618,120; Feb. 15.

Watson, John C., Attleboro, Mass., assignor of one-half to T. P. Gates, Providence, E. I. Cross-dyeing cellulose fabric. 1,629,769; May 24.
Watson, John C., Attleboro, Mass., assignor of one-half to T. P. Gates, Providence, R. I. Cross-dyeing cellulose fabric. 1,629,770; May 24.
Watson, John W., Wayne, Pa. Motion-controlling mechanism. 1,635,913; July 12.
Watson, John W., Philadelphia, Pa., assignor, by mesne assignments, to John W. Watson Company. Recoil brake. 1,652,074; Dec. 6.
Watson, John W., Company. (See Watson, John W., as-Watson, John W., and R. A., Wayne, Pa. Spring boot. 1,634,163; June 28.
Watson, Leonard E., St. Marys, W. Va. Wrench. 1,635,102; July 5.
Watson, Leonard E., St. Marys, W. Va. Tool. 1,652,075;

1,635,102; July 5.
Watson, Leonard E., St. Marys, W. Va. Tool. 1,652.075;
Dec. 6.
Watson, Manly A., et al. (See McKenney, F. Y., and

Watson, Manly A., et al. (See McKenney, F. Y., and Cheney, assignors.)
Watson & McDaniel Co. (See Jahn, Frederick L., assignor.)
Watson, Otto P., Michigan City, Ind., assignor to Reliance Manufacturing Company, Chicago, Ill. Sewing machine. 1,644,700; Oct. 11.
Watson, Philip H., assignor to Standard Pyroxoloid Corporation, Leominster, Mass. Water waver. 1,635,065; Watson, Richard A. (See Watson, John W. and R. A.)
Watson, Russell E., et al., executors. (See Francke, William J.)

William J.) Watson-Stillman Co., The. (See Klein, F., and Penso, assignors.)
Watson-Stillman Co., The. (See Nitchie, Hubbard D.,

Warson-Stillman Co., The. (See Wigtel, Carl, assignor.)
Warson-Stillman Co., The. (See Wigtel, Carl, assignor.)
Warson, Thomas S., Milwaukee, assignor to Kohler Company, Kobler, Wis. Automatic generating plant.
1,627,942; May 10.
Warson, Walter C., et al. (See Johnson, Alvin L., assignor.)

Vanue 21.
Watters, Daniel M., assignor to Killefer Manufacturing
Company, Los Angeles, Calif. Road tool. 1,620,247;

Company Compan

Wilmington, Del. Accounting machine, 1,615,806; Jan. 25.
Watters, Luther A., and S. F. Lloyd, St. Louis, Mo., assignors, by mesne assignments, to Remington Rand, Inc., Tonawanda, N. Y. Selecting apparatus, 1,641,713; Wattle, William M., sovcester, Mass. Mat and making the same, 1,636,731; July 12.
Wattle, William M., assignor to Crompton & Knowless Loom Works, Worcester, Mass. Dobby cylinder, 1,639,322; Aug. 23.
Wattle, St. William M., assignor to Crompton & Knowless Loom Works, Worcester, Mass. Dobby cylinder, 1,639,325; Aug. 23.
Wattle, Earl. Washington, lown. Signal device, 1,639,325; Dec. 20.
Wattle, Earl. Washington, lown. Signal device, 1,633,255; Dec. 20.
Wattle, Elmer A., assignor to The Miller Improved Gas Engine Company, Springfield, Ohlo. Mixture valve for Straight Company, Springfield, Ohlo. Cylinder construction for gas engines. 1,619,03; Mar. 8.
Wattle, Kluer A., assignor to The Miller Improved Gas Engine Company, Springfield, Ohlo. Cylinder construction for gas engines. 1,619,03; Mar. 8.
Wattle, John S., Los Angeles, Calif. Reducing gear and The Miller and Company, Springfield, Ohlo. Cylinder construction for gas engines. 1,619,03; Mar. 8.
Wattle, Mohn S., Los Angeles, Calif. Reducing gear and Thomas and Company, Calif. Reducing gear and Troning machines. 1,624,668; Apr. 12.
Wattle, Walter H., Los Angeles, Calif. Reducing construction of the Market Ma

assignor.)
Waugh Equipment Company. (See Endsley, Louis E.,

Waugh Equipment Company. (See Edusicy, Louis E. assignor, Waugh Equipment Co. (See Waugh, James M., Chicago, Ill. Draft-gear uni 1.628.758; May 17.

Waugh, James M., assignor to Waugh Equipment Co., Chengso, III. Draft-gear unit. 1,625,177; Apr. 19. Waugh, Lester R., Mount Vernon, N. Y. Smoking utersil. Waugh, William K., assignor to Appleford Counter Check Book Company, Limited, Hamitton, Ontario, Canada. Bottle cap. 1,651,426; Dec. 6. Wauhob, O'rul, Sloux City, Iowa. Manifold heater. 1,627(769; May 10. W. 1007). (See Edens, Henry N., assignor).

Waukesha Motor Company. (See Fisher, James B., as-

signor.)
Waukesha Motor Company. (See Horning, Harry L., as-

Motor Company. (See Horning, H. L., Fisher,

Signor.)
Waukesha Motor Company. (See Horning, H. L., Fisher, and Pope, assignors.)
Waukesha Motor Company. (See Le Van Horning, Har-

waters and a company. (see Le van rotting, nar-waverly Movelty Co. (see Avery, U. S., and Trout, as-signors,) Waverly Oil Works Company. (see Willock, H. H., Caplan, and Babb, assignors.)

Way, Alben W., Philadelphia, Pa. Automobile door hinge. 1,662,965; Dec. 13. Way, Alben W., Lynn, Mass., assignor to L. A. Way, Pittsburgh, Pa. Treating hydrocarbons. 1,638,021;

Fittsburgh, Fa. Areause Aug. 9.
Aug. 9.
Way, Alexander B., Lynn, Mass, assignor to L. A. Way, Pittsburgh, Pa. Material for the treatment of hydrocarbons. 1,638,022; Aug. 9.
Way, Alva O., Schenetady, N. Y., assignor to General Electric Company. Coil former. 1,623,760; Apr. 5.
Way, Lewis A. (See Way, Alexander B., assignor) Wayman, Fred, Binghamton, N. Y. Device for controlling the operation of workmen's time clocks. 1,623,370; Apr. 5.

WAPP. Company. (See Baker, Linnaeus E., assignor.)
WAPP. Company. (See Gaston, Rabh M., assignor.)
WAPP. Company. (See Langston, Robert E., assignor.)
WAPP. Company. (See Langston, Robert E., assignor.)
WAPP. Company. (See Langston, Robert E., assignor.)
Aug. 30.

Aug. 23.
Weagant, Roy A., New York, N. Y., assignor to Radio
Corporation of America. Wireless-telegraph receiving
apparatus, 1,645,650 oct. 18.
Weary, U. S., et al. (See Clark, Edward E., assignor.)
Weatherhead, Albert J., ir., Cleveland, Ohio. Handle
and making same. 1,617,357; Feb. 15.
Worthead H. (See Müller, F. W., and
Wanthausell Edward H. (See Müller, F. W., and

Weatherhead.

Weatherhead, Moward H. (see Miller, F. W., and Weatherproof Body Corporation. (See Ritter, Frederick Weatherproof Body Corporation.) (See Ritter, Frederick Weatherproof Body Corporation) (See Ritter, Frederick Weather) (See Ritter) (See Ri

1.648,087; Nov. 8.

Weaver, Alian, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Tranmission of pictures by electricity. 1.653.074; Dec. 20.

Weaver, Chrence A. (See Callin, Winfield, assignor.) Weaver, David In Efficienton, N. J., assignor to Hartford function, 1.629,946; May 24.

Weaver, Frank F., Dallas, Oreg. Brood frame for beelives. 1,650,170; Nov. 22.

Weaver, Frank L., and M. F. Campioon, Norwich, Conn. Electrical connector. 1,623,189; May 17.

Electrical connector. 1,623,189; May 17. Aug. 9

Wenver, Gailard E., assignor to Weaver Manufacturing Company, Springfield, Ill. Truck jack. 1,638 790:

Weaver, Gailard E., assignor to Weaver Manufacturing Company, Springfield, Ill. Truck jack. 1,638,791;

Company, Springfield, Ill. Truck jack. 1,635,791; Aug. 9, Weaver, Gailard E., assignor to Weaver Manufacturing Company, Springfield, Ill. Forcing-press boister-adjusting construction. 1,940,510; Oct. 25.
Weaver, Gallard E., assignor to Weaver Manufacturing Company, Springfield, Ill. The changer, 1,650,674; Nov. 29.

Weaver, Herbert H., Chicago, and E. A. Belging to Martin-Party Corporation, Worker, Gallard E., and H. C. Buffington, assignors to Weaver Manufacturing Company, Springfield, Ill. Punching and riveting machine. 1,648,088; Nov. 6.
Weaver, Gailard E., and A. R. Squyer, assignors to Meaver Manufacturing Company, Springfield, Ill. Trip mechanism for jacks. 1,648,036; Nov. 8.
Weaver, Harry A., Indianapolis, Ind., assignor to Martin-Parry Corporation, York, Pa. The carrier. 1,634,278; July 5.
Weaver, Herbert H., Chicago, and E. A. Bolen, assignors to Northwestern Corporation, Morris, Ill. Cut-Weaver, Herbert H., Chicago, and E. A. Bolen, assignors to Northwestern Corporation, Morris, Ill. Cut-Weaver, Herbert H., Chicago, and E. A. Bolen, assignors to Northwestern Corporation, Works, Ill. Cut-Weaver, Herbert H., Chicago, and E. A. Bolen, assignments, to skinner Automotive Device Co., Inc., Sacramento, Calif. Oil and fuel saver. 1,640,865; Aug. 30.

Aug. 30.

Aug. 30.

Weaver, Ira A., assignor to Weaver Manufacturing Company, Springfield, Ill. Jack. 1,650,810; Nov. 29.

Weaver, Ira A., and J. Sternaman, assignors to Weaver Manufacturing Company, Springfield, Ill. Tire changer. 1,646,511; Oct. 25.

Weaver, James C., San Diego, and H. B. Ames, Indio; said Weaver assignor of one-fourth to R. C. Sparks and one-fourth to J. J. Draney, San Diego County, Calif. Gear-changing mechanism. 1,647,895; Nov. 1.

Weaver, John L., Philadelphin, Fa. Portable woodworking machine. 1,643,524; Sept. 1.

Weaver, John L., Philadelphin, Fa. Portable woodworking machine. 1,643,524; Sept. 1.

Weaver, John L., Genning, N. Mex. Automatic control for windmills. 1,639,545.

Weaver Manufacturing Company. (See Buffington, Harry Weaver Manufacturing Company.

Weaver Manufacturing Company. (See Buffington, Harry C., assignor.)

C., assignor., Weaver Manufacturing Company, (See Buffington, H. C., and Weaver, assignors.)
Weaver Manufacturing Company, The. (See Heineke, Martin L., assignor.)
Weaver Manufacturing Company. (See Weaver, Gallard E., assignor.)

E., assignor.) Weaver Manufa Manufacturing Company. (See Weaver, G. E., and Squyer, assignors.) Weaver Manufacturing Company. (See Weaver, Ira A.,

assignor.) Weaver Manufacturing Company. (See Weaver, I. A., and Sternaman, assignors.)
Weaver, Otto T., Dormont, Pa. Toy. 1,634,223;

Weaver, C June 28.

Webb, George, West Hartford, assignor to Colt's Patent Fire Arms Manufacturing Company, Hartford, Conn. Dishwashing machine, 1.664-355; Dec. 27. Webb, George E., assignor to Koehring Company, Mil-waukee, Wis. Pavement-finishing machine, 1.628,088;

Webb, Geo waukee, May 10.

Wausee, Wis. Pavement-missing machile. 1,622,088; May 10.
Webb, George E., assignor to Koehring Company, Milwaukee, Wis. Automatic discharge for concrete mixers, 1,628,373; My 10.
Milway 10.
Milway

Webb, Orra W., assignor to Stetson-Ross Machine Company, Seattle, Wash. Cutter-head Journal assembly. Webb. Purcell T., Christchurch, New Zealand. Holder for fountain pens and the like, 1,620,930; Mar. 15.
Webb. Robert L., Minden, La. Housing for high-density compresses. 1,637,961; Aug. 2.
Webb. Robert R., assignor to Charles R. Hadley Company. 1,645,608; Aug. 15.
Webb. Robert R., Assignor to Charles R. Hadley Company. 1,645,608; Aug. 15.
Webb. Robert R., assignor to National Tube Company. Milling machine. 1,646,891; Oct. 25.
Webber, James H., Carrolltown, Pa. Attachment for arctics. 1,621,342; Mar. 15.
Webber, James H., Carrolltown, Pa. Rear window. 1,622,933 M. Carrolltown, Pa. Rear window. 1,622,934 M. Carrolltown, Pa. Rear window. 1,622,935 M. Carrolltown, Pa. Rear window. 1,622,935 M. Carrolltown, Pa. Rear window. 1,622,935 M. Webber, William (See Benjamin, B. R., and Webber). Webber William (La Grange, Ill., assignor to International Harvester Company. Knotter cam olier for harvesters, 1,629,190; May 17.
Webber, William J. Hill, E. L., and Webber.) Webber, William (See Jacobs, Joseph. Weber, Abraham. New York, N. Y. Floor olier.

Webbing an assignor.)

Assignor.)
Weber, Abraham, New York, N. Y. Floor oller. 1,626,991; May 3.
Weber, Albert, Providence, R. I. Fastening member for vamity cases. 1,632,863; June 21.
Weber, Albert, Providence, R. I. Vanity case. 1,632,864; Weber, Alfred, New York, N. Y. Lantern. Des. 73,393; Weber, Alfred, New York, N. Y. Lantern.

Weber, Alfred, New York, N. Y. Lantern. Des. 73.725;

weber, Alfred, New York, N. Y. Lanten. Des. 13.725; Web. 25. Hred, New York, N. Y. Ineandescent-lamp bulb weber, Ber E. (See Grubs, Frank, assignor.) Weber, Ber E. (See Grubs, Frank, assignor.) Weber, Carrl, Hilton, Nebr. Circuit closer for hold-up alarms. 1,630.455; May 31. Weber, Carl O., Dresden. Germany. Feeding device for grinding, milling, or boring machines and the like. 1,621,146; Mar. 15. Weber, Clarence J., assignor to National Brick Company, Chicago, Ill. Transport means for bricks and the like. Weber, Clifford A. M., Springfeld, Mass, assignor to Westinghouse Electric & Minufacturing Company. Alternating-current motor. 1,624,378; Apr. 12. Weber, Edith L., Miami, Fla. Hand bag. Des. 73,419; Sept. 6. Weber Electric Company. (See Dunbam, William G., assignor.)

signor

signor.)

Weber Engine Company. (See Gold, Sealing.)

Weber, Frank R., Troy, assignor to Mohawk Brush Company, Albany, N. Y. Hairbrush, 1,628,291; May 10.

Weber, Fred, assignor to Weber Showcase & Fixture Company.

Los Angeles, Calif. Measuring device, 1,646,567; Oct. 25.

Weber & Friedrich, Inc. (See Friedrich, Robert F., assignor.)

signor.)
Weet Friedrich W., Hackensack, N. J. Mineral-fanned
Weet Frand making the same. 1,816,400; Feb.
West, Friedrich W. Hackensack, assignor to Maywood
Chemical Works, Maywood, N. J. Treating animal tissue and products obtained therefrom. 1,621,965;
Mar. 22.

Weber, Friedrich W., Hackensack, N. J. Purification of the period of the

Sept. 13.

Weber, Gottlieb, Youngstown, Ohlo. Automatic spike machine. 1,634,567; July 5.

Weber, Gustavus E., Westchift-on-Sen, England. Ticket-delivering apparatus. 1,650,556; Nov. 22.

delivering apparatus. 1,650,556; Nov. 22.

Weber, Henry C. P., Edgewood: Lark, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condensation product. 1,630,565; May 31.

Weber, Henry C. P., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Weber, Henry E., P., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Medical Production of the Company. The Company of the Company of

Nonfammable varuish 1,000,000 of the coupling. Weber, Henry E. Canton, Ohio. Hose coupling. 1,636,579; July 19.
Weber, Herman G., Appleton, Wis, assignor of one-half to American Lakes Paper Company, Chicago, Ill. Coatting machine. 1,616,724; Feb. 8.
Weber, Isaac E., assignor of one-half to B. La Porte Limited and one-fourth to H. E. Alecck, Luton. England. Closure for bottles. 1,648,793; Nov. S.
Weber, John, assignor to The American-National Company, Toledo, Ohio. Juvenile wagon body. 1,620,931; Nov. 3.

Minr. 15.
Weber, John N., Waukesha, Wis. Apparatus for giving mud baths. I.603,401; July 19.
Weber, Karl A., assignor to Weber Showcase & Fixture Company, Low Angeles, Calif. Modding-rubbing appearance of the Company, Low Angeles, Calif. Modding-rubbing appearance of the Company, Low Angeles, Calif. Modding-rubbing assignor, Weber, Mathias J., assignor to Continental Scale Works, Chlengo, Ill. Scale. 1, C28, 205; May 10.
Weber, Mathias J., assignor to Continental Scale Works, Chicago, Ill. Weighing scale. 1, 1,693, 120; Aug. 16.

Weber, Mathias J., assignor to Continental Scale Works, Chicago, Ill. Infant scale. 1,639,121; Aug. 16. Weber, Max, Chicago, Ill. Filler construction. 1,616,243; Feb. 1.

Weber Showcase & Fixture Company. (See Weber, Fred, assignor.) Weber Showcase & Fixture Company. (See Weber, Karl

Weber Showcase & Fixture Company. (See Weber, Karl A., assignor.) Weber, Tobias. (See Chase, Hamilton C., assignor.) Weber, Valentine, and E. G. Price, Newark, N. J. Ther-Weber, Walter S., assignor to Wm. H. Luden, Inc., Read-ing, Pa. Carton-closing mechanism. 1,641,794; Sept. 6. Weber, Walter S., and E. T. Snyder, Reading; said Walter S., weber assignor to R. C. Rahm, Wyomissing, Pa. Candy mixing and kneading machine. 1,638,319; Aug. 16.

weeter, Louis 2-, Wateroury, Colin. Reader. 1,000,942:

Aug. 16.

Louis and connecting rods. 1,632,049; June 14.

Webster, Benjamin C., Southport, Conn., assignor, by mesne assignments, to Columbia Phonograph Company. Inc. Closure and its support. 1,628,265; May 17.

Webster, Benjamin C., assignor, by mesne assignments, to Columbia Phonograph Company, Mch. Pull socket. 1,646,002; Oct. 18.

Webster, Benjamin C., assignor, by mesne assignments, to Reynolds Spring Company, Jackson, Mch. Pull socket. 1,647,626; Nov. 1.

Webster, Charles C., assignor to J. K. Lanning, Fall 1,642,523; Sept. 13.

Webster, Charles C., Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lining-triuming machine. 1,629,560; May 24.

Webster, Charles C., Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lining-triuming machine. 1,629,560; May 24.

Webster, Earl P., assignor to The Shredded Wheat Company, Niagrar a Falls, N. Y. Conveyer chain. 1,621,559; Mar. 22.

Mar. 22.
Webster, Earl P., assignor to The Shredded Wheat Company, Niagara Falls, N. Y. Biscuit-removal means, -1,627,362; May 3.
Webster, Earl P., assignor to The Shredded Wheat Company, Niagara Falls, N. Y. Biscuit-removal means, 1,627,363; May 3.
Webster, Earl P., assignor to The Shredded Wheat Company, Niagara Falls, N. Y. Biscuit-removal means, 1,627,364; May 3.
Webster, Earl P., Niagara Falls, N. Y. Golf tee.
Webster Electric Company. (See Hawkins, William W., assignor).

assignor.)

Webster Electric Company. (See Kleckner, Arthur C.,

Webster Electric Company, (Sec. 1985).
assignor.)
Webster, George D. (Sec Ude, F. E., and Webster.)
Webster, George D. (Sec Ude, F. E., and Webster.)
Webster, Hosea, Montclair, assignor to The Babcock &
Wilcox Company, Bayonne, N. J. Heat-transfer device, 1,641,999; Sept. 13.
Webster, Leo N., Brentwood, Mo. Rotatable pipe joint.
1,645,838; Oct. 18.
Webster, Lewis E., assignor to The Wyoming Shovel
Works, Wyoming, Pa. Shovel handle, 1,652,076;

assignor.)

Webster Tallmadge & Company. (See Tallmadge, Webster, assignor.)
Webster, Warren & Company. (See Fitts, J. A., and Rohlin, assignors.)
Wechsler, Samuel, Cleveland, Ohio. Attachment for sewing machines. 1,613,860; Jan. 11.
Weckbaugh, Joseph V., assignor to American Cuptor Company. (See Fitts) American Cuptor Cuptor

Wedge, Utley, Ardmore, Pa., assignor to I. P. Thomas & Son Company, Camden, N. J. Producing phosphate fertilizer. I, 624,195; Apr. 12.
Wedge, Utley, Paoli, Pa. Furnace. 1,655,681; Dec. 27.
Wedgewood, Josiah, & Sons, Inc., of America. (See Goodwin, John E., assignor.) on the Company, Inc., of America. (See Wedgewood, Josiah, & Sasignor.)
Wedlock, Frank V., Chicago, Ill., assignor to Featheredge Rubber Company, Inc. Continuous process of producing sponge rubber articles. 1,629,013; May 17.
Weeber, Cristian F., Albany, N. Y. Fuel system for internal combustion engines. 1,625,007; Apr. 19.
Weder, Christian F., Albany, N. Y. Fuel system for internal combustion engines. 1,625,007; Apr. 19.
Weech. Joseph, Galesburg, Ill. Signaling device. 1,620,147; Mar. 8.
Weed. Control Company, Thc. (See Hughes, Hugh E., assignor.)

Weed James M., Scotia, N. Y., Sasignor to Potter & Buffinton Company, Providence, R. I. Gein. Des. 71.858; Jan. 11. Weed, James M., Scotia, N. X., assignor to General Electric Company, Induction furnace. 1,648,707;

Electrie Company. Induction Intruste. 1,020,000.

Nov. James M., Scotia, N. Y., assignor to General Electric Company. Electric turnace. 1,850,675; Nov. 29.
Weedon, Hugh H. (See Colley, George F., assignor.)
Weeks, Allan L., Long Beach, Calif. Sporting device and life preserver. 1,647,677; Nov. 1.
Weeks, Charles S., South Orange, N. J., assignor to Cary Manufacturing Co., Brooklyn, N. Y. Package-banding machine. 1,550,811; Nov. 29.
Weeks, Edmund G. (See Bottomley, W. T., and Weeks, Weeks, Edmund G. (See Bottomley, W. T., and Weeks, 73,554; Sept. 27.
Weeks, Edmund G. (See Bottomley, W. T., and Weeks, 73,554; Sept. 27.
Weeks, Eding O., Milwaukee, Wis. Radiator reflow device. 1,627,814; May 10.
Weeks, Eding O., Milwaukee, Wis. Apparatus for reatomizing fuel. 1,650,405; Nov. 22.
Weeks, Frank A., Mig. Co. (See Kelly, Orson N., assignor.)

Richards Weeks, Frank A., Mfg. Lu-signor.)
Weeks, Herbert T., Tunbridge Wells, England. Clip or Weeks, Herbert T., Tunbridge Wells, England. Clip or support for horticultural and other labels. 1,651,652; DPO of the Company of the Secretary Reall, Detroit, Mich., assignor to the Secretary

Dec. 6.

Weeks, Paul, Detroit, Mich., assignor to the Secretary of War of the United States, trustee. Grouser. 1,629,768; May 24.

Weeks, Paul T, Caldwell, N. J., assignor to Westinghouse Lamp Company. Electrical device for emitting light flashes and interrupting circuits. 1,647,595;

Nov. I. Weeks, Sawyer & Co. (See Weeks, Edward A., assignor.) Weeks, Virgil, Kansas City, Mo. Wardrobe trunk. 1,637.206 July 26. Weeks, Wallace M., et al. (See De Wallace, Harry, as-

Weeks, Wallace M., et al. (See Kavle, Oscar C., as-signor.) Weeks, Wallace M., et al. (See Kavle, Oscar C., as-

Weeks, Wallace M., assignor of one-half to J. A. Pease, Skanacieles, N. Y. Bottle closure. 1,625,119, App. 13. Method and apparatus for applying bottle closures. 1,625,955; Dec. 13. Weeks, William W., assignor to Elevator Supplies Company, Inc., Brooklyn, N. Y. Door closing and check management of the control of the con

Wegh, Edward, Denver, Colo. Ironing board. 1,651.427;

Dec. 6.

Wegman, Ernest C., and W. A. Southwick, Chicago, III., assignors to Western Electric Company, Incorporated, New York, N. Y. Apparatus for working strand material. 1,617,427; Feb. 15.

Wegner, Athur H. Jr., Washington, D. C. Transformer. 1,616,645; Feb. 8.

Wegner, Hintch F. W., Lubeck, Germany. Plowshare. 1,640,682; Aug. 30.

Wegner, Julus, New York, N. Y. Mechanical movement. 1,624,085; Apr. 12.

Wener, Peter C. (See Beulke, G. W., and Wego.)

Wehiritz, Henry C., Jersey City, N. J. Cowl. 1,641,060;

Wehiritz, Henry C., Jersey City, N. J. Cowl. 1,641,060;

Air. 30.

Webn. Charles E. assignor to Listo Pencil Corporation.

Alumeda, Calif. Pencil 1.625,513; Apr. 19.

Webr. Arthur J. A. V. Bilot, and J. W. Sheeres. Fort

Wommouth, N. J. Traffic indicator. 1 617,358;

Webr, William G., East Cleveland, assignor to The Cleveland Craue & Engineering Company, Wickliffe, Ohlo. Grab. 1,630,456; May 31. Webrbein, Henry L. (See Van Scoyoe, G. and Webr-bein.) assignor to reWehrbein, Henry L. (See Van Scoyoc, G., Wehrbein, and Shonle.) Wehrle, Frank X., assignor to Seth Thomas Clock Co., aston. Conn. Rack-and-snail strike clock.

webrie, Frank X., assignor to Seth Thomas Clock Co., Thomaston, Conn. Rack-and-snall strike clock. 1,614,165; Jan. 11. Weibel, Emil, Montreal, Quebec, Canada. Harness frame. 1,636,726; July 26. La Grange, assignor to All-American Control of the C

St. Louis, Mo. Alternating-current motor. 1,614,093;
Jan. 11.
Welchsel, Hans, assignor to Wagner Electric Corporation,
St. Louis, Mo. Alternating-current motor. 1,614,093;
Jan. 11.
St. Louis, Mo. Alternating-current motor. 1,643,327;
St. Louis,

Welchel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Alternating-current motor. 1,843,327; Welcher, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Synchronous motor, 1,843,388; Sept. 27. Welcker, Herman G., trustee. (See Winckel, Max, assignor.)
Welda. William W.. Massillon, Ohio. Fuse-plug holder. 1,836,589; July 12.
Welde, Rudolf, assignor to the Firm Hermann Hurwitz and Co., Berlin, Germany. Transfer-printing apparatus. 1,635,297; July 12.
Weldenan, George C., assignor of one-half to T. J. Smith, Weldenfeld, Samuel, Kurmace. 1,626,527; Apr. 26.
Weldenbagen, Rudolf, (See Spengler, O., Virck, and Weldenbagen, Rudolf, (See Spengler, O., Virck, and Weldenbagen, Rudolf, (See Spengler, O., Virck, and Weldenhagen.)
Weldert, Franz, Berlin-Zehlendorf, assignor to Optische Anstalt C. P. Goera Aktiengeseilschaft, Berlin-Friedenau, Germany. Photographic two-lens objective. 1,643,865; Sept. 27.

Sept. 27. Weidlich Bros. Mfg. Co., The. (See Flauder, Alfred J.,

Weidlich Bros. Mfg. Co., The. (See Flauder, Alfred J., assignor.)
Weidmann, Hans. Frankfort-on-the-Maln. Germany, assignor, by mesne assignments, to Allied Process Corporation, New York, N. Y. Preparation of lithlum carbonate. 1,623,513; Apr. Weidmer, Nathan, Brooklyn, N. Y. Beverage container. Des. 72,648; May 10.
Weidmer, Victor, Fort Washington, assignor to Viking T. 1,648,977; Nov. 15.
Weigand, John L., et al. (See Poeppelmeier, Frank II. assignor.)

assignor.)
Weigel, Daniel M., Trenton, N. J., assignor, by meane assignments to The American Wire Cord Tire Company, Wilmington, Del. Preumatic thre. 1,633,963; June 28.
1,616,725; Feb. Riverton, N. J. Permutation lock.
1,616,725; Feb. Riverton, N. J., assignor, by meane assignments, to R. W. Bristol, doing business as Atlas Elevator Devices Co., New York, N. Y. Guider-all lubrator. 1,643,036; Sent. 20.
Wassignor, Company, The. (See Hamblin, Fred B., assignor, free B., assignor, free

Weightograph Company, The. (See Schaper, Harry C.,

Weightograph Company, The. (See Shively, Louis S.,

Weightograph Company, The. (See Shively, Louis S., assignor).
Weil. Maximilian, New York, N. Y. Sound reproducer. 1.637.322; July 26.
Weight S. We universal joints. 1305-201 Dec. 130. Weiland, Henry J. (See Gubelmann, I., Weiland, and Stallman.) Weiland, William J., Indianapolis, Ind. Furnace radiator. 1,641,211; Sept. 6.

Weilenmann, Robert, Schaffbausen, Switzerland. Fas-tener to bind loose sheets of paper. 1.647,490; Nov. 1. Weiler, Charles, New York, N. Y. Saw. 1,650,476;

Weiler, Richolas, Canton, Ili. Bather's pump. 1,628,866; May 17.

Weiler. Theodore H., et al. (See Broyles, John E.,

ller, Theodore 12., ssignor.) iler, Wilhelm, Niederschonhausen, Berlin, Germany, as-iler, Wilhelm, Niederschonhausen, Berlin, Germany, as-

Weiler, Thoodore H., et al. (See Broyles, Meller, Wilhelm, Niederschonhausen, Berlin, Germany, assignor to General Electric Company. Single-phase induction-motor control system. 1,637,886; Aug. 2. Weilter, Ilenry, et al. (See Cooper, William D., assignor.) Weimer, Albert W., and J. Smith; said Weimer assignor to W. Farson, Geneseo, Ill. Battery connection. Welmer, Albert W., and J. Smith; said Weimer assignor to W. Parson, Geneseo, Ill. Battery connection. Welmer, Albert W., and J. Smith; said Weimer assignor to W. Parson, Geneseo, Ill. Battery terminal. 1,622,362; Mar. 29. Welmer, Hugo W., assignor to Allis-Chalimers Manufacturing Company, Milwaukee, Wis. Shaft suspension. 1,641,715; Sept. 6. Creek Ohio. Combined auto truck Weimer, Robert, Apple Creek Ohio. Combined Ohio.

berger.)

Weinberger, Julius, New York, N. Y., assignor to Radio Corporation of America. Method and apparatus for minimizing self-excited oscillations in vacuum-tube signaling devices. 1,618,319; Feb. 22.

Weinberger, Viktor, M. Jakobovits, and I. Roth. New 1,654,356; Dec. 27.

Weiner, Jahert. (See Dauer, Ernest I., assignor.)

Weiner, Emil. (See Katims, H., and Weiner.)

Weinerth Knitting and Machine Company. (See Leister. Morris, assignor.)

Weinerd, Charles, (See Strauss, Joseph B., assignor.)

Weinzeld, Bichard. (See Czapek, E. and Weinergand.)

Max.) Chaires, et al., executors, (See Hersaott). Max.)

Max. Max. Max. (See Caspek, E., and Weingand.)

Weingarther, Anthony E., Bethlehen, assignor fo American Engineering Company, Philadelphia, Pa. Rotary pump or motor. 1,622,986; Mar. 29.

Weingartner, Anthony E., Bethlehem, assignor to American Engineering Company, Philadelphia, Pa. Separable coupling. 1,660,557; Nov. 22.

Weingartner, George A., Fort Thomas, Ky. Cut-off mechanism for cigarette machines. 1,616,208; Feb. 1,700, 1,700

Meinzierl, Joseph T. (See Straub, F. J., and Weinzierl.) Weir, Horace M. (See Mann, M. D., Jr., and Weir.) Weir, James W. Fillmore, Calif., and W. J. Ryan, jr., Seattle, Wash, Treating lubricating oil stocks, 1,550,782; Nev. 20.
Weir, Roy W., assignor, by mesne assignments, to The Marvel Company, Hammond, Ind. Clutch. 1,659,383;

Weir, Roy Marvel Dec. 27.

Weis Manua. G., assignor.) els Manufacturing Company, The. (See Wuest, Albert

Weisbaum, Edward J., Cincinnati, Ohio. Necktie clasp. 1.644.863; Oct. 11.

Weiscopf, Marcus W., assignor to Standard Electric Troducts, Inc., Philadelphia, Pa. Slicing machine, 1,651,335; Nov. 29.
Weise, Alfred, New York, N. Y. Pocket umbrella, 1,652,639; June 14.
Weise, Paul, Wiesdorf, near Cologne-on-the-Rhine, assignor to I. G. Farbenmdustric Aktiengesellschaff, 2007, 1997, 1997.
Weisenborn, George F. A., Kansas City, Mo. Churn, mixing machine, and beater. 1,624,701; Apr. 12.
Weisenborn, George F. A., Kansas City, Mo. Churn, mixing machine, and beater. 1,624,701; Apr. 12.
Weisentreind, Isak, New York, N. Y. Beverage container. Des. 73,884; Nov. 15.
E., Tampa, Fla. Haircloth. 2007,

signments, to Wood Conversion Campany, Cloquer, Minn. Wall board and making the same. 1.631.173; June 7. Weiss, Howard F., Madison, Wis., assignor, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover. Weiss, Howard F., Madison, Wis., assignor, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover. Del. Wall construction. 1.634.808; July 6. Weiss, Howard F., Madison, Wis., assignor, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover. Del. Wall board. 1.634.809; July 6. Weiss, Howard F., Madison, Wis., assignor, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover. Del. Wall board. 1.634.809; July 6. Weiss, Howard F., Madison, Wis., assignor, by mesne assignments for C. F. Burgess Laboratories, Inc., Dover. Del. Paraffin-resisting surface for paraffin-sborbent. Del. Paraffin-resisting surface for paraffin-sborbent paraffin-sportent, and R. F. Norris, Madison, Wis., assignors, by mesne assignments, to C. F. Burgess Laboratories, Inc., Dover, Del. Moided product and its manufacture. 1,628.206; May 10.
Weiss, Johannes, Leipzig, Germany, Sound-insulating Diate sheet, or slab. 1,628,009; May 10.
Weiss, Mac Corporation. (See Elliot. John T., assignor, Weiss, Max M., New York, assignor of one-third to F. J. Boehm and one-third to B. Glick, Brooklyn, N. T. Weiss, Max M., New York, assignor of one-third to F. J. Boehm and one-third to B. Glick, Brooklyn, N. T. Weiss, Max M., New York, assignor of one-third to R. J. Weiss, Max M., New York, assignor of one-third to R. J. Weiss, Max M., New York, assignor of one-third to R. J. Weiss, Max M., New York, assignor of one-third to R. J. Weiss, Max M., New York, assignor of one-third to R. J. Weiss, Max M., New York, assignor of one-third to R. J. Weiss, Max M., New York, assignor of one-third to R. J. Weiss, Max M., New York, A. Y. Endergeney lock for doors. 1,618,738; Feb. 22.

, Morris L., Newark, N. J., assignor to Dovan mical Corporation, New York, N. Y. Vulcanizing ber and products obtained thereby. 1,616,936; Welsi, Myster Chemical Corporation, New Tubber and products obtained thereby.

Tubber and products obtained thereby.

Feb. 8.
Welss, Rudolph. (See Marx, Carl, assignor.)
Welss, Robert G., Oakland, Calif. Automobile lock. 1,640,631; Aug. 30.
Welssinger, Emil C., assignor to Bullders Needs, Incorporated, Milwaukee, Wis. Ornamental mantel.

1,630,910; May 31.
Welstock, Alexander E., and H. Dahne, Baltimore, Md. Welstock, Alexander S.; Apr. 12.
Welting, William W., trustee. (See Henry, Augustus Mt., assignor.)

apparatus. 1,635,869; July 12.
Weiting, William W. trustee. (See Henry, Augustus M., assignor.)
Weitzenkorn, Joseph W., assignor to Molybdenum Corporation of America, Pitteburgh, Pa. Steel alloy. 1,622,894; Mar. 29.
Weich, Aifred F., Fort Wayne, Ind., assignor to General Electric Company. Sewing-machine motor. 1,643,191;

Weich, Alfred F., Fort Wale, May, assigner Company, Sewing-machine motor. 1,643,191; Electric Company, Sewing-machine motor. 1,643,191; Welch, Charles M., Ogden, Ark. Electrical transformer core or magnetic circuit. 1,642,470; Sept. 13.
Welch, Charles M., Ogden, Ark. Electrical-transformer-containing case. 1,642,471; Sept. 13.
Welch, George W., assignor to Brooks Rupture Appliance Company, Marshall, Mich. Truss. 1,043,38; Peb. 22.
Company, Marshall, Mich. Truss. 1,043,38; Peb. 22.
1,644,964; Oct. 11.
Welch, Harry V., assignor to International Precipitation Company, Los Angeles, Calif. Waterproof cement. 1,644,968; Oct. 11.
Welch, Harry V., assignor to International Precipitation Composition and making the same. 1,645,968; Oct. 11.
Welch, Jack T., Sasignor to James Heddon's Sons, Welch, Jack M., Sasignor to James Heddon's Sons, Welch, Jack T., Sasignor to James Heddon's Sons, Nov. 8.

Nov. 8.

Welch, Lon E., Memphis, Tenn. Artificial stone or marble.

1,626,577; Apr. 26.

Welch, Peter, and A. Murphy, Olean, N. Y. Wave filter
receiving circuits. 1,638,608; Aug. 9.

Welch, William W., Livermore, Calif. Scraper.

1,625,382; Apr. 19.

Welcker, Rudolph, assignor of one-fourth of F. G. Neal,

1,633,402; July 19.

Welcker, Rudolph, assignor of one-fourth to F. G. Neal,

Springfield, Mass. Tank car. 1,650,406; Nov. 22.

Weldon, John J., Pittsfield, Mass., assignor to General

Electric Company. Insulating element. 1,640,433;

Aug. 30.

Effective Company. Insulating element. 1,640,433; Aug. 30.
Weldy, B. E. (See Forshay, Jesse B., assignor.)
Welk, Nelson S., assignor to The McBee Binder Company,
Athens, Ohio. Binder for loose-leaf files. 1,623,145;

Athens, Onto. British and the McBee Binder Co., Athens, Ohio. Filling tray. 1,626,885; May 5. Athens, Ohio. Filling tray. 1,626,885; May 5. Athens, Ohio. Filling tray. 1,633,837; Dec. 27. Athens, Ohio. Filling tray. 1,633,837; Dec. 27. Welke, Ferdinand G. (See McDonaid, F. A., and Welke). Welle, Henry C., Crockett, Calif. Treating sugar. 1,624,286; Japr. 12. Wellensiek, Louis H., (See Scott, F. L., and Wellensiek, Louis H., Houston, Tex. Drilling wells. 1,21,669; Mar. 22.

L.62,1,009; Mar. 22.
Weller, George L. assignor to Kalman Steel Company,
Chicago, Ill. Road strip. 1,629,760; May 24.
Weller, Herbert C., Tuscola, Ill. #Color rheostat.
1,618,337; Jan. Tuscola, Ill. #Color rheostat.
Weller, John C., Newark, Calif. Gauge. 1,629,426;

Weller, Herbert C., Tuscoia, In. \$Cool. Incoars., 16.13,337; Jan. 4. Wells, Jach. C., Newark, Calif. Gauge. 1,629,426; Wellst, Janton, Binghamton, N. Y. Vehicle signal. 1,633,964; June 28. Weller, Jessee C., Hemet, Calif. Walnut debydrater. 1,641,716; Sept. 6. Legans, Legans, Jack. Companies Inc., Waterbury, Conn. Rocking-handle flush-tank fitting. 1,627,943; May 10. Wellkamp, Frank J. (See Kopp, J. A., Guenthner, Wellkamp, And Meyer.) See McGowen, Peter J., assignor, Wellman Compan. (See McGowen, Peter J., assignor, Wellman, Frank E., Kansas City, Mo. Cracking oil. 1,616,521; Feb. 8. Wellman, Frank E., Kansas City, Kans. Liquid-level indicator. 1,619,553; Mar. 1. The Kansas City Gasoline Comman, Prank E., assignor to Kansas City Gasoline Comman, Prank E., assignor to Kansas City Gasoline Vallman, Frank E., assignor to Kansas City Gasolin

Company, Kansas City, Kans. Checking oil. AND First Jan. 25.
Wellman, Frank E., assignor to Kansas City Gasoline Company, Kansas City, Kans. Apparatus for heating oil. 1,639,622; Aug. 16.
Wellman, Harrison W. 15.
Begewater, Colo. Internal-compaction capital. 1,618,360; Feb. 22.
Wellman, Haskel F. (See Fearing, J. L., and Wellman.)

Weilman, Lester R., assignor to Stembridge & Brandt, Chicago, Ill. Bracket back for lighting fixtures. Des. 73,545; Sept. 27. Weilman, Lester R., assignor to Stembridge & Brandt, Chicago, Ill. Plate for lighting fixtures. Des. 73,726;

Oct. 25.
Wellman, Samuel K., Cleveland, Ohio. Shock absorber.
W.1631.077; May 31.
Wellman, Samuel K., Cleveland, Ohio. Shock absorber.
1,631.078; May 31.
Wellman, Samuel K., Cleveland, Ohio. Shock absorber for automobiles. 1,631.079; May 31.
Wellman, Samuel K., Cleveland Heights, and A. A. Gould, Cleveland, Ohio. Lubricating apparatus. 1,637,841;

Aug. 2.
Wellman, Samuel K., and G. R. Pennington, Cleveland
Heights, Ohio. Equalizing brake for vehicles. Wellian Samuel K., and G. R. Pennington, Cleveland Leight and the Equalising brake for vehicles. Wellian School and G. R. Pennington, Cleveland Leight School and G. R. Pennington, The. (See Case, Arthur F., assignor.) Wellman, William W., Las Vegas, Nev. Locomotive feedpump gauge. 1,631,714; June 7. Wellmann, William W., Les Recelor, J., and Wellmann.) Wells, Albert B., Southbridge, Mass. Lens. 1,647,721; Wells, Amos S. Mingraphie Miss.

Nov. 1.
Wells, Amos S., Minneapolis, Minn. Dental instrument.
1,639,914; Aug. 23.
Wells, Arthur E., Toronto, Ontarlo, Canada. Grating.
1,620,846; Mar. 15.
Wells, Benjamin F., Handley, Tex. Meter case.
1,616,096; Feb. 1.
1,616,096; Feb. 1.
1,616,096; Rev. 1,616,096; Peb. 1.
1,616,096; Rev. 1,616,096; Peb. 1.
1,616,09

1.619.4501; Marr. A. Wells, Charles G., et al. (See Marvin, Samuel W., assignor.) Wells, Charles H. (See Coghill, Charles W., assignor.) Wells, Charles H., Enddoctt, Nebr. Stock-car partition. 1.646.604; Oct. 25. Wells, Charles W. (See Sundblad, Uno L. assignor.) Wells, Chrester R. (See Glipin, V. L., and Wells.) Wells, Chrester R. (See Glipin, V. L., and Wells.) Wells, Chrester R. (See Glipin, V. L., and Wells.) Wells, Chrester R. (See Glipin, V. L., and Wells.) Wells, Chrester R. (See Glipin, V. L., and Wells.) United States of the States of the States of the States of States of the States of Stat

Feb. 22.
Wells, Joel B., Philadelphia, Pa. Skirt gauge. 1,621,588; May 10.
Wells, John H., Boston, Mass., assignor to Multiske Rotary Press Co., Limited, Toronto, Canada. Variable speed mechanism. 1,628,599; May 17.
Line State of the State

Nov. 1. ells, Thomas A. (See Van Derwky, John D., as-

weils, Thomas A. (See Van Derwky, John D., assignor.)

Weils, Walter A., Washington, D. C. Surgical instrument.

1.635.066; July 5.

Weils, Wesley B. (See Fisher, A. W. and Wells.)

Weils, Wesley B. (See Fisher, A. W. and Wells.)

Weils, Wesley B. (See Fisher, A. W. and Wells.)

The state of and apparatus for breaking up the components of petroleum and the like into more volatile products.

1.635.619; July 12.

Wells. William F., Chicago, Ill. Electrical switch.

1.637.461; Aug. 2.

Wells william F., Chicago, Ill. Leom. 1.636,343; July 19.

Wellstatter, Rosa R., New York, N. Y. Garment.

1.629.561; May 24.

Well, William, St. Louis, Mo. Safety device. 1.621.146; Mar. 16.

Welp, William, St. Louis, Mo. Sandy, Mar. 15.
Welshach Company. (See Bliss, C. E., and Wegener, assignors.)
Welshach Company. (See Lyon, Howard, assignor.)
Welshach Company. (See Keith, William

Welshuch Traffic Signal Company. (See Keith, Wilnam G. assignor.)
Welshy, Silas. assignor to David Brown & Sons (Huddersfield). Limited, Huddersfield, England. Expanding reamer. 1,635,103; July 5.
Welsch, August L. and W. H., Valmeyer, Ill. Automobile pump. 1,630,150; May 24.
Welsch, William H. (See Welsch, August L. and W. H.)
Welser, George B., fr., assignor to Chain Belt Company, Milwaukee, Wis. Mechanism for operating cleaning brushes and similar apparatus. 1,643,866; Sept. 27.

Welsh, James H., Monmouth, Ill. Road maintainer and grader. 1,632,685; June 14.
Welsh, James W. (See Stevens, F. A., and Welsh.)
Welsh, James W., Providence, R. I., assignor, by mesne assignments, to Eausch and Loub Optical Company, Rochester, N. Y. Opbthalmie mounting. 1,636,339; July 19. July 19. Welsh, James

Rochester, N. Y. Ophthalmic mounting, 1,636,339; July 19.

Welsh, James W., Providence, R. L. assignor, by messe messers, to Bausch and Lomb Optical Company, Rechester, N. Y. Spectacle-mpile, 1,636,340; July 29.

Welsh, James W., Providence, R. I., assignor to Bausch and Lomb Optical Company, Rochester, N. Y. Spectacle temple and making the same. 1,642,833; Sept. 20.

Welsh, James W., Providence, R. I., assignor, by mesne assignments, to Bausch and Lomb Optical Company, Same. 1,649,791; Nov. 15.

Welsh, James W., Providence, R. I., assignor, by mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y. Ophthalmic mounting and method. 1,649,732; Nov. 15.

Welsh, James W., Providence, R. I., assignor to Bausch 1,649,732; Nov. 15.

Welsh, James W., Providence, R. I., assignor to Bausch thalmic mounting. 1,649,738; Nov. 15.

Welsh, James W., Providence, R. I., assignor to Bausch thalmic mounting. 1,649,748; Nov. 15.

Welsh, James W., Providence, R. I., assignor, by mesne assignments, to Bausch and Lomb Optical Company, Rochester, N. Y. Ophthalmic mounting. 1,650,765; Nov. 22.

Nov. 22. Welsh, James

Nov. 22.

Welsh, James W., Providence, R. I., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Ophthal mic mounting and method. 1,62,421; Dec. 13.

Welsh, Thomas E., Woodbridge, Conn. Jar-opening device. 1,620,706; Mar. 15.

Welsher, Samuel I., New York, assignor, by mesne assignments, to F. A. Bower, Bayside, N. Y. Washing Compound. 1, 228,045; May 10.

Welspiel, Lettita. (See Arnett, F., and Welspiel)

Welte-Mignon Corporation. (See Check, Tolbert F., assignor, Signor)

Weispier, Lett.

Welte-Mignon Corporation. (See Check, Tollocit 1...)

Welte, Georg. (See Czochralski, J., and Weiter.)

Wolter, Georg. (See Czochralski, J., and Weiter.)

Wolter, Georg. Frankfort-on-the-Main. Germany, assignor,
by mesue assignments, to Allies Process Corporation.

New York, N. Y. Lithium-containing bearing metals.

1,692,077; Dec. Croporation, New York, N. Y. Lead-alkali metal containing bearingmetal alloys. 1,682,078; Dec. Welter, George J., Tiffin, Ohio. Pump. 1,641,717; Sapt. 6.

Welter, George J., Tiffin, Ohio. Pump. 1,641,717; Sapt. 6.

Welter, Sebastian J., assignor to Armstrong Bros. Tool

Co., Chicago, Ili. Chain pipe vise. 1,653,286; Dec. 20.

Welter, Schastun D. Co., Chicago, Ill. Chain pipe ...
Co., Chicago, Ill. Chain pipe ...
Dec. 20.
Welton, P. E., Engineering Company, The. (See Welton, P. E., and Wadsworth, assignors).
Welton, Park E., Cuyahoga Falls, Ohio, assignor to Tiregage Valve Corporation, Charleston, W. Va. Tire pressure gauge. 1,645,332; Nov. 8.
Welton, Park E., Cleveland, Ohio. Extruding machine. 1,652,187 E., and G. H. Wadsworth, assignors to The Welton, Park E., id G. H. Wadsworth, assignors to The Briquetting fuel. 1,642,055; Sept. 13.
Welton, Rosie A., et al. (See Moore, Samuel M., assignor.)

Welty, Arch, et al. (See Appleton, Russell V., assignor.) Welty, Arthur, et al. (See Appleton, Russell V., as-

signor.) olty, Fred, et al. (See Appleton, Russell V., as-

Welty, George D., Cleveland, Ohio, Company of America, Pitt assignor to Aluminum sburgh, Pa. Piston.

Weity, George D., Cleveland, Ohio, assignor to Aluminum Company of America, Pittsburgh, Pa. Pitson. 1,638,898; 148, 169. Pratt, L. S. Weitz, and Milks.) Wemb State of Pratt, L. S. Weitz, and Milks.) Wemb Company, The. (See Wagner, Albert G., assignor.) Wemlinger, William F., assignor of one-third to L. Bauer and one-third to J. Bellingham, Columbus, Ohio. Link-forming device. 1,629,751; May 24. Wempe, Friedrich, assignor to Schmidt'sche Heissdampf-Company, Inc. 1,629,751; May 24. Wempe, Friedrich, assignor to Schmidt'sche Heissdampf-Company, Inc. 1,629,751; May 24. Wempe, Striedrich, assignor to Schmidt'sche Heissdampf-Company, Inc. Tubular rotary retort full distributor and support. 1,614,220; Jan. 11. Wendel, Ernas B., Cranford, N. J., assignor to P. Sullivan, New York, N. Toy or similar article of manufacture. Wendel. William F., Girard, Pa. Ice-cream disher. 1,627,132; May 3. Wendle, V. P., et al. (See Welsgerber, Henry D., assignor.)

wendle, Virgil P., and M. L. Hunker, assignors to The Receves Manufacturing Company, Dover, Ohio. Closure, for containers. 1,639,244; Aug. 16. Wendler, Alex. Charlottenburg, assignor to J. Falck, Berlin-Tempelhof, Germany, and C. H. Huberich, The Hague, Netherlands, Increase the crops of plants and fruits. 165,633; J. McKelener, Ontarlo, Canada. Ex-haust muller. 1,622,692; Mar. 29.

Wendt, G Wendt.) Gerald L. (See Rogers, F. M., Grimm, and

Wendt, Status A., Spokane, Wash. Machine for ornamenting linings. 1,618,662; Feb. 22.
Wendt, Faust H. W., Jersey City, N. J. Clothespin, 1,634,892; July 5.
Wenger, Jacob, Highand, Ill. Wing construction for air-Wenger, Jacob, Highand, Ill. Wing construction for air-Wenham, Douglas. (See Murphy, G. O., and Wenham, Douglas. (See Murphy, G. O., and Wenham, Wenholz, Walter W., assignor to General Railway Signal Company, Rochester, N. Y. Absolute-permissive-block train-control system. 1,623,023; Mar. 29.
Wenker, Henry, Hamburg, assignor to National Anliline and Chemical Co., Inc., New York, N. Y. Dye compositions of the control of the control of the composition of the control o

trail-control system. 1,623,023; Mar. 29.

Wenker, Henry, Hamburg, assignor to National Anlline and Chemical Co., Inc., New York, N. Y. Dye composition containing soluble-cotton yellow G. 1,647,162; J. Went. 1, 1619,964; Mar. 8.

Wennemer, Gerard P., assignor to Western Electric Company, Incorporated, New York, N. Y. Protective device. 1,632,050; June 14.

Wenner, John C., Carrollton, Ohio. Tractor hitch. 1,623,441; Apr. 26.

Wensel, Jan. 4. Carrollton, Ohio. Tractor hitch. 1,632,441; Apr. 26.

Wensel, Louis, Los Angeles, Calif. Casement fastener. 1,652,648; Dec. 13.

Wensinger, Charles F., Fremont, Ohio. Lugage carrier. 1,632,645; Dec. 13.

Wensinger, Charles F., Fremont, Ohio. Lugage carrier. 1,632,645; Dec. 13.

Wensier, Koy J., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motorstarting System. 1,633,065; June 28.

Wensley, Roy J., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motorstarting System. 1,633,065; June 28.

Wensley, Roy J., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic stations. 1,649,048; Nov. 15.

Wensley, Roy J., Edgewood, Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic stations. 1,649,048; Nov. 15.

Wensley, Roy J., Edgewood, Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic stations. 1,659,970; Nov. 29.

Nensley, Roy J., Edgewood, Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Quick-acting thermal relay, 1,654,315; Dec. 7.

Wente, William F., Colorado Springs, Colo. Time feeder for domestic animals. 1,619,172; Mar. 1.

Wente, Edward C., assignor to Western Electric Company. 1,638,555; Aug. 9.

Wente, Emil C., Waverly, Iowa. Tile fork. 1,638,367; Ag. 20.

Wente, Emil C., Waverly, Iowa. Tile fork. 1,638,367; Ag. 20.

Wente, Emil C., Waverly, Iowa. Tile fork. 1,638,367; Ag. 20.

Wente, Emil C., Passaic, N. J. Massage machine. 1,643,039; Sept. 27.

Wente, J., Free, L., Passaic, N. J. Massage machine. 1,6

Twist tube for use in ring spanning.

Feb. 1.

Wenzel, William A., and G. J. Randie. Philadelphia, Pa.

Matrix-cleaning machine. 1,648,794; Nov. 8.

Wenzelmann, Gustave. and 1,648,794; Nov. 8.

Wenzelmann, John, Tyler, Minn. Portable fence. 1,618,739; Feb. 22.

Feb. 22. Leating Co. (See Mutscheller, Arthur, as-

Electric Co. (See Mutscheller, Arthur, as-Minneapolis, Minn. Air pump.

Weppler Electric Co signor.) Wepplo, Henry J., 1,613,338; Jan. 4. Wepplo, Henry J., 1,623,647; Apr. 5. Minneapolls, Minn. Air pump. Werber, Hermann T., Brooklyn, N. Y. Turbine.
1830,151: May 24.
Werbirky, Theophilus D., Cleveland, Ohio. Rotary valve for internal-combustion engines. 1,619,226; Mar. 1.
Werbner, Simon, Linton, Ind. Apparatus for casting curved stereotype plates. 1,631,944; June 7.
Wercely, Elic, Mason City, Iowa. Internal-combustion engine. 1,615,895; Feb. 1.
Werckley, George. (See Rester, H. E., and Wertckley,) Werkley, George. (See Rester, H. E., and Wertckley,) Werder. John F., Cleveland, Ohio. Abrasive compound. 1,623,222; Apr. 5.
Werder, John F., Cleveland, Ohio. Abrasive compound. 1,623,222; Apr. 5.
Werking, Letoy. C. (See Boner, R. C., and Werking,) Werkling, Letoy. C. (See Boner, R. C., and Werking, Jeroy. C. (See Boner, R. C., and Werking, 1911; Jan. 4.
Werlitz, Arthur, Berlin, Germany. Sounding figure. 1,627,365; May 3.
Wermes, Frederick J., Norwood, assignor to S. & W. Machine Company, Clucinnati, Ohio. Printed sheet-delivery attachment for printing presses. 1,628,292; Werning, Hugo H., assignor to Belden Manufacturing.

1,627.366; May 3.

Norwood, assignor to S & W Machinery, relational, Oblo, Printed sheet-delivery attachment for printing presses. 1,628,292; May 10.

Wermine, Hugo H., assignor to Belden Manufacturing Company, Chicago, Ill. Spool. 1,629,362; May 24.

Wernecke, Otto assignor to Weig, Germany, Chicago, Ill. Spool. 1,629,362; May 24.

Wernecke, Otto assignor to weig, Germany, Brunswick, Germany, Resetting mechanism for calculating machines. 1,664,441; Dec. 27.

Werner, A. M. (See Nerew, Morne, assignor.) Werner, Charles L. (See Werner, Theodore and C. L., assignors.)

Werner, Charles L. (See Werner, Theodore and C. L.) Assignors.

Werner, John, & Sons Inc. (See Werner, Theodore and C. L., assignors.)

Werner, Joseph, Perth Amboy, N. J. Flush box. 1,622,503; Mar. 8.

Christiein, P. and Werner, Werner, Merner, See Merner, Joseph, Perth Amboy, N. J. Flush box. 1,622,503; Mar. 8.

Christiein, P. and Werner, Werner, Karl, Dresden, Germany. Producing sand molds for molding stone pattern plates. 1,634,731; July 5.

Werner, Saiph M., Brooklyn, N. Y. Detachable shaft. Werner, Saiph M., Brooklyn, N. Y. Detachable shaft. Werner, Theodore and C. L., assignors to John Werner & Sons Inc., Rochester, N. Y. (Candy-forming machine. 1,652,226; Dec. 13.

Werner, Weilling, Mexia, Tex. Magnetic pump. 1,629,329; May 17.

Werner, Weilling, Mexia, Tex. Multiple-stage pump. 1,634,279; July 5.

Werner, Francis IT, 7528; Peb. 1.

Werner, Weilling, Mexia, Tex. Multiple-stage pump. 1,628,867; May 17.

Wernier, Francis IT, 7528; Peb. 1.

Werner, Weilling, Mexia, Tex. Multiple-stage pump. 1,628,867; May 17.

Wernier, Francis IT, 7528; Peb. 1.

Wernier, Francis IT, 7528; Peb. 1.

Wernier, Francis IT, 7528; Peb. 1.

May 17.

Wernig, Frederick A., Brooklyn, N. Y., assignor to New York Wire & Spring Company, automobile fender guard. 1,651,079; Nov. 29.

Wernig, John S., Brooklyn, N. Y. Automobile bumper. 1,627,218; May 3.

Wernig, John S., Brooklyn, N. Y., assignor of one-fourth to J. F. O'Brien, Englewood, N. J. Impact bar for automobile bumpers. 1,651,792; Dec. Compact Services of the Servic

Chicago. Nov. 22.

Werst, Willard C. Pendleton, Oreg. Doorknob spindle.
1,623,324; Apr. 6.

Wert, Cyrus S., Kendallville, Ind. Applying cement hardener and waterproofing to the main body and face of a
concrete brick. 1,641,874; Sept. 6.

Wertenberger, Roy. (See Warmoth, G. W., and Werten-

rtenbruch, Antony, assignor to Larrowe Milling Com-ny, Detroit, Mich. Bag-filling machine. 1,616,016; reb. 1.

Wertheimer, Max, Chicago, Ill. Toaster. 1,625,008;

Apr. 19.

Apr. 19.

ertz, Austin L., Lakewood, assignor to M. C. Rosenfeld,
Cleveland, Ohio. Frostproof drain valve. 1,640,475;

land,

Cleveland Ohio. Frostproof drain valve. 1,640,475; Aug. 30.
Wertzberger, Dallas D., Tulsa, Okla. Bottom-leg construction for well derticks. 1,638,886; July 26.
Wesala, Matthew E., Chicago, Ill. Cover for military hats. 1,615,780; Jan. 25.
Weschke, Alexander, Berlin-Schoneberg, Germany. ansatic implement. 1,631,388; June 7.
Wescott, William B., Dover, Mass. Treating latex and product thereof. 1,630,411; May 31.
Wescott, William B., Quincy, Mass. Scarlingal machine. 130,442; May 31.
Wescott, William B., Quincy, Mass, assignor to The Rubber Latex Research Corporation, Boston, Mass. Paving. 1,645,635; Oct. 18.
Wescott, William B., Quincy, Mass. Batting process. 1,646,605; Oct. 25.

Wesenberg, Georg. (See Günzler, H., and Wesenberg.) Weskl, Oskar, Berlin, Germany. Pressure bottle. 1,644,966; Oct. 11. Wesp, George, assignor to Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 72,649;

May 10.
esp. George, assignor to Rosenthal China Corporation,
New York, N. Y. Plate or similar article. Des. 72,650;

Wesp, George, assignor to Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 72,651; May 10. May 10.
esp. George, assignor to Rosenthal China Corporation,
New York, N. Y. Plate or similar article. Des. 72,652;

Wesp, George, assignor to Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 72,653; May 10.
Wesp, George, assignor to Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 72,654;

May 10.

Wesp, George, assignor to Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 72.809:

Wesson Sales Company, The. (See Smith, John H., assignor.) Supplementary

Augustus A., Philadelphia, Pa. St ust for internal-combustion engines.

West, Charles H., Pittsburgh, assignor to Westmoreland Glass Company, Grapeville, Pa. Candlestick, Des. 72,688; May 17. West, Claude A., Detroit, Mich. Milling cutter. 1,615,969; West, Cla Feb. 1.

est, Derrick S., Portland, Oreg. May 31. Vise. 1,630,993;

Disinfecting Company. (See Kooperstein, Louis,

assignor.)
West, Donald C. (See Whittaker, C. C., and West.)
West, Ernest. (See West, Frederick J, and B.)
West, Frederick J, and E., assignors to West England.
Coke extractor for vertical technical England.
Coke extractor for vertical technical (See Prestage, Edwin, assignor.)
West, H. J., and Company Limited. (See Prestage, Edwin, assignor.)
West, Harry E., Decatur, Ill. Automobile visor.
1.637.8412; Aug. 2.
West, Herter W., Zoanoke, Va. Brake-operated circuit

1.637.842; Aug. 2. Ceatry, M. Brake-operated circuit vest, Herbert W., Roanoke, Va. Brake-operated circuit closer. 1,629.897; May 24.
West, James, Jamaica Plain, Mass. Marking device. 1,622,291; Apr. 5.
West, John R. Jackson, Tenn. Direction signal. West, Lawrence B., Chattanooga, Tenn. Apparatus for drying and heating material. 1,641,108; Aug. 30.
West, Maxy J., Nelson, England. Manufacture of caps. 1,631,389; June 7.
West, Maxwell A., Portland, Oreg. Loading Jack. West, Otto, Cleveland, Ohio, assignor to The Miller Company, Meriden, Conn. Lamp socket. 1,629,243; May 17.

Company, May 17.

Musy 11.

West, Perry. (See Musselman, J. F., and West.)

West, Peter S. L., Brooklyn, N. Y. Fuel economizer.

1,616,401, Feb. 1.

West, Roger R., Norwood, London, England, Automatic

weighing machine. 1,623,820; Apr. 5.

West Bend Aluminum Company. (See Kircher, Ralph N.,

West Bend Aluminum Company. (See Wentorf, Robert

West Bend Aluminum Company. (See Wentorf, Robert H., assignors.)
West Bend Equipment Corporation. (See Quade. A., and Klumb, assignors.)
Westberg, Sigurd, Pittsburgh, Pa. Heat-treating furnace. 1.617.369. Feb. 15.
Westberg, Sigurd, Germantown, Pa. Making iron and steel. 1.629.563; May 24.
Westbrook, Frank L., Springfield, Mo. Take-up. 1.614.221; Jan. 11.
Westbrook, James R. (See Schweiker, M. A., and West-Westbrook, William Canasiota and P. W. Collins, Elmira.

stbury, William, Canastota, and P. W. Collins, Elmira, N. Y. Manufacture of glass articles. 1,620,308;

West Coast Knitting Mills. (See Stephens, Herman F., Assignor.)

Westco-Chippewa Pump Company et al. (See Borneman, Herman A. F., assignor.)

Westco-Chippewa Pump Company. (See Holmes, Robert E. L. assignor.)

Berry B. A. L. assignor.)

Westco-Chippewa Pump Company. (See Holmes, Robert E. L. assignor.)

Westcott, Benry P., deceased, Erie, Pa.; A. K. Westcott, administratrix. Differential-pressure gauge for orifice meters. 1,618,522; Feb. S. Douis, Mo. Pourling spout for Sestence, Frederick, S. Louis, Mo. Pourling spout for Westerberg, Arel M., and J. M. Sickle, New York, N. Y. Knee clamp. 1,634,144; June Sep. 27.

Westerberg, Arel M., and J. M. Sickle, New York, N. Y. Knee clamp. 1,634,144; June 29.

Westerberg, Johan G., Los Angeles, Calif. Bookrack Westerland, William M., et al. (See McDonald, John C., assignor.)

Westerman, Frederick, Chicago, Ill. Machine for icing cakes. 1,653,486; Dec. 20.

Westerman, Harry G., 101, 152, 2073; Dec. 6.

Westerman, William H., Marietta, Ohio. Thread guard. 1,640,963; Aug. 30.

Westerman Human H., Marietta, Ohio. Thread protector. 1,640,970; Aug. 30.

Westerm Cartridge Company. (See Clync, R. G., and Western Cartridge Company. (See Clync, R. G., and Western Cartridge Company. (See Clync, R. G., and Westco-Chippewa Pump Company et al. (See Borneman, Herman A. F., assignor.) assignor.) Western Cartridge Company. (See Clyne, R. G., and Williams, assignors.)
Western Cartridge Company.
assignor.) (See Olin, Franklin W., Western Cartridge Company. (See Olin, J. M., Davis, and Smith, assignors.)
Western Cartridge Company. (See Olin, J. M., and O'Neil, assignors.)
Western Cartridge Company. (See Olin, J. M., and Smith. assignors.)
Western Cartridge Company. (See O'Nell, Arthur S. assignor.) Western Clock Company. (See Schierholtz, Henry A., assignor. estern Coil & Electrical Co. (See Eells, Milton M., as-signor.) We signor.)
Western Coil & Electrical Co. (See Lewis. W. T., and Eells, assignors.)
Western Drop Forge Company. (See Moreland, George E., assignor.)
Western Electric Company. (See Adams, Arthur H., assignor.)
Western Electric Company. (See Adams, William J., jr., assignor.)
Western Electric Company. (See Adams, W. J., and Haddock, assignors.)
Western Electric Company. (See Albright, Henry F., assignor.) Western Electric Company. (See Anderson, Sidney E., as-Western Electric Company. (See Arkema, Harold P., asestern signor.) estern Electric Company. (See Arnold, Harold D., assignor.)
estern Electric Company. (See Augustine, Roy W., RSSIgn.
Western Electric Company.
Western Electric Company.
and Bonomi, assignors.)
Western Electric Company. (See Beaumont, W. M., (See Bell, John H., aswestern Electric Company. (See Beil, John H., assignor.)
Western Electric Company. (See Bernhard, Frederick S.,
assignor.)
Western Electric Company. (See Bertels, Arnold S., assignor.) Western Electric Company. (See Black, Harold S., assignor.) Western Electric Company. (See Blattner, David G., assignor.) Signor.]
Western Electric Company. (See Blount, H., and Hernlund, assignors.)
Western Electric Company. (See Blount, H., and Hernlund, assignors.)
Western Electric Company. (See Boe, Helmer J., as-Electric Company. (See Bohn, H. E., and Fauquier Western Electric Company. (See Bollinger, Charles, assignor.) estern Electric Company. (See Bouvier, George A., as-Western | signer. Western Electric Company. (See Boving, Henrik, as-Western Electric Company. (See Brown, Alfred B., asignor.) etern Electric Company. (See Brown, John T. L., assignor.)
Western Electric Company. (See Buckley, Oliver E., assignor.) estern Electric Company. (See Burkholder, John C., assignor.) (See Burton, Everett T., assignor.) Western

Western Electric Company. (See Carpenter, Warren W., assignor.)
Western Electric Company. (See Carter, Herbert F., assignor.)
Western Electric Company. (See Casper, William L., aswestern E signor.) Western Field, a Western Electric Company. (See Casper, W. L., and assignors.)
Electric Company. (See Cawthon, Samuel C., assign Western Electric Company. (See Chaplin, Merle P., aswestern Electric Company, signor.) Western Electric Company, signor.) Western Electric Company. (See Chesnut, Roy W., as-(See Christopher, Arthur J., assignor Western Electric Company. (See Chylinski, Stanislas Z .. Western Electric Company. (See Clark, Edgar H., assignor. Western Electric Company. (See Clausen, Henry P., assignor.) Western Electric Company, (See Clement, Lewis M., assignor.)
Western Electric Company. (See Clokey, Allison A., assignor.)
Western Electric Company. (See Colpitts, Edwin H., asgignor. Electric Company. (See Coon, Leslie E., assignor.) Western Electric Company. (See Coram, Roy E., assignor.) Western Electric Company. (See Cox. Louis T., aswestern Electric Company. (See Craft, Edward B., aswestern Electric Company.

Keller. assignors.)

Western Electric Company.

assignor.) Electric Company. (See Craft, E. B., and (See Cummings, George C., Western Electric Company. (See Curran, S. T., and Mueller, assignor.)
Western Electric Company. (See Curtis, Alfred S., asestern signor.)
estern Electric Company. Western (See Curtis, Austen M., assignor.)
Western Electric Company. (See Dahl, Jack F., assignor.) . (See Deakin, Gerald, as Western signor.) Electric Company. Western Electric Company. (See De Monte, R. W., and Shea, assignors.) Western Electric Company. (See Dowd, Andrew D., as-Western Electric Company. (See Dowey, Thomas L., assignor. Western Electric Company. (See Duncan, George W., Western Electric Company. signor.) Western Electric Company. assignor.) Western Electric Company. (See Dunham, Bert G., as-(See Durhan, Edward, jr., (See Egert, Benjamin J .. assignor.) Western Electric Company. (See Elmen, Gustaf W., assignor.) Western Electric Company. (See Emery, Charles B., assignor.) Western Electric Company. (See Farrington, John F., assigno Western Electric Company. (See Fay, Joseph W., assignor.)
Western Electric Company. (See Fay, J. W., and Wales, Western Electric Company. (See Ferguson, John G., assignor.)
Western
signor.)
Western
Newell, Electric Company. (See Fetzer, Karl M., as-Electric Company. (See Fetzer, K. M., and Western Electric Company. (See Field, Frank E., assignor.) Western signor.) Western Electric Company. (See Field, Joseph C., as-Electric Company. (See Flammer, Howard A., assignor.) Western (See Fletcher, Harvey, as-Western Electric Company. (See Fletcher, H., and Sivian, assignors.)
Western Electric Company. (See Floyd, Charles L., as-Western Electric Company. (See Fondiller, William, assignor.) Western Electric Company. (See Ford, Ben K., assignor.) (See Fowler, Clarence B., assignor.)
Western Electric Company.
signor.)
Western Electric Company. (See Franks, Clem H., as-(See Friis, Harald T., assignor.)
estern Electric Company. Western (See From Owen C. asestern Electric Company. Western (See Fullarton, Gregg M ...

(See Johnson, John B., as-Western Electric Company. (See Gabriel, John C., as-Western Electric Company. Western Electric Company.
assignor.)
Western Electric Company.
Shea, assignors.) gnor.) tern Electric Company. Signor.) Western Electric Company. (See Johnson, Kenneth S., (See Gallopin, Gustavo, as-(See Johnson, K. S., and (See Gargan, John O., as-Western Electric Company. signor. Western (See Johnson, Lewis H., as-(See Gauthier, Ernest, as-Electric Company. Western (See Johnson, L. H., and (See Gent, Edgar W., as-Electric Company. Electric Company. signor.) Western Electric Company. (See Gerhardt, Adelbert P., (See Johnston, John G., as-Western E assignor Western I signor. Western Electric Company. (See Jones, Charles G., as-Electric Company. (See Gibson, Earl S., assignor.) Western Western Electric Company. (See Jones, Harold F., as-(See Gilbert, John J., as-Electric Company. Western Electric Company. (See Jones, Warren C., as-Western Electric Company. Western Electric Company. (See Gill, Frank, assignor.) (See Gilson, Albert F. F., assignor.) Western Electric Company. (See Jongedyk, Ralph, as-(See Goff, Harold W., assignor.)
Western Electric Company. Electric Company. (See Jordan, William C., signor.)
Western Electric Company,
Shackleton, and Vroom, as assignor.)
Western Electric Company. et al. (See Glezen, L. L. Shackleton, and Vroom, a Western Electric Company. ((See Kelsay, Le Roy W., (See Gooderham, John W., assignor.) assignor.) Western (See Kemp, Archie R., assignor.) (See Gorton, Arthur F., as-W Western (See King, Robert W., assignor. signor. Western Electric Company. (See Gorton, William S., as-Western Electric Company. (See Knoop, William A., assignor. stern Electric Company. (See Graham, Frank H., as-Western Electric Company. (See Kochendorfer, Frederic S., assignor.)
Western Electric Company.
and Schulz, assignors.)
Western Electric Company.
signor.) Electric Company. (See Grange, John D., aswestern Electric Company.
signor.)
Western Electric Company.
Vosyka, assignors.)
Western Electric Company. (See Kochendorfer, F. S., Company. (See Grange, J. D., and (See Kopp, Ottmar H., as-(See Griffin, James T., as-Western Electric Company. (See Kuhn, John J., as-Western Electric Company. (See Griffith, Thomas R., assignor.) Western Electric Company. (See Kuhn, J. J., and Betts, assignors.)
Western Electric Company. (See Landeen, Arvid G., as-Western Electric Company. (See Haddock, Arthur, asignor.) etern Electric Company. signor.)
Western Electric Company. (See Hagelthorn, Thomas, (See Lamplough, Leslie F., assignor.)
Western Electric Company.
signor.) assignor.) Western Electric Company. (See Lang, Frederic H., as (See Hague, Alfred E., as-Electric Company. (See Hampton, Leon N., as-Western Electric Company. (See Laskey, William G., assignor.)
Western Electric Company.
Canfield, assignors.) Electric Company. (See Harlow, John B., as-(See Lawson, W. L., and Western Electric Company. (See Harrison, Hepry C., asd, assignors.)
Electric Company. Western (See Little, John S., assignor. Western Western Electric Company. Western Electric Company. (See Hart, Carl D.) (See Hart, Carl D., as-Electric Company. (See Locke, George A., asestern signor. signor.) Western Electric Company. (See Long, Maurice B., as-signor.) Western Electric Company. (See Lucas, Francis F., as-Western Electric Company. (See Hartley, Ralph V. L., assignor.)
Western Electric Company. (See Hawkins, William W .. signor. Western Electric Company. (See Lum, George R., as-Western Electric Company. (See Heising, Raymond A., signor. Western Electric Company. (See Lundell, Alben E., as-Western Electric Company. (See Hendry, William F., assignor. Western Electric Company. (See MacDougall, Harry W., Electric Company. (See Hersey, Ralph E., asassignor.) Western Electric Company. signor.) Western Electric Company. (See MacKenzie, Donald., (See Hill, Myron F., asassignor.)
Western Electric Company. (See Malm, Frank S., as-Western Electric Company. (See Hinrichsen, Edward E., assignor.) Western Electric Company. (See Marrison, Warren A., Western Electric Company. (See Hitchcock, Carl H., assignor.)
Western Electric Company. (See Martin, George R., assignor.) Western Electric Company. (See Hocker, Carl D., assignor.)
Western Electric Company.
assignor. Western Electric Company. (See Martin, Wallace L., (See Hoffmann, Henry L., Electric Company. (See Marwin, Alfred C., as-Western Electric Company. assignor.) Western Electric Company. (See Hofstetter, Robert, signor.)
Western Electric Company. estern Electric Company. (See Mason, Sumner R., Western Ele and Stull (See Holmberg, C. G., jr., and Stull, assignors.)
Western Electric Company. Western R., assi Western (See Massingham, Henry (See Horton, Joseph W., assignor.)
Western Electric Company. (See Hosford, William F., as-Electric Company. (See Mathes, Robert C., assignor.)
estern Electric Company. signor.) Western (See Maurer, Oswald H .. Western Electric Company. G., assignor.) Western Electric Company. (See Houskeeper, William assignor Western Electric Company. signor.) Western Electric Company. (See Maxfield, Joseph P., as-(See Hovland, Henry, assignor.) (See McFarland, Robert E., Western E Electric Company. (See Hubbard, Francis A., assignor Electric Company. (See McGall, Philip K., as-Western signor.) Electric Company. (See Hull, Sidney M., assignor.)
Western Electric Company. (See McWaid, Ralph A., Western Electric Company. (See Hulsizer, Robert I., as-Electric Company. (See Mead, Edward D., as-Electric Company. (See Huntington, Victor C., Western Electric Company. (See Merrill, Frank W., asassignor Electric Company. (See Ives, Herbert E., assignor Western Electric Company. (See Mesa, Joseph O., assignor.) Western Electric Company. (See Jacobsen, E., and Western Electric Company. signor.) Sperry, assignors.)
Western Electric Company. (See Jammer, Jacob S., as-(See Miller, Daniel D., as-Western Electric Company. (See Miller, Robert B., as-signor.) Western Electric Company. (See Mills, John, assignor.) Western Electric Company. (See Mills, Ralph H., assignor.) Western Electric Company. (See Jenkins, George M. O., assignor.) Western El estern Electric Company. (See Jespersen, Helgo W., assignor.)

Western Electric Company. (See Milton, Ivan L., assignor.) Western Electric Company. (See Mitchell, Clifford E .. assignor.)
Western Electric Company. (See Mohr. Franklin, assignor. Electric Company. (See Moore, Charles R., as-Western Electric Company. (See Moore, C. R., and Hay ward, assignors.) Western Electric Company. (See Mortimer, Louis A., assignor.) Western (See Morton, Charles A., Western Electric Company. (See Mueller, E. C., ir., and Curran, assignors.)
estern Electric Company. Western (See Murphy, Francis, as-Western Electric Company. (See Newton, Edwin E., as-Western Electric Company. (See Nicolson, Alexander M. assignor.)
Western Electric Company. (See Nordenswan, Robert, as-Western Electric Company. (See Nordenswan, R., and Curtis, assignors.) Western (See O'Neill, Henry W., assignor Western Electric Company. (See Oswald, Arthur A., as signor. Western Nelson Electric Company. (See Oswald, A. A., and a, assignors.)
Electric Company. Western (See Palmer, Joel C. R., as-Electric Company. (See Parcells, Paul D., as Western signor.) Western (See Payne, Edward B., as-Western Electric Company. (See Peoples, Robert E., assignor. Western Electric Company. (See Pfannenstiehl Harry assignor. Electric Company. (See Porter, Leslie F., as-Western Electric Company. (See Potter, William H., assignor.) Western Electric Company. (See Potts, Louis M., assignor Western Electric Company. (See Pruden, Harold M., assignor.) Western (See Quarles, Donald A., assignor.)
Western Electric Company. (See Ray, Joseph L., assignor.) Western Electric Company. (See Ray, William H., assignor.)
Western Electric Company. (See Ray, W. H., and Strawn. assignors.)
Western Electric Company. (See Reddig, Charles E., aswestern Electric Company. (See Reeve, Howard T., assignor. Western Electric Company. (See Reeves Frank N., as Western Electric Company. tsee Retallack, John B., as-Western Electric Company.
Signor.)
Western Electric Company.
Section Section Company. (See Richard, Charles D., as-Signoz.
Western Electric
Morris, assignors.)
Western Electric Company. (See Richard, C. D., and (See Richter, John W., as-Western signor.)
Western Electric Company.
Western Electric Company.
Kraisinger, assignors.)
Western Electric Company. (See Riggs, George, assignor.) (See Rinker, J. C., and (See Roberts, John G., assignor.) Western Electric Company (See Rock, George L., assignor Western Electric Company. (See Rogers, Joseph E., assignor.) Wes Electric Company (See Roman, F. L., and Winsemius, assignors.) (See Ronci, Victor L., as-Western signor.) Electric Company. Western Electric Company. (See Ruby, Frank J., as-Electric Company (See Ryan, Francis M., Western Electric Company. (See Sacia, Charles F., as-Western Electric Company. (See Sager, John W., as-Western Electric Company. (See Schafer, John P., as signor.) Western Electric Company. (See Schelleng, John C., assignor.) Western Electric Company. (See Schleppy, S. L., and Bureau, assignors.) (See Schulz, Arthur E., assignor.)
Western Electric Company. (See Schumacher, Earle E., assignor.)
Western Electric Company,
signor.) (See Schwerin, Paul, as-

Western Electric Company. (See Scriven, Edward O .. assignor.) Western Electric Company. (See Seeley, George A., as-Western Electric Company. (See Shackelton, William J., signor.) tern Electric Company. Western Electric assignor.) (See Shea, Timothy E ... (See Siebs, Claude T., as-Western Electric Company. (See Siegmund, Humphreys O., as: Western Electric Company. (See Smith, Ermy R., assignor.) Western Electric Company. (See Smith, George O., as-Western Electric Company. (See Snook, Homer C., assignor Western Electric Company. (See Spencer, Frank C., assignor. Western Electric Company. (See Sprague, Clarence A., Western Electric Company. (See Stearn Franklin A assignor.)
Western Electric Company. (See Stevenson, George H .. assignor Western Electric Company. (See Stokely, Ray L., assignor. Western Electric Company. (See Stoller, Hugh M., assignor.)
Western Electric Company. (See Swoboda, Adolph R., assignor.)
Western Electric Company. (See Tanner, De Witt C., Western Electric Company. (See Taylor, Hugh S., assignor Western Electric Company. (See Temple, David L., as signor.) Western Electric Company. (See Thronsen, Sigurd, as-Electric Company. Western (See Trebes, Bruno M. A., Western Electric Company. (See Ulrich, Horace W .. assignor.) Western (See Vadersen, Herbert, assignor. Western Electric Company and Blair, assignors.) Western Electric Company. Electric Company. (See Van de Water, J. W., (See van der Biil Hendrik J. assignor.) Western Electric Company. G., assignor.) Western Electric Company. (See Von Zastrow, Curtis (See Voos, Frederick A., assignor. Western E Electric Company. (See Vroom, Edward, assignor.) Western Electric Company. (See Walker, Howard G., assignor.) Western Electric Company. (See Walker, H. G., and March. assignors.)
Electric Company. (See Ward, Henry L., as-Western signor. Electric Company. (See Watrous, Paul M., as-Western Electric Company. (See Wegel, Raymond L., assignor.) Western Electric Company. (See Wegman, E. C., and Southwick, assignors.) Western Electric Company. (See Weinhart, Howard W., assignor.)
Western Electric Company. (See Wennemer, Gerard P., signor.) Western (See Wente, Edward C ... ssignor. Western (See Wentz, Jesse F., as-Electric Company signor.) Western Electric Company assignor.) Western Electric Company. (See Wheeler, Edmund B., (See Whitehorn, Homer A., Western Electric Company. (See Whittle, Horace, as-Electric Company. Western (See Wier, Harry B., assignor. Western (See Willard, Frederic W., Electric Company. Western I Electric Company. (See Williams, S. B., and assignors.) Western Electric Company. Gibson, assignors.) Western Electric Company. (See Williams, S. B., and Western E (See Willis, Frederick C., Western signor.) Electric Company. (See Wilson, Ira G., Western Electric Company. (See Wilson, John M., assignor.) Western Electric Company. (See Wold, Peter I., Western Electric Company. (See Wolfe, Wallace V., assignor. Western Electric Company. (See Wood, Ernest B., assignor.) Western Electric Company. (See Zethmayr, Gordon J., assignor.

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Western Electric Company. (See Zickrick, Lyall, as-
signor.)
Western Electric Company. (See Zogbaum, Ferdinand,
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Western Electric Company, (See Zoguaum, Ferdinand, assignor.)
Western Electric Company, Incorporated, et al. (See Dunham, B. G., and Haines, assignors.)
Western Felt Works. (See Faurot, Henry, assignor.)
Western Eas Construction Company, The. (See Beebe, Frederick H., assignor.)
Western Gas Construction Company. (See Stone, Thomas

W., assignor.) Western Harvester Co. (See Thoen, Lowell H., assignor.) Western Implements Limited. (See Goodfellow, Sampson

J., assignor.) Western Lithograph Company. (See Tuli, Roger, as-

signor.) Western Railway Equipment Company. (See Campbell,

Western Railway Equipment Company. (See Campassistering H, assignor.)
Western Railway Equipment Company. (See Pletzsch. Frank H, assignor.)
Western Railway Equipment Company. (See Shipley, Tolhott G, assignor.)
Western Reserve Rubber Company, The. (See Witten, Arthur P., assignor.)
Western States invelope Co. (See Vallier, Elljah G., assignor.)

Western States Machine Company. (See Roberts, Dugene.

Western States Machine Company, The. (See Roberts,

Eugene, assignor.)
Western Stoneware Company. (See Dains, Irven F., assignor.)

signor.)
Western Supplies Co. (See Woodworth, Roy V., assignor.)
Western Supply Company. (See Crotto, Frank E., assignor.)
Western Tool and Wrench Company. (See Peterson, Axel W., assignor.)
Western Union Telegraph Company, The. (See Angel, Herbert, assignor.)

Axel W., assignor.)
Western Union Telegraph Company, The. (See Angel, Herbert, assignor.)
Western Union Telegraph Company, The. (See Curtain. Leo P., assignor.)
Western Union Telegraph Company, The. (See Drake, Herbert W., assignor.)
Western Union Telegraph Company, The. (See Dudley, William A., and Duerr, assignors, The. (See Fluharty, Western Union Telegraph Company, The. (See Fluharty, Western Union Telegraph Company, The. (See Howard. renerr unon Telegraph Company, The. (See Fluharty, William C. assignors)
Welliam C. assignors, Company, The. (See Howard, Albert H. assignors)
Western Union Telegraph Company, The. (See Janson, George W., assignor).
Western Union Telegraph Company. (See Mason, Roger, assignors).

western Union Telegraph Company, The, (See Nelson, Crescent F., assignor.)
Western Union Telegraph Company, The. (See Parker, L. F., and Bramhall, assignors.)
Western Wheeled Scraper Company. (See Benboy, James

Western Wheeled Scraper Company. (See Bressler, RobWestern Wheeled Scraper Company et al. (See Flangan,
William A., assignor.)
Westfield, Gustay A.. Salem, Oreg. Door latch.
1,637,368; Aug. 2.
Westfield, Gustay A.. Salem, Oreg. Door latch.
1,637,368; Aug. 2.
Westfield, William P., Park City, Utah. Fire escape.
1,622,821; Apr. 5.
Westgard, Anton, Chicage, Ill. Saw construction.
1,642,183; Sept. 13.
1,642

Westinghouse Air Brake Company, The. (See Aikman,

Westinghouse Air Brake Company, The. (See Aikman, Burton S., assignor.)
Westinghouse Air Brake Company, The. (See Bartinchouse Air Brake Company, The. (See Burton. Thomas L., assignor.)
Westinghouse Air Brake Company, The. (See Carthew, John W., assignor.)
Westinghouse Air Brake Company, The. (See Carthew, John W., assignor.)
Westinghouse Air Brake Company, The. (See Carthew, Albert J., assignor.)
Westinghouse Air Brake Company, The. (See Chapin, Assignor.)
Westinghouse Air Brake Company. (See Clark, Horace S., assignor.)

massigner.)
Westinghouse Air Brake Company, The. (See Craig, John Westinghouse Air Brake Company, The. (See Dapron, Joseph M. assignor.)
Westinghouse Air Brake Company, The. (See Dean, William B., assignor.)

Westinghouse Air Brake Company, The. (See Down, Sidwestinghouse Air Brake Company, The. (See Elliott, Howard B., assignor.)
Westinghouse Air Brake Company, The. (See Farmer,

Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignors.)
Westinghouse Air Brake Company, The. (See Farmer, C. C., and McCune, assignors.)
Westinghouse Air Brake Company. (See Farmer, C. C., and McWhirter, assignors.)
Westinghouse Air Brake Company, Gsee Farmer, C. C., and Thomans, assignors.)
Lester A., assignor.)

Westinghouse Air Brake Company, The. (See Guillemin-Tarayre, Jean, assignor.)

Westinghouse Air Brake Company, The. (See Livingston, Fremont P., assignor.)
Westinghouse Air Brake Company. (See Maier, George E., assignor.)

Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.) Westinghouse Air Brake Company, The. (See Whitaker,

Westinghouse Air Brake Company, The. (See Wildin, G. W., and Farmer, assignors.)
Westinghouse Air Brake Company, The. (See Woernley,

Westinghouse Air Brake Company, The. (See Woernley, Harry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Aalborg, Christian, assignor.)
Westinghouse Electric and Manufacturing Company. (See Aalborg, C., and Wilharm, assignors.)
Westinghouse Electric & Manufacturing Company. (See Aalborg, C., and Colby, assignors.)
Westinghouse Electric & Manufacturing Company. (See Aiken, Joseph E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Allent, Chester T., assignor.)
Westinghouse Electric & Manufacturing Company. (See Allent, Chester T., assignor.)
Westinghouse Electric and Manufacturing Company. (See Allen, Robert C., assignor.)

(See Allen, Mouert C., assignor.)
Westinghous Electric & Manufacturing Company. (See
Angus, Donald J., assignor.)
Westinghouse Electric & Manufacturing Company. (See
Ansingh, Herman K., assignor.)
Westinghouse Electric and Manufacturing Company. (See
Aram, Otto, assignor.)

Aram, Otto, assignor.)

Westinghouse Electric & Manufacturing Company. (See
Asblaugh, John H., assignor.)

Westinghouse Electric & Manufacturing Company. (See
Asphwall, Louis M., assignor.)

Westinghouse Electric & Manufacturing Company. (See
Atherton, Alfred L., assignor.)

Westinghouse Electric & Manufacturing Company. (See
Austin, Eascum O., assignor.)

Westinghouse Electric & Manufacturing Company. (See
Austin, Eascum O., assignor.)

Westinghouse Electric & Manufacturing Company. (See
Austin, Mater M., assignor.)

Westinghouse Electric & Manufacturing Company. (See
Baker, John F., assignor.)

Baker, John F., assignor.)

Baker, John F., assignor.)
Westinghouse Electric & Manufacturing Company.
Bakken, Andrew H., assignor.)
Westinghouse Electric & Manufacturing Company.
Balph, Wilmer G., assignor.)
Westinghouse Electric & Manufacturing Company.
Barker, Virgil D., assignor.)
Westinghouse Electric and Manufacturing Company. (See (See

(See Baum, Frank G., assignor.)

Westinghouse Electric and Manufacturing Company. (See Baxter, Harold G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Baxter, Harold G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Beck, Edward, assignor.)
Westinghouse Electric and Manufacturing Company. (See Beck). Edward, assignor.)

Bettine, Chadue, assignor.)
Westinghouse Electric & Manufacturing Company.
Blebel, Herman M., assignor.)
Westinghouse Electric & Manufacturing Company.
Bierman, Harry C., assignor.)
Westinghouse Electric & Manufacturing Company.
Billiniere, Frank M., assignor.)
Westinghouse Electric & Manufacturing Company.
Billineris, Goorge E., assignor.)
Westinghouse Electric & Manufacturing Company.
Beadile, Clarence A., assignor.) (See (See

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Westinghouse Electric & Manufacturing Company.
Boddie, Clarence A., assignor.)
Westinghouse Electric & Manufacturing Company.
Boissonnault, Frank L., assignor.)
Westinghouse Electric & Manufacturing Company.
Botcher, Charles A., assignor.)
Westinghouse Electric & Manufacturing Company.
Bouslough, J. A., and Eaton, assignors.)
Westinghouse Electric & Manufacturing Company.
Westinghouse Electric & Manufacturing Company.
Brace. Porter H., assignor.)
Westinghouse Electric & Manufacturing Company.
Bradshaw, William M., assignor.)
Bestinghouse Electric & Manufacturing Company.
Bradshaw, W. M., and Ashbaugh, assignors.) (See

(See (See

Westinghouse Electric and Manufacturing Company, Bradshaw, W. M., and Mylius, assignors.) Westinghouse Electric & Manufacturing Company, Brannigan, Edward J., assignor.) Westinghouse Electric & Manufacturing Company, Breisch, Edgar W., assignor.	(See	Westinghouse Electric and Manufacturing Company. (See Goldsborough, T. R., and Eschholz, assignors.)
Westinghouse Electric & Manufacturing Company. Brannigan, Edward J., assignor.)	(See	Westinghouse Electric and Manufacturing Company, (See Goldsborough, T. R., and Eschholz, assignors.) Westinghouse Electric & Manufacturing Company, (See Health of the Company of the Comp
Breisch, Edgar W., assignor.) Westinghouse Fleatric & Manufacturing Company	(See	Westinghouse Electric & Manufacturing Company. (See Golladay, L. R., and Smith, assignors.) Westinghouse Electric & Manufacturing Company. (See
Westinghouse Electric & Manufacturing Company. Breisch, E. W., and Golladay, assignors.) Westinghouse Electric & Manufacturing Company.	(See	Goodwin, Walter C., assignor.) Westinghouse Electric & Manufacturing Company. (See
Brooks, Robert, assignor.)	(See	Gransden, William H., assignor.) Westinghouse Electric & Manufacturing Company. (See
Westinghouse Electric and Manufacturing Company. Brown, Arthur L., assignor.) Westinghouse Electric & Manufacturing Company.	(See	Grant, William M., assignor.) Westinghouse Electric & Manutacturing Company. (See
Brown, John L., assignor.) Westinghouse Electric & Manufacturing Company.	(See	Westinghouse Electric & Manufacturing Company. (See
Burger, Oswald, assignor.) Westinghouse Electric & Manufacturing Company.	(See	Westinghouse Electric & Manufacturing Company. (See
Burns, James A., assignor.) Westinghouse Electric & Manufacturing Company.	(See	Westinghouse Electric & Manufacturing Company. (See Guige, Benjamin J., assignor.) Westinghouse Electric & Manufacturing Company. Guy, H. L., and Blacklock, assignors.) Westinghouse Electric & Manufacturing Company. Hague, Floyd T., assignor.) Westinghouse Electric & Manufacturing Company. (See Hancock, Scott, assignor.)
Westinghouse Electric & Manufacturing Company.	(See	Westinghouse Electric & Manufacturing Company. (See Hancock, Scott, assignor.)
Westinghouse Electric & Manufacturing Company. Brown, John L., assignor.) Westinghouse Electric & Manufacturing Company. Westinghouse Electric & Manufacturing Company. Burns, James A., assignor.) Westinghouse Electric & Manufacturing Company. Burcher, Charles A assignor.) Westinghouse Electric & Manufacturing Company. Burcher, C. A., and Hart, assignors.) Work Andrew H., and Charl, assignors.	(Sec	Westinghouse Electric & Manufacturing Company. (See Hanna, Clinton R. assignor.)
Westinghouse Electric & Manufacturing Company. Cares. H. F., and Marsland, assignors.)	(See	Westinghouse Electric & Manufacturing Company. (See Harrison, William E., assignor.)
Candee, Andrew H., assignor.) Cardee, Andrew H., assignor.) Westinghouse Electric & Manufacturing Company. Cares. H. F., and Marsland, assignors.) Westinghouse Electric & Manufacturing Company. Carey, Charles E., assignor.)	(See	Westinghouse Electric & Manufacturing Company. (See Hanna, Clinton & assignor.) Westinghouse Electric & Manufacturing Company. (See Harrison, William E., assignor.) Westinghouse Electric and Manufacturing Company. (See Harvey, A. L., and Andersen, assignors.) Westinghouse Electric & Manufacturing Company. (See
Westinghouse Electric & Manufacturing Company. Cheetham, George A., assignor.)	(See	Westinghouse Electric & Manufacturing Company. (See Haverstick, Earl J., assignor.)
Westinghouse Electric & Manufacturing Company. Chubb, Lewis W., assignor.)	(See	Westinghouse Electric and Manufacturing Company. (See Hebrew, J. S., and Ross, assignors.) Westinghouse Electric & Manufacturing Company. (See
Westinghouse Electric & Manufacturing Company, therefine, George A, assignor.) Westinghouse Electric & Manufacturing Company, Chubb, Lewis W, assignor.) Westinghouse Electric & Manufacturing Company, Clay, Noble S, assignor.)	(See	Westinghouse Electric & Manufacturing Company. (See Haverstick, Earl J., assignor.) Westinghouse Electric and Manufacturing Company. (See Westinghouse Electric & Manufacturing Company. (See Helmund, Rudolf E., assignor.) Westinghouse Electric & Manufacturing Company. (See Hengstenberg, Paul M., assignor.) Westinghouse Electric and Manufacturing Company. (See Hengstenberg, Paul M., assignor.) Westinghouse Electric and Manufacturing Company. (See Hengstenberg, Paul M., assignor.)
Westinghouse Electric and Manufacturing Company. Coates, W. A. and Davies, assignors.) Westinghouse Electric and Manufacturing Company. Coates, W. A. Gittins, and Davies, assignors.) Westinghouse Electric & Manufacturing Company.	(Sec	Hengstenberg, Paul M., assignor.) Westinghouse Electric and Manufacturing Company. (See
Westinghouse Electric and Manufacturing Company. Coates, W. A., Gittins, and Davies, assignors.)	(See	Herr. Herbert T., assignor.) Westinghouse Electric & Manufacturing Company. (See
Colby, Ora A., assignor.)	(See	Hester, Edgar A., assignor.) Westinghouse Electric & Manufacturing Company. (See Himes, Walter H., assignor.) Westinghouse Electric & Manufacturing Company. (See
Colby, Ora A., assignor.) Colby, Ora A., assignor.) Westinghouse Electric & Manufacturing Company. Cole, William H., assignor.) Westinghouse Electric & Manufacturing Company. Courad, Frank, assignor.)	(See	Himes, Walter H., assignor.) Westinghouse Electric & Manufacturing Company. (See
Conrad, Frank, assignor.)	(See	Hineline, Harris D., assignor.) Westinghouse Electric & Manufacturing Company. (See Hodgkins, Charles H., assignor.) Westinghouse Electric & Manufacturing Company. (See
Crabbs, Herbert J., assignor.) Westinghouse Electric & Manufacturing Company	(See	Westinghouse Electric & Manufacturing Company. (See
Crichton, Leslie N., assignor.) Westinghouse Electric & Manufacturing Company.	(See	Hodgkinson, Francis, assignor.) Westinghouse Electric & Manufacturing Company. (See Holy, George H. F., assignor.) Westinghouse Electric & Manufacturing Company. (See Home William C. assignor.)
Coman, Flank, assignor.) Westinghouse Electric & Manufacturing Company. Crabbs, Herbert J., assignor.) Westinghouse Electric & Manufacturing Company. Crichton, Lexile N., assignor.) Westinghouse Electric & Manufacturing Company. Dann, Walter M., assignor.) Westinghouse Electric & Manufacturing Company.	(See	
Westinghouse Electric & Manufacturing Company.	(See	Westinghouse Electric & Manufacturing Company. (See Houston, Harold A., assignor.)
Westinghouse Electric & Manufacturing Company.	(See	Houston, Harold A., assignor.) Westinghouse Electric & Manufacturing Company. (See Houston, H. A., and Shepard, assignors.) Westinghouse Electric & Manufacturing Company. (See
Davis, David C., assignor.) Westinghouse Electric & Manufacturing Company. Davis, Robert L., assignor.) Westinghouse Electric & Maaufacturing Company. De Camp, Ray E., assignor.) Westinghouse Electric & Manufacturing Company. Demman, Earl W., assignor.) De Vries, Andrew, assignor.) Westinghouse Electric & Manufacturing Company. Eaton, George M., assignor.)	(See	Jablow, Charles, assignor.) Westinghouse Electric & Manufacturing Company. (See
Westinghouse Electric & Manufacturing Company. Denman, Earl W., assignor.)	(See	Jackson, Ray P., assignor.) Westinghouse Electric and Manufacturing Company.
Westinghouse Electric's Manufacturing Company. De Vries, Andrew. assignor.)	(See	Jablow, Charles, assignor.) Westinghouse Electric & Manufacturing Company. (See Jackson. Ray P., assignor.) Westinghouse Electric and Manufacturing Company. (See Jackson. R. P., Kent, and Casselman, assignors.) Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.) Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.) Westinghouse Electric & Manufacturing Company. (See James, Gliver S., assignor.) Westinghouse Electric & Manufacturing Company. (See James, Oliver S., assignor.)
Westinghouse Electric & Manufacturing Company. Eaton, George M., assignor.)	(See	James, Henry D., assignor.) Westinghouse Electric & Manufacturing Company. (See
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Ehrgott, Karl, assignor.) Westinghouse Electric & Manufacturing Company	(See	Westinghouse Electric & Manufacturing Company. (See
Ellis, Walter R., assignor.)	(See	Westinghouse Electric & Manufacturing Company. (See
Westinghouse Electric & Manufacturing Company. Else, Harry D., assignor.)	(See	Johnson, Josiah F., assignor.) Westinghouse Electric & Manufacturing Company. (See Johnston, Howard H., assignor.) Westinghouse Electric & Manufacturing Company. (See Jones, Jesse L., assignor.)
Eschholz, Otto H., assignor.) Westinghouse Electric & Manufacturing Company	(See	Westinghouse Electric & Manufacturing Company. (See Jones, Jesse L., assignor.)
Mestinghouse Electric & Manufacturing Company. Eschholz, Otto H., assignor.) Eschholz, Otto H., assignor.) Eschholz, Otto H., assignor.) Evans. Robert D., assignor.) Westinghouse Electric & Manufacturing Company. Falknor, Frank B., assignor.) Westinghouse Electric & Manufacturing Company. Farmer, C. C., and McWhiter, assignors.) Westinghouse Electric and Manufacturing Company.	(See	westinghouse Electric & Manufacturing Company. Jones, Jesse L., assignor. Jorstad, Osmund M., assignor.) Westinghouse Electric & Manufacturing Company. General Company. Westinghouse Electric & Manufacturing Company. Westinghouse Electric & Manufacturing Company. Kautz, Charles W., Jr., assignor.) Westinghouse Electric & Manufacturing Company. (See Kautz, Charles W., Jr., assignor.)
Falknor, Frank B., assignor.) Westinghouse Electric & Manufacturing Company.	(See	Westinghouse Electric & Manufacturing Company. (See Kasley, Alexander T., assignor.) Westinghouse Electric & Manufacturing Company. (See
Farmer, C. C., and McWhirter, assignors.) Westinghouse Electric and Manufacturing Company.	(See	Kautz, Charles W., jr., assignor.) Westinghouse Electric & Manufacturing Company. (See
Westinghouse Electric and Manufacturing Company.	(See	
Westinghouse Electric & Manufacturing Company.	(Sec	Keene, A. D., and Ehrgott, assignors.)
Westinghouse Dieetric and Manufacturing Company.	(See	Kehoe. Arthur H., assignor.) Westinghouse Electric and Manufacturing Company. (See
ray, Crit J., assignor.) Westinghouse Electric and Manufacturing Company. Filanders, Warren B., assignor.) Filanders, Warren B., assignor.) Filetcher, G. H. assignor.) Westinghouse Dilectric and Manufacturing Company. Foresman, Rohert A., assignor.) Westinghouse Electric and Manufacturing Company. Foresman, R. A., and Artm. assignors.) Westinghouse Electric & Manufacturing Company. Foresman, R. A., and Artm. assignors.) Westinghouse Electric & Manufacturing Company. Westinghouse Electric & Manufacturing Company.	(See	Keith, Harold L., assignor.) Westinghouse Electric & Manufacturing Company. (See
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Westinghouse Electric & Manufacturing Company. Fortescue, Charles L., assignor.) Westinghouse Electric and Manufacturing Company. Fortescue, C. L. and Englishers Company.	(See	Westinghouse Electric & Manufacturing Company. (See Knape, Charles N. F., assignor.)
Westinghouse Electric and Manufacturing Company. Fortescue, C. L., and Evans, assignors.)	(See	Wostinghouse Electric and Manufacturing Company. (See Kniskern, F. B., and Shuster, assignors.)
Westinghouse Electric and Manufacturing Company. Fortescue, C. L., and Evans, assignors.) Westinghouse Electric & Manufacturing Company. Foster, Julius E., assignor.) Westinghouse Electric & Manufacturing Company. Frost, Leele E., assignor.) Westinghouse Electric & Manufacturing Company. Frost, Leele E., assignor.) Frost, Leele E., assignor.)	(See	Westinghouse Electric and Manufacturing Company. (See Kehoe. Arthur H., assignor.) Westinghouse Electric and Manufacturing Company. (See Keith, Harold L., assignor.) Westinghouse Electric & Manufacturing Company. (See Kingle, Charles N. F., assignor.) Westinghouse Electric & Manufacturing Company. (See Knape. Charles N. F., assignor.) Westinghouse Electric and Manufacturing Company. (See Knape. Charles N. F., assignor.) Westinghouse Electric and Manufacturing Company. (See Knape. Charles L., assignor.) Workinghouse Electric and Manufacturing Company. (See Knotts, Charles L., assignor.)
Frost, Leslie E., assignor.) Westinghouse Electric & Manufacturing Company.	(See	Westinghouse Electric and Manufacturing Company. (See Krantz, Hubert K., assignor.)
Fuller, Bert F., assignor.)	(pee	Krantz, Hubert K., assignor.) Westinghouse Electric & Manufacturing Company. (See Krauss, Kurt, assignor.)

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Westinghouse Electric & Manufacturing Company. (See Procter, Joseph H., assignor.)
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Westinghouse Electric & Manufacturing Company. (See Procter, Joseph H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Randall, Karl C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Randall, Karl C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Randall, Karl C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Randall, Arbur, assignor.)
Westinghouse Electric & Manufacturing Company. (See Raid, Thomas A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Riegov.)
Westinghouse Electric & Manufacturing Company. (See Riley, L. G., Meyer., Johnston, and van Nieukerken, assignors.)
Westinghouse Electric and Manufacturing Company. (See Riley, L. G., Meyer., Johnston, and van Nieukerken, assignors.)
Westinghouse Electric and Manufacturing Company. (See Riobinson, Conway, assignor.)
Westinghouse Electric & Manufacturing Company. (See Roottan, Clarence J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Roottan, Clarence J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Roottan, Clarence J., assignor.)
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Westinghouse Electric & Manufacturing Company. (See Roottan, Clarence J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Senhelt, Sanufacturing Company. (See Schaake, William, assignor.)
Westinghouse Electric & Manufacturing Company. (See Schaake
Westinghouse Electric & Manufacturing Company, Khin, Ludwig, assignor.)

Wastinghouse Electric & Manufacturing Company, Landon, Vernon D., assignor.)

Westinghouse Electric & Manufacturing Company, Landon, Vernon D., assignor.)

Westinghouse Electric and Maoufacturing Company, Legg, Joseph W., assignor.)

Westinghouse Electric & Manufacturing Company, Legg, Joseph W., assignor.)

Westinghouse Electric & Manufacturing Company, Legg, Joseph W., assignor.)

Westinghouse Electric & Manufacturing Company, Liftle, Donald G., assignor.)

Westinghouse Electric & Manufacturing Company, Liftle, O., and Davis, assignors.)

Westinghouse Electric & Manufacturing Company, Liftle, Gorge M., assignor.)

Westinghouse Electric & Manufacturing Company, Liftle, G., and Pord, assignors.)

Westinghouse Electric & Manufacturing Company, Logiadt, Richard, assignor.)

Westinghouse Electric & Manufacturing Company, Louth, Herbert, assignor.)

Westinghouse Electric & Manufacturing Company, MacMell, John E., assignor.)

Westinghouse Electric & Manufacturing Company, MacMell, John E., assignor.)

Westinghouse Electric & Manufacturing Company, Marchell, John E., assignor.)

Westinghouse Electric & Manufacturing Company, Marchell, John E., assignor.)

Westinghouse Electric & Manufacturing Company, Marchell, John E., assignor.)

Westinghouse Electric & Manufacturing Company, Marsiand, Roland, assignor.)

Westinghouse Electric & Manufacturing Company, McCatty, Roy A, assignor.)

Westinghouse Electric & Manufacturing Company, McCatty, Roy A, assignor.)

Westinghouse Electric & Manufacturing Company, McCatty, Roy A, assignor.)

Westinghouse Electric & Manufacturing Company, McCatty, Roy A, assignor.)

Westinghouse Electric & Manufacturing Company, McCatty, Roy A, assignor.)

Westinghouse Electric & Manufacturing Company, McCatty, Roy A, assignor.)

Westinghouse Electric & Manufacturing Company, McCatty, Roy A, assignor.)

Westinghouse Electric & Manufacturing Company, McCatty, Roy A, assignor.)

Westinghouse Electric & Manufacturing Company, McC
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Mestinghouse Electric & Manufacturing Company.

McCoy, James L., assignor.)

McStinghouse Electric & Manufacturing Company.

McMilliams, Arthur C., assignor.)

McHandy Electric & Manufacturing Company.

McMilliams, Arthur C., assignor.)

McHandy Electric & Manufacturing Company.

McMilliams, Arthur C., assignor.)

McHandy Electric & Manufacturing Company.

McHandy Electric & Manufacturing Company.

McHandy Electric & Manufacturing Company.

McManufacturing Company.

McHandy Electric & Manufacturing Company.

McHandy Electric & Manufacturing Company.

McHandy Electric & Manufacturing Company.

Miller, Charles F., assignor.)

McHandy Electric & Manufacturing Company.

Miller, William L., assignor.)

McHandy Electric & Manufacturing Company.

Monghouse Electric & Manufacturing Company.

Mossinghouse Electric & Manufacturing Company.

Mostinghouse Electric & Manufacturing Company.

Mostinghouse Electric & Manufacturing Company.

Mestinghouse Electric & Manufacturing Co
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Singer, K., Paschen, and Reime, assignors.)
Westinghouse Electric & Manufacturing Company.
Slater. Earl A., assignor.)
Westinghouse Electric & Manufacturing Company.
Slepien, Harvey P., assignor.)
Westinghouse Electric & Manufacturing Company.
Slepien, Joseph, assignor.)
Westinchouse Electric & Manufacturing Company.
Slepien, J., and Hanna, assignors.)
Westinchouse Electric & Manufacturing Company.
Smith. Benjamin H., assignori,
Westinchouse Electric & Manufacturing Company.
Smith, John H., assignori,
Westinchouse Electric & Manufacturing Company.
Smith. Walter H., assignori,
Westinchouse Electric & Manufacturing Company.
Smith. Walter H., assignori,
Westinghouse Electric & Manufacturing Company.
Sparker, Harry P., assignori,
Westinghouse Electric and Manufacturing Company.
Stages, Stephen A., assignori,
Westinghouse Electric & Manufacturing Company.
Stages, Elden L., assignori,
Westinghouse Electric & Manufacturing Company.
Stages, Elden L., assignori,
Westinghouse Electric & Manufacturing Company.
Stages, Elden L., assignori,
Westinghouse Electric & Manufacturing Company.
Stages, Elden L., assignori,
Westinghouse Electric & Manufacturing Company.
Storer, N. W., and Scott, assignors.)
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                Westinghouse Electric & Manufacturing Company.
Plerce, Raymond T., assignor.)
Westinghouse Electric & Manufacturing Company.
Pilling, Norman B., assignor.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (See
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Westinghouse Electric & Manufacturing Company.
Strouse, Albert F., assignor.)
Westinghouse Electric & Manufacturing Company.
Sutherland, Ernest E., assignor.)
Westinghouse Electric & Manufacturing Company.
(See Sutherland, Ernest E., assignor.)
Westinghouse Electric & Manufacturing Company.
Terry, Matson C., assignor.)
Westinghouse Electric & Manufacturing Company.
Thomas, Phillips, assignor.)
Westinghouse Electric and Manufacturing Company.
Thomas, Phillips, assignor.)
Westinghouse Electric & Manufacturing Company.
Thomas, Phillips, assignor.)
Westinghouse Electric & Manufacturing Company.
Todd, Victor H., assignor.)
Westinghouse Electric & Manufacturing Company.
Townsend, John R. assignor.)
Westinghouse Electric & Manufacturing Company.
Travers, Henry A., assignor.)
Westinghouse Electric & Manufacturing Company.
Trumpler, W. E., and Soderberg, assignors.)
Westinghouse Electric & Manufacturing Company.
Trumpler, W. E., and Soderberg, assignors.)
Westinghouse Electric & Manufacturing Company.
Trumpler, W. E., and Soderberg, assignors.)
Westinghouse Electric & Manufacturing Company.
Trumpler, W. E., and Soderberg, assignors.)
Westinghouse Electric & Manufacturing Company.
Trumpler, W. E., and Soderberg, assignors.)
Westinghouse Electric & Manufacturing Company.
Ullrich, Emil H. W., assignor.)
Westinghouse Electric & Manufacturing Company.
Westinghouse Electric & Manu
                                                                                                                                                          (See
                                                                                                                                                                               Westinghouse Lamp Company. (See Lindstrom, Albert
                                                                                                                                                                               Westinghouse Lamp Company.
                                                                                                                                                          (See
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                                                                                                                                                                               Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                               (See MacRae, Duncan,
                                                                                                                                                         The.
                                                                                                                                                                               assignor.)
Westinghouse Lamp Company
Richardson, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                           (See
                                                                                                                                                                                                                       Lamp Company.
                                                                                                                                                                                                                                                                              (See MacRae, D., and
                                                                                                                                                           (See
                                                                                                                                                                                                                                                                            (See Madden, Harry D.,
                                                                                                                                                                               assignor.)
Westinghouse Lamp Company.
Higgins, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                          (See
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                                                                                                                                                          (See
                                                                                                                                                                                                                                                                          (See Madden, Harry De F.,
                                                                                                                                                                              westinghouse Lamp Company.
assignor.)
Westinghouse Lamp Company.
Higgins, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                           (See Madden, H. D., and
                                                                                                                                                           (See
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                                                                                                                                                                               assignor.)
Westinghouse Lamp Company.
                                                                                                                                                          (See
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                                                                                                                                                                               Rentschler, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                          (See
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                                                                                                                                                                               Westinghouse Lamp Company.
Rich, assignors.)
Westinghouse Lamp Company.
Thomas, and Conley, assignors.
Westinghouse Lamp Company. (S
                                                                                                                                                          (See
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                                                                                                                                                                               assignor.)
Westinghouse Lamp Company.
Colby, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                           (See McKay, W. A., and
                                                                                                                                                           (See
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                                                                                                                                                                               Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                            (See Powell, Arthur L.,
                                                                                                                                                                              westinghouse Lamp Company.
assignor.)
Westinghouse Lamp Company.
C., assignor.)
Westinghouse Lamp Company,
and Marden, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                            (See Rentschler, Harvey
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                                                                                                                                                                                                                       Lamp Company.
                                                                                                                                                                                                                                                                             (See Rentschler, H. C.,
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                                                                                                                                                                                    K., assignor.)
'estinghouse Lamp Company.
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                                                                                                                                          Company.
                                                                                                                                                                               Higgins, assignors.)
Westinghouse Lamp Company.
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                                                                                                                                                          (See
                                                                                                                                                                                     assignor.)
                                                                                                                                                                               Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                            (See Rotherham, Walter
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                                                                                                                                                                               S., assignor.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                           (See Schmid, Edward R.,
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                                                                                                                                                                               assignor.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                           (See Schule, F. W., and
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                                                                                                                                                                               Hunt, assignors.)
Westinghouse Lamp Company.
and Holden, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                            (See Shackleford, B. E.,
                                                                                                                                                           (See
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                                                                                                                                                                               Westinghouse Lamp Company,
C., assignor.)
Westinghouse Lamp Company,
Kelly, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                              (See Steel, B. F., and
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                                                                                                                                                                                                                                                                           (See Steel, Benjamin F.,
                                                                                                                                                           (See
                                                                                                                                                                               assignor.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                            (See Ulrey, Clayton T.,
                                                                                                                                                           (See
                                                                                                                                                                                     assignor.)
                                                                                                                                                                               Westinghouse Lamp Company.
C., assignor.)
                                                                                                                                                                                                                                                                           (See Van Voorhis, Cletus
                                                                                                                                                           (See
                                                                                                                                                                               C., assignor.)
Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                           (See Walton, Frank W.,
                                                                                                                                                                               Westinghouse Lamp Company.
                                                                                                                                                                                                                                                                           (See Weeks, Paul T., as-
                                                                                                                                                           (See
                                                                                                                                                                              westinghouse Lamp Company. (See Whitmore, J. B., and Erguson, assignors). Westinghouse Union Battery Company, (See Rupp, John L., assignor.)
Westinghouse Union Battery Company, The. (See Rupp, John L., assignor.)
Westlake, Albert, New York, N. Y. Galley-stove tongs. 1.645,466; Oct. 11.
Westlake, Charles T., assignor to Commonwealth Steel Company, St. Louis, Mo. Booster-motor support. 1.630,843; July 26.
Westlake, administratrix, Palestine, Tex., assignor to Commonwealth Steel Company. Granife City, Ill. Booster-motor support. 1.636,844; July 26.
Westlake, Charles T., assignor to Commonwealth Steel Company. Granife City, Ill. Booster-motor support. 1.636,844; July 26.
Westlake, Charles T., assignor to Commonwealth Steel Company. St. Louis, Mo. Car truck. 1.642,862; Sept. 20.
                                                                                                                                                           (Sec
    Westinghouse Electric & Manufacturing Company, Yacger, Albert A. jr., assignor.)
Westinghouse Electric & Manufacturing Company. Zimmerman, Jesse M., assignor.)
Westinghouse Electric & Manufacturing Company. Zworykin, Vladimir K., assignor.)
Westinghouse Gear and Dynamometer Company. Allen. Robert C., assignor.)
Westinghouse Gear and Dynamometer Company. Raumann. Karl. assignor.)
                                                                                                                                                           (See
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    westinghouse Gear and Dynamometer Company.
Baumann, Karl, assignor.)
Westinghouse Gear and Dynamometer Company.
MacFarland, Allis M., assignor.)
Westinghouse Lamp Company. (See Anderson, Ho
                                                                                                                                                           (See
                                                                                             (See Anderson, Homer G.,
          assignor.)
     Westinghouse Lamp Company.
E., assignor.)
Westinghouse Lamp Company.
assignor.)
                                                                                              (See Anderson, Waldemar
                                                                                                                                                                               Company, St. Louis, Mo. Car t
Sept. 20
Westlake, Lillian A., administratrix.
Charles T.)
Westland. Emil H., Chicago, Ill.
                                                                                                                                                                                                                                                                                                     (See Westlake,
                                                                                                  (See Beggs, Eugene W.,
     Westinghouse Lamp Company.
                                                                                                  (See Fredenburgh, Mark
    Westinghouse Lamp Company.
N., assignor.)
Westinghouse Lamp Company.
Hallock, assignors.)
Westinghouse Lamp Company.
                                                                                                                                                                              Jan. 11.

Westling, Erle H., Redwood City, Calif. Carburetor.
1.644.214; Oct. 4.

Westling, Herman. (See Dunbar, E. W., and Westling.)
Westliy, Jens. Christiansand, assignor to Det Norske
Aktieselskab for Elektrokemisk Industri of Norway,
Oslo, Norway. Self-baking electrode. 1,633,212;
Westling Francis C., Toronto, Ontario, Canada. Resur-
facing device. 1.647.066; Oct. 25.
Westlmoreland Chemical & Color Company. The. (See
Stewart, Henry C., assignor.)
Westlmoreland, Earl E., and S. G., Taylor, Oll City, La.
Sucker-rod elevator. 1,631,845; June T.
Sucker-rod elevator. 1,631,845; June T.
Sucker-rod elevator. 1,631,845; June T.
Westmoreland, Earl E., and S. G. Carbureton.
Westlmoreland, Earl E., and S. G. Carbureton.
Westlmoreland Glass Company. (See West, Charles H., assignor.)
                                                                                                  (See Gero, W. B., and
                                                                                                  (See Gibson, Arthur A.,
     Westinghouse Lamp Company.
                                                                                                  (See Gustin, Daniel S.,
     Westinghouse Lamp Company,
                                                                                                   (See Hall, Roy D., as-
     Westinghouse Lamp Company,
                                                                                                   (See Harrington, Ertle
     L., assignor.)
Westinghouse Lamp Company.
                                                                                                   (See Higgins, John J.,
     Westinghouse Lamp Company.
                                                                                                 (See Higgins, J. J., and
     Westinghouse Lamp Company.
Westinghouse Lamp Company.
H. T., assignor.)
Westinghouse Lamp Company.
assignor.)
                                                                                                      (See Holden, William
                                                                                                                                                                               Westign Charles W., Pampa, Tex. Chair. Des. 73.349:
                                                                                                    (See Kelly, Harry D.,
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Weston, Charles W., Pampa, Tex. Table. Des. 73,350; Aug. 23.

Weston, Charles W., Pampa, Tex. Table. Des. 10,000-Aug. 23.
Weston, Charles W., Pampa, Tex. Beverage-dispensing fountain. Des. 13,459; Sept. 13.
Weston, Edward F., assignor to Weston Electrical Instruments. Des. 73,768; Nov. 1. Case for electrical Instruments. Des. 73,768; Nov. 1. Weston, Edward F., Ellzabeth, assignor to Weston Electrical Instrument Corporation, Newark, N. J. Electrical measuring instrument. 1,630,592; May 31.
Weston, Edward F., and G. Carpenter, Newark, assignors Park, Newark, N. Electrical measuring instrument. 1,630,595; July 12.
Weston Electrical Instrument Corporation. (See Yawter, Charles E., assignor).
Weston Electrical Instrument Corporation. (See Weston, Edward F., assignor).

Weston Electrical Instrument Corporation. (See Vestom, Edward F., assignor.)
Weston Electrical Instrument Corporation. (See Weston, E. F., and Carpenter, assignors.)
Weston, Frederick H., Bridgeport, Conn., assignor to General Electric Company. Socket adapter. 1,640,434;

weston, F., and Carpenter, assignors). Weston, Frederick H., Bridgeport, Conn., assignor to Carna Electric Company. Socket adapter. 1,640,434; Meston, Milton T., New York, N. Y. Variable-speed device. 1,621,915; Mar. 22.
Weston, Sydney F., London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler-Weston, William Golumbia, S. C. Breakfast food and producing same. 1,617,973; Feb. 15.
Weston, William Golumbia, S. C. Breakfast food and producing same. 1,617,973; Feb. 15.
Westone, Hulliam S., Dallas, Tex. Anticreeper for railway rails. 1,646,512; Oct. 25.
Westore, Leslie E. Denner, Golo. Bearing cap and work Meston, William S., Dallas, Tex. Anticreeper for railway rails. 1,646,512; Oct. 25.
Westore, Leslie E. Denner, Golo. Bearing cap and work Westonal, Waller, Los Angeles, Calif. Radio loud speaker. 1,643,665; Nov. S., New Point, Ind. Cultivator attachment. 1,639,355; Aug. 16.
Westope, Fred J., assignor to Briggs Manufacturing Company, Detroit, Mich. Adjustable striker plate. 1,624,3668; Apr. 12.
Westope, Fred J., assignor to Briggs Manufacturing Company, Detroit, Mich. Adjustable striker plate. 1,624,3668; Apr. 12.
West Virginia Pulp and Paper Company. (See Drewsen, Virgo, assignor.)
West Wood, Louis J., assignor to Levy & Westwood Machinery Company, Toronto, Ontario, Canada. Cablewith Company, Capata and One-third to R. F. Grant and One-third to Remer Company, Wi

Sept. 20 Wetmore-Gibbons Co. (See Wetmore Charles P., as-

signor.) Wetmore Reamer Company. (See Wetmore, Charles P.,

assignor.) Welmore, William O., U. S. Army, Honolulu, Hawaii. Oll liberator. 1,623,371; Apr. 5. Wettengel, George A., St. Louis, Mo. Device for preventing theft of automobiles in highways. 1,630,284; May 31.

ing theft of automobiles in highways. 1,630,284; May \$1. Wettrich, George S., Pontiac, Mich. Calipers. 1,644,967; Wettstein, Fritz. Summit, N. J., assignor to Ruths Accumulator Company. Incorporated. New York, N. Y. Steam accumulator plant. 1,637,666; July 26. Wettstein, Karl, Brux, Czechstovakia. Making reenforced building elements. 1,626,331; Apr. 26. Wetzel, Arno. Milwankee, Wis. Yarn-tensioning device. Wetzel, Arno. Milwankee, Wis. Yarn-tensioning device. 42. Apr. 26. Wetzel, Arno. Milwankee, Wis. Yarn-tensioning device. Wetzel, Subard A., Roya Vork, N. Y. Safety attachment for pecketbooks, etc. 1,619,644; Mar. 1, Wetzel, Edward A., Royal Oak, Mich., assignor to Tobe American Motor Body Corporation. Philadelphia. Pa. Vehicle underbody construction. 1,624,903; Apr. 12. Wetzel, John W., Allentown, Pa. Fire escape. 1,620,309; Wetzel, Sewis C. assignor to Tobelo Scale Company, Tolcolo, Ohio, Weighing scale 1,647,327; Nov. 1, Wetzell, Clare A., Sterling, III. Toy. Des. 72,394; Apr. 5.

Wetzell Clare A., Sterling, III. Toy. Des. 72,395;
Apr. 5.
Wetzell, Clare A., Sterling, III. Toy. Des. 72,396;
Apr. 5. Clare A., Sterling, Ill. Toy. Des. 72,395;

Apr. Wetzell

Wetzell, Clare A., Sterling, Ill. Toy. Des. 72,396; Apr. 5.
Wetzell, Clare A., Sterling, Ill. Toy. Des. 72,397; Wetzell, Clare A., Sterling, Ill. Toy. Des. 72,398; Apr. 5.
Wetzell, Clarence A., Sterling, Ill. Toy Des. 72,398; Apr. 5.
Wetzell, Clarence A., Sterling, Ill. Mechanical toy. 1,613,424; Jan. 4.
Wetzell, Clarence A., Sterling, Ill. Mechanical toy. 1,644,047; Oct. 4.
Wetzetlein, George A., Mandan, N. Dak. Mitten. 1,634,300; June 21.
Weverlein, George A., Mandan, N. Dak. Mitten. 1,633,300; June 21.
Weverlein, George A., Mandan, N. Dak. Mitten. 1,633,400; June 21.
Weverlein, George A., Mandan, N. Dak. Mitten. 1,633,401; June 21.
Weverlein, George A., Mandan, N. Dak. Mitten. 1,633,401; June 21.
Weverlein, George W., Sterling, Mar. 1.
Wevelman, Abraham, Brooklyn, N. Y. Knockdown table. 1,643,478; Sept. 27.
Weyand, George W., See Ludwig, Nicholas U., assignor to Central Electric Tool Company. Fitsburgh, Pa. Reciprocating motors. 1,637,401; Aug. 2.
Weyandt, Carl S., assignor to Central Electric Tool Company. Pittsburgh, Pa. Reciprocating electric motor. 1,651,616, Agg. 100; Nov. 29.
Weyandt, Carl S., assignor to Central Electric Tool Company. Reciprocating electric motor. 1,651,617, Agg. 2.
Weyandt, Carl S., assignor to Central Electric Tool Company. Reciprocating electric motor. 1,651,618, Mar. 1.
Weyell, Jarl M., assignor of Central Electric Tool Company. Pa. Electric tool. 1,651,793; Dec. 6.
Weyandt, Clarko, Mar. 1.
Weyell, Jarl M., assignor of Auto Wheel Coaster Weyell, Jarl M., assignor of Auto Wheel Coaster Weyells. Jarl Lassignor of Auto Wheel Coaster Veyenden. Jar. March Tonawarda, N. Y. Stercing.

wssignor.) Weyers, Howard L., assignor to Auto Wheel Coaster Company, Inc., North Tonawanda, N. Y. Steering mechanism for vehicles. 1,645,409; Oct. 11. Weyhing, Richard J. (See De Lewsky, Frank J., assignor.)

signor.)

Weyland, Hermann, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc. Anthelmintic.
1.616.291; Feb. 1.

Weymann, Charles T., Paris, France. Window-glass
guide for vehicles and the like. 1.619.047; Mar. 1.

Weymann, Charles T., Paris, Franco. Operating and
locking device for oscillating panels. 1.623.923;

guide for vehicles and the like. 1,619.047, Mar. 1. Weymann, Charles T., Paris, France. Operating and locking device for oscillating puncls. 1,625.923 (Apr. 26. Charles T. Paris, France. Operating and locking device for oscillating puncls. 1,625.923 (Apr. 26. Charles T. Paris, France. Operating apparance of the property of the prope

Sept. 20.
Wharton, Edward R., Medford, Mass. Foldable water-proof boot. 1,642.050; Sept. 13.
Wharton, Sidney I., Burkburnett, assignor of one-half to D. R. Peevey, Wichita County, Tex. Shade-roller fixture. 1,618.831; Feb. 4.
Wharton, Sidney I., and D. R. Peevey, Burkburnett, Tex. Shade-roller fixture. 1,638.278; Aug. 16.
Wharton, Thomas F., San Francisco, Calif. Sash anti-rattler. 1,653.830; Dec. 27.
Wharton, William, Jr. & Company. (See Angerer, Victor, assignor).

Wharfon, William, Jr. & Company.
assignor.)
Wheary, George H., assignor to Wheary Trunk Company,
Raeine, Wis. Baggage carrier. 1,624,297; Apr. 12.
Wheary, George H., assignor to Wheary Trunk Company,
Raeine, Wis. Trunk fitting. 1,620,059; Apr. 23.
Wheary, George H., assignor to Wheary Trunk Company,
Racine, Wis. Garment retain to the Leaf 37,400; Aug. 23.
Wheary, George H., assignor to Wheary Trunk Company,
Racine, Wis. Baggage carrier. 1,625,652; Dec. 13.

Wheary Trunk Company. (See Luce, Milton H., assignor.) Wheary Trunk Company. (See Wheary, George H., as-

Mignor.)

Wheary Trunk Company. (See Wheary, George H., assignor.)

Wheat, Frank B., Los Angeles, Calif. Sectional partition or panel structure. 1,626,259; Apr. 26.

Wheatley, George H., Chicago, Ill. Rubber fiap. 1,021,388 March H., Chicago, Ill. Rubber fiap. 1,021,388 March H., London, England. Milling cutter for helical or spiral and straight bevel gears. 1,649,631; Nov. 15.

Wheatlon, Jenson A., South Bend, Wash. Line cutter. 1,616,422; Feb. 1, Dullas, Iowa. Automatic safety window latch. 1,023,293; Apr. 19.

dow latch. 1,023,293; Apr. 19.

dow latch. 1,635,753; Dec. 27.

Wheeler, Arther E. (See Eagle, Henry Y., assignor.)

Wheeler, Arther E. (See Eagle, Henry Y., assignor.)

Wheeler, Arther G., Montgomery, Ala. Mop. 1,618,252; Feb. 22.

Wheeler, Bradley P., Duluth, Minn. Waste-heat-hollow

Wheeler, Arther E. (See Eagle, Henry Y., assignor.)
Wheeler, Arthur G., Montgomery, Ala. Mop. 1,618,252;
Feb. 22.
Wheeler Bradley P., Duluth, Minn. Waste-heat boiler
Region of the Montgomery, Ala. Mop. 1,618,262;
Wheeler Condenser & Engineering Company. (See
Penniman, Abbott L., jr., assignor.)
Wheeler, Earl H., Windsor, Vt., assignor to The National
Acme Company, Cleveland, Ohio. Nut-facing attachment for automatic machines. 1,637,718; Aug. 2.
Wheeler, Edmund B., assignor to Western Electric Company, Incorporated, New York, N. Y. Recording device. 1,642,525; Sept. 13.
Wheeler, Edmund B., assignor to Western Electric Company, Incorporated, New York, N. Y. Recording device. 1,642,525; Sept. 13.
Wheeler, Edmund B., assignor to The Trumbull Electric
Manufacturing Company, Plainville, Conn. Box conmeter. 1,645,621; Aug. 30.
The Control of the Montgomer Conn.
Making vehicle props. 1,654,661; Dec. 27.
Wheeler, Gardner E., and C. Oppe, New Haven, Conn.
Making vehicle props. 1,654,661; Dec. 27.
Wheeler, Grace B., Boston, Mass. Stropping holder for
safety-razor blades. 1,645,676; Oct. 18.
Wheeler, Hervey J., and G. C. Engstrand, Brooklyn, assignors to Salvage Process Corporation, New York,
N. Y. Oli-pumping apparatus. 1,652,968; Dec. 13.
Wheeler, Hervey J., and G. C. Engstrand, Brooklyn, assignors to Salvage Process Corporation, New York,
N. Y. Oli-pumping apparatus. 1,632,962; Oct. 28.
Wheeler, Jerome S., Guelph, Ontario, Canada. Tipless
lamp and method of making same. 1,640,225; Aug. 23.
Wheeler, John H., Plymouth, and H. M. Scott, Wildo,
Mis. Treating cheese. 1,639,882; Aug. 23.
Wheeler, John L., assignor to The Measuregraph Company, St. Louis, Mo. Shutter silencer. 1,616,244;
Feb. 1.
Wheeler, John M., assignor to The Measuregraph Company, St. Louis, Mo. Shutter silencer. 1,616,24;
Feb. 1.

pany, St. Louis, Mo. Shutter silencer. 1,616,244; Feb. 1, John L., and G. C. Hosch, St. Louis, Mo., as-signors to The Measuregraph Company. Automatically-controlled shutter for measuring machines. 1,640,387;

Aug. 30.

Wheeler, John L., St. Louis, E. A. Reed, Maplewood, and G. C. Hosch, assignors to The Measuregraph Company, St. Louis, Mo. Retail and wholesale fabric measuring machine. Louis 1991, March 1992, March 1992, March 1993, March 1994, March

1,653,682; Dec. 27.

Wheeler, Mary E., Evanston, Ill. Window-curtain protector. 1,619,280; Mar. I.

Wheeler, Maude A. M., Oakland, Calif. Hair dye.

1,656,341; July 19.

(See Dickey, S. J., and Wheeler)

Wheeler, Baymond, (See Dickey, S. J., and Wheeler)

Wheeler, Walter H., ir. (See Pitney, A. H., Ogden,

Northrop, and Wheeler)

Wheeler, Walter H., Jr., and J. W. Ogden, assignors to

Pitney-Bowes Postage Meter Co., Stamford, Conn. Postmarking and stamp-canceling machine. 1,651,428;

Dec. 6.

Wheeler, William I., Scottville, Ill. Power-transmission mechanism. 1,614,637; Jan. 18.
Wheeling Stamping Company. (See Davis, W. T., and Meeling Stamping Company. (See Davis, Walter T.,

wheeling Stamping Company. (See Davis, Walter T., assignor.)
Wheeling Steel Corporation. (See Bell, William M., assignor.)
Wheeling Steel Corporation. (See Cook, William J., assignor.) Steel Corporation. (See Cook, William J., as-

Wheeling Steel Corporation. (See Paff, George A., assignor.)

signor.)
Wheeling Steel Corporation. (See Schrader, Herbert, assignor.)
Wheelock, Arthur C. (See Cane. G. F., and Wheelock.)
Wheelock, Ernest O., Rockford, III. Gauge. 1,639,321;
Aug. 16. Herbert K., Akron, Ohio.
Wheelock, Herbert K., Akron, Ohio.
1,625,383; Apr. 10.
Wheelock, Herbert K., Akron, Ohio.
1,625,383; Apr. 10.
Wheelock, Herbert K., Akron, Ohio.
ratus. 1,630,457; May 81.

Wheelock, Herbert K., Akron, Ohio. Vulcanizing apparatus. 1.647,595; Nov. 1.
Wheelock, Herbert K., assignor to The Akron Tyrweider Company, Akron, Ohio. Tire-repair vulcanizer. 1,630,815; May 31.
Wheelwright, Thomas S., Backhead Springs, assignor to Long the Company of the Co

signor.)
Wheldon, George H., et al. (See Hall, William, as-

signor.)
Whetstone, Irene, Chicago, III. Selective unit indication for filing and other purposes. 1,650,658; Nov. 22.
Whetzel, Herbert H.
Whidden, Austin C.,
Lancaster, Calif. Valve-operating
means. 1,641,560; Sept. 6.
Whidden, Austin C.,
Lincaster, Calif. Valve-operating
means. 1,641,561; Sept. 6.
Whidden, Charles S., assignor to Zenite Metal Company,
Indianapolis, Ind.
Windshield regulator. 1,644,416;

Indianapolis, Ind. Jan. 11.

Jan. 11.

Whidden Ernest D., Pomona, Calif. Hot-air furnace. 1.618.498; Feb. 22.

Whincap, Frederic J., Sturgis, Mich. Curtain rod or similar article. Des. 73.679; Oct. 18.

Whincap, Frederic J., Sturgis, Mich. Curtain rod or similar article. Des. 73.680; Oct. 18.

Whincap, Frederic J., Sturgis, Mich. Curtain rod or similar article. Des. 73.78; Oct. 25.

Whincap, Frederic J., Sturgis, Mich. Curtain rod or similar article. Des. 73.728; Oct. 25.

Whinnen, Eugene, Republic, Mich. Hydraulic core drill. 1.617.659; Feb. 15.

Whinnen, Eugene, Los Angeles, Calif. assignor to Sullidays Nov. 22.

Whipp, Wendell E., assignor to The Monarch Machine Tool Company, Sidney, Ohlo. Lathe. 1,636,028; July 19.

July 19.

Whipp, Wendell E., assignor to The Monarch Machine
Tool Company, Sidney, Ohio. Headstock for lathes.
1642-8637. Sept. 20.

White Company of the Monarch Machine Works.
White Company of the Monarch Machine Works.
White Company of the Monarch Machine Works.

Whipple, Charles I., Denver, Colo. Pump. 1,624,702;
Apr. 12.

Apr. 12.

Apr. 12.

Apr. 12.

Apr. 12.

Apr. 12.

Apr. 16.

Apr. 1

Whitacre, Charles R., Cincinnati, Ohio. Nonreturn check valve for builte systems connecting a plurality of en-perimental properties of the control of the con-will declared J., Janesville, Wis., assignor to Gen-eral Motors Corporation, Detroit, Mich. Closure, 1,619,996; Mar. S.

1.614.990; Mar. 8.
Whitaker, Carlos M., Ghent. Ky. Gate-operating mechanism. 1.628.092; May 10.
Firick Company, Wayneshoro, Pa. Air-agitating means for ice machines. 1.648.836; Nov. 8.
Whitaker, Frank P., Rugby, England, assignor to General Electric Company. Automatic control system. 1,628.379; May 10.

Whitaker, Frederic, Providence, R. I. Pendant. Des. 73,216; Aug. 2. Whitaker, John, Lansdale, Pa., assignor, by mesne assignments, to Bankers Trust Company, New York, N. Y. Power check writer. 1,649,632; Nov. 15.

Whitaker, John, North Wales, Pa., assignor, by mesne assignments, to Bankers Trust Company, New York, N. Y. Keyboard. 1,653,683; Dec. 27.
Whitaker, Weyboard. 1,653,683; Dec. 27.
Whitaker, Morris M., Nyack, N. Y. Door knocker. Des. Whitaker, Morris M., Nyack, N. Y. Ash tray. Des. 73,394; Aug. 30.
Whitaker, Uncas A., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Variable-load brake. 1,650,309; Nov. 22.
Whitaker, Uncas A., assignor to The Westinghouse Air Whitaker, Uncas A., assignor to The Westinghouse Air Company, Wilmerding, Pa. Locomotive brake equipment. 1,650,310; Nov. 22.
Whitaker, William A., Springheld, Mo. Skid-chain and rope or flexible-material misplacement. 1,639,205; Aug. 16.

Wittomber Williams A. Springadd, Mo. Skid-chain and rope or flexible material misplacement. 1,639,205; Aug. 16.

Whitby, George S., Montreal, Quebec, Canada, assignor to The Roessler & Hasslacher Chemical Co., New York. 7,634, Accelerator for the vulcanization of rubber. 1,634,205; Accelerator for the vulcanization of rubber. 1,634,925; July 5.

Whitby, George S., Montreal, Quebec, Canada, assignor to The Roessler & Hasslacher Chemical Co., New York. N. Y. Accelerator for the vulcanization of rubber. 1,634,925; July 5.

White on the standard for the vulcanization of rubber. 1,634,925; July 5.

White on the standard for the vulcanization of rubber. 1,634,925; July 5.

White on the standard for the vulcanization of rubber. 1,635,935; July 5.

Whiteomb, Henry F., Milwaukee, Wis., assignor to Richardson Ball Bearing Skate Company, Chicago, Ill. Whiteomb, Junes A. Knoisha, Wis. Metal wheel. 1,652,653; Dec. 13.

Whiteomb, Louie E. (See Rice, G. L., and Whitcomb. Whitcomb, Louie E. (See Rice, G. L., and Whitcomb.) Whitcomb, Junes A. Detham Mass. assignor to Great Whitcomb, Juline A. Detham Mass. assignor to Great Mass.

Whitcomb, Louis E. (See Seldel, G. F., Saits, and Whitcomb, William A., Dedham, Masz., assignor to Great Whitcomb, William C., Dedham, Masz., assignor to Great ing. 1624-029; Apr. 12.
Whitcomb, William C., and W. F. Eckert, assignors to Geo. D. Whitcomb Company, Rochelle, Ill. Locomotive. 1,649-429; Nov. 15.
Whitcomb, William H. (See Chandler, Daniel L., as-william), William H. (See Chandler, Daniel L., as-

signor.)
White, A. R., et al. (See Bowman, Lewis N., assignor.)
White, Alexander D., and J. R. Riley, Beatrice, Nebr.
Steering-wheel warmer. 1.617.226; Freb. 8.
White, Alrivd E. (See Reid, John. assignor.)
White, Alrivd C. (See Finch, Paul R., assignor.)
White, Alvin C., Austin, Minn. Base-attached plotting instrument. 1.629.311; Mar. 3.
White, Annie E. C., Kansas City, Mo. Tray. 1.653.244;
Dec. 20.

White, Annie E. C. Kansas City, Mo. Tray. 1,638,244; Whos. 20thur J. (See Mitchell, L. E., and White). White, Arthur K., Zarephath, N. J. Bathroom unit. 1,628,345; May 10.
White, Arthur K., Zarephath, N. J. Bathroom unit. 1,628,345; May 10.
White, Arthur S., and M. A. Wiseman, assignors to White and Hallock, Inc., Muskegon, Mich. Beater. 1,650,717; Moy 20.
White Cap Company, (See White, George P., assignor.) White, Charles D., East Orange, assignor to Brandes Laboratories, Inc., Newark, N. J. Electromagnetic sound reproducer. 1,613,775; Jan. 11.
White, Charles G., Sault Ste. Marie, Mich. Gate. White, Charles G., Sault Ste. Marie, Mich. Gate. White, Charles G., Sault Ste. Marie, Mich. Gate. White, Charles P., Lynn, Mass. Electrical apparatus. 1,018,499; Feb. 22.
White, Clarence B., Montclair, assignor, by mesne assignments, to Vivatex Processes, Inc., Lodi, N. J. Textile material and dyeing the same. 1,648,433; Nov. 8.
The Mich. Charles G., Reviviging fire-extinguishing solution, Utica, N. Y. Reviviging fire-extinguishing solution, Utica, N. Y. Fire extinguisher. 1,646,226; Ott. 18.

tion, Utica, N. Y. Fire extinguisner. 1,010,220, Oct. 18.
White Company, The. (See Hinger, William L., as-

signor.) White Company, The. (See Osborn, Arthur W., assignor.)
White & Comyn, Limited. (See Comyn, Bernard D.,

signor.)

white & Comyn, Limited. (See Comyn, Bernard D., assignor.)

white, D'Outy M., assignor to Motor Industries, Inc., White, D'Outy M., assignor to Motor Industries, Inc., Unite, Eduth S. (See Stow, Audley H., assignor.)

White, Edward A., Lewiston, Idaho. Motion storage and conveying apparatus. 1.619.906; Mar. 8.

White, Edward A., Lewiston, Idaho. Transport stand. 1.619.907; Mar. 8.

White, Edward A., Lewiston, Idaho. Sizing apparatus. White, Edward A., Lewiston, Idaho. Sizing apparatus. 1.651.009; Nov. 29.

White, Edward A., Seattle, Wash. Resilient wheel. 1.651.009; Nov. 29.

White, Edward, B. Seattle, Wash. Resilient wheel. 1.652.009; Nov. 29.

White, Elijah D., Brooklyn, N. Y., Safety lock. 1.653.467; Dec. 20.

White, Ernest C., New York, N. Y., assignor of one-half to R. F. Fisher, Philadelphia, Pa. Electric-lighting to R. F. Fisher, Philadelphia, Pa. Electric-lighting the Company of the Company

White, Frank H., New York, N. Y. Cooking and serving installation. 1,642,700; Sept. 20.
White, Frank R., and C. Lum. Columbia, N. Y.; said White assignor to said Lum. Device for expanding and contracting split rims. 1,645,664; Oct. 18.
White, George A., assignor to The Sparks-Withington Company, Mackson, Mich. Fan. 1,647,3316; July 26.
Company, Mackson, Mich. Fan. T. 1637,3316; July 26.
Company, New York, N. Y. Apparatus for heating stills. 1,621,298; Mar. 15.
White, George D., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Furnace. 1,622,666; May 24.
White, George H., Washington, D. C., assignor to G. P. White, George P., assignor to White George C., Company, New York, N. Y. Furnace. 1,622,666; May 24.
White, George P., assignor to White Cap Company, Chicago, Il. Pressure processing. 1,621,698; Mar. 22.
White, George S., Los Angeles, Calif. Therapeutic device. 1,622,007; May 10.
White, H. C., Company, (See Bried, Julien A., assignor).

signor.)
White and Hallock, Inc. (See White, A. S., and Wise-

signor. Mallock, Inc. (See White, A. S., and Wisewhite, assignors.)
White, Harold C., assignor to The Guide Motor Lamp
Manufacturing Company, Cleveland, Ohio. Lamp
Manufacturing Company, Cleveland, Ohio. Lamp
socket. 1,647,100; Oct. 25.
White, Harold E., Wikinsburg, Pa., assignor to WestingHouse Electic & Manufacturing Company. Autostarier
White, Harrold M., Detroit, Mich. Ovpandary. Autostarier
June 14.
White, Harrold M., Detroit, Mich. Ovpandary. Agistarier
(Assignors.)
June 14.
White, Harry, Kelmore, Ohio. Well screen casing.
1,615,495; Jan. 25.
White, Harry, Kelmore, Ohio. Well screen casing.
1,632,357; June 14.
White, Harry, Kelmore, Ohio. Well screen. 1,648,925;
White, Harry, Kelmore, Ohio, assignor to The Hoover
Company. Suction sweeper. 1,612,999; Jan. 4.
White, Harry T., Eric, Pa. Quick-opening die. 1,650,778;
Nov. 29.

White, Harry T., Eric, Pa. Quick-opening die. 1,650.778;
Nov. 29.
White, Henry, Glens Falls, assignor to Champlain Silk Mills, New York, N. Y. Silk-dressing machine. 1,634.767; July S. 1,634.787; July S. 1,634.767; July S. 1,744. assignors. White, J. H., Manufacturing Company. (See Crumley, L. 1,645.467; Oct. 11.
White, J. H., Manufacturing Company. (See Kahhs, W. R., and Keller, assignors.)
White, Janes N., Denver, Colo. Rotary laundry machine. White, Janes N., Denver, Colo. Rotary laundry machine. White, Janes N., Denver, Colo. Rotary laundry machine. History, J. 1,645.467; Oct. 11.
White, Janes N., Denver, Colo. Rotary laundry machine. History, J. 1,645.467; July 26.
White, Jany C., New Castle, Pa. Multiple-carriage lathe. 1,619.281; Mar. 1.
White, Jessee M., Philadelphia, Pa. Preventing backlash in geners. 1,625.964; May 24. Extension cord for electrical appliances. 1,636.73; July 26.
White, John Gen, Bent, L. M. E., Mackenzie, and White, White, John F., assignor to White Products Company. Chicago, Ill. Radiator cap. Des. 73.331; July 26.
White, John F., assignor to White Products Company. Chicago, Ill. Automobile radiator attachment. 1,613.148; Jan. 4.
White, John F., assignor to White Products Company. Chicago, Ill. Automobile radiator attachment. 1,613.148; Jan. 4.
White, John W., Buffalo, N. Y., Locking mechanism. July 26.
White, John W., Buffalo, N. Y., Fuel pump. 1,639.623; Aug. 16.
White, John W., assignor to General Motors Corporation. Detroit, Mich. Manufacture of gears. 1,618.907; July 26.
White, John W., assignor to General Motors Corporation. Detroit, Mich. Manufacture of gears. 1,618.907; July 26.

White, John W., assignor to General Motors Corporation, Detroit, Mich. Manufacture of gears. 1,619,997;

Mar. 8.
White, Joseph, Columbus, Obio. Rail-handling device.
1,619,908; Mar. 8.
White Luggage Co. Inc. (See Walinsky, Ossip J., as-

signor.) ite, Martin C., Alton, Ill. Nut lock. 1,645,840; White, M Oct. 18.

White Mop Wringer Company, The. (See Eiffe, James M.,

White Mop William Company, assignor; New York, N. Y. Lady's hand bag. White, Morris, New York, N. Y. Lady's hand bag. White, Morris, New York, and D. I. Reiter, Brooklyn, N. Y.; said Reiter assignor to said White. Handle for hand bags and the like, 1,640,52; Aug. 30.
White Motor Company, The. (See Church, Harold D.,

White Motor Company. The, (See Churcher, William B.,

assignor.)
White Motor Company, The. (See Dingham, Thomas C., White Motor Company, The. (See Goode, Gilbert C., as-

signor.)
White Motor Company, The. (See Teachout, John H...

White, Oliver C. Grand fountain. 1,653,525; Dec. 2007.

White, Oscar, St. Louis, Mc. 1,614,418; Jan. 11.

White, Oscar, St. Louis, Mo. Liquid-fuel Bandle, 1,620,522; Mt. Louis, Mo. Stove. 1,624,298; Apr. 12.

White, Otto, Spokane, Wash. Calk for boots and shoes. 1,053,526; Dec. 20.

White, Paul H., Indianapolis, Ind. Machine and method for postitioning armature windings. 1,650,558; Nov. 22.

White, Phillip A., St. Albans, assignor of one-half to R. W. Simpson and one-half to R. W. Simpson and one-half to R. A. Kenp. New York, N. Y. Vehicle wheel and brake drum structure, 1,641,393; Sept. 6.

1,641,393; Sept. 6.

White, Physical Company. (See Frisbie, Ray A., as Products Company. (See Hanson, Hans P. as White, John F., as

signor.)
White, Raymond E. (See Brown, K. C., and White.)
White, Raymond R., assignor to White Showers, Inc.,
Detroit, Mich. Pipe connection. 1,627,219; May 3.
White, Robert, assignor to J. L. Hill, Rochester, N. Y.
Machine for making lubricating means for vehicle
springs. 1,619,836; Mar. 8.
springs. 1,619,836; Mar. 8.
dispensing pump. 1,633,355; June 21.
White, Richard P., Chicago, Ill. Flowerpot. 1,648,570;
Nov. 8.

White, Richard F., Chicago, Ill. Flowerpot. 1,648,570; Nov. 8.
White, Rollin H., Cleveland Helghts, Ohio. Rubber tread attachment for track links. 1,635,596; July 12.
White, Rollin H., Cleveland Heights, Ohio. Grouter attachment for track belt links. 1,635,597; July 12.
White, Roy M., Riverside. Calif. Dentist's furnace. 1,620,179; Mar. 8.
White, S. S., Dental Manufacturing Company, The. (See Angell. Robert C., assignor.)
White, S. E., Dertal Manufacturing Company, The. (See White Sewing Manufacturing Company, The. (See White Sewing Manufacturing Company, White, S. E., Dertal Manufacturing Company, The. (See White Sewing Manufacturing Company, The. White Saveing Manufacturing Company, The. White Saveing Manufacturing Company, The. White Saveing Manufacturing Company, The. (See White Raymond R. assignor.)

White Sewing Machine Corporation. (See Hillix, Foster F., assignor.)
White Showers, Inc. (See White, Raymond R., assignor.)
White Showers, Inc. (See White, Raymond R., assignor.)
White Showers, Inc. (See White, Raymond R., assignor.)
White, Whomas U., Pittsburgh, and J. E. Gardner.
Wilkinsburg, Pa., assignors to Westinghouse Electric See Company, Rochester, Company, Metering System.
White, Wilred J., Detroit, Mich. Traffic-warning device.
Development of the Wilred J., Detroit, Mich. Traffic-warning device.
White, Wilred J., Detroit, Mich. Traffic-warning device.
White, Wilred J., Detroit, Mich. Traffic-warning device.
White, Wilrid O., sewton, Mass. Pelorus. 1.640,166; Aug. 23.
White, Wilfrid O., and H. G. Hatch. Newton, assignors to Kelvin & Wilfrid O. White Company, Boston, Mass.
White, William C., Schenectady, N. Y., assignor to General Electric Company. Wireless signaling system.
1.617,574; Feb. 15.
White, William C., Schenectady, N. Y., assignor to General Electric Company, Indicating apparatus. 1,628,444; May 10.

Mily William B., assignor to Kalman Strel Co., Chi-Milto, William E., assignor Relf.672; Mar. C., Chi-William E., assignor C., Chicaro, H. Twin and T. C., Chicaro, H. Twin and T. C., Lista, Mar. 15. White, William E., assignor to Kalman Steel Company, Chicaro, Ill. Twin-bar support, I, 621,184; Mar. 15. White, William E., assignor to Kalman Steel Company, Chicaro, Ill. Twin-bar support, I, 621,184; Mar. 15. White, William E., assignor to Kalman Steel Company, Chicaro, Ill. Bullt-up structural element, 1, 621,239; White, William Chicago, Ill.

Microsco, III. Built-up structural element. 1,621,299; White William E. assignor to Kallman Steel Co., Chleago, III. Sleeper anchor. 1,621,478; Mar. 15. White, William E. assignor to Kaliman Steel Company, Chicago, III. Support and spacer for bars. 1,625,838; Apr. 26.

White, William E

Apr. 26.
hite, William E., assignor to Kalman Steel Company,
Chicago, Ill. Junction clip and spacer for reenforcements. 1,625,839; Apr. 28.
hite, William B., assignor to Kalman Steel Company,
Chicago, Ill. Strip for roadways. 1,626,219; Apr. 26.
hite, William E., assignor to Kalman Steel Company,
Chicago, Ill. Screed chair. 1,629,753; May 24.
Chicago, Ill. Screed chair. 1,629,753; May 26.
hite, William E., assignor to Kalman Steel Company,
Chicago, Ill. Gauge and support for bars. 1,631,609;
June 7. White

June 7.
White, William G., Vesta, Wash. Log bunk. 1,645.082;
Oct. 11.
Watch hox holder or the

White, William H., Chicago, Ill. Match box holder or the like. 1.628,208; May 10 White, William H., Quincy, assignor to Regal Shoe Company, Whitman, Mass. Stand for fitting shoes. 1.646,717; Oct. 2.5. White, William J., Potsdam, N. Y. Chipper spout. 1.015,509, Jan. 25.

White, William K., et al. (See Gilmore, Forrest E., as-

White, William M., Milwaukee, Wis. Wearing plate for hydraulic machines. 1,641,362; Sept. 6. White, William M., Milwaukee, Wis. Hydraulic turbine. White, William M., Milwaukee, Wis. Hydraulic turbine. White, William S., Denver, Colo. Flushing valve.

1644,368; Sept. 6.

White, William S., Denver, Colo. Flushing valve.

Rc16,764; Oct. 4.

White, William W., Los Angeles, Calif. Sash lock and
counterbalance. 1,628,346; May 10.

White, William W., Evanston, assignor to Bendix Brake
Company, Chicago, Ill. Brake-operating means.
1,642,056; Sept. 18.

White and Wyckoff Manufacturing Company. (See
Toepfert, Henry J., assignor.)

Whitecotton, Wallace W. (See Shelley, Thomas W., asalgropt.)

Portable

signor.)
Whited, Harry W., Nacogdoches, Tex. Port
lumber and timber grade-marking device. Whited, Harry and timber grade-marking desired and timber and timb

Mitchead & Hoag Company, The. (See Hoag Philip. O. Whitehead & Hoag Company, The. (See Hoag Philip. O. Whitehead & Hoag Company, The. (See Hoag Philip. O. Whitehead & Hoag Company, The. (See Hoag Philip. O. Whitehead & Hoag Company, The.

assignor.) Whitehead,

assignor.)
whitehead, James F., assignor to Kales Stamping Company, Detroit, Mich. Mirror support. 1,646,379; Oct. 18.
Whitehead, James T. (See Wilson, John H., assignor.)
Whitehead, John H. (See Layland, W. E., and Whitehead, W. E., and Whit

head.)
Whitehead & Kales Company. (See Henderson, George C., assignor.)
Whitehead & Kales Company. (See Judd, Irving H.,

assignor.)
Whitehead & Kales Company. (See Putnam, Alden L., as

Whitehead & Kales Company. (See Vance, Howard C., assignor.)
Whitehead & Kales Company. (See Judd, Irving H., as-

Whitehead and Kales, Inc. (See Rainsford, Thomas F., assignor.) Whitehead, Leo S., Akron, Ohio. Wrench. 1,648,519; Nov. 8.

Nov. 8.

Whitehead, Richard H., assignor to New Haven Clock Co., New Haven, Conn. Clock case. Des. 73,460; Whitehead, Richard H., assignor to The New Haven, Clock Co., New Haven, Conn. Clock case. Des. 73,989; Nov. 29.

Nov. 2

Whitehead, Thomas C. (See Rainsford, Thomas F., as-

signor.)
Whitehead, Thomas C., Detroit, Mich. Float chamber.
1,628,293; May 10.
Whitehead, Thomas C., Detroit, Mich. Pump. 1,634,811;

Whitehead, Thomas C., Detroit, Mich. Radiator construc-tion. 1,634.812; July 5. Whitehead, Thomas C., Detroit, Mich. Refrigerating ap-paratus. 1,634.813; July 5. Whitehead, Thomas C., Detroit, Mich. Pump. 1,638,265;

July 19 Whitehead

whater 1.633,213; July 2.

Whitehead, Thomas C., Detroit, Mich. Hold over. 1.637,843; Aug. 2.

Whitehead Torpedo Company Limited. (See Jones, Albert E., assignor.)

Whitehead Torpedo Company Limited. (See Jones, Albert E., assignor.)

Whitehead William A., Trre Haute, Ind. Window awnuce I. 1633,407; July 2.

Whitehead William A., Trre Haute, Ind. Window awnuce I. 1634,407; July 2.

Whitehead, William A., Trre Haute, Ind. Window awnuce I. 1634,407; July 2.

Whitehead, Hard Mandatone, A. Spring suspension device. 1.619,452; Mar. 1.

Whitehead, Hard Mandatone, Kent, England. Electric vehicle transmission. 1.635,598; July 12.

Whitehorn, Harold K., assignor to Tilling-Stevens Motors Limited, Maidstone, Kent, England. Electric governor. Maidstone, Kent, England. Electric governor.

Whitehorn, Homer A., Norwood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., Temperature-compensating means for maintaining constant frequency in tuning forks. 1,653,794; Dec. 27.

Whitehouse, Vira B., and L. Pelletiere, New York, N. Y., assignors, by messne assignments, to said Whitehouse, Loose-lenf binder. 1,617,779; Feb. 15.

Whitehouse, Vira B., and L. Pelletiere, New York, N. Y., assignors, by messne assignments, to said Whitehouse, Loose-lenf binder. 1,617,779; Feb. 15.

Whitehouse, Vira B., and L. Pelletiere, New York, N. Y., assignors, by messne assignments, to said Whitehouse, Loose-lenf binder. 1,617,779; Feb. 15.

Whitehouse, Vira B., and L. Pelletiere, New York, N. Y., assignors, by messne assignments, to said Whitehouse, Loose-lenf binder. 1,617,779; Feb. 15.

Whitehouse, Vira B., and L. Pelletiere, New York, N. Y., assignors, by messne assignments, to said Whitehouse, Loose-lenf binder. 1,617,779; Feb. 15.

Whiteley, June York, N. Y. Rustless alloy steel. Spinka, New York, N. Y. Rustless alloy steel. Spinka, New York, N. Y. Mutteman, Charles E. Richmond Hill, assignor, by mesne assignments, to J. A. Golden, New York, N. Y. Motion-picture camera and picture-projecting machine. 1,549,331; Nov. 15.
Whiteman, Clarence E. (See Von Zundel, L., and Whiteman, Clarence E.

signor.)
Whitin Machine Works. (See Crockett, Frank L., as-

signor.)
Whitin Machine Works.
Whitin Machine Works. (See Hartley, Ellis, assignor.) (See Helland, Sigurd H., as-

(See Hendrickson, Fred K., as-

whitin Machine Works.
signor.)
Whitin Machine Works.
Whitin Machine Works.
Whitin Machine Works. (See Jolly, James, assignor.) (See Mills, Edward, assignor.) (See Morgan, William T., as-

signor.) Whitin Machine Works. (See Whipple, Amos E., as-

signor.)
Whiting, C. R., Co. (See Lader, Jack, assignor.)
Whiting, C. R., Co. (See Schmitz, William, assignor.)
Whiting Chain Company. (See Coombs, Edward A., assignor.)
Whiting, Charles A., Franklin, Mass., assignor to Whiting
& Davis Company. Making intermeshing links.
Whiting, Corporation. (See Beetham, M. F., and Moore,
Whiting & Davis Company. (See Berkley, Richard H.,
assignor.)
Whiting & Davis Company. (See Berkley, Richard H.,
assignor.)
Whiting & Davis Company. (See Lynds, Fred H., assignor.)

hiting & Davis Company. (See Lynds, Fred H., assignor.)
hiting & Davis Company. (See Whiting, Charles A., assignor.)

Assignor.)

Whiting, Donald E. Port Washington assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission circuits. 1.632.104; June 14. Whiting, Jasper, Boston, Mass. Attachment for bumidity-controlling units. 1.617.885; Feb. 15.

Whiting, John. Punxsutawney, Pa. Rotary alt motor or pump. 1.648.092; Nov. 8.

Whiting, Max A. Schenectady, N. Y., assignor to General Electric Company. Automatic control equipment. 1.652.969; Dec. 13.

Whiting, Max A. Schenectady, N. Y., assignor to General Electric Company. Automatic substation control equipment. 1.652.969; Dec. 13.

Whiting-Patterson Co. (See Labram, Alfred, assignor.) Whiting-Patterson Co. (See Wagner, Louis, assignor.) Whiting-Patterson Co. (See Wagner, Louis, assignor.) Whiting-Patterson Co. (See Wagner, Louis, assignor.) Whiting Max A. Schenectady, N. J. Printed fabric. 1.622.013; Mar. 22.

Whitley, James L. (See Sampson, C. H., and Whitley.)
Whitlock, Frank S., Rossford, assignor, by mesne assignments, to Commercial Savings Bank & Trust Company,
Toledo, Ohio. Plate-glass manufacture. 1,654,198;

Toledo, Ohio. Plate-glass manufacture. Dec. 27. Whitlock, John W., Rising Sun, Ind. Vari denser and coupling means therefor. Sept. 6. Variable-air

Whitlock, Sallie, Los Angeles, Calif. Safety slip for nursing bottles. 1,637,719; Aug. 2. Whitlow, James G., Cornellus, N. C. Valve-pin extractor. 1,632,237; June 21.

Whitlow, John B., Lexington, Ky. Transmission mechanism. 1,645,841; Oct. 18.
Whitman, Clarence, & Sons, Inc. (See Kirby, Walter B.,

Whitman, Louis J., Cincinnati, Ohio. Scraper mold. 1,639,122; Aug. 16. Whitman, Raymond C. (See Berg, W. H., Whitman, and

Whitman, Raymond C. (See Berg, W. H., Whitman, and Aab. M. A. Cheese Markey of the Color of the

Whitney, Clarence E., et al., executors. (See Hanson, Bengt M. W.)
Whitney, Eddy R., assignor to Commercial Truck Company, Philadelphia, Pa. Delivery truck. 1,619,775;

Whitney, Eddy R., assignor to Commercial Truck ComMar. Philadelphia, Pa. Delivery truck. 1,619,775;
Mar. Whitney, F. A., Carriage Company. (See Ambler, George
B., assignor.)
Whitney, Geo. C., Co., The. (See Whitney, Warren A.,
assignor.)
Whitney, George E., assignor to S. Zimmer, Bridgeport,
Com. Service Eray. 1,646,333; Oct. 18.
USAN Service Tray. 1,646,333; Oct. 18.
Whitney, Loren L., Hammond, Ind., assignor to American
Steel Foundries, Chicago, Ill. Making brake-beam fulcrums. 1,649,880; Nov. 22.
Whitney, Loren L., Hammond, Ind., assignor to American
Steel Foundries, Chicago, Ill. Forming check nuts.
Whitney, Toren L., Hammond, Ind., assignor to American
Steel Foundries, Chicago, Ill. Forming check nuts.
Whitney, Toren L., Hammond, Ind., assignor to American
Steel Foundries, Chicago, Ill. Forming check nuts.
Whitney, The Company, The. (See Belcher, Warren J.,
assignor).

Whitsitt, William B., Baltimore, Md. Valve mechanism. 1,637,135; July 26. Whitsit, William B., and W. R. Hedeman, Baltimore, Md. Superheater heder for locomotives. 1,631,635; Dec. 6. Whitson, James H., et al. (See Turver, William H., as-

whitten, James H., et al. (See Tulver, Whilam H., assignor.)
Whittaker, but harles C., and D. C. West, Pittaburgh, Pa.,
Whittaker, but westinglones Electric & Manufacturing
Company. Liquid rheostot, 1.684.394; Dec. 27.
Whittemore, Herbert L., Washington, D. C. Strain
gauge, 1.638.425; Aug. 9.
Whittemore, Herbert L., and S. N. Petrenko, Washington,
D. C. Proving ring, 1.648.375; Nov. 8.
Whitter, Albert E., Bristol, Conn. Golf-bag attachment.
Whittier, Albert E., Bristol, Conn. Thermostatic circuit
control. 1.623.568; Apr. 5.
Whittier, Horace R., Plymouth, Conn. Cigarette-smoker's
set. 1.615.001; Jan. 18.
Whittier, Horace R., Plymouth, Conn. Temperature indicator. 1.617.975; Feb. 15.
Whittier, Horace R., assignor to The Cooper Oven Thermometer Co., Plymouth, Conn. Thermostatic valve.
1.644.501; Oct. 4.
Whittier, Horace R., assignor to The Cooper Oven Thermometer Co., Plymouth, Conn. Thermostatic valve.
1.644.501; Oct. 4.

Whittier, John K., F. D. Langevin, and R. S. Curley, Lowell, Mass, assignors, by mesne assignments, to Kitson Machine Shop. Horizontal opener and cleaner, 1.638.649; Aug. 9, Whittier, Waller H. (See Leonard, H. C., and Whit-

Whittier, Walter H., Grand Rapids, Mich., assignor, by mesne assignments, to Electric Refrigeration. Refrigerator door, 1,630,100; May 24.
Whittingham, George H., Baltimore, M. Terminal For rheosiats, 1,632,363; June 14.
Whittingham, George H., assignor to Monitor Controller Company, Baltimore, Md. Self-locking switch.

whittingham, George H., assignor to Monitor Controller Company, Baltimore, Md. Melf-locking switch. 1,624,882; Apr. 12.
Whittingham, George H., assignor to Monitor Controller Company, Baltimore, Md. Thermal limit relay. 1,624,814; May 10.
Whittingham, George H., assignor to Monitor Controller Company, Baltimore, Md. Method and apparatus for Whittingham, George H., assignor to Monitor Controller Company, Baltimore, Md. Resistor. 1,648,871; Nov. 8.
Whittington, Frederik G., Evanston, Ill., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Automobile bumper. Des. 71,817; Jan. 4.
Whittington, Frederik G., Evanston, Ill., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Automobile bumper. Des. 71,817; Jan. 4.
Whittington, Frederik G., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Superheater. 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater. 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater. 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater. 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater. 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Superheater, 1,653,028; Dec. 20.
Whittington, Louis E., and W. Robinson, Slivis, Ill. Sup

1.020.418; Mar. 8.

Wiberg, Oscar A., Finspong, Sweden, Reversible power-trunsmission device. 1.621,1228; Mar. 15.

Wiberg, Oscar A., Finspong, Sweden, Back-pressure or noncondensing steam turbine. 1.647,421; Nov. 1.

Wichert, Alfred, Mannheim-Neuostheim, anstignot to Aktiengesellschaft Brown, Bovert & Cie., Baden, Switzerland, Hanger clamp for stranded cable. 1.642,707; Scpt. 20.

Wichman, Frank M., and A. P., Hartlapp, Salt Lake City, Utah, assignors to United States Smelting. Refining and Mining Company, Portland, Me. Mixing and disintegrating apparatus. 1.649,839; Nov. 22.

Wichman, Frank S., assignor to Locomotive Terminal system. 1.651,010; Nov. 20, 90, Ill. Bolier-washing system. 1.651,010; Nov. 20, 90, Ill. Bolier-washing system. 1.651,010; Nov. 20, 90.

signor.)

Wick Narrow Fabric Company. (See Kreh. Max, assignor.)
Wickenden, Leonard, Flushing, and W. F. Demmerle, New York, N. Y., assignors to Industrial Chemical Company, New York, N. Y. Electric-turnace apparatus and revisitifying decolorising carbon, fcc. 1,634.471. July 5, Okell, Tyrone, Pa., assignors to Industrial Chemical Company, New York, N. Y. Making decolorizing carbon. 1,634.477; July 5, Wickendea, Leonard, Flushing, N. Y., and S. A. W. Okell, Tyrone, Pa., assignors to Industrial Chemical Company, New York, N. Y. Making decolorizing carbon. 1,634.473; July 5, Wickenden, Leonard, Flushing, N. Y., and S. A. W. Okell, Tyrone, Pa., assignors to Industrial Chemical Company, New York, N. Y. Electric-furnace apparatus and making decolorizing carbon. 1,634.480; July 5, Wickenden, Leonard, Flushing, N. Y., and S. A. W. Okell, Tyrone, Pa., assignor to Industrial Chemical Company, New York, N. Y. Electric-furnace apparatus and making decolorizing carbon. 1,634.480; July 5. Wickenham, William R., Piftisburgh, Pa. assignor: Cricil-infortunier system. 1,654.310; Dec. 27 pany. Circuil-infortunier system. 1,654.370; Sept. 27 III. Automatic telephone system. 1,643.797; Sept. 27 III. Automatic telephone system. 1,648.690; July Parking, A. Chicago, J. D. Verezie, 1,628.295; May 10. Wickland, Anton I. (See Halstead, S. M., and Wickland, Anton I. (See Halstead, S. M., and Wickland, Anton I. (See Halstead

May 10. Wickland, Anton I. (See Halstead, S. M., and Wick-

Nand)

Wicks, Clifford P., Stamford, Conn. Signaling means for sutomobiles. 1,614,500; Jan. 18.

Wicks, Clifford P., Stamford, Conn. Switch or circuit closer for automobiles. 1,614,510; Jan. 18.

Wicks; Clifford P., Stamford, Conn. Switch mechanism for automobile signals. 1,614,511; Jan. 18.

Wicks, Herbert, Midland, Ontario, Canada. Wreck-lifting device. 1,630,994; May 31.

Wicks, John, Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic Wicks, John, Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, III. Automatic Electric Co., Inc., Chicago, III.

Wicks, John, Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Telephone system. 1,635,805; July 12. Wicks, John, Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Measured-service telephone system. 1,644,968; Oct. 11. Wicks, John, Oak Park, assignor, by mesne assignments. Inc. Wicks, John, Assignor, by mesne assignments of the service telephone system. 1,644,469; Nov. 16essured service telephone system. 1,642,645; Nov. 10. Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,622,405; Mar. 29. Wicks, John, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,636,636; Oct. 18. Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,636,636; Oct. 18. Germany. Machine for Wickschirdm, Jakob, Dusseldor, Germany. Machine for Wickwire, Charles C., assignor to Wickwire Brothers. (See Wickwire, Charles C., assignor,) Wickwire, Charles C., assignor,) Wickwire, Spencer Steel Company. (See Hubbell, Harry C., assignor,) Wickwire, Spencer Steel Company. (See Hubbell, Harry C., assignor,) Willows C., Ant. 5.

Wickelle, J., assignor.)
Wico Electric Company. (See Hubbell, Harry C., assignor.)
Wico Electric Company. (See Hubbell, Harry C., assignor.)
Wico Electric Company. (See Hubbell, Harry C., assignor.)
Wico Hubbell, Anna M., Akron, Ohio. Hair-cutting comb.
Widouwson, Walter P., London, England. Internal-combustion engine fuel-injection device. 1,613,000; Jan. 4.
Widell, Magnus E., Cincinnati, Ohio, assignor to American. 1,621,389; Mar. 15.
Widell, Magnus E., Cincinnati, Ohio, assignor to American Can Company, New York, N. Y. Scoring machine. 1,623,223; Apr. 5.
Chicinnati, Ohio, and F. Rudolphi.
Widell, Magnus E., Cincinnati, Ohio, and F. Rudolphi.
Now York, N. Y. Blank-shearing apparatus. 1,619,227; Mar. 1.

Mar, I.
Wideman, Edmond C., et al. (See Husted, Harry F., assignor.)

Display Trafford, Pa. Display rack, 1,640,971;

Wideman, Edmond C., et al. (See Husted, Harry F., assignor).
Widen, Charles, Trafford, Pa. Display rack. 1,640,971;
Widen, Charles, Trafford, Pa. Display rack. 1,640,971;
Widmaier, Otto, Magstadt, Germany. Envelope blank and making same. 1,636,495; July 19.
Widmain, Otto, Stuttgart, Germany. Envelope folding and sealing device. 1,645,842; Oct. 18.
Widmann, Oscar O., Brooklyn, N. Y. Loud speaker. Des.
Widming, Oscar O., Brooklyn, N. Y. Loud speaker. Des.
Widmer, Charles A., Glen Rock, N. J. Hide material and obtaining same. 1,618,031; Feb. 15.
Widmer, Gustave. (See Gams, A., and Widmer.)
Widmer, Harry A., assignor of one-half to A. Lewis Widmer. Harry A., assignor of one-half to A. Lewis Midmer, Henry A., London, England. Direction-indicating and warning device for motor road vehicles. 1,641,720; Sept. 6.
Widmont, Joseph C. (See Scott, H. B., Widmont, and Huster)
Widner, Charles A., Fort Wavne, Ind. Railway tie.

Widmont, Joseph C. (See Scott, H. B., Widmont, and Huey.)
Widner, Charles A., Fort Wayne, Ind. Railway tie. 1.653 527; Dec. 20.
Wiebe, Sigurd J. A., East Orange, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y. Dumping grate. 1.640,632; Aug. 30.
Wieben, Henry, Reinbeck, Iowa. Watering trough.
Wieben, Herman, Quincy, III. Step for bathtubs. 1.641,614; Sept. 6.
Wieczhorst, Herman, Brooklyn, N. Y. Vacuum cleaner. 1.637,067; July 26.
Wieczorkiewicz, Brone. (See Jacoby, J., and Wieczorkiewicz, Brone.

Wiczańskiewicz, Drone. (Sec Jacoby, J., and Wiczońkiewicz.)

Wiederdon. 1,626,488; Apr. 26.
Wicgand. Edwin L., Pittsburgh, Pa. Producing electrical heating element. 1,613,426; Jan. 4.
Wiegand. Edwin L., Dormont Borough, Pa. Electrical heating element. 1,614,339; Jan. 11.
Wiegand. Edwin L., Dormont Borough, Pa. Electrical heating element. 1,614,339; Jan. 13.
Heating element. 1,614,339; Jan. 14.
Wiegand. Edwin L., Dormont Borough, Pa. Electrical heating element of the strip type. 1,614,338; Jan. 18.
Wiegand. Edwin L., Dormont Borough, Pa. Electrical heating element of the strip type. 1,614,3398; Jan. 18.
Wiegand. George II. and V. E., Denver, Colo. Ear protector. 1,624,435; May 10.
Co. Milwruke. Wis. Resistance-control apparatus. 1,643,105; Sept. 20.
Wiegand, Viola E. (See Wiegand, George II. and V. E.)

Wieghardt, Paul, Magdeburg, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Platen printing press. 1,628,816;

Buckar Germany. Platen printing press. 1,628,816; Buckar Germany. Platen printing press. 1,628,816; Wish Affred Brooklyn, N. Y. Combined radio and phonograph loud speaker, 1,624,196; Apr. 12. Wieland, Charles G., New York, N. Y. Diaphragm for telephone receivers. 1,639,546; Aug. 16. Wieland, Charles G., New York, N. Y. Telephone diaphragm. 1,640,915; Aug. 30. Wieland, Eberhard, Pforzheim, Germany. Production of articles and covers from resinous compositions. 1,642,816; Aug. 16. Wieland, Eberhard, Biel-Madretsch, Switzerland. Sewing machine for darning. 1,642,285; Sept. 13. Wieland, Heinrich, Munich, Germany, assignor to the Firm of C. H. Boehringer Sohn Chemische Fabrik, Neider ingelheim-on-the-Rhine, Germany, Obtaining the active principle of lobelia, Reis,772; Oct. 18. Wieland, William, assignor of one-half to J. K. Mohr, Bay City, Mich. Floating tractor hitch. 1,636,845; Wieland, Albert, (See Falkenberg, Willelm, assignor.) Wiemann Co., The. (See Wiemann, William P., assignor.)

wiemann Co., The. (see Wiemann, William P., assignor.)
Wiemann, Herbert O., Chesterton, Ind. License indicator, Rel 6,683; Apr. 5.
Wiemann, William P., assignor to The Wiemann Co., Fittsburgh, Pa. Direction indicator. 1,622,895; Mar. 28.
Wiener, Martin L. (See Tuttle, J. C., Smith, and Wie-

Wiener, Martin L. (See Tuttle, J. U., Smith, and H., net.)
Wiens, Walter F., Peorla, Ill. Internal-combustion engine. 1,622,300; Mar. 29.
Wier, Harry B., Plainfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Reproduction of music and speech. 1,617,428; Feb. 15.
Wiese, Ernest E., Brecksville, Ohlo. Lamp. Dess. 73,500:
Wiese, Henry, Anderson, Ind. Airplane. 1,633,710: June 28.
Wiese, John D., Manson, Iowa. Orag attachment for disk cultivators or harrows. 1,626,572; Apr. 26.
Wiese, Otto C., Newton, Mass. Shaped seamless elastic corset. 1,649,633: Nov. 15.
Wiese, Paul, Waterbury, Conn. Armrest. 1,633,427; June 21.

I. Gl. 158; Feb. 1.

Wiggins, George E. (See Wiggins, Fredrick E. and G. E.)

Wiggins, John H., Bartlesville, Okla. Liquid-storage tank. 1,636,539; July 19.

Wiggins, John H., Bartlesville, Okla. Liquid-storage tank. 1,636,540; July 19.

Wiggins, John H., Bartlesville, Okla. Liquid-storage tank for Wiggins, John H., Bartlesville, Okla. Storage tank for Wiggins, John H., Bartlesville, Okla. Liquid-sealed vacuum and pressure-relief valve. 1,631,51; Oct. 11.

Wiggins, John H., Bartlesville, Okla. Liquid-sealed vacuum and pressure-relief valve. 1,631,051; Nov. 29.

Wigglesworth, Harry H. (See Morshead, H., and Wigglesworth, Harry H. (See Morshead, H., and Wigglesworth)

Wigglesworth, Harry H. (See Morshead, H., and Wigglesworth, Harry H., assignor to The Philadelphia, Drying Machinery Company, Philadelphia, Pa. Drying machine, 1,627,629; May 3.
Wigglesworth, Harry H., and W. P. Greiner, assignor to The Philadelphia Drying Machinery Company, Philadelphia Apparatus for use in the laying of bricks and similar elements in building, 1,615,859; Feb. 1, Vaporizer, 1,623,452; Apr. 5.
Wigle, Wilson B. Long Beach, Calif. Casing head for Wilson B. Long Beach, assignor, by mesne assignments, to W. D. Shaffer, Breac, Calif. Rotary hydraulic jar mechanism. 1,637,505; Aug. 2.
Wigtel, Carl, Brooklyn, assignor to The Watson-Stillman Co. New York, N. Y. Hydraulic pressing apparatus. Wilk, Sever R., Stettler, Alberta, Canada. Fly chaser. 1,617,227; Feb. 8.
Wilke, William L., assignor of 51 per cent to H. Richmond, Riverside, Calif. Rotary rake. 1,627,422; Wikbilas Uktror. Helsingfors Finland. Lee concrete.

Wife, William I., assignor of 31 per cent to R. Schemond, Riverside, Calif. Rotary rake, 1,627,422; May 3. Wikhila, Wiktor, Helsingfors, Finland. Ice concrete. 1,622,899; Apr. 12. Wike, George F., Milwaukee, Wis, assignor to The Fisk Wife, George F., Milwaukee, Wis, assignor to The Fisk Helm of Grapher Strates. 1,621,615; Mar. 22.

Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falis, Mass. Tire-building machine. 1,647,163; Nov. 1
Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falis, Mass. Building-core bead ring. 1,647,164; Nov. 1.
Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falis, Mass. Laminated material. 1,631,794; bec. 6.
Wiklund, Anders, assignor International Harvester Wiklund, Anders, assignor International Harvester Wiklund, The Wikeling of Wikeling of Chicago Wikeling and Chicago Wikeling, Jakob, Dusseldorf, Germany, Knife for cutting the points of wire tacks and nalls. 1,648,795; Nov. 8.
Wikstrom, Agnar, assignor to Flash Radio Corporation, Boston, Mass. Radio receiving set. 1,648,521; Nov. 8.
Wilber, Claude F., Tulsa, Okla. Stitch remover. 1,638,393; Aug. 16.

Wilber, Claude F., Tulsa, Okla. Stitch remover, 1,638,899; Aug. 16.
Wilber, William R., Los Angeles, Calif. Underreamer, 1,623,453; Apr. 5.
Wilborn, J. C., et al. (See Nell, Joseph B., assignor.)
Wilburnham, Charles. (See Sharples, R. G., and Wilbra-

Wildranam, Charles. (See Sharples, R. G., and Wildraham, Ray S., Lyndhurst, N. J., assignor to Bell Teleplone Laboratories, Incorporated, New York, N. Y.
Telephone system, 1,650,731; Nov. 29.
Wilburn, James, and J. J. Jefferson, Kingsville, Tex.
Rerailing device. 1,654,442; Dec. 27.
Wilburn, Sidney D., Englewood, N. J., assignor to American Telephone and Telegraph Company. Telegraph
Signaling system. 1,631,174; June 7.
William, Farst. (See Hahnemann, W., Rudolph, and

Wilckens

Wilckens, Ernst. (See Habnemann, W., Wilckens, and Lichte.) Wilcolator Company, The. (See Fonesca, Edward L.,

Wilciens, Ernst. (See Habnemann, W., Wilckens, and Lichte.)
Wilcolator Company, The. (See Fonesca, Edward L., assignor).
Wilcolator Company, The. (See Fonesca, Edward L., assignor).
Wilcolator Company, The. (See Twombly, Willard I., Wilcolator Company, The. (See Twombly, Willard I., Wilcolator Company, The. (See Twombly, Willard I., Wilcolator Company).
Wilcolator Company, The. (See Twombly, Willard I., Calif. Shaving brush. 1,641,721, Sept. 6.
Wilcolator Company, The Company, See Crowell, Tracy M. (See Millon, Sedgar M. (See Hannauer, G., and Wilcolator, Wilcolator, Sedgar M. (See Hannauer, G., and Wilcolator, Wilcolator, Sedgar M. (See Hannauer, G., and Wilcolator, Wilcolator, Sedgar M., See Hannauer, G., and Wilcolator, Wilcolator, See W

flon, Peckskiii, N. Y. Grate. 1,648,006; Nov. 15.

Wilcox, Lewis T., Peckskiii, N. Y. Grate. 1,648,006; Nov. 15.

Wilcox, Morrill M., deceased; A. E. Snow, administrator, assignor, by mesne assignments, to Wilcox Products Corporation, Saginaw, Mich. Tappet. 1,628,017; May 10.

Wilcox Novelty Company, The. (See Wilcox, Joseph, jr., assignor.)

assignor.)
Wilcox Novelty Company, The. (See Wilcox, Joseph S., assignor.)
Wilcox Patents Corporation. (See Homan, William C.,

assignor.)
Wilcox Patents Corporation. (See Wilcox, Lewis T.,

Wilcox Patents Corporation. (See Wilcox, Lewis T. and F. W., assignors.)
Wilcox Patents Corporation (See Wilcox, Lewis T. and F. W., assignors.)
Wilcox, Paul W., Troy, Kans. Water-supply attachment for concrete mixers. 1,632,938; June 21.
Wilcox, Philip W., deceased, Atlanta, Ga.; K. R. Wilcox, executrix. Apparatus for dusting powdered substances on surfaces. 1,643,143; Sept. 20.

Wilcox, Philip W., deceased, Atlanta, Ga.; K. K. Wilcox, executrix. Dusting machine. 1,643,144; Sept. 20. Wilcox Products Corporation. C. assignor.)
Wilcox Products Corporation. (See Wilcox, Merrill M.,

Wilcox Products Corporation. (See Osterholm, William U., assignor.)
Wilcox Iroducts Corporation. (See Wilcox, Merrill M., Wilcox, Ralph, Chicago, III., assignor to Sullivan Machinery Company. Core drill. 1,653,245; Dec. 20. Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Upsetting mechanism. 1,613,494; Mar. 1.
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Upsetting mechanism. 1,619,496; Mar. 19.
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Cutting off blanks in headers, upsetting machines, or the like. 1,622,935; Mar. 29.
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Die Foundry and Machine Company, Waterbury, Conn. Xut machine. 1,635,238; July 12.
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Trimming blanks. 1,649,634; Nov. 15.
Wilcox, Wilchard L., assignor to The Waterbury, Conn. Trimming blanks. 1,649,634; Nov. 15.
Wilcox, Fichard L., assignor to The Waterbury, Conn. Trimming blanks. 1,649,634; Nov. 15.
Wilcox, Fichard L., assignor to The Waterbury, Conn. Framk, Ithaca, N. Y., and B. Grotta. Tamaqua, Fa., assignors to Atlas Powder Company, Wilmington. Del. Manufacture of sodium adde. 1 028,836; May 10.
Wilcox, Minam D. Idaho Falls, Idaho. Making combell. Manufacture of sodium adde. 1 028,836; May 10.
Loll, 1885; Peb. 15.
Wild. Charles, Eureka, Calif. Well-boring machine. 1,648,731; Sept. 27.

Sept. 27.

Sept. 27.

1. 434.73.1: Sept. 27.

1. 434.73.1: Sept. 27.

1. 1. 434.73.1.

Motogram Corporation, New York, N. Y. Electric sign.
1,626,899: May 3.
Wilde. Francis E. J., Meadowmere Park, assignor to
Motogram Corporation, New York, N. Y. Electric-sign
control. 1,626,990: May 3.
Wilde, Louis J., and B. K. Gillespie, Los Angeles, Calif.
Apparatus for cleaning and polishing automobiles.
1,613,213; J. an. 4
Wilde, Percy R., Bath, England. Moist-hot-air bath.
1,636,631; July 19.

1.636.581; July 19.

Wilde, Samuel A., assignor to Glenwood Range Company, Taunton, Mass. Gas range. 1.645.543; Oct. 18.

Wilde, Samuel A., assignor to Glenwood Range Company, Taunton, Mass. Gas range. 1.645.784; Oct. 18.

Wilder, Arthur L., Wethersfield, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Gear-tooth Wilder, Arthur P., Arlington, and A. P. Fay, Roxbury, Mass. Turn shoe. 1,615.496; Jan. 25.

Wilder, Clinton E., Irvine, Pa. Pipe mold for centrifugal casting machines. 1,623,146; Apr. 5.

Wilder, Morris B., Omaha, Nebr. Drilling and countersinking tool. 1,620,848; Mar. 15.

Wildermorth G. G. Gassignor, to The Crescent Mass. 1,635,1667; Dec. 6, assignor to The Crescent Mass.

rous bodies, displatagms, liters, and the like of condite. 1,051,567; Dec. 6.
Wilderson, Clinton, C., assignor to The Crescent Manchine Company, Lectonia, Ohio, Sectional chip breaker for planing machines. 1,619,008; Mar. 1.
Wilderson, Clinton G., assignor to The Crescent Machine Company, Lectonia, Ohio, Sectional feed roll for planing machines. 1,619,009; Mar. Greecent Machine Company, Lectonia, Ohio, Mortising and boring machine. Christian, New York, N. Y. Device for separating plus from sweepings. 1,630,366; May 31.
Wildhaber, Ernest, assignor to Gleason Works, Rochester, N. Y. Producing goars. 1,622,555; Mar. 29.
Wildhaber, Ernest, assignor to Gleason Works, Rochester, N. Y. Producing goars. 1,622,555; Mar. 29.
Wildhaber, Ernest, assignor to Gleason Works, Rochester, N. Y. Curved tooth gen. 1,622,556; Mar. 29.
Wildhaber, Ernest, assignor to Gleason Works, Rochester, N. Y. Producing gears. 1,647,165; Nov. 1,000, N. Y. Gear. 1,047,166; Nov. 1.

Wildhaber, Ernest, assignor to Gleason Works, Rochester, N. Y. Gear. 1,647,167; Nov. 1.
Wildhaber, Ernest, Rochester, N. Y. Cutting gear teeth. 1,655,686; Dec. 27.
Wildhaber, Ernest, assignor to Gleason Works, Rochester, N. Y. Froducing gears. C. C. Ferner, Fittsurgh, assignor, by the corg. W. H. C. Ferner, Fittsurgh, assignor, by the corg. W. H. C. C. Ferner, Fittsurgh, assignor, by the corg. W. H. C. C. Ferner, Fittsurgh, assignor, by the corg. Compressor. 1,638,674; Aug. 9.
Wildman, John P., Portland, Oreg. Compressor. 1,638,674; Aug. 9.
Wildrick, Meade, Savannah, Ga. assignor, by mesne assignments, to The Sesame Company, Hartford, Conn. Reviews lock. 1,613,550; Jan. 4.
Wiley, Edgar C., assignor to Simplex Heating Specialty Company Inc., Lynchburg, Va. Direct-return frap. Wiley, George G., assignor to Simplex Heating Specialty Company Chicago, Ill. Swing-sash latching fixture. 1,630,913; May 31.
Wiley, George G., South Pasadena, Calif. Display device. 1,652,335; Dec. 13.
Wiley, Nathaniel T. (See Hersee, P. C., and Wiley.) Wiley, Mathaniel T. (See Hersee, P. C., and Wiley.) Wiley, Mathaniel T. (See Hersee, P. C., and Wiley.) Wiley, Milliam A. (See Woods, G. H., Denlson, and Willey.)

Wiley, W

June 14.
Wiley, William A. (See Woods, G. H., Denison, and Wiley, William R., Mount Clemens, Mich. Hood catch. 1447(22); Nov. 1.
1447(22); Nov. 1.
1454(22); Nov. 1.
1554(22); Nov. 1.
1554(23); Nov. 1.
1554(24); Nov. 1.
1554(24);

Wilhite, Samuel C., assignor to Wilhite Machine Works. Inc., Los Angeles, Calif. Wall-bracket electric fixture. Des. 73,547; Sept. 27. Wilhielm. Christian, Philadelphia, Pa. Vaive. 1,622,406; Mar. 29.

Wilk, Wilhelm. (See von Bohuszewicz, O., and Wilk.) Wilke, Alfred H., Boise, Idaho. Egg meter. 1,645,468: Oct. 11.

Oct. J. Wilke, John M., sr., Covington, Ky., assignor to The Julian & Kokenge Company, Cincinnati, Obio. Shoe. 1,640,633; Aug. 30, Wilke, Karl. (See Schirmacher, K., Zahn, Wilke, and Ochwat.)

Ochwat.)
Wilke, Wilhelm. (See Muller-Cunradi, M., and Wilke.)
Wilkens, Dick J. (See McLauchlin, W. D., and Wilkens,
Wilkens, Beker W. (See Bolheimer, R., and Wilkens,
Wilkers, Bayer W. (See Bolheimer, R., and Wilkens,
Wilkes, Clarace H., and G. E. Calboun, assignors to
Amsterdam Cutlery Company, Incorporated, Amsterdam, N. Y. Shears, I. 632,625; June 14.
Wilkes, Brederle, Wilkinsburg, Pa. Splashboard,
Wilkes, Wilkes, B. and A. Kengely, Clerchand, Ohio.

LUISOZY, Feb. 15.

Wilees, William R., and A. Kennedy. Cleveland, Chia, see M. M. M. McCoy, Williamsport, Pa. Window sach. 1,638,203; July 19.

Wilkin, George W., Grangeville, Idabo. Light shade for headlight, 1,046,436; Oct. 25.

Wilkin, John T., Connersville, Ind. Gear. 1,646,374; Oct. 18.

Wilkin, John T., assignor to The Connersville Blower Company, Connersville, Ind. High-speed lobed-impeller blower. 1,646.373; Oct. 18.

Wilkin, John T., assignor to The Connersville Blower Co., Connersville, Ind. Multiple control governor for gas or code oven systems. 1,648,522; Nov. 8. Wilkin, Robert E., assignor to Standard Oil Company, Whiting, Lester C. (See Sewell H. J., and Wilking). The Control of the

kins.)

Kins.)

Wikins, Chester A., Sacramento, Calif., and S. D. Wilkins, St. Louis, Mo. Insecticide. 1,630,506; May 31.

Wilkins, James M., assignor to A. Mueller, trustee, Decatur, Ill. Pressure regulator. 1,651,237; Nov. 29.

Wilkins, James M., assignor to A. Mueller, trustee, Decatur, Ill. Gas-pressure regulator. 1,618,236; Feb. 22.

Wilkins, Stanley D. (See Wilkins, Chester A. and S. D.)

Wilkins, Stanley D. (See Wilkins, Chester A. and S. D.)

Wilkins, Stanley D. (See Wilkins, Chester A. and S. D.)

Wilkins, Stanley D. (See Wilkins, Chester A. and S. D.)

Wilkinson, Bert. Fort Worth, Tex. Vehicle wheel. 1,624,646; Appl. K. Sewcastle, Ind., and W. Lehman, Mil
Wilkinson, Bert. Fort Worth, Tex. Vehicle wheel. 1,624,646; Appl. K. Sewcastle, Ind., and W. Lehman, Mil
Wilkinson, George D., Oak Park, assignor to Cribben & Company, Chicago, Ill. Broiler oven. 1,614,167; Jan. 11.

Wilkinson, George S. (See Napier, M. S., and Wilkinson).

Wilkinson, George S. (See Napier, M. S., Wilkinson, and

Tryon.)

Wilkinson, Henry, and G. A. Bassett, assignors of onethird to Platt Brothers and Company Limited, Oldham,
England. Pneumatic apparatus or means for conveying
and treating textile fibers. 1,642,135; Sept. 13.

Wilkinson, Henry, and J. Reed, assignors of one-third
to Platt Brothers and Company Limited, Oldham, England. Carding engine for carding artificial silk and
such like material. 1,642,768; Sept. 20.

Wikhison, Henry H., Brooklya, N. Y., assignor to Union
Sulphue Company. Purifying sulphur. 1,613,632;
Jan. 11.

Min. Jahez, Fall River, Mass. Warper or section below for a fact for the fact for t Apr. 5.

Apr. 5.

Wilkinson, James, Lynn, Mass., assignor, by mesne assignments, to Bailey Meter Company. Pressure-difference-creating device. 1,648.708; Nov. 8.

Wilkinson, James W., Kansas City, Kans. Electric welding appliance. 1,536.266; July 19.

Wilkinson, John, assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y. Cooling system for air-cooled motor-vehicle engines. 1,624.456; Apr. 12.

Wilkinson, John B., Alliance, Ohlo. Accounting system. 11,622,002; Sept. 10s. M., Memphis, Tenn. Detachable battery lamp. 1,651.307; Nov. 29.

Wilkinson, Samuel W., Westminster, London, assignor to Zair Syndicate, Limited, London, England. Dyring of animal fibers and fabrics of a protein nature. 1,625,484; May 10.

May 10.

Wilkinson, Stanley W., Waukegan, assignor of two-fifths to W. C. Davis, individually, and two-fifths to W. C. Davis, trustee, Chicago, Ill., and one-fifth to L. Hughes, Los Angeles, Calif. Vending apparatus. 1,651,857; Dec. 6.

Wilkinson, Stanley W., Waukegan, assignor of two-fifths to W. C. Davis, individually, and two-fifths to W. C. Davis, trustee, Chicago, III, and one-fifth to L. Hughes, Los Angeles, Calif. Vending apparatus. 1,651,858; Dec. 6.

Wilkinson, Tannie B. (See Rice, C. L., and Wilkinson, Wilkinson, Waiter, Jersey City, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Separation of the confituents of ternary gaseous mixtures, 1,619,909; Mar. 8.
Wilkinson, William E. (See Laucks, S. F., and Wilkinson, William E.)

son.)

son.) Will & Baumer Candle Company Inc. (See Flannery, Martin A., assignor.)

Martin A., assignor.) F. McConnell, Chicago, Ill. Golf-hell marker. 1,641,562; Sept. 6.

Will. Victor R., Sacramento, Calif. Gradometer. 1,618,776; Jan. 11.

Willamette Iron and Steel Works. (See Allison, Cliford E., assignor.)

Willamette Iron & Steel Works. (See Claypoole, Albert, assignor.)
Willamette Iron & Steel Works. (See Slefarth, Chester

J., assignor.)

Willans, Peter W. (See Agate, C. S., and Willans, I Willans, Peter W., Pattishall, Towcester, England. Ther-mionic valve circuits. 1.637,924; Aug. 2. Willans, Peter W., Pattishall, Towcester, England. Ther-mionic valve circuits. 1.637,977; Aug. 2. Willans, Peter W., Pattishall, Towcester, England. Frame aerial and the like. 1,644,906; Oct. 11.

Willard, Frederic W., Summit, N. J., assignor to Western Dilectric Company, Incorporated, New York, N. Y. Coated core and method of and apparatus for coating same. 1,615,428; Jan. 25.
Willard, George H., assignor to Draper Corporation, Hopedale, Mass. Loom shuttle. 1,630,817; May 31.
Willard, George H., assignor to Draper Corporation, Hopedale, Mass. Loom shuttle. 1,630,817; May 31.
Willard, Hopedale, Propension of Company of the American Company of the Company of the Company of the Company, O'Fallon, Ill. Furnace grate. 1,621,390; Mar. 15.

Willard, Louis J., assignor to The Rotary Printing Com-pany, Nowalk, Ohio. Perforating device. 1,649,635; Nov. 15. Willard, Maurice L., assignor to The Superior Type Com-pany, Chicago, Ill. Rubber stamp. 1,651,568; Dec. 6, Willard Storage Battery Company. (See Dunsweiher, Carl.

Whilard Storage Battery Company. (See Dunzweiler, Carly J., assignor.)
Willard Storage Battery Company. (See Dunzweiler, C. J., and Severance, assignors.)
Willard Storage Battery Company. (See Lormor, Henry

Willard Storage Battery Company. (See Lormor, Henry W., assignor).
Willard. Theodore A., Cleveland Heights, Ohio. Press.
1,646,668; Oct. 25.
Willard. Waldo W. (See Hewlett, E. M., and Willard.)
Wilbanks, Harry, Atlanta, Ga. Garage turntable.
1,647,678; Nov. 1.
Willbrandt, Blanche, et al. (See Krystofiak, Josef, as-

Willibrandt, Busicute, e. a. Signor, I. See Krystofiak, Josef, assignor, I. Willibrandt, Famil, et al. Assignor to Freyn Englishering Company, Chicago, Ili. Dust receiver, 1,020,244; May 17. Willicox, Frederick H., assignor to Freyn, Brassert & Company, Chicago, Ili. Gas-washing system, 1,632,572;

June 14.
Willeox, George B., Saginaw, Mich., assignor to Hart
Brothers, Saginaw, Mich. Multiple-feed sorting rolls.
1,618,500; Feb. 22.
Willcox & Gibbs Sewing Machine Co. (See Merritt.
Arthur A., assignor.)
Wille, Eduard, Cronenberg, Germany. Screw cutter.
1,633,913; June 28.
Wille, Henry V., R. M. Campbell, and W. J. Etherington,
assignors to The Baldwin Locomotive Works, Philadelphia, Pa. Frame for electric locomotives. 1,622,074;
Mar. 22.

Mar. 22. Mar. Karl, Mar. 22.
Wille, Karl, Somerville, N. J., and W. Tieke, Astoria, N. Y.; said Tieke assignor to said Willie. Paper-coloring device. 1.638,757; Aug. 9.
Willenbacher, August. Hackensack, N. J., assignor to C. Haas, New York, N. Y. Lamp-shade holder. 1.616,159; Feb. 1.
Web. 1.
Web.

Mar. 1.

Willett, Benedict E., Dayton, Ohio. Stepladder.
1,624,569; Apr. 12.

(See Burns, David E., assignor.)

Willett, Charles G. (See Burns, David E., assignor.)

Willette, Hazel C., Rhinelander, Wis. Stocking protector.

Willetts, Paul G., West Hartford, Conn. assignor to Hartford-Empire Company, Hartford, Conn. Producing fired ceramic blocks. 1,626,261; Apr. 26.

Willetts, Paul G., West Hartford, Conn. Making Conn. Producing fired Company, Hartford, Conn. Making Conn. 2008.

Willetts, Charles G., 1626,261; Apr. 26.

Willetts, Conn. Zirconia-faced refractory.
1,650,577; Nov. 22.

1.650.577; Nov. 22. Willey. Edith M., Scattle. Wash. Stuffed figure toy. 1.644,317; Oct. 4. Semerville assignor to Willey. Goorge H., Somerville assignor to Willey. Goorge H., Semerville assignor to Willey. Noves. Ing. device. 1.645,978; Oct. 19. Jenson, Mass. Circuit-clossing device. 1.645,978; Oct. 19. Company. (See Willey. George H., assignor.) Willey. Goorge H., assignor.) Willgoos, Andrew V. D., Upper Montclair, N. J., assignor to Wright Aeronautical Corporation. Clutch. 1.632,526; June 14.

Willheim, Raoul, Vienna, Austria, assignor to General Electric Company. Protective system. 1.632.573:

June 14.
Willhoeft, Carl, Wandsbek, Germany. Regulating apparatus for central heating appliances. 1,649,009;

NOV. 15.
William Bros, Boller & Mfg. Co. (See Ashenden, Ernest
W., assignor.)
Williams, Alfred J. (See Olson, G. E., and Williams.)
Williams, Alfred S., et al., trustees. (See Conner, Lester , assignor.)

williams, Alvin L. and M. O., assignors to R. B. Cozart, Lufkin, Tex. Cleaning machine 1,639,152: May 24. Williams, Annie M., committee. (See Williams, Frank H.) Williams, Anthony F., assignor to North East Appliances Inc., Rochester, N. Y. Fower mechanism. 1,643,041; Sept. 20.

Williams. Anthony F., assignor to North East Electric Company, Rochester, N. Y. Testing electrode. 1,650,779; Nov. 29.
Williams, Arthur H. T., Portland, Oreg. Gas holder. 1,630,647; May 31.
Heron, one-fourth to W. F. Gienn, Jr., and one-fourth to L. B. Glenn, Nashville, Tenn. Rotary engine. 1,625,233; Apr. 19.
Williams, Austin D., and F. B., Gillet, Sacramento, Calif. Bushing mold. 1,622,750; Mar. 29.
Williams, Austin D., and F. J. Hickey, Sacramento, Calif. Sept. 20.
Williams, Louisin D., and F. J. Hickey, Sacramento, Calif. Sept. 20.
Williams, Benjamin M., Philadelphia, Pa. Hat cover

Sept. 20.
Williams, Benjamin M., Philadelphia, Pa.
and carrier therefor. 1.635,916; July 12.
Williams, Byron, Chicago, Ill. Steering gear. 1,640,388;
Williams, Byron, Chicago, Ill. Steering gear. 1,640,388;
Williams, Carl S., Woodbridge, N. J., assignor to The
Roessler & Hasslacher Chemical Company, New York,
N. Y. Testing machine. 1,627,366; May 3.
Williams, Cecil O., Evansville, Ind. Refrigerator.
1,622,478; Mar. 29.
Williams, Charles H. (See Green, T. L., Morton, and

Williams, Charles H. (See Green, T. L. Green, Indianapolis, Ind. Lubricating system, 1,648,174; Nov. S. Williams, Charles H., assignor to T. L. Green, Indianapolis, Ind. Lubricating system, 1,648,174; Nov. S. Williams, Charles H., and M. L. Tucker, Pigua, Ohi H. Martin, Charles H., and M. L. Tucker, Pigua, Ohi H. Galles, Charles H., and Williams, Charles H., and Williams, Clifford E. (See Lewis, R. B., and Williams, Clifford E., assignor to Briggs Manufacturing Company, Detroit, Mich. Door buffer, 1,623,767; Apr. R.

Apr. 5.
Williams, Clifford J., assignor to Briggs Manufacturing
Company, Detroit, Mich. Adjustable striker plate.
1.634,814; July 5.

1.054,512; July 5.
Williams Company, The. (See Robbins, William H., assignor.)
Williams, D. T., Valve Company, The. (See Ernst, Harry

Williams, D. T., Valve Company, The. (See Ernst, Harry J., assignor.)
Williams, Dayton L., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Knife bracket for the machines. 1,637,794; Aug. 2.
Williams, Dayton L., assignor to The Goodyear Tire & Williams, Dayton L., assignor to The Goodyear Tire & L. 454,081; Oct. 1. Akron, Ohio. Tire-building tool. Williams, Dick B., assignor to W. O. Coleman, Chicago, Ill. Low-fuel alarm. 1,642,318; Sept. 13.
Williams, Dick B., assignor to W. O. Coleman, Chicago, Ill. Low-fuel alarm for motor vehicles. 1,654,443; Dec. 27.

Dec. 27.

Williams, Bouglas W. (See Lewis, N. E., and Williams, Williams, Edom, Louisville, Ky. Poultry feeder. 1.631,778; June 7.

Williams, Edward, Monessen, assignor to Williams Welding and Manufacturing Company, Charlerol, Pa. Port cooler for open-hearth furnaces. 1.648,157; Nov. 8.

Williams, Edward L., Lakewood, assignor to The Walter A. Goldsmith Company, Cleveland, Ohlo. Garment yoke. 1.647,623; Nov. 1.

Williams, Edward T., Brooklyn, assignor to Refrigeration Development, Inc., New York, N. Y. Reciprocating Compressor. Ref. 638; Aug. 2.

Compressor. Ref. 638; Aug. 2.

Williams, Edward T., assignor to Merit Underwear Company, Shoemakersville, Pa. Union sult. 1,615,922; Feb. 1.

Williams, Edwin R., Philadelphia Pa. Artificial limb and

Williams, Erank B., Buffalo, A. Williams, Erank B., Buffalo, A. M. Williams, Frank L., Buffalo, A. M. Williams, Strak B., Buffalo, A. M. Williams, Elijah. (See Prisey, Leonard C., assignor.) Williams Foundry and Machine Company, The. (See Garrigues, William C., assignor.) Williams Foundry & Machine Company, The. (See Williams, Frank B., West Medford, assignor to The Shoc-Bloc Co., Inc., Boston, Mass. Machine for making concrete blocks. 1,652,865; Dec. 13.
Williams, Frank B., West Medford, assignor to The Shoc-Bloc Co., Inc., Boston, Mass. Machine for making concrete blocks. 1,652,865; Dec. 13.
Williams, Frank H., Buffalo; A. M. Williams, committee of the person and estate of safe frank H. Williams, Williams, Frank I. (See Bryson, T. A., and Williams, Williams, Fred W. (See Bryson, T. A., and Williams, Williams, Fred W., Santa Maria, Calif. Multiple fuse Williams, Fred W., Santa Maria, Calif. Multiple fuse Williams, Frederick D., Sydney, New South Wales, Australia. Luegage carrier for motor rond vehicles. 1,648,044; Nov. 8.
Williams, George B., (See Clyne, R., G., and Williams.)

1,648,094; Nov. 8.

Williams, George B. (See Clyne, R. G., and Williams, Oeorge W., Oak Park, III., and A. M. Walstrom, Minneapolis, Minn., assignors to The Creamery Fackage Mfs. Company, Chicaro, III. Soldering mawilliams, George W., Oak Park, III., and A. M. Walstrom, Minneapolis, Minn., assignors to The Creamery Package Mfg. Company, Chicago, III. Soldering machine, 1,023,294; Apr. 5.

Williams, Harold E., Carthage, Mo. Foldable rack, Williams, Harry A. (See Hynes, L. P., and Williams.)

Williams, Harry M., assignor to General Motors Research Corporation, Dayton, Ohio. Bearing. 1,618,853;

search Corporation, Dayton, Ohio. Bearing. 1,618,853; Feb. 22.
Williams, Harry M., Dayton, Ohio, assignor to General Motors Research Corporation. Making lead-copper particles. 1,655,653; July 12.
Williams, Harry M., and Dayton, Ohio. Making lead-copper and the season of the season

J. M. Packer, Douglas, Wash. Sack jigger. 1.640,103; Aug. 23. Williams, Henry H., assignor to The Tabor Manufactur-ing Company, Philadelphia, Pa. Burner. 1,650,559;

Williams, Henry H., assignor to The Tabor Manufacturing Company, Philadelphia, Pa. Burner. 1,650,559; Nov. 22.
Williams, Henry H., assignor to The Tabor Manufacturing apparatus. 1,650,566; Nov. 22.
Williams, Henry H., Philadelphia County, assignor to The Tabor Manufacturing Company, Philadelphia, Pa. Liquid-fuel burner. 1,650,561; Nov. 22.
Williams, Henry H., Philadelphia County, assignor to T. Liquid-fuel burner. 1,650,561; Nov. 22.
Williams, Herbert H., assignor to T. E. Murray, Brooklyn, N. 3.
Method and apparatus for making wheels. 3.
Williams, Homer W., Tacoma, Wash. Car construction. 1,652,749; Dec. 13.
Williams, Hubert P., Hamlin, Tex. Agricultural attachment for tractors. 1,616,099; Feb. 1.
Williams, Hubert P., Hamlin, Tex. Trailer coupling. 1,622,933; May 3. and J. D. McGilton, Tulsa, Okla.
Williams, Islan, Gary, Ind. Car-moving device. 1,648,897; Nov. 1.
Williams, J. H., Company. (See Spencer, Philip L., assignor.)
Williams, Jack, assignor to Williams & Williams Liquided.

signor.)

Jack, assignor to Williams & Williams Limited,
Chester, England, Wilndow. 1,645,642; Sept. 20.

Williams, James B., Tampa, Fla. Over-water craft.
1,627,876; May 10.

Williams, James C., et al. (See Seward, Ira W., assignor.)

Williams, James C., assignor to Dalton Hosiery Mills. Dalton, Ga. Seamless hosiery and making same. 1.621.343; Mar. 15. Williams, James T., Miami, Mo. Gearing. 1.620.849;

1.621.348; Mar. 49.

Williams, James T., Miami, Mo. Gearing: 4,000.000.

Mar. 15.

Williams, Job J., Milwaukee, Wis, assignor to The Fisk
Rubber Company, Chicopee Falls, Mass. Dumb-bell
bolt 1.618,619; Feb. 22.

Williams, John, Washington, D. C. Show case. 1,534,732;
July 5.

July 5.

Williams, John A., Richmond Hill, N. Y. Cuff button.
1,621,570; Mar, 22.

Williams, John D., Whittenburg, Tex. Oil derrick.
1,630,837; Nov. 29.

Williams, John D., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Method and apparatus for braiding reenforced cords.
1,631,8033; Feb. 16.
1,635,621; July 12.

Williams, John H., Westwood, Calif. Mold. 1,613,214; Jan. 4.

Jan. 4.

Jan. 4.
Williams, John I., Du Bois, Pa. Fisherman's hat.
1.623,768; Apr. 5.
Williams, John M., fr., Montelair, N. J. Internal-combustion engine. 1,622,015; Mar. 22.
Williams, John M., fr., Montelair, N. J. Carburetor economics. 1,642,647; Sept. 27.
Honolulu, Hawaii. Filter. 1,642,645; Sept. 20.
Williams, John P., Bayside, assignor to Duplex Electric Company, New York, N. Y. Foot-rail contactor for electric burglar-alarm. 303,014; May 31.
New York, N. Y. Safety means for hand bags or the like. 1,643,106; Sept. 20.
Williams, John P., assignor to Pratt & Letchworth Co..
Ruffalo, N. Combined stop lug and center filler Williams, John P., assignor to Pratt & Letchworth Co..
Williams, John P., assignor to Pratt & Letchworth Co..
Ruffalo, N. Combined stop lug and center filler Williams, John T., assignor to Pratt & Letchworth Co..
Williams, John T., assignor to Pratt & Letchworth Co..
Ruffalo, N. Combined stop lug and center filler williams John T., assignor to Pratt & Letchworth Co..
Ruffalo, N. T. Combined stop lug and center filler williams. John T., assignor to Pratt & Letchworth Co..
Ruffalo, N. T. Combined stop lug and center filler williams. John T., assignor to Pratt & Letchworth Co..

Williams, John T., Brooks, Alberta, Canada. Grease cup. 1,647,945; Nov. 1. Williams, John W., Buffalo, N. Y. Muffler. 1,631,391;

June 7.

Williams, John W., South Miaml, Fla. Spraying apparatus, 1,634,701; July 5.

Williams, Joseph S. (See Allyn, H. H., and Williams.)

Williams, Joshua H. (See Gower, T. C., and Williams.)

Williams, Joshua H. (See Gower, T. C., and Williams.)

Williams, Steth. Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Jig for grinding.

Williams, Leland W., San Autonio, Tex. Door holder, 1,633,202; June 21.

Williams, Lester, Marshalltown, Jowa. Combined rotary

Williams, Lester, Marshalltown, Jowa. Combined rotary

Mar. 6.
Williams, Lester, Marshalltown, Iowa. Combined rotary
bevel shear and scrap cutter. 1,636,267; July 19.
Williams, Lester, Marshalltown, Iowa. Shear machine.
1,651,654; Dec. 6.
Williams, Louis, Seattle, Wash. Pruning implement.
1,640,168; Aug. 23.
Williams, Louis, Marshall, Wash. Pruning implement.
1,640,168; Aug. 23.
Williams, Louis, Marshall, Wash. and R. E. Watt, OnWilliams, Louis, H., Los Angeles, Calif. Collapsible hathox. 1,647,679; Nov. 1.
Williams, Marshall M., Falson, N. C. Combination foot
switch. 1,643,230; Sept. 20.
Williams, Martin E., Hope, Ark. Well pump. 1,616,017;
Feb. 1.

Feb. 1.
Williams, Martin L., Mishawaka, Ind. Boring and grinding tool. 1,646,892; Oct. 25.
Williams, Maude S., Los Angeles, Calif. Electric heating appliance. 1,633,801; June 28.
Williams, Melford O. (See Williams, Alvir L. and M. Williams, Martin L. and M. M. O.)

M. C.)
Williams, Merritt A., Norfolk, Va. Automatic mechanically operated oil burner. 1,621,447; Mar. 15.
Williams, Miriam S. F. (See Williams, Villor P., as-

Williams, Miriam S. F. 1988.

Williams Oil-O-Matic Heating Corporation. (see Williams Oil-O-Matic Heating Corporation. (see Hams, Waiter W., assignor.)

Hilliams, Orval L., Kenmore, Ohio. Rail joint. 1,632,359;

Williams, Orval L., Kenmore, Ohio. Conveying mechaJune 14.

June 14.

Percy Q., Cincinnati, Ohio. Conveying mechaJune 21.

Percy Rail June 21.

Necha-

Williams, Perty Q., Cincinnati, Ohio. Conveying mechanism. 1,633,053; June 21.
Williams, 1,673,054; June 21.
Williams, Percy Q., Cincinnati, Ohio. Leer-pan structure. 1,641,515; Sept. 6.
Williams, Percy Q., Cincinnati, Ohio. Conveying mechanism. 1,650,408; Nov. 22.
Williams, Percy Q., Huttington, W. Va. Leer conveyer. 1,046,047; Oct. 18.
Williams, Perl E., et al. (See Smyser, Elmer D., as-Williams, Philip S., McKittrick, assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif. Resistant substance. 1,018,397; Feb. 22.

Francisco, Calif. Resistant substance. 1,618,397; Feb. 22.
Williams, Pleasant P. (See Boardman, Frank E., as signor.)
Williams, Ralph T., assignor to Bodine Electric
pany, Chicago, Ill. Radio tuning inductance. 1,64i

Williams, Theodore, and C. T. Swart. Syracuse. N. Y., assignors, by mesne assignments, to Economy Baler Company, Ann Arbor, Mich. Baling press. 1,650,677; Nov. 29.
Williams, Theophilus G., Morristown, N. J. Ladies' hand bag. Des. 73,729; Oct. 25.
1,630,915; May 31. Chicago, Ill. Shock absorber. 1,630,915; May 31. Chicago, Ill. Shock absorber. 1,630,915; May 31. Chicago, Ill. Shock absorber. October 1,640,616; May 10. Chicago, Ill. Shock absorber. 1,630,915; May 31. Chicago, Ill. Signature of Chicago-Cleveland Car Roofing Company, Chicago, Ill. Williams, Thomas C., East Bakersheld, Cailf. Sash lifter and Jatch. 1,635,484; July 12.
Ill. Shock absorber 1,632,644; July 12.
Inglis M. Upperch, Deal, N. J., Spring governor. 1,632,257; June 14.
Williams Tool Corporation. (See Hall, Leslie S., assignor.)

williams, Villor P., Baltimore, Md. Adjustable vehicle supporting and turning device. 1,615,869; Feb. 1.
Williams, Villor P., Baltimore, Md. Adjustable vehicle supporting and turning device. 1,615,869; Feb. 1.
Williams, Villor P., assignor to M. S. F. Williams, Baltimore, Md. Unitary selective drive device for vehicle parking apparatus. 1,612,846; Jan. 4.
Williams, Villor P., assignor to M. S. F. Williams, Baltiwelle parking device. 1,618,861; Feb. 1.
Williams, Walter L., South Richmond, Va. Ironing-board cabinet. 1,632,939; June 21.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Thermostatic Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Domestic oil-burner installation. 1,617,470; Feb. 15.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Pumping unit. 1,622,694; Mar. 29.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Sefty control mechanism for liquid-fuel burners. 1,637,670; Aug. 2.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Sefty control mechanism for liquid-fuel burners. 1,637,670; Aug. 2.
Williams, Walter W., and M. Reeder, Wichita, Kans. Williams, Willamd A., Columbus, Ohio. Elevator-door latch. 1,622,391; Mar. 15.
Williams, William A., Columbus, Ohio. Elevator-door latch. 1,623,391; Mar. 15.
Williams, William E., Brooklyn, N. Y. Try cock. 1,622,566; May 10.
Williams, William E., Roosevelt, N. Y. Electric gasoline gauge. 1,634,165; June 28.

1.622.566; May 10.

Williams, William E., Roosevelt, N. Y. Electric gasoline gauge. 1.634.165; June 28.

Williams, William E., Wilmette, III. Metal sheet used for freight-car structures. 1.626.994; May 3.

Williams, William E., Wilmette, III., assignor to American Steel Foundries, Chicago, III. Disk wheel. 1,617.978; Feb. 15.

Williams, William E., Wilmette, assignor to American Chicago, III. Tubular-spoked wheel. 1.636.541; July 19.

Williams, William E., Wilmette, assignor to American Steel Foundries, Chicago, III. Wheel-spoke bar. 1,639.068; Aug. 16.

Williams, William E., Wilmette, assignor to American Steel Foundries, Chicago, Ill. Disk wheel and rlm therefor. 1.639,322; Jug. 16. Williams, William E., assignor to American Steel Found-ries, Chicago, Ill. Automobile steel-disk wheel.

therefor I believes, assignor to American Williams, William E, assignor to American III, and the steel-disk wheel. In: 640.063; Aug. 23. Williams, William E, Wilmette, assignor to Union Metal III. Side plate construction for railway box cars. 1, 445.061; Nov. 12. Williams, William E, Wilmette, III. assignor, by mesne assignments. to Steel Wheel Corporation. Lansing, Mich. Wheel disk and method of manufacture. 1,650,780; Nov. 29.

1.650/30; Nov. 29. William E., Wilmette, Il., assignor, by mesne assignments, to Steel Wheel Corporation, Lansing, Mich. Demountable-rim disk wheel, 1.650-781; Nov. 29. Williams, William E., Wilmette, assignor to Union Metal Products Company, Chicago, Ill. Side-plate construction for railway box cars. 1.654.153; Pec. 27. Williams, William G. (See Brown, T. E., jr., Williams, and Hardesty.)

williams, William 5. (See Brown, T. E., jr., Williams, and Hardesty.)
williams, William G., assignor of one-half to A. Gribble, Kary and Williams, William H. K., Spark-plug tester. 1,628,942; Williams, William H., Marlin, Tex. Light control. 1,628,567; May 10.
Williams, William H. K., Cottonwood, S. Dak. Carhuretor. 1,629,898; May 24.
Williams William T., Waco, Tex. Nuteracker. 1,647,029; Oct. 25.
Uritiams & Williams Limited. (See Williams, Jack, as-

Williams & Williams Limited. (See Williams, Jack, assignor.)

72535-P-43

Williams, Zenas H., San Antonio, Tex. Window-shade pulley. 1,613,071; Jan. 4.
Williamson, Aubrey C., assignor of 36 per cent to C. E. Smith and 24 per cent to J. K. Bagley, New Orleans, Williamson, Ser. R., Sandeld, Ser. R., San

Williamson, Frank S., Chicopee, Mass., assignor to A. G. 1630,638; May 31.
Williamson, Frank S., Chicopee, Mass., assignor to A. G. 1630,638; May 31.
Williamson, Fred H., Chicago, 111., and P. P. Runnels, Indianapolis, Ind.; said Runnels assignor to O. E. Stokes, Streator, Ill. Automobile bumper. 1,633,054; June 21.
Williamson, Fred H., Chicago, assignor to O. E. Stokes, Streator, Ill. Automobile bumper. 1,633,055; June 21.
Williamson, Frederic, Chicago, 1820, Mo. Stop-screw device. 1,650,313; Nov. 22.
Williamson, Frederick G., Ferguson, assignor to The American Brake Company, St. Louis, Mo. Stop-screw device. 1,650,313; Nov. 22.
Williamson, James, Chicago, Ill. Lighting fixture. 1,624,299; Apr. 12.
Williamson, James, Chicago, Ill. Lighting fixture. 1,647,946; Nov. 1.

1,624,299; Apr. 12, Williamson, James, Chicago, III. Lighting fixture, 1,647,946; Nov. 1. Lighting fixture, James, Chicago, III. Lighting fixture, 1,1647,947; Lighting fixture, 1,1647,94

Nov. 8. Williamson n. James L., Schenectady, N. Y., as: Electric Company. Pinion puller. 1 1.631.664:

June 1.
Williamson, John S., Seattle, Wash. Folding shipping case. 1,626,369; Apr. 26.
Williamson, Louis S., and B. A. De Bord, Temple, Tex.
Adjustable awning frame for motor vehicles. 1,638,901;

Aug. 16. Williamson, Mary P. (See Williamson, Samuel S., as

signor.)
Williamson, Pearl H. and F. M., Detroit, Mich. Window.
1,636,762; July 26.
Williamson, R., & Company. (See Ohm, Albert J. D., as-Williamson, R., & Company. (See Samuelson, Eric, as-

signor.)
Williamson, R., & Company. (See Samuelson, Eric T.,
4881907.)
Roy C. (See Abbe, G. C., and Williamson.)
Williamson, Ruben, Miaml, Fila. Body for toy wagons.
Des. 73.461; Sept. 13.
Williamson, Rusell B., White Fish Bay, Wis., assignor
to A. S. Madala. Mall box. Des. 73.623; Oct 11.
Williamson, Samuel H., Delight, Ark. Litter. 1,615,732;

Jan 25.
Williamson, Samuel S., assignor to M. P. Williamson, Philadelphia, Pa. Flush siphon. 1,617,295; Feb. S. Willig. Hars, Santa Barbara, Callf. Lath nail. 1,624,817; Apr. 12.
Willig. Robert P., Pittsburgh, Pa. Window screen. 1,628,485; May 10.
Willis, Bernard D., Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Internetic of the profice trunk circuits for telephone systems. Re16,637;

office trunk circuits for telephone systems. Re16,637; May 24.
Willis. Bernard D.. Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill.
Mossuredservice telephone system, 1,628,881; May 10.
Willis, Bernard D., Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill.
Multioffice telephone system, 1,638,382; Aug. 9.
Willis, Bernard D., Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill.
Automatic telephone system, 1,650,409; Nov. 22.
Willis, Child E., Marysville, Mich. Machine part.
1,647,847; Nov. 1.
Willis, Child H., Marysville, Mich. Machine part.
1,647,847; Nov. 1.
Willis, Child H., Marysville, Mich. Machine part.
1,647,847; Nov. 1.
Willis, Properties, E., Errokton, Mass, Tray for shoe racks, 1,638,609; Aug. 9.
Willis, Herry I., Colfax, Wash. Auto chain fastener.
Willis, John P., Jenkins, Ky. Piston having an adjustable head for facilitating the removal of the piston rings, 1,630,542; July 19.
Willis, Lohnd, Pilman, N. J., assignor to Pred II. Batematic Mills, Collad, Pilman, N. J., assignor to Pred II. Batematics, and the parts of the piston May 24. Willis. Bernard D.,

man Co., Philae 1,650,562; Nov. 22.

Willis. Olo C., assignor to The P. A. Geler Company, Cleveland, Ohio. Applicator for surgical dressings and the like. 1, 640,365; Oct. 18. Willis. Ortis C. (See Lewellen, L. J., and Willis, Willis, Ortis C. and O. Cox, Cotton Valley, La. Wrist pin. 1,634,106; June 28.

Willis, Patricia M., San Francisco, Calif. Protector spreader for univerlias. 1,648,095; Nov. 8.
Willis, Ray L., Arvin, Calif. Cotton gin. 1,642,982; Willis, Samuel T. (See Bannon, Thomas F., assignor.)
Willison, John, assignor, by mesne assignments, to National Malleable and Steel Castings Company, Cleve-Millison, John, assignor, by mesne assignments, to National Malleable and Steel Castings Company, Cleveland, Ohio. Car coupler and contour therefor. 1,614,518; Jan. 18.
Willison, John, assignor, by mesne assignments, to National Malleable and Steel Castings Company, Cleveland, Ohio. Car coupler and contour therefor. 1,614,515; Jan. 18.
Willison, John, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Car coupler. 1,614,517; Jan. 18.
Willison, John, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Car coupler. 1,614,517; Jan. 18.
Willison, John, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Car couplers. 1,614,518; Jan. 18.
Willison, John, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Car couplers. 1,614,518; Jan. 18.
Willison, John, and D. Robinson, assignors, by mesne assignments, to National Malleable and Steel Castings Company, Cleveland, Ohio. Transition device for car Willison, John, Assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Transition device for car Willison, John, See See Castings Company, Cleveland, Ohio. Transition device for car Willison, Walter W., Brooklyn, assignor to Thermokept Corporation, New York, N. Y. Treating food products. 1,637,661; July 26.
Willison, John, See Peach, Conn. Combination tool. 1,616,169; Feb. 1.
Willison, John, A., Philadelphia, Pa. Fuel burner. 1,1025,635; App. 19.

Willing, Karl D., Baltimore, Md. Snow guard. 1,622,035; May 3.
Wilher, Ellas, New York, N. Y. Infuser. 1,636,727; July 26.
Willock, John A., Philadelphia, Pa. Fuel burner. 1,622,633; Apr. 19.
Willock, Alice. (See Mason, Leon O., assignor.)
Willock, Alice. (See Mason, Leon O., assignor.)
Willock, Frederick J., Richmond Hill, N. Y. Book end or analogous article. Des. 74,042; Dec. 67.
Willock, Frederick J., Richmond Hill, N. Y. Book end or analogous article. Des. 74,042; Dec. 20.
Willock, Harry H., S. J. Caplan, and J. E. Babb, assignors to Waverly Oil Works Company, Pittsburgh, Pa. Lubricant. 1,625,509; Apr. 26.
Willoughby, Alfred B., Philadelphia, Pa. Impact pulverizer, 1,622,605; Mar. 29.
Willoughby, Victor. (See Almquist, L., and Willoughby, Victor. (See Cooper. W. E., and Willoughby, Victor. (See Cooper. W. E., and Willoughby, Victor. (See Cooper. W. E., and Willoughby, Victor.

Willoughby, Victor. (See Cooper. W. E., and Willoughby).
Willoughby, Victor, Ridgewood, N. I., assignor to American Car and Foundry Company. New York, N. Y. Coupler-centering device. 1.616.603; Peb. 8.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Valve Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Mine car. 1.626.633; May 3.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Tank Car and Foundry Company, New York, N. Y. Frame Car and Foundry Company, New York, N. Y. Frame Car and Foundry Company, New York, N. Y. Frame Car and Foundry Company, New York, N. Y. Hopper-car-door mechanism, Lefa-9431; Nov. 15.
Willoughby, Victor, Ridgewood, N. J., and A. Kassler, New York, N. Y. assignors to American Car and Foundry Company, New York, N. Y. Hopper-car-door mechanism, Lefa-9432; Nov. 15.
Willoughby, Victor, Ridgewood, N. J., and A. Kassler, New York, N. Y. assignors to American Car and Foundry Company, New York, N. Y. Hopper-car-door mechanism, Lefa-9432; Nov. 15.
Willoughby, Victor, Ridgewood, N. J., and A. Kassler, New York, N. Y. assignors to American Car and Foundry Company, New York, N. Y. Tank mounting and multi-life and the Carlotter of the Carlotter of tractors, La30,123; Aug. 16.
Wills, C. Harold, (See Smith, Joseph K., assignor)
Wills, C. Childe H. Marysville, Mich, Oll-feed constructions.

Mich. Childe H. Marysville, Mich. Oll-feed construc-tion 1.630,554; May 2018. Mich. Spare-wheel lock. 1.630,609; Aug. 16. Wills. Walter B. Baltimore, Md. Frying basket. 1.634,733; July 5.

Wills, Walter B., Baltimore, Md. Wire handle. 1,640,016;

Wills. Walter E., Baltimore, Md. Wire handle. 1,040,040, Aug. 23.
Willslaw, Harry, assignor to Dunlop Tire and Rubber Corporation of America, Buffalo, N. Y. Tire mold. 1,638,023; Aug. 9.
Willson, Adolph D., Modesto, Calif. Gradometer. 1,614,814; Jan. 18.
Willson, Carlot, C. (See Shindel, Harry F., assignor, Willson, Russell A.)
Willson, Russell A., deceased; C. Willson, executrix, assignor to F. N. Martin, Spokane, Wash. 1c-cream machine. 1,636,345; July 19.
Willson, Tom B., Pittsburgh, Pa. Automatic telephone apparatus. 1,619,554; Mar. 1.
Willy, Walter M., Pukwana, S. Dak. Reatomizing device for internal-combustion engines. 1,627,627; May 10.

Willys (orporation. (See Smith, Walter S., assignor.) Willys-Overland Company, The. (See Baker, Arthur J., Willys-Overland Company, The. (See Belden, Edward H.,

assignor.)
Willys-Overland Company, The. (See Edwards, Henry

Willys-Overland Company, The. (See Fisher, Walter S.,

assignor.)
Willys-Overland Company, The. (See Hunt, Warren T.,

assignor.)
Willys-Overland Company, The. (See Jerdone, Francis,

jr., assignor.) Willys-Overland Company, The. (See Lutz, Hans, as-

Willys-Overland Company, The. (See Rhoads, Harry E.,

Willys-Overland Company, The. (See Snell, Lyle K.,

Willysaver.
assignor.)
Wilmert, Charlie W., Coalinga, Calif. Doublew.
1,639,156; Aug. 16.
Wilmot Castle Company. (See Underwood, Weeden B.,
4See Wilmot, George W..

Feb. 15.

Wilms. Gustav O., assignor to The Reliance Company, Milwaukee, Wis. Electrical switch. 1,629,756; May 24.

Wilms. Gustav O., assignor, by mesne assignments, to The Reliance Company, Milwaukee, Wis. Pressure rheatat. 1,631,111; May 31; to J. B. Tuthill, Chicago, III. Funp. 1,633,720; June 23.

Wilsey, Irven H., assignor L. B. Tuthill, Chicago, III. Funp. 1,633,720; June 24.

Wilson, Adam B., Philipsburg, Pa. Controlling mechanism for headlights. 1,630,154; May 24.

Wilson, Albert, Chicago, III. Type-frame lifter. 1,640,683; Aug. 30.

Wilson, Albert A., and A. D. Robertson, Minneapolis, Wilson, Albert A., and A. D. Robertson, Minneapolis,

Auc. 30.
Wilson, Albert A., and A. D. Robertson, Minneapolis,
Minn. Vacuum-controlled shock-absorbing device.
1,618,036 Feb. 15.
Wilson, Albert V. and H. F., Los Angeles, Calif. Dogracing apparatus. 1,647,067; Oct. 25.
Wilson, Alexander H., Oak Park, assignor to Thomas
Elevator Company, Chicago III. Hoisting machine.
1,621,700; Mar. 22.
Wilson, Alexander H., Oak Park, assignor to Thomas Elevator Company, Chicago, III. Hoisting machine.
1,623,147; Apr. 5.

Wilson, Alexander H., Oak Park, assignor to Thomas Elevator Company, Chicago, Ill. Hoisting machine, 1,623,147; Apr. 5.
Wilson, Alexander H., Oak Park, assignor to Thomas Elevison, Alexander H., Oak Park, assignor to Thomas Elevison, Alexander T. (See Evans, P., and Wilson.)
Wilson, Alred R., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Carwall construction, 1,650,678; Nov. 29.
Wilson, Almond E., Indianpolis, Ind. Purifying mechanism and method. 1,634,683; July 5.
Fountain brush for roof painting, 1,650,678; Nov. 29.
Wilson, Alva R., Moline, Kans. Gas burner, 1,630,878; May 31.
Wilson, Annetts M., Indianagelle, Lad.

Wilson, Annetta M., Indianapolis, Ind. Drying rack. 1.617.281; Feb. 8.
Wilson, Archie B. (See Thompson, Thomas M., assignor.)

1.617,281; Peb. 8. (See Thompson. Thomas M., assignor.) Wilson. Bincham T., Los Angeles. Calif., assignor to Wilson. Brarm Tool Corporation. Swinging plow. 1.644,970; Oct. 11. Wilson Bros. (See Burke, William W., assignor.) Wilson Bros. (See Burke, William W., assignor.) Wilson. Calvin H., McCracken. Kans. Armored truck for transporting valuables. 1.632,260; June 14. Wilson. Charles A., Philadelphia, Pa. Container holder. 1.649,273; Nov. 15.

Wilson, Charles A., Torrance, J. B. Gocke, and C. F. De Corse, Los Angeles, assignors to Superior Valve Company, Los angeles, Calif. Tubine release valve. Wilson, Charles C., Kings Mountain, N. C., assignor of one-third to P. D. Herndon and one-third to B. A. Smith. Stop mechanism. 1,653,076; Dec. 20.
Wilson, Charles E., Anderson, Ind., assignor, by mesne assignments, to Deto-Remy Corporation, Dayton, Ohio. Charles E., Anderson, Ind., assignor, by mesne assignments, to Deto-Remy Corporation, Dayton, Ohio. Wilson, Charles T., Company. (See Johnston, Robert B., assignor). Wilson, Edward, assignor to The National Pump & Compression Company, St. Louis, Mo. Thermostatic control device. 1,629,737; May 24.
Wilson, Edward, assignor to The National Pump and Compressor Company, St. Louis, Mo. Fluid compressor, 1,635,522; July 12.
Wilson, Edward, assignor to The National Pump & Compressor Company, St. Louis, Mo. Compressor, 1,635,523; July 12.
Wilson, Edward, A. Jackson Heights, N. Y., assignor to

1.635.522; July 12.

Wilson, Bdward, assignor to The National Pump & Compressor Company. St. Louis, Mo. Compressor. 1.643.933; Sept. 27.

Wilson, Edward A., Jackson Heights, N. Y., assignor to W. H. & A. E. Margerison & Co. Philadelphia, Pa., a Des. 72.599; Apr. 5.

Wilson, Edward A., Jackson Heights, N. Y., assignor to Design Laboratories, Incorporated, New York, N. Y. Lantern. Des. 73.730; Oct. 25.

Wilson, Edwin B., Forest Hills, assignor to Design Laboratories, Incorporated, New York, N. Y. Lantern frame. The Company of t

Wilson, Dverett C., et al. (See Sprague, Earl V., assignor.)
Wilson, Everett L., Okemah, Okla. Shock absorber.
1,616,523; Feb. 8.
Wilson, Excited J., East Greenbush, assignor to F. C.
Huyck & Sons, Rensselaer, N. Y. Fulling mill.
1,645,210; Oct. 11.
Wilson Farm Tool Corporation. (See Wilson, Bingham
T., Assignor.)
Signor Frank A., et al. (See Davis, William L., assWilson

Wilson, From A., et al. (See Davis, within L., aswilson, Fred D. (See Beatty, W. T., Davis, and Wilson.)
Wilson, Fred D., Harvey, assignor to Austin Manufacturing Co., Chicago, Ill. Road-surface resmoother,
1.637,208; July 26.
Wilson, Frederick E., Buffalo, N. Y. Septic tank,
1.616,387; Feb. S.
Language C., Canonsburg, assignor to Fort Pitt
Bridge Works of Pittsburgh, Pittsburgh, Pa. Concrete
reenforcement. 1.641,109; Aur. 30.
Wilson, George A., Greenwood, Miss. Electrical generatling apparatus for airplanes. 1.634,197; June 28.
Wilson, George D., Berkeley, Calff., assignor to Americansembly for meter valves. 1.647,598; Nov. 1.647,pin
wilson, George F., and C. W. Leguilloi, Akron, Ohlo, assignors to The B. F. Goodrich Company, New York,
N. Y. Tire-trimming machine. 1.628,817; May 17.
Wilson, George O., et al. (See Press, Gilberto N., assignor.)
Wilson, George O., assignor, by mesne assignments, to

Wilson, George O., assignor, by meane assignments Standard Oil Company of California, San Franci, Calif. Tank-gauging device. 1,629,758; May 24. Wilson, George W., Algona, Iowa. Liquid-circulating paratus for internal-combustion motors. 1,622,5 Mar. 29.

Mar. 29.
Wilson, H. A., Company, The. (See Fry, Clayton E., assignor.)
Wilson, H. A., Company, The. (See Fry, Clayton E., assignor.)
Wilson, Harry S., High Rock, Pa. Rescuing device for
sunken ships. 1,623,148; Apr. 5.
Wilson, Harry B., Athens, III. Radiator guard.
1,631,846; June 7.
Wilson, Henry W., Duluth, Minn. Rolling-mill housing.
Wilson, Howard M., sr. (See Crumbaugh, H. M., and
Wilson, Howard M., sr. (See Crumbaugh, H. M., and

Wilson, Howard M., sr. (See Cross-Wilson.) Wilson, Ira G., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical-disturbance-eliminating system. I 545.174; Oct. 11, Wilson, J. G., Corporation, The. (See Dodge, Arthur H., assignor.)

Wilson, J. G., Corporation, The. (See Duncanson, Walter E., assignor.).

F. assignor.) Corporation, The. (See Winn, John F., Jr., assignor.) Corporation, The. (See Winn, John F., Jr., assignor.) Wilson, Jack. (See Camp, P. B., and Wilson, Jwilson, Jack. (See Camp, P. B., and Wilson, Jack.) Wilson, Jack. (See Camp, P. B., and Wilson, Jack.) Corp. P. S. (See March 1988) Apr. 5.

Apr. 5.

Wilson, James H., Falls Creek, Pa., assignor to Jackson Vitrified China Company, Falls Creek, Pa. Plate or Wilson, James H., assignor to Jackson Vitrified China Company, Inc., Falls Creek, Pa. Plate or similar article. Des. 73,813; Nov. 8.

Wilson, James O., assignor of forty-nine per cent. to G. Brown. Sterling, Kans. Baby walker. 1,638,426;

Brown, Sterling, Kans. Baby walker. 1,638,426; Aug. 9.
Wilson, James P., Norfolk, Va. Motor-meter protector. 1,627,201; May 3.
Wilson, James S., et al. (See Murphy, Robert N., as-Wilson, John. (See Reynolds, J., and Wilson.)
Wilson, John. (See Reynolds, J., and Wilson.)
Wilson, John. (See Reynolds, J., and Wilson.)
Wilson, John B., See Saie, J. W., and Wilson.)
Wilson, John B., See Saie, J. W., and Wilson.)
Wilson, John B., Macksville, Kans. Foultry roost. 1,613,633; Jan. 11.
Wilson, John F., St. Louis, Mo. Cutter guard for dado woodworking machines. 1,632,258; June 14.
Wilson, John F., Middlesex Township, Cumberland County, Pa. Wind-driven motor. 1,614,268; Jan. 11.
Wilson, John H., Middlesex Township, Cumberland County, Pa. Wind-driven motor. 1,614,268; Jan. 11.
Wilson, John H., assignor of one-half to H. L. Smith and one-half to A. Dormann, Ir., Scottsbulf, Nebr. Internal-combustion engine. 1,624,454; Apr. 12.
Wilson, John H., assignor, by mesne assignments, to J. T., Whitehead, Michell, Nebr. Wind-mill. 1,634,292; July S.

July 5.

Wilson, John H., assignor to The Aluminum Cooking Ufensii Co., New Kensington, Pa. Apparatus for cooking. 1,640,778; Oct. 25.

Wilson, John M., San Diego, Calif. Tobacco pipe. Wilson, John M., Bronz, assignor to Western Electric Company, Incorporated, New York, N. Y. Insulating compound. 1,638,557; Aug. 9.

Wilson, John R., Cambridge, Md. Scow. 1,614,859; Jan. 18.

Jan. 18. In W. (See Putnam, A. J., and Wilson.) Wilson-Jones Company. (See Neuman, George W., assignor.)

signor.

wilson, Joseph B., Chicago, III., assignor to Westing-house Electric & Manufacturing Company. Valve-operating mechanism. 1,634.764; July 5. Wilson, Josiah C., Richmond, Va. Eaves-trough hanger. 1,635,871; July 12. Wilson, Laura I., et al. (See Davis, William L., as-signor.)

Signor.)
Wilson, Baltra I., et al. (See Bulson, Oscar, assignor.)
Wilson, Chanda. Turbine windmill. 1,646,673; Oct. 25.
Wilson, Oscar, assignor of one-half to L. H. Wilson, Santa Ana, Calif. Child's scoter. 1,646,606; Oct. 25.
Wilson, Paul, et al. (See Hall, Randolph F., assignor.)
Wilson, Peter M., Niagara Falls, N. Y. Eyewash bottle.
1,623,454; ADT.
Wilson, Paul, et al. (See Hall, Randolph F., assignor.)
Wilson, Reter M., Niagara Falls, N. Y. Eyewash bottle.
1,623,454; ADT.
Wilson, Ray B. W. W. York, N. Y., assignor to Theodore W. Poster & Bro. Company, Providence, R. I.
Toliet box. 1,650,733; Nov. 29.
Wilson, Ray O., Los Angeles, Calif. Adjustable golf club.
1,620,588; Mar. 8.
Wilson, Ray O., and A. D. Sumner, Los Angeles, Calif.
Forming funges on can bodies. 1,622,558; Mar. 29.
Wilson, Ray O., and A. D. Sumner, Los Angeles, Calif.
Forming funges on can bodies. 1,622,558; Mar. 29.
Wilson, Raymond C., Woodslefe, sessioner to International device. 1,617,931; Feb. 15.
Wilson, Regrand G. (See Stable, L. R. D., Wilson, Terry, and Hull.)
Wilson, Robert, et al. (See Fénelon, Juan, assignor.)

Wilson, Robert, et al. (See Ffenken, Juan, assignor,)
Wilson, Robert A, assignor to The Guberson Corporation,
Unitals, Tex. Tubular coupling, 1,614,815; Jan. 18.
Wilson, Robert A, assignor to The Guberson Corporation, Dallas, Tex. Threaded coupling, 1,629,058;
May 17.

May 17.
Wilson, Robert A., assignor to The Guiberson Corporation, Dallas, Tex. Power wrench. 1,634,602; July 5.
Wilson, Robert A., assignor to The Guiberson Corporation, Dallas, Tex. July 5.
Wilson, Robert A., assignor to The Guiberson Corporation, Dallas, Tex. Automatic tubing catcher for wells.
1,642,635; Sept. 13.
Wilson, Robert A., assignor to The Guiberson Corporation, Dallas, Tex. Automatic tubing catcher for wells.
1,642,635; Sept. 13.
Wilson, Robert A., assignor to The Guiberson CorporaCt. 11. Itals, Tex. Box and pln coupling. 1,645,032;
Ct. 11.

Wilson, Robert D. (See Rogers, F. M., and Wilson.)
Wilson, Robert E., Chicago, Ili., assignor to Standard
Oil Company, Whiting, Ind. Furnace for the treatment of spent fuller's earth. 1,630,044; May 24.

Wilson, Robert E., Chicago, Ill., assignor to Standard Oll Company, Whiting, Ind. Frevention of evaporation, 1,647,424; Nov. I. Wilson, Robert E., Chicago, Ill., and W. H. Bahlke, assignors to Standard Oll Company, Whiting, Ind. Standard, Chicago, Ill., and W. H. Bahlke, assignors to Standard Oll Company, Whiting, Ind. Coking hydrocarbon oils. 1,654,200; Dec. 27. Wilson, Robert E., Chicago, Ill., and H. V. Atwell, assignors to Standard Oll Company, Whiting, Ind. Apparatus for coking hydrocarbon oils. 1,654,201; Dec. Wilson, Robert E., Chicago, Ill., and H. V. Atwell, assignors to Standard Oll Company, Whiting, Ind. Apparatus for coking hydrocarbon oils. 1,654,201; Dec. Wilson, Robert J., Rochester, assignor of one-half to R. S. Crain, Buffalo, N. Y. Rotary gans plow. 1,623,149:

Status for coking hydrocarbon oils. 1,664,201; Dec. 27
Wilson, Robert J., Rochester, assignor of one-half to R. S. Crain, Buffalo, N. Y. Rotary gang plow. 1,623,149; Apr. 5.
Wilson, Robert M., Montclair, N. J., assignor to General John Company. Voltage regulation of excitera. Wilson, Robert N., Colegrove, Pa. Chain tightener. 1,628,019; May 10.
Wilson, Samuel H., Glasgow, Scotland. Trough and splusing guard for rotary polishing or abrading devices. Wilson, Samuel H., Glasgow, Scotland. Trough and splusing guard for rotary polishing or abrading devices. Wilson, Sidney C., Pittsford, assignor to The Knab Corporation, Rochester, N. Y. Eaves-trough hanger, 1,639,916; Aug. 23.
Wilson, Sidney C., assignor to W. F. Wolf, Rochester, N. Y. Flying toy. 1,644,362; Oct. 4.
Wilson, Stove & Manufacturing Company. (See Heidbreder, Herman H., assignor.)
Wilson, Stove & Manufacturing Company. (See Heidbreder, Herman H., assignor.)
Wilson, Thomas R. C., Madison, Wis., assignor, by mesne assignments, to the People of the United States. Strap for use in bending wood to form parts of curved shape. Wilson, Thomas R. C., Madison, Wis., assignor, wesne assigners, and A. Stergios, Papeete, Tahit, Society Islands. Tree guard. 1,654,028; Dec. 27.
Wilson, Verno M. Benkelman, Nebr. Clutch for spring Wilson, Verno M. Benkelman, Nebr. Clutch for spring

Wilson, Valentine 1s., and A. Scerebos, T. School, Sch

Company, Burlington, Vt. Carpet spool. 1,630,155; May 24.

Wilson, William J., Southgate, and A. J. Carlton, Huntington Park, assignors to U. S. Tool Company, Long Beach, Calif. Rotary disk drill. 1,651,859; Dec. 6.

Wilson, William W. (See Adms. Robert, assignor.)

1,648,158; Nov. 8.

Wilson, Wylle G., Elizabeth, N. J. Packing ring for valves. 1,613,072; Jan. 4.

Wilson, Wylle G., Elizabeth, N. J. Lifting valve. Wilson, Wylle G., Elizabeth, N. J. Lifting valve. 1,616,072; Jan. 4.

Wilson, Wylle G., Elizabeth, N. J. Gafe valve. 1,616,072; Feb. 8.

Wilson, Wylle G., Elizabeth, N. J. Gafe valve. 1,616,072; Feb. 8.

Wilson, Wylle G., Elizabeth, N. J. Gafe valve. 1,645,758; Oct. 18.

Wilson, Wylle G., Elizabeth, assignor to Everlasting Valve Company, Dover, 1,616,072; Feb. 1.

Wilson, Wylle G., Elizabeth, N. J., assignor to Loose Seat Valve Company, Dover, Del. Lifting valve. 1,627,299; May 8.

Wilson, Wylle G., Elizabeth, N. J., assignor to Loose Seat Valve Company, Dover, Del. Lifting valve. 1,635,590; June 28.

Wilson, Wylle G., Jersey City, N. J. Valve. 1,654,515; Dec. 27.

Wilson, Wylle G., Jersey City, N. J. Valve. 1,654,515; Dec. 27.

Wilson, Wylle G., Jersey City., N. J., assignor to Loose Seat Valve Company. Apparatus for controlling the flow of fluid to a valve. 1,622,016; Mar. 22. Wilt John J., Bakersfield, Calif. Vapor condenser. 1,628,210; May 10. Lisbon, N. Dak. Milk-pall holder. 1 646,437; Oct. 25. Wiltsle, Roy B., San Diego, Calif. Air heater. 1,650,920; Nov. 29.

Wily, James H., Bethlehem, Pa. Toy firearm. 1,624,086; Apr. 12. Wilzin, Jerome, et al. (See Stewart, Frank H., assignor.)

Wimberger, Leopold, Vienna, Austria. Mercury-vapor rectifier. 1602,921; Dec. 13.
Wimberley, Harvey J., Austin, Tex. Cleaning plant. 1,650,478; Nov. 22.
Wimmer, Joseph. (See Mugdan, M., and Wimmer.)
Wimpix I I teating Specialty Company Inc. (See Wiley,

Winnier, Heating Specialty Company Inc. (See Wiley, Edgar C., assignor.) Winans, Milton E. (See Smily, W. E., Hannah, and

WEIGHT MIDON E. (See Smily, W. E., Hannah, and Wanals). Winch, Howard J., Shivrajpur, India, Variable gear, 1,649,050, Nov. 15.
Winchell, George H., sr. (See Burrow, Frank V., assignor.)

Winchell, Laurence J., Newkirk, Okla. Nall-driving tool. 1,644,409; Oct. 4. Winchester Repeating Arms Co. (See Blizard, Charles E.,

assignor.)
Winchester Repeating Arms Co. (See Burton, Frank F., assignor.)
Winchester Repeating Arms Company. (See de Olaneta,

Harold, assignor.)
Winchester Repeating Arms Company. (See Foisy, George

Windnesser Repeating Arms Company. (See Lamb, Charles P., assignor.)
Winchester Repeating Arms Company. (See Lamb, Charles P., assignor.)
Winchester Repeating Arms Co. (See Lane, Leavitt J.,

Winchester Repeating Arms Co. (See Tredwell, Charles

Winchester Repeating Arms Co. A., assignor to H. G. Winckel, Max, Berlin, Germany, assignor to H. G. Weicker, trustee, Montclair, N. J. Vitamine preparation. 1,624,104; Apr. 12. Winckier, Aage E., Milwaukee, Wis, Controller pedal for transmissions. 1,644,805; Oct. 11. Windberger, Eugene, Philadelphia, Pa. Air-cooling system for internal-combustion engines. 1,615,899;

winder, superior, riminer, and all art-colling systems. In International unit of the property of the property

Windell, Roy, Wilmington, Calif. Engine. 1,636,887; July 26.

July 26.

Winden, Engebright A., Willmar, Minn. Radiator shutter. 1,616,245; Feb. 1.

Winden, Engebright A., Willmar, Minn. Manifold holder. 1,641,722; Sept. 6.

Syr. Onarie G., Ground 1,637,323; July 28.

Winder, Samuel B., Chicago, Ill., and H. C. Daubenspeck, Massilion, Ohio. Flow feed for glass machines. 1,648,435; Nov. 8.

Winders, William D., Columbus, Ohio. Loose-leaf binder. 1,636,268; July 19.

Criffith, and Johnson, assignors.)

Window Glass Machine Company. (See Casselman, E. J., Griffith, and Johnson, assignors.)

assignor.)
indow Glass Machine Company. (See Monro, William

Windt, Rudolph T., St. Louis, Mo. Gas-burner-control mechanism. 1,625,010; Apr. 19. Wine Railway Appliance Co. (See Neikirk, John O., as-

signor.)
Wine, William E., Toledo, Ohio. Car-door-locking device.
1,617,429; Feb. 15.
Wine, William E., Toledo, Ohio. Door mechanism for railway cars. 1,634,225; June 28.
Wine, William E., Toledo, Ohio. Car-door mechanism.
1,648,003; Oct. 18.
Wine, William E., Toledo, Ohio. Side bearing. 1,653,077;

Wine, Winnin E., assignor to The Tractor Grip Wheel Dec. 20.
Wine, William E., assignor to The Tractor Grip Wheel Company, Toledo, Ohio. Tractor wheel. 1,618,002;
Jan. 4.

Wine, William E., assignor to The Tractor Grip Company, Toledo, Ohio. Traction shoe. 1,6 1,634,639;

Victoria, 10000, Ohio. Traction shoe. 1,634,639; July 5.
Wheeburgh, Henry H., assignor to Textite Electric Sign Co. Inc., New York, N. Y. Sign. 1,651,429; Dec. 6.
Wheell, Karl O. (See Pehrson, A. K., and Winell.)
Wheell, Karl O., assignor to Pressed Steel Car Company, Pattsburgh, Pa. Articulated car. 1,621,917; Mar. 22.
Wheeman, Wade H., Michigan City, Ind., assignor to Sullivan Machinery Company, Valve mechanism. 1,635,146 July 5.
Wan Machinery Company, Rock channeler. 1,648,096; Nov. 8.
Wineman, Wade H., Chicago, Ill., assignor to Sullivan Machinery Company. Forging machine. 1,638,225; Aug. 9.

Wineman, Wade H., Chicago, Ill., assignor to Sullivan Ma-chinery Company. Compressor-unloading mechanism. 1,642,760; Sept. 20.

Minesburg, William, Bristow, Okla. Oil and water well pump. 1,623,150; Apr. 5.

Winesburg, William, Bristow, Okla. Oil and water well pump. 1,623,150; Apr. 5.

Wing, Clarence G., Lakewood, Ohlo, assignor to The Scott-Ulliam Company, Cleveland, Oblo. Arm for lighting fixtures or similar articles. Des. 72,810; June 7.

Wing, Clarence G., Lakewood, assignor to The Scott-Ullman Company, Cleveland, Ohio, Lighting faxture. Des. 73, 395; Aug. 30.
Wing Clothes Per Preprietary, Limited. (See Drew, Des. 73, 395; Aug. 30.
Wing Clothes Per Proprietary, Limited. (See Drew, Winger, Knoier B. Fort Worth, Tex. Machine for vending bottled beverages. 1,638,792; Aug. 1999; Aug. 199

Miller, Louis G. (See Kelly, B. F., Miller, and Winkler, Louis G. (See Kelly, B. F., Miller, and Winkler, Louis G. (See Kelly, B. F., Miller, and Winkler, Louis G. (See Kelly, B. F., Miller, and Winkler, Erastus E., Lynn, Mass., assignor to United Shoe
Machinery Corporation, Paterson, N. J. Machine for
use in the manufacture of heels for boots and shoes.
Winkley, Erastus E., Lynn, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. Machine
for operating upon shoe bottoms. 1,645,566; Oct. 18.
Winkley, Erastus E., Lynn, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J. HeelWinkley, Erastus E., Lynn, and H. A. Davenport, Brockton, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Manufacture of shoes.
Winkley, Erastus E., Lynn, and H. A. Davenport, Brockton, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Manufacture of shoes.
Winkley, Erastus E., Lynn, and H. A. Davenport, Brockton, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Manufacture of shoes.
Winkley, Erastus E., Lynn, and H. A. Davenport, Brockton, Mass., assignors to United
Shoe Machinery Corporation, Paterson, N. J. Machine
Winkley, Erastus E., Lynn, and H. A. Davenport, Brockton, Mass., assignor to United
Shoe Machinery Corporation, Paterson, N. J.
Winn, Sidney B., Laper, Mich. Tractor-trailer solve
Winn, Sohn F., Ir., Nortolk, Va., assignor to United
Shoes Manufacturing
hollow bodies from pulp fiber. 1,621,147, Mar. 15.
Winnett, Alfred H., Meridian, Tex. Cotton chopper.
1,623,539; Apr. 5.
Winning, Robert K., Wauwatosa, assignor to Clum Manufacturing Company, Milwaukee, Wis. Fastening handle
knobs. 1,645,624; Nov. 8.
Winning, Robert K., Wauwatosa, assignor to Clum Manufacturing Company, Milwaukee, Wis. Fastening handle
knobs. 1,645,624; Nov. 8.
Winning, Robert K., Wauwatosa, assignor to Improved
Office Partition Co., Elmhurst, Long Island, N. Y.
Lidquid mixture for use in treating combustible fibrous
Oct. 11.
Winsell, Wil

materials to check the control of th

semius.)
Winship, Albert W., assignor to W. W. Winship & Sons,
Inc., Utlea, N. Y. Jobber's display trunk. 1,630,879;
May 31.
May 31.
Emory. (See Marcum, Arthur I., assignor.)
Winship, Emory. (See Marcum, Arthur I., assignor.)
Winship, Emory. (See Marcum, Arthur I., assignor.)
Winship, W. W. & Sons, Inc. (See Winship, Albert W., assignor.)
Winship, W. W. & Sons, Inc. (See Winship, Albert W., 1,618,598; Feb. 22.

Winslow Boiler & Engineering Co. (See Tedman, Rudson

Winslow Boiler & Engineering Co. (See Tedman, Audson A., assignor.)
Winslow, Carmi. (See Hossell, Fred, assignor.)
Winslow, Charles A., Vallejo, and E. J. Hall, Berkeley, Calif. Force-feed lubricating system for hydrocarbon engines. 1,638,281; Aug. 9.
Winslow, Elbert R., Gibbon, Nebr. Moving-picture-machine attachment. 1,653,282; Dec. 20.
Winslow, Harty F., Brocklyn, N. Y. Grinding viscous materials. 1,627,211; May 10.
Winslow, Harry F., Brocklyn, N. Y. Grinding viscous materials. 1,627,211; May 10.
Winslow Marion H., Terre Haute, Ind. Preventing sag and protecting bearings of platform weighing scales. 1,639,289; Aug. 23.
Winslow Safety High Pressure Boiler Company. (See Winslow, William H., assignor.)
Winslow, Samuel E., Leicester, Mass. Skate. 1,646,843; Oct. 25.
Winslow, Samuel E., Leicester, Mass. Skate. 1,646,844; Winglow, Samuel E., Leicester, Mass. Skate. 1,646,844;

Winsiow, Samuel E., Leicester, Mass. Skate. 1,646,844; Winsiow, Samuel B., Leicester, Mass. Skate. 1,646,844; Winsiow, William H., South Haven, assignor to Winslow Safety High Pressure Boiler Company, Chicago, Ill. Maintaining metals in a liquid condition and at a predetermined temperature. 1,651,937; Dec. 6. Winsor, Irwin B., Tulsa, Okla. Method of and apparatus for pumping wells. 1,637,629; Aug. 2. Winsor, Irwin B., Los Angeles, Calift, assignor to Singer Pump Company. Deep-well pump. 1,621,046; Mar. 15. Winsor, Roy J., Bucyrus, Olio. Leaning wheel. 1,633,151; June 3. Bucyrus, Olio. Leaning wheel. 1,633,151; June 4. Jr., Pawtucket, R. I. Chute-closing gare device. 1,649,941; Nov. 22. Winston, Marvin T. (See Payson, Edward B., assignor.) Winter, August P., assignor. by mesne assignments, to S. C. Clow, Minneapolis, Minn. Elevator driving mechanism. 1,653,975; Dec. 27. Winter, Courtney P. (See Rosenthal, D. A., and Winter, Courtney P. (See Rosenthal, D. A., and Winter, Courtney P. (See Rosenthal, D. A., and Winter).

Winter, Fred H., Schenectady, N. Y., assignor to General Electric Company. Regulating apparatus. 1,620,504;

Mar. 8.
Winter, Fred H., Schenectady, N. Y., assignor to General
Electric Company, Regulating apparatus. 1,622,620;

Electric Company, Acguardan, N. Y., assignor to General Electric Company, Relay, 1,655,078; Dec. 20. Winter, Helen L., Montgomery, Ala. Form-supporting undergarment, 1,616,018; Feb. L. Winter, Henry, Buffalo, N. Y. Bottle. Des. 73,629; Oct. 11.

Winter

inter, Herbert G., Pittsburgh, Pa. Trolley-wheel retainer. 1,640,304; Aug. 23. inter, Jess V., La Crosse, Wis. Decoy duck. 1,641,215;

tainer. 1,100,100 (17088). Wis. Deco; universely to Motor Wheel Corporation, Lausing, Mich. Vehicle wheel. 1,640,523; Aug. 30. Winter, John R., assignor to Youngstown Pressed Steel Company, Warren, Ohio. Forming metal. 1,651,111; Nav. 29.

Winter, John R. assignor to Youngstown Pressed Steel Company, Warren, Ohio. Forming metal. 1,651,111; Nov. 29.
Winter, John R. assignor to Youngstown Pressed Steel Company, Warren, Ohio. Forming metal. 1,651,111; Nov. 29.
Winter, Paul, Zurleh, assignor to Aluminium Welding Works, Lid., Schlieren, Switzerland. Sheet-metal cutter. 1,624,853; Apr. 12.
Winter, Paul, Zurleh, assignor to Aluminium Welding Works, Lid., Schlieren, Switzerland. Sheet-metal cutter. 1,624,853; Apr. 12.
Winter, Walter, Tulsa, Okia. Corner guide for bricklaying. 1,644,456; Oct. 4.
Winterlong, Standard, Standa

Winters, Robert E., Cleveland, Ohio, assignor to B. L. Winters, Sewickley, Pa. Friction-speed-changing mechanism. 1,645.270; Oct. 11. Winterton, Arthur H. (See Johnson, E. H., and Winterton, Arthur H.

Winthrop Chemical Company. (See Günzler, H., and Wesenberg, assignors.)
Winthrop Chemical Company. (See Hahl, Hans, as-

Signori)
Winthrop Chemical Company. (See Kayser, F., and Schranz, assignora.)
Winthrop Chemical Company. (See Lieske, R., and Bonrath, assignors.)
Winthrop Chemical Company. (See Lieske, R., Schulemann, and Bonrath, assignors.)
Winthrop Chemical Company. (See Lieske, R., Thauss, Winthrop Chemical Company. (See Lieske, R., Thauss, Winthrop Chemical Company. (See Schranz, K., and Lutter, assignors.)
Winthrop Chemical Company. (See Weyland, Hermann, assignors.)

winton, John R., assignor to Mechanical Appliance Com-pany, Chicago, Ill. Water-line trap. 1,646,513;

Winton, John R., assignor to Mechanical Appliance Com-pany, Chicago, Ill. Water-line trap. 1,646,514; pany, Oct. 25.

Oct. 25.
Wintrop, Jacob M., Philadelphia, Pa. Electric iron.
1,631,779; June 7.
Winzenburg, Wilhelm, Kragenhof, near Kassel, and F.
Noack, Kassel, Germany, Reflector lamp for diaprojection for cinematography. 1,629,192; May 17.
Wipperman, Paul W., Decatur, Ill. Book rack. 1,629,941;
May 24.
Wirchounds Patents Company. (See Steele, Roscoe, assigned)

Wirebounds Patents Company. (See Westin, Charles J.,

assignor.)
Wired Radio, Inc.
Wired Radio, Inc.
Wired Radio, Inc. (See Crossley, Alfred, assignor.) (See Culver, Charles A., assignor.) (See Duncan, Robert D., jr., as-

signor.)
Wired Radio, Inc.
Wired Radio, Inc.
Wired Radio, Inc.
Wired Radio, Inc.
Wired Radio, Inc. (See Hough, Clinton W., assignor.) (See Hund, August, assignor.) (See Meyer, Raymond B., assignor. (See Nicolson, Alexander M., a

signor.)
Wired Radio, Inc.
Wired Radio, Inc.
Wired Radio, Inc.
Wired Radio, Inc. (See Powell, Edwin L., assignor.) (See Salmons, George C., assignor.) (See Steinberger, L., and Hill, as-

Signors.) Signors.)
Wired Radio, Inc. (See Taylor, Albert H., assignor.)
Wired Radio, Inc. (See Taylor, A. H., and Young, as-

signors.)
Wired Radlo, Inc. (See Trogner, Arthur M., assignor.)
Wireless Radio Corporation. (See Lilienthal, George W.,

assignor.)
ireless Special Apparatus Company. (See Priess, Wil-

assignor.)

wireless Special Apparatus Company. (See Pickard, Greenleat W., assignor.)

wireless Specialty Apparatus Company. (See Pickard, Greenleat W., assignor.)

wireless Specialty Apparatus Company. (See Priess, William H., assignor.)

wireless Specialty Apparatus Company. (See Proctor, John A., assignor.)

wireless Specialty Apparatus Company. (See Proctor, John A., assignor.)

wireless Specialty Apparatus Company. (See Proctor, John A., assignor.)

assignor.)
Wirrer, Gottfried, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Apparatus for vaporizing hydrocarbon mixtures. 1,619,050; Mar. 1.

tor vaporizing hydrocarbon mixtures. 1,619,000; Mor. I. Gottfried, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Separator and vaporizer for internal-combustion engines. 1,629,565; May 24. Wirrer, Gottfried, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Apparatus for vaporizing hydrocarbon fuel. 1,631,176; June 7. Wirrer, Gottfried, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Final drive for vehicles. 1,631,996; June 14. sasignor to International Motor Company, New York, N. Y. Grinding Wirrer, Gottfried, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Grinding Wirrer, Gottfried, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Vaporizer-temperature control. 1,646,779; Oct. 25. Wirschinger, Erhard. (See Kolmer, W., and Wirschinger, Wirt Company, (See Ermold, Elmer A., assignor.)

Signor Archie, Sutton, N. Dak, Adjustable pittuan & Wirth, Elias, Satton, N. Dak, Adjustable pittuan & Wirth, Elias, assign of to Suizer Frères Société Anonyme, Winterthur, Switzerland, Absorption refrigerating machine. 1.627,071; May 3. Wirth, Elias, assignor to Suizer Frères Société Anopyme, Chine, Dias, assignor to Suizer Frères Société Anopyme, 1.630,648; May 31. Satton, Absorption refrigeration, 1.630,648; May 31. Satton, Absorption refrigerator, 1.630,648; May 31. Satton, Absorption refrigerator, Munich, Germany, Locemotive. 1.634,526; July 5. Wirth, Marcell J., Detroit, Mich. Pipe bench. 1,613,495; Jan. 4.

Wirtz, Franklin H. (See Shaffer, G. A., and Wirtz.)
Wirz, A. H., Inc. (See Barker, Edwin H., assignor.)
Wirz, Ernst, assignor to Aktiengesellachaft Brown, Boveri
apparatus for electric furnaces. I.646,048; Oct. 18.
Wisby, Marius J. (See Ritter, J., jr., and Wisby.)
Wisconsin Electric Company. (See Beach, Chester H.,
assignor.
Wisconsin Electric Company. (See Beach, Chester H.,
assignor.)
Wise, Charles H., New Lexington, Ohio. Pipe clamp.
1,616,019; Feb. 1.
Wise, Frank J., Taft, Callf. Wear-preventing means for
pumps. 1,647,425; Nov. 1.
Sutton-Abramsen Engineering Company, Pittsburgh, Pa. Straightening machine.
1,629,759; May 24.
Wise, George A., assignor to Sutton-Abramsen Engineering Company, Pittsburgh, Pa. Leveling apparatus for
metallic sheets and the like. 1,645,637; Oct. 18.
Wise, Goorge Ompany, Pittsburgh, Pa. Straightening roll.
1,649,204; Nov. 15.
Wise, J. B., Incorporated. (See Vallier, Orvis W., assignor.)
Wise, John S., Jr., New York, N. Y. Ash receptacle.

signor.)
Wise, John S., fr., New York, N. Y. Ash receptacle. 1.639/760; Aug. 23.
Wise, Karf M., assignor to The Studebaker Corporation, 1.640.634; Aug. 1.100. Internal -combustion engine. Wise, Roger M., Oskiand, assignor to E. T. Cunningham, San Francisco, Calif. Neutralizing system. 1,617,733; Feb. 15.

Feb. 15.

Wise, Roger M., Oakland, and E. G. Danielson, assignors to E. T. Cunningham, San Francisco, Calif. Variable condenser, 1,618,399; Feb. 22.

T. Colling of the Control of the Con

Wiseman, Earl H., Cleveland, assignor to W. M. Scott, Lakewood, Ohio. Connecter. 1,647,762; Nov. 1, Wiseman. Mark A. (See White, A. S., and Wiseman.) Wiser, Oha, El Paso, Tex. Selective flotation of min-erals from crude ores. 1,636,974; July 26. Wish, William E., Edgware, England, Road-vehicle lamp. 1,628,901; May 3. Wishart, Haroid W. (See Alexander, B. L., and Wis-Wishart, Haroid W. (See Alexander, B. L., and Wis-

Wishart, Harold W., Hollywood, Calif., and W. Wishart, Clinton, Iowa, assignors to Climax Engineering Co. Rotary-compressor refrigerating machine. 1,633,056; Rotary-co June 21. Wishart, W Waters.)

William. (See Alexander, R. L., Wishart, and

Wishart William. (See Wishart Harold W. and W.)
Wishart William, assignor to Climax Engineering Company, Clinton, Iown. Compressor discharge valve.
1,656.888; July 26.
Wishart. William, assignor to Climax Engineering Company, Clinton, Iowa. Stuffing box. 1,643,971; Oct. 4.
Wishnevsky, Leo B., Brooklyn, assignor to F. M. Heyman,
New York, N. Y. Demountable rim. 1,623,372; New Y Apr. 5.

Apr. 5.

Wismar, Albert D., Bowling Green, assignor to Pelican Toy Company, Toledo, Ohio. Toy balloon novelty. Des. 73,630; Oct. 11.

Wismer, Samuel H., Palmyra, and J. H. Thaidigsman, Delanco, N. J., assignors to Victor Triking Machine Company. Case or box. 1,622,818 Mar. 29.

Wisniewski. Vincent. Berlin, Germany. Electric motor. 1,635,872; July 12.

Wisroth, Ernst, Los Angeles, Calif. Paste-dispensing device. 1,613,368; Jan. 4.

Wisroth, Ernst, and A. J. Hirschfield, Los Angeles, Calif. Automobile parking device. 1,619,555; Mar. 1 G. Farbenindustrie. Aktiengesellschaft, Frankfot I. G. Farbenindustrie. Aktiengesellschaft, Frankfot-On-the-Main, Germany. Decorticating device. 1,613,149; Jan. 4. Main, Jan. 4.

Jan. 4.

Wissing, Jakob. (See Schille, Andreas, assignor.)

Wissinger, Fred. (See Kernats, Gustay, assignor.)

Wissler, Rolando, Salt Lake City, Utah, assignor to

Wissler Rotary Wedge Pump Company. Rotary pump.

1.661.366. Nov. 29.

Wissel, Rotary Berney Company. (See Wissler,
Li61.346.)

Wissell, Arthur M., Portland, Oreg. Transmission lock.

1.643.480; Sept. 27.

Wiswell, Arthur M., Portland, Oreg. Transmission lock.

1.618.620; Feb. 22.

Wiswell, Ozro N., Los Angeles, Calif., assignor to Swingspout Measure Co. Swingspout pouring device.

1.618.620; Feb. 22.

Wiswell, Ozro N., Los Angeles, Calif., assignor to Swingspout Sept.

Wiswell, Ozro N., Los Angeles, Calif., assignor to Swingspout Sept.

Wiswell, Ozro N., Los Angeles, Calif., assignor to Swingspout pouring device.

Wiswell, Ozro N., Los Angeles, Calif., assignor to Swingspout Sept.

Wiswell, Ozro N., Los Angeles, Calif., assignor to Swingspout Sept.

Wiswell, Ozro N., Los Angeles, Calif., assignor to Swingspout Swingspout Sept.

Wiswell, Ozro N., Los Angeles, Calif., assignor to Swingspout Swingspout Measure Co. Swingspout pouring device.

Wiswell, Archur M., Swingspout Swingspout Swingspout Measure Co. Swingspout Swingspout Swingspout Swingspout Measure Co. Swingspout Swingspout Swingspout Measure Co. Swingspout Swin

any,

Witchger, Eugene J., assignor to Luftin Rule Co., Sacinaw, Mitch. Case for a tape measure. Dear 72.049: Feb. 15. Witchger, Eugene J., assignor to Lufkin Rule Co., Saginaw, Mitch. Tape red. 1,638.262; Aug. 9. Witchger, Eugene J., assignor to Lufkin Rule Co., Saginaw, Mitch. Case for tape measures. 1,638,227; Aug. Mitchger, Eugene J., assignor to Lufkin Rule Co., Saginaw, Mitch. Case for tape measures. 1,638,227; naw, Aug. 9.

Withall, Albert P., assignor to W. H., Miner, Inc., Chicago, Ill. Shock-absorbing mechanism. 1,627,367; cago, May 3. Witham,

tham, George S., jr., Hudson Falls, N. Y. Fourdrinier machine and process of paper making. 1,629,607; machine and process of pure May 24.
Witham, George S. jr., Hudson Falls, N. Y. Beater.
1,639,917; Aug. 23.
Witham, George S., jr., Hudson Falls, N. Y. Moisture controlling device. 1,646,515; Oct. 25.
Witham, George S., jr., Hudson Falls, N. Y. Moisture measuring and recording apparatus. 1,646,516; Oct. 25.
Witherby, Yauline E., guardian. (See Blankenhorn,

Witherow, Harry M., Lynn, Mass., assignor to General Electric Company. Induction meter. 1,620,505: Mar. 8. Witherow, Steel Company. (See Witherow, William P., assignor) to Steel Company, Neville Island, Pittsburgh, Pa. Knife blank and making the same. 1,618,791; Peb. 22. Withers, Frank P., assignor to Line Material Company, 1632,191; Dec. 13. Wis. Electrical appliance. 1,652,191; Dec. 13. Wis. Electrical appliance. 3. Witherows, Marcelus, et al. (See Schiffner, Joseph A., assignor). Withrow, Floyd G., Grand Rapids, Mich. Spring oiler. 1,620,150; Mar. 8. Withrow, Floyd G., Grand Rapids, Mich. Carburetor-choke-valve spring. 1,627,220; May S. Withrow, Robert A. (See Walthall, Clarence H., as-Withrow, Robert A. (See Walthall, Clarence H., as-Withrow, Robert A. (See Walthall, Clarence H., as-Withrow, Robert A. (See Walthall, Clarence H., as-Withrowh, Robert A., Sydney, New South Wales, Aus-

choke-valve spring. 1,627,220°; May 8. Withrow, Robert A. (See Walthall, Clarence H., assignor.)
Withycombe, Robert M., Sydney, New South Wales, Australia. Both States, New 29. Withycombe, Robert M., Sydney, New South Wales, Australia. Bath spray brush. 1,630,995; May 31.
Withycombe, Robert M., Sydney, New South Wales, Australia. Withdrawing small quantities of medicaments from receptacles or containers and applying them to Withycombe, Robert M., Sydney, New South Wales, Australia. Nail brush. 1,647,068; Oct. 25.
Withycombe, Robert M., Sydney, New South Wales, Australia. Nail brush. 1,647,068; Oct. 25.
Witkowski, Rudolph, Beatrice, Nebr. Grease retainer. 1,629,059; May 17.
Witkowski, James J., Albion, N. Y. Battery connecter. Witkowski, Walter, 1,619,068; Mar 1.
Withyer, Harry M., assignor of one-third to J. H. Nissley and one-third to H. E. Trout, Manheim, Pa. Artificial Mitty, Londy, assignor of John Deere Tractor Company, Waterloo, Jowa. Detachable rim for tractor wheels. 1,616,729; Feb. 8.
Witt, Birdie V., Pasadena, and C. O. Nelson, Chicago, Ill. Orchard heater. 1,645 677; Oct. 18.
Witt, Birdie V., Pasadena, and C. O. Nelson, Chicago, Ill. Orchard heater. 1,645 677; Oct. 18.
Witt, Birdie V., Pasadena, and C. O. Nelson, Chicago, Ill. Orchard heater. 1,645 677; Oct. 18.
Witt, Birdie V., Pasadena, and C. O. Nelson, Chicago, Ill. Orchard heater. 1,645 677; Oct. 18.
Witt, Birdie V., Pasadena, and C. O. Nelson, Chicago, Ill. Witt, Boyd, Mass. Molding cutter. 1,635,732; July 12.
Witt, Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,630,555; May 31, Witt. Roy M., Tampa, Ffs. Tube. 1,

Witt, John S. Molding cutter. 1,635,732;
Winchendon, Mass. Molding cutter. 1,635,732;
Witt 12.
Witter Baward. St. Louis, Mo. Harvest hat. Des.
73,462; Sept. 13.
Witter Gward. St. Louis, Mo. Straw hat and making
same. 1,641,310; Sept. 6.
Witter Gward, assignor to Superfor Hat Company, St.
Louis, Mo. Harvest hat. 1,636,889; July 26.
Witte, Gustav W. (See Sperry, H. B., and Witte.)
Witte, Gustav W., Chicago, Ill., assignor to International
Harvester Company. Floating elevator for harvesters.
1,624,763, Apr. 12.
Witte, Gustav W., Covered dish. Des. 72,050; Feb. 15.
Witte, John, Ferguson, Mo. Gear-shift lock. 1,646,076;
Oct. 18.
Witte, John, Ferguson, Mo. Gear-shift-lever lock.

Uct. 18.
Witte. John, Ferguson, Mo. Gear-shift-lever lock. 1.046.077; Oct. 18.
Witte. William, Providence, R. I., assignor to The United States Finishing Company, New York, N. Y. Fhishing Labries and to the fabric and composition. 1.633,152; Witte. I.

June 21.
Wittek, Hermann, Itzehoe-Sude, Holstein, Germany, assignor to P. Stock, Elkhart, Ind. Combination scaffold and stepladder. 1,636,085; July 19.
Wittek Manufacturing Co. (See Tetzlaff, Benjamin A.,

Wittek Manufacturing Co. (See Tetzlaff, Benjamin A, assignor).
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Photographic film and reel therefor, 1,623,514; Apr. 5.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Reel-holding structure for projectors.
1,641,465; Sept. 6.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Motor-disconnecting means. 1,645,887;
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Motor-disconnecting means. 1,645,887;
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Cut-film adapter for cameras.

Oct. 18.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Cut-film adapter for cameras. 1.648.525; Nov. 8.
Witteman, Harvey A., Seattle, Wash. Rotary pump. 1.640.169; Aug. 23.
Wittemann, John Milwaukee, Wis. Window-curtain hanger. 1.646.893; Oct. 25.
Wittemeler, Huns, Rerlin, Germany. Filter for purifying the air. 1.632.813; June 21.
Witten, Arthur P., Akron, Ohio. Toy figure. Des. 73.352; Oct. 4.

Witten, Arthur P., assignor to The Western Reserve Rubber Company, Akron, Ohio, Toy figure. Des. 73,593;

Witten, Arthur P., assignor to The Western Reserve Rubber Company, Akron, Ohlo. Toy figure. Des. 73,593;
Wittenberg, Frank, Jr., Little Rock, Ark. Chart. 1,630,916; May 31.
Wittenberg, Robert, Breslau, Germany. Fastening device. 1,630,582; July 19.
Witter, Leon A. 1836,582; July 19.
Witter, Wilhelm, Halle-on-the-Saale, and P. Nebring, Braunswick, Germany. Recovering lend chloride. 1,647,426; Nov. 1.
Witter, Wilhelm, Halle-on-the-Saale, and P. Nebring, Braunswick, Germany. Recovering lend chloride. 1,647,426; Nov. 1.
Witter, Willis D. (See Erwin, O. R., and Witter.)
Wittignstein, Gerard T., Zurich, Switzerland. Wireless A., Wittignstein, J. (See Auller, P., and Wittmer, Witter, Casting Company, Cleveland, Ohlo. Transition device for car couplers, 1,652,263; Dec. 13.
Witter, Charles S., Yonkers, N. Y. Hose clamp, 1,619,841; Mar. 2.
Wobermin, Theadore H., Whittier, Calif. Well swab. Witter, Calif. Well swab. Witter, Calif. Well swab. Workless, 1,641,243; Sept. 6.
Wodke, Otto, assignor of one-half to the Firm Actien Gesellschaft "Nepturn" Schiffswerft und Maschienfabrik, Hostock, Germany. Seed dispenser. 1,619,687; Mar. 1.
Wobermin, Theadore H., Whittier, Calif. Well swab. Workless, 1,641,243; Sept. 6.
Wodke, Otto, assignor to R., Ringle, Cleveland, Ohlo. Vehicle suspension spring, 1,654,202; Dec. 27.
Woernley, Ha

Wolcik, Frank J., Lowell, Arlz. Foot shield. 1,626,489; Apr. 26. Wolbert, Edwy E., Concrete, Wash. Gate. 1,645,365; Oct. 11.

Oct. 11.

Wolcott, Edson R., Los Angeles, Calif., assignor to The Texas Company, New York, N. Y. Manufacture of aluminum chloride. I,617,696; Feb. 15.

Wolcott, Edson R., Los Angeles, Calif., Apparatus for pumping liquids. I,628,943; May 17.

Wolcott, Edson R., Los Angeles, Calif., assignor, by mesne assignments, to The Texas Company, New York, N. Y.

Aluminum-chloride production. 1,633,836; June 28.

Aluminum-chloride production. 1,633,836; June 28.

Aluminum-chloride production. 1,633,836; June 28.

Aluminum-chloride production. 1,634,7446; Nov. 1.

Collecting and utilizing aluminum chloride. 1,647,446; Nov. 1.

Collecting and utilizing aluminum chloride. 1,647,446; Nov. 1.
Wolcott, Edson R., Port Arthur, Tex. Buruer for heavy hydrocarbons. 1,630,556; May 31.
Wolcott, Frank E., Manufacturing Company, The. (See Wolcott, Frank E., Sasignor; Ompany, The Frank E. Wolcott, Frank E., West Hartford, assignor to The Frank E. Wolcott Manufacturing Company, Hartford, Conn. Electric tonster. 1,617,558; Feb. 15.
Wolcott, Frank E., West Hartford, assignor to The Frank E., West Hartford, Conn. Electric tonster. 1,617,558; Feb. 15.

Wolcott, Robeson B., assignor of one-half to F. L. Sessions, Lakewood, Ohio. Electric flash light. 1,649,882;

Nov. 22.
Wold, Carl O., Minneapolis, Minn. Cutting section for road-scraper blades. 1,633,057; June 21.
Wold, Knute. (See Erickson, Albert O., assignor.)
Wold, Knute. (See Erickson, Albert O., assignor.)
Electric Company, Incorporated, New York, N. Y. carrier-wave telegraphy. 1,652,549; Dec. 13.
Wold, William O., Battle Lake, Minn. Chimney cleaner. 1,615,733; Jan. 25.
Wolf, Albert, et al. (See Wolf, Howard A., assignor.)
Wolf, Albert, Canton Ohio. Bolt board. 1,621,860; Wolf, Albert, Canton Ohio. Bolt board. 1,621,860; Wolf, Albert, Canton Ohio.

Wolf, Albert, Canton Ohio. Bolt board. 1,621,869; Wafr. 22.
Wolf, Benjamin, et al. (See Wolf, Howard A., assignor.)
Wolf, Benjamin, et al. (See Wolf, Howard A., assignor.)
Wolf Charles assignor to Yates-American Machine Concardanty Beloft Was. Cutter G. (22,763)
Wolf, Charles D., Paris, Ill. Combined ironing board and step ladder. 1,832,721; June 14.
Wolf, Clarence, et al. (See Wolf, Howard A., assignor.)
Wolf Company, The. (See Fruitema Heary A., assignor.)
Wolf Company, The. (See Fruitema Heary A., assignor.)
Wolf, Daniel A., (Blosonburg, Ohlo. Tollet sent and cover. 1,616,020; Feb. 1.
Wolf, Davis L., Olney, Tex. Motor-vehicle power attachment. 1,629,566; May 24.
Wolf, Edwin, et al. (See Wolf, Howard A., assignor.)
Wolf, Exekiel, (See Fay, R. D., and Wolf).
Hayes, trustee, Boston, Mass. Determining the error in watches, clocks, and other devices. 1,628,214;

in watches, clocuts, nut watches, May 10.
Wolf, F. C., et al., trustees. (See Cutler, William C., assignor.)
Wolf, Frank, New York, N. Y. Collar fastener. 1,619,390;
Wolf, Frank, New York, N. Y.

Wolf, Frank, New York, N. Y. Holder for shaving-cream tubes, tooth-paste tubes, and the like. 1,926,771; May 3.

Wolf, Frank, New York, N. Y. Houser for sanking, tubes, tooth-paste tubes, and the like. 1,626,771; May 3. Wolf, Frank, New York, N. Y. Sample-display device. 1,644,318; Oct. 4. Wolf, Frank C., Los Angeles, Calif. Milk-bottle filler. 1,645,034; Oct. 11. Wolf, Franz, New York, N. Y. Fastener. 1,638,966; June 28. Wolf, Georg, assignor to the Firm Georg Wolf G. m. b. H., Berlin, Germany. Device for examining tubes and Wolf, Georg, assignor to the Firm of Georg Wolf G. m. b. H., Berlin, Germany. Illuminating device for medical purposes. 1,650,563; Nov. 22. Wolf, Georg, G. m. b. H. (See Wolf, Georg, assignor.) Wolf, Georg, G. m. b. H. (See Loeck, Gunther, assignor.)

Wolf, Georg, G. M. D. H. (1982)
Wolf, Hans H. Denyer, Colo. Vehicle-operated garage door, 1,613,973; Jan. Marker, Walfer L. assignor.)
Wolf, G. Wolf, Jan. Marker, Walfer L. assignor, Wolf, Howard A. Elkins Park, assignor to E. Wolf, B. Wolf, Howard A. Elkins Park, assignor to E. Wolf, B. Wolf, Howard A. Elkins Park, assignor to E. Wolf, B. Q. Holl, Howard A. Elkins Park, assignor to E. Wolf, B. Wolf, Howard A. Elkins Park, assignor to E. Wolf, Elevander and Market Park, and Mar

23.
Wolf, Isaiah W., Mobile, Ala. Screen fastener. 1,636,728;
July 26,
Wolf, Jacob, Princeton, Midn. Thrashing machine.
1,651,498; Dec. 6.
Wolf, Joseph A. (See Coffin, C. G., and Wolf,)
Wolf, Louis, et al. (See Wolf, Howard A., assignor.)
Wolf, Louis & Co. Inc. (See Du Bols, Harry D., as-

Wolf Machine Company, The. (See Meyer, Henry A., as-

signor.)

Wolf-Marjanski, John, New York, N. Y. Musical transformation chart. 1,630,246; May 24.

Wolf, Nat. (See Partin, Sammie D., assignor.)

Wolf Safety Lamp Co. of America, Inc. (See Anglada, Wolf, Walter F. (See Wilson, Sidney C., assignor.)

Wolf, William, New York, N. Y. Syringe for hypodermic needles or the like. 1,643.531; Sept. 27.

Wolfard, Merl R., Cambridge, Mass., assignor to Hopewell Brothers (a Copartnership) Watertown, Mass. May 10.

May 10.

Wolfe, Arthur H., West Philadelphia, Pa, and D. A.

May 10.
Wolfe, Arthur H., West Philadelphia, Pa., and D. A
Wolfe, Grand Rapids, Mich. Article container.
1,625,011; Apr. 19.
Wolfe, Charles A., Lebanon, Pa. Tire. 1,616,293;

1.622,011; Apr. 19.

Wolfe, Charles A., Lebanon, Pa. Tire. 1,616,293; Feb. 1.

Wolfe, Clinton L., and J. A. Fauret, New York, N. Y. Foot-actuated switch. 1,625,068; Apr. 19.

Wolfe, Dell H., assignor to The Parkersburg Rig & Reel Control of the Parkersburg Right Right

Wolfe, Jay A., assignor to The Columbus Heating and Ventilating Company, Columbus, Ohio. Heating and Ventilating apparatus. 1,026,1721, 190.
Wolfe, Noble A. (See Jones, B. W., and Wolfe.)
Wolfe, Noble A. (See Jones, B. W., and Wolfe.)
Wolfe, Richard, Kenliworth, Ill. Golf stance-steadying device. 1,636,086; July 19.
Wolfe, Wallace V. Corona, assignor to Western Electric Company, Incorporated, New York, N. Y. Transmission, J. Corona, L. Wolfe, William C., Richmond, Ind. Tamping tool. Rei6,775; Oct. 18.
Wolfe, William D. (See Kelley, H. W., and Wolfe.)
Wolfer, William S. (See Kilhorn, K. B., and Wolfe.)
Wolfer, William S. (See Kilhorn, K. B., and Wolfe.)
Wolfer, Henry L., Roxbury, Mass. Illuminated cross. 1,614,703; Jan. 18.
Wolff, Frank W., Parnassus, Pa., assignor to Union Metal Products Company, Chicago, Ill. Device for operating Wolff, Fred G., assignor to American Car and Foundry Company, New York, N. Y. Brake-beam support. 1,649,434; Nov. 15.
Wolff, Friedrich, Berlin, Germany. Safety device for gas and air making plants. 1,617,296; Feb. S.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phono-Wolff, Prod. Brooklyn, N. Y., assignor to Sonora Phono-Wolff, Joseph, Brooklyn, N. Y.

Wolff, H Wolff.) Joseph, Brooklyn, N. Y., assignor to Sonora Phono-h Company, Inc. Radiocabinet. Des. 71,894;

Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocablnet. Des. 71,894; Jan. 18.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocablnet. Des. 72,122; Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocablnet. Des. 72,123; Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocablnet. Des. 72,123; The Radiocab

Mar. 1.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocabinet. Des. 72,123;
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocabinet. Des. 72,124;
Mar. 1.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocabinet. Des. 72,201;

Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocabinet, Des. 72,201; Mar. 8.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocabinet. Des. 72,2604; Apr. 19.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Phonograph cabinet. Des. 73,273; Aug. 16.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radiocabinet. Des. 74,088; Wolff, Joseph, Prooklyn, N. Y., assignor, by mesne assignor.

graph Company, Inc. Radiocabinet. Des. 74,088; Dec. 13.
Wolff, Joseph, Brooklyn, N. Y., assignor, by mesne assignments, to Sonora Phonograph Company, Inc. Spring ments, to Sonora Phonograph Company, Inc. Needle retainer for phonographs. 1,616,732; Feb. 8.
Wolff, Joseph, Brooklyn, N. Y., assignor, by mesne assignments, to Sonora Phonograph Company, Inc. Needle rest. 1,634,702; July 5.
Wolff, Joseph, Brooklyn, N. Y., assignor, by mesne assignments, to Sonora Phonograph Company, Inc. Signments, to Sonora Phonograph Company, Inc. Wolff, Joseph, Brooklyn, N. Y., assignor, by mesne assignments, to Sonora Phonograph Company, Inc. Wolff, Joseph, Brooklyn, N. Y., assignor, by mesne assignments, to Sonora Phonograph Company, Inc. Concealed loud speaker for radio receiving sets. 1,653,795; Dec. 27.

signments, to Sonora Phonograph Company, Inc. Concealed Joud speaker for radio receiving sets. 1,653,795; Dec. 27.

Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Company, Inc. Radio apparatus. 1,653,796; Wolff, Joseph, New York, N. Y., assignor, by mene assignments, to Sonora Phonograph Company, Inc. Talking machine. 1,616,730; Feb. 8.

Wolff, Karl, Munich, Germany, Motor-vehicle ignition and lighting system. 1,623,638; Apr. 5.

Wolff, Karl, Munich, Germany, Motor-vehicle ignition and lighting system. 1,623,638; Apr. 5.

Wolff, Karl, Munich, Germany, Motor-vehicle ignition and lighting system. 1,623,638; Apr. 5.

Wolff, Mahol H., Los Angeles, Callf. Differential drive for vehicles. 1,638,228; Aug. 9.

Wolff, Sidnoh H., Los Angeles, Callf. Differential drive for vehicles. 1,638,228; Aug. 9.

Wolff, Sidnoh H., Los Angeles, Callf. Differential drive for vehicles. 1,638,228; Aug. 9.

Wolff, Sidnoh H., Los Angeles, Callf. Differential drive for vehicles. 1,638,238; Aug. 9.

Wolff, Sidnoh H., Los Angeles, Callf. Differential drive for vehicles. 1,638,330; Ph. Pin-tumbler cylinder lock. 1,650,564; Nov. 15.

Wolfford, Charles F., Santa Ana, Callf. Electrical switch mechanism. 1,622,301; Mar. 29.

Wolfford, Walter G., Cliffidde, N. J. Combined match Wolford, Walter G., Cliffidde, N. J. Adjustable sash holder. 1,624,819; Apr. 12.

Wolffam, Arthur, Hochst, Germany, assignor to the Firm Durand & Huguenin S. A. Basel, Switzerland. Manufacture of stable derivatives of vat dyestuffs. 1,639,206; Aug. 102535—P—44

Wolfram, George H., East Orange, assignor of one-half to H. K. Morris, Newark, N. J. Pedestal or support for caskets and tue like. 1,614,909; Jan. 18. Wolfson, David, Far Rockaway, N. Y. Duplicator. 1,615,058; Jan. 18. Wolfson, Julius H., et al. (See Ramin, Ezra, assignor.) Wolfson, Lewis W., Boston, Mass. Weatherproof antithett attachment for motor vehicles. 1,629,060; May 17.

Wolverine Bumper & Specialty Company. (See Hammond, Milton B., assignor.).
Wolverine Metal Specialties Co. (See Sealock, John W.,

wolverine Metal Specialties Co. (See Scalock, John W., assignor.)
Wolverine Metal Specialties Co. (See Scalock, J. W., and De Graaf, assignors.)
Wolverine Motor Works, Inc. (See Ryder, Charles, as-

Wolverine Supply and Manufacturing Company. (See Bain, Carl C., assignor.) Wolverine Tube Company. (See McIntyre, Patrick J.,

worverine Tube Company. (See McIntyre, Patrick J., assignor.)
Wolverton, Harry H., assignor to Kalamazoo Stove Company, Kalamazoo, Mich. Oven door for stoves and the like. 1,617,431; Feb. 15.
Wom. Holly, Whittier, Calif. Sandalwood burner. 1,613,777; Jan. 11.
Womack, Henry B., Birmingham, Ala. File. 1,616,403; Feb. 1.

Wonder Window Washer Corp. (See Barlow, Harry T., wasiganor).

Assigner and Schenectady, N. Y. Internal-combustion turbine. 1.632.157; June 14.

Wonser, Jerry H., Port Angeles, Wash. Magazine lubricator. 1.625.180; Apr. 19.

Wonson, Roy W., Staunton, Va. Finger ring. Des. 74,043; Dec. 6.

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Wonsowicz Andrew Gary, Ind. Automatic weather strlp.
1,613,496; Jan.
1,613,496; Jan.
1,613,496; Jan.
1,613,496; Jan.
1,613,496; Jan.
1,613,496; Jan.
1,613,634; Jan.
1,613,636; Nov.
1,613,636

signor.) 1 Conversion Company. (See Schorger, Arlie W.,

wood Conversion Company. (See Weiss, Howard F., as-

assignor.)

Wood Conversion Company. (See Weiss, Howard F., assignor.)

Wood, Donald L. (See Frederick, C. W., and Wood.)

Wood, Donald L. (See Frederick, C. W., and Wood.)

Wood, Edward K., Wilmington, J. Metzger, deceased. by

C. I. Metzger, administratrix, Venice, Calif., assignors to Amusement Engineering Corporation, Los Angeles, 100 and the Metzger, administratrix, Venice, Calif., assignors to Amusement apparatus. 1,625,877; Apr. 26.

Wood, Erick Company, Incorporated, New York, N. Y. Regulating and recording device. 1,623,712; Apr. 5.

Wood, Erivin. (See Taylor, J. R., and Wood.)

Wood, Floyd R., Grand Rapids, Mich. Oil-feed construction. 1,619,229; Mar. V. J., assignor to Chas. Cory of the Company, Mar. V. J., assignor to Chas. Cory & Son. Incorporated, New York, N. Y. Synchronous clock system. 1,641,404; Sept. 6.

Wood, Frank W., Montclair, N. J., assignor to Chas. Cory & Son. Incorporated, New York, N. Y. Thermostatic of Company, Mar. S. J., assignor to Chas. Cory & Son. Horoporated, New York, N. Y. Thermostatic of Company, Incorporated, New York, N. Y. Thermostatic of Company, Incorporated, New York, N. Y. Start, Control of Company, Incorporated, New York, N. Y. Start, Control of Company, Incorporated, New York, N. Y. Start, Control of Company, Incorporated, New York, N. Y. Start, Control of Company, Incorporated, New York, N. Y. Rotary annuciator drop. 1,651,238; Nov. 29.

Wood, Franz J., Des Moines, Iowa. Mechanism for controlling and operating molding machines. 1,620,060; Mar. 8.

Mar. 8

Mar. 8.

Wood, George B., assignor to Rockland & Rockport Line
Corporation, Rockland, Me. Method of and product
for making plaster. 1,635,391; July 12.

Wood, George E., assignor of one-half to C. R. Lamb, Wellington, New Zealand. Stop for sliding window sashes.
1,627,300; May 3.

Wood, George R., assignor to Dayton Scale Company,
Dayton, Ohio. Scales. 1,622,302; Mar. 29.

Wood, George R., assignor to Dayton Scale Company,
Myd. Scale Company,
Wood, George R., assignor to Dayton Scale Company,
Wood, George R., assignor to Dayton Scale Company,
Wood, Glesson, Withelm, Mass. Screw driver.
1,627,301; May 3.

Wood, George R., assignor to Dayton Scale Company, Dayton, Onlo. Meat slicer. 1,626,902; May 3. Wood, Glenson, Waltham, Mass. Screw driver, 1,627,303; May 3. Wood, Henry A. W., assignor to The Wood Newspaper Machinery Corporation, New York, N. Y. Casting device for segmental placent of the Wood Newspaper Machinery Corporation, New York, N. Y. Casting and finishing machine for curved stereotype printing plates. 1,627,817; May 10. Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Casting and finishing machine for curved stereotype printing plates. 1,627,817; May 10. Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Making latter and the property of the Wood Henry A. W., assignor to Wood Newspaper May 19. Wood Henry A. W., assignor to Wood Newspaper May 19. Wood Henry A. W., assignor to Wood Newspaper May 19. Wood Henry A. W., assignor to Wood Newspaper May 19. Wood Henry A. W., assignor to Wood Newspaper May 19. Wood Henry A. W., assignor to Wood Newspaper May 19.

News printing plate au more provided by the plate of the

Wood Hydraulic Hoist and Body Company. (See Barrett, Edward R., assignor.)
Wood Hydraulic Hoist & Body Company. (See Raddatz,

chara. John. assignor.) n Manufacturing Company. (See Marland, Wood. Arthur, assignor.)
Wood, John. Manufacturing Company. (See Markand, Arthur, assignor.)

Wood, Joseph, Brockton, Mass. Snipping and attaching bindings to tops for aboes. 1,651,745; Dec. 6. Wood, Joseph B, Quincy assi, Lindings to tops for aboes. 1,651,745; Dec. 6. Wood, Joseph B, Jose

house Electric & Manufacturing Company. Flexible element. 1,645,510; Oct. 11.

Wood, Justice W., and O. C. Ginuque, Hillsdale, Mich. Electrically-heated windshield wiper. 1,642,507; Oct. 11.

Wood, Logan T., Detroit, Mich. Hoist device for dumping bodies. 1,641,365; Sept. 6.

Wood, Ner L., Lamar, Colo. Wind motor. 1,617,888; Feb. 15.

Wood Newspaper Machinery Corporation. (See Catlin, Joseph F., assignor.)

When Y. A. W., assignor.)

Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)

Wood Newspaper Machinery Corporation. The. (See Wood, H. A. W., and Norfors, assignors.)

Wood, Paul G., Hilliards, Ohlo. Windshield screen. 1,627,780; May 10.

1.627,780; May 10.

1.627,780; May 10.

1.638,733; Sept. 27.

Wood, Preston K., Los Angeles, Calif. Air compressor. 1,618,733; Feb. 8.

Wood, Robert J., Spring Hill, W. Va., assignor to Goodman Manufacturing Company, Chicago, III. Scraper of Manufacturing Company, Chicago, III. Scraper of Manufacturing Company, Chicago, III. Mining machine. 1,644,216; Oct. 4,216; May. 29.

Wood, Robert W., Kansas City, Mo. Spring wheel. 1,616,734; Feb. 8.

Wood, Robert W., Kansas City, Mo. Spring wheel. 1,616,734; Feb. 8.

Wood, Robert W., Kansas City, Mo. Spring wheel. 1,616,734; Feb. 8.

Wood, Robert W., Robester, N. Y. Clothesline lock. Wood, Stanford J., and H. A. Greene, fr., Monterey, Calif. Variable-inductance coil. 1,638,835; Aug. 9.

Wood, Stanfey, Rochester, N. Y. Clothesline lock. Wood, Strand K., Hutchinson, Kans. Car-identifying appliance. 1,637,641; Aug. 2.

Wood, Strand K., Hutchinson, Kans. Car-identifying appliance. 1,645,744; Cot. 18.

Wood, Strand K., Hutchinson, Kans. Car-identifying appliance. 1,645,764; Aug. 2.

Wood, Strand K., Hutchinson, Kans. Car-identifying Appliance. 1,645,764; Aug. 2.

Wood, Strand K., Berner, Colo. Certificate container. 1,645,844; Cot. 18.

Wood, William H., South Euclid, Ohio. Lamp. 1,631,431; Dec. 6.

Wood, William H., South Euclid, Ohio. Lamp. 1,631,431; Dec. 6.

Wood, William H., South Euclid, Ohio. Lamp. 1,631,431;

July N. July N

for joining or outling.

Apr. 19.

Woodard, William E., Forest Hills, N. Y. Locomotive.

Tear-ed support. 1,620,423; Mar. 8.

1,620,423; Mar. 8.

Vocation of the community of t

Woodbridge, Charles K., Flushing, N. Y., assignor to Dictaphone Corporation, Bridgeport, Conn. Sound distributing and transmitting means and method. 1,625,970; Apr. 26.

Dictaphone Corporation, Bridgeport, Conn. Sound collecting and transmitting. 1,630,367; May 31.

Woodbridge, Charles K., New York, N. Y., assignor to Dictaphone Corporation, Bridgeport, Conn. Indicating means and the like. 1,635,558; Aug. 9.

Woodbridge, Joseph L., Philadelphia, Pa. Railway signal system. 1,600.

The philadelphia, Pa. Electric storage battery. 1,638,427; Aug. 9.

Woodcock, Andrew J., Wilmette, Ill. Fuel-oil burner. 1,619,919; Mar. 8.

Woodcock, Louis H., 1,651,570; Dec. 6.

Woodcock, Reginald B., and E. Hope, Leiester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Sole-pressing machine. 1,637,566; Aug. 2.

Woodcock, Reginald B., and E. Hope, Leiester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Sole-pressing machine. 1,637,66; Aug. 2.

Woodcock, Robert H., et al. (See Weichert, F. C., and Turnbuli, assignors.)

Woodland, Harry. (See Stresau, R., and Woodlnead.)

Woodland, Harry. (See Stresau, R., and Woodlnead.)

Feb. 15.

Woodlead, Harry. (See Stresau, R., and Woodhead.)
Woodlend, Carl. Focahontas, Iowa. Line guide for tractors. 1,629,014; May 17.

Woodln, Charles K., and W. Smith, Springfield, Ill. Golf putting apparatus. 1,614,704; Jan. 18.

Woodln, William H., Jr., Flainfield, N. J. Radio aerial pole or the like. 1,648,659; Sept. 3.

Radio aerial pole or the like. 1,648,659; Sept. 7.

Woodlings, Emanuel, Oakmont, assignor to Moodlings. Emanuel, Oakmont, assignor Again anchor. 1,668,760; Oct. 22.

Woodlings Forge & Tool Company. (See Woodlings, Emanuel, assignor).

Woodloon, E. J., Company. (See Burman, George A., assignor).

Woodland, E. J., Company. (See Burman, George A., assignor.)
Woodland, John E., Richmond Hill, assignor to Eltwoodland. John E., Richmond Hill, See Editing device for motion-picture projectors. 1,650,479; Nov. 22.
Woodland, John E., Richmond Hill, N. Y. Electrode holder. 1,653,441; Dec. 20.
Woodlands Limited. (See Hutchinson, Robert, assignor.)
Woodlands Limited. (See Kent-Jones, D. W., and Chitty, assignors)

assignors.)

Woodman, George, Chicago, Ill. Journal-box lid. 1,631,352; June 7. Woodman, George A., assignor to Woodman Railway Supply Company, Chicago, Ill. Journal-box lid. 1,631,353; June 7.

Woodman, George A., assignor to Woodman Railway Supply Company, Chleago, III. Cartruck pedestal, Woodman Railway Supply Company, (See Woodman, George A., assignor,) Woodman, Walter F. (See Perry, L. H., and Woodman,) Woodman, Walter F. (See Perry, L. H., and Woodman,) Company, Waterloo, lowa. Percussive device. 1,634,927;

Company, Waterloo, Iowa. Percussive device. 1,000,000 july 5, Woodroof, William W., Pittsburgh, Pa. Lighting-system switch. 1,636,347; July 19.

1,651,499; Dec. 6. New York, N. Y. Injection device. 1,651,499; Dec. 6. Woodrow, Harry R., assignor to T. E. Murray, New York, N. Y. Are-welding machine. 1,638,024; Aug. 9.
Woodrow, Oliver B., Newton, Iowa. Caster locking and Woodrow, Oliver B., Newton, Iowa. Washing machine. 1,629,761; May 24.
Woodrow, Oliver B., Newton, Iowa. Washing machine. 1,629,762; May 24.
Woodrow, Oliver B., Newton, Iowa. Clutch mechanism Woodrow, Oliver B., Newton, Iowa. Clutch mechanism of the Company of the C

Sept. 6.

Woodrow, Walter J., London, England. Cover for manholes. 1,630,557; May 31.

Woodruff, Albert N., Washington, D. C. Type-bar mechanism. 1,619,391; Mar. 1.

Woodruff, Alvie C., Oakridge, Oreg. Four-wheel brake.
1,646,335; Oct. 18.

Woodruff, Benjamin F., assignor of one-half to W. J.

McHarwe, Blue Diamond, Ky. Roundabout. 1,639,393;
Aug. 16.

Woodruff, Christine H., Westfield, N. J. Fortable wardrobe. 1.615,430; Jan. 25.
Woodruff, Christine H., Westfield, N. J. Plant protector.
1.641,244; Sept. 6.
Woodruff, Frank. (See Foster, J. R., and Woodruff, Woodruff, Frank, Rochester, and G. W. MacKenzie,
Beaver, assignors to Correct Measure Company, Rochester, Pa. Liquid-dispensing apparatus. 1,618,621;
Feb. 22.

Woodruff, Frank, and J. R. Foster, assignors to Correct Measure Company, Rochester, Pa. Volume-measuring apparatus for liquids. 1,648,669; Nov. 8.
Woodruff, Henry S., East Orange, N. J., assignor to Genchine and method. 1,627,681; May 10.
Woodruff, Isaac T., Portland, Oreg. Automatic feeder of mill waste fuel for domestic heating plants. 1,618,501; Feb. 22.
Woodruff, John C., and G. Bloomfield, assignors to Commercial Solvents Corporation Terre Haute, Ind. Challed Apr. 26. Synthetic methanol production. 1,623,624; Apr. 26.

lyst for synthetic methanol production. 1,025,924; Apr. 26.
Woodruff, John C., and G. Bloomfield, assignors to community of the control of th

Apr. 26. John C., and G. Bloomfield, assignors to ComApr. 25. John C., and G. Bloomfield, assignors to ComControl Composition, Terre Haute, Ind.
Catalyst for synthetic methanol production. 1,625,928;
Apr. 26.
Woodruff, John C., and G. Bloomfield, assignors to Commercial Solvents Corporation, Terre Haute, Ind.
Catalyst for synthetic methanol production. 1,622,929;
Apr. 26.
Whyp. 26.

Catalyst for synthetic metashot production.

Apr. 26,
Woodruff, Joseph W., Elizabeth, N. J. Force-feed lubricator. 1,630,321; May 31.
Woodruff, Joseph W., Elizabeth, N. J. Automatic force-with the first of the fir

signor.)

Woods, Frank E. (See Baldwin, E. F., and Woods, Swoods, Grover H., and A. B. Denison, Cleveland, Ohlo, and W. A. Wiley, assignors to American Sterlifzer Company, Erle, Pa. Dispensing device. 1,621,861; Mar. 22. Woods, John D., Steubenville, Ohlo. Gun sight. 1,641,018; Aug. 30.

Woods, Lee A., et al. (See Daugherty, Claude, assignor.)

Woods, Faul. (See Parsons, Albert R., assignor.)

Woods, Eastignor, Machine Company. (See Bood, Laurence E., assignor.)

oods, S. A., Machine Company. (See Carlson, Lewis B., assignor.)

wassignor. A. matchine Company. (See Carison, Lewis B., Woods, Sanuel J., Newport, R. I. Gas-igniting device. 1.635,104; July 5. Woods, Sophie L. (See Perry, Hubert M., assignor.) Woods, Shoppie L. (See Perry, Hubert M., assignor.) Woods, Theodore, West Linn, Oreg. Wrench for use in restricted locations. 1.615,497; Jan. 25. Woods, Walter T., Long Beach, assignor to U. S. Tool Company, Long Beach, Calif. Forming disk cutters. 1.614,432; Jan. 1.76. Woods, Walter T., assignor to U. S. Tool Company, Long Beach, Calif. Rotary drilling bit. 1.615,251; Jan. 26. Woods, William G., and N. T. Shaw, Los Angeles, Calif. Dispenser. 1.642,435; Nov. 13. W. Woodsome, 1.643,635; Nov. 13. W. Woodsome, John O., New York, N. Y. Steam-circulating fitting. 1.628,382; May 10. Woodsome, John O., New York, N. Y. Steam-circulating system for drices. 1.643,973; Oct. 4. Steam-circulating system for drices. 1.643,973; Oct. 4. Woodson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, Magnetic temperature-control system. 1,617,360; Feb. 15.

Magnetic temperature-control system. 1,617,300; Reb. 13.

Woodson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Furnace resistor mounting. 1,617,361; Feb. Company. Woodson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric furnace. 1,622,621; Mar. 29.

Roodson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric furnace. 1,622,622; Mar. 29.

Rodoson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heat-insulating wall. 1,626,655; May 3.

Woodson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric-furnace heating unit. 1,626,656; May 3.

Woodson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric heating unit. 1,628,831, May 3.

Woodson, James C., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Resistor mounting for electric furnaces. 1,630,368; May 31.

James C., East Pittsburgh, Pa., assignor to house Electric & Manufacturing Company. furnace. 1,633,967; June 28.
Typewriter Company. (See Hokanson, Otto Westinghouse Elect Electric furnace. 1, Woodstock Typewriter

Woodstock Typewriter Company. (See Hokanson, Otto A., assignor.)
Woodstock Typewriter Co. (See Hokanson, O. A., and Koca, assignors.)
Woodstock Typewriter Company. (See Koca, James F., assignor.)
Woodward, Charles L., West Springfield, assignor to United States Machinery Manufacturing Company, Springfield, Mass. Dishwashing machine. 1,630,684; May 31.

Moodworth, Roy V., assignor to Western Supplies Co., St. Louis, Mo. Marking machine. 1,639,360; Aug. 16. Woody, Clyde C., assignor to Madison Sillo Company, Winona, Minn. Silo. 1,642,003; Sept. 13. Woodyard, Laurel C., Laconal, Jowa. Wire stretcher. 1,632,016; June 14. Wooldridge, John, Childress, Tex. Boll extractor.

1,632,016; June 14.
Wooldridge, John, Childress, Tex. Boll extractor.
1,653,422; Dec. 20.
Woolery, Horace E., St. Paul, assignor to Woolery Machine Company, Minneapolis, Minn. Weed-burning device. 1,638,161; July 19.
Woolery Machine Company. (See Woolery, Horace E.,

assignor.)
Wooley, Bruce D., Johnstown, Ohio. Wall-papering device. 1,637,285; July 26.
Woolley, Haroid O., Maplewood, N. J., assignor to Power Specialty Company, New York, N. Y., Combined superheater and boiler. 1,626,220; Apr. 26.
Woolley, Rew E., Schenectady, N. Y., assignor, by mesne assignments, to Bailey Meter Company. Electric speed indicator. 1,650,679; Nov. 29.
Woolman, Clint V., Tacoma, Wash. Twine holder.
Woolsey, Charles A., Minneapolis, assignor to Northwestern Collapsible Carrier Co., St. Paul, Minn. Crate. 1,638,229; Aug. 9.
Woolsey, Charles A., and H. V. Rowman, Minneapolis.

1,633,229; Aug. 9.

Woolsey, Charles A., and H. V. Bowman, Minneapolis, Minn., assignors to Northwestern Collapsible Carrier Co., St. Paul, Minn. Crate. 1,639,873; Aug. 23.

Woolsey, Charles A., and H. V. Bowman, Minneapolis, assignors to Northwestern Collapsible Carrier Co., St. Woolsey, Charles A. and H. V. Bowman, Minneapolis, assignores to Northwestern Collapsible Carrier Co., St. Woolsey, John H. S. A. Bernstein, C. M. Sterllizer, 1,618,622; Feb. 22.

Woolsey, Nicholas I., Tottenville, N. Y. Valve-stem cap. 1,621,300; Mar. 15.

Woolson, Harry T., Detoit, Mich. Thermostat for motor Webberg, 1,611,622; Pec. 20.

Woolson, John M. Sasignor to Packard Motor Car Company, Detroit, Mich. Carbureting device. 1,613,257; Jan. 4.

pany,

Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,613,258 pany, I Jan. 4.

Woolson, Lionel M., assignor to Packard Motor Car Company. Detroit. Mich. Internal-combustion engine. 1,616,938; Feb. 8.
Woolson, Lionel M., assignor to Packard Motor Car Company. Detroit, Mich. ignition apparatus for internal-combustion engines. 1,616,939; Feb. 8.
Woolson, Lionel M., assignor to Packard Motor Car Company. Detroit, Mich. Internal-combustion engine. 1,616,949; Feb. 8.
Woolson, Lionel M., assignor to Packard Motor Car Company. Detroit, Mich. Internal-combustion engine. 1,616,942; Feb. 8.
Woolson, Lionel M., assignor to Packard Motor Car Company. Detroit, Mich. Internal-combustion engine. 1,616,942; Feb. 8. Pany, Feb. 15.

Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine, 1,620,641; Apr. 28.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Mixture-forming means for internal-combustion engines, 1,626,062; Apr. 28.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine, 1,627,601; May 10. for inWoolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. 1,631,177; June 7.

June 7.
Woolson, Lionel M., assignor to Packard Motor Car Com-pany, Detroit, Mich. Motor vehicle. 1,635,873; pany, Detroit, July 12. yon, Lionel M., assignor to Packard Motor Car Com-y, Detroit, Mich. Internal-combustion engine. 38.903; Aug. 16. pany, D 1.638.903

plant ferrous and for the following ferrous fe

signor.)
Wellow, Joseph H., Washington, D. C., assignor to The Ply-Rite Contracting Company, Baltimore, Md. Coat-Ing structural surfaces, 1,622,752; June 14.
Worbols, Edson L., Tonawanda, assignor to Howard Iron Works, Buffalo, N. Y. Nut-tapping machine, 1,613,369; Jan. 4.

Worcester Bilt-Rite Company. (See Arey, Ralph G., assignor.)

sugnor.)

Worcester, Evan R., Marlon, Ind., assignor to Macheth-Evans Glass Company, Charleroi, Pa. Glass jug. Des. 73,513; Sept. 20.

Worcester Knitting Co., The. (See Barnett, Arthur J., assignor.)

assignar.)

Worden, Erle D., assignor of one-half to O. Halliburton, Thiss, Okla. Antomatic brake-band-adjusting device. 1.613.778; Jan. 11.

Worden, Euclid P., Glen Ridge, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Surface condenser, 1,626.772; May 3.

Work, Bertram G., and L. N. Slade, assignors to The B. F. Goodrich Company, New York, N. Y. Reducing garment, 1,632.017; June 14.

Work, Robert D., and A. High, Philadelphia, Pa. Meter and meter-reading device. 1,817,932; Feb. 15.

Workman, Ellison E. (See Robinson, Edward A., assignor.)

signor.)

signor.)

Workman, Harold, Glasgow, Scotland. Projection lamp.

1.631.905; June 7.

Workman, Harold, Glasgow, Scotland. Electric incandescent lamp.

1.640.867; Aug. 30.

Workman, John E., York Pa. Trap.

1,623,515; Apr. 5.

Workman, Margaret A., Kansas City, Kans. Adjustable hoop.

1,652,970; Dec. 13.

World Bestos Corporation. (See Heany, John A., assignor.) signor.) World-Wide

Patent Enterprises, Inc. (See Bolgiano,

signor.)

World-Wide Patent Enterprises, Inc. (See Bolgiano, John, assignor.)

Worley, Marion D., St. Stephen, New Brunswick, Canada. Hair wavel. 1,629,567; May 24.

Worner, Marion D., St. Stephen, New Brunswick, Canada. Hair wavel. 1,629,567; May 24.

Worner, Henry F., Philadelphia, Pa. Radlorecelver. 1,626,379; App. 26.

Wornerl, George H., Kirkwood, Mo. Reenforced sheet lead. 1,628,759; May 17.

Worrail, George H., Kirkwood, Mo. Chemical-resistant lining. 1,628,769; May 17.

Worrail, George H., Kirkwood, Mo. Chemical-resistant lining. 1,628,760; May 17.

Worreil, Robert H., assignor.)

Worrell, Robert H., assignor.)

Worrell, Robert H., assignor.)

Worrell, Robert H., assignor.)

Worrell, Robert H., Robert H., assignor.)

Worrell, Robert H., assignor.)

Worrell, Robert H., assignor. To Worrell Mine Tie Manufacturing Company. Beckley, W. Va. Mine tie. 1,653,330; Dec. 20.

Worster, Harold B., assignor of one-half to C. R. Farmer, Keokuk, Iowa. Signal system for railways. 1,650,858; W. W. W. M. Charles H. Elbaron. N. J., Shopping bag.

Worster, Harold B., assignor of one-nair to C. R. Farmer, Keokuk, Iowa. Signal system for railways. 1,650.885; Nov. 2.

Worth. Charles H., Elberon, N. J. Shopping bag. 1,618.854; Feb. 22.

Worth Clemens S., Los Angeles, Calif., assignor, by mesne assignments, to E. G. Burghard. Compressor. 1,628,096; May 10.

Worth, Clemens S., Los Angeles, Calif., assignor, by Orth, Clemens S., Los Angeles, Calif., assignor, by Orth, Clemens S., Los E. G. Burghard. Fiston. 1,628,097; May 10.

Worth, Jacques, Paris, France. Combined bottle and holder therefor. Des. 73,594; Oct. 11.

Worth, Jacques, Paris, France, Combined bottle and holder therefor. Des. 73,594; Oct. 11.

Worth, Jacques, Paris, France, Combined bottle and holder therefor. Des. 73,594; Oct. 11.

Worthington, Charles C., Dunnfeld, N. J. Tractor-propelled lawn mower. 1,614,383; Jan. 11.

Worthington, Charles C., Dunnfeld, N. J. Tractor pelled lawn mower. 1,618,502; Feb. 22.

Worthington, Edith. (See Powell, Ms. W. assignor.)

Worthington, Edith. (See Powell, Ms. W. assignor.)

Worthington, George C., Elyria, Ohlo. Golf-club head. 1,617,090; Feb. 8.

Worthington Fump and Machinery Corporation. (See Allerton, Robert W., assignor)

Worthington Pump and Machinery Corporation. (See Barrett, Charles G., assignor.)
Worthington Pump and Machinery Corporation. (See Benson, Harry F., assignor.)
Worthington Pump and Machinery Corporation. (See Bourne, P. P., and Nonnenbruch, assignors.)
Worthington Pump and Machinery Corporation. (See Bourne, P. P., and Nonnenbruch, assignors.)
Worthington Pump & Machinery Corporation. (See Fleming, Wills M., assignor.)
Worthington Pump & Machinery Corporation. (See Fleming, Wills M., assignor.)
Worthington Pump and Machinery Corporation. (See Jorgensen, Olav E., assignor.)
Worthington Pump and Machinery Corporation. (See Machinery Corporation. (See Machinery Corporation.)
Worthington Pump and Machinery Corporation. (See Machinery Corporation. (See Machinery Corporation.)
Worthington Pump and Machinery Corporation. (See Morthington Pump and Machinery Corporation. (See Morthington Pump and Machinery Corporation. (See Morthington Pump and Machinery Corporation. (See Worthington Pump and Machinery Corporation. (See Morthington Pump and Machinery Corporation. (See Corporation Pump and Machinery Corporation. (See Morthington Pump and Machinery Corporation. (See Corporation Pump and Machinery Corporation.)
Worthington Pump and Machinery Corporation. (See Corporation.)
Worthington Pump and Machinery Corporation. (See Corporation.)

Withinston, Walter S., London, England. Screening of coils carrying high-frequency currents. 1,628,569; May 10.
Worthington, Wayne H., Battle Creek, Mich., ssignor to Advance-Rumely Company, La Forte, Ind. Huller. Worthold, Chape, Fort Washington, assignor to C. L. Bachman and E. Hahn, Philadelphia, Pa., composing the Copartnership Victor Engineering Co. Ash conveyer and ejector. 1,626,490; Apr. 26.
Wragg, Luiu M., Spokane, Wash. Windshield. 1,626,997; Wray, Charles F. (See Feldmeier, H., and Wray.) Wray, Charles F. (See Feldmeier, H., and Wray.) Wray, Charles S., Atlantic Highland, N. J. Belt conveyer. 1,633,153; June 21.
Wray, Edward N. (See Bashor, E. E., and Wray.) Wray, Charles F., 1649,557; Nev. 15.
Wrend Products Corporation. (See Wread, William E., assignor.)

assignor.) Wread, William

assignor.)

Wread, William E., Los Angeles, Calif., assignor, by mesne assignments, to Wread Products Corporation. Door latch and lock. 1,617,001; Feb. 8.

Wread, William E., Los Angeles, Calif., assignor, by mesne assignments to Wread Products Corporation. Wreford, William B., Detroit, Mich. Sport overshoe. 1,644,217; Oct. 4.

Wreisner, Arthur N., Dassel, Minn. Hen roost. 1,615,232; Feb. 1.

Wrenn, Moultrie F., assignor of one-half to S. A. Wrenn, Wrenn, Eannel A. (See Wrenn, Moultrie F., assignor.)

Wright, A. E., Company. (See Wright, Albertis E., assignor.)

signor.)

signor).

Wright Aeronautical Corporation. (See Lawrence, Charles L., assignor.)

Wright Aeronautical Corporation. (See Vanderlipp, Nathan F., assignor.)

Wright Aeronautical Corporation. (See Willgoos, Andrew Wright, Albert L., Ripley, and F. I. Smedley, Codnor Park, England. Construction of railway wagons and the like, 1,614,941; Jan. 18.

Wright, Alberti E., assignor to A. E. Wright Company, Chicago, Ill. Bottle, Dea. 73,118; July 19.

Chicago, Ill. Bottle, Dea. 73,118; July 19.

Chicago, Ill. Bottle, Dea. 78,118; July 19.

Chicago, Ill. Bottle, Oscar Statis, July 19.

Chicago, Ill. Bottle, Oscar Statis, July 19.

Chicago, Ill. Sottle, Oscar Statis, July

wright-Austin Company, case Runn, white In, as-signo, and E. Dallas, Tex. Mold for plastic materials. 1,648,038; Nov. 8. Wright, Charles C., Camden, N. J., assignor of one-half to Camden Pottery Company. Flush-tink construction and valve-lever-operating mechanism therefor. 1,628,128; Apr. 26. Wright, Charles F., Akron, Ohio, assignor to The Wright, Charles F., Akron, Ohio, assignor to The Dalamond March Company, Chicago, III. Delivery Mar. 132.

mechanism for box-ming machines, always, or, Mar. 15.
Wright, Charles F., Akron, Obio, assignor to The Diamond Match Company, Chicago, Ill. Match machine.
Wright, Charles F., Akron, Obio, assignor to The Diamond Match Company, Chicago, Ill. Cover-supplying mechanism for box-filling machines. 1,649,639:
Nov. 16.

mechanism for box filling machines. 1,649,639; Nov. 15.
Wright, Clarles H., Clarksburg, W. Va., assignor to Pittsplate Glass Company. Sheet-glass-drawing appuratus. 1,615,862; Feb. 1.
Wright, Charles H., Clarksburg, W. Va., assignor to
Pittsburgh Plate Glass Company. Apparatus for making sheet glass. 1,615,863; Feb. 1.
Wright, Charles L. assignor to Lamb Knitting Machine
Company, Chicopee Falls, Mass. Electric heater.
1,866,845; Oct. 25.
Wright, Charles W., Bloomington, Ill. Reboring device.
1,618,037; Feb. 16.

Wright, Clyde S. (See Schwimmer, F. J., and Wright, Vwright, Clyde S., assignor to The National Supply Company, Toledo, Ohio. Wire-line-drilling clamp, 1,614,681; Jan. 18.
Wright, Clyde S., assignor to The National Supply Company, Toledo, Ohio. Wire-line-drilling clamp, 1,621,616;

Wright, Cyril F., executor. (See Langdon-Davies, W., and

pany, Toledo, Onio. Wire-line-drilling clamp. 1,621,616; Mar. 22.
Wright, Cyrll F., executor. (See Langdon-Davies, W., and Sonmes).
Wright, Cyrll F., executor. (See Langdon-Davies, W., and Sonmes).
Wright, Daniel K., Fietrson, N. J., assignor to General Electric Company. Method of and apparatus for forming filaments. 1,613,666; Jan. 25.
Wright, Edward A., Fresno, Calif. Control pedal. 1,632,940; June 21.
Wright, Edward A., Fresno, Calif. Control pedal. 1,632,940; June 21.
Wright, Edward A., Fresno, Calif. Control pedal. 1,632,941; M. Wright, Edward B., (See Rogan, T. T., and Wright,)
Wright, Edward H., Schenectady, N. Y., assignor to General Electric Company. Combined trip and throttle valve. 1,648,710; Nov. 8.
Wright, Edward S., Glendale. Calif. Rake attachment for lawn mowers. 1,632,622; June 22.
Wright, Francis E., Cleveland, and R. M. Warner, East Cleveland, Onio. Compressor for refrigerating apparatus. 1,628,944; May 17.
Wright, Frad W., assign of one-fourth to T. F. Elsworth, one-fourth to P. Harker, and one-fourth to Wright, Fred W., assign of one-fourth to T. F. Elsworth, one-fourth to P. Harker, and one-fourth to Jan. 18.
Wright, Fred W., Assign of one-fourth to M. Wirght, Fred W., Assign of the May 17.
Wright, Fred W., Assign of one-fourth to Harker, and Cheelberty mechanism for printing machines. 1,614,940; Jan. 18.
Wright, George B., assignor to Massage device.
Wright, George B., assignor to Ansah Engineering Company, South Norwalk, Conn. Device for Illustrating the operation of rotary pumps. 1,639,918; Jan. 23.
Wright, George B., assignor to Ansah Engineering Company, South Norwalk, Conn. Device for Illustrating the operation of rotary pumps. 1,639,918; Jan. 24.
Wright, George B., assignor to Ansah Engineering Company, South Norwalk, Conn. Device for Illustrating the operation of rotary pumps. 1,639,918; Jan. 24.
Wright, George B., des Smith, B. B., and Wright, George W., May 10,420; Jan. 20.
Wright, George B., des Smith, B. B., and Wright, George W., May 10,420; Jan. 20.
Wright, George B., des Smi

signor.)

wright, Henry A., Halls, Tenn. Railway-mail-delivery apparatus. 1,631,228; June 7. Wright, Horace C., and F. G. Bristow, Sydney, New South Wales, Australia, assignors to Chleago Fiezible Shaft Company. Sherring blade for sheep shears and the like. 1,646,470; Oct. 23. Wright, Hubert E., et al. (See Barden, Fred, assignor.)

Wright, J. E., st. (See McRiwain, James, assignor.)
Wright, J. E., sr. (See McRiwain, James, assignor.)
Wright, J. T., Company, The. (See Wright, Joseph T.,
assignor.)
Wright, James D., Almena, Kans. Cultivator. 1,630,996;
May 31.

May 31.

Wright, James F., Cleveland, assignor to The McMyler Interstate Company, Bedford, Ohio. Clutch-operating Interstate Company, Bedford, Ohio. Clutch-operating Wright, James H. (1997), 1997.

Wright, James M. (1997), 1997.

Wright, James G. E., Alplaus, N. Y., and W. J. Bartlett, East Cleveland, Ohio. assignors to General Electric Company, Ester-resin composition and prepartion, 1034,969; July 5, 1997.

Wright, James R. (See Howard, F. A., and Wright, Wright, James R. Mayfield, Ky. Calculating device. Wright, John E., Mayfield, Ky. Calculating device. Mar. 1.

Wright, John E., Mayfield, Ky. Calculating, 1997.

Wright, John E., Mayheld, ky. Calculator. 1,619,230; Mar. 1.
Wright, John E., assignor to A. H. Fox, New York, N. Y. Street-traffic-signal device. 1,640,170; Aug. 23.
Will. 1,627,072; May 3.
Wright, John W., Dympia, Wash. Grate construction. 1,619,842; Mar. 8.
Wright, John W., Puwallup, Wash. Device for sorting beans. 1,627,221; May 3.
Wright, John W., and F. Underwood. Dallas, Tex. Wright, John W., and tetriks. 1,618,832; Feb. 8.
Wright, Joseph T., assignor to The J. T. Wright Company, Cincinnati. Ohlo. Lubricant control for transmissions. 1,645,504; Oct. 11.
Wright, Joseph T., assignor to The J. T. Wright Company, Cincinnati. Ohlo. Making tubular drills. 1,651,785; Dec. 6.
Wright, Joseph T., assignor to The J. T. Wright Company, Cincinnati. Ohlo. Making tubular drills. 1,651,785; Dec. 6.
Wright, Willis C., Waco, Tex. Air transferrer. Wright, Julius C., Waco, Tex. Air transferrer. 1,652,337; Dec. 13.
Wright, Norman A., assignor to Pontinc Tractor Company, Pontiac, Mich. Spraying attachment for tractors. 1,626,71; Apr. 26.
Wright, Norman J. (See Sippel, E. H., and Wright.)

Oliver S., assignor to Neptune Manufacturing my, Masontown, Pa. Hair-waying device. Wright,

Wright, Oliver S., assignor to Neptune Manufacturing Company, Masontown, Pa. Hair-waving device. 1,632,753; June 14. Wright, Pavin. (See Gerrard, A. J., and Wright, Wright, Paul D., Wilkinsburg, Pa. Valve. 1,636,618; July 19.

Wright, Paul D. Edgewood, Pa. Sculling hook. 1.636,634; July 19. Wright, Rea P., Washington, D. C., assignor to Marvel Carburetor Company, Flint, Mich. Thermostatic heat control for internal-combustion engines. 1,613,005;

Jun. 4. right, Rea P., Washington, D. C., assignor to Marvel Carburetor Company, Flint, Mich. Thermostatic heat control for internal-combustion engines. 1,613,006;

Jan. 4.
Wright. Rea P., Washington, D. C., assignor to Marvel
Carburetor Company, Fint, Mich. Thermostatic heat
courtol for internal-combustion engines. 1,030,728;

MRY 91.
Wright, Robert S., Minot, N. Dak. Noncorroding anti-freeze composition. 1,626,998; May 3.
Wright, Samson D., Cleveland Heights, Ohio. Dump car. 1,629,853; May 24.
Wright, Samson D., Cleveland Heights, Ohio. Recording scale for rallway cars. 1,652,838; Dec. 13.
Wright, Sanley K. (See Curits, A. H., Wright, and Wright, Sta Mackley.)

Mackley,)
Wright, Stanton M. (See Wright, Walter L. and S. M.)
Wright, Summer B., East Orange, N. J., assignor to
American Telephone and Telegraph Company. Voiceoperated relay equipment. J.636,031; July 13,
Operated relay equipment. July 13, July 13,
Operated relay equipment.

Wright, Thurman, et al. (See Feland, Oscar A., assignor.)
Wright, Walter L. and S. M., Los Angeles, Calif. Color motion-pleture photography. 1,641,466; Sept. 6.
Wright, Wayne C., Siloam Springs, Ark. Gravity meter. W. 16,18,41; Jan. 118 ee Gloss, S. D., and Wright.)
Wright, William, Siese Gloss, S. D., and Wright.)
Wright, William, assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car roofs. 1,614,335; Jan. 11.
Wright, William, assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car roof. 1,614,335; Jan. 11.
Wright, William, assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car roof. 1,623,636; Apr. 19.
Wright, William, assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car roof. 1,637,888; Aug. 2.
Wright, William, assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car roof. 1,637,888; Aug. 2.
Wright, William, assignor, by mesne assignments, to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car roof. 1,637,881; Aug. 2.
Wright, William, assignor to United Electric Railways Company, Providence, R. I. Railway transfer clamp. D. C. Vaccum-jacketed container. 1,651,655; Dec. 6.
Wright, William, P. assignor to Acme Can Company, Philadelphiam, Fa. Ice-cream freezer. 1,627,302; May. 3.

May 3.

Wright, William H., Pittsburgh, Pa. Jug cover. 1.625.405; Apr. 19. Wright, William H., Milwaukee, Wis., assignor to Founda-tion Oven Corporation. Coke oven. 1,643,532; Jug cover.

hon Oven Corporation. Coke oven. 1,643,532; Sept. 27.
Wrighton, William J., assignor to American Optical Company. Soutbirdge, Mass. Watchmaker's loupe. 16.
Wrightsen, C. et al. (See Keniston, G. I., and Priesiley. Assignors.)
Wrizley. Henry I., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Brake mechanism for railway cars. 1,618,740; Feb. 22.
Wrigley, Henry I., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Brake mechanism for rail-Wrigley, Henry I., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Brake mechanism for rail-Wrigley. Henry I., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Brake mechanism for rail-Wriston. Ed. 636,634; July 12.
Wriston. 16.613,635; July 12.
Wrocklage, George W. Hackensack, N. J. Concrete form. 1,649,265; Nov. 15.
Wuetkler, William E., Los Angeles, Calif. Power take-off for automobiles. 1,636,087; July 19.
Wuetthele, Edwin J., Pitteburgh, Pa. Bowling-alley tenpin. 1,642,286; Sept. 13.
Wiest, Albert G., assignor to The Weis Manufacturing Company, Monroe, Mich. Card-index device. 1,650,322;

uest, Edward H., Cincinnati, Ohio. Curtain-light apparatus. 1.612.847; Jan. 4. Wuest.

Wuest, Heinz M., Basel, Switzerland, assignor to The Hoffmann-La Roche Chemical Works, New York, N. Y., Manufacture of water-soluble neutral derivatives of dihydroxydiaminoarsenobenzol. 1,648,926; Nov. 15. Wulf, Charles A., Indianapolis, Ind. Furnae-charging apparatus. 1,641,651; Sept. 6. Wulf, Charles A., assignor to American Valve and Enameling Corporation, Indianapolis, Ind. Linter valve for totlet fusining mechanism. 1,622,606; Mar. 29. Wulf, Charles A., assignor to American Valve and Enameling Corporation, Indianapolis, Ind. Tollet-fusining to Corporation, Indianapolis, Ind. Tollet-fusining Wulf, Frank F., Neligh, Nebr. Draft evener. 1,645,569; Oct. 18. Wulf, John, Los Angeles, Calif. Clutch. 1,642,527; Sept. 13.

Wulf. John, Los Angeles, Calif. Clutch. 1,642,527; Sept. 13.
Wulfhorst, William E., Cincinnati, Ohio. Automatic signal. 1,620,982; May 24.
Januarie I., assignor to The Minnesota Specialty Jompany. St. Paul, Minn. key case. 1,615,059; Jan. 18.
Wulfing, Daniel J., assignor to The Minnesota Specialty Company, St. Paul, Minn. Auto key case. 1,641,110; Aug. 30.
Wulfrange, John A., Hamilton, Ohio. Grille. 1,622,363; Wulfrange, John A., Hamilton, Ohio. Grille. 1,622,363;

Wulffange, John A., Hamilton, Ohio. Grille. 1,622,363; Mar. 29.
Wulkan, Louis, Cedarhurst, N. Y. Mounting for radio loud speakers. 1,616,246; Feb. 1.
Wunder, George G. 18see Langstroth, C. B., and Wunder, W. G. 1986. Speakers. 1,616,246; Feb. 1.
Wunder, George G. 18see Langstroth, C. B., and Wunder, W. G. 1986. Speakers 1986. Speakers 1986. The Winsch, Erich P. G., Steglitz, near Berlin, assignor to Askania-Werke Aktiengeseils-baaft vormals Central-werkstatt Dessau und Carl Bamberg-Friedenau, Berlin-Friedenau, Germany, Hetort and gas-fow-regulating Winsch, Guido, Steglitz, near Berlin, Germany, Device for regulating gas pressure. 1,620,707; Mar. 15.
Wünsch, Hugo, assignor to Polyphonwerke Aktiengeseils-schaft, Berlin, Germany. Horn for talking machines. Wirdack, Herlin, Germany, Horn for talking machines. 1,636,204; July 19.
Wurdack, Erlin, Germany, Horn for talking machines. Wirdack, William, assignor to Wm. Wurdack, William, assignor to Mm. Wurdack, Electric Mfg. Co., St. Louis, Mo. Trim-securing clamp. 1,648,927; Nov. 15.
Wurdack, Wm., Electric Co. (See Wurdack, William, assignor), wurlitzer, Rudolph, Manufacturing Company. (See Deverlands).

Wurlitzer Grand Piano Company. (See Farny, Cyrll, assignor.)
Wurlitzer, Rudolph, Manufacturing Company. (See Deverall, Charles N., assignor.)
Wurman, Harry P., Brooklyn, N. Y., assignor to Bayuk Cigars Incorporated, Philadelphia, Pa. Cigar-finishing device. 1,641,795; Sept. 6.
Wuromus, Arthur F., assignor to the Firm Sendlinger Optische Glaswerke G. m. b. H., Berlin-Zehlendorf, Ger Company, Charles C., 1,648,526; Nov. 8.
Wurtenberg, Charles, (See Randall, C. J., and Wurtenberg, Charles, Charles, Carles, Carle

berg.)

berg.] Joseph, Dedham, Iowa. Draft equalizer. 1,648,098; Nov. 8. Wurzschmitt, Bernbard. assignor to I. G. Farbenindustrie Aktiengesellschaft. Uerdingen-Niederhein, Germans. Composition for impregnating wood. 1,654,229; Dec.

Composition for impregnating wood. 1,654,229; Dec. 27.
Wüstenhöfer, Julius, Dortmund, Germany, Safety catch for elevators, lifts, or the like. 1,633,836; June 28.
Wustholz, Fred, Claytonville, Ill. Concrete form. Wustholz, Fred, Claytonville, Ill. Concrete form. Wustholz, Fred, Claytonville, Ill. Concrete-form clamp. 1,629,899; May 24.
Wüthrleh, Christian, Niederuzwil, assignor to the Firm Gebrüder Bihler, Uzwil, Switzerland. Mold disk for dough presses. 1,618,226; Feb. 22.
Wutzler, George M., Waukegan, Ill. Coal-spout-operating Wyand, William, Absecon, N. J. Grate section. 1,621,302; Mar. 15.
Wyant, Leroy, Chicago, Ill., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,633,402; June 21.
Wyant, Leroy, Chicago, Ill., Railway signal 1,648.527; Wyckoff, Alvin, Los Angeles, Calif., assignor to Famous Players-Lasky Corporation, New York, N. Y. Coloring machine. 1,628,202; May 10.
Wyckoff, Andrew D., Fort Wayne, Ind. Locking device for barrel pumps. 1,653,446; Dec. 20.
Wiscoff, Mariew D., Fort Wayne, Ind. Locking device for barrel pumps. 1,653,446; Dec. 20.
Wylam, Birkett, Lancaster, J. E. G. Harris, Carlisle, Wylam, Birkett, Lancaster, J. E. G. Harris, Carlisle, Wylam, Birkett, Lancaster, J. E. G. Harris, Carlisle, Wylam, Birkett, Lancaster, J. E. G. Harris, Carlisle,

for barrel pumps. 1,636,446; Dec. 20. Wyko Projector Corporation. (See Brewster, Percy D., assignor.) Wylam, Birkett, Lancaster, J. E. G. Harris, Carlisle, England, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland, Preparing vardyestinf chloracette acid. 1,640,018; Aug. 23. Wyld, Robert H., Hempstend, and W. F. Keenan, fr., Pelham, assignors to Power Specialty Company, New York, N. Y. Hanger bolts for boiler settings. 1,622,303; Mar. 29.

Yancey, Samuel H., Rock Island, and H. S. Dickinson, Moline, assignors to Berry Shocker Incorporated, Chicago, Ill. Grain shocker. 1,639,4748; Aug. 1d. Yancey, Striling R. (See Schauman, K. O., Yancey, and Mifsud).

Yancey, Virgil L. (See Yancey, William O. and V. L. Yancey, William O., Chicago, Ill. Toy novelty. 1,615,924; Feb. 1.

Yancey, William O., Chicago, Ill. Toy novelty. 1,615,925; Feb. 1.

Yancey, William O., and V. L., Chicago, Ill. Gauging attackment for hair clippers. 1,649,999; Nov. 22.

Yankee Lock Corporation. (See Halaby, Camile E., as signor.)

Yankee Lock Corporation. (See Malluk, Assad M., assignor.)

Wylie, Adrian W. (See Pennell, R. H. L., and Wylie.)
Wylie, Garvin R. (See Harrison, J. A., and Wylie.)
Wylie, Garvin R. (See Harrison, J. A., and Wylie.)
Wylie, Garvin R., Washington, and J. A. Harrison, Parnassus, Pa. Educational game. 1,617,362; Feb. 15.
Wylie, Hamilton N., and F. M. Green, Coventry, England.
Joint for sheet-metal plates. 1,630,538; May 31.
Wyman, Charles W., Auburn, Wash. Mole trap.
1,430,578; Nov. 22.
Wyman, Charles W., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine.
1,630,578; Nov. 22.
Wyman, Charles W., Claremont, N. H., assignor to Sullivan Machinery. Company. Connecter device.
Wyman, George R., assignor to Bird & Son, Incorporated, Walpole, Mass. Shingle and laying the same.
1,635,732; July 12.
Wyman-Gordon Company. (See Oldeon Jakes) Wyman-Gordon Company. (See Damerell, Mark H., as-Wyman-Gordon Company. (See Oldson, John A., as-signor.)

Wynd, Leo A., and J. L. Schueler, Peoria, Ill. Coating materials having an iron or steel base. 1,630,507; May 31.

Wynd, Leo A., and J. L. Schueler, Peoria, Ill. Galvanizing apparatus. 1,630,508; May 31.

Wyner, Rudolni A., et al. (See Miller, Max C., assignor.)

Wyner, Rudolni A., et al. (See Miller, Max C., assignor.)

Wymer, Rudolni A., et al. (See Miller, Max C., assignor.)

Wynn, John G., Madison, Wis., assignor to The Zeno Button Company, Indianapolis, Ind. Casing for coincontrolled apparatus. 1,626,999; May 3.

Wynn, John G., Madison, Wis., assignor to The Zeno Button Company, Indianapolis, Ind. Casing for coincontrolled apparatus. 1,626,999; May 3.

Wynn, Lavonious K., assignor to Wynn Products Company, Sterling, Ill. Container, 1,615,319; Jan. 25.

Wynn, Loyal L., Florence, Colo. Mechanical toy. 1,625,755; Apr. 19.

Wynn Products Company. (See Wynn, Lavonious K., assignor) **assignor.** (See Webster, Lewis E., assignor.)
Wyoming Shovel Works, The. (See Webster, Lewis E., assignor.)
Wyrostok, Charles. (See Morris, W., and Wyrostok.)
Wyss, Ione, assignor to Swift & Company, Chicago, Ill.
Carton. 1617,472, Feb. 15.
A., assignor to General
Motors Corporation, Detroit, Mich. Method and apparatus for heat freating steel articles. 1,627,682; May 10.
Xippas, Socrates, A., Pittsburgh, Pa. Ventilating fan.
Relf,666; June 14.
Xippas, Socrates A., Pittsburgh, Pa. Fan blade and
X-Tt Laboratories, Inc. (See Wayne, Oscar T., assignor.)
Xylos Rubber Company, The. (See Barnet, William D., assignor.) Avios Rubber Company, The. (See Barnet, William D., assignor.)
Yacey, William O., Chicago, Ill. Toy novelty. 1,640,171; Aug. 23.
Yackley, George M., Avoca, Minn. Corn planter.
Yackley, Johns, Spokane, Wash. Cultivator. 1,643,232; Sept. 27.
Yackley, Johns, Spokane, Wash. Cultivator. 1,643,232; Sept. 27.
Yaeger, Albert A., Ir., Saginaw, Mich., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,632,365; Dec. 13.
Yager, Harvey J., Seattle, Wash. Fortable scaffold. 1,631,848; June 7.
Yager, Harvey J., Seattle, Wash. Collapsible and portable core form. 1,652,081; Dec. 6.
Yager, Ralph C., and G. L., assignors to Yager Sheet Metal Caulf. Louver ventilator. 1,640,588; Aug. 30.
Vager Sheet Metal Company. (See Yager, Ralph C. and G. L., assignors)

Yankee Lock Corporation. (See Malluk, Assad M., assignor.)
Yankelewitz, Hirsh W., Newark, N. J. Advertising and Yankelewitz, Hirsh W., Newark, N. J. Advertising and Yankey George W., assignor to The Alliance Machine Company, Alliance, Ohio. Beet-handling apparatus. 1,632,574; June 14.
Yanney, George W., and W. D. Keller, assignors to The Alliance Machine Company, Alliance, Ohio. Tongs. 1,632,704; June 24.
Yanney, George W., and W. D. Keller, assignors to The Alliance Machine Company, Alliance, Ohio. Tongs. 1,633,3015; June 28.
Yanovsky, Henry, New York, N. Y. Traveling bag. 1,651,171; Nov. 29.
Yant, William P., Pittsburgh, Pn., R. R. Sayers, Wash-Yant, William P., Pittsburgh, Pn., Pages, Okland, Calif. Many. Dec. 27, Nathongh, Artenus M., Hope, Ark, Hatrack, 1,654,063; Dec. 27, Nathongh, Pn. Pages, Okland, Calif. Many. Yarbrough, Artenus at, Roye, and Dec. 27.
Yard. Willis S., and E. N. Percy, Oakland, Calif. Manufacturing light hydrocarbon liquids. 1,643,401;
Yard, Willis S., and E. N. Percy, Oakland, Calif. Gas manufacture. 1,649,640; Nov. 15.
Yarder, Stanley W., Toledo, Ohlo. Tool-box tray and partition therefor. 1,614,910; Jan. 18,
Yard-OMeter Corporation. (See Tillian, Ferdinand J., asskull). Yard-O-Meter Corporation. (See Tillman, Ferdinand J., Sassignor.)
Yardsmore Golf Club Manufacturing Company. (Se. So Relle, Waiter B., assignor.)
Yaremenko. Alexander, New York, N. Y. Couch. Des. 73,733. (Oct. 25.
Yarnall-Waring Company. (See Mart, Leon T., assignor.)
Yarnall-Waring Company. (See Thompson, Charles H., xarnati-waring Company. (See Thompson, Charles H., assignor.) Benson A., Grand Rapids, Mich. Filing ma-chine or fig saw. 1,856,729; July 26. Yarrow, Harold E., Glasgow, Scotland. Steam super-heater, 1,623,759; Apr. 19. Yasuda, Yoshiaki. (See Takeuchi, Masayoshi, assignor.) Yates-American Machine Company. (See Johnson, Wal-lace D., assignor.) Yates-American Machine Company. (See Kelly, Charles Yates-American Machine Company. (See Keny, Charles H., assignor.) Yates-American Machine Company. (See Lane, Franklin L., assignor.) Yates-American Machine Company. (See Roman, Henry, L., assignor.)
Yates-American Machine Company. (See Roman, Henry, assignor.)
Yates-American Machine Company. (See Williams, R. A., and Bigsby, assignors.)
Yates-American Machine Company. (See Wolf, Charles, Yates-American Machine Company. (See Wolf, Charles, Yates, Arthur T., Gardenville, assignor to Buffalo Forge Company, Buffalo, N. Y. Punching machine. 1.650.411: Nov. 22.
Yates, De Witt E., assignor to American Steam Pump Company, Buffalo, N. Y. Punching machine. 1.650.411: Nov. 22.
Yates, De Witt E., assignor to American Steam Pump Company, Battle Creek, Mich. Convertible stage centrifugal pump 1.635.655; July 21.
Yates, P. B., Machine Company. (See Turcott, David, assignor.)
Yates, Walter and S., Swinton, near Manchester, England, Heat-exchanging apparatus. 1.619.776: Mar. 1.
Yates, Walter and S., Swinton, near Manchester, England, Heat-exchanging apparatus. 1.619.776: Mar. 1.
Yates, William E., Worrison, Ill. Mechanical toy. 1.617.933; Feb. 15.
Yates, William E., Morrison, Ill. Mechanical toy. 1.617.933; Feb. 15.
Yawman, Frederick G., Rochester, N. Y. Stepladder.
Yawman, Frederick G., Rochester, N. Y. Stepladder.
Yawman, Frederick G., Rochester, N. Y. Stepladder.
Jee, 20.
Yazley, Ernest E., Chicago, Ill. Connecting plug. 1.655.278; Dec. 27. Company, Oscalada, Canta Aug. 30. Taser Sheet Metal Company. (See Yager, Ralph C. and Yager Sheet Metal Company. (See Yager, Ralph C. and See L., assignors.) Bloomer, Wis. Inclination indicator. 1.622,752; Mar. 29. Yakubowski, Maryan, White Haven, Pa. Plow support. 1.630,997; May 31. Yale, Charless E., Santa Monica, Calif. Key-holding device. 1.623,224; Apr. 5. Yale, Charless E., Santa Monica, Calif. Key-holding device. 1.623,224; Apr. 5. Yale C. Towne Manufacturing Company, The. (See Jackson, Arthur C., assignor.) Yale & Towne Manufacturing Company, The. (See Ledin, Charles, assignor.) Yale & Towne Manufacturing Company, The. (See Richter, Paul C., assignor.) Yale & Towne Manufacturing Company, The. (See Richter, Paul C., assignor.) Yale & Towne Manufacturing Company, The. (See Richter, Paul C., assignor.) Richter, Paul C., assignor.)

Yale & Towne Mauntacturing Company. (See Schröeder, Charles S., assignor.)

Yamakishi. Tomoji Bellevue, Wash. Nail magazine.

1.633.154; June 21.

Yamannich, Tadoski. Takata-Machi, and Masataro Kawander.

Jana. Induction synchronous Marchine.

Yamey, Arthur, New Orleans, La. Making and setting one-piece can liners. 1.638,386; Aug. 9.

Yancey, Arthur, New Orleans, La. Preserving gasket.

1.644.457; Oct. 4.

Yancey, Arthur, Sew Orleans, La. Tumbler cap and Yancey, Arthur, Sew Orleans, La. Tumbler cap and Yancey, Arthur, Sew Orleans, La. Tumbler Scap and Yancey, Samuel H., Philadeiphia, Pa., assignor to S. A. L. Allen & Co., Inc. Seed drill. 1,625,345; Apr. 19. Dec. 20.
Yaxley, Ernest E., Chicago, Ill. Connecting plug.
1.654.278; Dec. 27.
Yeager, Anton J. (See Tyulo, T. A. and Yeager, John J. (Antoles); Califf. Adjustable endthrust bearing. 1.635.28; Dec. 20.
Yeager, Henry M., assignor to Feedders Manufacturing
Company, Inc. Buffalo, N. Y. Radiator shutter,
1.643.192; Sept. 20.
Yeager, John E., Poyntelle, Ky. Gearing for rear axles
of autos. 1.632.203; June 21.
Yeager, Ro. Y. Des Mones, Iowa. Structural-building
floor. 1,627,000; May 3.

Yeary, Don E. (See Yeary, Fred R. and D. E.) Yeary, Fred R. and D. E., Santa Ana, Calif. Oil friction brake. 1,623,425; June 14. Yejoff, Paul P., Seattle, Wash. Game. 1,613,974; Jan. 11. Yejlow Coach Manufacturing Co. (See Rackham, George

Yellow Coach Manufacturing Co. (See Ricknam, George J., assignor.)
Yellow Taxl Corporation, The. (See Gluck, J., and Karich, assignors.)
Yendruch, John Waterloo, Ontarlo, Canada. Burglar alarm. 1,633,468; June 21.
Yenotkian. George, Lawrence, Mass. Writer's guide. 1,628,347; May 10.
Yeomans Brothers Company. (See Yeomans, Charles, assignor.)

Yeomans, Charles, assignor to Yeomans Brothers Company, Chicago, Ill. Sewage-pumping station. 1,613,007; Jan. 4.

Your 4. Yeomans, Lucien I., Chicago, Ill. Supporting rotary cylinders. 1.642.834; Sept. 20. Yeomans, Lucien I., Chicago, Ill., assignor to A. O. Smith Corporation, Milwaukee, Wis. Centrifugal casting of metals. 1.630.445; May 24. Yeomans, Lucien I., Chicago, Ill., assignor to A. O. Smith Corporation, Milwaukee, Wis. Centrifugal casting machines. 1.643.265; Sept. 20. Centrifugal casting machines. 1.643.265; Sept. 20. Rurchard D., assignor.) Yerdon, J. L. (See Thompson, Burchard D., assignor.) Lic53.488; Dec. 20. Philadelphia, Pa. Horseshoe. 1.653.488; Dec. 20. Philadelphia, Pa. Horseshoe. 1.653.488; Dec. 20. Yerges, Frank L., assignor of one-tenth to H. Zimmerman, Fremont, Ohio. Multiply buffer. 1,620,708; Mar. 15.

man, F

Sair. 19.

Yerk, Henry H., and W. J. Baumberger, Davenport, assignors to Micro Machine Company, Bettendorf, Iowa.

Yerkes, George B., Cornopolis, Pa., assignor to The McMyler Interstate Company, Bedford, Ohio. Stabilizer
for locomotive cranes. 1,651,656; Dec. 6.

Yermak, William, Danbury, Conn. Beet puller. 1,631,180;
June 7.

Yermak, William, Danbury, Conn. Beet pulier. 1,631,180; June 7.

Yessaian, Alexander, assignor of one-half to S. Devrigian, Chelsea, Mass. Cignrette holder. 1,641,317; Sept. 6.

Yevseyeff, George F., Windsor, Ontario, Canada. Shock Yingling, Frank E., Hamilton, Ohio. Friction-drive tile press. 1,646,346; Oct. 25.

Nigye, Victor, South Orange, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. V. Dry battery. 1,624,435; Apr. 12.

Yingve, Victor, South Orange, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. V. Dry cell 1,626,173; Apr. 26.

Yingve, Victor, South Orange, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y. Dry cell 1,623,1568; June 7.

Yingve, Victor, South Orange, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y. Dry cell 1,623,1568; June 7.

Yingve, Victor, South Orange, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. V. Dry cell 1,637,433; Aug. 2.

Yoder, Howard D., assignor to Penberthy Injector Company, Feb. 8.

Yoder, Seeph D. (See Gibson, G. H., and Yoder.) Yoder, Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.) Yoder Seeph D. (See Gibson, G. H., and Yoder.)

Yoder, Joseph D. (See Gibson, G. H., and Yoder, Yoder, Sorris Company, The. (See Morris, Howard I., assignor).

Yoder, Sam Blackwell, Okla. Corner piece for buildings.

Yokel, Frank, Cleveland, Ohio, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Chandelier. Des. 73.362; Aug. 23.

Yokel, Frank, Cleveland, Ohio, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Chandelier. Des. 74.363; Aug. 23.

Yokel, Frank, Cleveland, Ohio, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Wall plate for electric-light fixtures. 73.354; Aug. 23.

Yokel, Frank, Cleveland, Ohio, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Husk for incandescent lamps. 73.355; Aug. 23.

Yokel, Frank, Cleveland, Ohio, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Chandelier loop. 73.356; Aug. 23.

Yokel, Frank, Cleveland, Ohio, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Chandelier brace. 73.357; Aug. 23.

Yokel, Frank, Cleveland, Ohio, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Chandelier brace. 73.357; Aug. 23.

Yokel, Frank, Cleveland, Ohio, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Wall plate for electric-light fixtures. Des. 73.418; Sept. 6.

Yokoyama, Bunkichi, Los Angeles, Callf, Making fried rice food. 1,621,763; Mar. 22.

Yokoyama, Masafl, Schagaya-Cho, Japan. System of unifying a group of clocks. 1,627,001; May 3.

Yore, Martin M., West Mansfield, Ohio. Wheel cleat. 1,611,252; Feb. 8.

Yok Klegaling and Yenchi, assignor to York Ironer and appliance Company. (See York, Edgar L., assignor.)

York Manufacturing Company. (See Bergdoll, John G., assignor.)
York, Margaret A., New York, N. Y. Child's costumer. Des. 74,168; Dec. 27.
York, Pinless H., Southport, Ind., assignor to Logan Co. Acquistable roller conveyer. 1,614,816; Jan. 18.
York, Pinley Company. 1,617,614; Prov. 1,617,614; P

Adjustant.

Vork, Victor, Los Angeles, Calif.

Feb. 15.

Feb. 15.

Apparatus. 1,624,647; Apr. 12.

Apparatus. 1,624,647; Apr. 12.

Yorke, Fred. (See Smith, C., and Yorke.)

Vost, Arthur A., Boston, Mass. Burner. 1,652,507;

Yost, Arthur A., Boston, Mass. Burner. 1,652,507; Dec. 18.
Yost, Ernest, and R. B. Holthaus, Chadron, Nebr. Automobile top and curtain structure. 1,616,294; Feb. 1, Yost, Henry, Kenton, Ohio. Roofing seam. 1,618,902; Yost, Ray C. (See Burch, A., and Yost.)
Young, A. Homer, et al. (See Jones, Leelle W., assignor, Young, Ada. (See Sparhawk, Charles B., assignor). Young, Add. (See Sparhawk, Charles B., assignor). Young, Add. See Sparhawk, Charles B., assignor to Gengal And See Sparhawk, Charles B., Assignor to Gengal W. (See Sparhawk, Charles B., Assignor to Gengal Charles B., Charles B., Assignor to Gengal Charles B., Charle

Radio apparatius. 1,623,152; Apr. 5.
Young, Arthur P., Kenliworth, England, assignor to General Electric Company. Telephone receiver. 1,628,383;
May Id. Arthur P., Kenliworth, and J. Hutt, Coventry, Charles, Company. Telephone receiver. 1,628,383;
May Id. Arthur P., Kenliworth, and J. Hutt, Coventry, Charles, Charles

Note: Carlotte Committee C

July 19. Young, Henry T., Darlington, S. C. Plow. 1,615,561; Jun. 25.

Jan. 25.

Young, Herman, New York, N. Y.

drainer. 1,641,061; Aug. 30.

Young, Howard A., Chiengo, Ill.

1,618,258; Feb. 22.

Young, Hough E. (See Kushlan, M., and Young.)

Young, Hugh E. (See Taylor, E. S., and Young.)

Young, Jacob L. New York, N. Y. Methed and apparatus

for grindlus surfaces. 1,630,685; May 31.

Young, Jacob L. New York, N. Y. Apparatus for grind
ray in burness. 1,630,685; May 31.

Young, Jacob R. (See Kerr, J. B., and Young.)

Young, James, Kenora, Ontario, Canada. Condensation remover for steam-heated driers. 1,640.019; Aug. 23. Young, James H., assignor to H. H. Robertson Company, Pittsburgh, Pa. Cellular body of asphalt and producing the same. 1,630,103; May 24. Young, James H., assignor to H. H. Robertson Company, Pittsburgh, Pa. Testing apparatus for ventilators. 1,640,477; Aug. 30. Young, James F. Fitsburgh, Pa. Soap-measuring de-Young, James Y. Fitsburgh, Pa. Soap-measuring de-Woung, James Y. Rushville, assignor to The Standard Manufacturing Company, Cambridge City, Ind. Folding chair, 1,633,721; June 28. Young, Jean A., Millville, N. J. Cobbler's jack, 1,637,462; Aug. 2. Young, John, Philadelphia, Pa. Bottle. Des. 73,990;

ing chair. 1,633,721; June 28.
Young, Jean A., Millville, N. J. Cobbler's Jack. 1,637,462;
Young, John M., Philadelphia, Pa. Bottle. Des. 73,990;
Young, John M., Brooklyn, assignor to American Can
Company, New York, N. Y. Compound lining head
1,634,481; July 6.
Young, John M., Brooklyn, assignor to American Can
Company, New York, N. X. Opening device for tearYoung, Itohn S., assignor of one-fourth to Maude L.
Young and one-half to L. D. Webber, San Dlego, Calif.
Folding bed. 1,635,806; July 12.
Young, John W. (See Selman, N., and Young.)
Young, Joseph R., Minneapolis, Minn. Automatic aligning attachment for manifolding devices. 1,643,368;
Young, Julius, assignor to California Card Manufacturing Company, San Francisco, Calif. Easel mounting for photographs and the like. 1,624,302; Apr. 12.
Young, Leo C. (See Taylor, A. H., and Young.)
Young, Leo C. (See Taylor, A. H., and Young.)
Young, Leo C. Washington, D. C. Radio receiving system.
1,651,658; Dec. 6.
Young, Lavin W., New York, N. Y. Table lamp. Des.
73,358; Aug. 23.
Young, Maude L., et al. (See Young, John S., assignor.)
Young, Manhanlel, Hickman, K.y. Fishing device.
1,624,456; Apr. 12.
Young, Philip E., Fairhaven, Mass., assignor to Acushnet Process Company. Toy motor boat. 1,620,709;
Mar. 15.
Young, Philip E., Fairhaven, Mass., assignor to Acushnet Process Company. Toy motor boat. 1,620,709;
Mar. 15.

Mar. 15.

Young, Philip E., Fairhaven, Mass., assignor to Acushnet Process Company. Golf tee. 1,628,636,55; July 19.

Young, Ralph P. (See Kramer, Henry W., assignor, Young, Raymond E. (See Chandler, P. F., and Young, Young, Raymond E. (See Chandler, P. F., and Young, Young, Raymond E. (See Chandler, P. F., and Young, Young, Samuel C., St. Joseph, I.a. Carburetor lock. 1,632,687; June 14.

Young, Stephen L., Syracuse, N. Y. Leaf-spring cover or wrapper. 1,645,493; Oct. 11.

Young, Stephen L., Syracuse, N. Y. Leaf-spring cover or wrapper. 1,645,493; Oct. 11.

Young, William (Carbure, See Chandler, Motor vehicle. 1,629,717; May 24.

Young, William Carbure, Scotland. Motor vehicle. 1,642,421; Sept. 18.

Hodder, 1,644,649; Oct. 4.

Young, William M., Harrisburg, Pa. Telephone attachment. 1,640,227; Aug. 23.

Youngblood, David E., San Antonio, Tex. Safety lockment. 1,640,227; Aug. 23.

Youngblood, David E., San Antonio, Tex. Safety lockment. 1,640,227; Aug. 23.

Youngblood, David E., San Antonio, Tex. Observation and communication permitting device for jails, etc. 1,622,317; May 17.

Youngblood, David E., San Antonio, Tex. Observation and communication permitting device for jails, etc. 1,622,317; May 17.

Youngblood, David E., San Antonio, Tex. Observation and communication permitting device for jails, etc. 1,622,317; May 17.

Youngblood, David E., San Antonio, Tex. Observation and communication permitting device for jails, etc. 1,622,317; May 17.

Younghlood, David E., San Antonio, Tex. Observation and communication permitting device for jails, etc. 1,622,317; May 17.

Youngblood, David E., San Antonio, Tex. Observation and communication permitting device for jails, etc. 1,622,317; May 17.

Youngblood, David E., San Antonio, Tex. Observation and communication permitting device for jails, etc. 1,622,817; May 17.

Youngblood, Lander, J., Nashua, N. H. Packaging band. 1,621,172; Nov. 29.

Youngblood, John R., New Orleans, La. Telegraph transmitter. 1,627,819; May 10.

Youngchild, Casper E., assignor to J. E. Alexander

July 20, Younger, E. L., & Sons. (See Younger, Signor.) Younger, Ellard L., assignor to E. L. Younger & Sons, Woodland, Calif. Dehydrator. 1,648,468; Nov. 8: Younghushand, James L., Chicago, III. Cosmetic case. 1.642.188; Sept. 13.
Youngman, Robert H. (See Schlotterer, G. K., and Youngman, Robert H. (See Schlotterer, G. K., and

Youngstand Walter, Winnipeg, Manttoba, Canada Combination, Scarlifer and cleaner, 1,629,900; May 24.
Youngson, Alexander C., Brooklyn, N. Y. System for preparing packages for shipment or delivery. 1,626,492; Apr. 26.
Youngstown Pressed Steel Company. (See Curtis, Lewis

Toungstown Pressed Steel Company. (See Curus, Lewis E., assignor.)
Youngstown Pressed Steel Company. (See Manofsky, John assignor.)
Youngstown Pressed Steel Company. (See Winter, John R., assignor.)

Youngstown Sheet and Tube Company, The. (See Thomas, Thomas C., assignor.) Youngstrom, William H. (See Halverson, H. J., and

Youngstrom, William H. (See Halverson, H. J., and Youngstrom.) Yount, Miles F., Beaumont, Tex. Counterweight. 1.616,100; Feb. 1. Yourtee, Samuel T., Deltabridge, La. Tractor. 1,616,295; Feb. 1.

Yourtee, Samuel T., Deitabridge, La. Tractor. 1,616,286; Reb. I. Youse, Oscar, Angola, Ind. Shock absorber. 1,650,680; Youtsey, Floyd S. (See Dresser, C. G., and Youtsey, Floyd S., assignor of one-half to C. D. Lukens, St. Louis, Mo. Casting method and apparatus. 1,634,482; July 5. Youtz, Jesse P., Rio De Janelro, Brazil, assignor to General Electric Company. Projection lantern. 1,633,837; June 28.

erai Escettie Company.

June 28.

Yowell, Mark, Carlinville, III. Airship. 1,651,309;

Nov. 29.

Yes. P. and Ysern y Dominguez.

Ytterberg, Arle, assignor to Alimanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden. Testing electric machinery. 1,624,457; Apr. 12.

Yuhasz, Andrew F., Cleveland, Ohio. Emergency bed. 1,640,743; Aug. 30.

Yuille, Nathaniel A., San Francisco, Calif. Dredging. 1,682,655; July 19. See Mason, T. S., and Yungk.)

Yungk, Edwin L., See Mason, T. S., and Yungk.)

Yungk, Edwin L., See Mason, T. S., and Yungk.)

Yungk, Edwin L., See Mason, T. S., and Yungk.)

Yungk, Edwin L., See Mason, T. S., and Yungk.)

Yungk, Edwin L., See Mason, T. S., and Yungk.)

Yungk, Edwin L., See Mason, T. S., and Yungk.)

Yungk, Feb. 15.

Yuyama, Juzi, Omori, Japan, assignor to General Electric Company. Measuring voit amperes. 1,641,654; Sept. 6.

Yutzler, Fred W. (See Kent, G. E., and Yutzler.)
Yuyama, Juzl, Jomot, Japan, assignor to General Electric Company. Measuring volt amperes. 1,641,654;
Zabel, Charles, Coraopolis, Pa., Gyratory pan toy.
1,626,904; May 3.
Zabel, Charles, Coraopolis, Pa., assignor, by mesne assignments, to T. Zabel, Feura Bush, N. Y. Toy pile driver.
1,633,155; June 21.
Zabel, Charles, Coraopolis, assignor, by mesne assignements, to McDowell Manufacturing Company. Milivale, Pa. Mechanical toy and making same. 1,641,653;
Sept. 6.
Zabel, George W., Sherman, Calif. Hinge. 1,626,372;
Apr. 26.
Zabel, George W., Sherman, Calif. Hinge. clutch.
1,626,373;
Apr. 26.
Zabel, Rudolph, et al. (See Bongers, Arnold H., assignor.)
Zabel, Tosca. (See Zabel, Charles, assignor.)
Zabel, Tosca. (See Scallivan, C. E., and Zabolitzky.)
Zabolitzky, Louis. (See Sullivan, C. E., and Zabolitzky.)
Zabolitzki, Lexier C. (See Drew, P., and Zabriskie.)
Detroit, Mich. Metallic Joist. 1,622,559; Mar. 29.
Zäch. Johann, Munich, Germany. Water vehicle.
1,646,178; Oct. 18.
Zachara, Ladislaus, Bremerton, Wash. Electric spectacle.
Rel0,521; Jan. 2.
Rel0,521; Jan. 2.
Rel0,521; Jan. 2.
Zachert, Victor. (See Dolbear, S. H., and Zachert.)
Zachry, Waiter H. (See Keener, Charles M., assignor.)
Zachert, Victor. (See Dolbear, S. H., and Zachert.)
Zachy, Waiter H. (See Keener, Charles M., assignor.)
Zachert, Victor. (See Dolbear, S. H., and Zachert.)
Zachert, Victor.

Zademach, Erich R., New Rochelle, N. Y., assignor, by meane assignments, to Hobart Manufacturing Company. Troy, Ohio. Washing machine. 1,628,818; May 17. Zagelmeyer, Frank. Bay City, Mich. Automobile camp trailer. 1,650,253; Nov. 22. Zahn, Carl. (See Schirmacher, K., Zahn, Wilke, and

Trailer trotter children to the control of the cont

May 17.

Zahnradfabrlik Aktlengesellschaft (See von Soden-Fraunhofen, Graf A., assignor.)

Zahodlakin, Victor F., Norwood, assignor of one-third to J. A. Scanlon, trustee, Cincinnati, Ohio. Internal-combustion engine. 1644,907; Oct. 11.

Zahodlakin, Victor F., Norwood, assignor of one-third to J. A. Scanlon, trustee, Cincinnatil, Ohio. Automatic rotary-valve cleavance reculator for internal-combustion engines. 1644,998; Oct. 11.

Zaidam Holin Kikagaku Kenkyudo. (See Ikeda, K., Zaikowsky, Wladimir M., Pasadena, Calif., assignor to Standard Development Co., New York, N. Y. Internal-combustion engine. 1, 648,929; Nov. 15.

Zait Syndicate, Limited. (See Wilkinson, Samuel W., assignor.)

Zaiss, Fred E., Los Angeles, Calif. Automatic hard-candy machine. 1,640,868; Aug. 30. Zaki, Joseph, Akron, Ohlo. Hosiery. 1,654,064; Dec. 27.

Zaleski, Frank, assignor to Reece Shoe Machinery Company, Boston, Mass. Sewing machine. 1,631,179; pany, Boston, June 7.

tecting cables from kinking at the point when the emerge from junction boxes or casings. 1,640,744; Aug. 30.
Zarobsky, Charles A., assignor to the Simplex Cap Company, Cleveland, Ohio. Closure. 1,627,762; May 10.
Zarobsky, Charles A., assignor to The Simplex Cap Company, Cleveland, Ohio. Closure. 1,664,966; Dec. 27.
Zartman, Charles A., assignor to The Simplex Cap Company, Cleveland, Ohio. Closure. 1,664,966; Dec. 27.
Zartman, Charles, Los Angeles, Calif. Sight reflectors and glareshield. 1,628,704; May 17.
Zastrow, Edgar E., Chanute, Kans. Storage-battery terminal. 1,634,280; July 5.
Zatzerkowny, Hawryil. (See Kindrat, M. J., and Zatzerkowny, Hawryil.)

kowny.) Zatzerkowny, Hawryll. (See Kindrat, M. J., and Zatzer-

Zavarchowny, Hawryll. (See Kindrat, M. J., and Zatzer-Zavarchowny, Hawryll. (See Kindrat, M. J., and Zatzer-Zavardo.) Alfred N., San Francisco, Calif. Compass. 1,637,607; Aug. 2.
Zavertnik, Joseph, Jr., Chicago, Ill., assignor to The Barrett Company. Preparation of saturants. 1,632,607; July 12.
L635,271, July 12.
L635,271, July 12.
L635,271, July 13.
L635,271, July 14.
L635,271, July 15.
L

Zeh, Ludwig. (See Dulsberg, V.,
Zeh, Ludwig. (See Dulsberg, V.,
Illismann.)
Zehl, Franz H. (See von Littrow, H., and Zehl.)
Zehl, Franz H.
Zehmann, Arthur, Rossberg-Beuthen, Germany. Silding
window. 1.633.963; June 28.
Zehnle, George, Quincy, Ill. Clevis hook. 1.650.735;
Nov. 22. Rennomy. Spring Pad Co. (See Zeidler, William
Rennomy. Rennomy. Spring Pad Co. (See Zeidler, William
Rennomy. Rennomy. Spring Pad Co. (See Zeidler, William
Rennomy. Rennom

Zeituler Economy Spring Pad Co. (See Zeidler, William A., assignor.)

Rooklyn, N. Y. Circular forming tool. Zeidler, William L., assignor to Zeidler Economy Spring Pad Co., Inc., New York, N. Y. Pad for laundry and other machines. 1,630,459; May 31

Zeidler, William A., assignor to Hurlburt Research Corporation, New York, N. Y. Scissors. 1,645,035; Oct. 11.

Zeidler, Charles D., St., Page 1.

Oct. 11.

Scieler, Charles D., St. Paul, Minn. Christmas-tree holder. 1.644-807; Oct. 11.

Scieler, Googee E. Plitsburgh, Pa. Glass-forming machine. 1.649.641; Nov. 15.

Scindlhofer, Anton. Sr., Vienna, Austria, assignor to Grove-Lock Co., Inc., New York, N. Y. Fastening device. 1.623.610; Apr. 2.

Zels. George J., Birnalo, N. Y. Automobile radiator orpament. Des. 73.548; Sept. 27.

(See Bauersfeld, Walther, assignor.)
(See Eppenstein, Otto, assignor.)
(See Henker, Otto, assignor.)
(See Konig, About assignor.)
(See Konig, About assignor.)
(See Maggiore, Luigi, assignor.)
(See Mechau, Robert, assignor.)
(See Siedentopf, Henry, assignor.)
(See Siedentopf, Henry, assignor.)
(See Siedentopf, Henry, assignor.)
(See Stelle, A., and Eppenstein, Zeiss, Firm of Carl.
Zeiss, Firm of Carl. Firm of Carl.

assignors.)
Zelss, Firm of Carl. (See Von Gruber, Otto, assignor.)
Zelss, Firm of Carl. (See Wandersleb, Ernst, assignor.)
Zeitser, Jakob, Lorch, Germany. Water tower for frefighting purposes. 1,644,972; Oct. 11.
Zeitung, Alpeck L., assignor to International Silver Com1,631,780; June Conn. Display chest for silverware.
1,631,780; June Conn. Display chest for silverware.
2 classko, Joseph. (See Slowinski, E., and Zelusko,)
Zeletzki, Willy, assignor to Gesellschaft für Drahtlose
Telegraphie m. b. H. Hallesches, Herlin, Germany.
Key circuit for tube senders. 1,646,517; Oct. 25.
Zeltwski, Alexander, Oberschonewide, near Berlin, Germent for transporting large transformers. 1,616,667; Jan. 25. many, assignor to General Electric Companient for transporting large transformers.

Zelger, Georges E., Vincennes, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Obtaining direct positives by reversal, 1,628.445:

Obinhing direct positives of May 10.
Zeller, George, et al. (See Gerau, George B., assignor.)
Zeller, Jacob F., Riverside, Calif. Demountable wheel.
1,617,003; Feb. 8.
Zeller, Join C., Watford City, N. Dak. Sickle.
1,629,428; May 17.
Zeller, Joseph V. (See Hower, J. B., and Zeller.)
Zeller, Otto, East Aurora, and C. Waldman, Butfalo, assignors to National Aniline & Chemical Company, Inc., New York, N. Y. Sulphur black dye. 1,630,818;
May 21. signors New Yo May 31.

May 91.

Zellweger A-G. (See Hammer, Willibald, assignor.)

Zellweger, John, St. Louis, Mo. Process and apparatus
for inducing germination and growth of seeds and
plants. 1,623,181; Apr. 19.

Zelov, Victor I, Rosemont, Pa. Hydraulic testing apparatus. 1,550,735; Nov. 29.

Zet, Elmer J., Fot Wayne, Ind., assignor to General
Electric Company. Electric signal lamp. 1,618,741;

Feb. 22.

Zeman, Anton, assignor to J. Saltzman, Chicago, Ill. Pressing machine. 1,620,248; Mar. 8.
Zengerle, Joseph W., Mount Pleasant, Mich., assignor to The Flowers Mausoleum Company, Toledo, Ohlo, Mausoleum. 1,631,239; June 7.

Zenite atent Company, signor.) Zenith Radio Corporation, (See Marks, Samuel I., as-signor.) Zenith Thread Company, (See Petersen, Anker, as-

Zenker, Hermann, Steglitz-, near Berlin, Germany. Weaving device. 1.615.805; Jan. 25.
Zeno Button Company, The. (See Wynn, John G., as-

signot. Am L. (See Varble, Albert B., assigner.).

Zetter, Mathew, Oshkob, assignor to Tella Sheet Metal
Co., Oshkosh, Wis. Check draft, 1,626,174; Apr. 26,
Zentz, James R., assignor of one-half to B. B. McCormick,
Los Angeles, Calif. Catafalque, Des. 73,247; Aug. 9.
Zeolite Engineering Co. (See Kenney, William J., assignor.)

Zeppelinwerk Lindau Gosellschaft mit beschränkter Haf-tung. (See Dornier, Claudius, assignor.) Zeratsky, August W., and W. V. Klidder, La Crosse, Wis. Air-supply connection for carburetors. 1,644,766: Air-sup Oct. 11

Zerbe, Karl, Milwaukee, Wis. Carcass scrubber. 1.617.002; Feb. 8. Zerbe, Lewis E. (See Timbs, E., and Zerbe.) Zerbe, Lewis E. (See Timbs, E., Zerbe and yon Schlegell.) Zerga. (harles, Philadelphia, Pa. Shoe shank. 1,625,346; Apr. 19.

Zerk, Osear, now by judicial change of name Osear Ulysses Zerk, Cleveland, Ohio, assignor, by mesne assignments to The Bassick Manufacturing Company, Lubricant-receiving nipple. 1.619.454; Mar. 1. Zerk, Osear, now, by judicial change of name, 0, U, Zerk, Cleveland, Ohio, assignor, by mesne assignments, to pensing apparatus. 1.645.888; Oct. 18. Zerk, Osear, now by judicial change of name, 0, U, Zerk, Cleveland, Ohio, assignor, by mesne assignments, to The Bassick Manufacturing Company, Lubricant-feeding in the Company of the C

Zerk, Oscar U., Detroit, Mich., assignor, by mesne assignments, to The Basslek Manufacturing Company. Lubricating nipple. 1,619,465; Mar. 1, mesne assignments, to The Basslek Manufacturing Company. Lubricating nipple. 1,619,465; Mar. 1, mesne assignments and the state of the st

1.635.738; July 18.

1.620.710; Stepler, Marian, et al. (See Fenner, 1989.85)

1.620.710; Stepler, Virgil A., St. Louis, Mo. Baking pan. 1,620.710; Stepler, Virgil A., St. Louis, Mo. Baking pan. 1,620.710; Stepler, John D., New York, and F. A. Rudolf, Jamaica, N.Y. Distillation of carbonaceous material. 1,617,697; Feb. 15.

1.637.389; Stepler, John D., New York, N. Y. Broom and Jamaica, N.Y. Broom and Jamaica, J. Stepler, J. Stepler,

Zieley, John D., New York, and F. A. Rudolf, Jamaica, N. Y. Distillation of carbonaceous material. 1,617,697; Zienbinski. Sigmund W., New York, N. Y. Broom and mon hanger. 1,618,023; Feb. 22. Zierdt, Conrad H., Penn Township, Allegheny County, Pa., assignor to The Union Switch & Signal Company, Swissvale Pa. Railway-track-circuit regulation. 21,1612,03; Jan. 4. Zieles, Zi

Zilllox, John, assignor to Park Metalware Co. Inc., Orchard Park, N. Y. Wire connecter. 1,635,200; July 12.

July 12.

July 13.

July 14.

July 15.

July 16.

July 16.

July 17.

July 18.

July 18.

July 19.

July 19

and Heron.)

Zimmerman, Casper, Fort Collins, Colo. Bridge. 1.616,480; Feb. 8.

Zimmerman, Charles, and W. T. Hamner. Los Angeles, Calif. Automobile headlight dimmer. 1,652,082; Dec. 6.

Zimmerman, Charles H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Airship nose batten, 1.622,649; Apr. 6.

Zimmerman, Emil C., assignor to Q & C Company, New Oct. N. Y. Foot guard for guard rails. 1,644,048; Zimmerpan, Barne. (Sc. Vic. 1997)

York, N. Y. Foot guard for guard rails. 1,644,048; Oct. 4.
Zimmerman, Harry. (See Yerges, Frank L., assignor.)
Zimmerman, Harry. Fremont, Ohlo. Stitched buffing section. 1,648,690; Sept. 27.
Zimmerman, Harry. Charletter of Bar-Zim Toy Manufacturing of Hinry assistance of Line of Section 1,000 of Line of Line

Dec. 27.

Zimmerman, Henry R., Topeka, Kans. Light-projecting device. 1,633,838; June 28.

Zimmerman, Herman E. (See Holtom, Albert O., as-

signor.)
Zimmerman, Hymen, New York, assignor to Art Cage
Manufacturing Company, Inc., Brooklyn, N. Y. Birdcage bottom, 1,651,982; Dec. 6.
Paramount Knitting
Mills, Philadelphin, Pa. Swenter, 1,651,239; Nov. 29,
Zimmerman, Jesse M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Relayoperation indicator, 1,647,328; Nov. 1,
Zimmerman, Joseph, and F. A. Glock, Dayton, Ohio.
Zimmerman, Joseph, and F. A. Glock, Dayton, Ohio.
Dec. 6. https://doi.org/10.1001/j.1001

Dec. o. Zimmerman, Victor, Holyoke, Mass. Ventilated hat. 1.647.030; Oct. 25. Zimmerman, William R. (See Bezzenberger, F. K., and

mann.)

mann.)

Zimmerman. Paul G., and B. V. Korvin-Kroukovsky,
Keyport N. J., assignor. by mesne assignments, to
Keyport N. J., assignor. by mesne assignments, to
ator. 1.621.918: Mar. 2mpany, inc. Wing-nose radiator. 1.621.918: Mar. 3mpany, inc. Winginc. Manufacturing quicktraverse shapers. 1.615.185; Jan. 18.
Zimmermann. William F., Maplewood, assignor to Gould
& Eberhardt, Newark, N. J. Spur-hobbing machine.
1,625.680; Apr. 19.

Zimmermann, William F., Maplewood, N. J., assignor to Gould & Eberhardt, Newark, N. J. Fired-angle helleal-gear hobber, 1,625,531; Apr. 19.
Zimmermann, William F., Maplewood, assignor to Gould & Eberhardt, Newark, N. J. Simplified hobber, and the state of the state

Ziola, Henry A., assignor to The Swartzbaugh Mfg. Co., Toledo, Ohio.
 Electric heater.
 Liola, Henry A., assignor to The Swartzbaugh Mfg. Co., Toledo, Ohio.
 Electric heater.
 Liola, Henry A., assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio.
 Handle latch for doors.
 Liola, Henry A., assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio.
 Handle latch for doors.
 Liola, Henry A., assignor.
 Ziringer.
 Rosco C., Pittsburgh, Pa.
 Display rack.
 Liola, S.28.
 Nov. 8.
 Zisch, George J., West Orange, N. J.
 Loud-speaking telephone receiver.
 Löze, J. J.
 Liola, S.71.
 N. West Orange, N. J.
 Liola, S.71.
 N. V.
 Locking device.
 Liola, S.71.
 N. Y.
 Locking device.
 Liola, S.71.
 Mar. 8.
 Zitscher, Arthur, and R. Schmitt, Offenbach-on-the-Main, Mar.
 Zitscher, Arthur, and R. Schmitt, Offenbach-on-the-Main,

Mar. 8.

Zitscher, Arthur, and R. Schmitt, Offenbach-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Di-acylacetyl-arylenedlamine and making same. 1,634,090; June 28.

Zizinia, Paul T., Belmar, N. J., assignor to Industrial Spray-Drying Corporation. New York. N. Y. Spray-processing apparatus. 1,634,640; July 5.

Zobel, Benjamin J., Buffalo, N. Y. Tire rim. 1,634,305; Aug. 23.

Zizinia, Paul J., Buffalo, N. Y. Tire rim. 1,640,305; Aug. 23.

July 5.

Zobel, Benjamin J., Buffalo, N. Y. Tire rim. 1,640,305; Aug. 23.

Zobel, Otto J., New York, N. Y., assignor to American Telephone and Telegraph Company. Electrical wave filter. 1,015,229; Jan. 25.

Telephone and Telegraph Company. Electrical wave filter. 1,044,004; Oct. 4.

Zoelly, Alfred, and P. Spiess, Zurleh, Switzerland. Rator blading for rotary engines, particularly for steam turbines and gas turbines. 1,639,247; Aug. 16.

Zoelly, Heinrich, Zurleh, Switzerland. Railway vehicle.

Zoelly, Heinrich, Zurleh, Switzerland. Railway vehicle.

Josephy, Heinrich, Zurleh, Switzerland. Railway vehicle.

Zoelly, Heinrich, Zurleh, Switzerland. Railway vehicle.

Zoelly, Heinrich, Zurleh, Switzerland. Railway vehicle.

Zoelly, Heinrich, Zurleh, Switzerland. Power-driven vehicle. 1,627,303; May 3.

Zogkaum, Ferdinand. assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system. 1,632,016; June 14.

Zoebnum, Ferdinand, assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system. 1,638,061; Dec. 20.

Zohner, Louis, Clifton, Colo. Adjustable hanger. 1,1613,636; Jan. 11.

Zoline, Orrin B., assignor to Brand & Oppenheimer, Incorporated, New York, N. Y. Siltting machine. 1,028,215; May 10.

Zoll Harry E., Philadelphia, Pa. Radiocabinet. Des. 13,815; Nov. 8.
13,815; Nov. 6.
14,816; Nov. 6.
15,816; Nov. 6.
15,816; Nov. 6.
16,816; No

assignor.) owie Manufacturing Company. (See Sewoster, Henry

Zouri Drawn Metals Company. (See Nelson, Charles G., assignor.)

Zowie Manufacturing Company. (See Sewoster, Henry J., assignor.)

Brooklyn, N. Y., assignor, by mesne assignments, to Automat Equipment Corporation. Vending machine. 1,633.451; July 12.

Zsoldos, Julius, Brooklyn, N. Y., assignment, by mesne assignments, the Automat Equipment Corporation. Vending machine. 1,633.652; July 142.

Vending machine. 1,633.652; July 120.

Zubaty, Joseph, Flint, Mich. Brake. 1,638.290; Nov. 8.

Zuber, Herman, Murphysboro, Ill., assignor of one-third to C. Zuber, Bowling Green, Mo. Milk-bottle cap. 1,614.094; Jan. 11.

Zublin, John A., Los Angeles, Calif. Packing structure. 2001; July 120.

Zubin, John A., Los Angeles, Calif. Reciprocating pump. 1,025,182; Apr. 19.

Zubin, John A., Los Angeles, Calif. Pump plunger. Zubrow, Hedwig, and E. Solomon, Philadelphia, Pa. Cushinning unit for vehicle tires. 1,631.447; June 7.

Zubrow, Simon, Philadelphia, Pa. Badge or like article. Des. 7,259; Apr. 19.

Zucco, Fierre. Seep de Lambert Léonce, assignor.)

Zucco, Fierre. Seep de Lambert Léonce, assignor.)

Zucco, Fierre. Seep de Lambert Léonce, assignor.)

Zucco, Pierre. Seep de Lambert Léonce, assignor.)

Zucco, Pierre. Seep de Lambert Léonce, assignor.)

Zucco, Nicholas, Rochester. N. Y. Chock brake. 1,619.487; Mar. 15.

Zucker Benjamin, New York, N. Y. Chock brake. 1,619.487; Mar. 15.

Zucker Benjamin, New York, N. Y. Chock brake. 1,619.487; Mar. 15.

Zuckerman, Adolph M., assignor to R. Hoe & Co., Inc., New York, N. Y. assignor.)

May 17.

Luckerman, Adolph M., assignor to R. Hoe & Co., Inc., New York, N. Y. Associating and delivery mechanism. 1,637,170; July 26.

Zuckerman, Adolph M., assignor, by mesne assignments. to R. Hoe and Co., Inc., New York, N. Y. Sheet feeding and associating mechanism. 1,650,923; Nov. 29.

Zuckerman, Roscoe C., Stockton, Calif. Sacking apparatus for potto intresters. 1,639,832; Aug. 23.

Zuckerman, Roscoe C., Stockton, Calif. Device for separating control of the co

otatoes from flotable foreign matter. 1,643.596;

Zuehlte, Fred H., Davenport, Wash. Harrow. 1,627,002; Zukor, Arnold, New York, N. Y. Door fastener. 1,636,947; July 26. Zu Löwenstein, Karl P., Berlin, Germany. Device for drilling or chiseling away rock. 1,622,896; Mar. 29.

Zumwalt, Joseph C., Clay Center, Nebr. Disk sharpener. 1,642,004; Sept. 13.

Zur, Anton, Chicago. III. Window latch. 1,653,143; Dec. 20.

Dec. 20.

Zuschlag, Theodor, assignor, to The Taumac Corporation, New York, N. Y. Investigating the nature of subterranean strata. 1.652.227; Dec. 13.

Zuspan, Charles E. (See Wade, V. M., and Zuspan.) Zudvern-philipp. (See Schmidt, K. F., and Zuspan.) Zuyderhoudt, Fanny. (See Zuyderhoudt, Friere C.) Zuyderhoudt, Flerre C., deceased, Erussels, Beiguin; F. Zuyderhoudt, Pierre C., deceased, Erussels, Jeiguin; F. Alexander C., and J. (1988) Jeiguin; F. Leveina, Alexander F., Pittsburgh, Pa. Henter, 1.648,600; Nov. 8.

Zweig, Joseph, Brooklyn, N. Y. Lighting fixture. Des. 72,538; Apr. 26.

22,005; Apr. 20.

Zwelg, Louis, Brooklyn, N. Y., assignor to Sun Rise Lamp
Mfg. Co., Inc. Table torchère or analogous article.
Des. 73.421; Sept. 6.

Zwelg, Louis, Brooklyn, N. Y., assignor to Sun Rise Lamp
Mfg. Co., Inc. Table lamp or analogous article, Des.
73.422; Sept. 6.

Zweig, Louis, Brooklyn, N. Y., assignor to Sun Rise Lamp Mfg. Co., Inc. Lamp or analogous article, Des. 73,423; Sept. 6.

Zweig, Louis, Brooklyn, N. Y., assignor to Sun Rise Lamp Mg, Co., Inc. Combined platform, lamp, and incense burner for smoking stands or similar articles. Des. 73.463; Sept. 13. Zwiebel, Carl. (See Jones, R. C., and Zwiebel.) Zwierzina, Alois J. (See Ackerman, E. L., and Zwier-

Zwierrina, Alois J. (See Ackerman, E. L., and Zwierzina.)
Zworykin, Vladimitr K., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company.
Wireless transmitting system. 1,634,390 ; July 5.
Zworykin, Vladimir K., assignor to C. & C. Developing Company.
Kinstanting System. 1,634,390 ; July 5.
Sept. Zilleworth B. A., Perth Amboy, N. J., assignor to Work.
Y. Process and apparatus for briquetting.
Zwoyer, Ellsworth B. A., Perth Amboy, N. J., assignor to The General Fuel Briquette Corporation, New York.
N. Y. Briquetting method. 1,627,222; May 3.
Zwoyer, Ellsworth B. A., Perth Amboy, N. J., assignor to The General Fuel Briquette Corporation, New York.
N. Y. Briquetting method. 1,627,222; May 3.
Zwoyer, Ellsworth B. A., Perth Amboy, N. J., assignor to Carbonizing fuel briquettes. 1,627,625 July 10. N. Y.
Zygmunt, Courad, North Milwaukee, assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,648,251; Nov. 8.
Zylo Ware Corporation, Inc. (See Shyer, Joseph, assignor.)

ALPHABETICAL LIST OF DISCLAIMERS.

Abell, Rollin, Boston, Mass. Disclaimer filed by the as-signees, Fannie Shaffer and Margaret N. P. Colburn. Carburetor. No. 1,158,259; disclaimer filed Oct. 14, 1927; v. 364; p. 7.

1927; v. 364; p. 7.

Ahlers, Robert H., and Earl M. Polk, Dayton, Ohio. Disclaimer filed by the patentees, assignee by mesne assignments, Delco-Remy Corporation, consenting. Apparatus for making armatures No. 1,556,691; disclaimer filed to the patentee, assignee, S. A. Cochin & Son Company, Disclaimer filed by the patentee, assignee, S. A. Cochin & Son Company, No. 1,558,501; disclaimer filed Mar. 12, 1927; v. 365, p. 388.

p. 988.

Andersen, Anders H., Poughkeepsie, N. Y. Disclaimer filed by the patentee. Class ring. Des. No. 69,830; disclaimers filed May 6, 1927; v. 358; p. 814; and Des. No. 70,047; filed May 6, 1927; v. 358; p. 814; and Des. No. 70,047; filed May 6, 1927; v. 358; p. 814. (Two cases.)

Anibal, Benjamin H., Detroit, Mich. Disclaimer filed by the assignee, The Studebaker Corporation. Instrument panel. No. 1,585,636; disclaimer filed No. 19, 1927; v. 365; p. 11.

Barrett, Glenn J., Grand Rapids, Mich. Disclaimer filed by the assignee by mesne assignments, Remington Typewriter Company. Typewriting and computing machine the property of the company. Typewriting and computing machine. P. 814; and 1,459,814; filed Apr. 21, 197; v. 368; p. 814. (Two cases.)

p. 814. (Two cases.)
Benson, Bernhart A., Chicago, III. Disclaimer filed by
the patentee, assignee by mesne assignments, Chicago,
Electric Manufacturing Company, consenting.
Fracket
for lumps. No. 1,551,533; disclaimer filed Apr. 7,
1927; v. 387; p. 536.
Bethel, Claude. Wilkinsburg, Pa. Disclaimer filed by the
patentee, assignee, Westinghouse Electric & Manufaction, assignee, assignee, we have a series of the series of the

210.
Colman, Howard D., Rockford, Ill. Disclaimer filed by the assignee, Barber-Colman Company. Machine for operating upon warps. No. 1,442,776; disclaimer filed Sept. 2, 1927; v. 362; p. 450.
Ebeling, August, Berlin-Schoneberg, Germany. Disclaimer filed by the assignee, Siemens & Halske Aktiengesellschaft. Telegraphy. No. 1,49,046; disclaimer filed Oct. 21, 1927; v. 364; p. 254.
Ellis, Carleton, Montclair, N. J. Disclaimer filed by the assignee by mesne assignments, Standard Development Company. Making motor fuel. No. 1,318,061; disclaimer filed May 12, 1927; v. 338; p. 814.
Folberth, William M., Cleveland, Ohio. Disclaimer filed by the assignee by mesne assignments, Trico Products Corporation. Windsheld-delanting apparatus. No. 1,405,773; disclaimer filed Nov. 28, 1927; v. 365; p. 233.

233.

Gibson, George Herbert, Montelair, N. J. Disclaimer filed by the patentee. Five-proportioning apparatus. Prospection of the property of the patentee filed Aug. 6, 1927; v. 361; p. 365. (Two cases.) Siled Aug. 5, 1927; v. 361; p. 569. (Two cases.) Goodrum, Charles L. New York, N. Y., and John E. Reynolds, Greenwich. Conn. Disclaimer filed by the patentees, assignee, Western Electric Company, Incorporated, consenting. Telephone system. No. 1,515,735; disclaimer filed Feb. 8, 1927; v. 366; p. 1.

Gullborg, Arthur V., Chicago, Ill. Disclaimer filed by the assignee by mesne assignments, The Bassick Manu-facturing Company. Lubricating means. 1.307,734; disclaimer filed Aug. 29, 1927; v. 362; p.

Table 1 and 1 and

and 1,621,549; filed Oct. 18, 1927; v. 394; p. 254. (Four cases.)

O'Connor, John F., Chicago, Ill. Disclaimer filed by the assignee by mesne assignments. W. H. Miner, Inc. Friction shock-absorbing mechanism. No. 1,620,678; disclaimer filed July 2, 1927; v. 361; p. 210. The control of the c

corporated, consenting, Telephone-exchange system, No. 1.577,076; disclaimer flied Jap. 14, 1927; V. 358; p. 1051.
Powell, Winfred T., Chicago, III. Disalaimer flied by the state assignments, automatic Electric Claimer filed Apr. 15, 1927; V. 358; v. 5.
Pray, Thomas E., and George Bodin, Chicago, III. Disclaimer filed Jap. 15, 1927; V. 353; v. 5.
Pray, Thomas E., and George Bodin, Chicago, III. Disclaimer filed by pateriere, assignee, Goodman Manufacturing Company, consenting. Mining machine. No. 1,500,245; disclaimer flied Jan. 29, 1927; V. 355; p. 356; p. 368.

183.
Read, Charles Percy, Chleago, Ill. Disclaimer filed by the assignee, Simmons Company. Machine for placing springs in casing. No. 1,218,314; disclaimer filed Dec. 5, 1927; v. 364; p. 655.

Rogers, John F., Cleveland Heights, Ohio. Disclaimer flied by the assignee, The Wellman-Seaver-Morgan Communication of the Mar. 21, 1927; v. 857. No. 1, 07, 2041; disclaimer flied Mar. 21, 1927; v. 857. No. 1, 07, 2041; disclaimer flied May Expense by messe assignments, Moline Plow Company, Incorporated, Tractor attachment. No. 2,472,888; disclaimer flied May 25, 1927; v. 360; p. 37,472,888; disclaimer flied May 25, 1927; v. 360; p.

1.42,5.85; Goscillare inted hay 25, 182; V. 800; p. 745.

Russiante, Receptacle cover. No. 1.458,955; disclaimers fled June 6, 1927; v. 359; p. 497; and 1.511,426; filed June 6, 1927; v. 359; p. 497. (Two cases.)

Schurr, Charles H., Cleveland, Ohio. Disclaimer filed by the assignee, The Lees-Bradner Company. Indexing mechanism. No. 1.467,985; disclaimer filed Oct. 12, 1927; v. 354. Heythorne, N. J. Disclaimer filed by the assignee, Standard Silk Dyeing Company. Washable dyed silk piece goods and dyeing them. Reissue No. 16,016; disclaimer filed June 2, 1927; v. 359; p. 497.

Shipley, Stanley D., and Guy C. Given, Stamford, Conn. Disclaimer filed by the assignee, Atlas Powder Company. Lacquer and lacquer enamel. No. 1,533,516; Soublet, Leonard D., 70edo, Ohio. Disclaimer filed by the assignee, The Owens Bottle Company. Glass feeder. No. 1,614,936; disclaimer filed Apr. 2, 1927; v. 357; p. 536.

3

p. 500. Sparks, William, Jackson, Mich. Disclaimer filed by the assignee by mesne assignments, Stewart Warner Speed-ometer Corporation. Liquid-feeding device. No. 1,466,387; disclaimer filed June 16, 1927; v. 360; p.

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Stenhouse, Thomas, and David Stenhouse, Washington, Pa. Disclaimer filed by the assignee, Hazel-Atias Glass Company. Safety mechanism. No. 1,564,497; disclaimer filed Jan. 10, 1927; v. 255; p. 1.
Stewart, Franklin W., Chicago, Ill. Disclaimer filed by the patentee. Means for locking automobiles against theft. No. 1,541,773; disclaimer filed Oct. 7, 1927; v. 363; p. 691.

Sundback, Gideon, Meadville, Pa. Disclaimer filed by the assignee, Hookless Fastener Company. Separable-fastener slides. No. 1,302,606; disclaimer filed Aug. 4, 1927; v. 361; p. 425.

Tector, Martin, Des Molnes, Iowa. Disclaimer filed by the assignee by mesne assignments, Lincoln Accounting Machines Company. Calculating machine. No. 1,344,191; disclaimer filed Oct. 31, 1927; v. 304; p. 780.

orchio, Philip, New York, N. Y. Disclaimer filed by the assignee, Thomas E. Murray. Protective device for electric-cable joints. No. 1,172,322; disclaimer filed Feb. 11, 1927; v. 356; p. 1. Torchio,

filed Feb. 11, 1927, v. 356; p. 1.

Van Meter, Solomon L., ir, Lexington, Ky. Disclaimer filed by the patentee. Aviatory life buoy. No. 1,192,479; disclaimer filed Oct. 15, 1927, v. 364; p. 7.

Wadsworth, George H., Akron, Ohio. Disclaimer filed by patentee. Tire-spreading device. No. 1,589,274; disclaimer filed June 14, 1927, v. 359; p. 744.

Wahl, Leo J., Sterling, Ill. Disclaimer filed by the patent of the patent of

16, 1927; v. 354; p. 6. Weiss, Morris L., Brooklyn, N. Y. Disclaimer filed by the assignee, Dovan Chemical Corporation, patenta assenting, Vulcanization accelerator, No. 1,411,231; disclaimer filed Aug. 9, 1927; v. 361; p. 894. Wilkin, John T., Connersville, Ind. Disclaimer filed by the assignee, Connersville Blower Company, Gasmeter, No. 1,487,042; disclaimer filed June 20, 1927; v. 366; p. 259.

v. 360; p. 259. Wright, David C., Euclid, and Philip V. Tippet, Cuyahoga Falls, Ohlo. Disclaimer filed by the patentee. Effective controller. No. 1,559,832; disclaimer filed Nov. 26, 1927; v. 365; p. 233. Zeh, Edward A., Passaic, N. J. Disclaimer filed by patentee. Display globe, Des. No. 71,347; disclaimer filed June 11, 1927; v. 359; p. 744.

ALPHABETICAL LIST OF INVENTIONS

A battery trickle charger and B supply, Combined. D. R. Lovejoy, 1,623,628; Apr. 5.
Abdominal support. J. M. Bodensiek. 1,652,160; Dec. 13.
Abdominal support. C. H. Hittenberger. 1,619,518; Mar. 1.
Abdominal support and brassière, Combination. H. Frieland. 1,652,197; Dec. 13.
Abdominal support and protector. C. Volkert, jr. 1,642,279; Sept. 13.
Abdominal supporter. W. T. Buckner. 1,629,067; May *17. I.642.279; Sept. 13.
Abdominal supporter. W. T. Buckner. 1,629,067; May Abdominal supporter. J. M. Coon. 1,629,203; May 17.
Abdominoscope. R. T. Evans. 1,621,159; Mar. 15.
Abrading apparatus. J. Whalen. 1,621,159; Mar. 15.
Abrading apparatus. J. Whalen. 1,621,159; Mar. 15.
Abrasive and applying same to continuous grinding systems. Apparatus for grading. H. K. Hitchcock.
Abrasive article. M. L. Hartmann. 1,615,271; Jan. 25.
Abrasive compound. J. F. Werder. 1,623,222; Apr. 5.
Abrasive material. F. Werder. 1,623,222; Apr. 5.
Abrasive material. Sheet. H. Joseph. Rei,6535; Jan. 11.
Abrasive material, Sheet. H. Joseph. Rei,6355; Jan. 11.
Abrasive material, Sheet. H. Joseph. 1,614,618; Jan. 18.
Abrasive to plate-glass-grinding mechanism, Apparatus for applying. G. W. Oakes. 1,618,063; Feb. 15.
Abrasive wheel, Cutting-off. C. R. King. 1,616,531;
Abrasive wheel, Multiple-groove-dressing device for. W. Owen. 1,651,225; Nov. 29.
Absorber. J. A. Campbell. 1,643,696; Sept. 27.
Absorption method and apparatus. E. Altenkirch. 1,651,255; Nov. 29.
Absorber. J. A. Campbell. 1,643,696; Sept. 27.
Absorption method and apparatus. E. Altenkirch. 1,651,255; Nov. 29.
Absorber. J. A. Campbell. L. E. Simmons. 1,648,070; Nov. 8.
Accelerator attachment. P. L. Hartz. 1,620,649; Mar. 15.
Accelerator, Foot. J. E. Messenger. 1,629,292; May 17.
Accelerator pedal. L. J. Cole. 1,628,792; May 3, J. Accelerator pedal. L. J. Cole. 1,628,792; May 3, J. Accelerator pedal. L. J. Cole. 1,628,792; May 3, J. Accelerator pedal. L. J. Cole. 1,628,792; May 3, J. Accelerator pedal. L. J. Cole. 1,628,792; May 3, J. Accelerator pedal. L. J. Cole. 1,628,792; May 3, J. Accelerator pedal. L. J. Cole. 1,628,792; Acid chamber, Suppured. Mry 8. Mry 8. Acid compound, Thioglycollic. E. Lyons. Oct. 4. Acid compounds, Making sodium formate formic. E. Elöd. 1,650,984; Nov. 29. Acid, Concentrating dilute acetic. H. Suida. 1,624,812; Acid, Concentrating dilute acetic. H. Suida. 1,624,812; Apr. 12.
Acid, Concentration of dilute acetic. H. Suida. 1,624,810; Apr. 12.
Acid, Concentration of evaporation of phosphoric. E. L. Larison. 1,648,137; Nov. 8.
Acid derivative, Barbituric. E. H. Volwiler. 1,636,201; July 19. July 19.
Acid, Distilling hydrochloric. L. C. Drefahl. 1,628,829;
May 17. Acid. Distilling hydrochioric. L. U. M. W. Mathieson and K. G. Blaikie. 1,650,950; Nov. 29.
Acid. Seters. Manufacture of lactic. H. W. Mathieson and K. G. Blaikie. 1,650,950; Nov. 29.
Acid. Ethyl normal hexyl barbituric. A. W. Dox. 1,622,546; Apr. 12.
Mar. 8.
Acid from cyanides. Evolution of hydrocyanic. H. F. Lebrecke. 1,615,637; Jan. 25.
Acid from dlute aqueous solutions of the same, Production of concentrated acetic. H. Suida. 1,621,441; Mar. 15. Acid from dilute aqueous solutions of the same, Production of concentrated acetic. H. Suida. 1,621,441; Mar. 15.
Acid from phthalic anhydride, Producing benzoic. C. Conover. 1,645,180; Oct. 11.
Acid from sugar containing raw materials by means of acid from sugar containing raw materials by means of acid from the products of combustion of sulphur or sulphurous prites, Obtaining liquid sulphurous. P. Jodeck. 1,649,701; Nov. 15.
Acid, Iron, and magnesia from titaniferous ores, Recovery of titanic. F. E. Bachman. 1,618,795; Feb. 22.
Acid, Making nitric. J. H. Shapleigh and C. A. Bigelow. 1,653,023; Dec. 20.
Acid, Making sulphuric. W. F. Lamoreaux. 1,617,212. Jan. 18.

Jan. 18.

Accelerator pedal. F. C. Grant. 1,618,652; Feb. 22.

Accelerometer, Recording. G. Gardner. 1,634,992;

July 5.

Accessory container for railway use. F. P. Miller. Accessory for use in connection with hair waving or curling appliances. B. M. Ray. 1,637.277; July 26. Accessory for use in connection with hair waving or curling appliances. B. M. Ray. 1,637.277; July 26. Accordion. R. Pancotti. Des. 72.337; Mar. 29. Accordion plate. J. Galleazzi. 1,636.299; July 19. Accounting system. W. M. Fredenburg. 1,653.642; Mar. 29. Accounting machine. J. R. Peiree. 1,626.871; May 3. Accounting machine. J. R. Peiree. 1,626.871; May 3. Accounting machines. Carrying mechanism for. J. Boyer. 1,634.068; June 28. Accounting system. J. B. Wilkinson. 1,642.002; Sept. 13. Accounting system. J. B. Wilkinson. 1,642.002; Sept. 13. Accounting. System of accrual. L. A. Foote. 1,618,124; Feb. 15. Acid, Manufacture of hydrocyanic. W. Gluud. 1,622,372; Mar. 29. Acid, Manufacture of hydrocyanic. O. Liebknecht. 1,626,848; May 3. Acid, Manufacture of nitric. E. L. Nellis. 1,635,949; July 12. Acid, Manufacture of nitric. C. Toniolo. 1,623,606; Acid, Manufacture of nitric. C. Junious, Apr. 5.
Acid, Manufacture of sulphuric. E. L. Larison, 1.631.139; June 7.
1.631.139; June 7.
1.634.404; Dec 27.
Acid, Method of and apparatus for making nitric. A. Hough, 1.649.901; Nov. 22.
Acid, Perhod of and apparatus for making nitric. A. Gubelmann, H. J. Weilaud, and O. Stallman, 1.654.289; Dec. 27. Feb. 15: System of actions. L. A. Footel, 1,050,127; Accounts, Keeping. W. Rotsted. 1,636,441; July 19. Acctaldebyde and aniline, Preparing a reaction product of S. M. Cadwell. 1,627,259; May 3. Acctaldebyde, Producing. A. E. Craver. 1,636,952; July 26. July 26.

Acetic anhydride, Manufacturing, R. Meingast and M. Mugdan, 1.686,701; July 26.

Acetylaminosalicylic acid with aliphatic amines and making same, Compounds of, G. W. Raiziss and A. Proskouriakoff, 1.682,796; Dec. 13.

Acetyl-cellulose, Dyeing and printing, H. Hoz, W. Bernoulli, and A. Link, 1.613,228; Jan. 4.

Acetyl cellulose, Dyeing and printing, H. Hoz, W. Bernoulli, and A. Link, 1.632,276; Nov. 22.

Acetylene generator. A. F. Griardin, 1.649,582; Nov. 15.

Acetylene generator. A. F. Griardin, 1.649,582; Nov. 14.

Acetylene generator, L. W. Steiner, 1.642,467; Sent, 13.

Acetylene generator, Drubble, W. C. Swift, 1,627,581; May 10.

Acid accumulators, Peroxide of lend, zinc, and sulphuric.

A. Miolati. 1,632,307; June 14. Dec. 27.

Acid. Producing 1.8-bydroxynaphthoic. R. Herz and F. Schulte. 1.623,678; Apr. 5.

Acid. Producing of concentrated acette. E. von Retze. 1.644,676; Nov. 1.

Acid. Production of bydrocyanic. G. Bredig and E. Elöd. Acid. Production of bydrocyanic. G. Bredig and E. Elöd. 1.634,728; July 5.

Acid. Production of bydrocyanic. G. Bredig and E. Elöd. 1.634,728; July 5.

Acid. Production of maleic. A. E. Craver. 1.636,879; July 28.

Acid. Production of phesphoric. W. H. Brassert, W. H. A. Brassert, W. H. A. G. W. W. H. Waggaman and H. W. Easterwood. 1.632,082; Mar. 22.

Acid. Production of phosphoric. W. H. Waggaman and H. W. Easterwood. 1,630,283; May 31.

695

Acid, Purification of abietic. G. H. Dupont. 1,628,535; Acid, Furnication of absence, G. H. Dupont. Apacopose, May 10.
Acid, l'urification of burned gases and for obtaining chemically pure sulphuric. M. Krafft. 1,627,977;
M. 10.
M. Covering hydrochloric. H. Terrisse and M. Levy. 46,633,677; June 28.
Acid-resisting compound. N. H. Schneider. 1,638,709;

Acid-resisting compound for the treatment of bands. Aug. 5.
Acid-resisting compound for the treatment of bands. N. H. Schneider. 1,649,323; Nov. 15.
Acid subger provide a control Treatmen. W. D. Kinkade acid acid subger acid ester compound of aromatic hydroxy-alkylethers. W. Hentrich and M. Hardtmann.

Acid sulphuric acid esfer compound of aromatic hydroxy-alkylethers. W. Hentrich and M. Harddmann. 1.644.524; Oct. 4.
Acid, Treating sludge. F. M. Rogers, F. V. Grimm, and G. L. Wendt. 1,630,074; May 24.
Acids and other allphatic acids, Manufacture of butyric. L. Le France. 1,625,732; Apr. 19.
Acids and their saits, 3-amino-4-omega-hydroxyalkyl-aminophenyl arsonic. E. B. Vilet and E. H. Volwiler. 1,622,748; Dec. 13.
Acids for a way of the compound of the comp

Acids from ammonia liquor and other liquors, Removal of tar. H. W. Robinson and D. W. Parkes. 1,653,783; Dec. 27.
Acids from hydrocarbons, Making fatty. W. C. H. of tar. H. W. Robinson and D. W. Parkes. 1,633,783; Dec. 27.
Acids from hydrocarbons, Making fatty, W. C. H. Pataky and F. J. Nellensteijn. 1,627,452; May S. Acids from hydrocarbons, Making fatty, W. C. H. Pataky and F. J. Nellensteijn. 1,627,452; May S. Acids, Making aryl-peri, H. D. Gibbs and E. L. Frederick. 1,617,313; Feb. 8.
Acids, Making aryl-peri, H. D. Gibbs and E. L. Frederick. 1,617,313; Feb. 8.
Acids, Making keto and aldo aliphatic carboxylic. A. Hiussler. 1,627,691; May S. Acids, Making keto and aliphatic darboxylic. A. Hiussler. 1,627,691; May S. Acids, Preparation of aliphatic di- or poly-hydroxy-arsonic. C. J. Oechslin. 1,648,569; Nov. 8.
Acids, Preparation of aliphatic di- or poly-hydroxy-arsonic. C. J. Oechslin. 1,654,224; Dec. 27.
Acids, Preparing halogen substituted anhydrides of the fatty. H. T. Clarke and C. J. Maim. 1,648,549; Nov. 8.
Acids, Preparing halogen substituted anhydrides of the fatty. H. T. Clarke and C. J. Maim. 1,648,549; Nov. 8.
Acids, Producing lead compounds of chromic. A. Nathansohn. 1,633,984; June 28.
Acoustic device. C. Kyle. 1,644,387; Oct. 4.
Acoustic device. C. R. Moore. 1,644,788; Oct. 11.
Acoustic device. C. R. Macartney and A. V. Habn. 1,625,325; Apr. 19.
Acoustic horns, Mounting for. D. H. Moss. 1,647,462;

Acoustic horns, Mounting for. D. H. Moss. 1,647,462; Nov. 1.

Nov. 1.

Acridine derivatives and making same. H. Jensch. 1,629,873; May 24.

Activated nitrogen and of oxides of nitrogen therefrom, Production of. W. A. Bone. 1,639,584; Aug. 16.

Active deposit, Process and apparatus for concentrating. H. B. Palmer. 1,644,350; Oct. 4.

Acquated cellulose ethers, Making. Jun. 4.

Bana Wyconbergh. 1,613,451; Jun. 4.

Adding and listing machine. J. Sundstrand. 1,629,639; May 8.

Adding machine. H. D. Betz. 1,644,559; Oct. 4.

Adding machine. W. E. Dunning and J. Bachofen. 1,629,615; May 24.

1,629,615; May 24.

1.622,615; May 24.

Adding machine. H. Landsledel, 1.624,104; Apr. 12.
Adding machine. H. C. Peters. 1.646,105; Oct. 18.
Adding machine. F. C. Rinsche. 1.635,691; July 12.
Adding machines, Automatic shuttle-control mechanism for. B. H. Tingley, 1.625,291; Apr. 19.
Gladwill and G. M. Ramsey, 1.620,542; Mar. 8.
Adding machines, Nonprint mechanism for. H. Landsledel. 1.633,788; June 28.
Address plate. H. C. Osborn. 1.628,630; May 10.
Address plates, Receptacle for. H. C. Osborn. 1,628,631; May 10.

Addressing machine. C. Chisholm. 1.627,687; May 10.

Addressing machine. C. Chisholm. 1,627,687; May 10. Addressing machine. E. Heuzé-Beauregard. 1,637,938; Aug. 2.

Addressing machine. J. A. Hult. 1.627.240; May 3. Addressing machine. J. E. Johnson. 1.623.642; Apr. 5. Addressing machine. L. H. Morse. 1.627.662; May 10. Addressing machine. L. C. Morse. 1.627.662; May 10. Addressing machine. L. Schultz. 1.648.220; Oct. 18. Addressing machine, Iland-operated. E. A. Gelger. 1.651.70; Dec. 6. Addressing machine. J. Charlessing machines. Detachable pedal connection for. E. A. Gelger. A. P. Schraegle, and H. T. Jennings. 1.638.453; Nov. 8. Addressine machine.

Addressing machines, Extensible pedal connection for. E. A. Geiger, A. F. Schraegle, and H. T. Jennings. I.648.492; Nov. 8. Addressing machines, Listing attachment for. P. A. Golinick. 1,639,131; Aug. 16.

Addressing machines, Selective attachment for. E. A. Gelger, A. F. Schraegle, and H. T. Jennings. 1,625,358; Appliance of the control of the charge during the activation of carbon, Prevention of. H. Thienemann. 1,638,070; Aug. 9. Adhesive N. F. Zimmerli and C. H. Bibb. 1,626,438; Adhesive.

Adjustable bracket. C. J. Hass. 1,614,550; Jan. 18. Adjustable chair. P. B. Friedman. 1,640,494; Aug. 30. Adjustable chair, Vertically. E. Berninghaus. 1,651,506;

Adjustable clamp. J. Ryden and C. 1,642,829; Sept. 20.
Adjustable connection. T. A. English. Gustavson. 1.649.951:

Nov. 22.

Adjustable hanger. L. Zohner. 1,613,636; Jan. 11.
Adjustable hoop. M. A. Workman. 1,652,970; Dec. 13.
Adjustable seat. A. Tichota. 1,623,818; Apr. 5.
Adjustable wrench. G. S. Alnsley. 1,614,170; Jan. 11.
Adjustable wrench. V. E. Paulson. 1,631,834; June 7.
Adjusting device. L. E. Baltzley. 1,632,212; June 14.
Adjusting mechanism. F. X. Maloccay. 1,634,718;
Adjusting mechanism. F. X. Maloccay. 1,634,718;
Adjusting the spine. Device for. L. Schneffer. 1,640,519;

Adjusting the spine, Device for. L. Schaeffer. 1,640,519; Aug. 30.

Aug. 30.

Adsorbed material from adsorptive material, Recovering. G. Miller. 1,617,960; Feb. 15.

Adsorbent and the product thereof, Making an. K. Ikeda, H. Isobe, and T. Okazawa. 1,630,660; May 31.

Advancing articles. Method of and apparatus for, V. C. Huntington. 1,641,276; Sept. 6.

Advertisement-mounting device. E. O. Castleton. 1,613,933; Jan. 11.

Advertisements Juminous by the opening or closing of doors, Device for rendering. V. M. Kolbe. 1,640,001; Aug. 23.

Advertising and amusement apparatus. H. W. Yankele-

doors, Device for rendering.

Aug. 23.
Advertising and amusement apparatus, H. W. Yankelewitz. 1,634,765; July 5.
Advertising and displaying apparatus, Mechanical. E. T.
Young. 1,651,657; Dec. 6.
Advertising apparatus. K. G. Östberg. 1,619,987;
Mar. 8.

Mar. 8.

Advertising apparatus. J. Klein. 1,630,630; Nov. 29.
Advertising apparatus, Monogrammic. P. Narayan.
1,636,821; July 28.

Advertising cabinet or the like, Depository. J. K. Rystedt.
1,622,210; Mar. 22.

Advertising cigar cutter and lighter stand, Combined.
W. L. Ewing. Des. 73,653; Oct. 18.

Advertising device. B. M. Arns. 1,841,468; Sept. 6.

Advertising device. C. E. Betzler. 1,639,482; Aug. 16.

Advertising device. C. E. Betzler. 1,639,482; Aug. 16.

Advertising device. C. Guymon. 1,627,505; May 8.

Advertising device. C. Guymon. 1,627,505; May 8.

Advertising device. W. W. Hamel. 1,631,597; Dec. 6.

Advertising device. C. N. Harmon and J. P. Dames.
1,633,635; June 28. Advertising device,
Advertising device,
Advertising device,
Advertising device,
1,633,635; June
Advertising device.

device. S. device, G. Hornecker. 1.653.707; Dec. 27. device. G. Hornecker. 1.653.707; Dec. 27. device. J. C. Johanknegt. 1,632,973;

June 21

Advertising device, Animated. W. G. Gould. 1,644,580; Oct. 4. Advertising device, Automaton. S. W. and O. E. Carter. 1,633,313; June 21. Advertising device, Floating. O. Brinkmann. 1,648,934; Advertising device, Floating. O. Brinkmann. 1,648,934; Nov. 15.

Advertising device, Illuminated. E. L. Goodloe and G. L. Advertising device, Illuminated. W. G. Shelton. 1,634,309; May 24.

Advertising device, Illuminated. W. G. Shelton. 1,634,309; July 5.

Advertising device, Mechanical. J. T. Addleburg and L. M. Fox. 1,621,344; Mar. 15.

Advertising device, Rotating. B. Ruegger. 1,628,432; Advertising device, Rotating. B. Ruegget. A,020,700,7 May 10.

Advertising device, Taxi. E. Dobrowsky. 1,645,060, Oct. 18.

Advertising display. A. J. Macy. 1,614,748; Jan. 18.

Advertising display card. C. P. Potier. Des. 71,927; Advertising display card. C. P. Potier. Des. 71,927;
Jan. 25.
Advertising display device. F. W. Blumie. 1,622,410;
Mar. 29.
Advertising machine. C. Barlow. 1,612,850; Jan. 4.
Advertising machine. C. Barlow. 1,612,850; Jan. 4.
Mov. 15.
Advertising machine. C. Barlow. 1,612,850; Jan. 4.
Mov. 15.
Advertising machine. C. H. H. Desbarats. 1,622,223;
Mar. 22.
Advertising movelty. S. V. Anderson. 1,622,020; Mar. 22.
Advertising novelty. L. R. Suggs. 1,642,906; Sept. 20.
Advertising powelty. L. R. Suggs. 1,642,906; Sept. 20.
Advertising powelty. L. R. Suggs. 1,642,906; Sept. 20.
Advertising portfolio. L. Ston. 1,625,225; Apr. 19.
Advertising portfolio. L. Ston. 1,625,225; Apr. 19.
Advertising portfolio. L. Ston. 1,625,225; Apr. 19.
Advertising sign. U. Roberts. Des. 73,580; Oct. 4.
Advertising stand. R. G. Sherman. 1,627,751; May 10.
Advertising stand. R. G. Sherman. 1,627,751; May 10.
Advertising wares. J. G. Davies. 1,618,863; Feb. 22.
Acerating lquids, Apparatus for. W. Hucks. 1,623,011;
Mar. 29.
Acerator, Cream-can. A. W. R. Schultz. 1,643,822;
Sept. 27.
Sept. 27.
Sept. 27.
L. E. Fraser and L. Schultz. 1,649,767; Aug. 23.
Acerial advertisor, J. Chvojka. 1,619,565; Mar. 1.
Acerial advertisor, J. Chvojka. 1,619,565; Mar. 1.
Acerial advertisor, Night. L. Azarraga. 1,652,996;
Dec. 20.
Acrial and the like, Frame. P. W. Willians. 1,644,906; Dec. 20.
Acrial advertising, Night. L. Azarınga. 1,652,996;
Dec. 20.
Acrial and the like, Frame. P. W. Willians. 1,644,906;
Oct. 11.
Acrial, Antistatic. R. A. Weagant. 1,639,913; Aug. 23.
Acrial, Collapsible loop. M. Mathlesen. 1,614,484;
Jan. 18. Aerial propulsion. P. Peterson. 1,637,389; Aug. 2. Aerial surveying by photography. J. Boykow. 1,650,978; Streeting by photography, J. Boykov. 1,509,316, Aerofoli, T. H. Birmingham. 1,613,602; Jan. 11. Aerofoli, Variable lift-variable resistance. W. L. Gil-more. 1,631,259; June 7. Aeronautical advertising device. J. J. Klapka. 1,616,947; Feb. 1. Aeroplane. A. Mersard. 1,627,004; May 3.
Aeroplane. H. V. Alexander. 1,632,158; June 14.
Aeroplane. A. Sarbin. 1,622,158; June 14.
Aeroplane. A. Sarbin. 1,622,038; June 14.
Aeroplane. A. Sarbin. 1,628,038; June 10.
Aeroplane. A. Sarbin. 1,628,038; June 10.
Aeroplane. B. Chillingworth. 1,633,342; Dec. 20.
Aeroplane. H. S. Clark. 1,615,682; Jan. 25.
Aeroplane. H. S. Clark. 1,615,682; Jan. 25.
Aeroplane. C. E. Lykins. 1,621,019; Mar. 15.
Aeroplane. A. Mannick. 1,648,818; Nov. 8c. 27.
Aeroplane. A. Mannick. 1,648,818; Nov. 8c. 27.
Aeroplane. F. McElhaney. 1,620,368; Mar. 8.
Aeroplane. F. McElhaney. 1,620,368; Mar. 8.
Aeroplane. H. J. Mundell. 1,638,338; Aug. 9.
Aeroplane. H. J. Mundell. 1,638,338; Aug. 9.
Aeroplane. A. D. Ray. 1,622,544; Mar. 19.
Aeroplane. C. H. Taylor and B. B. Neuteboom. 1,622,242;
Aeroplane. L. Raynolds. 1,631,603; June 7.
Aeroplane. C. H. Taylor and B. B. Neuteboom. 1,622,242;
Aeroplane. A. Worman. 1,625,012; Apr. 19. Mar. 22,
Aeroplane. A. Worman. 1,625,012; Apr. 19.
Aeroplane and like aircraft having folding wings. C. R.
Fairey. 1,652,618; Dec. 13,630,336; May 81.
Aeroplane fin. H. C. A. Fotez. 1,645,928; Oct. 18,
Aeroplane fin. H. C. A. Fotez. 1,645,928; Oct. 18,
Aeroplane fuselages, Air tunnel for. J. Miller,
1,645,612; Oct. 18.
Aeroplane fuselages, Wall construction for. A. Nosan.
1,637,871; Aug. 2.
Aeroplane kite. B. A. Founds. 1,620,882; Mar. 15.

Aeroplane landing gear. II. C. Mummert. 1,622,799; Mar. 29. Aeroplane Disgo, 1,625,020; Apr. 10. Aeroplane Oct. 18. Aeroplane Projectile. A. E. Henderson. 1,646,146; Aeroplane Propellers, Driving means for. A. Nosan. 1,464,154; Oct. 11. Aeroplane. Rotary swing or captive. R. Garvey. 1,628,474; Dec. 18. Aeroplane. Rotary swing or captive. R. Garvey. Aeroplane runway. A. H. Ballard. 1,645,494; Oct. 11. Aeroplane, Rolary swing or captive. R. Garvey. 1,652,474; Dec. 13.
Aeroplane runway. A. H. Ballard. 1,645,494; Oct. 11.
Aeroplane safety device. B. Loth. 1,644,586; Oct. 25.
Aeroplane wing. F. E. McGrath. 1,637,954; Aug. 22.
Aeroplane wing. Structure. J. V. Martin. 1,627,191;
Aeroplane wing. Construction of. E. Dewoitine. 1,636,902; July 26.
Aeroplanes, Adjustable propeller for. M. Glowackl, 1,649,296; Nov. 15.
Aeroplanes, Adjustable wing structure for. A. Nosan. 1,645,163; Oct. 11.
Aeroplanes, Adjustable map for. N. A. McCully. 1,627,614; May 10.
Aeroplanes, Adjustable map for. N. A. McCully. 1,627,614; May 10.
Aeroplanes, Adjustable map for. N. A. McCully. 1,627,614; May 10.
Aeroplanes, Adjustable map for. N. A. McCully. 1,627,614; May 10.
Aeroplanes, Apparatus for gun mounting, laying, and sighing for artillery on. E. Schneider. 1,638,962; Aug. 16.
Aeroplanes, Auxiliary lifting arrangement for. J. W. Dundas. 1,633,006; June 21.
Aeroplanes, Emplementage for. A. Noan. 1,632,414; Aeroplanes, Englie mounting for. E. H. Van Valkenheer. Dindas 1,633,005; June 21.

June 14.

June 14.

Aroplanes, Engine mounting for. E. H. Van Valkenberg.

1,641,306; Sept. 6.

Aeroplanes, Propelling device for. E. Landon. 1,642,752; Sept. 20.

Aeroplanes, Safety attachment for. F. Beni and D. 1,634,427; July 5.

Aeroplanes, Safety attachment for. H. M. Cosey. 1,613,422; July 5.

Aeroplanes, Safety attachment for. H. M. Cosey. 1,613,425; Feb. 15.

Aeroplanes, Safety device for. A. E. Fixel. 1,638,840; Aug. 16.

Aeroplanes, Safety device for. A. E. Fixel. 1,638,840; Aug. 16.

Aeroplanes, Ving or Similar member for. F. W. Hambert 1,637,637; Aug. 2.

Aeroplanes, Wing or similar member for. V. E. Clark. 1,616,682; Feb. 8.

Agents, Reactivating purifying. P. Mahler. 1,617,533; Feb. 15.

Agglomerated masses, Fabricating. R. Bowen. Feb. 15.
Agglomerated nesses, Fabricating, R. Bowen.
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Agricultural implement.
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Agricultural implement.
A. T. Peterson. 1,637,424;
Agricultural implement.
Agricultural implement.
1,623,321;
Agricultural implement.
E. A. Smith and B. R. Finch.
1,623,321;
Agricultural implement.
D. W. F. Smith and S. R. Finch.
Agricultural implement.
D. W. F. Smith and S. R. Finch.
Agricultural implement.
D. W. F. Smith and S. R. Finch.
D. W July 5.

Agricultural implement. F. J. Walling. 1,616,341; Feb. 1.

Agricultural implements. J. Hampson. 1,629,915; Agricultural implements, Attachment for. E. M. Cole. 1,627,694; May 10.

Agricultural implements, Electric traction system for. F. Remy, 1,625,744; Apr. 10.

Agricultural instrument. C. D. Symmes. 1,631,671, June 7. Agricultural machine. E. Bruning. 1,615,679; Jan. 25.
Agricultural machine. A. Dick and J. A. Dirschauer.
1,635,612; July 12.
Agricultural machine. J. W. Maddox. 1,648,625;
Sept. 27.
Agricultural machine. F. L. Schley and C. Ernst.
1,619,586; Mar. 1.

Agricultural machine. T. M. Thompson. 1,636,929;
July 26.
Agricultural machines, Clod-crushing and soil-pulverlzing
attachment for. J. S. Sawyers. 1,651,043; Nov. 25.
Air and sept. 1,632,076 June 22.
Air has the control of the cont Agricultural machine. T. M. Thompson. July 26. 1.636.929: Feb. 8.
Air-cleaning apparatus. F. F. Pease. 1,620,780; Mar. 15.
Air-cleaning machine. J. C. Hosch. 1,616,802; Feb. 8.
Air-compresson plant. Hydrault. J. O. Boving. 1,628,025; May 10.
Air compressor. V. E. Clark. 1,634,093; June 28.
Air compressor. J. A. and P. H. Davey and C. L. Gaugler. 1,636,291; July 19.
Air compressor. C. Schaer. 1,646,795; Oct. 25.
Air compressor. F. K. Wood. 1,616,733; Feb. 8.
Air compressor. Cylinder. R. E. Mitton. 1,653,920; Air compressor. P. K. Wood. 1,616,733; Feb. 8.
Air compressor. P. K. Wood. 1,616,733; F Air ir compressor or pump. W. G. E. Rolaff. 1.626,557; Apr. 26.

Air condenser and coupling means therefor, Variable,
J. W. Whitlock, 1,641.718; Sept. 6.

Air conditioner, C. L. Burdick, 1,640.564; Aug. 30.

Air-cooled engine, C. P. Burdick, 1,640.564; Aug. 16.

Air-cooled engine, A. F. Brotz, 1,689.022; Aug. 16.

Air-cooled engine, A. F. Brotz, 1,689.022; Aug. 16.

Air-cooled engine, A. F. Masury, 1,622.383; Aug. 16.

Air-cooled engine, E. Van Toff, 1,622.263; Aug. 16.

Air-cooled engine, E. Van Toff, 1,622.27; June 14.

Air cooler, E. Crispin, 1,622.131; Mar. 22.

Air cooler and humidifier, J. R. Bulmer, 1,621,766; Mar. 22. Air cooler and humidifier. J. R. Bulmer. 1,621,766; Mar. 22.
Air cooling and dehydrating device. W. E. Watt. 1,627,361; May 3.
Air-cooling apparatus. A. R. Smith. 1,614,159; Jan. 11.
Air-cooling device. J. F. Perkins. 1,616,545; Feb. 8.
Air cooling or heating apparatus. D. Weisz. 1,635,869; July 12. July 12.

Alt-cooling system for Internal-combustion engines, E. Windberger, L618,899; Feb. 22.

Alreraft, S. R. Anderson, 1,647,978; Nov. 8.

Alreraft, S. R. Anderson, 1,642,005; Sept. 13.

Alreraft, J. Bolgiano, 1,632,544; Dec. 13.

Alreraft, J. Bolgiano, 1,632,544; Dec. 13.

Alreraft, G. H. Congdon, 1,632,796; Aug. 23.

Alreraft, F. G. Gaddis, 1,622,5463; App. 19.

Alreraft, F. C. Kusse, sr., and F. C. Kusse, jr., 1,653,185; Dec. 20.

Alreraft, J. W. Silver, 1,623,433; May 24.

Alreraft, J. W. Silver, 1,623,433; May 24.

Alreraft, G. B. Sierry, 1,641,700; Sopt. 6.

Alreraft, G. B. Sierry, 1,641,700; Sopt. 6.

Alreraft, G. B. Sierry, 1,641,700; Sopt. 6.

Alreraft, G. Alfinder guage for use on. A. Nosan, 1,640,051; Aug. 23.

Alreraft, G. Alfinder guage for use on. A. Nosan, 1,640,051; Aug. 23. 11-640,051; Aug. 23.

11-640,051; Aug. 23.

11-640,051; Aug. 24.

11-640,051; Alperaft. Bomb deopping device for. O. J. Boos. 1,621,664; Mar. 22.

11-621,664; Mar. 22.

11-621,664; Mar. 22.

11-621,664; Mar. 22. Aircraft collecting device. F. M. Osborn. 1,640,667; Aug. 30. Aircraft, Control system for. J. H. Hammond, jr. 1.622,252; Apr. 19. Aircraft design. J. L. MacVicar. 1,627,856; May 10. 1,640,667;

Aircraft, Elastically connecting landing gear to. H. O. Short. 1,626,483; Apr. 26.

Aircraft engine. H. E. Moorehouse. 1,627,108; May 3. Aircraft, Eric-extinguishing apparatus for. G. W. Burke, Jr. 1,634,977; July 5.

1,624,977; July 5.

1,622,905; Mar. 22.

Aircraft, Geating for propelling. A. J. Rowledge. 1,654,432; Dec. 27.

Aircraft, Genting for propelling. A. J. Rowledge. 1,654,432; Dec. 27.

Aircraft, Landing and taking-off station for. W. J. Aircraft, Laterally-controlling. F. H. Page. 1,635,687; July 12.

Aircraft, Laterally-controlling. F. H. Page. 1,635,687; July 12.

Aircraft, Lighter-than-air. G. D. Burney. 1,632,269; Aircraft, Lighter-than-air. C. D. Burney. 1,632,269; Aircraft, Lighter-than-air. B. N. Wallis. 1,630,726; May 31.

Aircraft, Lighter-than-air. B. N. Wallis and C. D. Burney. 1,637,432; Aug. 2.

Aircraft, Lighter-than-air. B. N. Wallis and C. D. Burney. 1,637,432; Aug. 2.

Aircraft, Mooring dirigible. J. A. Steinmetz. 1,634,964; Aircraft, Mooring dirigible. 1,630,726 follibre-than-air. 1,630,364; July 10.

Aircraft, Mooring dirigible. J. A. Steinmetz. 1,634,964; Aircraft, Mooring dirigible. 1,630,726 follibre-than-air. 1,630,364; July 10. July 5.

Aircraft, Mooring mast and mooring gear for lighter-thanair. C. D. Burney. 1,636,354; July 19.

Aircraft-motor-control system. W. H. Barling. 1,641,567; Aircraft-motor-control system. W. H. Barling. 1,641,567; Sept. 6.
Aircraft, Pilot director for. R. Kauch and C. L. Paulus. 1,653,779; Dec. 27; Smoke clouds from moving. D. B. Bradner and N. D. Oglesby. 1,619,183; Mar. I. Aircraft, Rigid. F. Baucr. 1,632,641; June 14.
Aircraft, Safety attachment for. T. Douglas. 1,626,921; May 3. Alreraft, Salety active. J. Ostand. 1,630,211; May 24.
Alreraft safety device. J. Ostand. 1,630,211; May 24.
Alreraft sanoke luminous or other visible trails from.
J. C. Savage. 1,613,134; Jan. 4.
Alreraft, Sounding line for. H. E. Krammer. 1,651,956;
Dec. 6.
Stabilizar for. H. S. Steinbrecht. 1,626,567; J. C. Savage. 1,613,134; Jan. 4.
Alrecraft. Studilizer for. H. E. Krammer. 1,651,956;
Dec. 6.
Alrecraft. Stabilizer for. H. S. Steinbrecht. 1,626,567;
Alrecraft. Stabilizer for. H. S. Steinbrecht. 1,626,567;
Aircraft. Thermal circulation system for. C. S. Hall. 1,653,904; Dec. 27.
Aircraft. Thermal circulation system for. C. S. Hall. 1,653,904; Dec. 27.
Aircraft. Variable-pitch propeller and blade mounting.
A. Nosan. 1,623,549; Apr. 1,653,903; Dec. 27.
Aircraft. Wing structure for. A. Tammeo. 1,628,625;
May 10.
Aircraft. Wing structure for. A. Tammeo. 1,628,625;
May 10.
Aircraft. Wing structure for. A. Tammeo. 1,628,625;
May 10.
Aircraft. Wing structure for. A. Tammeo. 1,628,625;
May 10.
Aircraft with swinging wings. A. Ehrlich. 1,622,629;
Air currents. Apparture for special controlling, and air deflector. W. H. Rose 1,650,237; Nov. 22.
Air engine. J. M. Dapron. 1,625,457; Apr. 19.
Air; Filter drive. J. E. Bolling. 1,638,141; Aug. 9.
Air, Filter for purifying the. H. Wittemeler. 1,632,813;
June 21.
Air gas, Making. H. Foersterling. 1,624,946; Apr. 12.
Air gas, Making. H. Foersterling. 1,635,988; July 19.
Air gauge. F. G. Johnson. 1,636,566; July 19.
Air gauge. F. Stickel. 1,613,552; Jan. 4.
Air heater. J. S. Jacobus. 1,647,997; Nov. 8.
Air heater. D. S. Jacobus. 1,647,997; Nov. 8.
Air heater. R. B. Wiltsel. 1,650,920; Nov. 29.
Air heater, R. B. Wiltsel. 1,613,623; Jan. 25.
Air heater, Reddiant. O. A. Colby. 1,614,620; Jan. 11.
Air-heater furnace. L. Burmester and A. Muaroe. 1,651,668; Dec. 6.
Alt hose. Reenforced. A. S. Richardson. 1,635,597;
July 12. July 12.
Alr inlet and mixing device for motor vehicles, Auxiliary,
Y. D. McDonald. 1.648.358; Nov. 8.
Alr-inspiring plant, Hydraulic. J. O. Boving. 1,628,026;
May 10.
Air illerator, Warm. H. C. Heinle, jr. 1,644.920; Oct. 11.
Air lifts, Automatic control for. C. C. Jacobson. 1,620,220; Mar. 8.
Air lock. J. H. Murphy and E. A. Lotz. 1,636.572;
Alr lock. J. H. Murphy and E. A. Lotz. 1,636.572;
All locks J. H. Murphy and E. A. Lotz. 1,636.872; July 19.
Alr machines, Lubricator for compressed. L. P. Marcell, 1.615.594; Jan. 25.
Alr moistener. C. Grab. 1.643.844; Sept. 27.
Alr moistener. C. E. Salladu, 1.621.436; Mar. 15.
Alr moistening and cleaning device. H. J. Schmitt. Alr moistening and cleaning device. H. J. Schmitt. Alr moistening device. G. C. Prenzel, 1.620.738; Mar. 15.
Alr motor. E. N. Tuckey, 1.620.313-141; Apr. 26.
Alr motor. B. N. Tuckey, 1.620.313-141; Apr. 26.
Alr motor. B. Busch. 1.649.568; Nov. 15.
Alroptac compressor. A. G. Bnock, 1.602.973; Dec. 13.
Alr or gas compressor. A. G. Bnock, 1.602.973; Dec. 13.
Alroptac compressor. A. G. Bnock, 1.602.973; Dec. 13.
Alroptac compressor. A. G. Bnock, 1.602.973; Dec. 13.
Alroptac compressor. A. G. Bnock, 1.602.973; Dec. 13.

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Air or other gaseous mixture by liquefaction and fecti-
fication, Separation of the elements of. J. Le Rouge.
1.638.005; Aug. 2.
Airplane. G. Figlietti. 1.633.889; June 28.
Airplane. C. W. Hall. 1.647.619; Nov. 12.
Airplane. R. F. Hall. 1.650.346; Nov. 22.
Airplane. J. M. Miller. 1.650.944; Nov. 29.
Airplane. G. Stemstra. 1.644.655; Cot. 4.
Airplane. G. H. Taylor and B. B. Neutchoom. 1,622,241;
   Airpiane. R. F. Hall. 1,650,346; Nov. 22.
Airpiane. J. M. Miller. 1,650,945; Nov. 29.
Airpiane. G. Steenstra. 1,644,453; Oct. 4.
Airpiane. G. H. Taylor and B. B. Neuteboum. 1,622,241;
Airpiane. H. Wiese. 1,633,719; June 21.
Airpiane. H. Wiese. 1,633,719; June 21.
Airpiane. and helicopter, Combined. W. L. Thomas.
Airpiane and helicopter, Combined. W. L. Thomas.
Airpiane and other aircraft body. A. Black. 1,625,701;
Apr. 19.
Airpiane body, Freight. A. Black. 1,625,700; Apr. 19.
Airpiane body, Freight. A. Black. 1,628,734; May 10.
Airpiane construction. M. Syracusa. 1,627,398; Aug. 2.
Airpiane construction. M. Syracusa. 1,627,398; Aug. 2.
Airpiane specific production of the control for July 12.
Airpiane helicopter control. F. O. Ellerman. 1,632,492; July 12.
Airpiane helicopter control. F. O. Ellerman. 1,632,218; Mar. 22.
Airpiane syrats, Method of and apparatus for determining the shapes of. G. L. O. Benard. 1,615,663; Jan. 18.
Airpiane view finder. A. W. Stevens. 1,622,125; Mar. 22.
Airpiane wing construction. B. D. Thomas. 1,635,634; May 31.
   May 31.

Alrplane wing construction. B. D. Thomas. 1,625,634;
Apr. 19.

Alrplanes, Electrical generating apparatus for. G. Alrplanes, Electrical generating apparatus for. G. Alrplanes, Florential generating apparatus for. G. Alrplanes, Florential generating apparatus for. G. Alrplanes, Florential generating apparatus for. G. Alrplanes, Landing and landing, R. Simon. 1,624,188; Apr. 12.

Alrplanes, Landing and aking-off station for. W. J. Elmisson. 1,618,278; Feb. 22.

Alrplanes, Method and device for the increase of floating station for. A Robribach, L. G18,374; Mar. 1.

May 17, Wing construction for. J. Wenger. 1,628,940; May 17, Wing construction for. J. Wenger. 1,628,940;
      Alrolanes, Wing construction for metal. A. Rohrbach. Alrolanes, Wing construction for metal. A. Rohrbach. 1,619,672; Mar. 1.
      Alir-pressure bruke, Single-chamber, J. Rihosek and R. L. Leuchter, 1,640,905; Aug. 30.
Air pressure, Device for controlling, J. C. Hagey, 1,648,897; Nov. 3,647; Pressure equalizer, Automatic, C. D. Jarvis, 1,651,773; Dec. 6,
Air-pressure regulator, E. M. Morley, 1,682,618; June 14,
Alt pressure regulator. E. M. Morley. 1,632,618; the Line Liber diverse craft, Counterpropeller for. R. Wagner. 1,645,507; cbc. 25.

Air protective shield, Compressed. B. O. Patrick. 1,640,103; cct. 18.

Air purifier or humidifier and radiator vent valve, Combined, A. Bauer. 1,624,774; Apr. 12.

Air-purifying apparatus. A. Nosan. 1,637,873; Aug. 2.

Air-purifying device. B. Nosan. 1,637,878; Aug. 2.

Air-purifying device. B. M. Taylor. 1,647,878; Aug. 2.

Air-purifying device. B. M. Taylor. 1,642,268; Aug. 16.

Air-purifying device. B. M. Taylor. 1,642,268; Aug. 23.

Air separator. R. H. Kingdon. 1,652,309; Dec. 13.

Air separator. R. H. Kingdon. 1,652,309; Dec. 13.

Air-separator. T. J. Sturtevant. 1,615,558; Jan. 25.

Air-ship. H. T. Avery. 1,641,023; Jan. 18.

Air-ship. H. T. Avery. 1,641,023; Jan. 18.

Air-ship. D. Doncheff. 1,623,865; Apr. 3.

Air-ship. A. E. Henderson. 1,645,237; Oct. 11.

Air-ship. S. Richardsen. 1,643,237; Oct. 11.

Air-ship. S. Richardsen. 1,638,961; Aug. 16.

Air-ship. M. Yowell. 1,651,309; Nov. 29.

Air-ship. M. Yowell. 1,651,309; Nov. 29.

Air-ship. Dringible. W. Lemon. 1,629,951; Apr. 26.

Hirtitle. 1,623,653; Apr. 5.

Air-ship mooring drum. R. M. Getchell. 1,622,139; Mar. 2,139; Mar. 2,200; Mar. 3,200; M
             Airship nose batten. C. H. Zimmerman. 1,623,649;
   Apr. 5.

Airship, Rigid. K. Arnstein. 1,631,908; June 7.

Airship, Rigid. O. Gelsler. 1,642,727; Sept. 20.

Airship, Rigid. P. Helma. 1,642,024; Sept. 13.

Airship sheds. aeroplane hangars, and the like, Doors for.

A. R. F. Smith. 1,644,285; Oct. 4.

Airship with structural compensating surfaces. K. Arnstein. 1,614,519; Jan. 18.

Airships. Auxiliary device for assembling. L. Dürr. 1,051,764; Dec. 8.

Airships. Ballast recoverer for. H. R. Llebert and W. Fischer. 1,645,065; Oct. 11.

Airships. Condenser for. P. Schröder. 1,653,604; Dec. 20.
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Airships, Controlling device for ballast containers in. E. Hilligardt. 1,620,462; Mar. 8. Airships, Device for ground transportation of. B. Schnitzer. 1,637,789; Aug. 2. Airships, Fin and rudder of. L. Dürr. 1,651,755; Airships, Fin and rudder of. L. Dürr. 1,651,755; Dec. 6.
Loc. 6.
Liships from moorings and device therefor, Launching, W. V. N. Powelson and W. Travell. 1,647,472; Nov. 1.
Airships, Gas-eell protection for. L. Dürr. 1,622,663;
Airships, Gas valve for. K. Stabl and K. Siller. 1,652,165; July 12.
Liships, Hull construction of rigid. K. Arnstein, 1,620,567; Mar. 8.
Liships, University of K. Hürttle. 1,623,680–1;
Alrships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
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A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Hürttle. 1,623,680–1;
A. Liships, Outer cover on rigid. K. Liships, Outer cover on rigi Apr. 5.

Airships over water, Equipment for mooring and berthing. W. V. N. Powelson and W. Travell. 1,648,423; Dec. 27.
Alr spring. B. B. Holmes. 1,640,896; Aug. 30.
Air-suction crinkling apparatus. K. Wandel. 1,
May 31. 1,630,319: May 31.
Air supply, Apparatus for regulating. J. H. Reineke.
1,645,350; Oct. 11.
Air-supplying apparatus, Cold. R. Rodriguez. 1,632,680;
June 14.
Air tank. H. F. Hoevel. 1,648,455; Nov. 8.
Air tank. G. Shoup. 1,613,039; Jan. 4.
Air tank. G. Shoup. 1,613,039; Jan. 4.
Air tank. G. Shoup. 1,613,039; Jan. 4. Air tank. G. Shoup. 1,613,059; Jan. 4.

Tretmpering device. T. G. Hamilton. 1,617,050;

Air transferrer. J. C. Wright. 1,682,337; Dec. 13.

Air-volume dust reducer. A. H. Stebbins. 1,620,241;

Mar. 8.

Air writing with searchlight beams. W. W. Mitkewich.

1,635,051; G. H. Hamilton. 1,650,347; Nov. 22.

Air writing with searchlight beams. W. W. Mitkewich.

1,635,051; G. H. Hamilton. 1,650,347; Nov. 22.

Alarm: Sec.

Audible alarm.

Automatic alarm.

Dore alarm.

Dore alarm.

Dore alarm.

Drip-pan alarm.

Thermostatic falarm.

Thermostatic June 14.

Alarm mechanism. A. C. Rowley. 1,641,827; Sept. 6.

Alarm signal. A. N. Pierman. 1,652,683; Dec. 13.

Alarm system. A. M. Curtis. 1,632,683; Due 14.

Alarm system. A. M. Curtis. 1,632,059; June 14.

Alarm system. W. J. Luse. 1,627,612; May 10.

Alarm system. S. S. Solodar. 1,637,396; Aug. 2.

Alarm system. Protective. J. D. McDaniel. 1,650,288;

Nov. 22.

Alarm systems and the like, Device for use in transmitting signals in connection with fire and burglar. F. T. Matthews. 1,650,143; Nov. 22.

Alarm systems. Foot-rail cort for electric burglar. Alarm systems. Foot-rail cort for electric burglar. Alarms (Studies). Album, A. W. Engel. 1,632,002; June 14.
Album, Display. G. E. Buzza. 1,646,573; Oct. 25.
Album, Photographic. F. Huszto-Horvath. 1,625,724;
Apr. 18. Alcohol. alcohol-containing mixtures, and similar liquids. W. Ostwald. 1.644.267; Oct. 4. Hochol composition. Noncorrosive. W. T. Schreiber. 1.613.808; Jan. 11. Alcohol, Distillation of. E. I. Clapp. 1,614.877; Jan. 18.

Alcohol, Esters of normal-amyl. R. H. Van Schaack, Jr. 1,646,128; Oct. 18.
Alcohols, Manufacture R. B. B. MacMullin and R. E. Gegenheimer. 1,641,544; Sept. 6.
Alcohols and G. Widmer. 1,654,215; Dec. 27.
Aldehyde derivatives of reaction products of aldehydes and amines and making same. Higher. C. O. North. 1,619,953; Mar. 8.
Aldehyde reaction products of the aldehyde derivative of a Schiff's base, Manufacture of. C. O. North. 1,639,967; Aldehyde resins. Improving. W. O. Hermann. H. Adeniyoe reaction products or the Manopac terrivate of a Schiff's base, Manufacture of. C. O. North. 1,639,967; Aldebyde resins, Improving. W. O. Herrmann, H. Deutsch, and W. Haehnel. 1,643,496; Sept. 27.
Aldeses, Oxidation of. A. Stoll and W. Kussmaul. 1,648,368; Nov. 8.
Algin compounds and products produced derived therefrom, Producing. B. F. Erdahl. 1,625,301; Apr. 19.
Algin compounds and products produced derived therefrom, Producing. B. F. Erdahl. 1,625,301; Apr. 19.
Algin products, Device for forming. W. D. Bleier. 1,621,454; Mar. 15.
Alkali collulose, Drying. P. C. Seel. 1,635,012; July 5.
Alkali compounds, Manufacturing effervescent. W. F. Little. 1,616,587; Feb. 8.
Alkali-mestal arbates, Manufacture of. W. Hirschkind.
Alkali-metal arbates, Manufacture of. W. Hirschkind.
Alkali-metal arbates, Manufacture of. W. Hirschkind.
Alkali-metal vanide solutions containing sulphides, Purifying. K. Herrdegen. 1,633,485; June 21.
Alkali-metal sulphydrates, Producing. E. E. Naef. 1,635,106; July 19.
Alkaline potassium compounds, Manufacture of. W. Siegel. 1,636,710; July 26.
Alkalic arbonates, Manufacture of. H. G. Mitchell. 1,638,014; Aug. 9.
Alkyl carbonates, Manufacture of. H. G. Mitchell. 1,638,014; Aug. 9.
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Alkyl carbonates, Manufacture of. H. G. Mitchell. 1,638,014; Aug. 9.
Alkyl carbonates, Manufacture of. H. G. Mitchell. 1,638,014; Alky resortion: A. R. T. Dohme. 1,649,667; Nov. 15.
Alkyl sulphates, Making. R. H. McKee. 1,641,005;
Aug. 30.
Alloy. P. H. Brace. 1,649,094; Nov. 15.
Alloy. C. S. Brainin. 1,624,857; Apr. 12.
Alloy. C. S. Brainin. 1,624,857; Apr. 12.
Alloy. J. N. Early. 1,622,576; Mar. 29.
Alloy. J. N. Early. 1,622,576; Mar. 29.
Alloy. C. A. Gentty. 1,644,425; Oct. 4.
Alloy. C. A. Gentty. 1,644,425; Oct. 4.
Alloy. L. Jordan and G. W. Cuick. 1,638,555; Aug. 16.
Alloy. E. Klam. 1,635,630; Dec. 27, 628,050; May 10.
Alloy. C. A. Kracs and C. Callis. 27, 628,050; May 10.
Alloy. C. A. Kracs and C. Callis. 4,628,030; May 10.
Alloy. C. D. Merica and J. S. Vanick. 1,626,248;
Alloy. W. E. Ruder. 1,633,826; June 28.
Alloy. G. O. Smith. 1,634,343; July 5
Alloy. Acid or sea-water resisting. T. M. Diven, sr. 1,652,301; Dec. 13.
Alloy and making same, Nickel-copper. W. F. Cochrane. 1,614,375; Jan. 18.
Alloy and making the same, Silver. W. L. Mitchell. 1,614,752; Jan. 18.
Alloy and making the same, Silver willicon. M. G. Korsunsky. 1,643,304; Sept. 27.
Alloy. Erosive resistant ferrous. C. B. Jacobs. 1,641,970; Crosive resistant ferrous. C. B. Jacobs. 1,641,970; Crosiver resistant ferrous. Alloy, Corrosion-resisting. P. D. Schenck. 1,651,970; Dec. 6.
Alloy, Erosive resistant ferrous. C. B. Jacobs. 1,647,096; Oct. 28.
Alloy, Erosive resistant ferrous. C. B. Jacobs. 1,647,096; Oct. 28.
Alloy, Magnetic. K. K. Ledig. 1,647,301; Nov. 1.
Alloy, Magnetic. K. K. Ledig. 1,647,301; Nov. 1.
Alloy, Magnetic. W. S. Brophy. 1,633,805; June 28.
Alloy, Magnetic. W. S. Smith. N. Poppleford, and H. J. Garnett. 1,622,008; Mar. 22.
Alloy, Nickel. T. S. Fuller. 1,623,948; Apr. 5.
Alloy of Hithum and aluminum. J. Czochralski and G. Alloy, Resiston. W. B. Pilling. 1,628,691; May 3.
Alloy, Resiston. N. B. Pilling. 1,628,691; May 3.
Alloy, Stele. L. M. Browh. 1,643,054; Sept. 20.
Alloy, Stele. L. M. Browh. 1,643,054; Sept. 20.
Alloy, Steel. A. Fry. 1,649,398; Nov. 15.
Alloy, Steel. D. J. Gules. 1,650,707; Nov. 29.
Alloy steel. D. J. Gules. 1,650,707; Nov. 29.
Alloy steel. D. J. Gules. 1,650,707; Nov. 29.
Alloy steel. J. W. Weltzenkorn. 1,622,894; Mar. 29.
Alloy steel and bron, Manufacture of. B. D. Saklatwalla.
1,619,462; Mar. 1.
Alloy steel and making it. C. T. Evans. 1,639,989;
Aug. 28.
Alloy steels, Manufacture of. B. D. Saklatwalla.
1,616,492; Mar. 1. Aug. 23.
Alloy steels, Manufacture of. B. D. Saklatwalla.
1,616,393; Feb. 1.
Alloy structure. If M. Williams and A. L. Bocgebold.
1,642,348-9; Sept. 18.
Alloy Start Saklary. B. D. Field and R. Franks.
Alloys. T. Saklary. 1,020,(20; May 3. Alloys, Improving aluminum. V. Fuss. 1,631,930; June 7. Alloys, Lead-cadmium. W. Friedrich. 1,645,098; Oct. 11. Alloys, Making. J. H. L. De Bats. 1,639,330; Aug. 16. 1.631.930:

Alloys, making magnetic. V. B. Browne. 1,627,269; May 3. Alloys, making magnetic. V. B. Browne. 1,627,269; May 3.
Alloys, Manufacture of chromium-iron. B. D. Saklatwalla. 1,623,757; Apr. 5.
Alloys, Manufacture of very hard metallic. H. Lohmann. 1,652,627; Dec. 6.
Alloys, Separating flow-carbon. V. B. Browne. 1,645,126; Alloys, Separating the components of. C. G. Bossiere and H. Zanicoli. 1,642,574; Sept. 13.
Alpha rays, Demonstrating and visualizing the track of. C. T. Knipp. 1,647,397; Feb. 15.
Alternating current, Apparatus for controlling the frequency of an. H. Nyquist. 1,647,192; Nov. 1.
Alternating current, Apparatus for controlling the frequency of an. H. Nyquist. 1,647,192; Nov. 1.
Alternating currents, Method and apparatus for the rectification of. C. G. Smith. 1,617,171; Feb. 8.
Alternator, High-frequency. J. Bethenod and E. Girardeau. 1,645,517; Cot. 18.
Alumina from aluminum nitrates, Production of. B. F. Halvorsen, H. J. Falck, and 9. Ravner. 1,652,119.
Dec. 6. Dec. 6.
Aluminous binding material together with an iron alloy, Producing a hydraulic. L. de Lambert. 1,628,872; May 17.
May 17.
May 17.
May 17.
May 17.
May 18.
May 1 Dec. 6. Oct. 11.
Aluminum chloride, Collecting and utilizing. E. R. Wolcott. 1,647,446; Nov. 1.
Aluminum chloride, Distilling with. A. M. McAfee. 1,688,144; July 19.
Aluminum chloride, Distilling G. L. Prichard and H. Henderson, 1,616,549; Feb. S.
Aluminum chloride, Manufacture of. F. W. Hall. 1,619,022; Mar. 1.
Aluminum chloride, Manufacture of. E. R. Wolcott. 1,617,636; Feb. 15.
Aluminum chloride, Method of and apparatus for condensations. I. Prichard and H. Henderson, 1,641,503; Sept. 6.
L. Prichard and H. Henderson, 1,641,503; Aluminum-chloride process. H. I. Lea and C. W. Humphrey. 1.646.732-3; Oct. 25.
Aluminum-chloride Producing. H. Blumenberg, fr. 1.649,383; Nov. 15.
Aluminum-chloride production. E. R. Wolcott. 1.633,835; Aluminum-chloride production. E. R. Wolcott. 1.633,835; Aluminum-chloride production. June 28.
Aluminum chloride, Purifying. C. W. Humprey and D. S. McKittrick. 1,645,143; Oct. 11.
Aluminum chloride, Solidifying. C. W. Humprey and D. S. McKittrick. 1,645,142; Oct. 11.
Aluminum, Compound to solder. G. E. Gall. 1,641,422; Sept. 6. Sept. 6.

Aluminum dross and the like, Treating. J. G. G. Frost. 1.615.009; Jan. 18.

Aluminum from aluminum screenings and the like, Recovering. J. G. G. Frost. 1.648.263; Nov. 8.

Aluminum from olly metallic mixtures and the like, Recovering. J. G. G. Frost. 1.646.239; Oct. 18.

Aluminum hydroxide, Manufacturing. H. Pedersen. 1.618,105; Feb. 15.

Aluminum, Method and composition of matter for surface treating. A. Pacz. 1.638,273; Aug. 9.

1.648.262; Nov. 8. etc., Treating. J. G. G. Frost. 1.648.262; Nov. 8.

Aluminum, Spot welding of. E. Lunn. 1,618,764; Feb. 22.

Aluminum surfaces, Coating. E. H. Hewitson. 1,627,900; May 10. Aluminum surfaces, Coating. E. H. Hewitson. 1,627,900; May 10.
Alumite, Treating. H. H. Meyers. 1,613,228; Jan. 4.
Alumite, Treating. T. A. Mitchell. 1,628,174; May 10.
Amalgamating machine. C. E. Smith. 1,631,434; June 7.
Amalgamator. N. S. Keith. 1,627,181; May 3.
Amalgamator and concentrator, Centrifugal. F. D. Lewis. 1,623,421; Apr. 5.
Ambulatory repeating system. R. W. Morris. 1,624,966; Apr. 13.
Apr. 161,109; Feb. 1.
Ammonia by hyperpressure, Synthesis of. G. Claude. 1,615,535; Jan. 25.
Ammonia compressor. E. B. Terrill. 1,651,235; Nov. 29.
Ammonia, Direct synthesis of. F. C. Reed. 1,639,272; Aug. 16. Ammonia, Direct synthesis of. F. C. Reed. 1,639,272;
Aug. 10.
Ammonia from gases containing same. Recovering.
R. O. E. Davis and L. B. Olmstead. 1,631,720; June T.
Ammonium-aluminum sulphate from aluminum-sulphate solutions containing Ferric compounds, Extraction of.
R. Ganssen. 1,619,666; Mar. I.
Ammonium chloride and alkali-teal sulphate, Production of. O. Gergross. 1,654,870; July 5.
Ammonium chloride, Matting. H. Howard. 1,654,125; Ammonium fluorides, Making. J. W. Proctor. 1,642.788; Sept. 20. Sept. 20.
Ammonlum intrate and making same, Granular. E. M.,
Symmes. 1,618.334; Jan. 4.
Ammonlum intrate, Manufacture of. H. Howard.
1,625,807; Apr. 26.

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Ammunition, Method and apparetus for identifying. G. Ramsey, 1,650,908; Nov. 29.
Amplifier, J. L. Brown, 1,646,650; Oct. 18.
Amplifier, W. L. Carlson, 1,613,741; Jan. 11.
Amplifier, H. M. Johnson, 1,644,763; Nov. 8.
Amplifier, H. M. Johnson, 1,644,191; Oct. 4.
Amplifier, E. C. Kollath, 1,647,748; Nov. 1.
May 3. Massolle, H. Vogt, and J. Engl. 1,630,753;
May 3. Massolle, H. Vogt, and J. Engl. 1,630,753;
May 3. Amplifier, and self-modultar, Massolte, J. Claster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amusement rides, Passenger car for, H. Johnson
1.640.038; Aug. 23.
Anæsthetic compound, N. A. Hansen, 1.652,783; Dec. 13.
Anæsthetic, Producing an, W. V. Goodfellow, 1,648,547;
Amplifier, H. M. Johnson . 1,644,191; Oct. 4.
Amplifier, F. C. Kollath. 1,647,736; Nov. 1.
Amplifier, J. Massolle, H. Vogt, and J. Engl. 1,630,753; May 31.
Amplifier, J. Massolle, H. Vogt, and J. Engl. 1,630,753; May 31.
Amplifier, J. Massolle, H. Vogt, and J. Engl. 1,630,198; Nov. 29.
Amplifier, Goldnet, H. B. Newhall and H. W. Pleister. 1,623,036; Apr. 5.
Amplifier, Goldnet, H. B. Newhall and H. W. Pleister. 1,620,363; Apr. 31.
Amplifier, High-frequency attenting current. M. C. Amplifier, or electrically-disturbed telephone lines. M. Latour. 1,630,346; May 31.
Amplifier, High-frequency attenting current. M. C. Amplifier, Sound. J. B. Hawley. 1,641,630; Sept. 6.
Amplifier, Sound. L. D. Morris. Des. 72,181; Mar. 8.
Amplifier, Sound. L. D. Morris. Des. 72,181; Mar. 8.
Amplifier, Sound. L. D. Morris. Des. 72,181; Mar. 8.
Amplifier, Sound. H. W. Leister. 1,622,289; May 17.
Amplifier, Stabilizing. E. H. Lange. 1,626,027; Oct. 18.
Amplifying apparatus. L. V. Lewis. 1,636,699; July 26.
Amplifying apparatus. T. E. Spens. 1,634,796; Amplifying apparatus. Thermionic. M. C. A. Latour. 1,614,136; Jan. 11.
Amplifying circuit. L. Espenschied. 1,647,216; Nov. 1.
Amplifying system. F. C. Barton. 1,644,361; Ang. 30.
Amplifying system. F. C. Barton. 1,644,362; Ang. 30.
Amplifying system. F. C. Barton. 1,644,363; Ang. 30.
     Apr. 12.

Amplifying system. F. C. Barton. 1.640,436; Aug. 30.

Amplifying system. A. Crossley. 1,651,810; Dec. 6.

Amplifying system. L. J. Perkins. 1,626,480; Apr. 26.

Amplifying system. L. J. Perkins. 1,626,480; Apr. 26.

Amplifying system. L. J. Perkins. 1,626,480; Apr. 26.

Amplifying of high-frequency oscillations, Controlling. H. Vogt, J. Engl, and J. Massolle. 1,628,377; May 10.

Ampul serving as packing receptacle for surgical sewing material, dlass. R. Graf and W. Lapp. 1,643,407; Sept. 27c. tytestipn. liquids comprehave sensors decompositions.
       Ampulla for injection liquids comprising separated compartments. W. O. Heublein. 1,614,067; Jan. 11. Amusement and educational purposes, Changeable assembly set for. E. S. Savage. 1,620,674 Mar. 8. Amusement and protective device. K. Kohn. 1,620,561;
          Amusement apparatus. F. V. Burrow.
          Mar. 22. Amusement apparatus. E. M. Long. 1,619,580;
Amusement apparatus. J. D. Pontious. 1,1
June 28,
Amusement apparatus. H. N. Ridgway. 1,0
                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mar. 1.
1.633.751;
                                                                                                                                                                                                                                                                                                                                                                                                         1,619,988;
          Mar. 8. Amusement apparatus. G. H. Rumke. 1,628,745; May 17. Amusement apparatus. H. G. Traver. 1,616,470; Feb. 8. Amusement apparatus. Y. Tsujino. 1,652,071; Dec. 6. Amusement apparatus. J. B. Watling. 1,618,610;
       Feb. 22,
Amusement apparatus. E. K. Wood and J. Metzger,
1,625,877; Apr. 28,
Amusement device. J. G. C. Akers. 1,654,231; Dec. 27,
Amusement device. J. R. Anderson. 1,613,325; Mar. 1,
Amusement device. J. N. Bartlett. 1,633,204; June 21,
Amusement device. W. E. Callison. 1,635,370; Oct. 11,
Amusement device. G. F. Cupnin. 1,635,370; June 21,
Amusement device. G. F. Cupnin. 1,635,365; July A.
Amusement device. J. Davidson. 1,632,975; Dec. 13,
Amusement device. J. Davidson. 1,632,975; Dec. 13,
Amusement device. C. L. A. Diamond. 1,633,397;
June 21.
       Amusement device. C. L. A. Diamond. 1,633,397; June 21.

Amusement device. J. M. Fisher. 1,612,976; Jan. 4.

Amusement device. J. M. Foster. 1,615,749; Jan. 4.

Amusement device. A. M. Honti. 1,614,923; Jan. 18.

Amusement device. M. H. McMann. 1,622,877; Mar. 20.

Amusement device. M. H. McMann. 1,622,877; Mar. 20.

Amusement device. J. Müllen, Jr. 1,653,7124; July 26.

Amusement device. A. J. Morin. 1,637,124; July 26.

Amusement device. A. J. Millen, Jr. 1,653,7124; Dec. 27.

Amusement device. A. J. Millen, Jr. 1,653,938; May 24.

Amusement device. F. Stochere. 1,652,840; Dec. 13.

Amusement device. F. Stochere. 1,652,840; Dec. 13.

Amusement device. Racing. F. J. Newsbaum and J. M.

Lonn. 1,636,431; July 19.

Amusement device. A. Prins. 1,361,280; Feb. 1.

Amusement ride. H. F. Maynes. Re15,569; Mar. 8.

Amusement rides, Drive for. H. F. Maynes. 1,627,132; May 27.

Amusement rides, Drive for. H. F. Maynes. 1,627,132; May 27.

Amusement rides, Drive for. H. F. Maynes. 1,627,132; May 37.

Amusement rides, Drive for. H. F. Maynes. 1,627,132; May 37.

Amusement rides, Drive for. H. F. Maynes. 1,627,132;
                           June 21.
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Ahasthetic, Froducing and Nov. 8. Analysis apparatus, Gas. R. Eisenschitz. 1,643,155; Sept. 20.
Anamorphous images, Producing. J. K. McNeely. 1,641,184; Sept. 6.
Anatomical restraining appliance. H. Levine. 1,623,125; 1.641.184; Sept. 6.

Anatomical restraining appliance. H. Levine. 1,623,125; Anchor. W. J. Bauer. 1,632,529; June 14.

Anchor. M. W. Hall. 1,636,6092; July 19.

Anchor. W. A. Heinrich. 1,643,769; Sept. 27.

Anchor. V. A. Heinrich. 1,643,769; Sept. 27.

Anchor. J. A. Holzapfel. 1,618,107; Jan. 4.

Anchor. W. O. Isaacson. 1,616,4267; Nov. 15.

Anchor. W. O. Isaacson. 1,618,107; July 19.

Anchor. B. Scott. 1,636,617; July 19.

Anchor block. C. G. Betts. 1,637,210; July 26.

Anchor. Bott. J. K. Fisher. 1,649,160; Nov. 15.

Anchor. Bott. J. E. Ogden. 1,639,231; Aug. 19.

Anchor. Bott. J. E. Ogden. 1,639,231; Aug. 19.

Anchor. Bott. J. E. Ogden. 1,639,231; Aug. 19.

Anchor. Bott. J. E. Ogden. and C. C. Tomkinson. 1,648,320; Nov. 8.

Anchor. Bott. R. E. Ogden and C. C. Tomkinson. 1,650,957–8; Nov. 29.

Anchor. Bott. R. E. Ogden. C. Tomkinson, and A. R. 1,650,957–8; Nov. 29.

Anchor. Bott. R. E. Ogden. C. Tomkinson, and A. R. Anchor. Bott. R. E. Ogden. 1,648,431; Oct. 25.

Anchor. Bott. R. E. Ogden. C. Tomkinson, and A. R. Anchor. Bott. R. E. Ogden. 1,648,411; Oct. 25.

Anchor. Bott. R. E. Ogden. C. Tomkinson, and A. R. Anchor. Bott. R. E. Ogden. 1,648,411; Oct. 25.

Anchor. For crown blocks. L. A. Rawson. 1,642,170; Anchor davit. B. M. Schauman. 1,640,672; Aug. 30.

Anchor for crown blocks. L. A. Rawson. 1,642,170; Anchor for crown blocks. L. A. Rawson. 1,642,170; Anchor, Ground. M. Isaacs. 1,640,504; Aug. 30.

Anchor, Ground. M. Isaacs. 1,640,504; Aug. 30.

Anchor, Ground. M. Kasacs. 1,640,504; Aug. 30.

Anchor, Ground. M. Rasacs. 1,640,504; Aug. 30. Dec. 18.

Dec. 1 Apr. 26. J. E. Ogden. 1,646,457; Oct. 25. Anchoring device. M. C. Lyddane. 1,628,253; May 10. Anchoring device. J. O. and G. Meredith. 1,628,550; May 10. Anchoring device. M. C. Lyddane. 1,622,253; May 10. Anchoring device. J. O. and G. Meredith. 1,628,550; May 10. Anchoring device. F. Michalicek. 1,629,353; May 17. Anchoring device. R. E. Sheal. 1,613,965; Jan. 11. Anchoring device. R. E. Sheal. 1,613,965; Jan. 11. Anchoring device. R. E. Sheal. 1,613,965; Jan. 11. Anchoring device. R. E. Sheal. 1,613,965; Jan. 12. Anchors, Tanguage. H. C. Thien, 1,636,544; June 21. Anchors, Tamping bar for expanding spring and a survivolent of the state of the

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Amay 3.

All May 3.

All May 3.

All May 3.

Annular rings, Apparatus for covering. H. V. Lough and G. B. Mis. 1,635,187; July 12.

Annulat of drop. C. Auth. 1,623,376; Apr. 5.

Annunciator drop. C. Auth. 1,623,376; Apr. 5.

Annunciator drop. Rotary. F. W. Wood. 1,651,238;
          minimentor drop, Rotary. F. W. Wood. 1,651,238;
Nov. 29.
Antenna arrangement for short-wave apparatus. A. Essu. 1,633,775; June 28.
Antenna array, Directive. J. S. Stone. 1,643,323;
Sept. 27.
       Sept. 27.

Antenna construction. F. Orne. 1,644,266; Oct. 4.

Antenna device. A. R. Nilson. 1,650,461; Nov. 22.

Antenna, Loop. F. Grane. 1,615,755; Jan. 25.

Antenna, Loop. M. W. Stavrum. Des. 72,118; Mar. 1.

Antenna, Loop. E. Vroom. 1,642,522; Sept. 18.

Antenna reel. K. Rottgardt. 1,637,334; Aug. 2.

Antenna regulation. Automatic. W. W. Brown. 1,623,449; Apr. 26.

1,632,039; June 14.

Antenna-switching relay. A. Haddock. 1,647,290; Nov. 1.
       Antenna-switching relay. A. Haddock. 1,624,239; Nov. 1.
Antenna system, Automatic. J. H. Hammond, jr. 1,614,671; Jan. 18.
Antenna system for radiocommunication, Multiple. L. Espenschied. 1,622,270; Mar. 29.
Antenna system, Wireless. F. Conrad. 1,640,534; Aug. 30.
Antenna, Underground. A. L. Moburg. 1,638,699; Aug. 39.
  Aug. 30.
Antenna, Underground. A. L. Moburg. 1,638,699;
Aug. 9.
Antheimitic H. Weyland. 1,616,291; Feb. 1.
Antheimitic W. W. Fylend. 1,616,291; Feb. 1.
Antheimitic H. Weyland. 1,616,291; Feb. 1.
Antheimitic H. Weyland. 1,616,291; Feb. 1.
Antheimitic H. W. Fyfe, and M. Mendoza. 1,636,485; July 19.
Anthraquinone nitrosmine compound. H. Tesche and
A. Job. 1,643,428; Sept. 27.
Anthraquinone paste and making the same. W. M.
Grosvenor and V. P. Gershon. 1,631,589; Juny 19.
Anthrax aggressin, Producing. H. Jensen, C. E. Salsbery, and G. G. Graham. 1,615,76; Feb. 1.
Anticlimb device. R. M. Cutts, Fr. 1,836,856; July 19.
Anticreeper. H. G. Gilmor. 1,636,506; July 20.
Antidiabetic material from pancreas, Preparation of.
J. R. Murlin. 1,646,553; Oct. 25.
Antidabetic substance. F. S. Macy. 1,626,044; Apr. 26.
Antitreez composition, Noncorroding. R. S. Wright.
1,626,989; May 3.
J. F. Struble. 1,626,763; May 2.
Antitreezing colutions, Producing.
G. A. Schultheiss.
July 26.
Anticon. Scalet-fever. W. P. Larson. 1,621,119;
          Antirrost vision appliance. R. Trenota. 1,600,619, July 26. Antigen, Scarlet-fever. W. P. Larson. 1,621,119; Mar. 15. Antiglare attachment. A. A. Ehrlichman. 1,637,608; Aug. 2.
          Antiglare attachment. A. A. Ehrlichman. 1,637,008; Aug. 2.
Antiglare device. E. C. Gray. 1,653,208; Dec. 20.
Antiglare device. B. L. Noyes. 1,628,551; May 10.
Antiglare device. C. R. Snyder. 1,642,299; Aug. 28.
Antiholdup device. A. Goodman. 1,643,512; July 5.
Antiklicking device. J. Dewey. 1,624,861; Apr. 12.
Antimony compounds and tanking same, Complex. H.
Hahl. 1,628,838; May 17.
Antimony compounds allowed as a complex. H.
Antimony of the compound of the 
             May 24.
Antirattler. A. M. Mobley. 1,614.845; Jan. 18
Antirattling device. S. Baruch. 1,619.913; Mar.
Antirattling device. S. Baruch. 1,634.349; July 5
Antirodent preparation. J. C. Kitchin. 1,65:
          Antirattling device. S. Baruch. 1,634,349; July 5. Antirodent preparation. J. C. Kitchin. 1,655,710; Dec. 27. Antiskid chain. E. E. Cronenweth. 1,621,398; Mar. 15. Antiskid chain. H. T. Vulté. 1,619,592; Mar. 1. Antiskid device. G. R. Anderson. 1,615,154; Jan. 18. Antiskid device. G. Bonaccorae. 1,629,432; May 17. Antiskid device. G. Foster. 1,618,166; Feb. 16.
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Antiskid device. F. M. Hamann. 1,620,965; Mar. 15.
Antiskid device. H. E. Hodgson. 1,621,853; Mar. 22.
Antiskid device. W. J. J. Miley. 1,643,167; Sept. 20.
Antiskid device. A. A. Sunde. 1,635,017; July 5.
Antiskiding device. C. W. Erwin. 1,613,869; D. June. 7.
Antiskidding device. E. Sack. 1,615,235; Jan. 25.
Antiskidding device. E. Sack. 1,615,235; Jan. 25.
Antiskidding device. A. R. Thomson. 1,628,292; May 17.
Antiskidding device. Thread member for. A. R. Thomson. 1,628,25; May 17.
Antispasmodic. E. Leuchs. 1,621,757; Mar. 22.
Antithett device. I. M. Glick. 1,621,757; Mar. 22.
Antithumb-sucking device. W. F. MacLachlan. 1,652,867;
Dec. 18.
      Antithumb-sucking device. W. F. MacLachian. 1,652,867; Dec. 13.
Antivibrating device. E. E. Clark. 1,637,604; Aug. 2.
Antproof shelf bracket. H. E. De Pew. 1,633,438; June 21.
   Apparatus for acut. H. E. De Few. 1,686,488;
Antrum burr. B. S. Binkley, L. E. Sutsman, and T. E.
Grove. 1,630,239; May 24.
Ant trap. A. A. Edwards and R. L. McDonald.
1,621,318; Mar. 15.
Ant trap. W. E. Rawlings. 1,623,439; Apr. 5.
Apparatus for and method of applying the to cores.
B. K. Ford. 1,629,694; May 24.
B. Smith. 1,636,331; July 19.
Apparatus for applying vapors to the human body. J. F.
Class. 1,650,010; Nov. 22.
Apparatus for automatically charging containers with predetermined and adjustable amounts of liquids or the like. C. Kobau. 1,651,063, Dec. 20.
Apparatus for counting articles. O. J. Alletton. 1,651,939; Dec. 20.
Apparatus for counting and packing rings. A. F. Thener
      Dec. 6.
Apparatus for counting and packing rings. A. F. Thener and J. M. Kountzman. 1,654,022; Dec. 27.
Apparatus for delivering measured quantities of a fluent Apparatus for mixing and proportioning materials. E. P. Haliburton. 1,649,062; Nov. 16.
Apparatus for pressing dents in bakery rolls. H. Rill. 1,653,063; Dec. 20.
Apparatus for pressing dents in bakery rolls. H. Rill. 1,653,663; Dec. 20.
Apparatus for preventing grade-crossing accidents. L. H. Hopewell. 1,651,955; Dec. 6.
Apparatus for releasing step by step single-chamber air-pressure brakes. J. Rihosek and R. L. Leuchter. Apparatus for serving out beer. G. Lamarque and C. Recuero. 1,646,916; Oct. 25.
Apparatus for serving out beer. G. Lamarque and C. Recuero. 1,646,916; Oct. 25.
Apparatus for teaching by ear the rendition of musical compositions. J. A. Green. 1,653,458; Dec. 20.
Apparatus for the separation of volatile products from solid carbonaceous material. R. B. Cotterman. Apparel. J. Lesson. 1,649,711; Nov. 15.
Apparel grament. W. Kops. 1,022,873; Mar. 29.
Apparel grament. W. Kops. 1,022,873; Mar. 29.
Apparel rack. F. S. Saxton. 1,651,969; Dec. 6.
Apparel, Wearing. A. Witz. 1,628,213; May 10.
Appliance for producing dimples. E. I. Gilbert. Sept. 6.
Applicator for removing facial defects. I, Bliss, 1,641,471; Sept. 6.
Applicator for liquids. T. S. Harris. 1,615,581; Jan. 25.
Applicator, Liquid. E. Themak. 1,633,424; June 21, Applicator, Varinal. F. Noveron. 1636,489; July 12.
      Applicator, Liquid. E. Themak. 1,633,424; June 21,
Applicator, Vaginal. F. H. Newton. 1,636,482; July 19,
Appliqué trimming. W. W. Hobe. Des. 72,947-9;
June 28.
   June 28.
Applying apparatus. J. W. Cosgrove. 1,620,802; Mar. 15.
Appron. M. Baxter. 1,620,426; Mar. 8.
Apron. A. M. H. Bliss. 1,632,873; June 21.
Apron. M. Katz. 1,628,670; May 17.
Apron. M. Mercola. 1,643,811; Sept. 27.
Apron. Child's. C. E. Bowman. Des. 72,605; May 17.
Apron. Worker's. M. Lichter. 1,618,208; Feb. 22.
Aquarlum. L. H. Burlin. 1,620,006; Mar. 8.
Aquarlum. H. A. Stone. 1,643,527; Sept. 27.
All Hluminated. J. A. Schrimp. 1,634,305;
All Marchatel Child. 1,643,627; Sept. 27.
Apple 1,643,627
   July 5.
Arc converter, High frequency. R. R. Beal and H. F.
Elliott. 1,620,318; Mar. S.
Arc cutting and welding apparatus. Transformer for elec-
Arc cutting, repairing, and welding apparatus, Trans-
former for electric. F. C. Owen. 1,638,959; July 5.
Arc-extinguishing device. E. A. Hester. 1,017,390;
Feb. 15.
   Feb. 15.

Are for melting and pulverizing metals, Electric. W. Müller. 1.615.995; Feb. 1.

Are generator. R. Herzog. 1.636.094; July 19.

Are lamps. Feed for. P. Mole, fr. 1.625.472; Apr. 28.

Are lamps of the sealed type. F. Bahr. 1.632.578;

Are light. A. Ihln. 1.640.450; Aug. 30.

Are light. Letterdee, Production of. L. Kahl. 1.654.046; Dec. 27.

Are shield. C. T. Evans. 1.617.515; Feb. 15.

Are-welding generator. S. Harnock. 1.652.56; Dec. 13.

Are-welding system. H. D. Morton. 1,620.219; Mar. 8.
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Arc.welding system. P. P. Pipes. 1,618,672; Feb. 22.
Arch. J. C. Gordon. 1,640,932; Aug. 30.
Arch and ankle support. L. M. Pense. 1,639,198;
Aug. 16.
Arch and siphon, Steel water. G. D. McLeod, T. F.
Pokorski, and T. J. Hewitt. 1,646,304; Oct. 18.
Arch and dile for forming same. G. P. Reintjes.
Arch and dile for forming same. G. P. Reintjes.
Brand. 1,616,886; Feb. 8.
Arch sling, Multiple. E. D. George. 1,638,842; Aug. 16.
Arch support. C. G. Bergmann. 1,633,513; June 21.
Arch support. P. E. Boehlke. 1,648,633; Nov. 29.
Arch Support. H. R. Levick, fr. 1,631,288; Nov. 29.
Arch support. H. R. Levick, fr. 1,631,288; Nov. 29.
Arch support. D. Livignano. 1,646,920; Oct. 25.
Arch support, Athelic. F. T. Cutshaw. 1,627,598;
May 10.
Arch support, Detachable. F. J. Gibbons. 1,641,888: Arch support, Detachable, F. J. Gibbons. 1,641,886: Sept. 6 Arch: support, Detachable, F. J. Gibbons. 1,641,886: Sept. 6.
Arch supporter. P. Iacovino. 1,643,812; Sept. 27.
Arch supporter. J. Le Boeuf. 1,628,161; May 10, Arch supporter. J. Le Boeuf. 1,628,161; May 10, Arch supporter, Instep. W. S. Duffield. 1,628,725; Arch supporter, Instep. W. S. Duffield. 1,628,725; Arch supporter, Instep. W. S. Duffield. 1,628,725; Arch supporter, Instep. Resemble 1,622,830; June 14.
Archic or gaiter. G. C. Thomas. 1,626,537; Apr. 26.
Arctices, Attachment for. J. H. Webber, 1,621,342; Mar. 18.
Articles, Inst. 1,642,207; Sept. 20.
Archices, Attachment for. J. H. Webber, 1,621,342; Mar. 15.
Arm. H. S. Best. 1,626,502; Apr. 26.
Arm. Automatic. P. von Király and J. Lovász.
Arm. H. S. Best. 1,626,502; Apr. 26.
Arm. Automatic. P. von Király and J. Lovász.
Arm. H. S. Arm. Automatic. P. von Király and J. Lovász.
Arm. 1,642,207; Sept. 20.
Arm. 1,636,361; Aug. 9.
Arm rest. L. D. Houck. 1,628,816; Mar. 15.
Arm rest. F. Payion. 1,650,385; Nov. 22.
Arm. 1,7 S. Cully 1,652,801; Dec. 13.
Arm. 1,7 S. Cully 1,652,801; Dec. 13.
Arm. 1,7 N. Support. 1,632,855; Sept. 20.
Arm. 1,642,855; Sept. 20.
Armanent. E. M. Horn. 1,621,323; Mar. 15.
Armanent. E. M. Horn. 1,621,323; Mar. 15.
Armanure. N. J. Fitzgerald. 1,642,855; Sept. 20.
Armature. V. G. Apple. 1,642,957; Sept. 13.
Armature. V. G. Apple. 1,642,957; Sept. 13. May 10.

Armature, V. G. Apple. 1,642,057; Sept. 13.

Armature, P. J. Fitzgerald. 1,644,718; Oct. 11.

Armature-coll winding and shaping device. G. Bender.

1.616,947; Feb. 8. Armature-core insulation. A. B. Gomory. 1,619,415; Mar. 1. Armature for distant-control indicators for continuous distant-control indicators for continuous ting current. H. Usener. 1,630,503; Armature for distant-control indicators for continuous and alternating current. H. Usener. 1,630,503; May 31.

Armature securing and centering means. M. Camors. 1,637,173; July 26.

Armature studies and centering means. M. Camors. 1,637,173; July 26.

Armature winding machine. R. G. Jones and C. Zwiebel. 1,638,637; July 12.

Armature windings, Machine and method for position Ing. FH. White. 1,630,558; Nov. 22.

Armor. Diving. E. Levy. 1,643,667; Sept. 27.

Armor. Diving. E. Levy. 1,643,667; Sept. 6.

Arranding device, Article. J. S. Hardiman. 1,644,999; Oct. 11.

Arrows. Clamp for feathering. G. W. Blodgett. 1,653,257; Dec. 20.

Arsenic compounds, Manufacture of new derivatives of organic. J. Pflager Theory. 1,654,662; Nov. 1.

Arsenic compounds, Manufacture of organic. J. Pflager Arsenic compounds, Manufacture of organic. J. Pflager 1,655,227; Dec. 20.

Arsenic solutions and preparing same. O. Lowy. Arsenical product and making same. J. F. Blyth and C. Bilis. 1,649,562; Nov. 15.

Arsenical product and making same. J. F. Blyth and C. Bilis. 1,649,562; Nov. 15.

Arsenical product and making same. Complex metallic. K. Strettwolf and J. Hallensleben. 1,616,204; Peb. 1.

Art needlework. A. H. Shillman. 1,649,988; Nov. 22.

Article clip. W. E. Beek. 1,652,972; Dec. 32.

Article-feeding mechanism. E. Nordstrom. 1,623,066; Apr. 5.

Article-feeding mechanism. H. A. House. 1,627,391; Article-bandling mechanism. H. A. House. 1,627,391; and alternating current. H. Article-hondern M. G. Grundmann. 1,649,225; Nov. 15.
Article holder. M. G. Grundmann. 1,649,225; Nov. 15.
Article lifter. F. W. Skroch. 1,634,856; July 5.
Article of bonder granulus material and making the
Article of manufacture. C. A. Hatchet. 1,648,344; Nov. 8.

Articles by extrusion, Forming. W. T. Davis and J. A. McGinnis. 1,646.854; Oct. 25.
Articles, Feeding. C. Thyssen. 1,637,030; July 26.
Articles, From committed material, Forming. H. Buel. Articles from committed material, Forming. H. Buel. 24.
Articles from the metal, Method and apparatus for forming. H. B. Ruckett. 1,627,412; May 2.
Articles from sheets of material, Apparatus for forming. A. A. MacLaren. 1,619,210; Mar. 1.
Articulator. W. M. Gambill. 1,647,934; Aug. 2.
Articulator. W. M. Gambill. 1,647,934; Nov. 1.
Artificial flower. A. C. Matlack. 1,647,533; Nov. 1.
Artificial flow. A. C. Matlack. 1,647,533; Nov. 1.
Artificial flow. J. H. Rebm. 1,619,485; Mar. 1.
Artificial inthe O. H. Erickson. 1,644,822; Oct. 11.
Artificial materials, Manufacture of. L. Lillienfeld. 1,642,588; Sept. 13.
Artificial tree. H. L. Berman. 1,636,981; July 26.
Artificial tree. A. Ekdahl. 1,613,386; Jan. 4.
Articles from the following formulation of the following following formulation of the following foll Asbestos, Cleaning. E. F. Nanfeldt. 1,632,620; June 14. Asbestos cloth, Apparatus for weaving. E. J. Trainor. 1,629,850; May 24. 1.629.850; May 24.
Asbestos, Treatment of amosite. J. Gow. 1,617.803;
Feb. 15.
Asp and dust pan, Combined. W. I. Clements, 1,629.336; May 17.
Asp and dust pan, Combined. W. I. Clements, 1,629.336; May 17.
Asp and Combination. A. F. Culling, 1,618.366; Feb. 22.
Asp can cover. L. G. McConnell. 1,646.623; Oct. 25.
Asp canter, Elevated. J. S. Woodahl. 1,627,252; Ash carr May 3. May 3.

Ash-conveyer systems, Wash vent for. C. F. Zimmerman,
1.623,079; Apr. 5.

Ash gate. F. H. Dunbar, 1.630,378; May 31.

Ash gate. G. J. Oldroyd, 1.641,823; Sept. 6.

Ash gate. J. Van Brunt, 1.636,398; July 19.

Ash-handle equipment. O. S. Bowman, 1.624,909;

Apr. 19.

Ash-handling equipment. F. B. Allen, 1,634,228;

June 28. June 28.

Ash pan. R. B. Farrar. 1.627.023; May 3.
Ash receiver. C. J. Boe. 1.635.395; July 12.
Ash receiver. J. X. Tice. 1.634.611; July 5.
Ash receiver. J. X. Tice. 1.634.611; July 5.
Ash receiver and match box, Combined. A. W. Rosen, Des. 72.803; June 7.
Ash receptacle. H. G. Jorgensen. 1,627.907; May 10.
1.620.670; Mar. 15.
Ash sifter. M. Citrin. 1,629.149; May 17.
Ash sifter. A. Papenfuss. 1.629.720; May 24.
Ash-sifting shovel. A. H. Miller. 1.619.266; Mar. 1.
Ash-spraying apparatus. H. W. Minnick. 1,617.921;
Ash stand. R. G. Fleming. 1.646.686; Oct. 18.
Ash stand. R. G. Fleming. 1.646.686; Oct. 18.
Ash system, Dugsless. H. P. Rangheya. 1.627.024. Ash system, Dustless. H. P. Banninga. 1,637,982; Aug. 2. Ash tray and cigarere and cigar extinguisher, Combined.

J. F. Thiessen. 1,640,554; Aug. 30.

Ash tray and lamp cap. Combination. L. Baskin and M. Sternberg. Des. 72,468; Apr. 19.

Ash Tay and the receptacle, Smoker's. R. M. Davis.

Ash tray and match-box lock, Combined mergency. A. Shi tray and match-box lock, Combined mergency. A. Moore. 1,636,147; July 19.

Ash tray and stand. B. L. Farr. 1,653,897; Dec. 27.

Ash tray, cigarert cond. Dippe holder, Combination. L. Ash tray, and the standard cond. Dippe holder, Combination. L. Ash tray, regard cond. Dippe holder, Combination. L. Ash tray and stand. B. L. Farr. 1,639,036; Aug. 16.

Ash tray and stand. Similar nature. V. Allalouf. Des. Ash tray or article of similar nature. V. Allalouf. Des. Ash tray or article of similar nature. V. Allalouf. Des. Ash tray and producing the same, Cellular body of. J. H. Young. 1,630,103; May 24.

Asphalt or bitumen substitute. F. G. Renou. 1,649,545; Nov. 15. Asphalt slabs and sheets, Preparing. F. C. J. de Both. 1,643,059; Sept. 20.
Asphalt spreader. H. G. Richardson. 1,642,747; Sept. 20.
Asphalt, Ctoring and handling apparatus for. H. W. Asphalt, Ctoring and handling apparatus for. H. W. Asphalt, Ctoring and handling apparatus for. H. W. Asphalt tanks, Apparatus for heating and emptying. H. W. Ash. 1,654,859; Dec. 27.
Ascembling and lasting machine B. Jorgensen. 1,634,502; July 5.
Assembling machine. M. Hotheller. 1,617,371; Feb. 15.
Assembling machine. M. Hotheller. 1,617,371; Feb. 15.
Assembling machine. Leaf spring. E. S. Kolbeck. 1,648,408; Nov. 8.
Assembling machine, Stepladder-support. J. E. Kalgren. 1,647,345; Nov. 1,
Assembling parts, Apparatus for. G. M. Fullarton. 1,642,771; Sept. 20.
Assembling parts, Apparatus for. G. M. Fullarton. 1,642,771; Sept. 20.
Assembling parts, Apparatus for. G. M. Fullarton. 1,642,771; Sept. 20.
Assembling parts, Apparatus for. G. M. Fullarton. 1,624,119; Apr. 12.
Assembly plate and die-holding clamp. E. G. Bates and R. C. Bates. 1,638,180; Aug. 9.
Associating and delivery mechanism. A. M. Zuckerman. 1,637,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,637,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,637,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,635,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,635,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,635,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,635,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,635,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,635,170; July 20.
Associating and delivery mechanism. A. M. Zuckerman. 1,635,190; Aug. 9.
Astronomy device. M. Ryanuk. 1,643,007; Sept. 20. tolving ordinary problems of. W. A. Loth. 1,625,369; Apr. 19.
Apr. 19.
Astronomy device. M. Evanuk. 1,643,007; Sept. 20.
Asynchronous induction electric machine. V. Martinetto. 1,614,008; Jan. 11.
Asynchronous machine. V. Martinetto. 1,614,009; Jan. 11.
Asynchronous machine. V. Martinetto. 1,614,009; Jan. 14.
Artinetic cooling tower. J. S. Fluor. 1,624,324; Apr. 12.
Atmospherically-controlled switch. J. E. Bolling. 1,642,718; Sept. 20.
Atomization of fluids, Method and apparatus for. C. L.
Riley. 1,624,847; Apr. 12.
Atomizer. H. T. Fr. R. O. Edg. 1,622,372; Dec. 13.
Atomizer. H. S. Fr. R. O. Edg. 1,622,372; Dec. 13.
Atomizer. S. M. Salpas. 1,617,545; Feb. 15.
Atomizer. J. Stiriss. 1,623,604; Apr. 5.
Atomizer. V. E. Wiechmann. 1,642,767; Sept. 20.
Atomizer. V. E. Wiechmann. 1,642,767; Sept. 20.
Atomizer. Des. 73,113-16; July 19.
Atomizer. Des. 73,113-16; July 19.
Atomizer. Des. 73,113-16; July 19.
Atomizer. G. M. Milla-16, M. Minton, jr. Des. 73,555; Sept. 27. Atomizer, Perfume. G. M. Minton, jr. Des. 73,525; Sept. 27.

Atomizing device. W. J. Rudolph. 1,625,098; Apr. 19.

Atomizing device. W. J. Gates. 1,617,681; Feb. 15.

Atomizing device. W. J. Gates. 1,617,681; Feb. 15.

Atomizing liquid fuels or other liquids, Method and apparitus for. O. R. Gröhmist. 1,625,997; Apr. 20.

Atomizing means. F. B. Comins. 1,631,475; June 71.

Attaching means. F. B. Comins. 1,631,475; June 71.

Attaching mechine. W. E. Elliott. 1,627,889; May 10.

Attaching means. M. G. Fox. 1,636,222; July 19.

Attaching means. M. G. Fox. 1,636,222; July 19.

Attaching means. M. G. Fox. 1,636,222; July 19.

Attachinent device. F. J. Shook. 1,627,802; May 10.

Attachinent device. F. J. Shook. 1,627,7679 May 17.

Attrition mill. W. Loken. 1,631,422; June 7.

Audiole alarm. C. Denser. 1,633,374; June 21.

Audion amplifier circuits, Preventing retroactive effects in. G. A. Somersalo. 1,633,421; June 21.

Audion amplifier circuits, Preventing retroactive effects in. G. A. Somersalo. 1,633,421; June 21.

Audion in Convertible. J. S. Dean. 1,623,619; Apr. 5.

Auger, Posthole. A. C. Cogre. 1,642,647; Sept. 13.

Auto-chaln fastener. H. I. Willis. 1,643,048; Sept. 20.

Auto-condensation pad, Electric. W. R. Beckley. 1,022,244; Mar. 22.

Auto-crank, Antikick. N. Salo. 1,631,494; June 7.

Auto fender. S. Rubin. 1,647,933; Nov. 1. 1.022.244; Mar. 22.
Auto crank, Antikick. N. Salo. 1.631.649; June 7.
Auto fender. S. Rubin. 1.647.933; Nov. 1.
Auto heal protector. V. Christensen. 1.622.859; Mar. 29.
Auto, Land and water. J. W. Julich. 1.615.389; Jan. 25.
Auto, Land and water. J. W. Julich. 1.615.389; Jan. 25.
Auto Land. J. C. L. Fulton. 1.634.099; Julic. 1.62.
Auto Signal. W. P. Rohner. 1.654.4015; Dec. 27.
Auto Signal. F. W. Stull. 1.647.588; Nov. 1.
Auto Signal. C. Van Allen. 1.649.938; Nov. 22.
Auto Signal. G. Van Allen. 1.649.938; Nov. 22.
Auto Signal. F. W. Stull. 1.647.588; Nov. 1.
Auto Signal. F. W. Stull. 1.647.589; Nov. 21.
Auto Signal. G. Van Allen. 1.649.938; Nov. 22.
Auto Signal. F. W. Stull. 1.647.588; Nov. 1.
Auto Spring suspension. P. O. Solon. 1.618.599; Feb. 22.
Auto processing suspension. P. O. Solon. 1.618.599; Feb. 22.
Auto processing suspension. P. O. Solon. 1.618.599; Feb. 22.
Auto processing suspension. P. O. Solon. 1.618.599; Feb. 22.
Auto processing suspension. P. O. Solon. 1.618.599; Feb. 22.
Auto top. F. V. Miller and F. M. Crawford. 1,644.025; Oct. 4. Autostart motor. C. E. Johnson. 1,647,633; Nov. 1.
Auto top. F. V. Miller and F. M. Crawford. 1,544,025;
Oct. 4.
Auto traffic signal. E. C. Beecher. 1,646,895; Oct. 25.
Auto transformer. F. F. Brand. 1,641,659; Sept. 6.
Auto tray holder. C. D. Brown. 1,618,567; Feb. 22.
Auto tray holder. C. D. Brown. 1,618,567; Feb. 22.
Auto tray holder. C. D. Brown. 1,618,567; Feb. 22.
Auto tray kind. Sprayer, Combined. R. Weimer. 1,623,221; Apr. 5.

Auto vehicles, Transmission gear for. G. O. Howeth. 1,642,609; Sept. 13. Auto wheel. C. N. Swan. 1,646,635; Oct. 25. Auto wheel puller. J. V. Ray. 1,623,440; Apr. 5. Auto wheel sleigh runner. J. A. Barrett. 1,642,714; Auto wheel sleigh runner. slabs and sheets, Preparing. F. C. J. de Both. Sept. 20. Autos, Attachment for. E. H. Oakman. 1.626.746: May 3.
Autos, Attachment for. J. A. Rugroden. 1,617,651;
Feb. 15.
Autos, Foot scraper for. M. M. Lewis. 1,652,312; Dec. 13.
Autos, Headlight adjuster for. J. A. Piper. 1,628,360;
May 17.
Autos, Motor brake for. J. Kirchensteiner. 1,637,118;
July 26. July 26.
Autooggan. L. Hofmeister. 1,622,719; Mar. 29.
Autographic register. W. B. Barker and L. Jensen.
1,648,485; Nov. 8.
Autographic register. P. A. Jackson. 1,621,985; Mar. 22.
Autographic register. P. A. Jackson. 1,622,148; Autographic Autographic Mar. 22. Autographic register. P. A. Jackson. 1,630 Autographic register. P. A. Jackson. 1,630,298; May 31. ackson. 1,632,443; Autographic register. P. A. Jackson. 1,633,108; June 21.
Autographic register. P. A. Jackson. 1,636,961; July 26.
Autographic register. P. A. Jackson. 1,636,961; July 26.
Autographic register. P. A. Jackson. 1,650,892; Autographic register. L. Jensen. 1,648,549; Nov. 8. Autographic register. L. Jensen. 1,651,456; Dec. 6. Autographic register. A. A. Johnson. 1,649,234; Nov. 15. Autographic register. C. L. Johnston. 1,649,595; Autographic register. G. J. Neth. 1,615,953; Feb. 1. Autographic register. F. E. Pfeiffer. 1,640,960; Autographic register. J. Q. Sherman. 1,617,032; Feb. 8, Autographic register, J. Q. Sherman. 1,644,955; Oct. 11. Automatic alarm. J. W. Johnson. 1,641,278; Sept. 6, Automatic closure. N. A. and G. A. Stathes. 1,629,747; Automatic closure. N. A. and G. A. Stathes. 1,829,747; May 24.
Automatic gate. E. S. Coyle. 1,613,872; Jan. 11.
Automatic gate. R. I. Farrell. 1,634,025; June 28.
Automatic gate. H. M. Hirsch and F. A. Harris. 1,622,799; May 24.
Automatic gate. T. A. Matthews. 1,618,599; Jan. 18.
Automatic gate. T. A. Matthews. 1,618,699; Jan. 18.
Automatic gate. T. Swearingen. 1,624,813; Apr. 12.
Automatic gate. T. Swearingen. 1,624,813; Apr. 12.
Automatic handle. W. E. Baxter. 1,627,889; May 10.
Automatic handle. W. E. Baxter. 1,627,889; May 10.
Automatic handle. W. E. Baxter. 1,627,890; May 10.
Automatic register. L. K. Aldrich. 1,618,625; Pap. 22.
Automatic register. L. K. Aldrich. 1,618,625; Fap. 22.
Automatic register. L. D. A. M. Spon. 1,624,474; Mar. 26.
Automatic regulator. L. Dana. 1,624,639; Apr. 12.
Automatic regulator. A. M. Spon. 1,628,797; May 3.
Automatic regulator. A. M. Spon. 1,628,797; May 3.
Automatic sprinkler. J. F. Jones. 1,628,797; May 3.
Automatic sylich. P. W. Wolfborat. 1,629,946; May 24.
Automatic switch. F. A. Jacken. 1,628,638; Jan. 4.
Automatic switch. J. D. Collins. 1,620,443; Mar. 8.
Automatic switch. L. W. Gilbert. 1,635,5078; July 5.
Automatic switch. L. W. Gilbert. 1,635,5078; July 5.
Automatic switch. C. R. Sipe. 1,631,506; June 7.
1,623,737; July 12.
Automobile accessory. J. Bindon. 1,651,943; Dec. 6.
Automobile accessory. R. A Mayer. 1,621,849; Mar. 22. May 24. Automobile accessory. J. Bindon. 1,651,943; Dec. 6.
Automobile accessory. R. A. Mayer. 1,621,849; Mar. 22.
Automobile and truck traction attachment. W. and M. H.
Paterson. 1,652,133; Dec. 6.
Automobile apparatus. J. A. Tonne. 1,628,374; May 10.
Automobile applance. J. R. Snyder. 1,615,599; Jan. 25.
Automobile arm rest. J. Finn. Des. 75,286; Aug. 23.
Automobile attachment. J. Bouck. 1,035,814; July 12.
Automobile attachment. A. and J. W. Roth. 1,404,784; Nov. 8.
Automobile attachment. W. H. Ruth. 1,649,083; Nov. 15.
Automobile bed. O. C. Harper. 1,620,346; Mar. 8.
Automobile bodies, Glass partition for closed. W. Brewster. 1,628,074; Apr. 26.
Automobile body. P. Bunevac. 1,619,918; June 14.
Automobile body. C. A. Frick and R. W. Dwight. 1,623,946; Apr. 5.
Automobile body. J. E. Larson. Des. 72,374; Apr. 5.
Automobile body. J. E. Larson. Des. 72,374; Apr. 5.
Automobile body. J. Ledwinka. 1,613,177; Jan. 18.
Automobile body. J. Ledwinka. 1,643,740; Sept. 20.
Automobile body. J. Ledwinka. 1,643,740; Sept. 27.
Automobile body. J. Ledwinka. 1,643,740; Sept. 27.
Automobile body. J. Spurges. Des. 72,574; Aug. 2. 1,623.946; Apr. 5.
Automobile body. J. E. Larson. Des. 72.374; Apr. 5.
Automobile body. J. E. Larson. Des. 72.374; Apr. 5.
Automobile body. J. Ledwinka. 1,652.865; Dec. 13.
Automobile body. J. Ledwinka. 1,652.865; Dec. 13.
Automobile body. J. Ledwinka. 1,632.865; Dec. 13.
Automobile body. D. S. Miller. Des. 72.561; May 3.
Automobile body. C. Supres. Des. 73.212; Aug. 2.
Automobile body. W. O. Underwood. 1,644.405; Oct. 4.
Automobile body. M. O. Therwood. 1,644.405; Oct. 4.
Automobile body. And making same. J. Ledwinka. 1,643.741; Sept. 27.
Automobile body. And making same. J. Ledwinka. 1,643.743; Sept. 27.
Automobile body. And making same. J. Ledwinka. Sept. 27.
Automobile body. And M. C. L. Childs. 1,641.319; Sept. 47.
Automobile body. And M. C. L. Childs. 1,641.319; Sept. 47. Sept. 6. Automobile body construction. G. Fauser. 1,638,729; June 28.

Automobile body construction. H. Ford. 1,629,493; May 24.
Automobile body construction. A. J. Hollingshead.
1,639.037; Aug. 16.
Automobile body, Convertible. F. Bunevac. 1,637,101; Automobile body, Convertible, F. Bunevac, 1,637,101; July 26.
Automobile body, Convertible, Q. Obergfell and E. Patewall, 1,632,672; June 14.
Automobile body Fronts, Hood for, J. S. Booth, Des Automobile body spring control apparatus, J. B. Drennan, 1,632,728; June 14.
Automobile body-verifiating system, B. W. Twyman and S. Paul, 1,626,893; May 3.
Automobile brake, J. E. Beard, 1,618,748; Feb. 22.
Automobile brake, J. E. Beard, 1,618,748; Feb. 22.
Automobile brake, J. Alaman, A. G. S. G. S. J. C. S. Automobile brake, J. E. Garcia, 1,624,671; Oct. 11.
Automobile brake mechanism, E. Garcia, 1,644,671; Oct. 11. Oct. 11.
Automobile brake mechanism. H. S. Hart. 1,653,277; Automobile buffer and attachment therefor. G. A. Lyon. Automobile buffer and attachment therefor. G. A. Lyon. 1,626,347; Apr. 26.
Automobile buffer construction. G. A. Lyon. 1,650,635; Nov. 29.
Automobile bumper. V. Breuer and P. Leschnik. 1,615,565; Jan. 25.
Automobile bumper. C. Girl. 1,623,404; Apr. 5.
Automobile bumper. O. H. Goeta. 1,623,471; Apr. 5. Automobile bumper, M. H. Loughruge, A, May, sor, Feb. S. Automobile bumper, W. G. Pancoast, 1,623,043; Jan. 4. Automobile bumper, W. Rahe, 1,644,032; Oct. 4. Automobile bumper, W. Rahe, 1,644,032; Oct. 4. Automobile bumper, J. S. Wernig, 1,627,218; May 3. Automobile bumper, F. G. Whittington, Des. 71,817; Jan. 4. Jan. 4. Automobile bumper and clamp. J. J. Mascuch. 1,613,668; Automobile bumper and clamp. J. J. Mascuch. 1,613,608, Jan. 11.
Automobile chassis-greasing preparation. G. G. Fairchild. 1,645,097; Oct. 11.
Automobile chassis-bublicating device. F. H. Gleason. 1,629,453; May 17.
Automobile chassis, Lubricating means for. E. M. Six. 1,531,550; June 7.
Automobile chassis, Lubrication. J. Bijur. 1,618,122; Automobile chassis Lubrication. J. Bijur. 1,618,122; Heb. Automobile, Child's foot-power. J. A. Bried. 1,634,486; July 5. Automobile circuits, Indicator for. H. I. Shire. 1,630,807; May 31. Automobile cleaning device. J. W. Carrington. 1,625,792; Automobile cleaning device. J. W. Carrington. 1,625,792; Apr. 26.
Automobile construction. C. R. Paton. 1,638,782; Aug. 28.
Aug. 31.
Automobile custions, Retainer for. W. Brewster. 1,619,916; Mar. 8.
Automobile closer, Soncetting means for two-part. R. W. Hull. 1,616,803; Feb. 8.
Automobile doors, Connecting means for two-part. R. W. Hull. 1,616,803; Feb. 8.
Automobile doors, Sheid attachment for. F. H. Campaline doors, Sheid attachment for. F. H. Campaline doors, Ventilator fastener for. A. T. Meyer. 1,636,479; July 19.
Automobile doors, Ventilator fastener for. A. T. Meyer. 1,636,479; July 19.
Automobile engine. S. I. Fekete and S. G. Baits. Automobile engine. S. I. Fekete and S. G. Baits. Automobile engine. S. I. Fekete and S. G. Baits. 1,641,011; Aug. 30.
Automobile engine. Heater for. A. H. Sargent. 1,641,011; Aug. 30.
Automobile fender. J. Ledwinka. Des. 72,266; Mar. 22.
Automobile fender. J. Ledwinka. Des. 72,266; Mar. 22.
Automobile fender. J. Ledwinka. Des. 72,266; Mar. 22.
Automobile fender. J. Ledwinka. Des. 72,666; Mar. 24.
Automobile frame and tubular crosspart herefore, Festple. L. R. Smith. 1,630,036; May 24.
Automobile frame and tubular crosspart herefore, Fiexble. L. R. Smith. 1,630,036; May 24.
Automobile frame and tubular crosspart herefore, Fiexble. L. R. Smith. 1,630,036; May 24.
Automobile frame. Automobile frame say further the frame and tubular crosspart herefore, Fiexble. L. R. Smith. 1,630,036; May 24.
Automobile frame. 1,643,282; Sept. 20.
Automobile frame. 1,643,282; Sept. 20.
Automobile frames, Torsion-resisting cross bar for. B. T. Andren. 1,643,282; Sept. 20.
Automobile frames, Torsion-resisting cross bar for. B. T. Andren. 1,648,283; Sept. 20.
Automobile frames, Torsion-resisting cross bar for. B. T. Andren. 1,648,283; Sept. 20.
Automobile frames, Torsion-resisting cross bar for. B. T. Andren. 1,648,283; Sept. 20.
Automobile frames, Torsion-resisting cross bar for. B. T. Andren. 1,648,283; Sept. 20.
Automobile heater. J. R. Furshoun. 1,628,481; Nov. 29.
Automobile heater. J. R. F Apr. 26.
Automobile construction. C. R. Paton.

Automobile heater, L. C. Karcher and L. Asman, 1282,974; June 2W. E. Stevens. 1,642,631; Sept. 13. Automobile heater. H. B. Tyler. 1,633,717; June 28. Automobile heaters, Casing for. T. Bovey. 1,635,701; Automobile heaters, Casing for. T. Bovey. 1,635,701; Automobile heaters, Casing for. T. Bovey. 1,635,701; July 12:
Automobile heaters, Control device for. T. Bovey Automobile heaters, Control for. T. Bovey and S. J. Y. Bovey, 1,617,099; Feb. 8.
Automobile hood. D. H. Abell. 1,617,661; Feb. 15.
Automobile hood. J. Watson. 1,648,086; Nov 8.
Automobile hood. D. Marson, R. G. Moore. 1,637,530; Automobile hood. D. Watson. 1,648,086; Nov 8. Automobile hoods and radiators, Emblem for. G. W. Derujinsky, Des. 73,161; Aug. 2. Automobile hoods, Attachment for. A. J. Smith. 1,613,912; Jan. 11. Automobile hoods, Louver covering for. O. A. Larsen. 1,616,810; Feb. 8. Automobile hoods, Rain guard for. M. P. Fishburn. 1,636,746; July 12. Automobile hoods, Rain guard for. M. P. Fishburn. 1,636,740; July 12. Automobile horn blower. C. Bendtsen. 1,614,340; Jan. 11. Aug. 2. Jan. 11. Automobile hotel and garage. R. C. Hecox. 1,634,498; Automobile inclosure. G. E. Bishop. 1,620,003; Mar. S. Automobile inclosure structure. J. B. Zimmers and O. L. Herron. 1,637,367; Aug. 2. Automobile inhaler. W. S. Brown. 1,613,220; Jan. 4. Automobile instrument panel. A. F. Draper. Des. 73,073; Jul. 19. Automobile instrument panel. A. F. Draper. Des. 73,073; July 19. Automobile instrument panel. P. J. Kent. Des. 73,087; July 19. Automobile instrument panel. P. J. Kent. Des. 73,527; automobile instrument panel. P. J. Kent. Des. 73,087; July 19.

Automobile instrument panel. P. J. Kent. Des. 73,527; Sept. 27.

Sept. 27.

Automobile jack. J. T. Amiss. 1,634.391; July 5.

Automobile jack. O. W. Hahn. 1,630.792; May 31.

Automobile jack. G. P. Lee. 1,616.392; May 31.

Automobile jack. G. P. Lee. 1,616.392; May 31.

Automobile jack. G. P. Lee. 1,616.392; May 31.

Automobile jack. B. W. Twyman. 1,601.206; Feb. 1.

Automobile jack. B. W. Twyman. 1,601.206; Feb. 1.

Automobile jack. B. W. Twyman. 1,601.206; Feb. 1.

Automobile lens. L. B. Rice. 1,619.038; Mar. 24.

Automobile lens. L. B. Rice. 1,619.038; Mar. 24.

Automobile lens. L. R. Mar. 1,619.038; Mar. 24.

Automobile lens. L. R. Mar. 1,619.038; Mar. 24.

Automobile liense tags, Identification seal for. L. J. Kiger. 1,636.778; July 26.

Automobile light. J. Mediock. 1,646.328; Oct. 25.

Automobile light. H. R. Khearer. 1,627.689; May 10.2

Automobile light. H. R. Andrew. 1,622.435; Apr. 12.

Automobile lock. M. Farsh. 1,625.249; Apr. 13.

Automobile lock. M. Farsh. 1,625.249; Apr. 13.

Automobile lock. M. Farsh. 1,625.249; Apr. 13.

Automobile lock. F. M. Furber. 1,617.840; Feb. 15.

Automobile lock. F. M. Furber. 1,617.840; Feb. 15.

Automobile lock. G. S. Hershey. 1,644.583; July 26.

Automobile lock. G. S. Hershey. 1,644.583; July 26.

Automobile lock. G. S. Hershey. 1,644.583; July 26.

Automobile lock. F. M. Furber. 1,627.631-2; May 3.

Automobile lock. G. S. Hershey. 1,644.583; July 26.

Automobi Automobile lock. R. G. Weissel. 1.640.631; Aug. 30. Automobile lock. J. M. White. 1.646.227; Oct. 18. Automobile lock, Automatic. F. Matthiesen. 1.614,623; Jan. 18. Automobile locking apparatus. T. Miller. 1,628,469; May 10. Automobile locking means. W. Hemingway, Jr. 1,631,267; June 7. Automobile memo. A. H. Muscate. 1,629,201; May 1,401,600; May 1,611,629,201; May 1,611,627; W. Paul. 1,617,270; Automobile oil-drain device, E. E. and C. I. Hiscox. 1.631.129; June 7. Automobile operating gate. E. I. Martin. 1.653,716;

Automobile parking device. J. E. Desmond. 1,614,233; Jan. 11.
Automobile parking device. E. Wisroth and A. J. Hirsch-field. 1,619,555; Mar. 1.

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Automobile parts and the like Surfacing for. J. C. Carlson, 1,625,508, Apr. 26, 1,629,5381; May 17. Automobile plates, Fastening device for. J. N. Griffith, 1,613,654; Jan. 11. Automobile power transmission. T. Jacobs. 1,614,614;
               Jan. 18
   Jan. 18.
Automobile power-transmission attachment. W. H.
Henton. 1,617,638; Feb. 16.
Automobile radiator. P. Bastien and C. S. Crawford.
Des. 72,545; May 3.
Automobile radiator attachment. J. F. White. 1,613,148;
   Jan. 4.
Automobile radiator cap. F. C. Ruppel. Des. 73,509;
 Altomoble radiator-cap ornament J. N. Pomeroy. Des. 73,865; Nov. 15. Automoble radiator-caps, Ornament for. W. H. Billings-ley. Des. 71,775; Jan. 4. Automoble radiator caps, Ornament for. Des. 72,479; Automoble radiator caslag. A. O. Holtom. Des. 72,479;
 Apr. 19.
Automobile radiator casing. E. W. Seaholm. Des.
72,745; May 24.
Automobile radiator emblem, F. J. Kindsvater. Des.
73,847; Nov. 15.
Automobile radiator ornament. F. W. Ebrlich. Des.
71,869; Jan. 18.
Automobile radiator ornament. G. J. Zeis. Des. 73,548;
Sept. 27.
               Apr. 19
   Automobile radiator or the like. F. de Causse. Des. 72.821; June 14.
Automobile radiator shield. H. L. Curran. 1,631,948;
Automobile radiator shield. H. L. Curran. 1,631,948; June 71. radiators and the like, Closure for J. Jacques Automobile radiators, Cap for. J. W. Sealock. 1,643,133; Sept. 20. Automobile radiators, Condenser for. G. D. Roberts. 1,634,211; June 28. Automobile radiators, Condensing attachment for. V. Automobile radiators, Ornament for. G. H. Hodge and A. F. Schultz. Des. 73,978; Nov. 29. Automobile radiators, Water gauge for. L. A. Jarvis. 1,630,388; Mag 31. A. 1,627,379; May 3. Automobile rim and fastening means. J. H. Wagenhorst. 1,646,777; Oct. 25. Automobile radiator body. M. C. Tunison. Des. 73,214; Automobile rim and fastening means. J. H. Wagenhorst. 1,646,777; Oct. 25.
              June 7
   Automobile roadster body. M. C. Tunison. Des. 73,214;
    Automobile safety attachment. M. Doujak. 1,619,709;
   Automobile safety device.
                                                                                                                                                       A. D'Aguanno.
                                                                                                                                                                                                                                                      1,646,139;
 Automobile safety device. A. D'Aguanno. 1,646,138; Oct. 18.
Automobile safety fenier. C. Leone. 1,630,951; May 21.
Automobile sandere B. P. Robinson. 1,622,165; Mar. 22.
Automobile sandere B. P. Robinson. 1,622,165; Mar. 22.
Automobile sander. E. P. Robinson. 1,622,165; Mar. 22.
Automobile sand. J. J. Rell. 1,644,226; Sept. 2.
Automobile seat. F. A. Huff. 1,644,528; Oct. 4.
Automobile seat. W. B. South.rn. 1,646,963; Automobile seat. W. B. South.rn. 1,1640,968; Automobile seat. W. B. South.rn. 1,1640,968; Automobile seat. W. B. Routh.rn. 1,1640,968; Autom
   Oct. 25.
Automobile seat, Convertible. G. De Petris. 1,640.984;
   Aug. 30.
Automobile-seat-cover fastener, H. A. Sallop. 1,647,934;
   Nov. 1. Automobile scat-cushion cover. M. F. Aaron. 1,619,556; Mar. 1. Automobile scats, Cushioning means for tiltable. C. C. Davis and G. I. Clarke. 1,638,697; June 28. Automobile semaphore signal. C. C. Lovejoy. 1,629,400;
Automobile semaphore signal. C. C. Lovegy, May 17.
Automobile side curtains, Storage sling for. M. Rahr, jr. 1,648,961; Nov. 15.
Automobile side light. J. Rall and H. E. Sprow. 1,624,433; Apr. 12.
Automobile signal. W. I. Baldwin. 1,618,907; Feb. 22.
Automobile signal. F. Barnes. 1,646,678; Oct. 25.
Automobile signal. J. T. Christian. 1,631,471; June 7.
Automobile signal. R. L. Dickson. 1,622,096; Mar. 22.
Automobile signal. R. Triedland. 1,614,427; Jan. 11.
Automobile signal. Y. Harnda. 1,613,466; Jan. 1.
Automobile signal. Y. Harnda. 1,613,466; Jan. 2.
Automobile signal. G. B. Hitchook. 1,640,275; Aug. 23.
Automobile signal. J. N. Korvallis. Des. 73,705; Oct. 25.
                                                                                                          G. Kuclpak. 1,639,192; Aug. 16.
N. Lawson. 1,613,175; Jan. 4.
S. Lawson. 1,613,175; Jan. 4.
G. Mill. 1,652,069
G. Mill. 1,652,069
E. F. Sebesta. 1,638,414; Aug. 9.
H. H. Thels. 1,629,057; May 17.
C. Von Glzinsky. 1,641,910; Sept. 6.
S. A. Wall and B. A. Boyd.
    Automobile signal
   Automobile signal.
Automobile signal.
    Automobile signal.
Automobile signal.
Automobile signal
    Automobile signal. C. On Gizinsky. 1.641.910; Sent. 6.
Automobile signal. S. A. Wall and E. A. Boyd.
1.622.61; Mar. 29. C. Whitmore. 1.646.332; Oct. 18.
Automobile signal. accessory. J. E. Liebrich. 1.637.528;
   Aug. 2.
Automobile signal casing. V. P. Carter. Des. 73,895-6;
Nov. 22.
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Automobile signal casing. J. W. Gunn. Des. 73.257: Aug. 16.
Automobile signal casing. P. Vonfelt. Des. 72,743; May 24. Automobile signal, Casing for. A. Hartman. Automobile signal Casing for. A. Hartman. Des. 74. Martman. Des. 7 June 28. Automobile signal device. A. Sanchez. Automobile signal device. L. Van Gale. 1.623.450: Alpho. Company Strain Grant Gr Ang. 9 Automobile speed control. A. E. Wilshusen. 1,653,687: Automobile speed control. A. E. Wilshusen. 1,653,687; Dec. 27.
Automobile speedway device. C. F. Thuss. 1,630,229; May 24.
Automobile springs, Assembling. F. J. Morisette and A. Schinkez. 1,652,791; Dec. 13.
Automobile stand. C. R. Coleman and C. M. Johnston. 1,648,474; Nov. 8.
Automobile steering knee control. J. H. Cresmer. Automobile steering should be steering the control. J. H. Cresmer. 1,407,268; Feb. 15.
Automobile steering mechanism. E. C. Renaud. 1,617,458; Feb. 15.
Automobile steering stabilizer. J. E. McCritilis. 1,616,429; Automobile steering stabilizer. J. E. McCritilis. 1,616,429; Feb. 15. Automobile steering stabilizer. J. E. McCrillis. 1,616,429; Automobile stering stabilizer. J. E. McCrillis. 1,616,429; Feb. 1.
Automobile supply tank and holder. E. S. Johnson. Automobile suspension. E. Martin. 1,627,061; May 3.
Automobile suspension. E. Martin. 1,631,103; May 31.
Automobile tag. E. D. Dolloff. Des. 74,049; Dec. 13.
Automobile theft detector. J. D. E. Hughes. 1,536,513; July 19.
Automobile theft detector. J. D. E. Hughes. 1,636,513; Automobile theft detector. J. D. E. Hughes. 1,636,513; Automobile theft detector. J. D. E. Automobile the Automobile the P. H. Ober. Des. 72,382; Apr. 5.
Automobile three larm mechanism. U. G. Replogle. tire. P. H. Ober. Des. 72.382: Apr. 5. tire-alarm mechanism. U. G. Replogle. Automobile threafarm mechanism U. G. Replogle. 1,618,352; Feb. 22. Automobile top. B. H. Alvey. 1,613,429; Jan. 4. Automobile top. E. Hill. 1,652,359; Dec. 13. Automobile top. C. C. and M. R. Hull. 1,637,112; July 26. Automobile top. Automobile top. G. C. and M. R. Hull. 1,637,112; July 26. Automobile top and curtain construction. R. H. Stobbe. 1,629,935; May 24. Automobile top and curtain structure. E. Yost and R. B. Holthaus. 1,616,294; Feb. 1. Automobile top and support. Combined. H. E. Foltz. Des. 72,009; Feb. 15. Automobile top dressing. C. C. Davis. 1,614,232; Jan. 11. Automobile top dressing. C. C. Davis. 1,614,232; Jan. 11. Automobile top dressing. C. C. Davis. 1,614,230; Jan. 11. Automobile topedo. W. Dieter. 1,623,099; Åpr. 5. Automobile torpedo. W. Dieter. 1,623,099; Åpr. 5. Automobile torpedo. Automobile Jan. 11.
Automobile torpedo.
Automobile traffic-signaling apparatus.
J. 627,645; May 3.
Automobile traffic-signaling apparatus.
B. Meyrowtill, Automobile trains.
J. R. Culver. 1.613.345; Jan. 4.
Automobile transmission. J. M. Simpson. 1,631,938; June 7
Automobile trucks or tractors. Power-delivering attachAutomobile truck and track 1.682,903. June 21.
Automobile trunk and table. Combination. T. J. Bricca
and J. C. Fayilla. 1.619,186; Mar. 1.
Automobile trunk rack. S. J. Levy. Des. 72.025; Feb. 1.
Automobile trunk rack. S. J. Levy. Des. 72.025; Feb. 1.
Automobile trunk gelevie. M. D. Dominguez. 1,614,289; Jan. 11. Automobile Jan. 11.
Automobile vehicles. Brake for. J. C. Huck and M.
Twight. 1,652,479; Dec. 13.
Automobile vehicles. Electric lighting of. E. Friedrichs.
1,649,680; Nov. 15.
Automobile ventilator. G. A. Burkholder. 1,623,383; Automobile ventiliator. C. A. Advondile visor. C. R. Alwood, H. Berg, and O. R. Automobile visor. C. R. Alwood, H. Berg, and O. R. Automobile visor. C. R. Alwood, H. Berg, and O. R. Automobile wheel, S. Kaplan. 1,625,325; July 12. Automobile wheel, J. H. Partridge. 1,632,502; June 14. Automobile wheel, A. T. Sacre, 1,632,382; June 14. Automobile wheel, A. T. Sacre, 1,632,382; June 14. Automobile wheel, G. Van Daam, 1,623,645; Apr. 5. Automobile wheel brake. H. W. Lutes, 1,643,388; Sent 27. Automobile wheel G. Van Daam. 1,623,635; Apr. 5.
Automobile wheel brake. H. W. Lutes. 1,643,589;
Automobile wheel, Resilient. W. D. Thomas. 1,641,909;
Sept. 6.
Automobile wheel structure. E. A. Nelson. 1,627,193; Automobile wheels Norslip attachment for. J. D. Ross. Automobile wheels, Norslip attachment for. J. D. Ross. Automobile wheels, Power take-off shaft for. E. Purtzer. 1.645,401; Oct. 1. Automobile wheels, Reel attachment for. F. V. Sjolander. 1.642,630; Sept. 13.

Automobile window and warning signal, Combined rear.

H. Koller. 1,646,617; Oct. 25.
Automobile winter top. J. W. Osten. 1,617,542; Feb. 15.
Automobiles, All-weather top for. G. M. Balley,
Automobiles, All-weather top for. G. M. Balley,
Automobiles, All-weather top for. G. M. Balley,
Automobiles and making the same, Axle housing and
gear casing for. F. Palm. 1,638,873; Aug. 16.
Automobiles and method of manufacturing same, Rearaxle housing and gear casing for. C. S. Smith.
Automobiles and other vehicles, Spring wheel for. H. Hill.
1,625,594; May 10.
Automobiles and other vehicles, Suspension of. G. H. E.
de Ram. 1,626,183; Apr. 26.
Automobiles and the like, Ar cleaner for. F. S. Orem.
1,630,007; July 12,631,651,559; Dec. 6.
Automobiles and the like, Front-wheel brake for. H. S.
Cassel. 1,635,708; July 12, Light detector for. W. F.
Lautencollager. 1,648,2715; Nov. 1648,2715; Nov. S.
Automobiles and the like, Window ventilator for. A. D.
Automobiles and the like, Window ventilator for. A. D.
July 26.
Automobiles, 1,623,053; May 10.
July 136.
Automobiles, Apriskid device for, R. D. Allemang.
July 26.
Automobiles, Apriskid device for, R. D. Allemang. July 26. Automobiles, Antiskid device for. R. D. Allemang. 1,618,161; Feb. 22. Automobiles, Antithert device for. J. Fares. 1,615,364; Jan. 25.
Automobiles, Apparatus for cleaning and polishing. L.
J. Wilde and B. K. Gillespie. 1,613,213; Jan. 4.
Automobiles, Apparatus for tilting. J. R. Holcombe.
1,638,931; Aug. 16.
Automobiles, Automatic stop device ror. H. E. Christensen and J. L. Loehnis. 1,653,945; Dec. 27.
Automobiles, Automatic gear shift for. F. S. Cartwright.
1,629,654; May 24.
Automobiles, Automatic shaft lock for. W. B. Uffert.
Automobiles, Automatic shaft lock for. W. B. Uffert.
Automobiles, Automatic shaft lock for. W. B. Uffert.
Sept. 6. Automboules, Axie gauss Sept. 6.
Automobiles, Baby chair for. M. J. Miller. 1,629,834;
May 24.
Automobiles, Brake for. H. W. Alden and G. Hufferd.
1,631,448; June 7.
Automobiles. Brake mechanism for. E. D. Brown. 1.631.44b. Brake mechanism for. 1.645.124; Oct. 11. Automobiles, Brake mechanism for. 1.613.397; Jan. 4. Automobiles, Brake mechanism for. 1.613.589; Jan. 4. Dumper for. 1. Dumper for. 1.613.589; Jan. 4. Dumper for. 1 E. L. Kulick. Automobiles, Brake mechanism for. E. L. Kulick. 1,613.589; Jan. 4.
Automobiles, Buffer or bumper for. F. Mische and K. Roschitsch. 1,638,501; Aug. 9.
Automobiles, Bumper bar and rear fender for. F. Peacock. 1,637.454; Aug. 2.
Automobiles, Card-display receptacle for. H. H. Dedmon. 1,622,934; May 17.
1,632.495; Cosed gody structure for. J. Ledwinka. 1,632.495; Cosed gody structure for. J. Ledwinka. Automobiles, Conch body of. R. A. Fatoux. 1,634,656; July 5. E. L. Kulick. Automobiles, Coach body ot. N. S. Pricot Library, Combination brake and jack mechanism for. E. and C. Ferry. 1,625,936; Apr. 26.
Automobiles, Combined glare, wind, rain, and insect shield for. W. I. Clements. 1,631,010; May 31.
Automobiles, Combined side wing and sun and rain shield for. S. Nakagawa. 1,619,879; Mar. 8.
Automobiles, Cooling apparatus for. H. H. Crawford. 1,649,339; Nov. 15.
Automobiles, Cooling system for. H. S. Burgess Automobiles, Cranking device for. T. H. LeFever. 1,632,300; June 14. 1.632.99**, Cranking 1.32.300; June 14.
1.332.300; June 14.
1.332.300; Cushion device for. Automobiles, Cushion device for. J. A. O'Neill.
Automobiles, Cushion
Automobiles, Cushion
Automobiles, Device for holdling registration cards on.
P. M. Ullich. 1,626,107; Apr. 26.
Automobiles, Differential for. C. Bittner. 1,648,753; Nov. 8.
Automobiles. Direction indicator for. S. Angelo. 1,641,950; Sept. 13.
Automobiles. Direction indicator for. R. Wardhaugh. 1,629,425; May 17.
Automobiles, Direction signal for. A. Stipech. 1,617,035; Attomobiles, Direction signal for. A. Stipech. 1,617,035; Feb. 8.

Automobiles, Dirigible headlight for. J. W. Dell. 1,612,802; Jan. 4.

Automobiles, Electric starting system for. S. C. Spivey. 1,618,688; Feb. 22.

Automobiles, Electric starting system for. S. C. Spivey. 1,612,982; Jan. 4.

Automobiles, Extractor for. H. W. Muhleisen. 1,612,982; Jan. 4.

Automobiles, Extractor for. W. A. Brightman. 1,652,873; Dec. 13.

Automobiles, Fan. attachment for. E. N. Nolan. 1,662,873; Dec. 13.

Automobiles, Fan. attachment for. H. H. Irwin and W. A. Carpenter. 1,631,417; June 7.

Automobiles, attachment for gasoline tanks of. O. Creed. 1,626,789; May 3.

Automooiles, Flag holder for the motometers and similar devices of, M. A. Kane. 1,620,820; Mar. 15. Automobiles, Foldable sun shade for. J. W. Collier. 1,645,416; Oct. 11. Automobiles, Folding towing device for. J. R. Sandberg. 1,649,084; Nov. 15. Automobiles, Foot scraper for. L. J. Crowe. 1,619,404; Mar. 1. Automobiles, Glass cover for. L. W. Colby. 1,623,718; Jan. 4.
Automobiles, Holddown device for. G. G. Fedderman.
1,617,582; Feb. 15.
Automobiles, Illuminated license-tag holder for. J. R.
Kerns. 1,619,520; Mar. 1.
Automobiles in highways, Device for preventing theft of.
G. A. Wettengel. 1,630,284; May 31.
Automobiles, Knockdown bed frame for. T. E. Carrigan.
1,630,183; Journal of the Computer of the C Automobiles, Lock for, R. Alfist, 1,632,576; June 14. Automobiles, Lock for spare wheels of. F. W. Henke, fr. 1,625,637; Apr. 19. Automobiles, Luggage carrier for. J. W. Bement. 1,624,462; Apr. 12. Automobiles, Luggage carrier for. F. J. Laher. 1,640,779; Aug. 30. Expense carrier for. C. B. Leffert. Automobiles, Luggage carrier for. F. J. Laher.
1.640.779; Aug. 30.
Automobiles, Luggage carrier for. C. B. Leffert.
Automobiles, Luggage carrier for. F. J. Werneth.
1.617.828; Feb. 15.
Automobiles, Mud puller for. G. W. Smith. 1.635.645; July 12. Automobiles, Nonskid chain for. F. Bond. 1,636,846; July 26. Automobiles, Nonskid device for. H. Sebell 1.643.959: Automobiles, Nonskid device for H. Seveli. 1,928,3907, Automobiles, Nonskidding device for A. Varga. 1,617,729; Feb. 15.
Automobiles, Oiling system for. C. S. Crawford and W. G. Wall. 1,648,841; Nov. 8.
Automobiles, Faint stick for. R. T. Romine. 1,634,341; Automobiles, Planet 1,629,021; May 17 Planetary-gear drive for. C. L. Culver. 1,629,021: May 17.

Automobiles. Portable hand puller for. E. R. Long.
1,648,355: Nov. 8.

Automobiles. Power take-off for. W. E. Wuelker.
1,636,087; July 19.

Automobiles. Power transmission for. D. L. McClintock.
1,618,301; Feb. 22.

Automobiles. Protective means for. B. Jacobson.
1,616,126; Feb. 1.

Automobiles. Radiator casing for. H. H. Bassett. Des. 1.616.126; Feb. 1.
Automobiles, Radiator casing for. H. H. Bassett. Des. 73.136; Nov. 1.
T3.136; Nov. 1.
T3.136; Nov. 1.
T3.136; Nov. 1.
T4. Stover. P. A. Stover. Automobiles, State 1.
T4. Lift. 1.
T5. State 1.
T5 Automobiles, Safety device for. H. Brown. 1,619,697; Autómobiles, Safety fender for. W. H. Mulloy. 1,652,872;
Autómobiles, Safety steering wheel for. V. C. Doerstan,
1,650,499; Nov. 22.
Autómobiles, Screen for. N. L. Collton. 1,639,589;
Autómobiles, Screen for. N. L. Aug. 16. Automobiles, Screen for. R. W. Evans. 1.619.501 * Mar. J. Automobiles, Selective four-wheel drive and steering and brake mechanism for. R. H. Lewis. 1,621,211; Mar. 15.
Automobiles, Side light for. J. F. Styer and T. W. Automobiles, Signaligation of the Cast of Automobiles, Signaling apparatus for.
1,620,049; Mar. 8.
1,620,049; Mar. 8.
Automobiles Signaling device for. S.
Automobiles Signaling device for. C. Л. Weech L. Jones. Automobiles, Signaling device for. S. L. Jones. 1.632.081; June 14. Automobiles, Signaling means for. C. P. Wicks. 1.614.509; Jan. 18. Automobiles, Sled attachment for. E. R. Armstrong. 1,629,061; May 17.

Automobiles, Sleeve puller for. E. O. Kroells. 1,632,482; June 14.
Automobiles, Slip-on repair top for. H. Glover.
1.613,270; Jan. 4.
Automobiles, Snubber for. W. N. Dunn, sr. 1,651,679; Dec. 6.
Automobiles, Stabilizer for. B. D. Gibbs.
Feb. 22. 1,618,651; Feb. 22. Automobiles, Starter for. W. C. Starkey. 1.617.775 Feb. 15. Automobiles. Steering connecting rod for. M. C. 1,628,914; May 17. Steering range for. C. W. Anderson. automonies, Stearing range for, C. W. Anderson, 1,651,174; Nov. 29.
Automobiles, Steering stabilizer for, J. F. Cavanagh, 1,633,944; Dec. 27.
Automobiles, Stop signal for, G. May, 1,627,659; May 10. Automobiles, Stop signal for. C. A. Michel. 1,643,465; Sept. 27. Automobiles, Storm shield for. C. M. Paulson. 1,638,508; Autcinobiles, Storm shield for. C. M. Paulson. 1,638,508; Aug. 9. Automobiles, Switch or circuit closer for. C. P. Wicks. 1,614,510; Jan. 18. Automobiles, Temperature indicator for. C. A. Dunham. 1,613,745; Jan. 11. Automobiles, Theft alarm for. I. L. Ridge. 1,630,968; May 31. Automobiles, Theft alarm for. G. H. Stange. 1,648,202; Nov. 8. NOV. 8.
Automobiles, Theft-preventing device for. B. Golembiew-ski. 1.644,334; Oct. 4.
Automobiles. Thermostatically-controlled radiator shutter for. J. F. Raleigh. 1,634,301; July 5.
Automobiles, Timer 1 or. C. L. Shelton. 1,615,101; Automobiles, Timer for. C. L. Shelton. 1,615,101;
Jan. 18.
Automobiles, Traction appliance for. E. R. Armstrong.
1,613,598; Jan. 11.
Automobiles, Traction attachment for. F. Fennel.
1,638,329; Aut. 9.
Automobiles, Traffic signal for. T. M. Campos.
1,642,941; Sept. 20.
Automobiles, Traffer hitch for. A. L. Coffey. 1,650,189;
Automobiles, trucks, trailers, and the like, Automatic controller reachestics. Nov. 22.
Automobiles, trucks, trailers, and the like, Automatic
controlling mechanism for. W. M. Mozley. 1,636,064;
July 19.
Automobiles, Trunk carrier for. C. S. McKenney.
1,636,527; Nov. 22.
Automobiles, Tube-repairing attachment for. E. R. Justice. 1,640,327; Aug. 2.
Automobiles, Ventiating screen for. C. A. Baker. Automobiles, Tube-repairing attachment for. B. R. Justice. 1,64,327; Aug. 2 Screen for. C. A. Baker. 1,638,610; Aug. 9.
Automobiles, Vibration absorber for. H. R. Lloyd and J. W. Ellis. 1,641,556; Sept. 6.
Automobiles, Vibration check for. J. P. Thomason. 1,612,840; Jan. 4.
Automobiles, Visor for. O. E. Grigsby. 1,615,079; Jan. 18. Automobiles, Visor for. O. E. Grigsby. 1,615,079; Im. 18.

Automobiles, Wind deflector for. B. Jassen. 1,634,290; July 5.

Automobiles, Wood-saw attachment for. W. P. Mathews. Re16,815; Dec. 13.

Automobiles brake. A. J. Chanja. 1,622,419; Mar. 29.

Automotive brake. A. J. Chanja. 1,622,419; Mar. 29.

Automotive brake. A. J. Chanja. 1,622,419; Mar. 29.

Automotive equipment. P. M. Krantz. 1,642,200; Sept. 20.

Automotive equipment. P. M. Krantz. 1,642,200; Sept. 20.

Automotive equipment. P. M. Krantz. 1,642,200; Sept. 20.

Automotive successive for the following following for the following fo June 21.
Awning frame. T. C. Girton and F. J. P. Kuhlmann.
1.629.958; Mar. 15.
Awning Medil. H. D. Cloud and C. Bitterman.
1.615.214; Jan. 25.
Awning Mefnl. H. D. Cloud and C. Bitterman.
1.648.334; Nov. 8.
Awning Arganization divides.
1.648.231-2; Sept. 20.

Awning-raising mechanism. E. H. Schane and E. Durant. 1,615,917; Feb. 1.
Awning-roller center support. J. Derus. 1,615,830; Feb. 1. J. 615.917; Feb. 1.

Awning-roller center support. J. Derus. 1,615.830; Feb. 1.

Awning structure. E. S. Johnson. 1.640.690; Aug. 30.

Awning structure. W. R. Torbert. 1,220.500; Mar. 8.

Awning structure. W. R. Torbert. 1,220.500; Mar. 8.

Awning support. E. M. McGrew. 1,621.941, Mar. 22.

Awning support. E. M. McGrew. 1,621.941, Mar. 22.

Awning, Window. W. A. Whitehead. 1,633.467; June 21.

Awnings. Clamping member for. E. H. Schane.

1,628.687; May 17.

Ax sheath. E. O. Estwing. 1,633.319; June 21.

Ax sheath. E. O. Estwing. 1,653.249; Dec. 20.

Axle-aligning gauge. C. C. Bennett. 1,653.249; Dec. 20.

Axle-alignment gauge. A. O. Wanger. 1,652.848; Dec. 13.

Axle and spindle assembly, Front. J. A. and K. A. Pedersen. 1,653.061; Dec. 20.

Axle arsamplinde assembly, Front. J. A. and K. A. Pedersen. 1,653.061; Dec. 20.

Axle assembly, Road-grader, F. E. Arndt. 1,624.272;

Axle attachment. O. Olsen. 1,624.273; Apr. 12.

Axle consumption, Drive. L. Blackmore. 1,644,707;

Axle construction, Drive. T. H. Oppenheim and B. Selhorst. 1,638,953; Aug. 16.

Axle drive. J. J. Balaun. 1,613,371; Jan. 4.

Axle drive. J. J. Balaun. 1,613,371; Jan. 4.

Axle for tramway, railway, and other vehicles. P. Al
Axle housings, Making. A. L. Lambert. 1,620,616;

Axle housings, Making. C. S. Smith. 1,643,225; Sept. 20.

Axle man. 1,645,575; Oct. 18.

Axle housings, Making. C. S. Mith. 1,643,255; Sept. 20.

Axle man. 1,650,616; Dec. 20.

Axle man. 1,645,575; Oct. 18.

Axle housings, Making. C. S. Mith. 1,643,255; Sept. 20.

Axle man. 1,645,575; Oct. 18.

Axle measuring instrument. T. F. Segers. 1,650,770;

Axle man. 1,650,616; Dec. 20.

Axle man. 1,645,675; Oct. 18.

Axle housings, Making. A. D. Robbins. 1,654,672. Axle-measuring instrument. T. F. Segers. 1,650,770; Nov. 29.
Axle transmission. R. B. McCormick. 1,641,42; Dec. 27.
Axle transmission mechanism, Rearc. N. L. Olson. 1,630,201; May 24.
I.630,210; May 24.
I.630,310; May 24. Axle-measuring instrument. T. F. Segers. 1,650,770; Nov. 29. Baby car Mar. 8 Baby-carriage rocking and rolling mechanism. J. J. Vicek. 1,617,637; Feb. 8. Mahr. 1,617,215; Feb. 8. Baby holding. Company of the company of Sept. 10.

Baby walker. I. D. Brand. 1,613,438; Jan. 4.

Baby walker. A. W. Hawkinson. 1,622,108; Mar. 22.

Baby's chair. V. C. Schneider. 1,647,200; Nov. 1.

Back adjustment. R. H. Irvine. 1,647,200; Nov. 1.

Back adjustment. R. H. Irvine. 1,642,150; Sept. 13.

Back-pedaling brake. F. J. Olsen. 1,648,421; Nov. 8.

Back-up post, Rotary. C. W. Perkins. 1,621,467;

Mar. 10. Mar. 15.

Bacon or ham, Preservation of. T. W. Morris.
1,627,057; May 3.

Eacterium specific for rheumatic fever and utilizing the same in the prevention and treatment of rheumatic fever. J. C. Small. 1,636,445; July 19.

Badge. J. C. Dav. 1,626,133; Apr. 25.

Badge. J. C. Dav. 1,626,133; Apr. 56.

Badge. S. O. Fraser. Des. 73,403; Sept. 6.

Badge. W. H. Harris.

Badge. W. H. Harris.

Badge. W. H. Harris.

Badge. W. T. F. Tybarger.

Des. 71,875; Jan. 18.

Badge or like article. S. Zubrow. Des. 72,509; Apr. 19.

Badge or similar article. J. G. Agnew and R. K. Pond. Des. 72,339; Apr. 5.
Badge or similar article. B. J. De Passe. Des. 72,764; May 31. May 31.

Badge or similar article. L. Edwards. Des. 72,006;
FED. 15.

Jan. 11.

Badle plate in valve chamber. A. Taub. 1,623,322;
Apr. 5. Apr. 5. Baffle, Superheater. B. Broldo. 1,633,975; June 28. Baffle to be set automatically. B. Goldman. 1,651,816; Baffle Superheater. B. Broldo. 1,633,975; June 28.

Baffle vall. E. W. Ashenden. 1,652,157; Dec. 13.

Baffle wall. E. W. Ashenden. 1,652,157; Dec. 13.

Baffle wall tool. J. A. MacDowell. 1,616,458; Feb. 8.

Baffle wall tool. J. A. MacDowell. 1,616,458; Feb. 8.

Baffle wall tool. J. A. MacDowell. 1,616,458; Feb. 8.

Baffle bag. Clothespin bag.

Clothespin bag.

Clothespin bag.

Garment bag.

Garment bag.

Garment bag.

Garment bag.

Garment bag.

Mattress and sleeping bag.

Mattress and sleeping bag.

Multiply bag.

Mothproof bag.

Nothproof bag.

Stephin bag.

Stephin bag.

Stephin bag.

Stephin bag.

Stephin bag. Bag construction. E. O. Nelson. 1,652,679; Dec. 13.
Bag-delivery mechanism. T. M. Avery. 1,618,042;
Beb. 150.
Bag-delivery mechanism. T. M. Avery. 1,618,042;
Beb. 150.
Beb. 150 Bag-delivery Feb. 15. Bass, Latch device for name. D. Appel. 1,631,452; June 7.

Bags, Machine for stapling handles on. T. M. Avery, 1,624,854; Apr. 12.
Bags, Making. A. M. Bates. 1,636,545; July 19.
Bags, Making paper. D. Appel. 1,621,049; Mar. 15.
Bags, Method and the staple of the staple o Bait, Artificial. C. H. Hughes and B. B. Kothe. 1,627,512; May 3,
Bait, Artificial. J. J. Pflueger. 1,615,803; Jan. 25.
Bait, Artificial. A. J. Putnam and J. W. Wilson. 1,624,233; Apr. 12.
Bait, Artificial. J. T. Welch. 1,635,518; July 12.
Bait, Artificial. J. T. Welch. 1,635,518; July 12.
Bait, Artificial. J. T. Welch. 1,635,518; July 12.
Bait box. H. A. Roat. 1,619,634; Mar. 1.
Bait box. J. M. Wattawa. 1,625,006; Apr. 19.
Bait box. J. M. Wattawa. 1,625,006; Apr. 19.
Bait, Fish. W. Stanler, 1,615,636; Feb. 1.
Bait ox. J. M. Wattawa. 1,625,006; Apr. 19.
Bait, Fish. W. Stanler, 1,615,636; Feb. 1.
Bait or lure and finishing the same, Artificial. C. C. Sinclair and F. A. Phelps. 1,639,963; Aug. 23.
Bait trap and carrier, Fisherman's. L. Marsh and Raking crusts, Support for. M. A. Miller. 1,641,090; Aug. 30.
Baking outfit. C. Pleischer. 1,652,325; Dec. 13. Aug. 30.

Baking pau.

H. B. Cramer. 1,625,2825; Dec. 13.

Baking pau.

H. B. Cramer. 1,625,525; Apr. 10.

Baking pau.

H. A. Lockwood. 1,623,692; Apr. 5.

Baking pau.

V. A. Ziegler. 1,629,710; Mar. 15.

Baking pan. cooking utensil, and mold, Combined. W.

von Elm. 1,622,757; May 10.

Baking pan, Covered. J. G. Jackson. 1,628,885; Baking pan, cooking utensil, and mold, Combined. W. Baking pan, cooking utensil, and mold, Combined. W. Baking pan, cooking utensil, and mold, Combined. W. Baking pan, Covered. J. G. Jackson. 1,628,885; May 17.
Baking pan, Covered. A. Katzinger. 1,631,734; June 7.
Baking pan, Reenforced. A. Katzinger. 1,632,742; 38,142; 23.
Baking pan, Reenforced. A. Katzinger. 1,624,648; June 28.
Baking pan, Reenforced drawn. A. Katzinger. 1,624,648; June 28.
Baking pan, Reenforced drawn. A. Katzinger. 1,624,648; June 28.
Baking pan, Reenforced drawn. A. Katzinger. 1,627,659; May 10.
Baking powder. H. Schneider and F. Rahn. 1,641,013; April 20.
Baking powder. H. Schneider and F. Rahn. 1,641,013; April 20.
Baking powder. H. G. Sibbald. 1,630,140; May 24.
Balanced wheel drive. A. H. Asprooth and A. M. Leoni. 1,616,343; Feb. 1.
Balancing device. C. H. Hapgood. 1,651,272; Nov. 29.
Balancing machine. G. T. Johnson 1,625,255; April 3,630,140; May 10.
Balancing machine. G. T. Johnson 1,625,255; April 3,630,140; May 10.
Balancing machine. W. E. Trumpler. 1,632,555; Dec. 13.
Balancing machine. W. E. Trumpler. 1,648,143; Nov. 15.
Balancing machine. W. E. Trumpler. 1,648,246; Nov. 8.
Balancing machine. F. Colley. 1,622,3936; Apr. 5.
Bale-dei Minging device. A. C. Barrows. 1,637,543; Aug. 2.
Bale-tearing machine. F. Colley. 1,622,3936; Apr. 5.
Bale-tearing machine. G. W. Hurt. 1,627,903; May 3.
Baling press, Duplex. M. Herkman. 1,627,827; May 3.
Baling press, Duplex. M. Hielman. 1,627,827; May 3.
Bales, Filing cotton. E. L. Barnes. 1,617,743; Feb. 15. Baling press, Duplex. M. Hickman. 1.627,327; May 3. Bales, Piling cotton. E. L. Barnes. 1,617,743; Feb. 15. Ball: See— Cricket, hockey, and the Blaying ball.

Cricket, hockey, and the Rubber ball.

Game ball.

Game ball.

Gear-shift-lever ball.

Indiatable ball.

Tank Ball and making subsets 58 Sept. 6. Sept. 6. Ball and seat. J. F. Larkin. 1,617,603; Feb. 15. Ball and seat. J. F. Faudi. 1,653,352; Dec. 20. Ball-bearing mounting. A. Master. 1,626,092; Apr. 26.

Ballbearing rat. M. Snee. 1,652,461; Dec. 13. B. 153,334; Aug. 9. Ball bearings, Ball retainer for. D. F. Chambers. 1,627,232; May 3. Ball bearings, Cage for. A. H. Linde. 1,638,537-8; Ball bearings, Cage for. A. H. Linde. Aug. 9. Il bladder, Game. G. L. Lawrence, jr. 1,631,740; June 7.

Ball catcher, W. H. Jones and A. Eberle. 1,623,543; pp. 5.

Ball cleaner. J. E. Lawler. 1,639,740; Aug. 23.

Ball cock. C. H. Gunn. 1,643,558; Sept. 27.

Ball cock. J. A. Sherman and W. H. Sheppard. 1,629,546; May 24.

Ball-cone elements, Making. B. G. Nice. 1,630,715; May 31.

Ball cover. T. J. Hartman. 1,649,063; Nov. 15.

Ball-grinding machine. W. B. Gardiner. 1,629,864; May 24. June Ball joint. A. Y. Dodge. 1,635,468; July 12. Bell, 15.
Ball joint, A. Y. Dodge, 1,635,468; July 12.
Ball-joint case, Separable cover for universal, A. A.
Liniey, 1,624,262; Apr. 12.
Ball lights, Detachable stencil for, L. H. Buchanan, 1,638,679; Aug. 9.
Ball-making macine, Metallic, M. W. Magann, Metallic, M. W. Magann, Metallic, M. W. Magann, Metallic, M. W. Magann, M. M. M. Barker, 1,636,585; July 19.
Ball mill, W. M. Barker, 1,636,585; July 19.
Ball mill, Air swept, H. H. Waterman, 1,630,992; May 31.
Ball mill, Air swept, H. H. Waterman, 1,630,992; May 31.
Ball mills, Screen grate for, W. Currie, 1,637,986; Aug. 2. Ball mills, Screen grate for. W. Currie. 1,637,980, Aug. 2.
Ball or tube mill. W. B. Koppen and C. Pfeiffer. 1,636,138; July 19.
Ball race. F. T. Farmer. 1,643,156; Sept. 20.
Ball retainers, Making. H. N. Parsons. 1,629,173; May 17.
Ball vertainers, daking. H. N. Parsons. 1,629,173; May 17.
Ball transmission, G. S. Morison. 1,634,507; July 15.
Ball transmission, G. S. Morison. 1,634,507; July 15.
Balls. Making indated. F. T. and W. E. Roberts. 1,649,734; Nov. 15.
Balls of any kind, Device for closing the air bladders of sport. A. W. Turner. 1,620,245; Mar. 8.
Ballst-cleaning machine. W. J. Shannon. 1,632,045; June 14. June 14.
Ballast diggling and cleaning machine. G. C. Melin.
1,625,864; Apr. 26.
Ballast plate. J. H. Christie. 1,650,819; Nov. 29.
Ballast plate. J. H. G. Warr. 1,613,420. Jan. 4.
Balloon. J. F. Cooper. 1,617,011; Feb. 8.
Balloon capable of being employed as a captive observation balloon and as a dirigible. L. Avorlo. 1,628,374;
May 17.
Ballot. Diricibile. L. M. Campau. 1,648,935; Nov. 15.
Ballot box, Registering and Indorsing. R. D. Tolman.
1,618,691; Feb. 22. Ballotting system and the like. J. B. Fischer. 1,624,045; Apr. 12. Bandage and the like, Massage, J. Mildenberg, 1,646,590; Oct. 25. Bandage compress, R. W. Johnson, 1,622,948; Mar, 29. Bandage-dispensing device, J. A. Swanson and A. A. Pollak, 1,626,257; Apr. 26. Bandage, Eye, J. L. Robinson, 1,642,661; Sept. 13. Bandage, Eye, J. L. Robinson, 1,644,508; Oct. 4. Bandage, Surgical, E. W. Binke, 1,644,508; Oct. 4. Bandage, Suspensory, A. R. Chisholm, 1,633,525; Aug. 9. Bandage, Suspensory, A. R. Chisholm. 1,638,526; Aug. 9.
Bandages, Fastener particularly for. R. Schuftan. 1,638,631 June 28.
1,633,631 June 28.
1,637,177; July 26.
Bandeau and permanent wave, Ladys. W. J. Gaskell. 1,652,933; Dec. 18.
Banding machine. V. D. Barker. 1,621,052; Mar. 15.
Banding machine. F. X. Malocsay. 1,653,646; Dec. 27.
Banding machine. F. X. Malocsay. 1,653,646; Dec. 27.
Banding machine. F. X. Malocsay. 1,653,649; Dec. 27.
Banding machine. F. X. Malocsay. 1,653,649; Dec. 27.
Banding mechanism. E. P. Sheldon. 1,649,327; Nov. 15.
Bandism wheel. C. E. Tannewitz. 1,649,327; Nov. 15.
Bands or wheel. C. E. Tannewitz. 1,649,525; Oct. 18.
Bands or belts in motion, Apparatus for guiding flexible. M. Landraud. 1,644,927; Oct. 11.
Banjo. P. Arthur. Des. 7,4133; Dec. 27.
Banjo. P. J. Bacon. 1,649,559; Nov. 163,3424; Dec. 20.
Banjo. A. J. Bouchard. 1,625,387; Apr. 19.
Banjo. A. J. Bouchard. 1,625,387; Apr. 19.
Banjo. W. L. Lange. 1,625,735; Apr. 5.
Banjo. W. L. Lange. 1,625,735; Apr. 5.
Banjo. H. E. Menzemer and M. Cambre. 1,621,735; Banjo. F Mar. 22

Banjo bridge. F. J. Bacon and D. L. Day. 1,649,376; Banjo Ringia Propins A. D. Grover, 1,636,091; July 19.
Banjo Castruction. A. D. Grover, 1,636,091; July 19.
Banjo Ringi Gra V. E. Adler. Des, 73,154; Aug. 2.
Banjo talipiece, Top adjustable. R. R. Fage. 1,626,094; Bahly Campete, 109 adjustante. R. R. Fage. 1,626,094; Banlos, Armrest for. A. D. Grover and L. H. Bertram 1,642,811; Sept. 20. Banjos. Tone-modifying device for. W. L. Lange. 1,615,460; Jan. 25. Bank and method of protecting money. C. G. Beersman. 1,648,891; Nov. 15. B. Smily. T. Hannah, and M. E. Winnus. 1,633,873; June 28. Bank check. A. B. Schilling. Des. 78,389; Aug. 30. Bank. Coin. J. Habart. 1,635,664; July 12. Bank. Coin. J. Habart. 1,635,664; July 12. Bank. Coin. J. Bank. T. L. Bank. Coin. J. B. Hagals. 1,619,073; Mar. Bank. Coin. J. B. Hagals. 1,619,073; Mar. B. Bank. Coin. J. B. Hagals. 1,619,734; Aug. 2. Bank. Coin. J. B. Hagals. 1,619,734; Aug. 2. Bank. Coin. J. B. L. Bank. L. Coin. J. B. L. Bank. Coin. J. B. L. Bank. Coin. J. B. L. Bank. L. L. Bank. L. Coin. J. B. L. Bank. L. L. B Bank, Home savings. V. P. Alexander. 1, May 10.
Bank ledger. A. J. Norman. 1,621,806; Mar. 22.
Bank, Metallic. J. Sinko and D. Szantay. 1, Nov. 1. Bar: See—
Boring bar.
Core bar.
Grate bar. Steel bar. Stop bar. Tracker bar. Tractor draw bar. Type bar. Wheel-spoke bar. Grate bar.
Lingual bar.
Metal bar.
Musical bar.
Musical bar.
Musical bar.
Wheel-spoke bar.
Wheel-spoke bar.
Holds Same, Connecting, H. T. Anderson.
1,615,821; Feb. 1.
Ar and method of manufacture, Splice. E. S. Seavey.
1,646,170; Oct. 18.
Ar and shelf bracket. R. E. Jordan. Des. 73,038;
July 12. natr and shell bracket. R. E. Jordan. Des. 73,038;
July 12.
Bar cuff link. E. F. Clark. 1,631,246; June 7.
Bar for foundry flasks, C. H. Estes. 1,627,165; May 3.
Bar joists, Support for. G. F. Pawling. 1,614,570;
Jan. 18. Bar joists, Support for. G. F. Pawling. 1,614,570; Jan. 18.
Bar mills, Roller-nozzle gulde for. E. W. Auer and S. Pastorius. 1,615,608; Jan. 25.
Bar structure, Connected. H. Nagin. 1,631,691; June 7.
Bar support. W. C. Burrell. 1,645,1946; Dec. 6.
Bar support, Twin. W. E. White. 1,621,184; Mar. 15.
Bars, Gauge and support for. W. E. White. 1,631,609; June 7.
June 7. Bars. Gauge and support for. W. E. White. 1,651,000 June 7.

Bars. Machine for cutting or severing metallic. F. Schiess. 1,625,748; Apr. 19.

Bars. Making hollow. T. S. Wheelwright. 1,618,142; Feb. 15.

Bars. Support and spacer for. W. E. White. 1,625,838; Apr. 26.

Barber pole. R. Dixon. Des. 73,425; Sept. 13.

Barbers' chairs, Seat for. R. Hydron and D. Forsyth. 1,630,432; May 31.

Barbers' comb. J. W. Burke. 1,628,577; May 10.

Barbers' hair cloths, Clasp for. A. Vedetta. 1,617,089; Feb. 8. Barb-wire support. J. E. Hunt and C. Ashton. 1,618,929; Feb. 22. Barge, Air floated. V F. Casey. 1,621,625; Mar. 22. Barge, Air-propelled. H. Sundstedt. 1,641,937; Sept. 6. Barge-unloading apparatus. I. A. Ryan. 1,631,065; May 31. Barge-unlonding apparatus. I. A. Ryan. 1.631.055; May 31.
Barium carbonate and barium sulphydrate. Maklug precipitated. J. B. Plerce, jr. 1.634.338; July 5.
Looser. 1.615.515; Jan. 25. E. Marwedel and J. Barium carbonate. Manufacture of pure. F. Falco. 1.640.652; Aug. 30.
Barium silienfluoride, Production of. H. S. McQuaid. 1.648.143; Nov. 8.
Barium sulphide, Manufacturing. G. Richardson. Barium sulphide, Manufacturing. G. Richardson. Barium sulphide. Manufacturing. G. Richardson. Barium sulphide. Manufacturing. G. Richardson. Barium sulphide. Manufacturing. G. Richardson. 1.632.64; June 14.
Barometer. H. Long. Des. 72.715; May 24.
Barometer. H. Long. Des. 72.715; May 24.
Barometer. H. Long. Des. 72.715; May 24.
Barometer. Mercurial. P. E. Riopsteg and H. P. Sachse. 1.632.64; June 14.
Bulleton-setting means. P. R. Jameson. 1,632.736; Barrel. R. J. Bell. 1,651.317; Nov. 29.
Barrel. E. C. Walker. 1.652.662; Dec. 13.
Barrel and the like boop and the joining the ends. J. F. Watt. 1,653.829; Dec. 27. Banjo. H. H. Slingerland. 1,631,293; June 7. Banjo. C. H. Strupe. 1,653,593; Dec. 20. Banjo and the like. C. H. Richter. 1,636,244; July 19.

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Barrel bung. F. J. Nagel. 1,653,818; Dec. 27.
Barrel closure. G. H. Ames. 1,630,510; May 31.
Barrel, Core. O. M. Carter. 1,640,204; Aug. 23.
Barrel, Core. J. T. Phipps. 1,644,947; Oct. 11.
Barrel, Core. W. N. Thompson. 1,636,084; July 19.
Barrel cover: E. S. Hopson. 1,649,032; Nov. 15.
Barrel, Knockdown. J. W. and G. F. Smoak. 1,648,786;
        Barrel-lining machine. W. A. Lorenz. 1,653,434-5;
    Barrel-lining machine. W. A. Lander-Lining machine. Dec. 20.

Barrel-reversing mechanism. E. F. Beugler. 1,632,110:

June 14.

Barrel states and the like. Machine for cutting tongues to the like. Machine for and H. L. Abbott. 1,649,373; Nov. 15.

Barrels and the like, Machine for operating on. W. W. Trevor and D. A. Berean. 1,648,372; Nov. 8.

Barrels, Making sheet-metal. C. H. Riegel. 1,645,971.

Get. 18.
Trevor and L. A. Leaven.

Barriels, Making sheet-metal. C. H. Riege.
Oct. 18,
Barriels or other containers, Machine for operating on.
D. A. Berean and W. W. Trevor. 1,647,980; Nov. 18.
Barriels, W. T. Battle. 1,625,587; Apr. 19.
Barrette. W. T. Battle. 1,625,587; Apr. 19.
Barrette. F. Sokol. 1,633,616; June 28.
Barrette. D. L. Van Stekle and W. H. Cavin. 1,624,449;
Apr. 12.
Barrier, Highway. G. T. O'Maley. 1,651,221; Nov. 28.
Barrier, Highway. G. T. O'Maley. 1,651,221; Nov. 29.
Barrier, June 21.
    Apr. 12.

Barrier, Highway, G. T. O'Maley. 1,651,221; Nov. 29.

Barrier or fence against locusts. N. G. Marengo.

1,641,769; Sept. 6.

Barytes, Reining. W. J. O'Brien. 1,633,347; June 21.

Base-attached plotting instrument. A. C. White.

1,620,311; Mar. 8.

Base, Aufomatically-adjustable. U. J. Dages. 1,650,433;
Base, Automatically adjustable. U. J. Dages. 1,650,433;

Baseball center. S. Lannom, jr. 1,636,518; July 19.

Baseball center and producing the same. W. H. Fox.

1,631,317; June 7.

Baseball game. H. C. Franke and R. C. Bange.

1,625,200; Apr. 19.

Baseball game, Automatic. E. B. Ropp. 1,643,522;

Baseball machine, Mechanical. W. J. Schmid. 1,617,546;

Feb. 15.

Base or support, Folding. S. M. Dover. 1,642,231;

Sept. 13.

Baseball machine, Mechanical. E. Burton. Des. 74,095;

Baseball machine, Baseball game.
  Base plate for a drawer pull. E. Burton. Des. 74,095; Dec. 20.

Basin, Washing, R. O. Krasseit. 1,636,865; July 26.

Basket. A. L. Kelley. Des. 73,260; Aug. 16.

Basket. C. R. Morl. 1,623,176; May 10.

Basket. H. J. O Brien and A. R. Page. 1,616,983; Feb. 8.

Basket. A. P. Smith. 1,642,181; Sept. 13.

Basket, Berry. R. M. Oliver and G. R. Penn. 1,652,251;

Basket, Berry. R. M. Oliver and G. R. Penn. 1,652,251;

Basket, Collapsible. R. W. Birch. 1,639,921; Aug. 23.

Basket, Frejiace. E. H. Sholar. 1,563,035; Nov. 22.

Basket, Frejiace. E. H. Sholar. 1,650,303; Nov. 22.

Basket, Frejiace. E. M. Shorekon. 1,631,793; Feb. 15.

May 31.

Basket, Frying. W. B. Wills. 1,634,733; July 5.
Basket, Fruit packing. W. A. Breckoft. 1.001,000; May 31.
Basket, Frying. W. B. Wills. 1.624,733; July 5.
Basket handle. F. J. Brainard. 1.620,941; Mar. 15.
1.614,106; Jan. 11.
Basket Laudry. N. Carruth. 1.642,643; Sept. 13.
Baskets and the like, Cover for. J. Armstrong. 1.650,003; Nov. 22.
Baskets, Backing for centrifugal. E. Roberts. 1.625,377; Apr. 19.
Baskets, Handle for shipping. F. A. Reiss. 1.622,674; Mar. 20.
Baskets, Handle for souden. H. W. Kramer. 1.644,478; Charles, Handly top for fish. R. E. Eaton. 1.617,994; Feb. 15.
Baskets, Machine for making. W. F. Newhouse. 1.643,287; Sept. 20.
Baskets, Screen for centrifugal. E. Roberts. 1.625,376; Apr. 19.
Baskets, Screen for centrifugal. E. Roberts. 1.625,376; Apr. 19.
Baskets, Screen for centrifugal. E. Roberts. 1.625,376; Apr. 19.
Batching spparatus. W. W. Venable. 1.624,122; Apr. 12.
Feb. 1.
Bath mat. A. A. Boschelli. 1,618,165; Feb. 22.
Bath mit. A. Benussi. 1,619,180; Mar. 1.
Bathroom fixture. L. Block. 1,647,983-4; Nov. 8.
Bathroom fixture. S. A. Frolking. Des. 72,366-7;
  Bathroom ixture. S. A. Froising. Des. 12,000-11.
Bathroom fixture. J. G. Zolleis. J. H. Balmer. Des. 72,643-44; May 34.
Bathroom fixture. Combination. J. H. Balmer. Des. 72,653-44; May 34.
Bathroom fixture. Combination. J. H. Balmer. Des. 72,691; May 24.
Bathroom, Fortable. J. F. Murphy. 1,632,668; June 14.
Bathroom unit. A. K. White. 1,628,345; May 10.
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Bathroom wall fixture. S. E. Sharwood. Des. 72,804; Bathroom wall fixture. S. E. Sharwood. Des. 72,804; June 7. Bathtub. C. T. E. Gould. 1,632,582; June 28. Bathrub. C. T. E. Gould. 1,632,582; June 28. Bathrub and shower casing, Combined. F. Fort. Des. 72,942; June 28. Bathrub and shower casing, Combined. F. Fort. Des. 72,942; June 28. Bathrub appliance. R. Graves. 1,650,067; Nov. 22. Bathrub and S. Johnstone. 1,615,706; Jan. 25. Bathrub sat. W. H. Eozarth. 1,615,706; Jan. 25. Bathrub sat. W. H. Eozarth. 1,633,310; June 21. Crocker. 1,645,986; Oct. 18. Bathrubs. And lavatories, Waste valve for. J. N. Mortimer. 1,630,352; May 31. Bathrubs. Cover attachment for. J. E. Tlerney. 1,615,351; Jan. 25. Bathrubs surjing rack for. F. M. Turner. 1,628,936; Bathrubs. Steaming appliance to be attached to. E. Lander. 1,650,798; Nov. 29. Bathrubs, Step for. A. Wiebmer. 1,641,514; Sept. 6. Bathrubs, Vapor-bath attachment for. D. Handelan. 1,652,437; Dec. 13. June 7. Bathtub. Bather's safety appliance. A. J. La Pierre. 1,617,061; Feb. 8. Feb. 8.
Bathing apparatus, Electromagnetic light. G. von Hütxchlen. 1,615,285; Jan. 25.
Len. 1,615,185; Jan. 25.
Len. 1 June 14.

June 14.

June 14.

June 15.

June 16.

June 17.

June 17.

June 17.

June 18.

June 1 Batteries for leaks, Testing. G. L. Kyle. 1,643,949; Oct. 4.
Batteries, Making storage. C. W. Hazelett. 1,645,424; Oct. 11.
Batteries, Making storage. C. W. Hazelett. 1,645,424; Oct. 11.
Batteries, Making storage. C. W. Hazelett. 1,645,4724; Oct. 21.
Batteries, Positive electrode for electric. R. Oppenheim. 1,631,642; June 7.
Batteries, Self-centering core for dry. H. M. Koretzky. 1,654,171; Dec. 27.
Battery and tery.
Electric lantern battery.
Frimary battery.
Battery and battery charger for radio apparatus, Casing for combined. J. L. Rupp. Des. 72,576; May 3.
Battery and connecter. S. G. and P. L. Breeden. 1,632,536; June 14.
Battery attachment, Storage.
P. M. Marko. 1,653,579; Dec. 20.
Battery binding post. L. G. Bowen. 1,642,224; Sept. 13.
Battery binding post. Battery attachment, Storage. F. As. matab. 1,000,000 Dec. 20.
Dec. 20.
Dec. 20.
Dec. 20.
Dec. 20.
Dec. 20.
Battery box. C. J. Bender. 1,644,641; Oct. 4.
Battery box. C. J. Bender. 1,644,641; Oct. 4.
Battery box. mold, Multicell. J. K. Robinson, jr.
1,633,036; June 21.
Battery carrying device, Miner's. J. Mctcalfe, sr.
1,635,522. Dec. E. Bobbitt. 1,624,131; Apr. 12.
Battery case. W. Mever. 1,647,141; Nov. 1.
Battery casing. R. H. Wappler. 1,634,475; July 5.
Battery casing. R. H. Wappler. 1,634,475; July 5.
Battery cell. C. C. Carpenter. 1,632,364; June 14.
Battery cell. F. A. Keller. 1,640,039; Aug. 23.
Battery-cell und and making the same, Electric. H. M.
Battery chargers, Method of and apparatus for control-ling. C. Pfanstiehl. 1,645,720; Oct. 18.
Battery charging and voltage-regulating system. Automatic. E. D. Smith and W. H. Perkins. 1,634,338; Nov. 15. Battery charging and voltage-regulating system, Automatic, E. D. Smith and W. H. Perkins. 1,649,136; Nov. 15.

Battery-charging apparatus. E. W. Engle. 1,638,478; Aug. 9. Aug. 9.

Battery-charging apparatus. N. R. Haas. 1,638,305;
Aug. 9.

Battery-charging system. J. H. Hunt. 1,641,386;
Sept. 6.

Battery-charging system. W. E. Menzies. 1,624,420;
Apr. 12.

Battery clamp. H. J. Hick. 1,636,562; July 19.

Battery clamp and support. F. E. Dayes. 1,651,753;
Dec. 6. Dec. 6.

Buttery connecter. J. 9. Luthy. 1,627,42; May 8.

Buttery connecter. J. J. Witkowski. 1,648,638; oct. 11.

Buttery connection. W. E. Gill. 1,624,647; Apr. 12.

Battery connection. W. E. Goodwin. 1,658,999; Dec. 27.

Battery connection. S. Osterman. 1,651,726; Dec. 6.

Battery connection. A. W. Weimer and J. Smith. Battery connection. S. Usterman. 1,691,720; Dec. 6. Battery connection. A. W. Weimer and J. Smith. 1,613,070; Jan. 4. Battery construction, Dry. E. E. Meisekothen. 1,684,78; July 19. Battery construction, Dry. E. E. Meisekothen. 1,641,685; Battery container, Storage. C. J. Dunzweiler and M. W. Seyerance. 1,634,284; July 5. Battery filler. J. S. Hooper. 1,624,890; Apr. 12.

Battery filler. J. Taylor. 1.628.564; May 10.
Battery-filling device, Liquid. D. C. Sowell. 1,635,444;
July 12 Battery-plate-filling machine. C. M. Angell. 1,644,659; Oct. 11.

Battery-plate pasting machine. C. M. Angell. 1,627,764;
May 10.

Battery-plate puller. J. Taylor. 1,628,563; May 10.

Battery-plates, Art of and apparatus for making. T. S.
Cole and S. Johnson. 1,639,640; Aug. 16.

Battery plates, Device for joining or burning. W. T.

Woodall and C. E. Girton. 1,625,534; Apr. 19.

Battery plates, Teating discarded lead. A. Stewart. star. 10. Battery plates, Treating discarded lead. A. Stewart. 1,627,351; May 3. Battery-sealing construction. L. J. Pearson. 1,651,226; Nov. 29. Battery separator, Wooden. E. S. Humboldt. 1,631,867; June 7. June 7.
Battery support. R. K. Jack. 1,629,665; May 2.
Battery switch. P. H. Bethea. 1,615,106; Jan. 18.
Battery terminal. J. Rumore. 1,651,294; Nov. 29
Battery terminal. A. W. Welmer and J. Smith. 1,622
Mar. 29. May 24. 1,622,362; Battery-terminal connecter. E. F. Goeller. 1,633,176; June 21. Battery terminal for upright posts. E. E. Ness. 1,614,382; Jan. 11.
Battery-terminal lifter. C. C. Echelberger. 1,637,687; Aug. 2. Battery terminals and other electrical conductors, Connector for. H. E. Atkinson. 1,653,833; Dec. 27.
Battery terminals, Puller for. H. J. Noack. 1,641,599;
Sept. 6. Sept. 0.

Battery unit and producing same. C. P. Deibel and W. G.
Waitt. 1,625,848; Apr. 26.

Batting process. W. B. Wescott. 1,646,605, Oct. 25.

Beach chair. N. G. Perry and L. L. Hanson. 1,628,472; Beach Char. N. G. Ferry and L. L. Hanson. 1,628,412; May 10. Beacon, Day and night. A. V. Conover. 1,613,938; Jan. 11. Beacon-light casing. J. R. Townsend. Des. 72,916; Bead and weather strip, Combined parting. W. F. Koelling. 1,653,632; Dec. 27.
Bead-building machine. A. H. Marietta. 1,615,025; Bear State of the 1,053.5.

Beams, Rolling flanged. N. C. Renderman.

Apr. 5.

Beams, Rolling flanged. N. C. Renderman.

Apr. 5.

Beam-separating machine. J. H. Ruttle. 1,623,275;

Apr. 5.

J. H. Carter. 1,621,968; Mar. 22.

Apr. 5. Apr. 5.
Bean stringer. J. H. Carter. 1,621,968; Mar. 22,
Beans and other pulse foods, Apparatus for treating. H.
P. Okle. 1,653,506; Dec. 20.
Beans, Device for sorting. J. W. Wright. 1,627,221;
May 3.
Benter. C. B. Johnson. 1,653,912; Dec. 27.
Beaning. C. Bethel. 1,630,369-70; May 31.

Bearing. R. R. Bloss. 1,628,571; May 10.

tearing. T. V. Buckwaiter. 1,649,285; Nov. 15.

Bearing. J. P. Catlin. 1,652,468; Dec. 13.

active. T. C. Delaya-Crow. 1,643,082; Oct. 4.

Bearing. G. P. Bisenhauer. 1,641,577; Sept. 6.

Bearing. G. Filntermann. 1,643,532; Aug. 30.

Bearing. G. Filntermann. 1,643,532; Aug. 30.

Bearing. B. Gauthler. 1,638,682; Aug. 23.

Bearing. H. W. Henry. 1,618,877; Feb. 22.

Bearing. M. P. Holmes. 1,624,837; Apr. 12.

Bearing. A. M. Hunt. 1,647,523; Nov. 1.

Bearing. R. Fruger. 1,623,6624; Apr. 5.

Bearing. C. H. Reynolds. 1,629,413; May 17.

Bearing. C. H. Reynolds. 1,629,413; May 17.

Bearing. G. A. Shoemaker. 1,637,317; July 26.

Bearing. G. A. Shoemaker. 1,637,317; July 26.

Bearing. H. M. Williams. 1,618,553; Feb. 22.

Bearing. H. M. Williams. 1,618,553; Feb. 22.

Bearing. H. M. Williams. 1,618,553; Feb. 22.

Bearing. H. M. Williams and A. L. Boegehold.

1,642,347; Sept. 13.

Bearing. Adjustable. M. Jones and T. H. Forehand.

Bearing. Adjustable. M. Jones and T. H. Forehand. Bearing, Adjustable end-thrust. H. Yeager, 1,653,528; Dec. 20. Dec. 20. Bearing, A Nov. 29 Nov. 29.

Bearing adjusting means, External. G. W. Sponable. 1,631,567; June 7.

Bearing and assembling the same, Antifriction. J. A. Ganster. 1,632,639; May 31.

Bearing and assembling the same, Roller. T. V. Buckwalter. 1,617,318; Reb. 15.

Bearing and bushing the same sterefor. R. H. Bearing and bushing remover. C. M. McCord. 1,621,733; Mar. 22.

Bearing and direction indicates. Adjustable roller, J. J. Strempel, 1.650,728; Mar. 22.

Bearing and direction indicator with section map for vehicles. R. Tledemann. 1,644.454; Oct. 4.

Bearing and forming the same, Antifriction. C. Claus. 1,654.509; Dec. 27.

Bearing and making same. G. A. Shoemaker. 1,646,371; Oct. 18. Oct. 18.
Bearing and making the same, Self-aligning. C. Claus.
1.638,797; Aug. 9.
Bearing and shim, Adjustable. T. H. Forehand.
Bearing and the like, Chain roller. W. A. Mitchell.
1,615,809; Jan. 25.
Bearing and transmission, Combined resilient. B. F.
Seymour. 1,643,682; Sept. 27.
Bearing, Antifriction. W. Blake. 1,617,700; Feb. 15.
Bearing, Antifriction. W. II. Chapman. 1,651,807; Diec. 6.

Bearing, Antifriction. W. A. Geiger. 1.648.265; Nov. 8.

Bearing, Antifriction. W. A. Geiger. 1.648.265; Nov. 8.

Bearing, Antifriction. W. A. Geiger. 1.648.302; Nov. 8.

Bearing, Antifriction. S. B. Haseltine. 1.648.271;

Nov. 8.

Bearing, Antifriction. G. W. Nordstrum. 1.688.271;

Bearing, Antifriction. J. E. O'Correct. 1.608.271; Bearing, Antifriction. G. W. Nordstrum. 1,638,271; Aug. 9. Bearing, Antifriction. J. F. O'Connor. 1,620,680; Bearing, Antifriction. J. F. O'Connor. 1,640,207-8; Aug. 23. Bearing, Antifriction. W. A. Pitt. 1,630,310; May 31. Bearing, Antifriction. O. W. Young. 1,617,660; Feb. 15. Bearing application, Antifriction. F. H. Gibbs. 1,631,318; June 7. Bearing-assembling device, Ball. R. E. Gamble. 1,627,963; May 10. Bearing, Automatic take-up. J. A. Anderson. 1,642,476; Sept. 13. Sept. 13.

Bearing. Automatic thrust. G. C. Monckmeier. 1.646,416; Oct. 25.

Bearing, Ball. F. Ellwein. 1.622,578; Mar. 29.

Bearing, Ball. B. Okner. 1.645,345; Oct. 41.

Bearing, Ball. W. Rieffert. 1.644,611; Oct. 4.

Bearing, Ball. L. J. Sauer and C. H. Joy, jr. 1,613,058; Jan. 4.

Bearing box, Self-aligning pitman. V. L. Forsyth. 1,615,940; Feb. 1.

Bearing, Breech-lock. E. G. du Mazuel. 1,615,810; Jan. 25. Bearing cages by spot welding. Device for assembling two-piece ball. I. Rounnet. 1.651,779; Dec. 6.
1.639,245; Ang. 16.
1.639,245; Ang. 16.
Bearing, Car-axle. W. C. Sanders. 1.617,349; Feb. 15.
Bearing, Caster, Top. W. H. Noedting, E. A. Smithfield, and C. B. Noedting. 1.622,734; Mar. 29.
Bearing, Combined radial and thrust. 1.651,073; Bearing, Nov. 29. ROV. 29.

Rearing, Connecting-rod. V. E. Ankario. 1,644,974;
Oct. 11.

Bearing, Connecting-rod. J. Kuhne. 1.612.824; Jan. 4.

Benring, Connecting-rod. C. J. Scudder. 1.619,588;
Mar. 1.

Bearing, Counterbalanced side. S. B. Haseltine. 1,640,034;
Aug. 23.

Bearing cups, Mounting roller, T. V. Buckwalter. 1,648,977; Oct. 4. Bearing, Cylinder. W. Evensen. 1,646,056; Oct. 18. Bearing drive and hanger box, Antifriction. G. L. Miller. 1,632,495; June 14. Bearing for band-saw mills, Shaft. G. E. Campbell. 1,614,421; Jan. 11. Bearing for grain separators. P. F. Gruver. 1,631,810; June 7. Barting for link chains and belts. S. J. Bens. 1,634,641; July 5.

Bearing for locomotives, Driving rod. J. E. Allen. 1,643,760; Sept. 27.

Bearing for looms, Rocker-shaft. A. Harris. 1,618,125; Feb. 16.

F Bearing for link chains and belts. S. J. Bens. 1,634,641; June 14.
Bearing mounting. I. J. McCullough. 1,633,994; June 28.
Bearing, Mounting for antifriction. J. O. Bailey.
1,622,483; Mar. 29.
Bearing oiler, Automatic. J. J. Goodrich. 1,649,467;
Nov. 15. Bearing or like sections, Machine for trimming the edges of. C. W. Eggenweiler and W. J. Fiegel. 1,626,924; May 3. May 3.

Bearing pin lubricator and obstruction ejector. M. A. Frank. 1,628,833; May 17.

Bearing plane. J. J. Johnston. 1,649,703; Nov. 15.

Bearing plate for wire-line pumping jacks, Adjustable. J. R. Robb. 1,652,048; Dec. 6.

J. R. Robb. 1,652,048; Dec. 6.

J. R. Robb. 1,652,048; Dec. 6.

Bearing puller. R. B. Noble. 1,640,304; Aug. 30.

Bearing puller. R. B. Noble. 1,640,304; Aug. 30.

Bearing promp. I. A. Oliver. 1,633,188; June 21.

Bearing race and bushing remover. C. M. McCord. 1,621,734; Mar. 29.

Bearing, Radial. H. A. Perkins. 1,622,830; Mar. 29.

Bearing, Radial. A. E. Schein. 1,629,314; May 17.

Bearing, Radial. A. G. Schein. 1,629,314; May 17.

Bearing, Roller. J. G. Avers. 1,651,798; Dec. 6. Bearing, Railway-car suce. L. Royam-suc. Oct. 18.

Bearing, Roller. M. Guidi. 1,638.029; Aug. 9.

Bearing, Roller. M. Guidi. 1,638.029; Aug. 9.

Bearing, Roller. G. F. Honold and F. Leicht. 1,617,907;

Bearing, Roller. D. W. Tietjen. 1,629,600; May. 24.

Bearing, Roller. A. W. Ward. 1,653,073; Dec. 20.

Bearing, Roller. B. H. W. Weibul. 1,622,985; Mar. 29.

Bearing, Roller. R. E. Wells. 1,617,613; Feb. 15.

Benting, Roller and like. N. H. Crouse. 1,652,766;

Dec. 13. Bearing, Roller and like. N. C. Rockenstire. 1,649,188; Dec, 13.
Bearing, Roller side, W. C. Rockenstire. 1,649,181; Nov. 15.
Bearing, Rolling mill. G. Cooke. 1,621,711; Mar. 22.
Bearing, Sandproof, J. P. Whann. 1,642,914; Sept. 20.
Bearing, Sand-reel. F. Redick. 1,622,678; June 14.
Bearing, Self-adjusting, W. H. Ogden. 1,655,407; Dec. 20. Bearing, Self-adjusting connecting-rod. M. D. Greenig, 1.634.993; July 5. Bearing, Self-lubricating. A. H. Singelmann. 1,637,966; Aug. 2. Aug. 2.
Bearing, Self-oiling, H. J. and B. A. Smith. 1,653,377;
Dec. 20. Bearing, Self-oiling. H. J. and B. A. Smith. 1,653,377; Dec. 20.

Bearing shaft, M. Hemleb. 1,631,962; June 14, Bearing, Shaft. O. Poulsen. 1,623,207; Apr. 5.

Bearing, Shaft. J. Rummins. 1,649,258; Nov. 15.

Bearing, Side. E. G. Goodwin. 1,627,432; May 3.

Bearing, Side. E. G. Goodwin. 1,642,532; Nov. 8.

Bearing, Side. W. E. Wine. 1,653,0717; Dec. 20.

Bearing, Side. W. E. Wine. 1,653,0717; Dec. 20.

Bearing sleeves and bearings, Tool for removing and inserting. F. Meridan. 1,641,895; Sept. 6.

Bearing sleeves. Tool for inserting and removing. F. Meridan. 1,619,625; Mar. 1.

Bearing surfaces, Method of and spparatus for finishing cylindrical. G. R. Mappin. 1,619,479; Mar. 1.

Bearing, Thrust. S. H. Libby. 1,626,470; Apr. 26.

Bearing, Thrust ball. F. Symansik. 1,622,065; Mar. 22.

Bearing, Thrust ball. F. Symansik. 1,622,065; Mar. 22.

Bearing, Truck center. T. W. Hawley. 1,653,564; Dec. 20. Bearing, Dec. 20.

Bearing, Underground. A. E. Bergloff. 1,628,022; May 10.
Bearling, Wrist-pin. C. C. Crowder. 1,654,210; Dec. 27.
Bearing, Wrist-pin. C. C. Crowder. 1,654,210; Dec. 27.
Bearings and the like, Machine for boring. W. J. Flegel. 1,615,372; Jan. 25.
Bearings, Automatic take-up for shaft. R. W. Johnson. 1,650,629; Nov. 29.
Bearlings, Automatic take-up for shaft. R. W. Johnson. 1,650,629; Nov. 29.
Bearlings, Cape for ball. H. Styri. 1,654,101; Dec. 27.
Bearlings, Cage for ball. H. Styri. 1,654,101; Dec. 27.
Bearlings, Cape for J. L. Brown. 1,621,709; Mar. 22.
Bearlings, Cooling system for thrust. H. A. S. Howarth. 1,648,049; Nov. 8.
Bearlings, Cooling system for thrust. H. A. S. Howarth. 1,648,049; Nov. 8.
Bearlings, Making cages for roller. M. T. Lothrop. 1,645,866; Oct. 18.
Bearlings, Making cages for roller. M. T. Lothrop. 1,645,866; Oct. 18.
Bearlings, Making roller. C. E. Robson. 1,639,351; Aug. 16. 1,645,686; Oct. 16.
Bearings, Making roller. C. E. Robson. 1,000,000-1,
Aug. 16.
Bearings, Manufacturing eages for ball or roller. L.
Rouanet. 1,650,582-4; Nov. 29.
Bearings, Mounting for antifriction. G. R. Bott.
1,635,684; Aug. 22.
Bearings, Mounting for antifriction. G. R. Bott.
1,635,124; Aug. 22.
Bearings, Oil-returning device for axie. O. E. Hoffmann.
1,654,124; Dec. 27.
Bearings, Oil-returning device for axie. O. E. Hoffmann.
1,654,124; Dec. 27.
Bearings, Oiling system for. P. E. Matthews. 1,631,217;
June 7.
Bearings, Preventing displacement in rollers for roller.
Bearings, Preventing displacement in rollers for roller. J. G. S. Wither and M. A. Wiseman. 1,631,217; Bearings. Oiling system for. P. E. Matthews. 1,631,217; Bearings. Preventing displacement in rollers for roller. P. A. E. Armstrong. 1,646,947; Oct. 25. Bearings. Sheet-metal cage for roller. R. F. Runge. 1,616,827-8; Feb. S. Bearings. Supporting frame for. R. Bernhard. 1,642,482; Sept. 13. Beater. C. Andrews. jr. 1,617,787; Feb. 15. Beater. C. Andrews. jr. 1,617,787; Feb. 15. Nov. 29. S. White and M. A. Wiseman. 1,650,777; Nov. 29. S. Witham, jr. 1,639,917; Aug. 23. Beater. Capter. F. P. Johnson. 1,644,020; Oct. 4. Beater or mixer. O. R. Boynton. 1,627,315; May 3. Beater, Capter. F. P. Johnson. 1,644,020; Oct. 4. Beater or mixer. O. R. Boynton. 1,627,315; May 3. Beater-roll raiser. H. C. Claffin. 1,614,226; Jan. 18. Beating engine. L. Shilck. 1,623,364; Apr. 5. Beating engine. L. Shilck. 1,623,364; Apr. 5. Beautifying set for ladies' hand bags. K. Deubel. 1,652,771; Dec. 13. Bed. A. E. Ramsey. 1,641,991; Sept. 13. Bed. A. D. McDonald. 1,648,652; Nov. 8. Bed. J. L. Moore. 1,624,965; Apr. 19. Bed. A. E. Ramsey. 1,641,991; Sept. 13. Bed. and chifforobe, Combination. L. Diamond. 1,618,642; Feb. 22. Bed and couch. Combination. H. Manott and J. H. McGrath. 1,637,493; Aug. 2. Bed and couch. Combination. H. Manott and J. H. McGrath. 1,637,493; Aug. 2. Bed and couch. Combination. H. Manott and J. H. McGrath. 1,637,493; Aug. 2. Bed and douch. Combination. H. Manott and J. H. McGrath. 1,637,493; Aug. 2. Bed and couch. Combination. H. Manott and J. H. McGrath. 1,637,493; Aug. 2. Bed and douch. Combination. A. B. Sprague. 1,620,404; Mar. 8, 200, Mar. 8, 200, Mar. 9, 200, Mar. 9, 200, Mar. 9, 200, Mar. 10, McGrath. 1,627,609; May 10. Bed and trunk. Convertible. C. D. MacDonald. Mar. 8.

Bed and the like, Day, S. J. Lavezzi. 1,627,609; May 10.

Bed and trunk, Convertible. C. D. MacDonald. 1,619,353; Mar. 1.

Bed attachment. T. B. Smith. 1,630,453; May 31.

Bed, Automobile. W. R. Bailey. 1,625,515; Apr. 19.

Bed, Automobile. L. E. Ike. 1,649,233; Nov. 15.

Bed, Baby's. W. L. Summerson. 1,649,754; Nov. 15.

Bed bottom. L. P. Armstrong. 1,641,836; Sept. 6.

Bed bottom. F. C. Marquardt. 1,625,817; Apr. 26.

Bed-bottom fabric. R. Bradshaw. 1,631,852; June 7,800,100; Marguardt. 1,641,852; June 7,800,100; Marguardt. 1,641,852; June 7,800,100; Marguardt. 1,620,416; May 17.

Bed Drace. J. D. King. 1,643,502; Sept. 27.

Bed, Camp. R. C. Johnston and J. R. Estey. 1,621,841; Mar. 22.

Bed. Camping. L. Efaw. 1,651,681; Dec. 6. Mar. 22.
Bed, Camping. L. Efaw. 1.651.681; Dec. 6.
Bed, Chair. M. Gursky. 1.617.108; Feb. 8.
Bedclothes holder. A. W. Brater. 1,638,912; Aug. 16.
Bedclothes holder. E. M. Ware. Des. 74.031; Dec. 6.
Bedclothes, Means or device for the retention of. S. H.
Bartter. 1,627,008; May 3.
Bed. Collapsible camp. M. M. Larsen. 1,625,476; Bed, Collapsible camp. M. M. Larsen. 1,625,476; Apr. 19. Bed couch, Foldable. O. Konrad. 1,623,251; Apr. 5, Bed cover, double. C. W. Wilmert. 1,639,156; Aug. 16. Bed davenport. D. F. Dyke. 1,620,086; Mar. 8. Bed, Davenport. T. S. Morrison. 1,631,600; June 7. Bed elevator, Invalid. E. H. Hutchins. 1,645,608; Oct. 18. Oct. 18.

Bed, Emergency. A. F. Yuhasz. 1,640,743; Aug. 30.

Bed, Exercising. W. W. Everts. 1,638,025; Aug. 9.

Bed, Poldable. S. Abrums. 1,637,843; Aug. 2.

Bed, Poldable. S. Abrums. 1,637,843; Aug. 12.

Bed, Folding. W. A. Burger. 1,639,163; Aug. 16.

Bed, Folding. A. Pittonl. 1,649,323; Nov. 15.

Bed, Folding. M. M. Simon. 1,615,412; Jan. 25.

Bed, Folding. G. F. Sisbower and L. E. Pittonl. 1,639,237; Aug. 16.

Bed, Folding. G. F. Sisbower and L. E. Pittonl. 1,639,237; Aug. 16.

Bed, Folding. J. S. Yuung. 1,635,806; July 12.

Bed, folding bed, or any substitute for beds. E. S. Horwitz. 1,618,589; Feb. 22.
Bed, Folding camp. L. Edwards. 1,622,188; Mar. 22.
Bed, Folding camp. L. Edwards. 1,622,188; Mar. 22.
Bed, Folding portable. F. S. Inco. 1,036,097; July 19.
Bed for automobiles, Folding. J. H. McManus. 1,622,462;
R. Gr. Invalids. C. E. Sparhawk. 1,643,793; Sept. 27.
Bed for invalids. C. E. Sparhawk. 1,643,793; Sept. 27.
Bed for havilids. C. E. Sparhawk. 1,643,793; Sept. 27.
Bed for havilids. C. Pow. 1,631,888; June 7.
Bed, Hospital. J. C. Pow. 1,631,888; June 7.
Bed, Metal folding. W. J. Duvall. 1,624,222; Mar. 29.
Bed or couch, Folding. O. Fichtenbaum. 1,626,801;
Bed of couch spring organization. C. Lofman. 1,626,140;
July 19.
Bedpan. F. L. Bonds. 1,651,324; Nov. 29. July 19.

Bedpan. F. L. Bonds. 1,651,324; Nov. 29.
Bedpan. A. O. Breaux. 1,632,021; June 14.
Bedpan. G. A. Burd. 1,652,467; Dec. 13.
Bedpan. S. Lowenstein. 1,642,255; Sept. 13.
Bedpan. S. Lowenstein. 1,642,255; Sept. 13.
Bedpan. M. E. Northrop. 1,627,571; May 10.
Bedpan and pad. C. Riedeman. 1,649,419; Nov. 15.
Bedpan cleaner and sterilizer. W. B. Underwood. 1,653,242; Dec. 20.
Bedpan, Sanitary. A. de Luna. 1,632,645; June 14.
Bedpan shield. D. Smith. 1,623,602; Apr. 5.
Bed, Preumatic. R. L. Combs. 1,627,835; May 10.
Bed. Portable folding. A. M. Smith. 1,646,116; Oct. edpost lock. W. Silber. 1.626,121; Apr. 26. ed rails, Connecting means for. C. H. Ruth. 1,644,281; Oct. 4. Oct. 4. Bed rest. Bed veer. A. J. Updegrove. 1,619,685; Mar. 1. Bed sander, Endless. P. A. Solem. 1,653,741; Dec. 27. Bed. Silding. M. M. Hampton. 1,621,103; Mar. 15. Bedspread. D. Kemp. Des. 72,265; Mar. 22. Bedspread. D. Kemp. Des. 72,429; Apr. 12. Bedspread or similar article. W. K. Guuter. Des. Bedspread or similar article. W. K. Gunter.
71,870; Jan. 18.
Bed-spring. D. Hanauer. 1,628,462; May 10.
Bed-spring. J. Pepernick. 1,631,036; May 31.
Bed-spring and the like. C. P. Trimble. 1,631,076;
May 31. May 31.

Bed-spring attachment. F. J. Vida. 1.630.813; May 31.

Bed-spring brace. C. Marconi. 1.640,956; Aug. 30.

Bed-spring construction. B. K. Ford. 1,636,556; May 3. May 3. Bed-spring fabric. S. Kirschberg. 1,643,623; Sept. 27. Bed-spring fabric. W. H. Matthews. 1,630,196; May 24. Bed-spring, Foldable, F. Smith. 1,629,317; May 17. Bed-spring packages, Opening. C. W. Myers. 1,614,568; Jan, 18.

Bed-spring support. D. Hanauer. 1,621,111; Mar. 15.

Bed-springs, Attachment for. E. L. Bronstien. 1,619,187; Mar. 1.

Bedstead. M. Antrobus. Des. 72,127; Mar. 8. Mar. 1.
Bedstead. M. Antrobus. Des. 72,127; Mar. 8.
Bedstead. M. H. Covey. 1,640,754; Aug. 30.
Bedstead. R. C. Erskine. Des. 72,994; July 5.
Bedstead attachment. W. E. R. Scherbarth. 1,647,199; Benstean statement of the statement of t Bedsteads, Dec. 27. Slip joint for. H. Rubin. 1,653,665; Dec. 27.

Bed structure, Folding-. G. G. Powers. 1,636,532;
July 19.

Bed stable. E. Pretsch. 1,653,657; Dec. 27.

Bed. Tourist's combination. F. Ness. 1,644,852; Oct. 11.

Bed. Tourist's combination. F. Ness. 1,644,852; Oct. 11.

Bed. Wall. M. F. Bayer. 1,628,763; May 17.

Bed. Wall. M. F. Bayer. 1,628,763; May 17.

Bed. Wall. B. L. Jones. 1,621,885; Mar. 22.

Bed warmer, Electric. A. T. Lister. 1,622,326; Mar. 29.

Bed with means for easing nature, Sick. V. Prettenthaler.

1,636,765; July 26.

Librig. 1,620,363; Mar. 8.

Bedding clamp. Adjustable. F. M. Correa. 1,619,853;

Mar. 8. Mar. 8.
Beds. Appriments with companion. H. B. Littlefield.
1.647.973; Nov. 1.
Beds. Envelope shield for crib. M. B. Houston.
1.620.660; Mar. 15.
Beds. Foot-frame lock for foldable. G. E. Bennett.
1.631.081; May 51.
Littlefield. A. Welsman. 1,632,524; ds, Manufacturing meets.

June 14.
ds, Stabilizer for folding. R. B. Page. 1,618,467; June 14.

Beds. Stabilizer for folding. R. B. Fuge.

Feb. 22.

Beds. Supporting and concealing folding. H. L. Monroe
and W. Cramer. 1,628,418; May 10.

Bee escape. H. A. Holmes. 1,636,625; July 19.

Bee frames, Spacing arrangement for. H. Keepp.
1,637,002; July 28.

Beehives. Brood frame for. F. F. Weaver. 1,650,170;

Nov. 22.

Pachines. Portable lifter for. D. G. Little. 1,622,201; Noy. 22.
Bechives, Portable lifter for. D. G. Little. 1,622,201;
Mar. 22.
Mar. 22.
We will be the for. A. R. Kelly. 1,654.464;
Dec. 27.
Bechives, Wire queen excluder for. G. Markle. 1,639,856;
May 81.

Bees, Combination introducing device for queen. B. Hinds. 1.613.752; Jann. 11.
Beet and cotton thinner. L. C. Hall. 1.643.242; Sept. 20.
Beet carcasses, Method of and apparatus for treating. G. H. Miller. 1.614.312; Jan. 11.
Beet-handfing apparatus G. W. Yanney. 1.632.574; Beef-landing appearance
June 14.
Beet puller.
Beet puller.
W. Yermak. 1,631,180; June 7.
Beet topper.
A. Kowalsky. 1,651,030; Nov. 29.
Beet-topping machine. G. Isago. 1,637,634; Aug. 2
Beet-topping machine. A. J. Scritchfield. 1,649 Beet-topping machine, A. J. Scritchfield. 1,649,617; Seet-topping machine, A. J. Scritchfield. 1,649,617; Bell. 40, W. Thaden. 1,651,303; Nov. 29. Bell. 60, M. Thaden. 1,651,303; Nov. 29. Bell and buzzer alternator. V. E. Larsen. 1,618,154; 1,649,617; Bell and obszer trees.
Feb. 15.
Feb. 15.
Bell, Electric, W. F. Hendry. 1,633,583; June 28.
Bell, Electric, L. E. Richmond. 1,633,288; June 21.
Bell-ring machinery. G. H. Schieferstein. 1,645,522; Oct. Bell Oct. 18, Bell support. G. M. Thaden. 1,651,304; Nov. 29. Bellows, Making. E. J. Leach and W. C. Lagerman. 1,614,563; Jan. 18. Bellows, Making metallic. H. B. Fay. 1,644,823; Oct. 11. Bellows, Maxing metallic. J. M. Lea. 1,630,622; May 31. Belt. J. T. Griffin. 1,636,602; July 19. Belt. C. P. Moretti and E. Mezzera. 1,539,383; Aug. 16. Belt. and buckle clasp. E. L. James. 1,615,085; Jan. 18. Belt and loop fastener used in connection with the same. Belt and making the same. H. J. Martin. 1,612,978; Jan. 4, J E. S. Mix. 1,644,645; Oct. 11.

Belt and making the same. H. J. Martin. 1,612,978;
Jan. 4.

Belt and method and apparatus for forming the same,
Belt and fabric. W. W. Bewsiek. 1,625,648; Apr. 19.

Bloom Michael C. W. Bewsiek. 1,625,648; Apr. 19.

Belt buckle. W. Dietrick Des. 73,688; Oct. 25.

Belt buckle. H. F. Eichner. Des. 73,689; Oct. 25.

Belt buckle. H. C. Vaisey. Des. 73,720-2; Oct. 25.

Belt buckle. H. C. Vaisey. Des. 73,720-2; Oct. 25.

Belt buckle. Bathing. J. B. Freysinger. 1,648,015;

Nov. 8.

Belt clamp. E. Vollrath. 1,643,037; Sept. 20.

Belt clamp. E. Vollrath. 1,648,037; Sept. 20.

Belt clamp. E. Vollrath. 1,648,037; Sept. 20.

Belt clamp. E. Vollrath. 1,648,037; Sept. 20.

Belt connecter. G. G. Grace. 1,633,939; June 28.

Belt connecter. Expansible. J. E. Alm. 1,639,250;

Aug. 16.

Belt conveyer. G. R. Kyle and B. A. Mitchell. 1,626,041; Apr. 26.

Belt conveyer. G. S. Wray. 1,633,153; June 21.

Belt conveyers and making the same Roller for. F. E. Belt conveyer arrangement. E. T. Cannon. 1,636,680; July 26.
Belt conveyers and making the same, Roller for, F. E. Smith. 1,648,626; Nov. 8.
Belt conveyers, Control system for endless. C. R. Fisher. 1,620,52; Mar. 8.
Belt conveyers, Endless. J. W. Silver. 1,620,168; Mar. 8.
Belt conveyors, Tripper for duplex. F. B. Caldwell. 1,636,986; July 20.
1,636,986; July 20.
1,636,986; July 20.
1,636,986; July 20.
1,637,987, Marchand E. G. Handley. 1,635,363; July 12.
Belt Instener. L. J. Andersson. 1,629,983; May 24. July 12.
Belt fastener. L. J. Andersson. 1,629,983; May 24.
Belt fastener. R. H. Hassler. 1,613,888; Jan. 11.
Belt fastener. K. Kovarik. 1,615,176; Jan. 18.
Belt fastener. D. E. Lewellen. 1,634,034; June 28.
Belt fastener. M. M. Mitchell. 1,614,751; Jan. 18.
Belt for personal wear. I. Leibovitz. Des. 72,432;
Apr. 12. Belt fastener. M. M. Mitchell. 1,614-761; Jan. 16.
Belt for personal wear. I. Leibovitz. Des. 72,432;
Apr. 12.
Belt guide, Automatic. B. Ross. 1,628,614; May 10.
Belt blook-closing machine. F. W. Knott. 1,619,137;
Mar. 1. lacing. V. Tobolla. 1,635,185; July 12.
Belt Joint. E. G. Kimmich. 1,635,185; July 12.
Belt Jaign device. W. Cramer. 1,640,822; Aug., 30.
Belt, Liquid-holding. M. Marin. 1,650,764; Nov. 29.
Belt, Liquid-holding. M. Marin. 1,650,764; Nov. 29.
Belt, Life. J. B. Adams. 1,625,971; Apr. 26.
Belt, Life. J. B. Adams. 1,625,971; Apr. 26.
Belt, Life. J. B. Adams. 1,625,971; Apr. 26.
Belt, Life. J. B. Adms. 1,625,971; Apr. 26.
Belt, Life. J. B. Adms. 1,625,971; Apr. 26.
Belt, Songer. H. C. Keller. 1,651,063; Nov. 29.
Belt, Rospiration. O. König. 1,647,299; Nov. 1.
Belt, Sacro-iliac. C. A. Pratt. 1,626,085; May 17.
Belt, Sacro-iliac. C. A. Pratt. 1,626,085; May 17.
Belt, Sacro-iliac. C. A. Pratt. 1,636,3459; July 19.
Belt sander, Portable. H. A. Swan. 1,631,898; June 7.
Belt, Sanitary. M. B. Hammond. 1,614,239; Jan. 11.
Belt, Sanitary. B. Schaffer. 1,646,880; Oct. 25.
Belt, Self-compensating fun. R. W. Schulte. 1,614,693;
Belt, Self-compensating fun. R. W. Schulte. 1,614,693;
Belt shifter. A. W. Haines. 1,616,657; Feb. 8.
Belt shifter. A. W. Haines. 1,616,657; Feb. 8.
Belt shifter. A. W. Haines. 1,616,657; Feb. 8.
Belt shifter in mechanism. A. J. Crossen. 1,631,254;
Nov. 29. Belt-shifting mechanism. J. A. Johnston. 1,653,463; Bertsmitting mechanism. J. A. Johnston. 1,655,426, Dec. 20.
Belt shipper. B. S. T. Bishop. 1,653,250; Dec. 20.
Belt spicer. D. E. Lewellen. 1,634,033; June 28.
Belt. Sprocket chain or link. S. J. Bens. 1,634,647;
July 5. Belt-tensioning device. E. Roberts, 1.652,799; D. Belt tightener. C. E. L. Lipman. 1.616,191; Feb.

Belt tightener, S. F. Stein. 1,640,623; Aug. 30.
Belt tightening and guiding device. D. G. Ashton.
1,617,982; Feb. 15.
Belting, W. M. Cavanaugh. 1,631,580; June 7.
Belting and its manufacture, Round fabric. A. H. De
Voc. 1,624,932; Apr. 19.
Belting, Link. H. A. House.
1,625,609; Apr. 19.
Bully 26.
Belts, Making. A. Jewett. 1,636,617; May 31.
Belts, Making. A. Jewett. 1,636,617; May 31.
Belts, Making laminated. E. F. Hathaway. 1,634,145;
June 28. Belts, Making. A. Jewett. 1,630,617; May 31.
Belts, Making laminated. E. F. Hathaway. 1,634,145;
June 28.
Belts, Pocket attachment for. F. P. Mitchell. 1,629,404;
Belts, Propulsion link for endless traction. A. L. Laugenfield. 1,633,259; June 21.
Bench: See—
Florist bench.
Folding bench.
Greenhouse or conservatory Tub bench.
Greenhouse or conservatory Tub bench.
Greenhouse or conservatory Tub bench.
Bench. P. C. Sbapiro. Des. 73,211; Aug. 2.
Bench and table structure, Knockdown. F. Bokan.
1,618,893; Feb. 22.
Bench and wardrobe, Combination. W. B. King. Des.
Bench and wardrobe, Combination. W. B. King. Des.
Bench and mardrobe, Combination. W. M. Drennon.
1,626,923; May 3.
Bench motor stand, Universal. W. M. Drennon.
1,629,223; May 3.
Bench, waste-paper receptacle and automat stand, Combined nevertising. M. B. Fohey. 1,639,085; Aug. 16.
1,633,248; June 21.
Bending and buckle-attaching machine, Band. M. P.
Lawton. 1,619,873; Mar. 8.
Bending apparatus, Multiple. F. J. L. Dinkel. 1,628,581;
Bending machines, Gripping device for. A. Wagenbach.
14445,55; Oct. 4. Badding paratus, Multiple. F. J. L. Dinkel. 1,628,581;
Dending machines, Gripping device for. A. Wagenbach.
1,644,555; Oct. 4.
Bending machines, Gripping device for. A. Wagenbach.
1,644,565; Oct. 4.
Bending press. D. Kondakjian. 1,645,865; Oct. 4.
Bends and coils and for expanding tubes. Machine for
producing tubular. R. H. Böhling. 1,648,161; Nov. 8.
Benzanthrone derivatives containing sulphur, Manufacture
Benzanthrone, Making. R. G. Caswell and E. G. Marshall.
1,626,392; Apr. 26.
Benzidine and derivatives, Production of. R. A. Nelson.
1,633,123; June 21.
Benzine and oil separator. A. Kutzer.
1,636,866;
Benzoxizolon arsine oxides, L. Benda and O. Sievers.
1,635,167; July 12.
Benzoxazolon arsine oxides, L. Benda and 1,635,168;
July 12.
Benzoxazolon arsonic compounds. L. Benda. 1,635,168;
July 12.
Benzoxazolon arsonic compounds. L. Benda. 1,648,214; Benzoxazolon arsonic acids, L. Benda. 1,635,168; July 12.

Benorasolone arsonic compounds. L. Benda. 1,648,214; Benorasolone arsonic compounds. L. Benda. 1,648,214; Benorasolone arsonic compounds. L. Benda. 1,648,214; Berries, especially Thompson seedless raisin, Drying. T. W. W. Forrest. 1,626,805; May 3. Berries, especially Thompson seedless raisin, Drying. T. W. W. Forrest. 1,645,895; Oct. 18. Berries, C. M. F. Keeler, Fr. 1,636,806; July 19. Berry box. M. F. Keeler, Fr. 1,636,806; July 19. Berry box. M. F. Keeler, Fr. 1,636,806; July 19. Berry box. M. F. Keeler, Fr. 1,636,806; July 19. Berry box. M. F. Keeler, Fr. 1,636,806; July 19. Bertaine hydrochloride, etc., Manufacture of. D. K. Tressler, 1,634,221; June 28. Betaine hydrochloride, etc., Manufacture of. D. K. Tressler, 1,634,421; June 28. Betaine hydrochloride, Preparing. D. K. Tressler, 1,634,221; June 28. Betaine hydrochloride, Preparing. D. K. Tressler, May 17. Bevel and square. F. P. Cash. 1,636,623; July 19. Bevel-edging machine. N. M. Baker. 1,651,501; Dec. 6. Beveling and sealing clamp. T. Midgley. 1,624,616–17; Beverage container. C. M. Cordley. Des. 72,593; May 10. Beverage container. C. M. Cordley. Des. 72,593; May 10. Beverage cooler and dispenser, Combined. M. A. Powers. Des. 73,648; July 12. Beverage cooler and dispenser. Combined. M. A. Powers. Des. 73,648; July 12. Beverage-dispensing apparatus. L. W. Hassensall. Beverage-dispensing apparatus. L. W. Hassensall. Beverage-dispensing apparatus. L. W. Hassensall. Loughty, 1,634,437; July 5. Benzoxazolone arsonic compounds. L. Benda. 1,648,214; Beverage-dispensing apparatus, Carbonated. W. B. Doughty. 1,634,457; July 5. Beverage-dispensing device. D. Humphrey. 1,623,597; Beverage-dispensing device. D. Humphrey. 1,623,597; Apr. 5.
Beverage-dispensing fountain. C. W. Weston. Des. 73,459; Sept. 13.
Beverage mixer. E. B. Van Houten. Des. 72,119; Mar. 1.
Beverage mixer attachment. C. Ferguson. 1,623,535; Apr. 5.
Beverage, Preparing chocolate. I. S. Hocker. 1,650,355; Nov. 22.
Reverage-est stand. H. Bronsther. Des. 71,822; Jan. 11.
Beverage urn or similar article. B. Branston. 72,696-7; May 24.

Beverages, Apparatus for preparing infusion. H. E. Elrod. 1,648,983; Nov. 15. Beverages, Clarification of. J. Duclaux. 1,619,016; J. Duclaux. 1.619.016: Beveriges, Clarification Mar. 1.

Beverrages, Displaying and dispensing apparatus for. W. Matzka. 1.654.379; Dec. 27.

1.625.542; Apr. 1.

Blas-cutting machine. J. W. Brundage. 1,621,152; Mar. 15. Bicycles, France 10.8.

1,626,775; May 3.

Bicycles, Resilient wheel for. L. Balogh. 1,630,920; Bicycles, Resilient wheel for. L. Balogh. 1,630,920; Bitcycles, Resilient wheel for. L. Balogh. 1,630,920; Bitcoal lens. T. B. Drescher. Re16,541; Feb. 8.

Billobard, Advertising. H. R. Gottlob. Des. 72,895; June 21.

Billobard, Automatically-revolving. T. C. Gower and J. H. Williams. 1,650,205; Nov. 22.

Bill clasp. A. W. Standing. 1,638,254; July 19.

Bill fold. F. E. Ryan. 1,638,462; Aug. 9.

Bill fold. C. L'Enfant. 1,651,396; Dec. 6.

Bill folder R. H. and H. J. Rolfs. 1,619,543; Mar. 1.

Bill folder. C. J. Kortz. 1,339,1317; Aug. 18.

Elli folder. C. J. Kortz. 1,339,1317; Aug. 18.

Bill posting. H. Mock. 1,634,333; July 6.

Bill loosting. H. Mock. 1,634,333; July 6.

Bill loosting. H. Mock. 1,634,333; July 6.

Bill loosting. H. Mock. 1,634,333; July 6. Bill posting. H. Mock. 1,634,333; July 5.
Billiard-oll rack, Pocket. C. P. Barker. 1,613,372;
Billiard compass. J. A. Kaye. 1,625,770; Apr. 19.
Billiard compass. J. A. Kaye. 1,625,770; Apr. 19.
Billiard-cue, rod, and like article rack hanger and locker.
A. Demers. 663,004; June 21.
A. Demers. 1,633,004; June 21.
Detroyes. 1,630,417; May 31.
Billiard table. J. G. Bjorkman. 1,615,899; Feb. 1.
Billiard table. H. C. Burke and A. A. Friberg. 1,640,879;
Aug. 30.
Billiard tables. J. G. Bjorkman. 1,615,899; Feb. 1.
Billiard tables, Ductile wire trough for. F. Lanza. 1,620,424; Apr. 26.
Billing machines, Aligning and registering device for.
R. T. Mannhardt and A. B. Hitzel. 1,621,265; Mar. 15.
Billiard tables, Ductile wire trough for. F. Konza. 1,648,275; Nov. 86.
Billing machines, Aligning and registering device for.
R. T. Mannhardt and A. B. Hitzel. 1,621,265; Mar. 15.
Billiard tables, Ductile wire trough for. F. Howell.
Bin: Sec—
Sectional bin. Sectional bin. Sectional bin. Sectional bin. Service bin. Bin: See—
Sectional bin.

Bin. W. M. Venable. 1,632,103; June 14.

Bin circulating apparatus, Reversible-draft, individualBins, Combination spout and gate for. R. P. Micallef.

1,630,538; May 31.

1,624,660; Apr. 12.

Binder. W. Feldmann. 1,624,369; Apr. 5.

Binder. E. L. Krag. 1,634,406; Nov. 8.

Binder. E. L. Krag. 1,634,500; May 31.

Binder cover, Loose-leaf. C. M. Conger. 1,632,434;

June 14. June 14.
Binder device, Loose-leaf-, A. M. Martin. 1,618,770;
Feb. 22.
Binder for loose-leaf files. N. S. Welk. 1,623,145; Binder for 1008e-leaf files. N. S. Weik. 1,623,145; Apr. 5.
Binder hitch. G. A. Trauger. 1,632,013; June 14.
Binder, Load. H. Crumbach and J. H. Deal. 1,650,328;
Nov. 22. Nov. 22.
Binder, Load. F. A. Jenkins. 1,636,638; July 19.
Binder lock, Loose-leaf. J. Kahn. 1,647,635; Nov. 1.
Binder, Loose-leaf. T. V. Bell. 1,648,105; Nov. 8.
Binder, Loose-leaf. A. L. Boyer. 1,623,524; Apr. 5.
Binder, Loose-leaf. A. L. Boyer. 1,623,524; Apr. 6.
Binder, Loose-leaf. B. Couch. 1,641,662; Sept. 6.
Binder, Loose-leaf. B. Couch. 1,641,662; Sept. 6.
Binder, Loose-leaf. B. Couch. 1,641,662; Sept. 6.
Binder, Loose-leaf. B. Ch. Franz, Fr. 1,640,071; Aug. 23.
Binder, Loose-leaf. G. H. Franz, Fr. 1,640,071; Aug. 23.
Binder, Loose-leaf. B. W. Japs. 1,626,269 Apr. 26.
Binder, Loose-leaf. B. W. Japs. 1,626,269 Apr. 26.
Binder, Loose-leaf. B. W. Japs. 1,626,269 Apr. 26.
Binder, Loose-leaf. H. B. Jennings, ir. 1,620,103-5;
Mar. 8. Binder, Mar. 8 Mar. 8.
Binder, Loose-leaf.
May 31.
Binder, Loose-leaf.
Binder, Loose-leaf. Loose-leaf. H. B. Jennings, jr. 1,630,849; C. E. Johnson. 1,618,013; Feb. 15. E. A. Koelling, Jr. 1,646,597; Oct. 25. J. MacLean. 1,617,958; Feb. 15. A. M. Martin. 1,618,769; Feb. 22. H. B. McBee. 1,624,961; Apr. 19. J. L. McMillan. 1,640,087; Aug. 28. H. C. Miller. 1,639,305; Aug. 16. C. S. Mullins. 1,636,428; July 19. G. W. Neuman. 1,614,080; Jan. 11.

E. L. Persons. 1,627,864; May 10. A. B. Plushkell. 1,638,784; Aug. 9. J. J. Pott. 1,638,878; Aug. 16. W. S. Proudit and E. F. Graf. Binder, Loose-leaf. Binder, Loose-leaf. Binder, Loose-leaf. Bituminous composition. L. Kirschbraun. Mar. 15.
Bituminous composition and making same. L. Kirschbraun. 1,620,899; Mar. 15.
Bituminous emulsion. J. A. Montgomerie. 1,643,675; Binder, Loose-leaf, 1,641,397; Sept. 6. Binder, Loose-leaf. Binder, Loose-leaf. 6. W. A. Ringler. 1,615,850; Feb. 1. F. E. Rupf. 1,644,087; O.t. 4. W. J. Steenrod. 1,619,589; Mar. 1. H. C. Sterling. 1,625,752; Apr 19. C. D. Trussell. 1,634,125; June 28. R. M. Van Valkenburgh. 1,641,711; Styl. 21.

Bituminous emulsions, Making. L. Kirschbraun. 1,615,303; Jan. 25.

Blackboard renovators, Cleaning head for. A. P. Bennington. 1,623,520; Apr. 5.

Bladder, Inflatable. T. H. Fewlass. 1,649,458; Nov. 15.

Blade-adjustment mechanism, Folding. F. Lamatsch. 1,639,948; Aug. 28.

Blade attachment, Cutting. J. G. Darling. 1,632,823; Blade-packing. meables. Binder, Loose-leaf, Binder, Loose-leaf, Binder, Loose-leaf, Binder, Loose-leaf, Binder, Loose-leaf. Binder, Loose-leaf. R. M. Van Valkenburgh. 1,641,711; Sept. 6.
Binder, Loose-leaf. R. M. Van Valkenburgh. 1,646,669; Oct. 25.
Binder, Loose-leaf. V. B. Whitehouse and L. Pelletiere, 1,617,778-80; Feb. 15.
Binder, Loose-leaf. W. D. Winders. 1,636,268; July 19.
Binder, Temporary. F. H. Crump. 1,633,070; June 21.
Binder, Temporary. J. S. Lacey. 1,622,159; May 30.
Binder, Temporary. H. C. Miller, 1,631,049; May 31.
Binder, J. J. M. Jones and R. R. Webb. 1,638,023; June 21.
Binders, Attachment for. C. J. Polchow. 1,648,621; Nov. 8.
Binders, Chain guide for corn. C. M. Livingston. Binders, Attachment for. C. J. Polchow. 1,648,621; Nov. 8.
Binders, Chain guide for corn. C. M. Livingston. 1,653,299; Dec. 20.
Binders, Controlling device for motor-drawn. T. J. Fetcher. 1,621,773; Mar. 22.
Binders, Flyleaf for loose-leaf. H. C. Sterling. 1,634,345; Binders, Flyleaf for loose-leaf. H. C. Sterling. 1,634,345; June 14.
Binders, Locking mechanism for loose-leaf. W. J. Steenrod. 1,623,283; Apr. 5.
Binders, Platform canvas-adjusting mechanism for grain. H. Hartvikson. 1,634,187; June 28.
Binders, Tripping mechanism for. L. K. O. Bakke. 1,620,035; Mar. 8.
Binders, Partorn canvas-adjusting to the control of the contro Sept. 27.
Binding post. W. H. Pumphrey. 1.642.695; Sept. 20.
Binding post. C. D. Tuska. 1,646,890; Oct. 25.
Binding strip. A. Freydberg and J. Marcus. 1,638,254;
Aug. 9. Binding strip. A. Freyderg and J. Marcus. 1,688,204; Binding strips, Machine for making metal. J. W. Dixon. 1,626,227; Apr. 26.
Bind cage. N. W. Hendryx. Des. 73,784; Nov. 8.
Bird cage. L. Intieri. Des. 11,797; Jan. 4.
Bird cage. L. Intieri. Des. 11,797; Jan. 4.
Bird cage. A. M. Kroczek. 1,620,361; Mar. 8.
Bird cage. J. J. Johnson. 1,649,302; Nov. 22.
Bird cage. J. J. Johnson. 1,649,302; Nov. 22.
Bird cage. J. V. Johnson. 1,649,302; Nov. 22.
Bird cage. W. F. Schleich. Reil-6,81; July 19.
Bird cage. W. F. Schleich. Reil-6,81; July 19.
Bird cage. E. W. Sintow. Des. 73,331; Aug. 30.
Bird cage bath. B. Markow. 1,617,492; Feb. 15.
Bird-cage stand. C. H. Hennings. Des. 73,176; Aug. 2.
Bird cages, Base for. L. J. Leon. 1,614,927; Jan. 18.
Bird cages, Base for. L. J. Leon. 1,614,927; Jan. 18.
Bird cages, Base for. L. J. Leon. 1,614,927; Jan. 18.
Bird cages, Base for. L. J. Leon. Des. 72,522; Apr. 26. Bird cages, Wall bracket for. L. J. Leon. Des. 72,522; Apr. 26.

Apr. 26.

Bird house. C. C. Reiber. 1,634,209; June 28.

Bird house. R. W. Tisch. 1,628,597; May 10.

Bird house. R. W. Tisch. 1,628,4763; July 5.

Bisalkyl-xanthogens, Making. A. Rothmann and H. Stein. 1,628,558; Apr. 26.

Biscult. G. F. Chambers. Des. 73,067; July 19.

Biscult machines, Cutting and embossing device for. A. Altimes. 1,650,682; Nov. 26.

Biscult making and the like machine. E. L. Vicars.

Biscult making and the like machine. E. L. Vicars.

Biscult form. B. Dass. 1,635,972; July 12.

Biscult-removal means. E. P. Webster. 1,627,364; May 3.

Biscults and the like, Machine for stacking. J. H. L.

Boettcher. 1,649,563; Nov. 15. Biscult-removal means. E. F. Webster. 1,024,304;
May 3. and the like Machine for stacking. J. H. L.
Eoettcher. 1,649,563; Nov. 15.
Bismuth. Medical preparation of colloidal. V. A. Lapenta
and S. Reisler. 1,615,226; Jan. 25.
Bit: SeoDisk bit. Roller bit.
Bit: Rock and S. Reisler. 1,615,226; Jan. 25.
Drilling bit. Rotary drill bit.
Drilling bit. Rotary drill bit.
Driving bit. Rock-drill bit.
Bit-brace head. G. Abrahamuson. 1,640,020; Aug. 23.
Bit holder. J. Davis. 1,613,693; Jan. 11.
Dec. 13.
Bits. Machine for dressing. C. A. Butler. 1,614,649;
Jan. 18. Anchor block. Balancing block. Bits, Machine for dressing, C. A. Butler, 1,614,649; Jan. 18. M. B. Carter, 1,649,664, Nov. 15. Bit truey, Registering, J. E. Psayla, 1,652,910; Dec. 1,614,614, Nov. 16. Bit truey, Registering, J. E. Psayla, 1,652,910; Dec. 1,614, Nov. 1,614, Nov Boot block.
Bracing block.
Building block.
Cable block.
Chock block.
Cornice block.

Blade-adjustment mechanism, Folding. F. Lamatsch. 1,639,948; Aug. 23.
Blade attachment, Cutting. J. G. Darling, 1,632,823; June 21.
Blackachaning machine. H. J. Gaisman and C. Schumder. 1,623,2593; June 14. Gaisman and C. Schumder. 1,632,503; June 14. Gaisman and C. Schumder. 1,632,503; June 14. Gaisman and C. Schumder. 1,632,503; June 14. Gaisman 1,619,133; Mar. 1.
Blade fastening. A. T. Kasley. 1,619,133; Mar. 1.
Blade fastening. A. T. Kasley. 1,619,133; Mar. 1.
Blade fastening. A. T. Kasley. 1,619,134; Mar. 1.
Blade for use in rotary pumps and engines and like machine. 1,630,648; June 21.
Blade for use in rotary pumps and engines and like machine. 1,630,648; June 21.
Blade in the company of the comp 1,630.474; May 31.

last-furnace structures, Elevator tower for. J. Kennedy. 1,630.088; May 24.

Blast release and conveying means. J. Herr. 1,647,519; Blasting. W. O. Owen. 1,627,991; May 10.

Blasting for closure. W. Lindner. 1,642.118; Sept. 13.

Blasting cap box, Safety. N. I. Steers. 1,639.906; Aug. 23.

Blasting cap box, Safety. A. Turk. 1,629.423; May 17.

Blasting cap box, Safety. A. Turk. 1,629.423; May 17.

Blasting clarges, Container for. W. E. Jenkins. 1,635.038; Aug. 9.

H. H. D. Oberdorfer. 1,623.068; Apr. 5.

Bleaching and like purposes. C. B. Thorne. 1,642.978; Sept. 20.

Bleaching and the like purposes. C. B. Thorne. 1,642.978; Sept. 20.

Bleaching and the like purposes. C. B. Thorne. 1,642.978; Sept. 20.

Bleaching and the like purposes. C. B. Thorne. 1,642.978; Sept. 20.

Bleaching and servers. Spring roller for. A. Glenister. 1,623.635; Apr. 5.

Blinds and servens, Spring roller for. A. Glenister. 1,623.835; Apr. 5.

Blinds. Offsetting support for Venetian. A. H. Dodge. 1,625.021; Apr. 19.

Blister preventive and foot pad. F. Sheehan. 1,637,285; July 28.

Balanchor block. Fire-box arch block.

Balanchor block. Fire-box arch block.
Fuse and junction block.
Fuse block. Boot block.
Building block.
Building block.
Choic block.
Chock block.
Cornice block.
Distributing block.
Liestilock.
Mirker block.
Mirker block.
Alling block.
Paving block.

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Block: See—
Pulley block.
Railway safety block.
Reduction block.
Refractory block.
Road-paving block.
Safety block.
          Safety block.
Safety sheave block.
Sheave block.
Shuttle block.
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Socket-seating and fuse-testing block. Take-up block. Take-up block. Terra-caoutchouc block. Toy block.
Toy-building block.
Traveling block.
Vehicle stay block.
Wheel block.

Snatch block.

Snatch block.

Block and kicker structure, Combined log-deck.

1,617,757; Feb. 15.

Block for wall construction. A. K. Jorgensen. 1,651,893;

1.617.67; Feb. 15.

Block for well construction. A. K. Jorgensen. 1,651.803; Dec. 6.

Block machines, Pneumatic core for. A. Adams. 1.624.704; Apr. 12.

Block machines, Pneumatic core for. A. Adams. 1.624.704; Apr. 12.

Block machines, Pneumatic core for. A. Adams. 1.60.

Block machines, Pneumatic core for. A. Adams. 1.60.

Block pulley, Crown and traveling. W. S. Evans. 1,615.170; Jan. 18.

Block system. M. H. Loughridge. 1,617.402; Feb. 15.

Blocks, Making refractory. P. G. Willetts. 1,628.261; Blocks, Making refractory. P. G. Willetts. 1,628.261; Blocks, Making refractory. P. G. Willetts. 1,628.261; Blood-coagulation medium. C. A. Mills. Re16.639; May 31.

Blood-testing device. C. E. Roderick. 1,631.553; June 7. Blood transfusion. N. C. Aguilar. 1,630.248; May 31.

Blood-treating process. A. Sternberg. 1,632.321; June 14. E. E. Carlson, J. P. Costello, and R. L. Heilbronner. 1,643.980; Oct. 4.

Bloomers. R. K. Gershenow. 1,616.688; Feb. 8.

Bloomers and making the same. F. Chatfield. 1,629,147; May 17.

Blooter bloods of the same. F. Chatfield. 1,629,147; May 17.

Blotter- Geg guard and paper cutter. L. G. Swiningston. 1,640,100; Aug. 23.

Blotter holder. B. A. Smith. 1,617.551; Feb. 15.

Blouse, Knitted. W. A. Keller. Des. 71.947; Feb. 1.

Blower and heater, Combination. W. A. Brown. 1,627.229; May 3.

Blower mechanism. R. C. Osgood. 1,654.485; Dec. 27.

Blower and haler. T. Kasley 1,630.901; July 19.

Blower and haler. J. Kasley 1,630.913; July 26.

Blowing device. F. M. Siater. 1,630.901; July 19.

Brecht and R. Fugmann. 1,649.335; Nov. 15.

Blower though the process. 1. A. Kammerdiner. 1,650,0074; Nov. 22.

Blow-out packer. J. A. Kammerdiner. 1,650,0074; Mov. 22.

Blow-out packer. J. A. Kammerdiner. 1,650,0074; Mov. 22.

Blow-out packer. J. A. Kammerdiner. 1,620,0074; Mov. 22.

Nov. 22. Plow-out packer. J. R. Rogers. 1,631,112; Aug. 2. Plow-out patch. A. J. Stephens. 1,618,314; Feb. 22. Plow-out preventer. W. A. Trout. 1,621,041; Mar. 15. Blow-out preventer. W. A. Trout. 1,621,041; Mar. 15. Blow-out preventer. W. A. Trout. 1,621,041; Mar. 15. Blow-out preventer. Blow-out preventer. Stept. 1. Blowtorch. H. L. Fish. 1,629,969; May 24. Blow-out-preventer. E. C. Norton. 1,642,625; Sept. 13. Blow-orch. Plumber's. W. F. Pagel. 1,628,739; May 17. Blubber-slieng implement. E. C. Norton. 1,642,625; Sept. 13. Blow-orch. Plumber slieng board. Plotting board. Significant ploard. Signi

Board and making the same, Composition. F. J. Hallauer. 1,634,462; July 5. Board panel, Instrument. A. L. Knapp. Des. 74,057; Dec. 13.

Dec. 13.

Boards or panels. Warp prevention in. E. Freund. 1.646.996; Oct. 25.

Boat. T. B. Collins. 1.631.400; June 7.

Boat. E. B. Collins. 1.632.606; Mar. 29.

Boat. W. H. Harpen. 1.622.636; Mar. 28.

Boat. W. A. Hickman. 1.621.839; Mar. 22.

Boat. W. A. Hickman. 1.621.839; Mar. 22.

Boat. W. A. Hickman. 1.621.839; Mar. 22.

Boat. W. Meyer. 1.631.047; May 31.

Boat. W. Miller. 1.635.834; July 12.

Boat. L. R. Ruthenburg. 1.636.076; July 19.

Boat, L. Aluminum. F. L. and J. Friet. 1.625.598; Apr. 19.

Boat, Barling. F. R. Walters. 1,625.579; Apr. 19.

Boat, Car speed. F. Chávez. 1,641,574; Sept. 6. Boat, Collapsible. J. F. Boyle. 1,620,867; Mar. 15. Boat, Collapsible. E. and G. Kaechele and R. Leidig. 1,640,311; Nov. 15. 1.649.311; Nov. 15.
Boat, Collapshibe canvas. F. H. Churchill. 1,614,280;
Jan. 11.
Boat construction. D. R. Baribault. 1,643,329; Sept. 27.
Boat construction. J. Kozelka, jr. 1,616,500; Feb. 9.
Boat construction, Nonshable. G. Arneld. 1,616,208;

Boat construction, 10. Feb. 1.
Boat, Fish. A. Bent, Fish. L. B. Sperry. 1,629,978; May 24.
Boat, Flying. L. B. Sperry. 1,629,978; May 24.
Boat, Foot-propelled. C. Garro. 1,634,237; July 5.
Boat form. C. E. Chance. 1,622,699; Apr. 26.
Foot-hull construction. C. J. Thompson. 1,637, 1.637.973:

Aug. 2.
Boat, Hunting. C. B. Ulrich. 1,651,785; Dec. 6.
Boat-launching device. F. A. Antoncich. 1,626,714;

Boat-launching device. F. A. Antoncich. 1,626,714; May 3. Boat-launching device. H. L. Sorensen. 1,629,419; May 17. Boat, Life. S. A. Sieurin. 1,619,001; Mar. 1. Boat, Life. Saving. H. L. Grundstein. 1,649,403; Nov. 15. Boat of the camoe type. J. L. G. Dykes. 1,618,409; Feb. 22.

Boat, Life. S. A. Sleurin. 1,619,001; Mar. 1.
Boat, Life. saving. H. L. Grundstein. 1,649,403; Nov. 15.
Boat of the canoe type. J. L. G. Dykes. 1,618,409; Reb. 22.
Boat of the canoe type. J. L. G. Dykes. 1,618,409; Reb. 22.
Boat of the canoe type. J. L. G. Dykes. 1,618,409; Reb. 22.
Boat of the canoe type. J. L. G. Dykes. 1,618,409; Reb. 22.
Boat propoled by manually-operated mechanism. I. R. Fiching. 1,638,955; Nov. 15.
Boat propelled by manually-operated mechanism. I. R. Fiching. 1,638,955; Nov. 15.
Boat propelled by manually-operated mechanism. I. R. Fiching. 1,638,955; Nov. 15.
Boat propelled by manually-operated mechanism. I. R. Fiching. 1,638,955; Nov. 15.
Boat Speed. 1,625,736; Apr. 19.
Boat sact. R. C. Hansen. 1,617,905; Feb. 14.
Boats, Anchor support for. P. Boller. 1,618,634; Feb. 22.
Boat, Speed. J. Plum I. E. Krammer. 1,627,184; May 3.
Boat, Speed. J. Plum I. 618,905; Mar. 1.
Boats, Anchor support for. P. Boller. 1,618,634; Feb. 22.
Boats, Launching ships. A Vreugdenhil. 1,613,307; Jan. 4.
Boats, Rudder for. W. J. Snadeckl. 1,639,675; Aug. 23.
Bobbin bin and shelf therefor. G. Schlesinger. 1,622,399; Mar. 29.
Bobbin-braking mechanism. H. J. Tynan. 1,636,158; July 19.
Bobbin classer, Filling-replenshing-loom W. I. Stimp-Bobbin ductibing means for rotatable spindles. J. A. Miller. 1,628,054; May 10.
Bobbin-driving shaft for winding frames and its bearing arrangement. W. Reiners and G. Kahlisch. Bobbin ductibing means for rotatable spindles. J. A. Miller. 1,628,054; May 10.
Bobbin driving shaft for winding frames and E. Kahlisch. Bobbin with rings centralled by how motion, Detector the duction of the series of the ser

Bodily exercise, Appliance for. 20.
B. Neumann. 1,638,003;
Aug. 2.
Body adjuster for deceased persons. W. G. Barnes.
1,632,160; June 14.
Body applicator. J. H. Paul. 1,627,618; May 10.
Body construction. J. H. Bourgon. 1,640,640; Aug. 30.
Body-forming mechanism. P. H. Lange. 1,639,513;
Aug. 16.
Body liftering mechanism. P. H. Lange. 1,639,513;
Aug. 16.
Body lifter and carrier. C. W. Smith. 1,620,298; Mar. 8.
Body lifter boiler. Bitumen boiler.
Bitumen boiler.
Linen boiler.
Linen boiler.
Linen boiler.
Linen boiler.
Sectional heating boiler.
Electric steam boiler.
Electric steam boiler.
Ham boiler.
Waste-heat boiler.
Waste-heat boiler.
Waste-heat boiler.

Steam boiler.
Superheater boiler.
Waste-heat boiler.
Water-tube boiler.

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J. H. Baker. 1,646,382; Oct. 25.
T. W. Dablquist. 2,648,043; Nov. 8.
F. L. Decarie. 1,651,446; Dec. 6.
R. L. d'Espujols. 1,647,960; Nov. 1.
W. J. Fisher. 1,615,789; Jan. 25.
W. G. Hongland. 1,637,939; Aug. 2.
W. G. Hongland. 1,637,939; Aug. 2.
E. B. Howell. 1,651,526; Dec. 6.
D. S. Jacobus. 1,629,273; May 17.
V. L. Jones. 1,618,289; Feb. 22.
H. G. Kraus. 1,638,163; Aug. 9.
T. Matson. 1,638,461; Dec. 27.
M. Morley. 1,628,646; Apr. 10.
M. Morley. 1,628,646; Apr. 10.
M. Morley. 1,638,648; Dec. 27.
M. E. Smith. 1,646,428; Oct. 25.
L. D. Summers. 1,636,391; July 19.
H. E. Wallis and C. T. Kingston. 1,619,171;
      Boller.
      Boiler.
Boiler.
      Boiler.
         Boiler.
         Boiler.
      Boiler.
                      Mar. 1.
oiler and
1,642,794;
                                                                                                economizer organization. L. D. Summers.; Sept. 20. evaporator, Steam. W. Donald. 1,633,398;
1642.794; Sept. 20.
Boller and evaporator, Steam. W. Donald. 1,633,398; July 21.
Boller and incinerator system, Combined. L. L. Scott. 1,624,681; Apr. 12.
Boller and incinerator system, Combined. L. L. Scott. 1,624,681; Apr. 12.
Boller and steamer. Combination double. W. E. Balley. 1,647,209; Nov. 1
Boller attact 1637,721; Aug. 2.
Boller baffle. G. H. Dickson. 1,619,463; Mar. 1.
Boller, Blow-off and circulating device. G. Purvis. 1,648,028; Nov. 8.
Boller-check plug, Fusible. J. A. Mascho. 1,640,611; Aug. 30.
1.648.028; Nov. 8.
Boiler-check plug, Fusible. J. A. Mascho. 1,640,611;
Aug. 30.
Boiler cleaner. F. Bowers. 1,624,576; Apr. 12.
Boiler cleaner. W. F. Thomas. 1,614,502; Jan. 18.
Boiler cleaner. W. F. Thomas. 1,614,502; Jan. 18.
Boiler cleaner. G. I. Rawoon. 1,644,275; Ord. 2,3.
Boiler cleaner. H. M. Varian. 1,644,275; Oct. 41.
Boiler-cleaner. H. M. Varian. 1,644,2715; Oct. 4.
Boiler-cleaner construction. S. J. Herman. 1,635,997; July 19.
Boiler-cleaning device. M. R. Bower. 1,626,385; Apr. 26.
Boiler-cleaning device. E. Janson. 1,616,372; Feb. 1.
Boiler-construction. B. N. Boildo, 6,40,178; Aug. 23.
Boiler-construction. W. F. McPhee. 1,621,374; Mar. 15.
Boiler construction. W. F. McPhee. 1,621,374; Mar. 15.
Boiler elements, Connecting nipple for cast-fron heating.
A. Brahm. 1,631,911; June 7.
Boiler feed regulator. A. A. Atkins. 1,644,612; Sept. 8.
Boiler feed trap. S. L. Till. 1,631,708; June 7.
Boiler fire box, Locomotive. C. G. Hawley. 1,637,819;
Aug. 2.
    Aug. 2.
Boiler for carbon-black retorts. H. R. Rogers. 1,644,152;
    Boller furnace G. Trasenster. 1,631,646; Dec. 6.
Boller furnace. G. Trasenster. 1,631,646; Dec. 6.
Boller pare glass. S. F. Weston. 1,644,864; Oct. 11.
Boller headers, Internal mandrel for sectional. J. H.
Himman. 1,638,633; Aug. 9.
    150167 installation, Steam. J. Reimas. 1,030,505, Oct. Boiler acket. A. M. Mertzanoff, 1,649,317; Nov. 15. Boiler or the like. A. H. Kemper. 1,649,387; Nov. 15. Boiler rack. E. Slowinski and J. Zelasko. 1,652,687; Dec. 13. Boiler regulator. C. A. French and L. E. Gott. 1,632,125;
      Boiler stand. S. E. Hopper. 1,635,415; July 12.
Boiler stand. O. M. Redion. 1,622,884; Mar. 29.
Boiler structure. T. F. Harty. 1,622,947; Mar. 29.
Boiler system, Waste-heat. H. Koppers. 1,653,635;
      Boiler system, Waste-heat. H. Koppers. 1,653,635;
Dec. 27.
Boiler-tube cleaner. F. H. Cole. 1,636,355; July 19.
Boiler-tube cutting device. F. W. Larc. 1,631,495;
      June 7.
Boiler-tube-cutting device. F. W. Larc.
                                                                                                                                                                                                                                                                                                                                                                              1.653,186:
    Dec. 20.

Boiler tube or flue cleaning implement. T. W. Dailey. 1.641,375; Sept. 6.

Boiler-tube stopper. C. S. Hart. 1,647,223; Nov. 1.

Boiler tubes and the like, Apparatus for cleaning. P. G. Handoll. 1,647,291; Nov. 1.

Boiler tubes condenser tubes, and other surfaces, Apparatus for condenser tubes, and other surfaces, Apparatus for tubes, Appa
                         Dec. 20
      Belier with superheater. B. Broido. 1,650,184; Nov. 22. Boilers. Adjustable support for range. L. E. Koontz. 1,645,197; Oct. 11.
Bollers and furances, Lining for. R. F. Burgin. 1,615,785; Jan. 25.
Boilers, and superheaters, etc., Electric heater for steam. W. A. Patschelder. 1,626,295; Apr. 26.
Bollers, Antiscale material for. A. G. Doe. 1,639,027; Aug. 16.
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Boilers, Apparatus for changing the water In. S. Otis.
1842,389; Mar. 29.
1801ers, Apparatus for use in preventing the incrustation of steam. J. F. Sanftleben. 1,645,973; Oct. 18.
1801ers, Automatic alarm and shut-off for steam. J. M. Boilers, Automatic alarm and shut-off for steam. G. C. G. Gray. 1,617,591; Peb. 15.
1801ers, Automatic alarm and shut-off for steam. G. C. G. Gray. 1,617,591; Peb. 15.
1801ers, Auxiliary heater for. R. Scheliga. 1,613,381; Jan. 4.
1801ers, Baffle for water-tube. D. H. Mayo. 1,634,077; June 28.
1801ers, Gottoure means for manhole openings in steam. H. Franke. 1,632,957; June 21.
1801ers, Control for sub-vacuous condition of periodically-inted. V. T. Beigham. 1,620,005; Mar. 8.
1801ers, Control for sub-vacuous condition of periodically-inted. V. T. Beigham. 1,620,005; Mar. 8.
1801ers, Control for sub-vacuous condition of periodically-inted. V. T. Beigham. 1,620,005; Mar. 8.
1801ers, Draft-regulating device for. H. Praud. 1,634,345; Dec. 27.
1801ers, Draft-regulating device for. H. Praud. 1,654,486; Dec. 27.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,424; Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,742; D. Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,742; D. Nov. 8.
1801ers, Grafte for. J. J. Rathgeb, Jr. 1,648,755; Mar. 29.
1801ers, Solvent and dissolving scale in steam. P.
1801ers, Steam superhear for propressure sectional. W. Hontsch. 1,636,230; July 19.
1801ers, Steam superhear for water-tube. J. H. Human and R. F. Buke. 1,620,762; Mar. 16.
1801ers, Steam superheare for hopressure sectional. W. May 24.

Bolster. E. R. Viberg and W. C. Parker. 1,615,857;
Feb. 1.

Bolster cases, Manufacture of. W. O. Aldrich. 1,621,708;
Mar. 22.

Bolster repair stake. O. H. Sumpter and J. G. Sheffer. Bolster repair stake. O. H. Sumpter and J. G. Sheffer. 1,648,664; Nov. 8. Bolster spring seat stop. C. F. Huntoon. 1,617,811; Feb. 15. Bolt: See-Dumb-bell bolt. Spring surface. Spring surface bolt.
Supporting bolt.
Take-up bolt.
Theft-preventing bolt.
Wear-compensating bolt. Lock bolt.
Reciprocating bolt.
Reciprocating bolt.
Reciprocating bolt.
Supporting bolt.
Stiding bolt.
Spindle bolt.
Spindle bolt.
Spindle bolt.
Bolt. B. J. Goldsmith and E. Keeb. 1,652,621; Dec. 13.
Bolt. D. Klaus. 1,634,477; Oct. 4.
Bolt. F. F. Koelin. 1,653,015; Dec. 20.
Bolt. H. A. Lomason. 1,627,012; May 10.
Bolt. W. Schwenieln. 1,624,707; Apr. 12.
Bolt. Feb. 1.

Rolt and nut assembly. E. B. Stimpson. 1,631,286; Feb. 1.

Rolt and nut, Lock. F. W. Lowe. 1,649,071; Nov. 15.

Bolt and the like. Expansible shackle. F. A. Ross.

L. Bolt blanks or the like, Machine for threading or turning. J. A. Eden, ir. 1,646,954; Oct. 25.

Rolt-board. A. Wolf. 1,621,860; Mar. 22.

Bolt cutter. A. A. Schwindt. 1,643,589; Sept. 27.

Bolt-cutting device. N. Glandonato. 1,638,483; Aug. 9.

Bolt, Expansion. L. R. Zifferer. 1,625,013; Apr. 19.

Bolt fixing. J. C. Abel. 1,649,486; Nov. 15.

Bolt for bolier settings, Hanger. R. H. Wyld and W. F.

Bolt head, Removable. J. Mitchell and J. C. G. Cossey.

1,621,162; Mar. 22.

Bolt-boarding machines. Semiautomatic electric stock heater for. F. R. Long. 1,649,412; Nov. 15.

Bolt-locking device. G. Roudanez. 1,624,563; Apr. 12.

Bolt-locking means. M. Saloun. 1,621,854; Mar. 22.

Bolt machines. Work-handling mechanism for. J. A. Khney. 1419,077; Mar. 1.

Bolt maining or similar machines, Die for. F. J. Simpson. 1,643,425; Oct. 25.

Bolt mouting. G. H. Forsyth. 1,629,494; May 24.

Bolt nouting. G. H. Forsyth. 1,629,494; May 24.

Bolt nouting. G. H. Forsyth. 1,629,494; May 24.

Bolt nutting and automatic chucking apparatus and method. B. A. Mellnow. 1,642,379; Sept. 1. Rellogs. 160; Org. 200; Straightening machine. D. P. Kellogs. 160; Org. 200; Straightening machine. D. P. Kellogs. 1,949,106; Nov. 15.

Bolt threads. Device for testing. O. Eppenstein. 1,949,106; Nov. 15.

Bolter. M. C. Carlson. 1,635,925; July 12.

Bolttes dead-end clamp. G. H. Aldrich. 1,651,395; Dec. 6.

Bolts, Means for anchoring. R. A. Mirzan. 1,629,880; May 24.

Bolts, Means for anchoring. R. A. Mirzan. 1,629,880; May 24.

Bolts, muts, screws, and the like, Machine for trimming binnks of. M. J. Riley. Rel6,522; Jan. 4.

Bolts, muts, screws, and the like, Machine for trimming binnks of. M. J. Riley. Rel6,522; Jan. 4.

Bolts, muts, Screws, and the like, Machine for trimming binnks of. M. J. Riley. Rel6,522; Jan. 4.

Bolts, muts, Screws, and the like, Machine for trimming binnks of. M. J. Riley. Rel6,522; Jan. 4.

Bolts, muts, Screws, and the like, Machine for trimming binnks of. M. J. Riley. Rel6,522; Jan. 4.

Bomb with safety device, Aeroplane. T. Lafitte. 1,643,385; Sept. 27.

Bombing attacks, System for cartying out mimic. A. W. Parsons. 1,622,078; Apr. 19.

Leg.3,993; Apr. 5.

Bond in the minimal properties of diopping. W. Swiatecki. 1,623,393; Apr. 26.

Bond binding and covering machine. R. E. Ackley. 1,600, binding and covering machine. R. E. Ackley. 1,600, binding and covering machine. R. E. Ackley. 1,600, binding machine. C. F. McRee. 1,652,724; Dec. 13.

Book cover. B. L. Persons. 1,632,452; June 7.

Book cover. B. L. Persons. 1,632,452; June 14.

Book cover. B. L. Persons. 1,632,452; June 14.

Book cover. Reenforced. G. M. Sharrard. 1,618,733; Feb. 1.

Book cover. Reenforced. G. M. Sharrard. 1,618,733; Feb. 1. Mar. 15.

Book hanger. W. E. Slevin. 1,649,619; Nov. 15.

Book holder. E. H. Lundius. 1,616,630; Feb. 8.

1,634,191; Dec. 27.

Book holder. E. S. and F. J. Petrick. 1,647,391; Nov. 1.

Book Loose-leaf. C. L. and W. S. Engel. 1,644,772;

Oct. 11. Book holder, E. S. and F. J. Petrick. 1,647,930; Nov. 1. Book, Losseleaf. C. L. and W. S. Engel. 1,644,772; Oct. 11. P. Horacek. 1,646,291; Oct. 18. Bookmark. P. Horacek. 1,646,291; Oct. 18. Bookmark. P. Horacek. 1,646,291; Oct. 18. Bookmark. C. E. Willis. 1,639,476; Aug. 16. Book Note. M. Vogel. 1,639,821; Aug. 23. Book or binder, Losse-leaf. W. R. Horsfield. 1,621,783; Mar. 22. Book or binder, Losse-leaf. W. R. Horsfield. 1,621,783; Mar. 25. Book or binder, Losse-leaf. W. R. Horsfield. 1,621,783; Mar. 25. Book or binder, Losse-leaf. W. R. Horsfield. 1,621,783; Mar. 25. Book or binder, Losse-leaf. W. R. Horsfield. 1,621,783; Mar. 25. Book rack. P. W. Wipperman. 1,629,941; May 24. Book Refill. E. A. Trussell. 1,615,498; Jan. 25. Book rack. P. W. Wipperman. 1,629,941; May 24. Book Refill. E. A. Trussell. 1,615,498; Jan. 25. Book rack. A. Grumbles. 1,621,622; Mar. 22. Book sander. W. E. Reavis. 1,642,771; Sept. 13. Bookkeeping machines and the like, Operating device for V. J. Hedden. 1,632,228; June 14. Bookkeet. J. G. Westerfors. 1,654,027; Dec. 27. Books, Holder for manifolding. E. K. Bottle. 1,645,177; Books, Honardacture of manifolding. E. K. Bottle. 1,645,177; Books, Honardacture of manifolding. A. R. Lawson. 1,639,040; Aug. 16. Books, Rounding. J. Murray. 1,648,860; Nov. 8. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L. J. Larsen. 1,650,759; Nov. 29. Booms and sails, Mounting for. L

Boot block. P. Hammes. 1,649,783; Nov. 15.

Boot. Felidable waterproof. E. R. Wharton. 1,642,050;
Spt. 128.
Sp Booth, Fortable references
Oct. 4.

Borax from brine, Decreasing the rate of crystallization
of. A. W. Gauger and H. H. Storch. 1,621,927; of. A. W. Gauger and H. H. Storch. 1,621,927;
Boring and coring apparatus, Deep-well. C. E. Reed.
1,649,837; Nov. 22.
Boring and coring apparatus, Rotary deep-well. C. E. Reed.
Reed. 1,649,856; Nov. 22.
Boring and drilling machines, etc., Control and feed for.
W. P. Hunt. 1,635,848; July 12.
Boring and reaming tool. C. B. Robinson. 1,622,209;
Boring and reaming tool. C. B. Robinson. 1,622,209;
Boring and reaming tool. Mar. 22.

Mar. 22.

Mar. 22.

Mar. 24.

Mar. 24.

Mar. 25.

Mar. 26.

Mar. 26.

Mar. 27.

Mar. 28.

Mar. 28.

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Mar. 29.

Mar. 29.

Mar. 20.

Mar. 2 Boring machine, Car-wheel- T. C. Kaseberg. 1,649,411; Nov. 15. Boring machine, Earth. G. Genung. 1,641,926; Sept. 6. Boring machine, Expansible. A. Gosper. 1,637,745; Aug. 2. June 28.
Boring machine, Overhead. R. H. Henderson. 1,644,831;
Oct. 11. Boring mechanism. J. T. Hiscock. 1,637,611; Aug. 2. Boring mill, Locomotive-tire-. L. C. Cole. 1,650,692; Dorrog tool. F. A. Decker. 1,622,094: Mar. 22.
Boring tool. G. H. Spengler. 1,626,887; May 3.
Borneol esters, Manufacture of. H. M. Blum. 1,640,639;
Aug. 30. Botto compounds and the like, Mining soluble. H. Blumenberg, jr. 1,649,385; Nov. 15.
Boron compounds, Mining insoluble. H. Blumenberg, jr. 1,649,385; Nov. 15.
Boron compounds, Mining insoluble. H. Blumenberg, jr. 1,684,455-6; July 19.
Bosh-cooling plate. F. H. N. Gerwig. 1,647,041; Oct. 25.
Bottle. C. J. Baumann. Des. 71,899; Jan. 25.
Bottle. C. J. Baumann. Des. 71,899; Jan. 25.
Bottle. R. Boyde. 1,634,77; Dec. 27.
Bottle. R. Boyde. F. W. Nitardy, and J. C. Lewis. Des. 71,954; Feb. 8.
Bottle. L. G. Branham. Des. 74,000; Dec. 6.
Bottle. F. S. Cavanaugh. Des. 73,388; Aug. 30.
Bottle. J. P. Curran. Des. 74,139; Dec. 27.

Boot, Foldable waterproof. E. R. Wharton. 1.642.050:

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F. J. de S. Coty. Dea. 71,779; Tan. 4. F. Deitrick. Des. 71,007; Ian. 71,007; Jan. 2. F. Deitrick. Des. 71,007; Jan. 200. May 10. J. R. Dolan and J. P. Sebea. 1,636,174; July 19. G. Dunaime. Des. 73,428; Sept. 13. F. K. Edwards. Des. 73,901; Nov. 22. J. A. Fields. Des. 74,104; Dec. 20. S. V. A. Fisher and K. Amlearelli. 1,615,577;
                 Bottle.
Bottle.
             Bottle. Jan, 25
                                                                                                                                           26. A. Fisser and R. Americhi. 1,010,011; M. Fox, Des. 73,226; Aug. 9. E. F. Glacken. 1,650,440; Nov. 22. F. Grad. Des. 73,281; Sect. 20. J. F. Harrison. Des. 73,288; Aug. 23. W. A. Heyman. Des. 73,288; Aug. 24. M. A. H. Johnson. Des. 12,361; June 28. A. H. Johnson. Des. 72,861; June 14. M. A. Klein. 1,625,728; Apr. 19. L. B. Koch. 1,632,187; June 14. L. B. Krick. Des. 71,918; Jan. 25. J. F. Lasten. Des. 72,323; Aug. 9. F. Lasten. Des. 73,231; Aug. 9. F. Lasten. Des. 73,251; Aug. 9. F. Lasten. Des. 73,251
             Bottle.
Bottle.
                 Bottle.
    Böttle. J. K. Lindemann. Des. 73,138; 131y 26.
Böttle. C. T. Long and A. C. Sohn. Des. 72,483;
Apr. 19.
Bottle. G. N. Mas. Des. 73,530; Sept. 27.
Bottle. G. N. Mas. Des. 71,919-20; Jan. 25.
Bottle. G. N. Mas. Des. 74,069-5; Dec. 13.
Bottle. G. N. Mas. Des. 74,069-5; Dec. 18.
Bottle. G. N. Mas. Des. 74,069-5; Dec. 18.
Bottle. J. C. May. Des. 72,630; May 10.
Bottle. J. C. May. Des. 72,530; June 21.
Bottle. F. R. Miller. Des. 73,130; June 21.
Bottle. F. R. Miller. Des. 73,233; Oct. 4, 19.
Bottle. F. R. Miller. Des. 73,233; June 21.
Bottle. J. Netter. Des. 72,434; Apr. 12.
Bottle. J. Netter. Des. 72,434; Apr. 12.
Bottle. J. Netter. Des. 72,434; Apr. 12.
Bottle. G. J. Oppenheim, jr. Des. 72,564; May 3.
Bottle. J. Publ. Des. 73,866; Nov. 15.
Bottle. G. D. Stewart. Des. 72,873; June 44.
Bottle. A. B. Taylor, C. T. Long, and A. C. Sohn. Des. 72,459; Apr. 19.
Bottle. A. B. Taylor, C. T. Long, and A. C. Sohn. Des. 72,459; Apr. 12.
Bottle. M. S. Walker. Des. 73,990; Nov. 29.
Bottle. J. Noville. Des. 73,990; Nov. 29.
Bottle. J. Berber's dispensing. R. Depue. 1,687,557; Aug. 20.
                      Bottle.
             Bottle.
Apr.
Bottle.
Bottle.
Bottle.
Bottle. A. E. Wright. Des. 73,629; Oct. 11.
Bottle. J. Koung. Des. 76,990; Nov. 29.
Bottle. J. Stoug. Des. 76,990; Nov. 29.
Bottle. J. Stoug. Des. 76,990; Nov. 29.
Bottle. Barber's dispensing. R. Depue. 1,687,557;
Bottle and cream separator for use therewith, Milk. E.
H. Turnell. 1,645,632; Oct. 18.
Bottle and holder therefor, Combined. J. Worth.
73,594; Oct. 11.
Bottle cap. E. G. Baum. 1,619,283; Mar. 22.
Bottle cap. A. C. Booth. 1,622,220; Mar. 22.
Bottle cap. A. C. Booth. 1,622,220; Mar. 22.
Bottle cap. L. S. Groves. 1,619,509; Mar. 1.
Bottle cap. L. S. Groves. 1,619,509; Mar. 1.
Bottle cap. L. S. Groves. 1,619,509; Mar. 1.
Bottle cap. L. S. Groves. 1,630,179; May 24.
Bottle cap. M. T. Hasek. 1,630,179; May 24.
Bottle cap. W. R. Waugh. 1,651,426; Dec. 6.
Bottle cap. Automatic. R. R. Frye. 1,637,632; Aug. 2.
Bottle cap. Automatic. R. R. Frye. 1,637,632; Aug. 2.
Bottle-cap dispenser. V. Browne. 1,600,600; Nov. 29.
Bottle-cap machine. A. C. Artz. 1,635,454; July 12.
Bottle-cap machine. A. C. Artz. 1,635,454; July 12.
Bottle-cap machine. M. G. Baum. 1,651,517; Jan. 18.
Bottle cap. Milk. H. G. Baum. 1,651,517; Jan. 18.
Bottle cap. Milk. J. M. Jordan. 1,627,036; May 3.
Bottle cap. Milk. H. Zuber. 1,614,094; Jan. 11.
Bottle cap or closure. B. Kühne. 1,612,927; Jan. 4.
Bottle cap or closure. B. Kühne. 1,612,927; Jan. 4.
Bottle cap permover. F. S. Enkler and G. W. Baird. 1,628,715; May 17.
Bottle-cap premover. F. S. Enkler and G. W. Baird. 1,628,715; May 17.
Bottle-cap premover. F. S. Enkler and G. W. Baird. 1,624,715; May 17.
Bottle-cap premover. F. S. Enkler and G. W. Baird. 1,628,715; May 17.
Bottle-cap premover. F. S. Enkler and G. W. Baird. 1,649,459; Nov. 15.
Bottle-capping machine. G. A. Fullips. 1,649,459; Nov. 15.
Bottle-capping machine. S. L. Goldman. 1,643,557; Sept. 27.
             Bottle-capping machine E. Jabs. 1,634,363; July 5.
Bottle-capping machine. E. Jabs. 1,634,363; July 5.
Bottle-capping machine. J. A. Johnson. 1,634,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1,643,557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1,634,464;
             Bottle-capping machine.
May 24.
                                                                                                                                                                                                                                                                                                                                                                                                                         O. N. Tevander. 1,629,599;
             May 24.
Bottle-capping machine. O. N. Tevander. 1,649,266;
Nov. 15.
Bottle-capping utensil. R. E. Reardon. 1,631,289;
June 7.
        June 7.

Bottle caps, Machine for manufacturing. II. A. Skov.
1.028.338; May 10.

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Bottle closure. W. G. Laidlaw. 1,636,422; July 19.
Bottle closure. C. D. Lukens. 1,625,617; Apr. 19.
Bottle closure. J. A. Fease. 1,644,642; Oct. 4, 93.
Bottle closure. W. M. Weeks. 1,251,10; Apr. 19.
Bottle closure. W. M. Weeks. 1,251,10; Apr. 19.
Bottle closure. and making same. W. P. Henry. 1,640,102; Aug. 23.
Bottle closure and producing the same. O. N. Tevander. 1,635,510-13; July 12.
Bottle closure and the like. F. K. Plympton. 1,640,009; Bottle closure and the like. F. K. Plympton. 1,640,009; Bottle closure, Milk. W. A. Souder. 1,643,322; Sept. 27.
Bottle closure, Milk. W. A. Souder. 1,643,322; Sept. 27.
Bottle closures, Apparatus for sealing. O. C. Kayle. 1,638,445; Aug. 9.
Bottle closures, Cushion material for. C. E. McManus. 1,638,541; Aug. 9.
Bottle closures, Expander for. O. C. Kayle. 1,638,444; Bottle closures, Making. F. K. Plympton. 1,625,869; Apr. 26.
Bottle closures, Method and apparatus for applying. W. M. Weeks and J. A. Pease. 1,652,595; Dec. 13.
Bottle construction. E. B. Clark. 1,638,070; July 5.
Bottle container Nursing. M. A. Wagner. 1,825,002; Oct. 180tle container Nursing. M. A. Wagner. 1,825,002; Dec. 180t Bottle-container closure. H. A. Sausse. 18.

Bottle container, Nursing. M. A. Wagner. 1,625,002; Apr. 19.

Bottle container, Perfume. E. M. Prat. Des. 73,669; Oct. 18.

Bottle cooler. W. Planski. 1,639,857; Aug. 23.

Bottle-cooling device. G. A. Nuhrah, E. Thoman, and G. F. Rosewall. 1,614,017; Jan. 11.

Bottle cover. J. W. Dawson and J. L. Herold. 1,633,073; June 21.

June 21.

Souther Cover and cap remover. C. T. Raschick. 1,621,902; Bottle cover and cap remover. C. T. Raschick. 1,621,902; Bottle cover and cap remover. C. T. Raschick. 1,621,902; Mar. 22. Mar. 22.
Bottle cover and receptacle, Milk.- E. D. Smitb. 1,630,867; May 31.
Bottle decapper. C. M. Brennan. 1,650,597; Nov. 29.
Bottle-exchange receptacle for containing milk bottles. Exceptage for Containing milk bottles. Sept. 20.
Bottle, Eyewash. P. M. Wilson. 1,623,454; Apr. 5.
Bottle filler, Milk.- F. C. Wolf. 1,645,094; Oct. 11.
Bottle-filling apparatus. A. J. Galland. 1,634,416; July 5. July 5.
Bottle-filling device, R. F. Thomson, 1,633,048; June 21.
Bottle-filling machine. W. Meadowcroft, 1,637,582; Aug. 2.

Bottle-filling machine, F. W. Müller and E. H. Weatherhead, 1,614,485; Jan. 18.

Bottle-filling machine, H. M. Ross. 1,641,550; Sept. 6.

Bottle-forming machine, A. F. Tremblay, 1,648,792; Nov. 8.

Bottle, Fraudproof. A. Keizer. 1.645.954; Oct. 18.

Bottle, Glass. A. G. Hamilton. Des. 72.240; Apr. 12.

Bottle, Glass. W. J. Ready. Des. 73.540; Sept. 27.

Bottle, Heat-insulating. A. Günther and R. Gertloff.

1.631.413; June 7.

Bottle-height-compensating mechanism. A. Calleson.

1.650.185; Nov. 22.

Bottle holder. H. G. Baker and J. R. Moore. 1.654,477;

Dec. 27. Dec. 27.

Bottle holder. J. E. Fite, jr. 1,633,083; June 21.

Bottle holder. J. I. Freisner. 1,634,747; July 5.

Bottle holder. J. R. Gruetter. 1,618,821; Feb. 22.

Bottle holder, Milk. L. Bardax. 1,645,274; Oct. 11.

Bottle holder, Milk. T. Dangerdield. 1,640,927; Aug. 30.

Bottle holder, Milk. T. C. Rouse. 1,630,409; May 31.

Bottle holder, Milk. M. Kelpt. 1,614,259; Jan. 11.

Bottle holder, Milk. M. S. Bukkey. 1,636,8467; May 34.

Bottle holder, Nursing. M. S. Bukkey. 1,636,8467; May 24.

Bottle holder, Nursing. P. Cardarella. 1,630,167; May 24. holder, Nursing-. L. P. Fleshner. 1,629,156; Bottle holder, Nursing. L. P. Flesniner. 1,629,106; May 17. Bottle holder, Nursing. A. Tufenkjian. 1,624,695; Apr. 12. Bottle holder, Perfume. J. A. Fields. Des. 71,830; Jan. 11. John House, Fertimes. J. A. Freus. Des. 17,859, Jan. B. Hot-water. E. E. Sturk. 1,643,794; Sept. 27. Bottle-making machine. J. J. Meyer and J. G. Lepper. 1,653,723; Dec. 27. Bottle, Milk. J. F. Allen. 1,653,608; Dec. 27. Bottle, Milk. O. H. Baker. 1,623,459; Apr. 5. Bottle, Milk. O. H. Baker. 1,623,459; Apr. 5. Bottle, Milk. D. F. Cunninsham. 17,633,398; Aug. 16. Bottle, Milk. D. F. Cunninsham. 17,633,398; Dec. 27. Bottle, Norrellable. M. Hernes, 613,199; Aug. 9. Bottle, Norrellable. M. Hernes, 613,199; Aug. 9. Bottle, Norrellable. M. Hernes, 613,199; Aug. 9. Bottle, Norrellable. M. Hernes, 1633,199; Aug. 9. Bottle, Norrellable. M. Hernes, 1633,199; Aug. 9. Bottle, Oli-dispensing. H. M. Boe. Des. 73,824; Nov. 15. Bottle opener. A. S. Adams and D. H. Morgan. 1,653,938; Dec. 27. Gaerris, Des. 73,2406; Sept. 6. Bottle opener. D. W. Lies. 1,692,219; May 17. Bottle or similar article. C. N. Comati, P. E. Kekenes, and N. J. Peters. Des. 71,777; Jan. 4. Bottle or similar article of manufacture adapted for use as an ornament. paper weight, or the like. C. A. Hatcher. Des. 72,063; Feb. 22.

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Bottle or similar container, R. T. Brewster, Des. 72,889; June 21.
Bottle or similar container, P. C. Delaize. Des. 71,782; Jan. 4.
Bottle or similar container. P. C. Delaize. Des. 72,410-11; Apr. 12.
Bottle or similar container. J. I. Poses. Des. 73,267; Bottle or similar container. W. E. Swindell. Des. 71,937; Jan. 25.
Bottle or similar container. W. E. Swindell. Des. 73,716; Oct. 25.
Bottle or similar container. W. E. Swindell. Des. Bottle or similar container. W. E. Swindell. Des. Bottle or similar container. W. E. Swindell. Des. Bottle or similar container. M. Vionnet. Des. 72,687; May 17.
Bottle or similar perfume container, R. T. Brewster.
   May 17.

Fortile or similar perfume container. R. T. Brewster.
Des. 73,278; Aug. 23.
Bottie, Perfume. G. Grunberg.
Bottie, Perfume.
Bottie, Perfume.
G. Grunberg.
Bottie, Perfume.
Bottie, Perfume.
G. Grunberg.
Bottie, Perfume.
Bottie, Perfume
   Mar. 1.

Mar
          Bottle stopper, Dispensing. E. H. Barker. 1,631,784; June 4, Dune 4, Depine. 1,628,555; May 10. Bulle supporting and locking device, Milk. J. Rogginger. 1,635,546; July 12. Bottle top, Combined cap remover and milk. F. Balcerzak. 1,642,596; Sept. 13. Bottle-transfer mechanism. M. J. Owens. 1,626,748; May 3.
          May 3.

Bottle-vending machine. J. E. Sapp. 1,639,615; Aug. 16.

Bottle washing and sterilizing apparatus. L. Kosen-
feld. 1,634,215; June 28.

Bottle-washing device. J. Becker. 1,622,900; Mar. 29.

Bottle-washing machine. J. Brusson. 1,640,643; Aug. 30.

Bottle-washing machine. J. R. Dostal. 1,644,515; Oct. 4.

Bottle-washing machine. J. R. Dostal. 1,629,155;
              May 17.

Bottle-washing machine. J. R. Dostal. 1,629,155;

May 17.

Bottle-washing machine. A. E. Ladewig. 1,653,638;

Dec. 27.
              Dec. 27.
Bottle-washing machines, Adjustable jet for. J. E. Ayers.
1.652.599; Dec. 13.
Bottle-washing machines, Bottle holder for. J. E. Ayers.
1.652.597; Dec. 13.
       1.652.597; Dec. 13.
Bottles, Adapter for vacuum. W. M. Kushner. 1,623,544;
Bottles, Adapter for vacuum. W. M. Kushner. 1,623,544;
Bottles and other containers, Closure for. R. H. Carpmael. 1,651,669; Dec. 6.
Bottles and other vessels, Machine for filling. H. V. Nielsen. 1,652,994; Dec. 13.
Bottles and the like, Manufacture of paper pulp. J. Shaw, 1,632,928; June 21.
Bottles and the like, Ktopper and sprinkler cap for. G. E. Davis. 1,643,286; Sept. 20.
Bottles, Deces, packets, and similar articles, Machine for Bottles, Deces, packets, and similar articles, Machine for Bottles, Court. 1, E. Weber. 1,648,793; Nov. 8.
Bottles, Container for milk. J. E. Abott. 1,625,183; Apr. 19.
              Apr. 19.

Bottles containing poison or the like, Safety attachment for. E. C. Dennert. 1,648,165: Nov. 8.

Bottles, Dispensing cap for. C. W. Cooke. 1,636,215; July 19.

Bottles, Disnlay device for water. W. L. Hensel. 1,647,044; Oct. 25.

Bottles, Guard for poison. W. Moses. 1,641,897; Sept. 6.

Bottles, Handle-securing means for. L. T. La Paugh. 1,617,213; Feb. 8.

Bottles, Holder for feeding. E. M. Patterson. 1,649,852; Nov. 22,648.
              Nov. 22.
Bottles, Holder for nursing. B. Hyman, 1,035,789;
July 12.
Bottles, Method relating to the manufacture of rubber
water. H. A. Hands. 1,644,829; Oct. 11.
1,645,316; Oct. 11.
Bottles or similar articles, Cap for. M. A. Green. Des.
73,096; Oct. 25.
Bottles, Safety slip for nursing. S. Whitlock. 1,637,719;
Aug. 2.
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Bowling and apparatus. G. Bradshaw. 1,629,065; May 17. Bowling ame apparatus. C. H. Panjeau. 1,625,676; Apr. 19. C. B. Geiser. 1,635,472; July 12. Bowling pin. G. P. Geiser. 1,635,472; July 12.
Bowling pin. M. J. Whelan. 1,620,310; Mar. 8.
Bowling-pin-setting apparatus and its operating. L. D.
Schaffer. 1,627,414; May 3. Box: Sec-Alarm box. Bait box. Ballot box. Hairpin box.
Hanger box.
Hanger box.
Hat box.
Jack box.
Jewelry box.
Journal box.
Knockdown box.
Locomotive driving box.
Mail box.
Make-up box.
Match box. Bailt box.
Bailtery box.
Battery box.
Battery box.
Berry box.
Blerry box.
Blasting-cap box.
Bodler fire box.
Budget box.
Cake box.
Canburising box.
Carburising box.
Carburising box.
Carburising box.
Clear box.
Clear box.
Clear box.
Cololing box.
Conduit box.
Conduit box.
Conduit box.
Conduit box.
Conduit box.
Londuit box.
Londui Make-up i Mechanical box. Minnow box. Miter box. Miter box.
Outlet box.
Outlet box.
Packing and display box.
Paper folding box.
Pilferproof box.
Powder box.
Refrigerator box.
Roller box.
Shaft box. Dispenser box.
Display box.
Dividable box.
Driving box.
Exhaust box. box. Shipping b Smoke box. Stuffing box. Suction box. Switch box. Fare box.
Feed box.
Electrical inclosing box.
Suction box.
Electrical box.
Filter box.
Filter box.
Flow box.
Folding box.
Toole box. Talcum-powder box. Tee box.
Tempo box.
Theft-proof box.
Transporting box.
Toilet box.

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Box. G. K. Henderson. 1,641,969; Sept. 13.

Box. J. G. Huye. 1,641,974; Sept. 13.

Box. W. H. Joslin. 1,642,032; Oct. 18.

Box. E. Kramer. Des. 72,962; June 28.

Box. E. Kramer. Des. 72,962; June 28.

Box. F. J. N. Koyal. Des. 74,122; Dec. 20.

Box. F. J. Schleicher. Des. 74,145; Sept. 13.

Box. F. J. Schleicher. Des. 72,967; June 28.

Box. F. J. Schleicher. Des. 72,967; June 28.

Box. F. J. Schleicher. Des. 73,445; Sept. 13.

Box. H. D. Senat. 1,624,439; Apr. 12.

Box. H. D. Senat. 1,624,439; Apr. 12.

Box. H. B. Smith. 1,630,652; Nov. 22.

Box. H. B. Smith. 1,650,652; Nov. 22.

Box. H. B. Walter. 1,616,014; Feb. 1.

Box. H. B. Walter. 1,616,014; Feb. 1.

Box. H. B. Walter. 1,624,225; Mar. 15.

Box. H. B. Walter. 1,616,670; Oct. 25.

Sept. 6.

Box and B. Walter. 1,646,670; Oct. 25.

Sept. 6.

Box and B. Walter. 1,645,670; Oct. 25.

Sept. 6.

Box and B. Walter. 1,645,670; Oct. 25.

Sept. 6.

Box and B. Walter. 1,616,014; Feb. 1.

Box. H. B. Walter. 1,616,70; Oct. 25.

Sept. 6.

Box and B. Walter. 1,616,70; Oct. 25.

Box. H. B. Walter. 1,616,70; Oct. 25.

Sept. 6.

Box and B. Walter. 1,616,70; Oct. 25.

Box. H. B. L. L. Loftin. 1,613,759; Jan. 11.
           Jan. 11.

Box and making same. H. Carle. 1,649,569; Nov. 15.

Box and making the same. R. I. Rhodes. 1,645,403;
       Box and making same. H. Carre. 1,049,009; Nov. 16.
Box and making the same. R. I. Rhodes. 1,645,403;
Oct. 11.
Box and pin coupling. R. A. Wilson. 1,645,032; Oct. 11.
Box and spring saddle, Driving. W. O. Moody.
1,643,312; Sept. 27.
Box and the like, Paper. S. Bergstein. 1,616,677-8;
Feb. 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.616.677-8:
Dox and the like, Paper. S. Bergstein. 1,639,281; Aug. 16.

Box and to like, Paper. S. Bergstein. 1,644,411; Oct. 4.

Box and toy house. Combination candy. D. C. Faulkner. 1,630,117; May 24.

Box body and cover assembling apparatus, Automatic. J. M. Hothersail. 1,620,025; Mar. 8.

J. M. Hothersail. 1,620,025; Mar. 8.

Box construction. B. Case. F. T. Buckthorpe and A. Barting and Construction. 1,625,033; Apr. 19.

Box connecter. F. T. Wheeler. 1,640,521; Aug. 30.

Box connecter. F. T. Wheeler. 1,640,521; Aug. 30.

Box construction. R. Boughner. 1,650,318; Nov. 22.

Box cover, Adjustable and attachable. S. Bezzant and R. Bezzant. 1,622,128; Mar. 22.

Box cover, Sheet-metal. V. Odquist. 1,613,286; Jan. 4.

Box-covering machine. G. E. Gooding. 1,642,067; Sept. 13.
                                                                          and the like, Paper. S. Bergstein. 1,639,281;
       Sept. 13.

Box-covering machine. G. E. Gooding. 1,642,000;

Sept. 13.

Box-covering machine. G. E. Gooding. 1,649,523; Nov. 15.

Box fastener. S. Debus. 1,621,630; Mar. 22.

Box fastener, Sealing device for. F. Schäfer. 1,648,152;
   Box Histeric, Control of the Monthly States and States 
   Nov. 26.
Box for chicks, Shipping. R. A. Gorsuch. Re16.518;
Jan. 4.
Land 4.
Land 5.
Land 6.
Land 6.
Land 7.
Land 7.
Land 7.
Land 7.
Land 7.
Land 7.
Land 8.
La
Box for salve or cream. J. Lesquendieu. 1,643,815; Sept. 27.

Box for salve or cream. J. Lesquendieu. 1,643,895; Sept. 27.

Box for salve or cream. J. Lesquendieu. 1,643,895; Sept. 27.

Box for storing furs B. Müller. 1,619,529; Mar. 1.

Box lost storing furs B. Müller. 1,619,529; Mar. 1.

Hilsinger. 1,623,310; Apr. 5.

Box holder, Safety match. J. Q. Taylor. 1,637,358; Aug. 2.

Box-lid holder and advertising device. J. C. L. Clayton 1,653,696; Dec. 27.

Box lids, Method of and apparatus for making. H. J. Goff. 1,627,894; May 10.

Box-making machine. C. Burnham. 1,621,655; Mar. 22.

Box-making machine. C. Burnham. 1,635,593; July 12.

1,614,522; Jan. 18.

Box-making machine. C. H. V. A. Clain. 1,642,913; Sept. 20.

Box-making machine. C. H. V. A. Clain. 1,642,913; Sept. 20.

Los making machine. C. H. V. A. Clain. 1,642,913; Sept. 20.

Los making machine and the like. S. Bergstein. 1,632,932; Aug. 16.

Box-making machine and the method of making boxes. L. Triolo. 1,627,874; May 10.

Box-making machine, Pasteboard. A. J. Evers. 1,651,877; Dox-making machine. Pasteboard. A. J. Eve
   Dec. 6.

Box-making machines, Adhesive-applying mechanism for paper. S. Bergstein, 1,647,072; Oct. 25.

Smith. 4,269,725; Mar. 15.

For mechanism, Sectional.

Oct. 4.

Box opener. J. H. Richards, 1.637,916; Aug. 2.

Box or carton. W. G. Booth. 1,620,324; Apr. 26.

Box or carton. W. G. Booth. 1,620,324; Apr. 26.

Soy or case, Lunchcon or picnic. W. F. May. 1,642,374; Sept. 13.
       Box or crate. A. L. Foreman. 1.621,363; Mar. 15.
Box or crate, Shipping, J. H. and E. J. Hieb. 1.640,080;
Aug. 23.
       Box or similar container. R. T. Brewster. Des. 72,759;
May 31.
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Box or similar container. P. C. Delaize. Des. 72,408-9;
Apr. 12.
Box or similar container. P. C. Delaize. Des. 72,670;
May 17.
Box or similar container. A. T. Gollnik. Des. 72,207;
May 17.
Box or similar container. A. T. Gollnik. Des. 72,207;
       Box of similar container. A. Mar. 15.

Box or similar container. H. Noonan. Des. 73,940;

Nov. 22.

Box or similar container. J. N. Royal. Des. 72,870;

June 14.

Box or similar container for toilet preparations. H. H.

Raynor. Des. 72,330; Mar. 29.

Box or similar receptacle for caudy. E. J. Daigle. Des. 72,830. Nov. 22.
  Baynor. Des. 72.339; Mar. 29.
Box or similar receptacle for candy. E. J. Daigle, Des. 73.899; Nov. 22.
Box or the like, Candy. F. A. Purchas. Des. 71,887; Jan. 18.
Box-seculing machine and the like. S. Bergstein. 1,639.282; Aug. 16.
Box-seculing means. A. L. Rocbuck. 1,650,741; Nov. 29.
Box-seculing means. A. L. Rocbuck. 1,650,741; Nov. 29.
Box straps, Sealing device for. S. W. Parsons. 1,649,363; Nov. 15.
Box support, Outlet. H. Ginsburg. 1,639,496; Aug. 16.
Box toe. C. E. Swett. 1,623,073; Apr. 5.
Box toes, Making. E. I. La Chapelle. 1,619,350; Mar. 1.
Box urappers. Ascembling. inbiding. and applying com-
Box wrapping system. J. R. Sonneborn. 1,646,563; Oct. 25.
Box-wrapping system. J. R. Sonneborn. 1,646,563; Oct. 25.
Box-wrapping system. J. S. Stokes. 1,647,481; Nov. 1.
Boxing apparatus. E. E. Foster. 1,620,598; Mar. 8.
Boxes and box blanks, Producing. H. B. Smith.
Boxes and the like, Cover for. H. Schell. 1,652,331; Dec. 13.
Boxes and the like, Cover for. H. Schell. 1,652,331; Dec. 13.
Boxes and the like, Making paper. S. Bergstein and A. C. E. Lindner. 1,640,638; Aug. 30.
Boxes and the like, Manufacture of cigar. A. A. Adam-
son. 1,653,719; Aug. 9.
Boxes, Apparatus for molding battery. T. R. Palmer. 1,620,388; Mar. 8.
Boxes, Apparatus for molding battery. T. R. Palmer. 1,620,388; Mar. 8.
       Oct. 25.

Boxes, Apparatus for molding battery. T. R. Palmer.
1,620,388; Mar. 8.

Boxes, Appliances for making set-up. E. W. Labombarde.
1,631,492; June 7.

Boxes, bottles, and like containers, Machine for taping or sealing. E. Berry. 1,645,734; Oct. 18.

Boxes, Hanger bar for outlet. V. T. Jennings. 1,615,329;
or sealing. E. Berry. 1,645,734; Oct. 18.
Boxes, Hanger bar for outlet. V. T. Jennings. 1,615,329;
Jan. 25.
Boxes, Molding frame for supporting honey. W. A.
Shook. 1,638,064; Aug. 9.
Boxes, Machine and method: 1,624,885; Apr. 12.
Boxes, Machine for forming blanks for corrugated-paper.
J. F. Jones, 1,619,207; Mar. 1.
Boxes, Machine for forming blanks for corrugated-paper.
J. F. Jones, 1,619,207; Mar. 1.
Boxes, Machine for making set-up. H. J. Goss. 1,651,200;
Nov. 29.
Boxes, Machine for making wire-bound. J. Shellenberger.
1,639,674; Aug. 23.
Boxes, Machine for use in making. R. Steele. 1,634,049;
Boxes, Manufacturing seamless wrought-iron annealing.
T. Lammine. 1,623,059; Apr. 5.
Boxes, Machanism and method for strip covering. H. B.
Smith. 1,651,233; Nov. 29.
Boxes or shipping cases from multiply venecued panels.
Producing. H. V. Foluter. 1,644,203; Oct. 4.
Brocuring device for. J. A. Seguin. 1,647,938;
Nov.
Boxes, tables, and the like, Construction for the assembling of box-like structures, such for example as. G.
P. Washburn. 1,628,938; May 17.
Boxes, Temporary fastening means for outlet. J. C.
Boyton. 1,653,251; Dec. 20.
Brace: See.
Ankle brace.
       Brace: See—
Ankle brace,
Bed brace,
Bed brace,
Bed-spring brace,
Chair brace,
Cross brace,
Door brace,
Frein brace
                                                                                                                                                                                                                                                                                               Furniture brace.
                                                                                                                                                                                                                                                                                       Knee brace.
Motor brace.
Radius-rod brace.
Rail brace.
Rail brace.
Spinal brace.
                          Engine brace.
Fender brace.
       Brace. A. J. Feaster. 1,641,027; Aug. 30.
Brace. S. H. Hill. 1,653,767; Dec. 27.
Brace and drill, Combination. C. W. Beamer. 1,625.517;
  Brace and drill, Combination. C. W. Beumes.

Apr. 19
Brace and gauge, Track. V. O. Sampson. 1.637.919;

Apr. 2.
Prace for shipping vehicles in freight cars. V. P. Rumely. 1.651.551; Nov. 29.
Brace plate. M. Taylor. 1.624.289; Apr. 12.
Bracelet. E. A. Combis. 1.622.769-70; Mar. 29.
Bracelet. E. A. Combis. 1.622.769-70; Mar. 29.
Bracelet. E. Gebhardt. 1.643.108; Nov. 15.
Bracelet. E. Gebhardt. 1.643.038; July 19.
Bracelet. F. W. Jones. 1.637.639; July 19.
Bracelet. F. W. Jones. 1.637.639; Sept. 6.
Bracelet. R. King. 1.417.289-89; Feb. 8.
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Braiding reenforced cords, Method and apparatus for.

J. D. Williams, 1,618,033; Feb. 15.

Brake: See—
Automobile valve.
Automobile wheel brake.
Cab brake.
Cab brake.
Cab brake.
Cab brake.
Conster wagon brake.
Compound brake.
Compound brake.
Derailment brake.
Disk brake,
Electric hydraulic brake.
Electric hydraulic brake.
Electric brake.
Electrically-released brake.
Electropeumatic b
             Bracelet. O. Klinke. Des. 72,369; Apr. 5.
Bracelet. I. Kraysler. 1,626,139; Apr. 26.
Bracelet. W. Lichtenfels. 1,630,955; May 31.
Bracelet and L645,349; Oct. 1.
Bracelet construction. A. Person. 1,644,347; Oct. 4.
Bracelet construction. A. Person. 1,644,4487; Oct. 4.
Bracelet flow of the construction. A. Person. 1,644,344; Dec. 27.
Bracelet, Expanding. F. and E. Jones. 1,621,205; Mar. 16.
Bracelet, Expansible. F. W. Nittel. 1,630,236; May 24.
Bracelet, Expansible. F. Schaffer. 1,630,689; July 26.
Bracelet Brocket. K. A. Schaefer. 1,630,689; July 28.
Brock. Pleckble wrist-watch. L. S. Chilson. 1,616,215; Bracelet bloder. B. M. Reckow. 1,614,844.
             Bracelet Instener. A. A. Schläson. 1,616,245; Teb. 1.
Teb. 1.
Tracel 1.
Tracel 2.
Tracel 3.
Tracel 4.
Tracel 4.
Tracel 5.
Tracel 5.
Tracel 5.
Tracel 6.
Tracel 6.
Tracel 6.
Tracel 7.
Tracel 6.
Tracel 7.
Trac
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Railway brake.
Railway brake.
Roote brake.
Roote brake.
Steve-expaned brake.
Steve-tranel brake.
Stevering-ear brake.
Steering-wheel brake.
Steering-wheel brake.
Tractor brake.
Transmission brake.
Truck brake.
Vehicle brake.
Vehicle brake.
Wheel brake.
Bracelet, Wrist-watch, A. Janus, S. Bracelet, Extension device for L. S. Chilson. 1,641,372; Bracelet Extension device for flexible. C. H. Patten. Bracelet Extension device for flexible. C. H. Patten. Bracelet Extension device for flexible. C. H. Patten. Gracelet Extension device for flexible. C. H. Patten. Bracelet Extension device for flexible. C. H. Patten. Gracelet Extension device for flexible flexible. C. H. Patten. Gracelet Extension device for flexible flexible. C. H. Patten. Gracelet Extension device for flexible flexible. C. H. Patten. Gracelet Extension device flexible. C. H. Patten. Gracelet Extension device flexible. C. H. Patten. Gracelet Extension device flexible. C. H. Pa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Brake. W. S. Adams. 1,635,021; July 5.
Brake. J. N. Anderson and T. F. Clark. 1,625,584;
Apr. 19.
Brake. W. J. Andreson and T. F. Clark. 1,625,584;
Apr. 19.
Brake. W. J. Andres. 1,640,589; Aug. 30.
Brake. F. Bastien. 1,632,075; Mar. 15.
Brake. F. Bastien. 1,635,071-2; July 2.
Brake. F. Bestien. 1,653,071-2; July 2.
Brake. F. Bendix. 1,653,071-2; July 2.
Brake. P. B. Camp. 1,618,810; Feb. 22.
Brake. P. B. Camp. 1,618,810; Feb. 22.
Brake. D. B. Clark. 1,628,950; May 17.
Brake. J. T. Crane. 1,637,894; Aug. 2.
Brake. J. W. Dodd. 1,632,440; Aug. 2.
Brake. J. W. Dodd. 1,632,440; May 24.
Brake. J. W. Dodd. 1,633,648; Sept. 27.
Brake. A. Y. Dodge. 1,643,548; Sept. 27.
Brake. A. Y. Dodge. 1,643,548; Sept. 27.
Brake. A. Y. Dodge. 1,643,548; Aug. 30.
Brake. G. R. Fuller. 1,640,186; Aug. 28.
Brake. H. C. Heston: 1,640,545; Aug. 30.
Brake. G. R. Fuller. 1,640,186; Aug. 30.
Brake. H. C. Heston: 1,623,733; Apr. 5.
Brake. W. Le Krieg. 1,635,697; July 5.
Brake. L. E. La Brie. 1,634,645; Sept. 6.
Brake. L. E. La Brie. 1,630,69; Dec. 6.
Brake. L. E. La Brie. 1,651,643; Dec. 6.
Brake. B. G. Leffer. 1,616,586; Peb. 8.
Brake. E. C. Le Munyon and H. N. Moore. 1,631,540; June 7.
Brake. V. Link. 1,619,262; Mar. 1
    Authensol Bracket.
Car bracket.
Car bracket.
Curtain and shade bracket.
Curtain and shade bracket.
Bracket.
Display bracket.
Blevating and supporting bracket.
Display bracket.
Blevating and supporting bracket.
Bracket.
Hook bracket.
Steering-wheel brake.
Steering-wheel.
Steering-wheel brake.
Steering-wheel brake.
Steering-wheel br
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Brake.
June
Brake.
Brake.
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June 7.

Brake. V. Link. 1,619,262; Mar. 1.

Brake. V. Link. 1,619,262; Mar. 1.

Brake. V. Link. 1,619,379; Mar. 1.

Brake. W. H. Conkey. 1,630,600; May 24.

Brake. M. W. McConkey. 1,640,395; Oct. 18.

Brake. M. W. McConkey. 1,640,395; Oct. 18.

Brake. M. W. McConkey. 1,640,395; Oct. 18.

Brake. B. W. McConkey. 1,640,395; Oct. 18.

Brake. B. G. Farson. 1,651,142; Nov. 29.

Brake. B. G. Farson. 1,651,142; Nov. 29.

Brake. B. G. Farson. 1,641,374; Aur. 30.

Brake. B. G. Sprung. 1,645,2469; Mar. 29.

Brake. E. Siade. 1,622,681; Mar. 29.

Brake. E. Siade. 1,622,681; Mar. 29.

Brake. E. Siade. 1,622,681; Mar. 29.

Brake. W. H. Tape. 1,645,975; Oct. 18.

Brake. G. Walker. 1,641,912; Sept. 6

Brake. G. Walker. 1,641,912; Sept. 6

Brake. M. F. Wrenn. 1,614,976; Jan. 18.

Brake. A. Jubnity. 1,648,290; Nov. 8.

Brake accelerator for single-chamber compressed-air brakes w. Hildebrand. 1,631,815; June 7.

Brake-actuating device. G. C. Goode. 1,628,967; May 17.

Brake-actuating device. M. La Londe. 1,639,379; July 12.

Brake-adjusting device. M. La Londe. 1,639,379;
             Jan. 11.

Braiding machine, Carrier for, F. Mossberg, 1,633,346;
June 21.

Braiding machinery, Attachment for, R. B. Kalbach, 1,649,476; Nov. 15.

Braiding machines, Bobbin for, C. P. Berolzheimer, 1,634,607; July 5.

Braiding machines, Carrier for, F. Mossberg, 1,630,660;
May 31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brake-adjusting device. M. La Londe.
Aug. 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aug. 16.

Brake and jack, Automobile. C. Simmons. 1,625,226;
Apr. 19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brake-applying apparatus. C. S. Bushnell. 1,628,454;
                 Braiding, Method of and apparatus for. G. A. Sceley. 1,639,673; Aug. 23.
Braiding reenforced cords, Method and apparatus for. S. A. Beyland and E. P. Reynolds. 1,617,983; Feb. 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             May 10.

Brake-applying apparatus. C. S. Bushnell. 1,649,444;
Nov. 15.

Brake-applying apparatus. S. W. Dudley and C. S.
Bushnell. 1,628,312; May 10.
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Brake-applying connection. A. Y. Dodge. 1,651,195; Nov. 29. Parke-applying device. W. A. Reaves and G. P. Nicolo-poolos. 1,614,638; Jan. 18. Parke-applying means. V. Bendix. 1,650,816; Nov. 29. Brake-applying means. L. E. La Brie. 1,639,095; Aug. 16. Brake-applying mechanism, Throttle-control apparatus for. C. S. Bragg and V. W. Kliesrath. 1,633,360; June 21. Brake attachment. M. K. Jackson and E. D. Hackett. 1,614,597; Jan. 11.
Brake band and lining. C. A. Geetty. 1,647,221; Nov. 1.
Brake band and shoes, Lining for. J. G. Bowman. 1,624,035; Apr. 12.
Brake-hand-adjusting device. J. A. Dommer. 1,621,004: Brake-band adjusting device, J. A. Dommer. 1,621,004: Mar. 15.
Brake-band-adjusting device, Automatic. E. D. Worden. 1,613,778; Jan. 11.
Brake-band lining. A. H. Sweet. 1,615,490; Jan. 25.
Brake-band lining. A. H. Sweet. 1,615,490; Jan. 25.
Brake-band lining securing means. E. Trist. Rei6,578; Mar. 29.
Brake-band lining securing means. E. Trist. Rei6,578; Mar. 29.
Long the control of the contr Brake-beam guide. H. W. Ekholm. 1,632,061; Yune 14. Brake-beam guide. H. W. Ekholm. 1,632,061; June 14. Brake-beam guide. H. W. Ekholm. 1,632,061; June 14. Brake-beam safety bars, Mount for. T. L. Burton. 1,641,621; Sept. 6. Brake-beam safety hanger. J. H. Gimpel. 1,634,902; July 5. Brake-beam safety support. A. H. Oelkers. 1,652,633; Dec. 13. Dec. 13.

Prake-beam support. C. Harter. 1,650,792; Nov. 29.
Brake-beam support. A. C. Moore. 1,642,080; Sept. 13.
Brake-beam support in F. G. Wolff. 1,649,434; Nov. 15.
Brake-beam supporting means. A. W. Hawkins. 1,644,869; Oct. 11.
Brake beams, Adjustable eccentric chair for. W. Janus. 1,622,516; Mar. 29.
Brake beams and assembling same, Auxiliary support and guard for. E. G. Busse. 1,644,871; Oct. 11.
Brake beams, Reversible strut for. T. E. Rodman. 1,640,554; 102, 30.
1,640,554; 102, 30.
1,618,706; Feb. 22.
Brake beams, Safety support for. H. W. Ridgway. 1,653,417; Dec. 20.
Brake-beams, Safety support for. H. W. Ridgway. 1,653,417; Dec. 20. Brake-chain-operating means. M. L. Howell. 1,637,151; July 26. Brake control. M. W. McConkey. 1,632,140; June 14. July 26.
Brake control. M. W. McConkey. 1,632,140; June 14.
Brake control, Automatic. R. L. Milton. 1,646,306;
Oct. 18.
Brake-control-actuating mechanism. A. Y. Dodge. Oct. 16.

Oct. 1 Brake-drum construction. P. Yungiling. 1,617,781; Feb. 15.
Brake drum of usard. A. Y. Dodge. 1,624,222; Apr. 12
Brake drums, Manufacture of. J. L. Price. 1,628,804; May 17
May 18
May 17
May 18
May 17
May 18
May 1 Brake equipment, Load. J. Guillemin-Tarayre, 1,844,550; Oct. 4. Brake for automobiles. H. W. Alden, 1.647,119; Nov. 1, Brake for railway trains. E. A. Moutier, 1,640,092; Aug. 30. Aug. 30.

Brake enuge. E. L. Macabee and F. E. Macabee. 1,624,142; Apr. 12.

Brake hanger. W. S. Adams. 1,640,228; Aug. 23.

Brake hanger. J. W. Bettendorf. 1,640,599; Aug. 30.

Brake hanger, Closed-link. F. Schaefer. 1,646,879; Oct. 25.

Brake-hanger august 25. Oct. 25.
Brake-head support. A. and C.
1.639.256 Aug. 16.
Brake-lever connection. T. N. Russell. 1.647
Brake-lever-releasing device. O. Miller.
Mar. 29. 1.647,252;

Brake Ilning. J. Y. Case. 1,615,165; Jan. 18.
Brake lock. W. G. Bowers and C. A. Smith. 1,623,382;
Apr. 5.
Brake lock. F. L. Collins. 1,643,334; Sept. 27.
Brake mechanism. W. J. Andres. 1,625,444; Apr. 19.
Brake mechanism. H. E. Bartsch. 1,623,227; Apr. 5.
Brake mechanism. H. E. Bartsch. 1,623,227; Apr. 5.
Brake mechanism. K. E. Blasdel. 1,632,232; Dec. 18.
Brake mechanism. Apr. 1,624,675; Dec. 13.
Brake mechanism. P. B. Camp. 1,624,244; Apr. 19.
Brake mechanism. P. B. Camp. 1,624,244; Apr. 19.
Brake mechanism. J. Greenberg and D. Dworkin. 1,637,300; July 26. Brake mechanism. 1,637,300; July 26, Brake mechanism. G Brake mechanism. J Brake mechanism. H. A. Tuttle. 1.646,124; Oct. 18. Brake mechanism. W. W. Tuttle and E. Hirvonen. 1.647,975; Nov. 1. Wilson. 1.623.295; Apr. 5. Brake mechanism. J. Wilson. 1.623.295; Apr. 5. Brake mechanism and control means therefor, Track. G. Hannauer and E. M. Wilcox. 1.638,631; Aug. 9. Brake mechanism and the like. J. A. Miller. 1,636,145; July 19. Brake mechanism, Automatic. A. A. Allen. 1,646,916; Brake mechanism. Automatic. Train. 0. Bosener. ake mechanism, 1,653,615; Dec. 27 Automatic train. O. Boerner. Frake mechanism, Drop. A. F. O'Conner. 1,618,218; Feb. 22. Feb. 22
Brake mechanism, Emergency, C. Reber. 1,621,431;
Mar. 15.
Brake mechanism for motor shafts, Fluid. J. R. Bingaman, 1,621,653; Mar. 22.
Brake mechanism, Front-wheel-drive. C. S. Allen. 1,638,007; Aug. 9.
Brake mechanism, Hydraulic. F. Krisch. 1,635,331;
July 12.
Brake mechanism, Hydraulic. F. J. MacKenzie. 1,620,115;
Mar. 8.
Brake mechanism, Hydraulic. R. E. McCleary. Mar. S.

Brake mechanism, Lond-adjusted, C. O. Anderson, 1,630,711; May 31.

Brake mechanism, Lond-adjusted, C. O. Anderson, 1,627,306; May 3.

Brake mechanism, Railway-, J. S. Ball, 1,620,508; Mar. 8.

Mar. 8.

Mar. 8.

Mar. 8.

Mar. 8.

Mar. 9.

1,622,695; Apr. 19.

Brake of the expanding-shoe type, G. Forasca, 1,633,984; June 28.

Brake-operated circuit closer, H. W. West, 1,629,897; May 24.

Ball. 9.

Brake-operating connection, W. J. Anderson, 1,621,842; May 24.

Brake-operating connection, W. J. Anderson, 1,621,842; Market 1,622,842; Market Mar. 22.
Brake-operating connection. W. J. Andres. 1,645,846;
Oct. 18. Brake-operating means. G. E. Collins.
July 26. Brake-operating means. July 19. G. F. Michael. 1.636.526: July 19.
Brake-operating means. E. A. Nelson. 1,623,262; Apr. 5.
Brake-operating means. W. W. White. 1,642,056; Sept. 13. Brake-operating mechanism. W. J. Andres. 1,634,250: July 5. July 5.
Brake-operating mechanism. W. J. Andres. 1,654,357;
Dec. 27.
Brake-operating mechanism. P. Bastien. 1,639,071;
Aug. 16. Aug. 16.
Brake-operating mechanism. A. Y. Dodge. 1,613,024;
Jan. 4.

Jan. 4. Y. Dodge. 1,636,554; Oct. 4. Brake-operating mechanism. J. S. Payne. 1,628,060; May 10. Bruke-operating mechanism. J. S. Payne. 1,628,060; May 10.

Brake-operating mechanism. J. C. Smith. 1,615,526; Jan. 25.

Brake or clutch. C. D. Schmidt. 1,623,706; Apr. 5.

Brake or clutch. C. D. Schmidt. 1,623,706; Apr. 6.

1,630,519; May 31.

H. 630,519; May 31.

Brake-setting device, Emergency. H. M. Bakin. 1,635,825; July 12.

Brake shafts, Supporting means for drop. W. R. Hall. 1,625,206; Apr. 10.

Brake shafts, Supporting means for drop. W. R. Hall. 1,625,206; Apr. 10.

Brake shafts, L. B

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Brake shoe. C. Cobb. ir. 1,632,763; Dec. 18.
Brake shoe. C. Cobb. ir. 1,638,759; Aus. 9.
Brake shoe. C. Cobb. ir. 1,638,759; Aus. 9.
Brake shoe. A. Y. Dodge. 1,638,369; July 17.
Brake shoe. A. Y. Dodge. 1,638,326; Aug. 9.
Brake shoe. A. Y. Dodge. 1,653,424; Dec. 27.
Brake shoe. L. E. La Brie. 1,621,794; Mar. 2.
Brake shoe. L. E. La Brie. 1,621,794; Mar. 2.
Brake shoe. L. E. La Brie. 1,621,794; Mar. 2.
Brake shoe. L. E. La Brie. 1,638,003; July 19.
Brake shoe. L. E. La Brie. 1,632,488; Dec. 13.
Brake shoe. J. E. La Brie. 1,632,488; Dec. 13.
Brake shoe. B. G. McDonald. 652,035; Dec. 6.
Brake shoe. B. C. D. Petris 1,650,296-7; Nov. 22.
Brake shoe. T. W. Peterson. 1,647,661; Nov. 1.
Brake shoe. F. D. Reynolds. 1,642,555; Sept. 13.
Brake shoe. F. D. Reynolds. 1,642,555; Sept. 13.
Brake shoe. F. D. Reynolds. 1,642,555; Sept. 13.
Brake shoe, Pivoted. A. Y. Dodge. 1,634,370; July 9.
Brake shoe, Pivoted. A. Y. Dodge. 1,622,133; Mar. 24.
Brake shoe, Reenforced. V. Bendix. 1,629,471; May 14.
Brake shoe, Making. M. R. De France. 1,615,573; May 17.
May 17.
May 17.
May 17.
May 17.
May 17.
May 18.
        Brake shoes, Manufacturing. S. Whitworth. 1,629,427;
May 17.
     Bake 11.

Brake-staff mechanism, Drop. W. W. Lindblom.
1,618,098; Feb. 15.

Brake structure. A. and C. Christianson. 1,643,837;
Sept. 27.

Sept. 27.

Brake supporting and operating mechanism. A. S.
Fishel. 1,636,21; July 19.

Fishel. 1,636,21; July 19.

Fishel. 1,636,2290; Dec. 13.

Brake systems connecting a plurality of engines, Non-return check valve for. C. R. Whitacre. 1,625,837;
Aug. 26.
        printing of engines, Non-return cheek valve for. C. R. Whitacre. 1,625,837; Apr. 26.

Enake tester. F. Dowrello. 1,639,884; Aug. 23.

Brake-testing device. W. L. Fry. 1,619,714; Mar. 1, Brake-testing device, Auto. F. B. McKinney. 1,654,136;
Benate-testing device, Auto. F. B. McKinney. 1,654,130 t. Dec. 27.
Dec. 27.
Brake-testing instrument. C. F. Cowdrey. 1,624,219; Apr. 12.
Brake-testing machine. H. W. Langbein. 1,612,928; Jan. 4.
Brake-valve device. L. A. Fowler. 1,626,607; May 3.
Brake-valve device. L. A. Fowler. 1,626,607; May 3.
Brake-winding mechanism. L. G. Nilson. 1,654,089; Brakes, Anchoring device for. H. D. Church. 1,638,223; Aur. 9.
Brakes, and clutches, Manufacture of friction bodies for. H. Kattwinkel. 1,614,200; Jan. 11.
Brakes, Attachment for emergency hand. A. Jackson 1,618,600; Feb. 1.
Brakes, However, 1,619,821; Mar. 8.
Brakes, Control mechanism for. G. Hannauer and E. M. Wilcox. 1,638,630; Aug. 9.
Brakes, Drop shaft for hand. S. J. Strid. 1,620,141; Mar. 8.
Brakes, Prop shaft for hand. S. J. Strid. 1,620,141; Mar. 8.
     Wilcox. 1,638,630; Aug. 9.

Brakes, Drop shaft for hand. S. J. Strid. 1,620,141;
Mar. 8.

Rutkes, Equalizer for four-wheel. F. L. Nelson and J. A.

Brakes, Logon and M. Stringer. 1,610,549; Mar. 1.

Brakes, Liquid-control means for hydraulic. L. L.

Reckler, 1,626,968; May 3.

Brakes, Liquid saving, replenishing, and air-bleeding mechanism for hydraulic. G. S. Merwin. 1,617,020;

Feb. 8.
        Brakes, L
May 31.
                                                                                       Locking hand-operated. A. Saget.
                                                                                                                                                                                                                                                                                                                                                                                                                                    1.631.066:
        May 91.

Braking and steering mechanism. A. Y. Dodge. 1,642,063; Sept. 13.

Braking apparatus. M. Loughead. Re16,761; Oct. 4.

Braking apparatus, Railway. J. P. Coleman. 1,644,771; Oct. 11.
Braking apparatus, Railway, J. P. Coleman, 1,644,771; Oct. 11. Braking apparatus, Railway-traine. L. V. Lewis. 1,644,834; Nov. 1. Braking control, Regenerative. P. W. Forsberg. Braking device. B. G. Gartin, 1,630,013; Nov. 22. Braking mechanism. E. C. Gartin, 1,630,013; Nov. 22. Braking mechanism. M. H. G. Girling. 1,619,718; Mar. 1. Braking mechanism, Mine-car. J. A. Hebb. 1,644,474; Braking mechanism, more particularly for motor vehicles. G. R. Hoffman, 1,627,508-10; May. 3. Braking system, W. S. H. Hamilton, 1,621,403; Mar. 15. Braking system, W. S. H. Hamilton, 1,621,403; Mar. 15. Braking system, W. S. H. Hamilton, 1,621,403; Mar. 29. Branches, Adjustable support for. C. Mylaeus, 1,613,716; Jan. 11. Branding. D. E. Hennessy, 1,621,587; Mar. 22. Branding device. M. Davis, 1,622,528; Mar. 29. Branding device. M. Davis, 1,622,801; Dec. 13. Brassière. K. E. Cunningham, 1,640,823; Aug. 30. Brassière. W. Rosenthal. 1,648,464; Nov. 8. Brassière anchor. C. Bulie, 1,622,206; Mar. 29. Brassière anchor. C. Bulied, Combined. V. Gulnzburg. 1,632,547; June 14. Brassière, Corset. C. H. Fleck. 1,644,117; Oct. 4. Brassière for formal wear. W. Rosenthal. 1,649,736; Nov. 15.
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Brassière, Girdle. S. E. B. Shepard. 1,647,023; Oct. Brassière, Nursing. J. M. Haberkamp. 1,632,
     Brasslere, Nbrsing. J. June 21.
Bread, Making. C. B. Hill and G. L. Tintner. 1,643,011-12;
Sept. 20.
Bread, Manufacture of. H. A. Kohman. 1,651,717-18;
Dec. 6.
Bread, Manufacture of. H. A. Kohman. 1,652,828;
        Bread or the like, Machine for making buttered slices of.
W. Steinkeliner, 1,615,920; Feb. 1.
Bread rack. J. D. Spaulding and B. Bouda. 1,638,173;
     Bread rack J. D. Spanning and L. Schaller, Aug. 9, Bread-slicing machine. J. J. Krakora. 1,617,058; Feb. 8, Breakasleiches Packaging. J. H. Coughlin. 1,629,995; May 24. Breaker and stopper extractor. E. Vallens. 1,615,150; Jan. 18. Breaker arm gauge. A. S. Adler. 1,615,297; Jan. 25. Breaker arms, Making. J. C. Baker. 1,625,697; Apr. 19. Breaker, Automatic safety. L. A. Brown. 1,627,828; May 10.
Jan. 18.

Breaker arms Making. J. C. Baker. 1,625,697; Apr. 19.

Breaker, Automatic safety. L. A. Brown. 1,627,828; May 10.

Breaking-in machine. H. L. Ashby. 1,651,319; Nov. 29.

Breaking-in machine. H. L. Ashby. 1,651,319; Nov. 29.

Breaking-in machine. H. L. Ashby. 1,651,319; Nov. 29.

Breaking-foller. C. H. Ramsey. 1,627,339; May 3.

Breast deill. T. J. Fegley and G. O. Leopold. 1,633,400; Breaking roller. C. H. Ramsey. 1,627,339; May 3.

Breast deill. T. J. Fegley and G. O. Leopold. 1,633,400; Breaking number of the control of the cont
     Brick, Sorting apparatus. G. W. Booth. 1,636,547; July 19. Brick-scotting apparatus. G. W. Booth. 1,636,547; July 19. Brick-sizing machine. S. G. Hamer. 1,650,832; Nov. 29. Brick stud. Fire. J. H. Gutridge. 1,616,746; Feb. 8. Brick, Texturing. E. V. Poston. 1,641,047; Aug. 30. Brick, Unburned refractory. G. E. Schlotterer and R. H. Brick, Venecring. E. V. Poston. 1,641,048-9; Aug. 30. Bricks and piling the same, Separator for. E. C. Clark. 1,644,661; Aug. 30. Bricks and similar elements in building, Apparatus for use in the laying of. G. E. Wight. 1,615,869; Feb. L. Bricks and the like. Transport means for. C. J. Weber. Bricks and tiles, Producing. E. W. Tillberg. 1,647,663; Oct. 25. Bricks. Apparatus for and method of simultaneously tex-
        Oct. 25.
Bricks, Apparatus for and method of simultaneously texturing both ends of. E. V. Poston. 1.641,046; Auc. 30.
Bricks, Apparatus for handling. G. H. Stover.
Bricks for building rooms inclosed by walls, Box of.
A. Bosslet, 1,629,199; May 17.
Bricks, Making arch. R. J. Himmelright. 1.634,356;
July 5.
        July 5.
Bricks, Repressing, H. K. King. 1,630,436; May 31.
Bricks tiles, and the like, Form for making hollow. A
P. Turner. 1,642,980; Sept. 20.
Bridge. G. Schmid. 1,637,787; Aug. 2.
Bridge. G. Jümmerman. 1,616,480; Feb. 8.
Bridge, Adjustable. F. E. Peterson. 1,619,367; Mar. 1.
Bridge approach. A. S. Hackett. 1,629,787; May 24.
Bridge attachment, Method of and apparatus for. D.
Baratt. 1,638,820; Aug. 16.
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Bridge, Bascule. L. R. Ash, H. C. Tammen, and H. G. Hunter. 1,633,565; June 28.
Bridge, Bascule. J. B. Strauss. 1,615,891; Fèb. 1.
Bridge, Combined suspension and arch. G. G. Krivoshein. 1,626,241; Apr. 26.
Bridge construction. A. Folino. 1,624,325; Apr. 12.
Bridge construction. A. Folino. 1,624,325; Apr. 12.
Bridge Jamp or the like, Arm for a. J. Hirsch. Des. 75,379-30; Aug. 30.
Bridge, Lift. S. Hardesty and W. G. Williams. 1,646,403;
     16,019-80; Allg. 30. Strong Strong Strong Strong Lift. S. Hardesty and W. G. Williams. 1,646,4603; Bridge material. I. Caroni. 1,640,980; Aug. 30. Bridge material. I. Caroni. 1,640,980; Aug. 30. Bridge Movable. H. L. Prinz. 1,610,478; Mar. 1. Bridge, Movable. R. E. Sheal. 1,613,485; Jan. 4. Bridge players, Reminder for. W. L. Shryton. 1,653,440;
     Dec. 20, so, Aminet 101. W. H. Sayton. 1,000,310, Bridge-retaining device. G. A. Yantis. 1,621,702; Mar. 22. Bridge-Rolling lift. R. and J. Dayde. 1,613,504; Jan. 4. Bridge-score recorder. C. A. Cooke. 1,622,077; Mar. 8. Bridge-score. F. A. Bartlett and R. J. Davis. 1,618,976;
     Jan. 11.
Bridge, Submerged, W. Blauchard, 1,620,716; Mar. 15.
Bridge warning device, F. H. Gilligan, 1,628,720;
May 17.
     Brüge work. L. A. Kiander. 1,632,744; June 14. Brüges and the like, Operating mechanism for meyable, T. E. Brown, ir., W. G. Williams, and S. Hardesty. 1,648,674; Nov. S. Brüges and the like, Truss for. C. A. P. Turner. 1,632,014; June 14.
1.632.014; June 14

Bridges, Center lock for bascule. L. R. Ash. 1,646,340; Bridges, Center lock for bascule. L. R. Ash. 1,646,340; Bridges, Dlates, and the like in timepiece movements, counting mechanisms, and like apparatus, Assembling device for. C. Rosat. 1,634,214; June 28. Bridging, II O. Davidson. 1,042,945; Sept. 20. Bridge J. M. Waish. 1,651,170; Nov. 29. Bridge J. Goerk. 1,646,730; Oct. 25. Brief case. S. Bolomon. 1,648,3991; June 28. Brief case. S. Solomon. 1,648,3991; June 28. Brief case. S. Solomon. 1,648,731; Sept. 6. Brief case. S. Solomon. 1,648,715; Sept. 6. Brief case. S. Solomon. 1,648,715; Sept. 6. Brief case. M. H. and L. Stein. 1,632,753; Aug. 9. W. H. Bittner. 1,622,017; Mar. 22. C. Winkler and W. H. Bittner. 1,622,017; Mar. 22. C. Winkler and Islandia and J. S. Briquette and its manufacture, Carbonized. S. F. Walton. 1,627,068; May 3. Briquette and its manufacture, Carbonized. S. F. Walton. 1,627,068; May 3. Briquetting apparatus. G. B. Damon. 1,650,495; Nov. 22. Briquetting apparatus. G. B. Damon. 1,650,495; Nov. 22. Briquetting apparatus. G. B. Damon. 1,650,495; Nov. 22. Briquetting attachment. C. C. Hansen. 1,627,737; May 10. Broaching attachment. C. C. Hansen. 1,627,737; May 10. Broaching machine. J. Oakley. 1,650,033; Nov. 22. Broaching machine. J. L. Perkins and H. D. Croft. 1,642,593; Sept. 13. H. Urschel. 1623,7755; May 10. Broaching machine. E. Brider 1631,632,755; May 10.
     Bridges, Center lock for bascule. L. R. Ash. 1,646,340;
Oct. 18.
Nov. 1.

Broaching machine.

J. Oakley. 1,650,033: Nov. 22.

Broaching machine.

Broaching machine.

B. L. Perkins and H. D. Croft.

Broaching machine.

B. H. Urschel. 1,627,755; May 10.

Broaching tool. G. H. Richey. 1,631,693; June 7.

Broaching tool. G. H. Richey. 1,631,693; June 7.

Broaching tool. G. H. Richey. 1,631,693; June 7.

Broadcast distribution, Polyphase.

E. E. Clement.

1,622,924-49; May 17.

Broadcast distribution, Polyphase.

E. E. Clement.

1,622,092; Dec. 6.

1,624,214; Apr. 12.

Broiler. F. V. Detwiler. 1,614,661; Jan. 18.

Broiler. R. T. Hosking. 1,642,771; Sept. 13.

Broiler. R. T. Hosking. 1,642,771; Sept. 13.

Broiler. Bicetric. F. C. Calvo. 1,614,746; Jan. 18.

Broiler. Bicetric. F. C. Calvo. 1,614,818,88; Dec. 6.

Broiler pan. D. E. Lutzler. 1,650,634; Nov. 29.

Broiler pan. D. E. Lutzler. 1,650,634; Nov. 29.

Broiler pan. D. E. Lutzler. 1,650,634; Nov. 29.

Broiler significant of the particular and J. F. Costelow.

1,632,655; June 7.

C. Sunderland and J. F. Costelow.

1,633,655; June 7.

Bromine. Recovery of.

H. H. Dow and E. O. Barstow.

1,623,417; May 17.

Brooch ar similar article. A. Brod. Des. 73,482-94;

Sept. 20.
        Brooch or
Sept. 20.
  Sept. 20.

Brooder, W. G. Bruns. 1,629,066; May 17.

Brooder, H. A. Christiansen and L. E. Merrick. 1,632,367; June 14.

Brooder, P. A. Demuth. 1,650,196; Nov. 22.

Brooder, L. Fortier, 1,613,792; Jan. 11.

Brooder, A. Kistler. 1,621,544; Mar. 22.

Brooder, A. Kistler. 1,621,544; Mar. 22.

Brooder, P. A. McGowan. 1,636,749; July 26.

Brooder, P. D. Warner. 1,627,346; May 3.

Brooder, T. D. Warner. 1,618,161; Feb. 22.

Brooder, Chicker. L. A. Sauer. 1,618,702; Feb. 8.

Brooder, Glicker. F. Frengie and F. D. Rohan. 1,627,279; May 3.

Brooder, Gas. J. W. Myers. 1,642,787; Sept. 20.
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Brooder hover, Adjustable. F. Frengle. 1,637,637;
AUS. 2 and the like, Burner control for. H. M. Sheer. 1,618,141; Feb. 15.
Broom. W. A. Brown. 1,631,465; June 7.
Broom. W. A. Brown. 1,631,465; June 7.
Broom. R. E. Helmer. 1,648,943; Nov. 15.
Broom. W. Hertuberg. 1,636,533; Feb. 8.
Broom. W. Hertuberg. 1,636,533; Feb. 8.
Broom. W. W. C. Read. 1,621,273; Mar. 16.
Broom. J. M. Reid. 1,646,041; Oct. 18.
Broom. Adjustable. L. H. Russell. 1,613,771; Jan. 11.
Broom and door holder, Combination. R. J. Craven. 1,666,627; July 19.
Droom and mop hanger. S. W. Zlembinski. 1,618,623; Feb. 22.
Broom bridle. H. R. Shekerian. 1,643,032; Sept. 20.
Broom. Broom. Broadwood. 1,631,732; Aug. 2.
Broom bridle. H. R. Shekerian. 1,643,732; Sept. 20.
Broom bridle. H. R. Shekerian. 1,643,732; Sept. 20.
Broom bridle. H. R. Shekerian. 1,643,732; Sept. 20.
Broom bridle. A. J. Milligan. 1,637,732; Aug. 2.
Broom holder. A. J. Milligan. 1,637,732; Aug. 2.
Broom Reversible. W. Dupré. 1,631,253; June 7.
Broom. Reversible. W. Dupré. 1,631,253; June 7.
Broom. Reversible. W. Dupré. 1,631,253; June 7.
Broom. Reversible. G. A. Hawkins. 1,637,639; From Broom. Reversible. W. Dupré. 1,631,253; June 7.
Brooms. Manufacture of. 0, A. Hawkins. 1,637,639; From Brooms. Reversible. G. O. A. Hawkins. 1,637,639; From Br
         Dec. 13
Brooms,
Aug. 2.
                                                                                                           Manufacture of. O. A. Hawkins. 1,637,639;
                      Aug. 2.

Adms. 1,618,742; Feb. 22.

Frush. J. Cox. 1,635,970; July 12.

Frush. J. Cox. 1,635,970; July 12.

Frush. J. Cox. 1,631,015; May 31,

Frush. J. Cox. 1,631,015; May 31,

Frush. J. G. Frari. 1,626,816; May 3.

Frush. C. Grether. 1,626,816; May 3.

Frush. C. Herold. 1,637,823; Aug. 2.

Frush. G. N. Jacob. 1,618,855; Feb. 8.

Frush. G. N. Jacob. 1,618,855; Feb. 8.

Frush. J. Revield. 1,625,834; Dec. 13.

Frush. J. R. Lelle. 1,620,738; Mar. 15.

Frush. J. R. Ellec. 1,620,738; Mar. 15.

Frush. W. Schalle. 1,649,490; Nov. 15.

Frush. J. Eridle 1,642,974; Sept. 20.

Frush. C. H. Struble and S. W. Hall. 1,631,560;

Frush. C. H. Struble and S. W. Hall. 1,631,560;

Frush. C. H. Struble and S. W. Hall. 1,631,560;

Frush. C. H. Struble and S. W. Hall. 1,631,560;

Frush. C. H. Struble and S. W. Hall. 1,631,560;

Frush. C. H. Struble and S. W. Hall. 1,631,560;

Frush. A. Excidel 1,642,74; Sept. 20.
            Brush.
         Brush,
Brush,
                  Brush.
            Brush.
            Brush.
         Brush.
Brush.
         Brush.
Brush.
         Brush.
Brush.
         Brush.
      Brush. C. H. Struble and S. W. Lau.
June 7.
Brush. Abrading. L. Holtschneider. 1,642,857; Sept. 20.
Brush, Abrading. L. Holtschneider. 1,613,588;
Jun. 4.
Jun.
      Brush, Air. J. D. Murray. 1,636,315; July 19.
Brush and broom attachment. T. H. Lawrence.
1,617,764; Feb. 15.
Brush and polisher, Combined. F. A. Lisi. 1,633,898;
June 28.
      Brush and squeegee, Combined. S. G. Mayers. 1,636,425;
July 19.
Brush and tray, Crumb. H. D. Gladwell. 1,650,507;
Nov. 22.
      ANO. 22.
Brush, Bact. J. J. Adkins. 1,628,023; May 10.
Brush, Bath spray. R. M. Withycombe. 1,630,995; May 31.
Brush, Carpet, rug, and floor. A. E. Custer. 1,617,103; Feb. 8.
Feb. 8.

Brush, Commutator. E. B. Gilleland. 1,643,842; Sept. 27.

Brush, Commutator. E. B. Gilleland. 1,643,842; Sept. 27.

Brush, Commutator. E. B. Gilleland. 1,643,842; Sept. 27.

Brush, Folding. L. H. 1,635,211; July 12.

Brush, Folding. J. F. Connor. 1,631,011; May 31.

Brush, Folding. J. F. Connor. 1,627,200; May 3.

Brush for leadrical apparatus. Self-lubricating. C. E. Chapin. 1,635,257; July 12.

Brush for roof painting. Fountain. A. F. Wilson.

Brush, Fountain. N. Cottrell. 1,635,114; July 5.

Brush, Fountain. S. M. Cottrell. 1,635,114; July 5.

Brush, Fountain. S. W. Kockman. 1,621,432; Mar. 15.

Brush, Fountain. J. D. Walker. 1,615,104; Jan. 18.

Brush, Fountain. J. D. Walker. 1,615,104; Jan. 18.

Brush, Fountain. J. B. W. Kolows. 4,692,506;

Aug. 16.
   Aug. 10.

Brush, Hair. F. W. Kellogg. 1,633,894; June 28.

Brush head, Removable. E. Myers. 1,638,054; Aug. 9.

Brush holder. J. T. Janette. 1,614,616; Jan. 18.

Brush holder. J. H. Mumaw, J. B. Schnieders, and W.

G. Haas. 1,624,426; Apr. 12.

Brush holder. R. L. Tuttle. 1,615,662; Jan. 25.

Brush holder. R. L. Tuttle. 1,615,662; Jan. 25.

Brush lolder. Connection. J. T. Janette. 1,651,059;

Nov. 29.
      Nov. 29.
Brush holder for shaving brushes, Sanitary.
I. 1.616.580; Feb. 8.
Brush holder or handle, Paint. F. Travaglini.
Brush machine, A. W. Le Boouf. 1.627,787; May 10.
Brush machine, A. W. Le Boouf. 1.627,787; May 10.
Brush-making machine. C. B. Fisher. 1.638,957;
Aug. 16.
Brush, Nail. R. M. Withycombe. 1.647,068; Oct. 25.
Brush, Power-driven. J. W. Richman. 1.633,128;
June 21.
      Brush protector. W. T. Saunders. 1,612,887; Jan. 4. Brush, Rotary. E. S. Carman and E. E. Curtis. 1,631,998; June 14. Brush, Botary. H. C. Schlueter. 1,633,230; June 21. Brush, Shaving. M. Alland. 1,651,356; Dec. 6. Brush, Shaving. T. W. Boyle. 1,617,569; Feb. 15. Grush, Shaving. L. Fuld. Des. 73,782; Nov. 8.
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Brooder hover, Adjustable. F. Frengle. 1,637,637; Aug. 2.

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Brush, Shaving, F. G. Wilcott and P. J. Morelli.
1.641.721; Nept. 6.
Brush, Shaving, H. Zimmet. 1,649,052; Nov. 15.
Brush, Shaving, H. Zimmet. 1,649,052; Nov. 16.
Brush, Shaving, H. Zimmet. 1,649,052; Nov. 17.
Brush, Toilet. F. E. Pretat. 1,621,900; Mar. 22.
Brush, Toilet. F. E. Pretat. 1,621,900; Mar. 22.
Brush, Willer. G. M. Blanch. 1,648,533; Nov. 8.
Brush, Wire. W. W. Davidson, 1,823,481; May 24.
Brush, Wire. W. W. Davidson, 1,823,481; May 24.
Brush, Wire. G. Rasmesen, pr. 1,633,274; June 21.
Brush, Wire. B. M. Blanch. 1,634,543; Nov. 8.
Brush with detachable bandle. W. R. James. 1,630,703; May 31.
Brushes and similar apparatus, Mechanism for operating cleaning. G. B. Welser, jr. 1,643,560; Sept. 27.
Brushes and similar apparatus, Mechanism for operating Prushes, and the like, Removable-handle mechanism for. W. and E. Prestwich. 1,615,483; Jan. 25.
Brushes, Back for yotary scrubbing. I. C. Carpenter. 1,654,036; Dec. 27.
Brushes, Mauferium, H. P. McMillan. 1,619,428; Brushes, Mauferium, H. P. McMillan. 1,619,428; Brushes, Material for commutator. F. C. Atkinson. 1,644,703; Oct. 11.
Brushes, Pigtall connection for. J. F. Kerlin and H. J. Rosenhofer. 1,629,875; May 24.
Brushing and polishing machine. W. D. Lee. 1,625,667; Apr. 19.
Brushing machine. H. M. Keith. 1,632,705; June 14.
Brushing machine. Pipe. E. P. Bly. 1,647,499; Nov. 1, Bubble absorption tower. H. E. Shay. 1,635,400.
Bubble-Bosprion tower. H. E. Shay. 1,647,499; Nov. 1. July 12. Bubble-Bosprion tower. H. E. Shay. 1,635,440; July 12. Bubble pipe. B. B. Gaffin. 1,646,398; Oct. 25. Bubble pipe. B. Gaffin. 1,646,398; Oct. 25. Bucket. Octoveryers, Selective dumping device for. W. R. Eddington. 1,636,220; July 19. Bucket or vessel, Measuring. A. Davis, jr. 1,624,477; Apr. 12. Bucket. Power-actuated. G. H. Strayer. 1,627,872; Bucket. Self clearing, dredging, and excavating. C. Harrison. 1,653,496; Dec. 27. Bucket veneer. D. R. Hulsart. 1,654,375; Dec. 27. Bucket veneer. D. R. Hulsart. 1,654,375; Dec. 27. Bucket. Well. P. B. Getz. 1,629,912; May 24. Bucket. Well. P. B. Getz. 1,629,912; May 24. Bucket. J. W. Krebs. 1,850,453; Nov. 22. Bucket. J. W. Krebs. 1,850,453; Nov. 22. Bucket. W. L. Davis. 1,644,513; Oct. 4. Buckle. M. A. Goldstein. 1,644,720; Oct. 11. Buckle. N. Jenkins. 1,648,617; Nov. 8. Buckle. E. Laier. 1,646,645; Oct. 25. Buckle. R. A. Moore. and W. F. Murtha. Re16,745; Sept. 27. Murtha. Re16,745;
                                                                                                              21.

42.

44e. J. W. Krebs. 1,650,453; Nov. 22.

F. P. Daughaday. Des. 73,559; Oct. 4.

W. L. Dayis, 1,544,513; Oct. 4.

N. Jenkins. 1,648,017; Nov. 8.

S. Kielar. 1,615,381; Jan. 25.

E. Laier. 1,616,645; Oct. 25.

I. R. Lederer. Des. 73,409; Sept. 6.

L. Lehr. 1,620,216; Mar. 8.

R. A. Moore, and W. F. Murtha. Re16,745;
           Buckle, R. A. Moore, tone.
Sept. 27.
Buckle, H. M. Pfaltzgraff, 1,630,758; May 31.
Buckle, G. E. Prentice, 1,652,211; Dec. 13.
Buckle, N. D. Richards, Des. 73,009; July 5.
Buckle, H. W. Russell, 1,648,062; Nov. S.
Buckle, C. H. Sampson and J. L. Whitley, 1,618,389;
       Buckle and purse, Combined. B. H. Marcus. 1,625,040;
Buckle and the like, Extensible. L. Macheroux. 1,622,954; Mar. 20.
Buckle, Bale-band. T. J. M. Daly. 1,631,402; June 7.
Buckle, Bale-tie. J. A. Todd. 1,617,527; Feb. 15.
Buckle, Belt. E. P. Daughady. 1,632,435; Nov. 29.
Buckle, Belt. F. P. Daughady. 1,632,135; Nov. 29.
Buckle, Belt. J. Knistrom. 1,620,137; Mar. 8.
Buckle, Belt. J. Knistrom. 1,633,1104; May 31.
Buckle, Belt. G. M. Mabon. Des. 71,876-9; Jan. 18.
Buckle, Belt. G. M. Charles. 1,644,755; Nov. 29.
Buckle, Belt. G. M. Charles. 1,644,755; Nov. 8.
Buckle, Garment. W. E. Hatheway. 1,653,852; Dec. 27.
Buckle, Hart. J. F. Brown. Des. 73,774; Nov. 8.
Buckle, Belt. W. Cronan. 1,625,889; Apr. 19.
Buckle, Hat. J. F. Brown. Des. 73,774; Nov. 8.
Buckle, Belt. W. T. Moon. 1,643,681; Sept. 20.
Buckle, Strap. L. F. Orten. 1,644,594; Oct. 4.
Buckle, Turn. R. C. McArthur. 1,625,818; Apr. 26.
Buckles. Removable crossbar for. I. R. Lederer. 1,622,503; May 10. Lillecton. 1,644,564; Nov. 8.
Buckles. Removable crossbar for. I. R. Lederer. 1,622,503; May 10. Lillecton. 1,648,648; Nov. 8.
May 100. Buffer. E. A. Banschbach. 1,647,766; Nov. 1.
           Buckle and purse, Combined. B. H. Marcus. 1,625,040;
Apr. 19.
Buckle and the like, Extensible. L. Macheroux.
                                                                                                                                 E. A. Banschbach, 1,647,766; Nov. 1.
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Buffer
         Buffer, O. E. Bergendan, Aug. 9.
Buffer, D. Bourque, 1,622,759; Mar. 29.
Buffer apparatus, for automobiles and other vehicles,
Safety, W. S. Gregory, 1,652,170; Dec. 13.
Buffer, Automobile door. J. Ledwinka. 1,644,681;
                                                                               O. E. Bergendahl and R. A. Rimel. 1.638.008:
Buffer, Automobile door. J. Ledwinka. 1,644.681;
Buffer device for railway cars. G. E. Coutant. 1,652,395;
Dec. 13.
Buffer for automobile doors. J. Ledwinka. 1,644.679;
Oct. 11.
Buffer mechanism, Diaphragm-face-plate. A. E. Small. 1,653,068; Dec. 20.
Buffer, Multiply. F. L. Ierges. 1,620,708; Mar. 15.
Buffer mechanism, Upper. G. G. Gilpin. 1,649,465;
Nov. 10.
Buffer, Multiply. F. L. Ierges. 1,620,708; Mar. 15.
Buffing apparatus. C. M. Jamieson. 1,651,350; Nov. 29.
Buffing mechine. C. W. Bailey. 1,635,340; Dec. 27.
Buffing mechine. C. W. Bailey. 1,635,340; Dec. 27.
Buffing wheel. E. A. Chase. 1,622,942; Mar. 29.
Buffing wheel. J. J. Fiechter. 1,648,700; Nov. S.
Buffing wheel. J. J. Fiechter. 1,649,003; Aug. 23.
Buffing wheel. J. J. Fiechter. 1,648,700; Nov. S.
Buffing block. D. W. Welker. 1,653,771; Dec. 27.
Buffing block. D. W. Kelchline. 1,653,771; Dec. 27.
Buffing block. D. W. Kelchline. 1,653,771; Dec. 27.
Buffing block. W. E. Lemley. 1,620,695; Nov. 29.
Building block. W. E. Lemley. 1,620,695; Nov. 28.
Building block. M. W. Kelchline. 1,653,771; Dec. 27.
Building block. T. Robbins. 1,649,780; Nov. 15.
Building block. L. W. McDearmon. 3,167,490; Oct. 4.
Building block. L. W. Stevens. 1,639,663; Aug. 48.
Building block. and wall construction. R. F. Greene. 1,618,426; Feb. 22.
Building block and wall construction. R. F. Greene. 1,618,426; Dec. 13.
Building blocks and process of molding, Mold for. R. B.
Fuller. 1,634,900; July 5.
Building blocks and the like. Mechanism for haudling. H. R. Straight. 1,650,053; Nov. 22.
Building blocks and the like. Mechanism for haudling. H. R. Straight. 1,650,053; Nov. 22.
Building blocks and the like. Mechanism for haudling. H. R. Straight. 1,650,053; Nov. 22.
Building blocks and the like. Mechanism for haudling. H. R. Straight. 1,650,053; Nov. 22.
Building blocks and the like. Me
       Building blocks, Production of. Hr cense, producing the same. S. J. Bedington, 1.648,604; Nov. 8. Building camp. D. J. M. Leck. 1,641,819; Sept. 6. Building construction. C. F. Aberle, 1,016,433; Feb. 8. Building construction. J. A. Billerman. 1,651,323; Nov. 29. Building construction. H. C. Blank. 1,650,485; Nov. 22. Building construction. D. W. Brown. 1,614,775; Jan. 18, Building construction. D. B. Danlelson. 1,630,399; Aug. 16. Building construction. E. Flagg. 1,622,997; Mar. 29. Building construction.
            Aug. 16.
Building construction.
                                                                                        construction. E. Flagg. 1,622,997; Mar
construction. W. G. Forkey. 1,61
         Building
         Feb. 8.

Building construction. W. G. Forkey. 1,646,450; Oct. 25.

Building construction. A. Grossinger. 1,644,996; Oct. 11.

Building construction. A. Henderson. 1,642,952;

Sept. 20.
         Building construction. A. B. Kleinhans.
June 21.
       Building construction.

June 21 construction.

L. L. Michod. 1.622,962; Mar. 29.
Building construction.

July 12.
Building construction.

July 12.
Building construction.

W. S. St. 1.632,425; June 14.
Building construction.

Building construction.
         Building construction,
Nov. 29.
         Nov. 29.
Building construction. J. C. Telford.
Jan. 4.
Building construction. E. E. van Wie.
Aug. 2.
                                                                                                                                                                                                            J. C. Telford, 1,613,546-7;
                                                                                                                                                                                                                                                                                                                                                                                                1,637,430:
    Building construction. F. M. Venzle. 1,612,733; May 8.
B. 1,627,531; May 8.
B. 1,627,531; May 8.
B. 1,648,760; Oct. 25.
Building construction, Concrete form for. E. E. Seelye.
Building construction, Earthquakeproof. D. Tambone.
B. 1,613,760; Jan. 26.
B. B. 1,627,760; D. Tambone.
B. 1,637,760; J. 1,632,769; May 1,632,769; J. 1,632,769; May 1,632,769;
         Building construction, Form for. P. L. Gottschalk.
1.627,171; May 3.
Building construction, Metallic, A. Lamm. 1.654,293;
Dec. 27.
            Dec. 27.
Building-core bead ring. G. F. Wikle. 1,647,164; Nov. Building-corner guard. F. Pfistner. 1,653,656; Dec.
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Building drum for the manufacture of thre beads. E. Schnedarck. 1,618,131; Feb. 15.
Building elements, Making reenforced. K. Wettstein. 1,626,318; Apr. 26.
Building, Fireproof. H. Sorensen. 1,641,556; Sept. 6.
Building form. F. L. Decker. 1,639,539; Aug. 16.
Building form. W. E. Urschel. 1,636,336; July 19.
Building form. Cement. J. A. and L. M. Comer. 1,616,334; Feb. 1. F. W. Dakin. 1,648,724; Nov. 8.
Building inclosures. D. M. Simons. 1,613,011; Jan. 11.
Building incockdown or foldable. T. C. Cott. 1,629,150; May 17.
Building machine, Tread-hand. K. J. Thompson. 1,649,933; Nov. 22.
Building material. L. Isaacs. 1,635,676; July 12.
Building material, Metal-back. S. A. Gates. 1,644,247; Oct. 4.
  Oct. 4.

Building material, Mold for. S. Flam. 1,618,648;
Feb. 22.

Page 29.

Composition. D. Garza.
Building material, Porous composition.

1.637,935; Aug. 2.

Building material, Porous composition.

1.637,935; Aug. 2.

Building materials, Composition of matter adapted to be Building materials. Abbott. 1,620,312; Mar. 3.

Building method and product. A. F. Bemis. 1,618,696; Feb. 22.

1.632,633,637; Aug. 2.

1.633,637; Aug. 16.

1.633,637; Aug. 16.

1.633,637; Aug. 16.

1.633,637; Aug. 16.

1.633,637; Aug. 16.
    Building Belavor Feb. 22.
Building Portable. G. F. Slater. 1,639,577; Aug. 16.
Building, Portable. J. C. Truemper. 1,622,746; Mar. 29.
Building, Fortable. J. C. Truemper. 1,622,746; Mar. 29.
Building, Fortable. L. H. Whittedge. 1,569,311;
Nov. 22.
Bullang, Potane. L. H. Whitelege Lower, Nov. 22.
Bullding slding, Composition. W. A. Carter. 1,641,623;
Building, Storage. F. E. d'Humy. 1,626,602; May 2.
Building, Storage. H. Hornbostel and W. J. Strassburger. 1,637,110; July 26.
Building structure. P. F. Flagge. 1,643,934; Sept. 27.
Building structure. J. M. Hewlett and R. B. Fuller.
Building structure comprising water receptors. C. W. Stark. 1,633,685; June 28.
Building structures, Mold form for. W. E. Keller. 1,639,785; May 31.
Building structures, Mold form for. W. S. Thomas. 1,629,348; May 24.
  1.639.795; May 81.

Building trims. Attaching means for. W. S. Thomas. 1.629.848; May 24.

Building unit. J. A. Birkholz. 1.634.283; July 5.

Building unit. G. D. Reagan. 1.649.367; Nov. 15.

Building unit. G. D. Reagan. 1.649.367; Nov. 15.

Sept. 20.

Building-unit construction. H. G. Oliver. 1.652.634; Dec. 13.

Building unit, Hollow. G. D. Reagan. 1.633,191; June 21.
  Buildings, Corner piece for. S. Yoder. 1,634,862; July 5.
Buildings, Device for use in moving. J. J. Roos. Buildings, Poundation for earthquakeproof. A. A. Porter. 1.651,411; Dec. 6.
Buildings, Heating and cooling of. R. G. Crittall and J. L. Musgrave. 1,625,987; Apr. 26.
Buildings, Side and eand wail of sectional. L. Swisher. Buildings, Side and eand wail of sectional. L. Swisher. Buildings, Ventilating device for farm. H. R. Straight. 1,615,964; Feb. 1.
Build Container. T. P. Jackson. 1,651,772; Dec. 6.
Buildings, Ventilating device for farm. H. R. Straight. 1,616,964; Feb. 1.
Buildengs, Side and earth of the container. T. P. Jackson. 1,651,772; Dec. 6.
Buildings, Ventilating device for farm. H. R. Straight. 1,616,963; Pec. 6.
Buildings, Side and earth of the container. T. P. Jackson. 1,651,772; Dec. 6.
Buildings, Side and earth of the container. T. P. Jackson. 1,651,772; Dec. 6.
Buildings, Side and earth of the container. T. P. Jackson. 1,651,772; Dec. 6.
Buildings, Side and earth of the container. J. G. Buildings, J. A. Dickerman. 1,633,168; June 21.
Builder, Mushrooming. J. A. Dickerman. 1,633,168; June 21.
Bumper. W. E. Dunston. 1,633,865; Jan. 11.
    Bumper. W. E. Dunston, 1,613,695; Jan. 11.
Bumper. W. E. Dunston, 1,623,398; Apr. 5.
Bumper. J. Floto, 1,621,501; Mar. 22.
Bumper. R. A. Flum, 1,613,699; Jan. 11.
Bumper. G. C. Geanopulos, 1,638,782; June 28.
Bumper. H. S. Jandus and H. L. Blyde 1,623,413; Apr. 5.
                                                                                                                                                                                                                                                                                                                                      Blydenburgh.
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Bumper. H. S. Jandus and E. R. Keelor. Des. 73,838-39; Nov. 15.
Bumper. H. S. Jandus and E. R. Keelor. Des. 73,841; Nov. 15.
Nov. 15.
Bumper. H. S. Jandus and J. R. Morgan. Des. 73,840; Nov. 15.
Bumper. H. S. Jandus and C. E. Rasmussen. Des. 73,837; Nov. 15.
Bumper. H. S. Jandus and N. Van Husen. Des. 73,836; Nov. 15.
Bumper. H. S. Jandus and N. Van Husen. Des. 73,842; Bumper. E. J. Johnson. 1,613,880; Feb. 22.
Bumper. W. G. Johnson. 1,613,880; Feb. 22.
Bumper. P. A. Knudsen. 1,615,633; Jan. 25.
Sumper. H. S. Jandus and N. Van Husen. Des. 73,842;
Nov. 15.

Bumper. W. G. Johnson. 1,618,880; Feb. 22.

Bumper. E. J. Johnson. 1,641,225; Sept. 6.

Bumper. P. A. Knudsen. 1,641,225; Sept. 6.

Bumper. C. G. Morrell. 1,641,225; Sept. 6.

Bumper. C. G. Morrell. 1,641,225; Sept. 6.

Bumper. C. G. Morrell. 1,641,251; Jan. 11.

Bumper. C. G. Morrell. 1,641,251; Jan. 11.

Bumper. J. H. Sagor. 1,632,663; Jan. 25.

Bumper. S. H. Shaw. 1,632,943; Jan. 4.

Bumper. S. H. Shaw. Des. 71,930; Jan. 25.

Bumper. S. H. Shaw. 1,612,046; Jan. 18.

Bumper. S. H. Shaw. 1,612,046; Jan. 18.

Bumper. S. H. Shaw. 1,615,040; Jan. 18.

Bumper. S. H. Shaw. 1,615,040; Jan. 18.

Bumper. C. L. Stein. 1,626,564; Jan. 26.

Bumper. G. B. Stokes. 1,631,653; June 7.

Bumper. G. W. Veale. 1,651,005-6; Nov. 29.

Bumper and advertising medium, Combined. A. W. Pattison. 1,647,014; Oct. 25.

Bumper and advertising medium, Combined. A. W. Pattison. 1,647,014; Oct. 25.

Bumper and fetder, J. Bunis. 1,638,615; Aug. 9.

Bumper and fetder, Combined. N. L. Harmon. 1,617,248; Feb. 8.

Bumper and fetder, Combined. N. L. Harmon. 1,612,2667; Mar. 29.

Bumper and fitting, Antomobile. W. G. Cox. 1,630,374;

Bumper and support, Automobile. W. W. Donegan. 1,640,146; Aug. 23.

Bumper and support, Automobile. W. W. Donegan. 1,640,146; Aug. 23.

Bumper and trunk rack, Combined non-bile. W. W. Donegan. 1,640,146; Aug. 23.

Bumper, Automobile. H. Floch. 1,643,743; Oct. 18.

Bumper, Automobile. H. Floch. 1,643,743; Oct. 18.

Bumper, Automobile. B. W. Kahe. 1,643,743; Oct. 25.

Bumper, Automobile. W. M. N. Hurley. 1,633,464; July 12.

Bumper, Automobile. W. R. Medowen. 1,631,640; June 7.

Bumper, Automobile. W. R. Medowen. 1,631,640; June 7.

Bumper, Automobile. W. Rahe. 1,623,568; Juny 24.

Bumper, Automobile. W. Rahe. 1,623,587; July 24.

Bumper, Automobile. W. Rahe. 1,623,587; July 24.
         Bumper, Automobile.
T. S. and P. S. Vosbikian. Des.
Bumper, Automobile.
F. H. Williamson and P. P. Runnels.
Bumper, Automobile.
Bumper, Automobile.
F. Williamson and P. P. Runnels.
Bumper, Automobile.
Bumper, Automobile.
F. Williamson and P. P. Runnels.
Bumper, Automobile.
Bumper, Automobile.
Bumper of Automobile.
Bumper and the like, Clamping device for. C. F.
Brown. 1,649,149; Nov. 15.
Bumper bars and the like, Clamping device for. C. F.
Bumper constitution.
Bumper device, Collelian.
Bumper for dispatch carriers, Removable.
Bumper for dispatch carriers, Removable.
Bumper for vehicles.
Bumper, Ingage carrier, and trailer bitch attachment.
Combination.
L. G. Price.
Bumper, Bumper for Vehicles.
Bumper, Bumper for Veh
                      Bumper,
Oct. 18.
                      Oct. 18.
Bumper, side. F. E. Price. 1,643.517; Sept 27.
Bumper, Spring. W. Rahe. 1,617.027; Feb. 8.
Bumper-supporting means. H. S. Jandus. 1,
Jan. 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1,614,784;
                      Bumper, Vehicle. H. S. Jandus. Des. 73,300; Aug. 23. Bumper, Vehicle. H. S. Jandus. Des. 73,318-21; Aug. 23.
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Bumper, Vehicle. H. S. Jandus and R. A. Flum. Des. (73,290; Aug. 23. Bumper, Vehicle. H. S. Jandus and E. R. Keelor. Des. 73,292; Aug. 23. Bumper, Vehicle. H. S. Jandus and E. R. Keelor. Des. 73,299; Aug. 23. Bumper, Vehicle. H. S. Jandus and J. R. Morgan. Des. 73,291; Aug. 23. Bumper, Vehicle. H. S. Jandus and C. E. Rasmussen. Des. 73,291; Aug. 23. Bumper, Vehicle. H. S. Jandus and C. E. Rasmussen. Des. 73,291; Aug. 23. Bumper, Vehicle. H. S. Jandus and C. E. Rasmussen. Des. 73,291; Aug. 23. Bumper, Vehicle. H. S. Jandus and N. Van Husen. Des. 73,296; Aug. 23. Bumper, Vehicle. H. S. Jandus and N. Van Husen. Des. 73,298; Aug. 23. H. S. Jandus and N. Van Husen. Des. 73,298; Aug. 23. Bumper, Vehicle. H. S. Jandus and N. Van Husen. Des. 73,298; Aug. 23. Bumper, Vehicle. H. S. Jandus and N. Van Husen. Des. 73,303–4; Aug. 23. Bumper, Vehicle. G. A. Schmidt. Des. 74,075. Dec. 28. Bumper, Vehicle. C. A. Schmidt. Des. 74,075. Dec. 28. Bumper, Vehicle. C. A. Schmidt. Des. 74,075. Dec. 28. Bumper, Vehicle. H. J. Schuette. 1,636,248; July 19. Bumper, Vehicle. A. Welland. 1,644,0467; Oct. 4. Bumper, Vehicle. A. Welland. 1,644,0467; Oct. 4. Bumper, Vehicle. A. Welland. 1,651,006; Aug. 23. Bumper, Vehicle. A. Welland. 1,651,006; Nov. 29. Bumpers, Vehicle. A. Welland. 1,651,006; Nov. 29. Bumpers, Vehicle. A. Welland. 1,651,006; Nov. 29. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Morgan. Des. 73,305; Aug. 23. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Morgan. Des. 73,305; Aug. 23. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Morgan. Des. 73,305; Aug. 23. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Morgan. Des. 73,305; Aug. 23. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Morgan. Des. 73,305; Aug. 23. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Morgan. Des. 73,305; Aug. 23. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Morgan. Des. 73,305; Aug. 23. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Morgan. Des. 73,305; Aug. 23. Bumpers, Clamp for vehicle. H. S. Jandus and J. R. Mor
      Bumper, Vemes. 73,290; Aug. 2
                                                                                                   Vehicle, H. S. Jandus and R. A. Flum. Des.
                  Burial casket, Handle for a. F. K. Allen. Des. 71,898;
Jan. 25.
Burial casket, Handle for a. C. H. Hiser. Des.
71,918-14; Jan. 25.
Burial casket or coffin. N. N. Barron. 1,634,767;
July 5.
                  Burial slipper. E. Martin. Des. 73.664; Oct. 18. Burial vault. D. R. Fauley. 1,618,522; Feb. 22. Burial vault. C. M. Johnson. Des. 73.609; Oct. 11 Burial vaults, Automatic latching device for. I Myers. 1,532,243; June 14.
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Burner: See—
Broiler burner.
Cactus burner.
Camp-stove burner.
Fuel burner.
Gas burner. Pressure burner. Sandalwood burner. Self-feeding burner. Camposurer,
Gas burner,
Gas hidding burner,
Hydrocarbon burner,
Liquid-tuel burner,
Oil burner,
Oil burner,
W. Bartlett,
Burner, F. M. Bierce,
Burner, K. C. Brown and R. E. White.

Stump - Stump - Sulphur burner,
Troch burner,
Trash burner, Burner K. C. Brown and R. E. White. 1,6
Nov. S. Bullum. 1,613,928; Jan. 11.
Burner S. Bullum. 1,633,538; July 19.
Burner S. Bullum. 1,633,538; July 19.
Burner R. Hoffman. 1,632,761; July 19.
Burner R. Hoffman. 1,650,716; Nov. 29.
Burner P. C. Hughes. 1,641,275; Sept. 6.
Burner S. C. Long. 1,639,518; Aug. 16.
Burner F. A. Nieberding. 1,641,230; Sept. 6.
Burner F. A. Nieberding. 1,641,350; Sept. 6.
Burner G. L. Reichhelm. 1,644,610; Oct. 4.
Burner F. V. Risinger. Re19,574; Mar. 15.
Burner F. V. Risinger. Re19,574; Mar. 15.
Burner M. Stone. 1,644,617; Oct. 4.
Burner M. Stone. 1,644,617; Oct. 4.
Burner H. Stone. 1,644,617; Oct. 4.
Burner H. M. Stone. 1,644,617; Oct. 4.
Burner H. M. Stone. 1,644,617; Oct. 4.
Burner H. Wallstrom. 1,625,581; Apr. 19.
Burner A. A. Yost. 1,652,507; Dec. 18.
Burner and lamp, Magneslum. L. Kral. 1,61
Durner L. Zenrer and lamp, Magneslum. L. Kral. 1,61
Burner and lamp, Magneslum. L. Kral. 1,61
Burner and making same, Gas. B. A. Genelak. 1. 1.648.578: Burner. H. H. Williams. 1,650,559; Nov. 22.
Burner. A. A. Yost. 1,652,507; Dec. 13.
Burner and lamp, Magnesium. L. Kral. 1,653,693; Dec. 27.
Burner and lamp, Magnesium. L. Kral. 1,653,693; Dec. 27.
Burner apparatus. E. Michand. 1,629,722; May 24.
Burner apparatus. E. Michand. 1,629,722; May 24.
Burner apparatus. E. Michand. 1,629,722; May 24.
Burner chance. C. Scheuerman. 1,636,616; July 19.
Burner corner. C. Scheuerman. 1,636,616; July 19.
Burner corner. C. Scheuerman. 1,636,616; July 19.
Burner for gaseous and powderous solid fuel. W. Vedder. 1,647,675; Nov. 1.
Burner for heating purposes, Gas. L. Morabito. 1,636,643; July 19.
Burner for liquid fuel. J. H. Gray. 1,644,372; Oct. 4.
Burner for liquid fuel. J. H. Gray. 1,644,372; Oct. 4.
Burner igniter. A. A. Steward. 1,646,6503; Oct. 25.
Burner or carbon holder. J. W. and K. Brenkert. 1,641,378; Jan. 4.
Burner-regulating device. C. M. Fitch. 1,637,179; July 26.
Burner-regulating device. C. M. Fitch. 1,637,179; July 26.
Burner-support. A. W. Morse. 1,628,470; May 10.
Burner-tip cleaner. L. B. Hood. 1,614,888; Jan. 18.
Burner-support. A. W. Morse. 1,628,470; May 10.
Burner-tip cleaner. L. B. Hood. 1,614,888; Jan. 18.
Burner-support. A. W. Morse. 1,628,470; May 10.
Burner-tip cleaner. L. B. Hood. 1,614,888; Jan. 18.
Burners and the like, Fire box for oil. R. L. Shrock. 1,647,328; Supplying device for gas. G. A. Huetteman and F. A. Gercich. 1,650,359; Nov. 22.
Burners, Attochment for weed. W. S. Servoss. L. 1,649,550; Nov. 15.
Burners, Controlling unit for oil. T. B. Allardice. 1,635,699; July 12.
Burners, Controlling unit for oil. T. B. Allardice. 1,644,835; Sept. 2; Jan. 18.
Burners, Fuel-oil feed system for crude-oil. A. C. Staley. 1,634,692; Jan. 18.
Burners, Fuel-oil feed system for crude-oil. A. J. Bradley. 1,616,418; Feb. 1.
Burners, Fuel-oil feed system for crude-oil. A. J. Bradley. 1,616,418; Feb. 1.
Burners, Injector for g 1.653.963: Dec. 13.

Burners, Safety cut-off mechanism for gas. L. Hill.

1.616,494; Feb. 8.

Burners, Safety device for. S. Dahl. 1.630,926; May 31.

Burners, Safety device for. S. Dahl. 1.630,926; May 31.

Burners, Safety device for. S. Dahl. 1.630,926; May 31.

Burners, Gastey device for. S. Dahl. 1.630,926; May 31.

Burners, Gastey for. S. Dahl. 1.620,926; Apr. 19.

Burners, Gastey for. S. Dahl. 1.622,927; Apr. 19.

Burners, Gastey for. S. Dahl. 1.622,927; Apr. 19.

Burners, Gastey for. S. Dahl. 1.622,927; Apr. 19.

Burners, Gastey for. S. Dahl. 1.624,727; Nov. 1.

Burners, Gastey for. S. Dahl. 1.624,459; Oct. 4.

Burners, Gastey for. S. Dahl. 1.624,459; Oct. 4.

Burners, Gastey for. S. Dahl. 1.621,425; Dahl. 1.621,425; Dahl. 1.621,425; Dahl. 1.621,425; Dahl. 1.622,425; Dahl. 1.621,425; Dahl. 1.621,42 Bus body. C. H. Whitfield. 1,623,988; Apr. 12.

Bus, Double-deck. E. A. Corbin, jr. 1,654,492; Dec. 27.
Bus, Low center of gravity completely-inclosed doubleGus ventilation. C. J. Eckland. 1,652,170; Mar. 22.
Bush-hammering machine. C. First. 1,626,033; Apr. 26.
Bush or plant support. M. P. Effiel. 1,627,495; May 3.
Bushing. W. Ferris and M. F. Keese. 1,629,818; May 24.
Bushing. Adustable self-alignine. B. R. Benjumin and
Bushing and forming the same. B. J. Gudge. 1,640,543;
Aug. 30.
Bushing. Automatic rotary spider. F. Hertzberg. 1,625,604; Apr. 19.
Bushing. Drill-stem roller driving. E. W. Gocser.
Bushing. Brill-stem roller driving. E. W. Gocser.
Bushing to high voltages, Leading-in. J. stolz. 1,651,234; Nov. 29.
Bushing mold. A. D. Allexander. 1,636,796; July 26.
Bushing for high voltages, Leading-in. J. stolz. 1,622,795; Mar. 29.
Bushing mold. A. D. Williams and F. B. Gillett. 1,622,795; Mar. 29.
Bushing solo. H. B. Worster. 1,632,720; June 14.
Bushings Conductor terminal for. A. O. Austin. Bushings and the like, Device for extracting. C. D. Thompson. 1,634,600; July 5.
Bushings. Conductor terminal for. A. O. Austin. Bust confiner. E. K. Pollack. 1,623,973; Apr. 12.
Bust supporter. L. Farkas. 1,620,335; Mar. 8.
Butt-cutting machine. H. F. Walker. 1,626,770; May 3.
Butten State of the property of the Nov. 29.

Butter-making apparatus. C. H. Hapgood. 1.650,625;
Nov. 29.

Butter, Manufacture of. S. Karpinsky and J. S. Anderson. 1.644,254; Oct. 4.

Butter mold. A. Aronson. 1.621,822; Mar. 22.

Butter mold. J. Greener. 1.639,937; Aug. 23.

Buttocks elevator. A. B. Corlson. 1,650,261; Nov. 22.

Button. F. J. Arnold. Des. 74,132; Dec. 27.

Button. F. J. Arnold. Des. 74,132; Dec. 27.

Button. J. L. Clark. Des. 72,547; May 3.

Button. J. H. Herman. 1,644,475; Oct. 4.

Button. J. H. Herman and G. W. Jones. 1,643,010; Sept. 20. Button. J. H. Herman and G. W. Jones. 1,643,010; Sept. 20.

Sept. 20.

Putton. W. W. Hobe. Des. 71,971-2; Feb. 8.

Button. W. W. Hobe. Des. 73,130; July 26.

Button. M. Lind and W. C. Lind. 1,623,847; Apr. 5.

Button. J. A. Meyer. 1,618,719; Feb. 22.

Button and fastener therefor. H. R. Lichtenstein. 1,619,800; Mar. 1.

Button anchor. F. Spick. 1,644,206; Oct. 4.

Button anchor. F. Spick. 1,644,206; Oct. 4.

Button-apting implement. B. D. Gilliam. 1,636,052; July 19.

Button-attaching machine. F. N. Ross. 1,653,065; Dec. 20.

Button-lank-facing machine. N. Barry. 1,646,132; Det. 20.

Button-lank-facing machine. N. Barry. 1,646,132; Dec. 20. Button-blank-facing machine. N. Barry. 1,646.132; Oct. 18.

Button blanks, Machine for making pearl. H. H. Knott. 1.653.294; Dec. 20.

Button clamp, R. L. Lyons. 1,645.587; Oct. 18.

Button, Collar. E. F. Coates. 1,619.706; Mar. 1.

Button, Collar. H. Horwitz. 1.617.252; Feb. 8.

Button, Collar. H. Horwitz. 1.617.252; Feb. 8.

Button, Collar. H. Horwitz. 1.617.252; Tec. 27.

Button, Collar. W. M. Marken, Des. 71.985; Feb. 8.

Button, Collar. W. M. Morson, 1631.912; June 7.

Button, Cuff. G. W. Brown, 1.631.912; June 7.

Button, Cuff. G. W. Brown, 1.631.912; June 7.

Button, Detachable metal. W. F. Kaynor, 1,826.582; Apr. 26.

Button fastener. A. L. Gross, 1,635.785; July 12.

Button fastener. A. L. Gross, 1,635.785; July 12.

Button, Froile. C. T. Hathaway, Des. 72.317; Apr. 26.

Button, Froile. C. T. Hathaway, Des. 72.317; Apr. 26.

Buttonhole attachment. J. A. Guy, 1,619.613; Mar. 1.

Buttonhole shield. R. J. and P. J. O'Brien. 1,643.170; Sept. 20. Oct. 18. Buttonholes, Forming stitched. H. C. Miller. 1,640.283;
Aug. 23.
Buttonholes, Machine for cutting. J. Siarkowski. 1,633,196; June 21.
Button, Horn. R. K. Winning. 1,648,523; Nov. 8.
Button, Indentification. J. A. Mahank. 1,630,855;
May 31. Button loop. C. E. Anderson. 1.628,638; May 17.
Button-making machine. H. Isringhaus. 1,629,214;
May 17. Bufton-making machine. C. O. Stohlgren. 1,641,462; Button, Push. H. E. Hill. 1,614,887; Jan. 18.

Button, Rubber. C. A. Rehor. 1,619,541; Mar. 1. Sutton, Separable. J. V. Pilcher. 1,628,236; Apr. 26. Button, Separable cuff. M. O. Noble. 1,628,735; May 17. Button, Slide. P. E. Fenton. 1,654,479; Dec. 27. Button, Siret. F. M. Fuey. 1,647,841; Nov. 1. Buttons, Device for polishing. M. J. Davis. 1,618,518; Feb. 22. Feb. 22.
Buttons, Machine for making. L. H. Bean. 1,619,233;
Man.
Man.
Man.
Man.
Machine for the manufacturing of. J. A. Bladh.
1,632,642; June 14.
Buttons, Sewing on. C. T. A. Sibbald and J. B. Ransom.
1,633,614; June 28.
Buttons to cards, Attaching. A. Haenicke. 1,626,337;
Buttons to barbituric acid. Secondary. A. W. Doy. Apr. 26.
Butyl allyl barbituric acid, Secondary. A. W. Dox.
1,615,870; Feb. 1.
Cab-supporting structure. G. M. Eaton. 1,654,324;
Dec. 27.
Cab underframe, Electric-locomotive. W. M. Sheehau.
1,640,054; Aug. 23.
Cabin for light-producing device. A. Vallat. 1,652,590; Ch. u.oderframe. Electric-locomotive-. W. M. Sheehan 1,640,054; Aug. 23.
Cabin for light-producing device. A. Vallat. 1,652,590; Dec. 13.
Cabinet. O. B. Bach. Des. 73,552; Oct. 4.
Cabinet. C. E. Campbell. 1,631,738; June 7.
Cabinet. M. Dumont. 1,636,738; Juny 8.
Cabinet. M. Dumont. 1,636,738; Juny 8.
Cabinet. C. T. Fisher. 1,641,259; Sept. 6.
Cabinet. W. E. Hinson. 1,631,202; June 7.
Cabinet. S. I. Marks. 1,617,452; Feb. 15.
Cabinet. Z. P. Pietrzycki. 1,619,312; Mar. 1.
Cabinet. Z. P. Pietrzycki. 1,619,312; Mar. 1.
Cabinet. J. J. Pillod. 1,639,364; Aug. 23.
Cab. and table, Combined. C. W. Sanders. 1,613,294;
Cabinet. and treating matrices. Martix-drying. R. W. Bandy. 1,649,647; Nov. 15.
Cabinet. Capar-lighter. R. H. Gibson. Des. 73,516;
Cabinet, Cigar-lighter. R. H. Gibson. Des. 73,516;
Cabinet, Cigar-lighter. R. H. Gibson. Des. 73,516;
Cabinet, Cigar-lighter. R. H. Gibson. Des. 73,516;
Cabinet, Composing-room. W. Stephens. 1,630,678;
May 1.
Cabinet. Commodity. J. H. Boye. 1,645,218; Oct. 11.
Cabinet. Composing-room. W. Stephens. 1,630,678;
May 1.
Cabinet. Dispensing. R. C. Courtis. 1,621,971; Mar. 22.
Cabinet, Dispensing. H. W. Krueger. 1,632,446;
Aug. 16.
Cabinet, Dispensing. H. W. Krueger. 1,632,446;
Tune 14.
Cabinet, Dispensing. H. W. Krueger. 1,632,446;
Cabinet, Dispensing. H. W. Krueger. 1,632,446;
Cabinet, Dispensing. H. W. H. Brooks. 1,643,738;
Sept. 27.
Cabinet, Chilage. F. McGee. 1,651,829; Jun. 4.
Cabinet, Display. L. E. Payne. 1,613,529; Jun. 4.
Cabinet, Display and Jones H. Brooks. 1,644,388;
Sept. 27.
Cabinet, Composition of the McGee. 1,651,829; Jun. 4.
Cabinet, Display. G. F. McGee. 1,651,829; Dec. 6.
Cabinet, Display. G. F. McG Cabinet for arc lamps. J. H. Wagenhorst, 1,641,308; Sept. 6.
Cabinet for displaying and dispensing merchandise. C. F. Cabinet for electrical apparatus. Sectional. H. L. Van Valkenburg. 1,620,047; Mar. 8.
Cabinet for projecting apparatus. L. A. Stegemann. 1,653,743; Dec. 27.
Cabinet for radio receiving apparatus. E. S. Pridham and P. L. Jensen. Des. 72,869; June 14.
Cabinet for soda fountains, Cooler. T. De Stefani. Cabinet for soda fountains, Cooler. T. De Stefani. 1,651,873; Dec. 6.
Cabinet for sound-reproducing mechanism. C. H. Cowan. Des. 72,087-9; Mar. 1.
Cabinet for sound-reproducing mechanism. A. C. Mowitz. Des. 72,106; Mar. 1.
Cabinet, 1661,673; J. C. Watse. 1,645,445; Oct. 11.
Cabinet, 16-cream. J. Goldsmith, 1,619,611; Mar. 1.
Cabinet, 16-cream. J. C. Watse. 1,636,445; Oct. 11.
Cabinet, 16-cream. J. C. Watse. 1,636,836; Mar. 31.
Cabinet, 16-cream. J. C. Watse. 1,632,939; June 21.
June 21.
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June 21.
June 21.
June 21.
Lebon. E. Buylon. 1,621,401; Mar. 22. Feb. 8.
Cabinet, Ironing-board. W. L.
June 21.
Cabinet, Kitchen. E. Burke. 1,621,491; Mar. 22.
Cabinet, Kitchen. P. Crowe. Des. 74,048; Dec. 1
Cabinet, Kitchen. W. G. Himmelwright. 1,61 Dec. 13. Cabinet, Kitchen. P. Crowe Lees. Cabinet, Kitchen. W. G. Himmelwright. 1,618,126; Feb, 15.
Cabinet, Kitchen. M. P. Leeds. 1,645,652; Oct. 18.
Cabinet, Loud-speaker. M. C. Rypinski. Des. 72,111-13; Mar. 1.
Cabinet, Merchandise. R. C. Walsh. 1,631,844; June 7.
Cobinet, Merchandise delivery. S. Esgro. 1,645,694; Oct. 18.
Cabinet, Paper-cutting. I. R. Sunday. 1,631,776; June 7.
Cabinet, Phonograph. A. Hudson. Des. 73,229; Aug. 9. June 7. Cabinet, Phonograph. A. Hudson. Des. 73,229; Aug. 9. Cabinet, Phonograph. J. Wolff. Des. 73,273; Aug. 16. Cabinet player. T. F. Cheek. 1,626,327; Apr. 26. Cabinet, Portable. C. Batehoits. Des. 72,663; May 17.

Cabinet, Portable bath, E. C. Benson. 1,646,521;
Cott. 25.
Cott. 25.
Cott. 25.
Cott. 25.
Cott. 26.
Cott. 27.
Cott. 2 Portable bath, E. C. Benson, 1,646,521; cable clamp and bridle ring. C. fl. Klein. 1,625,897; Apr. 26.
Cable-clamping device for guard rails. J. C. Nevius. 1,651,833; Dec. 6.
Cable connecter. L. H. Church. 1,644,205; Oct. 4.
Cable connecter. L. H. Church. 1,644,308; Oct. 4.
Cable connecter. A. P. Davis and S. N. Buchanan.
Cable connecter. J. C. Ledbetter. 1,644,294; Oct. 4.
Cable connecter. J. C. Ledbetter. 1,644,298; Oct. 4.
Cable connecter. J. C. Ledbetter. 1,644,298; Oct. 4.
Cable connecter. J. C. Ledbetter. 1,644,306-7; Oct. 4.
Cable connecter. J. C. Ledbetter. 1,644,306-7; Oct. 4.
Cable connecter. H. L. Strongson. 1,644,291; Oct. 4.
Cable connecter. H. L. Strongson. 1,644,291; Oct. 4.
Cable connecter. H. L. Strongson. 1,644,291; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,303-4; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,303-4; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,303-4; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,303-4; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,303-4; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,303-4; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,309; Oct. 4.
Cable conpecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Oct. 4.
Cable connecter. G. C. Thomas, jr. 1,644,308-1; Man. 29.
Cable, Electric. S. C. Cawthon. 1648.443, Nov. 8.
Cable, Electric. H. W. Fisher. 1,648.641, Nov. 8.
Cable, Electric. H. W. Fisher. 1,648.641, Nov. 8.
Cable, Flexible. C. R. Boggs. 1,654,568; Dec. 27.
Cable guard. I. E. Quist. 1,637,241; July 22.
Cable guard. J. A. Le Blanc. 1,635,944; July 12.
Cable hook. J. P. Ratigan. 1,625,165; Apr. 19.
Cable insolation, Submarine. A. R. Kemp. 1,645,758; Oct. 18.

Cable joint. N. E. Buck, D. W. Roper, and A. P. Thoms. 1,613,740; Jan. 11.

Cable joint. A. O. Hoeftmann. 1,647,699; Nov. 1.

Cable joint. D. M. Simons. 1,622,438; May 10.

Cable joint. D. M. Simons. 1,622,543; Sept. 12.

Cable joint. D. M. Simons. 1,622,543; Sept. 12.

Cable joint. D. M. Simons. 1,622,543; Sept. 12.

Cable joint and making the same, High-tension. L. Emanuell. 1,635,895; Dec. 27.

Cable-joint structure. D. M. Simons. 1,642,515; Sept. 13.

Cable machine. Tabular-armoring. S. W. Bourn.

Cable. M. Cable. The M. Simons. 1,620,785; Mar. 15.

Cable or wire clamp. J. F. Haworth. 1,622,109-10; Mar. 22.

Cable or wire clamp. J. F. Haworth. 1,644,375-6; Oct. 4.

Cable puller. R. B. Billings and J. E. O'Toole. 1,653,693; Cable puller. R. B. Billings and J. E. O'LOOIC. 1,100,000 p. Jpc. 27.
Cable reel. C. O. Schooley. 1,625,503; Apr. 19.
Cable-retaining shroud. E. W. McSheen. 1,646,207;
Cable splice. H. Prince. 1,646,660; Oct. 25.
Cable splicer. H. Yates. 1630,880; May 31.
Cable splicing. L. S. Burgett. 1,642,484; Sept. 13.
Cable support. A. W. Gothnerg. 1,630,423; May 31.
Cable support. A. W. Gothnerg. 1,630,423; May 31.
Cable system. C. J. Siefarth H. 161,7331; Feb. 15.
Cable-threading apparatus. W. J. Buell. 1,616,410;
Reb. 1. Cable tools and the like, Expansive drill bit for. J. P. Miller, 1,637,268; July 26. Cable-winding mechanism. R. H. Beaumont. 1,649,279; Cables winding mechanism. R. H. Beaumont. 1,649,279; Moy. 15. Cables and flexible conduits, Device for pulling. D. H. Garber. 1,632,267; Dec. 20. Cables, Construction of. H. W. Fisher and R. W. Atkinson. 1,651,590; Dec. 6. Cables from kinking at the point where they merge from junction boxes or casings, Protecting. G. Zapf. 1,649,744; Aug. 30. Cables, Hunger clamp for stranded. A. Wichert. 1,622, Horder p. 20. Logar March 1,642, Horder p. 20. Capf. 1,649, Horder p. 20. Capf. 1,643, Horder p. 20. Capf. March 1,643, Horder p. 20. Capf. March 1,643, Horder p. 20. Capf. March 1,643, Horder p. 20. Capf. Manufacture of W. S. Smith and H. J. Garnett. 1,635, 443; July 12. Cables, Machine for armoring. M. Katcher. 1,648,437; Feb. 22. Cables, Making fireproof electric insulated. C. B. Backer. Cables, Macking fiverroof electric insulated. C. B. Backer.
Cables, Mary 2: Nov. 29.
Cables, Mary 2: Nov. 29.
Cables, Method of and apparatus for protecting aerial.
T. Varney. 1,639,820; Aug. 23.
Cables, Splice head for electric. A. C. Rumble. 1,647,251;
Nov. 1. Cables, Spilce head for electric. A. C. Rumble. 1,647,251; Nov. 1.
Cables, Terminal building for oil-filled. D. M. Simons. 1,613,910; Jan. 11.
Cables through pipe lines, Device for passing. J. M. and W. H. Thompson. 1,620,788; Mar. 15.
Cables to battery terminals, Device for attaching. R. L. Cables to battery terminals, Device for attaching. R. L. Catter and the control of the c Calcine, Device for iding. H. Carter. 1,627,639; May 10.
Calcine from roaster furneces and charging same into
A. G. McGregor. Rel.6685; July 16.
Calcinu arsenate, Producing. H. K. Moore. 1,619,267;
Mar. 1. Mar. 1.

Calcium arsenate products and making the same. W. J.
Liliprert. 1,626,942; May 3.

Calcium carbonate and producing the same, Colloidal.

Calcium carbonate, and producing the same, Colloidal.

Calcium carbonate, Manufacture of precipitated. B. G.

Wood. 1,641,563; Sept. 6.

Calcium cyanamid, Treating. G. Barsky, 1,618.047; reb. 15. Feb. 15.
Calcium cyanamide and deodorising the same, Removing the dust from. J. Brestauer. 1,619,185; Mar. 1.
Calcium cyanide, Preparatino of. R. W. Poindexter. 1,652,874; Dec. 13.
Calcium preparation. H. A. Shonle. 1,649,000; Nov. 15.
Calcium salts of inositiol phosphoric acid. Manufacture of.
Calcium salts of inositiol phosphoric acid. Manufacture of.
Calcium-susts of inositiol phosphoric acid. Manufacture of.
A. Gams and M. Girard. 1,645,233; Oct. 11.
Calcium-sugar preparation. F. Van Scoyoc. H. L. Wehrbein and H. A. Shonle. 1,649,270; Nov. 15.
Calculating are preparation. F. Van Scoyoc. H. L. Wehrbein. 1,649,269; Nov. 15.
Calculating and adding machines, Key mechanism for. A. Kottmann. 1,632,266; June 21.
Calculating and recording machine.
1,624,105; Apr. 12.
Calculating apparatus. O. C. F. King. 1,645,009; Oct. 11.

Calculating apparatus particularly for use in the laying of ordnance, Tabular. W. F. Grotendorst. 1,615,510; Jan. 25. L. H. Hempleman. Calculating device. T. J. Smulski. 1,621,609; Mar. 22. Calculating device. J. E. Wright. 1,613,497; Jan. 4. Calculating machine, J. H. Barr. 1,644,504; Oct. 4. Calculating machine. R. Berk. 1,641,615; Sept. 50. 5. Calculating machine. H. A. Bowers. 1,634,485; July 6. Calculating machine. C. E. Broman. 1,639,23; Aug. 23. Calculating machine. C. M. F. Friden. 1,634,990; July 6. Calculating machine. C. M. F. Friden. 1.640.493; Aug. 30.
Calculating machine. C. M. F. Friden.
Sept. 27. 1.643.710: Sept. 27.
Calculating machine.
Calculating machine
May 31.
machine machine. C. M. F. Friden. machine. H. Hoffme 1.651.882 : Dec. 6. H. Hoffmeister. 1,631,033; Calculating H. Hoffmeister. machine. 1.635.125: July 5.
Calculating machine. W. Jenny. 1,653,462; Dec. 20.
Calculating machine. C. L. Johnston. 1,628,154; Calculating machine. W. W. Landsiedel. 1,649,478; Calculating machine. E. C. Schinke. 1,644,897; Oct. 11. Calculating machine. C. H. Stuivenberg. 1,640,381; Calculating machine. C. H. Stulvenberg. 1,640,831.

Calculating machine. J. C. Wahl. 1,648,667; Nov. 8.

Calculating machines, Carrying-over mechanism for.

F. W. Barkley. 1,622,563; Mar. 29.

Calculating machines, Control mechanism for. J. H. F.

Silver. 1,636,718; July 26.

Calculating machines, Coupling device for. A. Kottmann.

1,637,827; Aug. 2.

Calculating machines, Overrotating check for. F. W.

Barkley. 1,622,2664; Mar. 29.

Calculating machines, Dec. 27

Calculating machines, Transfer mechanism for. G. B.

Petter. 1,615,033; Jan. 18.

Calculating machines, Transfer mechanism for. G. B.

Calculating machines, J. Bergmann. 1,849,379;

Nov. 15. Nov. 15. Calculator. Calculator, V. Karapetoff, 1.648,733; Nov. 8.
Calculator, M. L. Pike, 1.653,655; Dec. 27.
Calculator, J. T. Redding, 1.615,883; Feb. 1.
Calculator, J. E. Wright, 1.619,230; Mar. 1.
Calculator, Check, C. T. Raschick, 1,621,686; Mar. 22.
Calculator, Check, W. D. Starrett, 1,635,646; Calculator. J. E. Wright. 1,619,230; Mar. 1.
Calculator, Check. C. T. Raschick. 1,621,686; Mar. 22.
Calculator, Slope-stake. W. D. Starrett. 1,635,646;
July 12.
H. G. Peterson. 1,613,769; Jan. 11.
Calculator. H. E. Shedd. 1,616,005; Feb. 1.
Calendar. H. E. Shedd. 1,616,005; Feb. 1.
Calendar. F. J. Vierling and W. E. Cook. 1,617,731;
Feb. 15.
Calendar. W. A. Whitney. 1,648,093; Nov. 8.
Calendar and card-index tray or file, Combination desk.
J. B. Ormond. 1,641,600; Sept. 6.
Calendar, Perpetual. W. Esau. 1,632,393; June 14.
Calendar, Perpetual. W. C. Hiering. 1,621,067; Mar. 15.
Calendar, Ferpetual. W. C. Hiering. 1,621,067; Mar. 15.
Calendar, Tension. poparatus for. C. A. Myers.
1,614,433; Jan. 11.
Calendering machines, Doctor-operating mechanism for.
J. A. Frossard and G. Lamourux. 1,644,917; Oct. 11.
Calendering machines, Roller for. G. L. Doerr.
1,644,819; Oct. 11.
Calendering or ironing machine. B. J. Dykes. 1,640,491;
Aug. 30.
Aug. 30.
Aug. 412chyment for. N. R. Goodwin. 1,633,2494.
Aug. 30.
Aug. 412chyment for. N. R. Goodwin. 1,633,2494.
Aug. 30.
Aug. 412chyment for. N. R. Goodwin. 1,633,249. Calenders, Cutting device for. A. E. Richey, 1,651,837; Dec. 6. Calenders, Cutting device for. A. E. Richey. 1,651,837; Dec. 6.
Calenders, Pressure-relieving means for hydraulic. C. Schlatter. 1,637,282; July 26.
Calcolored Safety device for. A. H. Peglow. 1,646,980; Oct. 25.
Calf and ankle grip. C. A. Pope. 1,638,704; Aug. 9.
Calf weaner. E. R. Davis. 1,636,047; July 19.
Calf weaner. G. M. Krauss. 1,629,909; Apr. 26.
Calf weaner. R. G. Saville. 1,650,962; Nov. 29.
Callbrating device for gauge sticks. W. C. Murtaugh.
Caliper. H. Coullery. 1,634,019; June 28.
Caliper. H. Coullery. 1,634,019; June 28.
Caliper. A. Haglund. 1,621,778; Mar. 22.
Caliper. A. Haglund. 1,621,778; Mar. 22.
Caliper. A. Haglund. 1,621,778; Mar. 22.
Caliper. J. Culell. 1,621,526; Mar. 23.
Caliper. A. Haglund. 1,621,778; Mar. 27.
Caliper. A. Haglund. 1,621,778; Mar. 1,633,873; Juny 28.
Caliper. Marcometer. P. J. Darlington. 1,629,486;
May 24.
Caliper, Micrometer. P. J. Darlington. 1,629,486;
May 24.
Callper, Micrometer. P. J. Darlington. 1,625,854; Caliper, Micrometer. P. J. Darlington. Dec. 18 Calipers. Dec. 13.
Callpers. A. A. Coyle. 1.617.669; Feb. 15.
Callpers. B. B. Garrett. 1.654.459; Dec. 27.
Callpers. II. A. St. John and J. F. Griffin.
June 7.
Callpers. J. Stuart. 1.635.908; July 12.
Callpers. G. S. Wettrich. 1.644.967; Oct. 2.
Callpers. Centering. F. Walther. 1.630.505; J. 15. c. 27. mn. 1,631,896: 967: Oct. 11. 1,630,505; May 31.

Calipers, Direct-reading outside and inside, J. L. Avery, 1,650,926; Nov. 29.
Calipers, Micrometer, P. J. Darlington, 1,631,019; Calipers, Micrometer, R. J. O. Simpson, 1,625,767; Calipers, Micrometer. R. J. O. Simpson. 1,620,701; Apr. 19, Calking machine. H. A. Pedrick. 1,632.559; June 14, Call-distributing system. W. T. Powell. 1,625,624; Call-distributing system. W. T. Powell. 1,020,024, Call-distributing system. W. T. Powell. 1,020,024, Call-distributing system. W. T. and S. T. Curran. 1,632,093; June 14. Call selector. L. L. E. Chauveau. 1,628,635; May 17. Calling device. H. F. Obergfell. 1,642,822; Sept. 20. Calorimeter. E. G. Borden. 1,623,299; Apr. 5. Calorimeter and measuring heat. W. Falkenberg. 1,616,312; Feb. 1. Cam device. W. M. Densmore. 1,620,445; Mar. 8. Cam for fertilizer distributors and the like, Variable. 1,613,176; thindle V. Speer, and C. C. Hermann. 1,613,176; thindle V. Speer, led C. C. Hermann. 1,613,176; thindle V. Speer, led C. G. Gameshaft comparator. C. L. Goodrich. 1,652,435; Dec. 13. Camera, A Aug. 2. Aug. 2.

Camera, Automatically - focusing, R. 8. Hopkins.
1,623,538; Apr. 5.

Camera, Aylation. G. H. Ohlau. 1,645,923; Oct. 18.

Camera, Card. W. L. Fish. 1,628,606; May. 3.

Camera casing. N. F. Lehr. Des. 73,750; Nov. 1.

Camera. Collapsible. G. Washington. 1,631,298;

June 7. June 7.
Camera construction, Photographic. E. E. Underwood.
1,620,304; Mar. 8.
Camera copy for the photo-engraver, Producing. B. F.
Hutchison. 1,614,924; Jan. 18.
Camera, Copying. R. R. Robertson. 1,612,987; Jan. 4.
Camera front catch. L. W. Lessler. 1,637,225; July 26.
Camera-lens-focusing appliance. L. F. Deming. 1,404,094; Aug. 30. Omera Photographic. C. C. Balston. 1,627,722; Aug. 30.
Camera, Photographic. C. C. Balston. 1,621,422;
May 10.
Photographic. N. B. Cregier. 1,633,378;
June 21.
Camera, Photographic. A. S. Howell. 1,620,727; Mar. 15.
Camera, Photographic. R. Kroedel. 1,651,460; Dec. 6.
Camera, Photographic. J. Mihalyi. 1,642,385; Sept. 20.
Camera, Photographic. F. T. Powers. 1,617,804; Feb. 8.
Camera, Photographic. W. B. Ross. 3,622,322; May 12.
Camera, Photographic. W. E. Ross. 1,622,322; May 12.
Lineary 1,622,562; May 12.
Lineary 1,622,652; Lineary 1,625,652; Camera, Photomicrographic, F. F. Lucas. 1,625,952; Apr. 26. Camera, Photomicrographic, F. F. Lucas. 1,625,952; Apr. 26.
Camera, Roll-holding. A. W. Caps. 1,651,441; Dec. 6.
Camera sextant. M. R. Pierce. 1,653,555; Dec. 20.
Camera sextant. M. R. Pierce. 1,653,555; Dec. 20.
Camera, Actuating device for wire-push-release. J. L. Lomax. 1,621,551; Mar. 22.
Cameras, All-metal telescopic box for. A. H. Gaebel. 1,642,651; Sept. 13.
Cameras, All-metal telescopic box for. A. H. Gaebel. 1,642,651; Sept. 13.
Cameras, All-metal telescopic box for. A. H. Gaebel. 1,642,651; Sept. 13.
Cameras and producing same, Decorative covering for. E. E. Underwood. 1,613,365; Jan. 4.
Cameras and the like, Pocusing instrument for. G. A. Mitchell. 1,637,529; Aug. 2.
Cameras, and the like, Pocusing instrument for. G. A. Cameras, cinematograph projectors, and similar apparatus, Optical system for. J. E. Thornton. 1,654,391; Dec. 27.
Cameras. Cut-film adapter for. O. Wittel. 1,648,525; Nov. 8. Dec. 27.
Cameras, Cut-film adapter for, O. Wittel. 1,648.525;
Nov. 8.
Cameras, Film-winding mechanism for, I., W. Lessler
and C. A. Bornmann. 1,642.818; Sept. 20.
Cameras, Film-winding spool for, G. Washington,
1,631.302; June 7.
Cameras, Finding and focusing device for, G. Washington,
1,631.309; June 7.
Cameras, Focusing device for, G. Washington,
1,631.299; June 7.

Cameras, Focusing indicator for. C. Bornmann.
1.637,213; July 26.
Cameras, Focusing mechanism for. R. Kroedel and C. F.
Speidel. 1.621,935; Mar. 22.
Cameras, Focusing mechanism for. E. E. Underwood.
1.651,743; Dec. 6.
Cameras, Focusing mechanism for photographic. R.
Kroedel. 1.613,523; Jan. 4.
Cameras, Leveling attachment for. M. Sturm, jr.
1.618,237; Feb. 22.
1.618,237; Feb. 22.
1.618,238; Jan. 4.
Cameras, Panoraming device for photographic. A. S.
Cameras, Panoraming device for photographic. A. S.
Cameras, Panoraming device for photographic. A. S.
Cameras, Photographic. G. Washington. 1,631,301;
June 21. Howell. 1,000.00. Howell, G. Washington, June 7. Cameras, Photographic. G. W. F. Rossiter. 1,621,903; Mar. 22. Plate carrier for multicolor. G. Lundberg. Cameras, Plots of the formal carrier for multicolor. G. Lundberg. Cameras, Roll-film holder for. E. J. Prindle. 1,618,387; Feb. 22. Shutter control for. R. W. Smith. 1,631,435; Accession; Apr. 19.

Cameras, Soll-lim holder for. E. J. Prindle. 1,618,387; Brown 22.

Soll-lim holder for. R. W. Smith. 1,631,435; June 2.

Cameras, Shutter mechanism for. G. Washington. 1,631,300; June 7.

Cameras, Spool holder for. J. Christie. 1,645,894; Oct. 25.

Cameras, Telescopic attachment for hand. A. Warmisham. 1,651,493; Dec. 6.

Cameras, Visible registering device for. B. Schade. Cameras, Visible registering device f Oil can,
Paper can,
Powder can,
Pressure oil can,
Rip-strip can,
Sanitary can,
Sanitary waste can,
Sifter-top can,
Tobacco can Sanitary can.
Interior-collar can.
Sanitary waste can.
Lever-top can.
Milk c Feb. 1.
Can and opener, Combined. G. A. Bardet and W. E. Burns. 1,642,478; Sept. 13.
Can bodies, Forming flanges on R. O. Wilson and A. D. Can bodies, Method and appearatus for making. W. E. Taylor. 1,628,928; May 17.
Can bodies, System of handling. P. H. Lange. 1,639,512; Aug. 16.
Can bodies, System of handling. P. H. Lange. 1,639,512; Aug. 16.
Can body and forming the side seam thereof. C. Stollberg, 1,625,229; Apr. 19.
Can-body blank. F. Rudolph, 1,642,174; Sept. 13.
Can-body panking machine. W. Cameron. 1,624,213; Apr. 12.
Can-body-making machine. J. F. Peters. 1,635,603; Can-body-making machine.
Apr. 19.
Can-body-making machine.
Apr. 19.
Can-body-making machine.
Sept. 13. J. F. Peters. 1.625.091: J. F. Peters. 1,642,169; Sept. 13.
Can-capping machine. H. L. Guenther. 1,633,250;
June 21. capping machine, R. E. J. Nordquist. 1,614,041; n. 11. Can caps or the like, Separating device for. N. Lossel.
1.625.262; Apr. 19.
Can cleaning and drying apparatus. J. O'Connell and
H. H. Kerr. 1.625.493; Apr. 19.
Can-closing machine. J. M. Hothersall. 1.649.232;
Can-closing machine, Semiautomatic. F. Huntar.
1.639.945; Aug. 23.
Can-closing machines. Feeding and spacing mechanism for filled. P. W. Fleischer. 1.646.960; Oct. 25.
Can-closing machines. Seaming head for. J. Coyle.
Can-closing machines, Seaming head for. J. Coyle.
Can-closing the seaming head for. J. Coyle.
Can-closing machines, T. J. Lawley. J. 616.594; Peb, 8.
Can closure. L. R. Morgan. 1.643.939; Oct. 11.

Can closure, Outturned-edge. F. J. O'Brien. 1,623,808; Apr. 5.
Can conveying, inverting, and discharging mechanism.
C. F. McEwan. 1,649,073; Nov. 15.
Can cover. W. E. Rooney. 1,464,3553; Oct. 4.
Can cover, Ash. C. Olson. 1,635,350; Aug. 9.
Can cover, Yentlated milk. W. N. Snow. 1,625,287;
Apr. 19. Can overs, Machine for fastening keys to. W. F. Bulletter, 1,635,536; July 12.
Can covers, Seal for. R. Sorgan, 1,649,328; Nov. 15.
Can-drying attachment. J. M. Hothersall. 1,045,005; Oct. 11. Oct. 11.

Can-end curling and stacking mechanism. W. Cameron.
1.640,979; Aug. 30.
Can-end-dining machine. N. Troyer and M. L. Dodge.
1.639.118; Aug. 16.
Can ends, Apparatus for and process of lining. S. N.
Tevander. 1,614,023; Jan. 11.
Can ends, Method of and machine for lining the flanges
of. J. M. Hothersail. 1,634,500; July 5.
Can exhauster. J. F. Anderson. 1,641.367; Sept. 6.
Can fleder. A. R. Thompson. 1,621,611; Mar. 22.
Can filler, Measuring. T. Shipley. 1,637,967; Aug. 2.
Can filler, Measuring. T. Shipley. 1,637,967; Aug. 2.
Can grid. N. M. Small and L. Buehler, fr. 1,620,579;
Mar. 8.

(Mar. 8. Can grid. N. M. Small and L. Buehler, Jr. 1,620,579; Mar. 8.

Can-beading machine. W. B. Smith. 1,617,505; Feb. 15.

Can holder. T. B. Cook. 1,638,681; Aug. 9.

Can jacket, Ice-creame. R. C. Washburn. 1,639,418;

Aug. 16.

Can-label cutter. J. C. Thom. 1,614,578; Jan. 18.

Can-label cutter. J. C. Thom. 1,614,578; Jan. 18.

Can-making machines, Soldering-flux and cement applying device for. D. C. Hansen. 1,622,781; Mar. 29.

Can opener. C. O. Applequist. 1,613,499; Jan. 4.

Can opener. H. E. Asbury. 1,617,142; Feb. 8.

Can opener. H. E. Asbury. 1,617,142; Feb. 8.

Can opener. R. T. Chase. 1,617,144; Feb. 8.

Can opener. R. T. Chase. 1,617,144; Feb. 8.

Can opener. W. D. Lamb. 1,639,193; Aug. 16.

Can opener. W. D. Lamb. 1,639,193; Aug. 16.

Can opener. D. Nachtigal. 1,618,304; Feb. 8.

Can opener. A. W. Peterson. 1,636,785; July 26.

Can opener. A. M. S. Schhaning. 1,641,054; Aug. 30.

Can opener. A. M. S. Schhaning. 1,641,054; Aug. 30.

Can opener. A. M. S. Schhaning. 1,641,054; Aug. 30.

Can opener. Clamp for rotary. J. T. McGrath.

Can openers, Clamp for rotary. J. T. McGrath.

Can openers, Clamping mechanism for. S. A. Davis. 1,629,482; May 24.

Can openting and closing device. F. J. Streit. 1,632,519; June 14.

Can openting and closing device. F. J. Streit. 1,632,519; June 14. Can opening and closing device. F. J. Strett. 1,632,519; June 14.
Can or cartridge, Grease. F. D. Gatchell. 1,632,594; June 14.
Can or receptacle. F. H. Gouffer. 1,648,009; Sept. 26.
Can pairing and incasing machine. L. W. Dicely. 1,623,3393; Apr. 5.
Can polithing and souring machine. W. W. Wadsworth Can polithing and souring machine. W. W. Wadsworth Can polithing and souring machine. W. F. Hebrank. 1,638,850; Aug. 16.
Can pointing machine. W. F. Hebrank. 1,638,850; Aug. 16.
Can-puncturing device. J. A. Kraus. 1,640,505; Aug. 30.
Can-seaming machine. R. W. Strout. 1,617,465; Feb. 15. Can spout. G. W. Lang. 1.641,003; Aug. 30. Can steamer. J. Cook. 1,626,452; Apr. 26. Can structure, Key-opening-. W. E. Burns. 1,650,061; Can steamer, J. Cook. 1,026,402; Apr. 26. Can structure, Key-opening- W. E. Burns. 1 Nov. 22. Can tester. W. F. Butler. 1,649,287; Nov. 15. Can tester. H. E. Skoog. 1,640,311; Aug. 30, Can-testing machine. A. L. Kronquest. 1 Can-testing machine. A. L. Kronquest. 1,640,242; Aug. 23. Can-testing machine. L. H. Peters. 1,648,660; Nov. 8. Can-testing machine, Automatic. J. H. O'Neil. 1,645,018; Oct. 11. 1,640,242; Cant-testing machine, Automatic. J. H. O'Neil. 1,649,018; Oct. 11.
Can-top remover. E. Van Leunen. 1,628,080; May 10.
Can washer. D. A. Maanum. 1,620,116; Mar. 8.
Can washer and steamer. B. E. Cramer. 1,626,6516; Apv. 20ther, Hot-water. O. K. Haugen. 1,620,654; Mar. 15.
Can washer, Rotary. H. D. Lathrop. 1,653,219; Dec. 20.
Can-washing machine. J. Wolfinger and R. D. Baker. 1,652,654; Dec. 13.
Canals, production of. V. Brünig. 1,632,2946; June 21.
Candelabrum. S. Szigethy. 1,631,232; June 7.
Candies, Cream depositor for hand-roll centers for. H. E. Hontz. 1,622,115; Mar. 22.
Candy box. J. M. Cooper. 1,625,192; Apr. 19.
Candy box. J. M. Cooper. 1,625,192; Apr. 19.
Candy box. J. M. Cooper. 1,633,245; Dec. 20.
Candy box. I. Kidder. Des. 73,831-2; Aug. 30.
Candy box. I. Kidder. Des. 73,831-2; Aug. 30.
Candy box. T. J. Schleicher. Des. 73,623; Oct. 11.
Candy Composite. H. S. Moore. 1,652,789; Dec. 13.

Candy confection. H. A. Myers. Des. 72,777; May 31. Candy confection. O. Z. Pooler. Des. 72,276; Mar. 22. Candy contection and making same. W. S. Lord and O. C. Ashley. 1,013,231; Jan. 4. Candy-crystallizing machine. P. S. Henderson. 1,650,513; Candy-dispensing box. J. M. Sheridan. 1 629 661 -May 24. Candy-forming machine. Z. M. Marr. 1,635,682; July 12. Candy-forming machine. T. and C. L. Werner. 1,652,226; Candy-forming machine. Z. M. Marr. 1,635,682; Juny 12. Candy-forming machine. T. and C. L. Werner. 1,632,226; Candy Junping jack. W. W. Cassidy, 1,623,166; Apr. 5. Candy jamping jack. W. W. Cassidy, 1,623,166; Apr. 5. Candy machine. A. F. Schmand. 1,62,1936; Mar. 22. Candy machine. A. F. Schmand. 1,621,936; Mar. 22. Candy machine. W. B. Laskey. 1,628,251; May 10. Candy-making machine. R. S. Histop. 1,635,713; Candy making and kneeding machine. W. S. Weber and E. T. Snyder. 1,639,319; Aug. 146.
Candy mold. E. Villaschor. 1,947,944; Nov. 1. Candy or like box. C. A. Peirce. Des. 73,983; Nov. 29. Candy package. A. Olsen, jr. 1,640,052; Aug. 23. Candle. A. E. Agnew. Des. 73,770-2; Nov. 8. Candie. S. Nicholson. Des. 73,851; Nov. 1. Candie. A. E. Agnew. Des. 73,770-2; Nov. 8. Candie. S. Silcholson. Des. 73,861; Nov. 1. Candie. A. E. Agnew. Des. 73,761; Nov. 8. Candie. A. E. Agnew. Des. 73,761; Nov. 8. Candie. A. D. Candie. A. E. Agnew. Des. 73,761; Nov. 8. Candie. A. D. Candie. A. C. Cand Candie holder and candle. R. W. Smith. 1,640,734; Aug. 30.
Candie receptacles, Apparatus for cleaning. M. A. Flannery. 1,619,110; Mar. 1.
Candle socket. Electric. E. Herst. 1,649,228; Nov. 15.
Candiestick. O. B. Bach. Des. 72,133-4; Mar. 8.
Candiestick. D. Fisher. Des. 73,468; Sept. 20.
Candiestick. D. Fisher. Des. 73,498; Sept. 20.
Candiestick. E. Magnussen. Des. 73,03; July 5.
Candiestick. E. Magnussen. Des. 78,003; July 5.
Candiestick. C. H. West. Des. 72,688; May 17.
Candiestick. C. H. West. Des. 72,688; May 17. Candlestick, Communicion Oct. 11.
Candlestick or analogous article. P. Cricchio. Des. 73,065; July 19.
Indian article of manufacture. J. L. Drucklieb. Des. 74,103; Dec. 20.
Candle support. E. L. Bearse. 1,647,898; Nov. 1.
Candles, Making ornamental. J. B. Rhoads. 1,622,347; Candles, M Candles, M Candres, Mar. 29.
Mar. 29.
Cane. R. Fleming. 1,624,591; Apr. 12.
Cane. A. Soriente. Des. 73,948; Nov. 22.
Cane and gun, Combined. B. B. Walker. Cane. A. Gur. Combined. B. B., Value. Cane and gun, Combined. B. B., Value. J. B. D. Davis. 1,618,065; Feb. 15. Cane juice, Preserving. A. K. Balls. 1,634,348; July 5. Cane-juice settlings, Treating. J. F. Borden. 1,653,491; Pag. 90. Dec. 20.

Cane stripper. J. S. Warren. 1,628,087; May 10.

Cane, unbriella, or the like. W. Simek. 1,653,024;

Dec. 20.

Canes. Apparatus for inserting dry-cell cores into. H. A.

Canister: Sec.

Measuring. contesting. Canister: SecMeasuring conister.
Canister or container for tea, coffee and the like. C.
Tempest. 1,618,688; Feb. 22.
Canning apparatus. A. K. Malmquist. 1,643,990; Oct. 4.
Canning machine. C. H. Ayars. 1,614,056; Jan. 11.
Cannon powder Tashless. F. 1 and B. du Pont.
Cannon, Device for firing. E. Bustamante. 1,620,994;
Mar. 15.
Canopy fixture. G. B. Thomas. 1,655,560. Mar. 15.
Canopy fixture. G. B. Thomas. 1,650.549: Nov. 22.
Canopy fixture. G. B. Thomas. 1,652.066: Dec. 6.
Canopy holder. V. F. McKerter. 1,622.076: Dec. 20.
Canopy Switch. H. Hubbell. 1,617,521; Feb. 15.
Cans and containers. Method of and apparatus for ing labels on noncircular. J. A. Cereghino. 1,653, Dec. 20. 1,653,495; Dec. 20.

Cans and other receptacles, Apparatus for cleansing milk.

I. H. Kendall. 1,644,384; Oct. 4.

Cans. Apparatus for vacuumizing and sealing. A. E.

Lindstrom. 1,626,291; Apr. 26.

Cans. Apparatus for washing. L. E. Holmes. 1,651,208;

Nov. 29

Cans. Apparatus for washing ice-cream. C. G. Davis.

1,628,300; Apr. 19.

Cans. Combination vent and closure for. C. W. Bassett.

1,618,694; Feb. 22.

Cans. Device for lifting ice. M. J. Uline. 1,639,788;

Aug. 23. Cans. Device for litting rec.

Aug. 23.

Cans. Device for purpling and plugging. E. O. Burns.
1,641,571; Sept. 6.

1,621,743; Mar. 22.

Cans. Machine for boxing or casing. A. H. Kyler.
1,634,031; June 28.

Cans. Machine for closing filled. H. A. Flnk and G.
Flook. 1,640,762; Aug. 30.

Cans. Machine for scoring and forming tapered. J. F.
Peters. 1.616,668; Feb. 8.
Peters. 1.616,689; Peters. 1.616,689; Peters. 1.621,079; Mar. 16.
Peters. 1.621,079; Mar. 16.
Peters. 1.621,079; Mar. 16.
Peters. 1.622,079; Peters. Nov. 1.

Cans to closing machines. Mechanism for feeding filled. H. A. Fink. 1,629,616; May 24.

Cans to closing machines, Mechanism for feeding filled. M. M. Sedwick. 1,628,919; May 17.

Canteen set. S. Frey. 1,651,889; Dec. 6.

Canyas, Woven-wire art. L. Francis. 1,616,445; Feb. 8.

Canyas, Woven-wire art. L. Francis. 1,616,445; Feb. 8.

Canyas, Woven-wire art. C. Francis. C. W. Bedford. 1,645,084; Oct. 11.

Caoutchoue, Vulcanizing. C. W. Bedford. 1,645,084; Oct. 11. Caputhoue, Vulcanizing. C. W. Bedford. 1,645,084; Oct. 11.

Caoutchoue, Vulcanizing. C. W. Bedford. 1,645,084; Oct. 11.

Caoutchoue, Vulcanization of. S. J. Peachey and A. Skipsey. 1,653,821; Dec. 27.

Cap. M. Bloomfield. 1,650,258; Nov. 22.

Cap. B. Rosenberg and E. M. John. 1,632,640; Aug. 16.

Cap. S. Boschberg and E. M. John. 1,633,622; Dec. 6.

Cap. S. Boschberg and E. M. John. 1,633,622; Dec. 6.

Cap. M. E. Smith. 1,620,400; Mar. 8.

Cap. W. V. Sutton. 1,631,562; Dec. 6.

Cap. Adjustable. F. C. Murnan. 1,651,929; Dec. 6.

Cap. Adjustable. F. C. Murnan. 1,651,929; Dec. 6.

Cap. Adjustable. F. C. Murnan. 1,651,529; Dec. 6.

Cap. Adjustable. F. C. Murnan. 1,651,502; Oct. 11.

Cap. Dather assembling machine. R. Newbold. 1,648,778; Nov. 8.

Cap. Barbing. H. A. Bauman and R. M. Pierson. Des. 7,226; June 28.

Cap. Barbing. H. A. Bauman and R. M. Pierson. Des. 7,226; June 28.

Cap. Bouloir. M. L. Peters. Des. 7,2494; Apr. 19.

Cap. Convertible. R. Kieln. 1,648,608; Nov. 8.

Cap. Goodoir. M. L. Peters. Des. 7,2494; Apr. 19.

Cap. Dust. W. F. Duryea. 1,619,710; Mar. 1.

Cap. Dust. W. F. Duryea. 1,619,710; Mar. 1.

Cap. Dust. J. M. Stone. 1,622,533; June 14.

Cap. Dust. J. M. Stone. 1,622,538; Mar. 29.

Cap. Dust. J. M. Stone. 1,622,538; Mar. 29.

Cap. Dust. J. M. Stone. 1,622,538; Mar. 29.

Cap. Nintted. F. H. Phillips and C. E. Mann. 1,618,222; Feb. 22.

Cap. Kintted. S. S. Sampliner. Des. 72,239; Mar. 15.

Cap. Kintted. S. S. Sampliner. Des. 72,239; Mar. 15.

Cap. Kintted. S. S. Sampliner. Des. 72,239; Mar. 15.

Cap. Kintted. S. S. Sampliner. Des. 72,239; Mar. 16.

Cap. Kintted. S. S. Sampliner. Des. 72,239; Mar. 15.

Cap. Miner's. E. N. Galanis. 1,652,776; Dec. 13.

Cap. Kintted. S. S. Sampliner. Des. 72,258; May 3, 7.

Cap. Miner's. E. N. Galanis. 1,652,776; Dec. 13.

Cap. Sanitary bottle. C. G. Hughes. 1,624,285; June 21.

Cap. Sanitary bottle. C. G. Hughes. 1,624,285; Mar. 20.

Cap. Sanitary bottle. C. G. Hughes. 1,624,285; Mar. 20.

Cap. Sanitary bottle. C. G. Hughes. 1,624,285; Mar. 20.

Cap. Sanitary bottl Jan. 11.

Caps. Manufacture of. M. J. West. 1,631,389; June 7.

Caps to bottles, Device for applying. A. C. Spahn.

1,640,332; Jung. 23.

Cremander. 1,646,504; Oct. 25.

Cape and hat protector, Combined. A. T. Lane.

1,626,288; Apr. 26.

Capo insto. N. M. Johnston. 1,616,859; Feb. 8.

Capoing instrument. V. D. Lespinasse. 1,615,125;
Jun. 18.

Lane Theories W. Hawking 1,637,818; Aug. 2. Jan. 18.
Capstan, Electric. W. J. Hawkins. 1,637,818; Aug. 2.
Capsules, Apparatus for and manufacture and filling of.
J. Schaubt. 1,628,333; May 10.
Capsules, Marking. K. K. Keller. 1,636,823; July 26.
Car. A. Campbell. 1,648,292; Nov. 8.
Car. J. O. Neikirk. 1,628,010; Apr. 26.
Car. T. de Roode. 1,625,467; July 12.
Car. ir., and cleetre coupling system. E. A. Larsson.
1,636,139; July 19.
Car. 3,637; July

Car and container, Transportation. A. H. Smith. 1,645,259; Oct. 11. Car and power unit, Combination railway. C. E. F. Ahlm. 1,613,664; Jan. 11. Car and the like, Cane. L. D. Gregg. 1,634,779; 1,618,868; Jan. 11.

Car and the like, Cane. L. D. Gregg. 1,651,768; Car and the like, Cane. L. D. Gregg. 1,651,768; Car and the like, Hopper. A. Campbell. 1,6 Uply 12.

Car and the like, Traction. O. P. Smith. 1,6 May 31. Car and track therefor, Coaster. W. 1.642,276; Sept. 13. Car, Articulated. F. M. Brinckerhoff. Sept. 20. W. H. Strickler. Car. Articulated. F. M. Brinckerhoff. 1,642,869;
Sept. 20.
Sept. 2 Mar. 29.
Car brake. A. F. Klasing. 1,621,844; Mar. 22.
Car-brake-controlling device. P. J. Gallagher. 1,653,955;
Dec. 27.
Car-brake-operating mechanism. W. D. Brewster.
Car-brakes, Fower device for operating. C. W. Collins. 1,637,440; Aug. 2.
Car brakes, Fower device for operating. C. W. Collins. 1,637,440; Aug. 2.
Car bumper. H. Breyley. 1,621,708; Mar. 22.
Car, Cane. T. W. Elder, Jr. 1,631,311; June 7.
Car check lock, Mines. C. B. Bell. 1,628,625; May 10.
Car, Coke-quenching. A. H. Challages. 1,645,587; Oct. 18. Car, Coke-quene.
Oct. 18.
Oct. 18.
Car, Collection. V. W. Balzer
1.640.873; Aug. 30.
Car, Compartment freight. A. H. Smith.
Car, Compartment freight. A. C. Griewank.
Nov. 29.
Act. 81.
Act. 81.
Act. 82.
Act. 82.
Act. 83. H. Ballou. 1.650.661: Car, Concrete ra Aug. 2. Car construction. Car construction. Car construction. Aug. 2.

Car construction. A. Campbell. 1,635,254: July 12.

Car construction. A. Christianson. 1,648,856; Sept. 27.

Car construction. A. Christianson. 1,648,856; Sept. 27.

Car construction. K. C. Gardner. 1,630,001; May 24.

Car construction. F. H. Hardin. 1,622,5982; Mar. 29.

Car construction. D. Hindahl. 1,618,008; Feb. 13.

Car construction. D. Hindahl. 1,618,008; Feb. 13.

Car construction. L. Millen. 1,622,594; Sept. 13.

Car construction. J. F. O'Connor. 1,650,378; Nov. 22.

Car construction. J. F. Streib. 1,631,437; June 7,

Car construction. H. W. Williams. 1,652,749; Dec. 13.

Car construction. H. W. Williams. 1,652,749; Dec. 13.

Car construction. J. F. John 1,631,437; June 7,

Car construction. A. T. Clark, H. A. Leonhauser, and J. R. Jester. 1,617,667; Feb. 15.

Car construction, D. Hindahl. 1,626,845;

May 3.

Car construction, Dump: D. Hindahl. 1,626,845; 1.637.817: construction, Dump-. D. Hindahl. 1,625,9()8; Apr. 26. r construction, Freight-. L. J. Spence. Car 1,630,868; May 31. r construction, Poultry. W. P. Johnson. 1.653.573; Dec. 20. Dec. 20.

Car construction, Railway. A. Christianson. 1,383,162; June 21.

Car control conjument. One-man. F. Hedley and J. S. Car control equipment. Safety. C. C. Farmer and J. S. McWhirter. 1,622,429; Mar. 29.

Car-control equipment, Safety. G. Macloskie. 1,621,328; Mar. 16.

Car-control equipment, Safety. W. E. Morcy. 1,625,088; Mar. 16.

Car-control mechanism, Dump. W. E. Morcy. 1,625,088; App. 19. 1 mechanism. Safety. J. M. Dangon. 1,645,689; tr-control mechanism, Safety. J. M. Dapron. 1,645,690: Oct. 18. Car conveyer, Chain-rail. G. M. Johnson. 1, July 12. Car-cooling apparatus. D. Parker. 1,651,626; D. Car coupler. F. Anliker and R. J. Wittmer. 1, Car coupler. Nov. 1. Car coupler. 1,647,498; Nov. 1.
Car coupler. A. J. Bazeley. 1,647,496; Nov. 1.
Car coupler. W. Blackmore. A. J. Bazeley, and D.
Car coupler. C. J. Fredo. 1,651,265; Nov. 29.
Car coupler. C. J. Fredo. 1,651,265; Nov. 29.
Car coupler. C. H. Gage. 1,620,585; Mar. 8.
Car coupler. S. and A. Luchkanich. 1,613,115; Jan. 4.
Car coupler. W. McConway, jr. 1,629,251; May 17.
Car coupler. W. McConway, jr. and E. George, jr.
1627,202; Nov. 1.
Car coupler. J. W. Smith. 1,645,459; Oct. 11.

Car coupler. J. Willison. 1,614,512; Jan. 18. Car coupler. J. Willison. 1,614,516-17; Jan. 18. Car coupler J. Willison. 1,616,937; Feb. 8. Car coupler and contour therefor. J. Willison. 1,614,515; Jan. 18; Car coupler, Automatic. C. C. Farmer. July 26.
Car coupler, Automatic. H. F. Woernley. 1,622
Mar. 29.
Car-coupler mechanism, Transitional. E. P. K.
1,615,946; Feb. 1.
Car coupler, Mine-. C. H. Gage. 1,617,628; Feb.
Car-coupler mounting. E. George, Jr. 1,644,577; Ora-coupler-positioning device. G. G. Glipin. 1,649 1.622.479: Car-coupler mounting. E. George, fr. 1,644,577; Oct. 4. Car-coupler-positioning device. G. G. Gilpin. 1,649,466; Nov. 15.
Car-coupler-positioning device. A. H. Small. 1,645,205; Car. coupler system. R. G. Averill. 1,639,717; Aug. 23. Car-coupler uncoupling mechanism. J. T. Fitzpatrick. 1,630,481; May 31.
Car couplers. Centering device for. A. E. Small. 1,631,295; June 7.
Car couplers. Device for operating. C. D. Bonsall. 1,631,294; June 7.
Car couplers. Device for operating. A. E. Small. 1,631,294; June 7.
Car couplers. Device for operating. F. W. Wolff. 1,631,294; June 7.
Car couplers, Levice for operating. F. W. Wolff. 1,631,294; June 7.
Car couplers, Levice for operating. F. W. Wolff. 1,630,734; Nov. 29.
Car couplers, Levice for operating. F. W. Wolff. 1,630,734; Nov. 29.
Car couplers, Levice for operating. G. Gardipler, Positioning device for railway. G. G. Gilpin. 1,636,180; July 19.
Car couplers, Transition device for. J. Willison. 1,614,518; Jan. 18.
Car couplers, Transition device for. J. Willison. 1,614,518; Jun. 18.
Car couplers, Uncoupling device for. A. E. Small. 1,636,154; July 19.
Car coupling. J. W. Easter. 1,632,222; June 14.
Car coupling. J. W. Easter. 1,632,222; June 14.
Car coupling. J. W. Easter. 1,632,550; Mar. 8.
Car coupling. J. W. Easter. 1,632,550; Mar. 8.
Car coupling. J. W. Higgins. 1,620,350; Mar. 8.
Car coupling. L. W. Higgins. 1,620,350; Mar. 8.
Car coupling mechanism. E. George, Jr. 1,641,424; Sept. 6.
Car, Cupola-charging. J. K. Clutts. 1,638,3693; June 28.
Car diaphragm and forming the same. H. U. Morton. Sept. 6. Car, Cupola-charging, J. K. Clutts. 1,633,693; June 28. Car diaphragm and forming the same. H. U. Morton. 1,626,048; Apr. 26. Car dome closure, Tank. J. J. McBride. 1,650,579; Car dome closure, Tank. J. J. Archine.
Nov. 22.
Car door. A. S. Barrows. 1,624,306: Apr. 12.
Car door and locking means therefor, Dump. A. Campbell. 1,615,792; Jan. 25.
Car door and trap. Vestibule. R. N. Patterson and A. G. Fell. 1,614,686; Jan. 18.
Car-door construction, Railway. G. L. Whipple and L. K. Silleox. 1,619,048; Mar. 1.
Car-door controlling device. C. C. Farmer. 1,626,672;
Car-door controls, Dump. W. J. Hosceit. 1,620,023; Mar. 8.
Car door. Electrically-operated railway. T. Elliott. 1.650.579: May 3.

Car-door controls, Dump. W. J. L.

Car door, Electrically-operated railway. T. Elliott.

1,643,064; Sept. 20.
Car-door fastener. F. S. Hetrick. 1,615,944; Feb. 1.
Car-door fastener. F. S. Hetrick. 1,615,104; Feb. 1.
Car-door, Grain. I. D. Parker. 1,619,310; Mar. 1.
Car-door-locking device. W. E. Wine. 1,617,429;
Feb. 15.

Car-door-locking device. W. E. Wine. 1,617,429;
Feb. 15.

Car-door-locking device. W. E. Wine. 1,617,429;
Car-door-locking device. Feb. 15.
Car-door-locking means. A. Campbell and A. E. Zimmer.
1,635,983; July 19.
Car-door-locking mechanism. A. Campbell and A. E.
Zimmer. 1,633,762; June 28.
Car-door mechanism. C. H. Crane. 1,621,833; Mar. 22.
Car-door mechanism. Hopper. V. Willoughby. A. Campuel and A. E.

2 mmer 1633.762; June 28.

2 mmer 1633.762; June 28.

Cardoor mechanism. H. Crane. 1,621,833; Mar. 22.

Cardoor mechanism. W. E. Wine. 1,646.003; Oct. 18.

Cardoor opening and closing mechanism. C. Schussler.

1,624,636; Apr. 12.

1,624,636; Apr. 12.

1,627,631; May 10.

Cardoor operating mechanism. H. T. Anderson.

1,616,434; Feb. S.

Cardoor operating mechanism. G. B. Dorey. 1,635,177;

Cardoor operating mechanism. Car-door operation, L. P. Hynes. 1,643,454; Sept. 27. Car door, Railway-hopper-, W. P. Murphy. 1,638,126; Aug. 9. Aug. 9.
17 door, Sheet-metal. W. P. Murphy.
July 12.

D. Hindahl Car door, Sheet-metal. W. P. Murphy. 1,635,191; July 12. Car doors, Latching device for. D. Hindahl. 1,622,718; Car doors, Latching device for. D. Hindahl. 1,622,718; Mar. 29. Car doors, Locking mechanism for sliding. F. Machava. Car doors, May 10. Car doors, Motor system for. L. P. Hynes. 1,627,180; May 3. Car doors, Seal for. W. J. Colvin. 1,628,655; May 17. Car, Drop-bottom mine. S. H. McCrary. 1,635,048; July 5. Car, Dump. W. F. Batho. 1,615,671; Jan. 25. Car, Dump. J. D. Benbow. 1,640,637; Aug. 30.

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Car, Dump. W. L. Burner and O. E. Kantenweln.
1,621,871; Mar. 22.
Car, Dump. A. Campbell. 1,615,794-5; Jan. 25.
Car, Dump. A. Campbell. 1,617,7573; Feb. 15.
Car, Dump. A. Campbell. 1,617,573; Feb. 15.
Car, Dump. A. Campbell. 1,637,573; Feb. 15.
Car, Dump. A. Campbell. 1,635,233; July 12.
Car, Dump. A. Campbell. 1,635,233; July 12.
Car, Dump. A. C. Schmohl. 1,642,750; Sept. 20.
Car, Dump. A. C. Schmohl. 1,642,750; Sept. 20.
Car, Dump. A. C. Schmohl. 1,642,751; May 24.
Car, Dump. A. C. Schmohl. 1,642,751; May 34.
Car, Dumplag. F. Handel. 1,623,639; Mar. 15.
Car, Elevator. F. E. Van Doorn and E. W. Feld. 1,618,055-6; Feb. 1.
Car end. W. D. Thompson. 1,649,912; Aug. 30.
Car end. W. D. Thompson. 1,649,912; Aug. 30.
Car end. W. Wright. 1,642,571; Sept. 13.
Car-end. Construction. A. E. Ostrander. 1,631,327;
Car end, Metal. E. I. Dodds. 1,648,204; Sept. 20.
Car end, Metal. E. I. Dodds. 1,648,204; Sept. 20.
Car end, Metal. E. I. Dodds. 1,648,204; Sept. 20.
Car end, Metal. E. I. Dodds. 1,672,0578; Mar. 8.
Car for aeroplane swings. H. G. Traver. Des. 73,014; July 5.
Car for aeroplane swings. H. G. Traver. Des. 73,014; July 5.
Car for roundabouts. A. Tottereau. 1,614,061; Jan. 11.
Car, Freight. E. T. Cunningham. 1,619,920; Mar. 8.
Car, Glass-container box. E. D. Campbell. 1,616,605; Feb. 8.
Car, Grader. R. E. Bressler. 2,622,761; Mar. 29.
    Feb. 8.
Car, Grader. R. E. Bressler. 1,622,761; Mar. 29.
Car heater. H. Hellweg, 1,627,560; May 10.
Car heater. V. Sussin. 1,623,215; Apr. 5.
Car-heating system. E. H. Gold. 1,629,234; Apr. 26.
Car-heating system. E. H. Gold. 1,639,338; Aug. 16.
Car-heating systems. Automatic regulating apparatus for.
E. A. Russell. 1,619,219; Mar. I. Zanner. 1,652,842;
Dec. 13.
Car-holder attachment. C. H. Tauner. 1,652,842;
Dec. 16.
       Car-Econd repairing and building apparatus, Motor. A. E. Nghtimada. 1614.883; Jan. 11.
Car, Hopper. P. Klemoff. 1.628.156; May 10.
Car, Hopper freight. J. A. Shafer. 1,623,071; Apr. 5.
Car-Identifying appliance. S. K. Wood. 1,637,542; Aug. 2.
                           Aug. 2.
r-identifying appliance, Motor-. S. K. Wood. 1,637,541;
       Car-identifying appliance, notor-, S. K. 1700.

Aug. 2.

Car-identifying means. S. K. Wood. 1.645.844; Oct. 18.

Car-joint, Articulate. S. P. Buck. 1.633.942; Dec. 27.

Car-journal. C. K. McCune. 1.636.100; July 19.

Car-Killn. G. D. Moran. 1.642.638. Sept. 20.

Car-Load-discharging. A. Campbell. 1.615.733; Jan. 25.

Car-Load-discharging. A. Campbell. 1.615.731; Feb. 22.

Car-Load-discharging. A. Campbell. 1.620.948; Mar.
    Car loader. G. Manierre. 1,626,947; May 3.
Car, Mine. L. Almquist, and V. Willoughby. 1,616,564;
         Car move
Sept. 6.
       Sept. 0.

Car-moving device, I. Williams. 1.647.897; Nov. 1.

Car, Multiple-unit tank. W. E. Cooper and V. Willough-
by. 1,631.307; June 7.

Car or wagon. R. B. Girdwood-Blackett. 1,651,693;
    Car' or wagon. R. B. Girdwooden Black.
Dec. 6.
Car, Orc. W. M. Sheehan. 1.638.634; July 19.
Car part. E. I. Dodds. 1.633.091; Dec. 20.
Car part. E. I. Dodds. 1.633.091; Dec. 20.
Car part. Carringsted. G. G. Gilpin. I. 649.464; Nev. 15.
Car partitionless cane. R. J. Magor. 1.640.785;
Aug. 30.
Car partition, Stock. C. H. Wells. 1.646.604; Oct. 25.
Car Passenger. H. Albin. 1.625.443; Apr. 1.632.240;
Car Passenger. H. Albin. 1.625.443; Apr. 1.632.240;
Car Dank Carringston C
                                                                  wagon.
            Car, Plate-glass-surfacing. A. L. Harrington. 1,631,126;
         June 7.
Car, Poultry, W. P. Johnson, 1.651.129; Nov. 29.
Car, Railwad, A. E. Smith, 1.645.026; Oct. 18.
Car, Railway, H. T. Anderson, 1.634.068; June 28.
Car, Railway, H. T. Anderson, 1.634.068; June 28.
Car, Railway, A. Campbell, 1.635.249; July 12.
Car, Railway, A. Campbell, 1.635.252; July 12.
Car, Railway, L. T. Canfield, 1.643.834; Sept. 27.
Car, Railway, W. M. Shechan, 1.628,825; May 17.
Car, Railway, W. M. Shechan, 1.628,825; May 17.
                             June
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Car, Railway dump. D. Hindahl. 1,626,825; May 3. Car, Railway dump. W. J. Hosceit and D. Hindahl. 1,634,107; June 28. Car, Railway motor. H. E. Robeson. 1,628,513; May 10. Car, Refrigerator. M. Carr. 1,623,305; Apr. 5. Car, Refrigerator. L. von Dabrowski. 1,631,297; June 7. Car, Refrigerator. O. Luhr. 1,642,882; Sept. 20. Car, Refrigerator. A. L. Richardson. 1,443,471; Sept. 27. Car, retarder. W. Brasack. 1,620,943; Mar. 15. Car retarder. W. Brasack. 1,620,943; Mar. 15. Car retarder, Railway. J. P. Coleman. 1,626,920; May 3.
       Car reta:
May 3.
Car roof.
Car roof.
Car roof.
                                                                                                                                                  N. W. Bloss. 1,617,041; Feb. 8.
C. D. Bonsall. 1,624,207; Apr. 12.
C. D. Bonsall. 1,627,372-3; May 3.
C. D. Bonsall. 1,629,472; May 24.
C. D. Bonsall. 1,645,851; Oct. 18.
S. D. Gloss and W. Wright. 1,654,252;
       Car roof.
       Car roof.
Dec. 27.
       Dec. 27
Car roof.
                                                                                                                                                      D. W. Hawksworth. 1,622,509; Mar. 29, F. A. Jacobs. 1,637,307; July 26, A. C. Mather. 1,650,949; Nov. 29, T. N. Russell. 1,622,056; Mar. 22, W. D. Thompson. 1,645,078; Oct. 11, T. H. Williams and F. A. Jacobs. 1,615,1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.615.105:
       Car roof, T. H. Williams and F. A. Jacobs.
Jan. 18.
Car roof, W. Wright. 1,614,334-5; Jan. 11,
Car roof, W. Wright. 1,625,636; Apr. 19.
Car roof, W. Wright. 1,637,888; Aug. 2.
Car-roof, claup. T. H. Williams and V.
1,619,282; Mar. 1.
Car-roof construction. K. M. Hamilton.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.631.860:
                                       June 7.

pre roof, Refrigerator. W. D. Thompson. 1,647,382;
June 1:

Car roof, Refrigerator.

Nov. 1.

S. Kahn. 1,617.761: Feb. 15.

Car safety. S. Kahn. 1,517.761: Feb. 15.

Car safety. M. Johnson. 1,515.225; Jan. 25.

Car seal. E. W. Johnson. 1,515.525; Jan. 25.

Car seal. J. A. Brooks. 1,644.632; Oct. 4.

Car seat. C. T. Hansen. 1,614.954; Jan. 18.

Car-seat handle. A. Rothman. 1,550.961; Nov. 29.

Car, Sectional railway. R. L. Parker. 1,637.585;

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Chart. Carling and Carling
   Car. Sectional railway. R. L. Perker. 1,637,585; Aug. 2.
Car, Sectional railway. A. H. Smith. 1,631,164; June 7.
Car, Sectional railway are sectional railway. A. H. Smith. and B. G. Miner. 1,631,165; June 7.
Car, Selective dump. D. Hindahl. 1,643,018; Sept. 20.
Car, Selective dump. D. Hindahl. 1,643,018; Sept. 20.
Car, Sielective dump. D. Hindahl. 1,643,018; Sept. 20.
Car signal Stolen. B. C. Taylor. 1,6436,886; Oct. 25.
Car, Sieping. A. R. Rossman. 1,621,086; Mar. 15.
Car spring plank with brake-beam safety device, Cast-steel freight. J. E. Hunter. 1,621,014; Mar. 15.
Car stactions, Tripping device for. J. C. Knapp.
Car stack. D. Muno. 1,641,287; Sept. 6.
Car, Stock. D. Muno. 1,641,287; Sept. 6.
Car, Stock. D. Muno. 1,641,287; Sept. 6.
Car structure, Grain. J. P. Polnaszek. 1,634,118; June 28.
           Car' structure, Grain. J. P. Poinaszek. 1.634,118; June 28. Car structure, Hopper. W. M. Sheehan. 1,628,928; May 17. Car structure, Hopper. W. M. Sheehan. 1,628,928; May 18. Car, Tank. S. E. Beasley: 1,615,672; Jan. 25. Car, Tank. S. F. Beasley: 1,615,672; Jan. 25. Car, Tank. B. A. Fall. 1,620,453; Mar. 8. Car, Tank. F. G. Garlick. 1,638,311; June 28. Car, Tank. P. Klemoff. 1,635,717; July 12. Car, Tank. R. Welcker, 1,650,406; June 7,622,721; Tank. V. Willoughby. 1,651,304; June 7,627,721; May 24. Mechanism. B. A. Mäingren. 1,629,721; May 24. M
   Car. Tank. V. Willoughby. Lubrace.

(Ag. Tank. V. Willoughby. Lubrace.

(Ag. Trackless street. W. Leathers. 1,634 587; July 5.

Car. Trackless street. W. Leathers. 1,634 587; July 5.

Car. Transfer. S. M. Chase. 1,623,828; Apr. 5.

Car. transfer apparatus. L. E. Endsley. 1,639,726;

Aux. 23.

Car track. G. A. Anderson. 1,622,328; May 10.

Car truck. G. A. Anderson. 1,622,328; May 10.

Car truck. S. P. Bush. 1,637,928; Aux. 2.

Car truck. S. P. Bush. 1,637,928; Aux. 2.

Car truck. Rallway. C. L. Charles. 1,621,493; Mar. 22.

Car truck, Rallway. C. L. Charles. 1,621,493; Mar. 22.

Car truck, Rallway. C. L. Charles. 1,621,493; Mar. 22.

Car truck side frame. G. A. Anderson. 1,622,037; Apr. 5.
       Car truck side frame. G. A. Anderson. 1.623.037; Sune 14. Car-truck side frame. H. B. Doerr. 1.682.002; Dec. 6. Car-truck side frame. H. W. Stertzbach and M. R. Hansen. 1.637.970; Aug. 2. Car-truck side frame. B. T. WashIngton. 1.627.131; May 3. Car-truck side frame. Cast. G. T. Johnson and H. W. Stertzbach. 1.621.786; Mar. 22. Johnson and H. W. Stertzbach. 1.621.786; Mar. 22. Johnson and H. W. Stertzbach. 1.621.782; Aug. 23. Car-truck spring. J. C. Wiltridge. 1.641.719; Sept. 6. Car truck spring. J. C. Wiltridge. 1.641.719; Sept. 6. Car truck spring. J. C. Wiltridge. 1.641.719; Sept. 6. Car trucks, Cast side frame for. H. W. Stertzbach. 1.642.793; Sept. 27. Car trucks, Cast side frame for. H. W. Stertzbach. 1.642.793; Sept. 20. Car-uncoupling mechanism. H. F. Finney and F. A. Car-uncoupling mechanism for railway. W. C. Rockenstire. 1.618.605; Feb. 22. Car underframe. T. R. Cock. 1.627.484; May 3. Car underframe. T. R. Cock. 1.627.484; May 3. Car underframe. W. M. Sheeban. 1.628.924; May 17.
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Car underframe, Dump. W. M. Sheehan. 1,620,839;
Mar. 15.
Car-unloading apparatus, Box. W. Sundberg. 1,626,984;
Car-unloading apparatus, Box. W. Sundberg. 1,626,984;
Car-wall construction. W. D. Thompson. 1,641,208;
Sept. 6.
Car-wall construction. W. D. Thompson. 1,641,208;
Sept. 6.
Car-wall structure. C. D. Bonsall. 1,638,5144; Aug. 9.
Car-wall structure. C. D. Bonsall. 1,649,505; Nov. 15.
Car-washing apparatus. S. L. Smith. 1,614,213; Jan. 11.
Car-wast-transfer apparatus, Passenger. S. S. Riegel.
1,613,848-9; Jan. 11.
Car, Welded railway. W. N. Oehm and E. W. Test.
1,613,69; Mar. 1.
Car, Welded railway. W. N. Oehm and E. W. Test.
1,643,418; Sept. 27.
Car-wheel clamp. E. and O. B. Mullins. 1,625,136;
App. 28.
Car-wheel clamp. E. and O. B. Mullins. 1,625,136;
App. 28.
Car-wheel clamp. E. M. Toombs, fr. 1,626,765;
May 3.
Car-wheel, Roller-bearing. J. M. Toombs, fr. 1,626,765;
May 3.
Car-wheel and the like Machine for testing. T. R. Car-wheel construction, Railway. E. F. Maas. 1,638,413;
Nov. S. Car wheel, Roller-bearing. J. M. Toombs, jr. 1,626,765;
Car wheels and the like, Machine for testing. T. R.
Brown. 1,628,767; May 17.
Car wheels, Apparatus for truing. R. S. Blair and B. D.
Wells. 1,627,074; May 3.
Car Section of the control Nov. 22.

Cars, Brake device for railway. F. C. Rutz. 1,639,669;

Cars, Brake mechanism for railway. P. B. Camp and J. Wilson. 1,623,304; Apr. 5.

Cars, Brake mechanism for railway. P. B. Camp. 1,636,284; July 19.

Cars, Brake mechanism for railway. P. B. Camp. 1,636,284; July 19.

Cars, Brake mechanism for railway. P. B. Camp. 1,628,758-9; Dec. 13.

Licars, Brake mechanism for railway. C. L. Moorman. 1,628,306; Aug. 16.

Cars, Brake mechanism for railway. H. I. Wrigley. 1,618,740; Feb. 22.

Cars, Brake mechanism for railway. H. I. Wrigley. 1,635,664; July 12.

Cars, Buffer for railway and like, H. Mohr. 1,629,224; May 17. Cars, Buffe May 17. May 17.

Cars. Combined draft-hook bur and step for freight.

R. J. Magor. 1,613,189; Jan. 4.

R. J. Magor. 1,613,189; Jan. 4.

For refrigerator. L.

Cars. Corner post for drop and good June 14.

Cars. Corner post for drop and gondola. A. G. Sandman.

1,638,128; Jung. 9.

Cars. Corner post for freight. R. J. Magor. 1,627,981;

May 10. May 10.

Cars. Corney nose for freight. R. J. angolf. 1,621,981;
May 10.

Cars. Corngated end wall for railway. G. E. Coutant.

Cars. Corngated metallic plate for railway. G. G. Gilpin. 1,638,153; Aug. 9.

Cars. Corrugated metallic plate for railway. G. G. Gilpin. 1,638,156; Aug. 9.

Cars. Corrugated structure for railway. G. G. Gilpin. 1,638,154; Aug. 9.

Cars. Corrugated structure for railway. G. G. Gilpin. 1,638,154; Aug. 9.

Cars. Corrugated structure for railway. G. G. Gilpin. 1,649,462–3: Nov. 15.

Cars. Corrugation in hopper doors for railroad. V. E. Slsson. 1,638,167–9; Aug. 9.

Cars. Cot for poultry. P. Kortenhoeven. 1,614,963; Jan. 18.

72535—P—47

Cars, Coupling for railway. C. Stollberg. 1,629,551; May 24. Cars, Cross tie for railway. K. C. Gardner. 1,632,181; Cars, Cross de lor railway, J. June 14.
Cars, Detachable ladder for railway, J. Mitchell, 1,629,145; Apr. 26.
Cars, Differential axie for railroad, J. B. Pope. 1,644,147;
Cars, Door-closing device for box. L. F. Johnson, 1,638,694; Aug. 9. Cars, Door-closing device for box. L. F. Johnson. 1,635,694; Aug. 9.
Cars, Door-closure for railway. E. M. Senftle. 1,628,920; Cars, Door-locking device for cane. W. A. Lucas. 1,649,413; Nov. 15.
Cars, Door mechanism for railway. B. W. Kadel. 1,637,905; Aug. 2.
Cars, Door mechanism for railway. W. E. Wine. 1,634,225; June 28.
Cars, Dous guard Cars, Door mechanism for railway. W. E. Wine. 1,634,225; June 28.
Cars, Dust guard Lagar, the journal boxes of railway. J. L. Mothum. 1,621,893; Mar. 22.
F. Hynninen. 1,645,644; Oct. H.D. Hallenberg and A. F. Hynninen. 1,645,644; Oct. H.D. Hallenberg and A. F. Hynninen. 1,645,644; Oct. H.D. Cooke. 1,638,147; Aug. 9.
Aug. 9. F. Hynninen. 1,645,484; Oct. 11.

Cars, End plate for railway box. G. T. Cooke. 1,638,147;
Aug. 9.

Cars, End reenforcement for railway. G. T. Cooke. 1,638,148;
Aug. 9.

1,638,148; Aug. 9.

1,649,461; Nov. 15.

Cars, End structure for railway. G. G. Gilpin. 1,634,641; Nov. 15.

Cars, End structure for railway. R. D. Hawkins. 1,638,121; June 7.

Cars, End wall for railway. C. D. Bonsall. 1,636,166;
July 10. wall for railway. A. E. Small. 1,649,449; Cars. End wall for railway. C. D. Bonsall. 1,636,166; July 19.
Cars. End wall for railway. A. E. Small. 1,649,493; Nov. 15.
Cars. Food crough for poultry. W. P. Johnson. 16,43,001; Sept. 27.
Cars. Foot accelerator for motor. S. Amoroso. 1,615,926; Feb. 1.
Cars. Groat accelerator for motor. S. Amoroso. 1,615,926; Feb. 1.
Cars. Groat door for freight. N. E. Bray. 1,634,015; June 28.
Cars. Hand brake for railway. S. B. Haseltine. 1,616,690; Feb. 8.
Cars. Hand brake mechanism for railway. Y. Miyasakl. 1,624,235; Apr. 12.
Cars. Hand-brake mechanism for railway. Y. Miyasakl. 1,624,235; Apr. 12.
Cars. Hand-brake mechanism for railway. Y. Miyasakl. 1,624,235; Apr. 12.
Cars. Hand-brake mechanism for railway. Y. Miyasakl. 1,632,576; Dec. 13.
Cars. Hand-broever-operating means for refrigerator. W. F. Dietrichson. 1,631,309; June 7.
Cars. Hopper door for railway. V. E. Sisson. 1,638,166; Aug. 9.
Cars. Hopper door for railway. V. E. Sisson. 1,638,603; Cars. Hopper for refrigerating. H. A. Glenn and L. S.
Cars. Hopper for refrigerating. H. A. Glenn and L. S.
Cars. Hopper for refrigerating. H. A. Glenn and L. S.
Cars. Hopper for refrigerating. H. A. Glenn and L. S.
Cars. Hopper for refrigerating. H. A. Glenn and L. S.
Cars. Hopper for refrigerating. H. A. Glenn and L. S.
Cars. Hopper for refrigerating. H. A. Glenn and L. S. Cars, Indicator for refrigerating. H. A. Glenn and L. S. Dromgold. 1,639,176; Aug. 16.
Cars, Indicator for railroad. F. M. Ginger. 1,645,133; Cars, Indicator for railroad. F. M. Ginger. 1,645,133; Oct. 11.
Cars, Leveling means for railway. C. P. Knox and I. Simons. 1,616,976; Feb. 8.
Cars, Lifting mechanism for railway. L. J. Clapp. 1,627,481; May 3.
Cars, Lock for dump. R. E. McGahey. 1,616,815; Feb. 8. Cars, Lock for railroad. W. Babekuhl. 1,946,181; Oct. 18. Cars, Metal end structure for railway. A. E. Small. 1,638,172; Aug. 9. Cars, Metal roof for freight. G. G. Gilpin. 1,631,260; L. Constant of the freight. Cars, Mctul roof for freight. Cars, Mctul roof for freight. Cars, Ca Cars or coaches, Brake-beam safety guide for railway, F. M. Le Comte. 1,612,929; Jan. 4. Cars, Panel bracing in hopper doors for railway. C. D. Bonsall. 1,638,143; Aug. 9. Cars, Paneling for hopper doors for railway. C. D. Bonsall. 1,638,142; Aug. 9. Cars, Pareltion end for freight. R. J. Magor. 1,627,980; May 10. Aug. 10. Cars, Partlion end for freight. R. J. Kagor. 1,627,980; Aug. 10. Cars, Partlion end for freight. E. A. Fall. 1,644,774; Aug. P. Floard holder for tank. E. A. Fall. 1,644,774; Piccard holder for tanna.

Care, Pain brake for railway. T. Elliott. 1,645.741;
Oct. 18.
Oct. 18.
Oct. 18. Oct. 18.

Cars, Reenforcing hopper door for railway. G. G. Gilpin.
1,638,155; Aug. 9.

Cars, Remote control device for railroad. J. McCallum.
1,629,286; May 17.

Cars, Repair construction for wooden-frame box. E. G.
Franck. 1,630,483; May 31.

Cars, Reversible placard holder for tank. S. L. Joiner.
1,614,792; Jan. 18.

Cars, Run board for freight. F. E. Sandstrom.
1,628,809; May 17.

Cars, Safety device for articulated. F. McF. Brinckerhoff.
1,618,935; Oct. 18.

Cars, Safety device for motor. G. E. Lynch. 1,643,989; Oct. 4.
Cars, Safety device for trolley. B. Phillips. 1,647,469; Cars, Safety life-saving fender for. J. Tuba. 1,639,154; Aug. 16.
Cars, Safety systems for railway. H. Rowntree. 1,627,748; May 10.
Cars, Safety and the construction of the construction of the construction for all way become construction for railway box. W. E. Cars, Side door for railway freight. A. E. Small. 1,626,882; May 3.
Cars, Side-plate construction for railway box. W. E. Williams. 1,654,153; Dec. 27.
Cars, Sleeping berth for poultry. I. V. Edgerton. 1,641,376; Sept. 6.
Cars, Sclenid coupler for. S. B. Schenck. 1,649,129; Cars, Spotlight for mail. D. F. Bradshaw. 1,631,003; May 31.
Cars, Siring suspension for railway. H. W. Frost. 1,633,011; June 21.
Cars, Steam chamber for tank. W. R. Cleary. 1,614,107; Cars, Steam chamber for tank. W. R. Cleary. 1,614,107; Cars, Steam chamber for tank. W. R. Cleary. 1,614,107; Cars, Steam chamber for S. F. Faunce and H. C. Dorris. Cars, Steam chamber for this.

Jan. 11.

Cars, Striking plate for. B. F. Faunce and H. C. Dorris.

1.633,934; June 28.

Cars, Supporting mechanism for dump. W. L. Burner

and O. E. Kantenwein. 1,631,241; June 7.

Cars, Supporting the contents in freight. R. E. Harmon.

1,637,484; Aug. 2.

Cars, Switch and valve control in air and electric coupling systems for. H. E. Van Dorn. 1,621,292;

Mar. 15.

Mar. 16.

Cars, Truck for mine. J. R. Fleming. 1,643,298; pling systems for. h. E. Mar. 15.

Mar. 15.

Cars, Truck for mine. J. R. Fleming. 1,643,298;
Sept. 27.

Cars. Licoupling link for railway. A. C. Mather. 1,633,339; June 21.

1,633,339; June 21.

Cars. Underframe for ore. W. M. Sheehan. 1,628,921;

Cars. Unloader for railway. G. Manierre. 1,626,948;

May. 3. May 41.

Cars, Unloader for railway. G. Manierre.

May 3.

May 4.

May 4.

May 5.

May 6.

May 6.

May 7.

Cars, Unloading apparatus for railway. F. G. Mitchell.

1.628,732; May 17.

Cars, Ventilating door for the hatchways of refrigerator.

G. A. Hull. 1,637,861; Aug. 2.

Cars. Vestibule guard for articulated. F. Koch.

1.637,193; July 26.

Cars. Wall structure for railway. J. McMullen.

1.632,264; Aug. 16.

Caramels, Separation of. F. F. Molié. 1,635,136;

Caramels, Separation of. F. F. Molié. 1,635,136;

Caramels, Separation of the Putifying. C. B. Dayls. Caris: Music Manager and Caramels, Separation of. F. F. Molié. Lessonous, July 5. Canolitate solutions, etc., Purifying. C. B. Davis. Carolitate solutions, etc., Purifying. C. B. Davis. Carbon Jand making the same, Granular. E. N. Bunting. 1.646,389; Oct. 25. Carbon Jand making the same, Granular. E. N. Bunting. Carbon black from natural gas, Producing. E. B. Parsons, W. D. Inskeep, and W. Hunt. 1.614.685; Jan. 18. Carbon black, Manufacture of. C. A. Barbour, fr. 1.643,736; Sept. 27. Carbon black or lampblack, Method and apparatus for the manufacture of. E. B. Bird. 1.616,409; Feb. I. Carbon black or lampblack, Method and apparatus for the manufacture of. E. B. Bird. 1.616,409; Feb. I. Carbon black, Process and apparatus for producing. C. Matiock. 1,617,074; Feb. 8. Carbon black, Producing. L. J. Dales. 1,633,071; June 21. June 21.

Carbon-black-producing apparatus. C. A. Barbour, jr. 1,638,722; Aug. 9.

Carbon-bonded refractory, Producing a. E. L. Hauman. 1,653,850; Dec. 27.

Carbon catalyst and process of making it. C. B. Jacobs. 1,623,508; Apr. 5.

Carbon dioxide, Discharging. C. L. Jones. 1,644,338; Carbon o

Oct. 4.
Carbon dioxide, Discharging. C. L. Jones. 1,044,358; Oct. 4.
Carbon dioxide to a solid, Method and machine for concentrated. V. Drewsen. 1,619,336; Mar. 1.
Carbon dioxide to a solid, Method and machine for concentrated. V. Drewsen. 1,619,300; Sept. 27.
Carbon. Electric-furnace apparatus and process for making decolorizing. L. Wickenden and S. A. W. Okell. 1,634,439; July 5.
Carbon. Electric-furnace apparatus and process of revisiting decolorizing. L. Wickenden and W. F. Demmerle. 1,634,479; July 5.
Carbon. Electric-furnace apparatus for manufacturing apparatus for manufacturing apparatus for manufacturing form of the machine for manufacturing apparatus for manufacturing form of the machine form of the machine for manufacturing apparatus for determining the precentage of. C. J. G. Mallmberg and J. G. Holmström. 1,626,005; Apr. 26.
Carbon. Making adsorbent. Q. L. Barnebey and M. B.

Carbon, Making adsorbent. O. L. Barnebey and M. B. Cheney. 1.614.707; Jan. 18. Carbon, Making decolorizing. L. Wickenden and S. A. W. Okell. 1.634,477 July 5.

Carbon, Manufacture of active. J. N. A. Sauer, 1.644,033; Aug. 30. Carbon, Manufacture of vegetable. L. H. Bonnard, Carbon, Method and apparatus for producing. C. Matlock. Rel6,765; Oct. 1. Carbon-monoxide detector. C. S. Gordon and J. T. Lowe, 1.644,041; Oct. 4. Carbon paper, Making. G. W. Poorman. 1,614,490; Carbon paper, Making. G. W. Poorman. 1,614,490; Carbon paper, Making. G. W. Poorman. Jan. 18. Carbon pigment and making the same, Nondusting. Sheppard and L. W. Eberlin. 1,651,733; Dec. 6. Carbon. Process and apparatus for making decolor L. Wickenden and S. A. W. Okell. 1,634

Sleepard and L. W. Eberlin. 1,651,733; Dec. 6.
Carbon, Frocess and apparatus for making decelorizing.
L. Wickenden and S. A. W. Okell. 1,634,478;
July 5. Producing active. P. Laeg, J. Drucker, and H.
Carbon, Producing metallic. C. Robinson. 1,637,652;
July 26.
Carbon, Producing metallic. C. Robinson. 1,637,652;
July 26.
Carbon, Producing oxidized. O. W. Storey and G. T.
Collinson. 1,639,981; Aug. 23.
Carbon, Producing solid oxides of. O. W. Storey.
Carbon-removing implement. S. Ling. 1,645,435; Oct. 11.
Carbon scraper. G. D. Lawson. 1,620,822; Mar. 15.
Carbon scraper. G. D. Lawson. 1,620,1327; Mar. 1.
Carbons, Revivitying chylene, Revivitying. A. A.
Backhaus. 1,619,326; Mar. 1.
Carbonacous articles, Destructive distillation of solid.
P. Dvorkovitz. 1,627,321; May 3.
Carbonacous materials, Distillation of. J. D. Zieley and
F. A. Rudolf. 1,617,697; Feb. 15.
Carbonacous materials, Distillation and coking of. L.
Honigmann. 1,640,602; Aug. 30.
Carbonacous materials, Distillation and coking of. L.
Honigmann. 1,640,602; Aug. 30.
Carbonating apparatus. T. B. Slatte, 1,634,638; June 24.
Carbonating apparatus. T. B. Slatte, 1,634,638; June 24.
Carbonating apparatus. T. B. Slatte, 1,634,638; June 24.
Carbonating apparatus. T. B. Slatte, 1,634,638; June 26.
Carbonation and bottling, Method and apparatus for low-pressure. P. W. Shields and L. De Markus. 1,648,466; Nov. 8.
Carbonator. C. L. Bastinn, 1,655,573; Dec. 6.

pressure.

C. L. Bastian. 1,651,573; Dec. 6. R. B. Campbell. 1,648,575; Nov. 8. A. L. Koenig. 1,682,490; June 14. G. H. Maas. 1,630,575; May 31. H. J. McCue. 1,642,739; Sept. 20. article and making same. J. Beckwith. Apr. 12. Carbonator. Carbonator. Carbonator. Carbonator. G. H. Maa Carbonized article and 1,624,710; Apr. 12. Carbonizing apparatus. G. W. Wallace. 1,639,390;

Carbonizing apparatus. G. Aug. 16.
Carboy, R. H. Bradford, J. S. La Barr, and P. H.
Thompson. 1,630,163; May 24.
Carboy package. W. H. Lohmann. 1,641,179; Sept. 6.
Carboy package. W. H. Lohmann. 1,641,179; Sept. 6.
Carbureter. W. J. En Earl. 1,647,400; Nov. 1.
Carbureting apparatus. W. G. Hemenway. 1,634,782;

Tapparatus. W. G. Hemenway. 1,634,782;

device. G. M. Holley. 1,641,332; Sept. 6.

device. L. M. Woolson. 1,613,237; Jan. 4.

means. S. A. Gutman. 1,614,238; Jan. 11.

C. 3. Allen. 1,632,329. June 21.

S. S. Allen. 1,632,329. June 21.

S. S. Astelline. 1,651,359; Dec. 6.

F. H. Barger. 1,625,516; Apr. 19.

F. Baverey. 1,631,716; June 7.

R. H. Beach. 1,613,599; Jun. 11.

G. H. Bicker. 1,631,599; Jun. 11.

G. H. Bicker. 1,632,594; Jun. 12.

G. H. Beach. 1,613,599; Jun. 14.

G. H. Beach. 1,613,599; Jun. 14.

A. V. Chapin. 1,619,529; Mar. 1.

F. G. Crone. 1,637,104; July 26.

S. J. Brindley. 1,644,233; Oct. 4.

A. V. Chapin. 1,619,529; Mar. 1.

F. G. Crone. 1,637,104; July 26.

J. S. Unt. 1,613,111; Jun. 38.

F. B. Cutt. 1,631,203; Jun. 70.

J. W. M. Crofton. 1,619,656; Mar. 1.

F. Day. 1,631,203; June 70.

A. Dickerson. 1,645,945; Oct. 18.

N. Eckles. 1,632,279; June 14.

P. W. Ensign. 1,653,041; Dec. 20.

E. Feroldi. 1,629,210; May 11.

J. W. Fisher. 1,623,668; Apr. 5.

S. W. Goodall. 1,613,947; Jan. 11.

W. Grikscheit. 1,634,401; July 5.

C. J. Gustafson. 1,623,180; Apr. 5.

V. R. Hoffler. 1,653,628; Dec. 27.

D. C. Hendrickson. 1,648,11; Sept. 27.

L. Henrich. 1,626,658; Apr. 27. Carbureting Carburetion Carburetor. V. R. Heffler. 1,652-859. Dec 13.
V. R. Heffler. 1653-828. Dec 27.
D. C. Hendekken. 1,643-711; Sep.
L. Herrict. 1,626-868; Apr. 26.
S. R. Holmes. 1,622-518; Mar. 2.
F. A. Howard. 1,649-531; Nov. 1.
J. A. Jackson and P. Swanson. 1 Carburetor. Carburetor. Carburetor. Carburetor. Carburetor. Apr. 5. 1,623,682;

Apr. 5. Carburetor. Carburetor. J. T. Jennings, 1,623.683; Apr. 5.
J. Juhasz, 1,640,412; Aug. 30.

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Carburetor. C. F. L. and W. L. Kaufmann. 1,624,603;
Apr. 12.
Carburetor. J. B. Kessel. 1,636,187; July 19.
Carburetor. E. H. Kelley, F. Greiwe, and F. E. Hoskin. 1,623,347; Apr. 5.
I,623,347; Apr. 5.
Iking. 1,636,308; July 19.
Carburetor. T. W. Kings. 1,636,308; July 19.
Carburetor. G. Kingston. 1,617,999; Feb. 15.
Carburetor. G. Kingston. 1,617,999; Feb. 15.
Carburetor. J. G. Lanning. 1,630,493; May 31.
Carburetor. J. G. Lanning. 1,630,493; May 31.
Carburetor. J. J. A. Miller. 1,640,711; Aug. 30.
Carburetor. J. G. Mack. C. J. Gustafson, and M. E.
Carburetor. F. C. Mock. C. J. Gustafson, and M. E.
Carburetor. F. C. Mock. C. J. Gustafson, and M. E.
Carburetor. F. C. Mock. C. J. Gustafson, and M. E.
Carburetor. E. A. Poleson. 1,625,341; Apr. 19.
Carburetor. E. A. Poleson. 1,625,341; Apr. 19.
Carburetor. E. M. F. Parrey. 1,654,343; July 12.
Carburetor. E. W. Pagett. 1,619,309; Mar. 1.
Carburetor. E. W. F. Frirey. 1,656,343; July 12.
Carburetor. W. F. Frirey. 1,656,343; July 12.
Carburetor. E. F. Schoenwolf. 1,649,260; Nov. 15.
Carburetor. W. T. Simpson. 1,625,572-4; Apr. 19.
Carburetor. W. T. Simpson. 1,626,572-4; Apr. 19.
Carburetor. W. T. Simpson. 1,626,793; July 26.
Carburetor. E. F. Schoenwolf. 1,649,260; Nov. 15.
Carburetor. E. F. Schoenwolf. 1,649,260; Nov. 15.
Carburetor. E. F. Schoenwolf. 1,649,230; Nov. 15.
Carburetor. E. F. Schoenwolf. 1,649,230; Nov. 15.
Carburetor. F. E. Stratton. 1,536,793; July 26.
Carburetor. F. E. Stratton. 1,536,793; July 26.
Carburetor. J. W. Swan. 1,630,723; May 31.
Carburetor. J. W. Swan. 1,630,223; May 31.
Carburetor. J. W. Swan. 1,630,274; Mar. 18.
Carburetor. J. W. Swan. 1,630,274; Mar. 15.
Carburetor. J. W. Swan. 1,630,274; Mar. 15.
Carburetor. A. E. Weaver. 1,618,081; Nov. 8.
Carburetor. A. E. Weaver. 1,618,
                                                                                              C. F. L. and W. L. Kaufmann. 1,624,603;
      Carburetor.
  Carburetor W. H. K. Williams. 1,629,888; May 24.
Carburetor adjustment, Automatic. W. J. Short.
1,624,631; Apr. 12.
Carburetor and fuel feeding system therefor. W. T. Simpson.
1,625,767; Apr. 19.
Carburetor attachment. R. R. Ross. 1,639,242; May 24.
Carburetor, Automatic compensating. A. C. Peterson.
1,617,608; Feb. 15.
Carburetor device. P. Boncl. 1,644,322; Oct. 4.
Carburetor device. P. Boncl. 1,644,322; Oct. 4.
Carburetor device. P. Boncl. 1,644,322; Oct. 4.
Carburetor device. P. M. Williams, fr. 1,643,479;
Sept. 27.
Carburetor feed control, Automatic. C. W. Collins.
1,636,851; July 26.
Carburetor from S. Making. F. Holt. 1,617,906;
Carburetor frames. Die for making. F. Holt. 1,625,854;
    Feb. 15.
Carburetor frames, Die for making. F. Holt. 1,625,854;
Apr. 26.
Carburetor, Furnace. R. J. Hansen. 1,620,966; Mar.
    Carburetor,
Sept. 13.
                                                                                                Venturi for, C. Carlsson.
                                                                                                                                                                                                                                                                                                                                                        1.642.332:
    Sept. 13.
Carburetors, Air controller for gas-engine. C. A. Criqui and E. T. Larkin. 1,614,106; Jan. 11.
Carburetors, Air heating and moistener for. W. J. Priest-ley. 1,623,438; Apr. 5.
Carburetors, Air-supply connection for. A. W. Zeratsky and W. V. Kidder. 1,644,766; Oct. 11.
Carburetors, Apparatus for controlling the air supply of.
Carburetors, Attachment for. C. Powell. 1,637,455; Aug. 2,2
      Aug. 2.
Carburetors, Choke control for, S, G, Garrett.
1,616,082; Feb. 1.
Carburetors, Control for, M. J. B. Barbarou. 1,627,951;
May 10.
      May 10.
Carburetors, Device for regulating temperature of air in.
H. N. Edens. Re16,528; Jan. 11.
Carburetors, Electrical heater for the air-supply pipes
of. W. F. Cleary and W. J. Wagener. 1,624,216;
Apr. 12.
    Apr. 12.
Carburetors, Evaporator for. V. Pellegrino. 1,332,675;
June 14.
Carburetors, Fuel-control attachment for. F. Barden.
1,650,482; Nov. 22.
Carburetors, Mixture control for airplane. F. C. Mock,
C. J. Gustafson, and M. E. Chandler. 1,636,480;
July 19, Moisture-supplying attachment for. H. Free-
Carburetors, Moisture-supplying attachment for. H. Free-
Carburetors, Thermostatic control for. M. R. Wolfard
1,627,947; May 10.
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Carburetors, Vacuum fuel system for. N. Eckles. 1,623,237; Apr. 5.
Carburizing box. W. B. Sullivan. 1,643,756; Sept. 27.
Carcass cutter. H. A. Meyer. 1,617,410; Feb. 15.
Carcass scruber. K. Zerbe. 1,617,002; Feb. 8.
Carcass splitter. H. A. Meyer. 1,616,058; Feb. 1.
Carcass splitter. H. A. Meyer. 1,643,721; Sept. 27.
Carcass splitting machine. A. H. Paxton. 1,620,035;
Mar. 8, display sign, Combined. L. Rommel. 1,621,754; Mar. 22.
Card-assorting machine. M. M. Goldberg. 1,627,028;
May 3.
Cardbasorting machine. M. M. Goldbason. 1,615,773.
  May 3.

Cardboard and like box. E. Robinson. 1,615,773;
Jan. 25.

Cardboard or the like, Machine for scoring, cutting or otherwise leasting. N. P. Andrew. 1,615,605; Peb. 3.

Local Cardboard or the like, Machine for scoring, cutting or otherwise leasting. N. P. Andrew. 1,615,605; Peb. 21.

Local Cardboard or Cardboa
June 14.
Car. W. Bryce. 1.655,179; Nov. 29.
Card, Display. A. J. Brown. 1.648,421; Sept. 27.
Card doffers, Vibrator for R. W. Blumstead and R. S.
Robertson. 1.645,794; Oct. 18.
Card-drying stand. C. L. Gestrine. 1.682,114; Dec. 6.
Card-drying stand. C. L. Gestrine. 1.682,114; Dec. 6.
Card-drying stand. C. L. Gestrine. 1.682,114; Dec. 6.
Card-drying stand. S. E. A. Ford. 1.633,397; June 28.
Card-handling apparatus. E. A. Ford. 1.633,397; June 28.
Card-handling apparatus, Selective. E. A. Geiger. 1.621,716; Mar. 22.
Card holder. E. Arendt. 1.651,358; Dec. 6.
Card holder. W. S. Beazell. 1.613,163; Feb. 22.
Card holder. G. H. Dawson. 1.615,443; Jan. 25.
  Card holder, U. B. Sugar Card holder, V. E. Knopp. 1,618,9346; Aug. 23. Card holder, G. H. Keeney. 1,637,344; Aug. 2. Card holder, V. E. Knopp. 1,618,975; Feb. 8. Card holder M. Meyerson. 1,618,9827; Mar. 8. Card holder, M. Meyerson. 1,618,2827; Mar. 8. Card holder, M. Meyerson. 1,615,250; Oct. 11. Card holder, License. N. J. Churmusi. 1,645,239; Oct. 11. Card holder, License. N. J. Churmusi. 1,645,239; Oct. 11. Card holder, Playing. V. C. Teneau. Des. 73,272;
        Card holder, Playing. V. C. Teneau. 1,634.696; July 5.
Card holder, Playing. V. C. Teneau. 1,634.696; July 5.
Card holders, Extender for. C. S. Sawyer. 1,651,471;
        Dec. 6.
Card-holding device.
                                                                                                                                                                                                                               D. E. B. Combs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.630.373:
  Card-floiding device, 2. L. May 31. Card, Index. C. H. Cobb. 1,625,934; Apr. 26. Card-floex device, J. H. Rand, Jr. 1,622,670; Mar. 2 Card-floex holder. R. W. Renton. 1,618,825; Feb. 8. Card, Mailling. G. O. Jenner. 1,623,185; June 14. Card, Milk. A Pearson and D. N. Lindquist. 1,619,75
1,619,756;
  Card table. A. W. Koehn. 1,630,851; May 31.
Card table. A. W. Koehn. 1,630,851; May 31.
Carding engine for carding artificial silk and like material. H. Wilkinson and J. Reed. 1,642,758; Sept. 20.
Carding engines, Vacuum stripper for. E. Clark. 1,622,246; Mar. 22.
Carding machine. W. F. Putnam. 1,652,215; Dec. 13.
Carding machine. W. F. Putnam. 1,652,215; Dec. 13.
Carding machines, W. S. P. Lander M. F. Kevlin and W. F. Costello. 1,642,656; Nov. J. K. Kevlin and L. Garding machines, Waste collector for. J. F. Fliedner. 1,642,235; Sept. 13.
Cards, etc., Device for displaying. A. Reese. 1,619,434; Mar. 1.
Cardis Making embosed show. F. D. Courtenay. Cards, Numbered playing. L. S. Francke. 1,652,979; Dec. 13.
Cards, Sensing means for perforated record. F. M.
     Dec. 13.

Cards, Sensing means for perforated record. F. M. Carroll. 1,628,164; Apr. 5.

Cards used for statistics, bookkeeping, and the like, Arrangement for sorting perforated. G. Tauschek, 1,639,443; Jug. 16.

Cargo fleet for water navigation and operating said fleet. C. J. Bacr. 1,618,401; Feb. 22.

Carlon hook. H. R. Benson. 1,648,655; Nov. 15.

Carline. D. W. Hawksworth. 1,644,674; Oct. 11.

Carline. E. C. Murro. 1,654,364; Dec. 27.

Carline. T. N. Russell. 1,1644,460; Oct. 4.
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Carline recoforcement and load-lifting attachment. C. D. Bonsall 1, 1838.145; Aug 9.
Carline-reenforcement and load-lifting arrangement. C. D. Bonsall 1, 1645.217; Oct. 11.
Carpenter's gauge. J. H. Edmondson. 1,634,178; June 28.

Carpenter's gauge. J. H. Edmondson. 1,004,116,110,28.
Carpenter's gauge. Combination. H. T. Hamer. 1,649,686; Nov. 15.
Carpenter's tote case. H. L. Kennedy. 1,647,735; Nov. 1.
Carpet. A. Finlay. Des. 73,664; Oct. 18.
Carpet. A. Finlay. Des. 73,664; Oct. 18.
Carpet. A. Finlay. Des. 73,664; Oct. 18.
Carpet. I. J. Vetter. Des. 72,198; Mar. 8.
Carpet and like fastening, Stair. C. E. Rose. 1,645,663; Oct. 18.
Carpet and rug beating apparatus. H. L. Schneider. 1,036,150; July 19.
Carpet cleaner. S. M. Blanch and F. J. Quist. 1,641,063; Aug. 30.
C. M. S. Garpet sweeper, Toy. C. A. Snider. 1,630,605; Jan. 4.
Carpet fasteners, Mechanism for setting. G. A. King. F. E. Warner, and E. H. Tompkins. 1,620,468; Mar. 8.
Carpet sweeper, Toy. C. A. Snider. 1,613,062; Jan. 4.
Carpet fasteners, Mechanism for setting. G. A. King. F. E. Warner, and E. H. Tompkins. 1,620,468; Mar. 8.
Carpet sweeper, Toy. C. A. Snider. 1,613,062; Jan. 4.
Carpet sade of the control of the cont

1.643.262; Sept. 20.
Carriage, gocart, and the like, Baby. F. K. Fischer.
Carrier: See—
Ash carrier.
Bagagge carrier,
Bardding carrier.
Braiding carrier.
Bundle carrier.
Clamp carrier.
Clamp carrier.
Meschandise carrier.
Meschandise carrier.
Meschandise carrier.
Message carrier.
Mining-machine carrier.
Clothing and package Package carrier.

Lumber carrier.
Medicament carrier.
Merchandise carrier.
Message carrier.
Message carrier.
Package carrier.
Pipe carrier.
Portable carrier.
Shawl carrier.

Shawl carrier Sheaf carrier Step plate and luggage car-rier.

carrier. Cone carrier Contact carrier. Creel carrier. Dispatch carrier. Dressing carrier.

Dispatch carrier.
Dressing carrier.
Came cattrier.
Game carrier.
Golf-bag carrier.
Golf-bag carrier.
Hat and parcel carrier.
Lec-can carrier.
Laundry carrier.

Carrier-transmission system. J. S. Jammer. 1,617,393; Carrier-transmission system. M. B. Long. 1.615.988:

Carrier-transmission system. M. B. Long. 1,615,988; Feb. 1.

Carrier-wave-transmission system. J. S. Jammer. 1,617,392; Feb. 15.

Carrousel. A. Pinto. 1,631,331; June 7.

Carrousel. A. Pinto. 1,631,331; June 7.

Carroy-off. A. J. Gardier 1,647,623; Nov. 1.

Carry-off. C. J. Gurtheerlet. 1,640,768; Aug. 30.

Carrying bag. M. A. Myers. Des. 73,919; Oct. 11.

Carrying boards. Securing cases to. D. E. Rose, K. G.

Pulliam, Ir., and H. E. Hossfeld. 1,638,216; Aug. 9.

Carrying case. J. N. St. Lawrence, 1,638,216; Aug. 9.

Carrying case. J. N. St. Lawrence, 1,638,216; Aug. 9.

Carrying case. J. N. St. Lawrence, 1,638,216; Aug. 9.

Carrying case. J. N. St. Lawrence, 1,638,216; Aug. 9.

Cart. P. Mosier. 1,649,176; Nov. 15.

Cart. Cothes-basket. E. A. Hagberg. 1,642,731; Sept. 20.

Cart. Corter councing and distributing. W. P. Star
Cart. Service. N. L. and F. J. Jarvis. 1,649,065;

Nov. 15.

Cart structure. R. Littlefield. 1,617,644; Feb. 15.

Nov. 15.
Cart structure. R. Littlefield. 1,617,644; Feb. 15.
Carton. A. E. Keppler. 1,653,914; Dec. 27.
Carton. R. B. Meller. 1,643,845; Jan. 18.
Carton. W. A. Morris. 1,634,947; May 31.
Carton. W. A. Morris. 1,634,947; Dec. 27.
Carton. W. W. Russell. 1,024,971; May 3.
Carton. W. W. Russell. 1,024,971; May 3.

Carton. W. G. Terwilliger and J. Scudder. 1,652,746; Dec. 13.
Carton. G. Urban, jr. 1,620,789; Mar. 15.
Carton. J. Wagner. 1,620,174; Mar. 8.
Carton. I. Wyse. 1,617,472; Feb. 15.
Carton, Advertising and display. A. S. Napier. 1,636,066; July 19.
Carton-blank separator. H. K. Becker and E. G. Jurgens. 1,635,518; Aug. 9.
Carton-blank separator. J. H. Krapf. 1,637,560; Aug. 2.
Carton-blank separator. J. H. Krapf. 1,637,560; Aug. 2.
Carton-blank separator. J. H. Krapf. 1,637,560; Aug. 2.
Carton-dosing and sealing machine. Filled. W. D. Kimball, J. B. Hdeout, and M. McFaull. 1,615,631; Jan. 25.
Carton-closing mechanism. W. S. Weber. 1,641,794; J. Jan. 25.
Carton-closing mechanism. W. S. Weber. 1,641,794; J. J. 1,641,794; J. 1

Cartou-closing mechanism. W. S. Weber. 1,641,794; Sept. 6.

Sept. 6.
Carton conveyers, Compensator for. G. A. Robinson. 1.636,014; July 19.
Larton, Dispensing. R. C. McCrystal. 1.632,412; June 14.
Carton, Dispensing. R. C. McCrystal. 1.632,412; June 14.
Carton, Dispension. B. Even. 1.648,074,7 Mar. 15.
Carton, Display. C. C. Miller. 1.620,673; Mar. 15.
Carton, Display. J. J. Ryan and J. Gaffney. 1,625,687; Apr. 19.
Carton, Egg. E. W. Koeser. 1,653,633; Dec. 27.
Carton, Egg. E. Schinscholl. 1,653,634; June 7,625,687; Apr. 19.
Carton, Egg. C. W. A. Schurmann. 1,634,598; July 5.
Carton-reduling machine. S. R. Howard. 1,688,599; Aug. 9.
A

Carton-feeding machine. S. R. Howard. 1,638,399; Aug. 9, Carton-feeding machine. J. M. and J. Schnur, F. Kessering, and S. Joniscik. 1,625,057; Apr. 19. Carton-feeding mechanism for carton folding and filling machines. R. A. Jones. 1,624,746; Apr. 12. Carton, Foldable cellular. C. H. Goodyear. 1,636,508; July 19.

July 19. Carton-handling apparatus. M. McFaull and A. E. Ride-out. 1,634,078; June 28. Carton, Mailing. E. W. Winters. 1,625,756; Apr. 19. Carton, Packing or shipping. F. D. Pitt. 1,636,071;

1.634.933; July 5
Cartridge-roloading machine. E. P. Spencer. 1,642,344;
Sept. 13.
Cartridge, Safety blasting. P. T. McLaughlin and W. Anderson. 1,642,341; Sept. 13.
Cartridge, Shot. E. M. Sweeley. 1,613,148; Jan. 4.
Cartridge, Sporting. C. des Allimes. 1,624,649; Apr. 12.
Cartridge, Sprimer for. O. C. Horney. 1,619,867; Mar. 8.
Carving machine, Wood-. D. B. Salstrom. 1,644,952;
Oct. 11.
Case: Sec—
Auto key case.
Packing case.

Auto key case.
Battery case.
Biscuit-display case.
Box, cigarette, and like case. Brief case. Cardcase. Carpenter's tote case.
Carrying case.
Cigarette case.
Coffin case. Containing case. Dental case.

Dental case.
Display and vanity case.
Display case.
Fiting case.
Flashlight case.
Hypodermic case.
Identification-card case. Key case.
Map case.
Mattress case.

Packing case. Pencil case. Propeller case. Racket case Razor case. Refrigerator show case. Sample case. Shipping case. Show case, Slug case, Sorting case, Spectacle case, Spectacle or eyeglass case. Tag case. Thermometer case. Ticket case. Tobacco case. Transmission case.

Vending and display case. Violin case. Violin case. Watchcase. Waterproof case.

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Case. M. J. Greubel. 1,631,871; June 7.
Case. W. Watt, jr. 1,620,417; Mar. 8.
Case and razor holder, Combined. J. Kaufman.
1,632,840; June 21.
Case and rable, Combined. J. I. Smith. 1,614,261;
Case for inches and case of the combined. J. I. Smith. 1,614,261;
Case for smokers' requisites, Articulated, W. C. Hiering.
1,632,335; June 14.
Case for stamps in roll form. E. M. Bolton. 1,617,791;
Feb. 15.
Case for stamps in roll form. E. M. Bolton. 2,617,791;
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Case for stamps in roll form. E. M. Bolton. 2,617,791;
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Case for stamps in roll form. E. M. Bolton. 2,617,791;
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Case for stamps in roll form. E. M. Bolton. 2,617,791;
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Case for stamps in roll form. E. M. Bolton. 2,617,791;
Feb. 15.
Case for stamps in roll form. E. M. Bolton. 2
                     Cree 1.3:

Cree 1.4:

       Case-shift mechanism. J. F. Koca. 1,640,127; Aug. 23. Casing and dial, Combined. H. Schlaich. Des. 73,870; Casing and frame for a washing machine, Combined. T. W. Behan. Des. 73,895; Dec. 6.
Casing and making the same. C. B. Alexander. 1,631,611; June 7.
Casing, Collapshile. W. J. Beasley. 1,648,890; Nov. 15.
Casing, Collapshile. W. J. Beasley. 1,648,890; Nov. 15.
Casing cover and tool holder. F. W. Sadler. 1,625,774; Apr. 19.
Casing cutter. M. Clayboole and A. J. Eshenbaugh. 1,645,672; Cert. 1,645,709; Sept. 27.
Casing cutter. G. D. Tawcett. 1,643,709; Sept. 27.
Casing elevator. G. Krell, Reife,771; Oct. 11.
Casing for a cloth-measuring machine. F. J. Tillman. Des. 73,987; Nov. 29.
Casing for a weight-printing machine. V. F. Slezak.
Casing for a weight-printing machine. V. F. Slezak.
Casing for cincontrolled apparatus. J. G. Wynn. 1,626,999; May 3.
Casing for timepieces, Celluloid. J. S. Wilcox. 1,616,999; Feb. 8.
1.626.999; May 3.
Casing for timepleces, Celluloid. J. S. Wilcox. 1,616,999; Feb. 8.
Casing from wells, Device for recovering. M. M. Kinley.
Casing from wells, Device for recovering. M. M. Kinley.
Casing head. Oct. 11.
Casing, 12.
Casing head. J. E. Hitchcock. 1,620,888; Mar. 15.
Casing head. J. L. Mitchcock. 1,620,888; Mar. 15.
Casing head. J. L. M. Pearce and J. O. McPherson.
1,642,749; Sept. 20.
Casing head. L. M. Pearce and J. O. McPherson.
1,642,749; Sept. 20.
Casing head. L. M. Pearce and J. O. McPherson.
1,642,749; Sept. 20.
Casing head. M. L. Sweeney. 1,629,749; May 24.
Casing head. M. L. Sweeney. 1,629,749; May 24.
Casing head, Old Sept. 1,620,839; Nov. 8.
Casing head, Old Sept. 16.
Casing pulse. J. M. T. Archer. 1,648,039; Nov. 8.
Casing pulser. W. N. More. 1,621,947; Mar. 22.
Casing pulser. W. N. More. 1,621,947; Mar. 22.
Casing pulser. W. M. More. 1,621,947; Mar. 22.
Casing pulser. W. More. 1,621,947; Mar. 22.
Casing pulser. M. More. 1,621,947; Mar. 22.
Casing spiler. G. A. Montgometry. 1,623,885; Apr. 5.
Casing spiler. G. A. Montgometry. 1,623,885; Apr. 5.
Casing spiler. G. A. Montgometry. 1,623,885; Apr. 5.
Casing spiler. Safety. J. S. Taylor. 1,650,101; Nov. 22.
Casing spiler. G. A. Montgometry. 1,623,885; Apr. 5.
Casing these in bore holes, wells. or the like, Sealing of fixing of. A. R. Neelands. 1,649,846; Nov. 22.
Casing vand. R. Neelands. 1,649,846; Nov. 22.
Cases. Article-containing. N. Kasdan and D. Pollack.
1,634,285; Apr. 1,288; Apr. 12.
Cases. Archie-containing. N. Kasdan and D. Pollack.
1,638,255; June 21.
Cases. Archie-containing. N. Kasdan and D. Pollack.
1,638,255; June 21.
Cases. Archie-containing. N. Kasdan and D. Pollack.
1,638,255; June 21.
Cases. Archie-containing. N. Kasdan and D. Pollack.
1,638,255; June 21.
Cases. Archie-containing. N. Kasdan and D. Pollack.
1,641,483; Sept. 6.
Cases. Archie-containing. N. Kasdan and D. Pollack.
1,641,483; Sept. 6.
Cases. Archie-containing. N. Kasdan and D. Pollack.
1,641,483; Sept. 6.
Cases. Archie-containing. N. Kasdan and D. Pollack.
1,64
       Feb. 15.

Casement-window adjuster. C. E. Spencer and O. W. Roberts. 1,641,649; Sept. 6.

Cash drawer, Antographic-register. W. R. Barker and L. Jensen. 1,631,395; June 7.

Cash drawer, Automatic mechanically-controlled power-driven. F. Howell. 1,654,045; Dec. 27.

Cash register. W. W. Bowman. 1,652,087; Dec. 6.

Cash register. E. Braid. 1,648,980; Nov. 15.

Cash register. E. Breitling. 1,649,443; Nov. 15.

Cash register. E. Breitling. 1,649,443; Nov. 15.

Cash register. R. A. Christian and E. Gates. 1,652,091; Dec. 6.
              Cash register, F. L. Fuller, 1,623,722; Apr. 5.
Cash register, F. L. Fuller, 1,623,722; Apr. 5.
Cash register, F. L. Fuller and W. H. Robertson, 1,619,664; Mar. 1.
Cash register, M. Jacob, 1,649,408; Nov. 15.
Cash register, J. J. Klosterman, 1,622,799; Mar. 29.
Cash register, W. H. Robertson, 1,627,119; May 24.
Cash register, W. H. Robertson, 1,627,119; May 3.
Cash register, W. H. Robertson, 1,627,139; May 24.
Cash register, W. H. Robertson, 1,628,537; May 24.
Cash register, B. M. Shipley, 1,619,736; Mar. 1.
Cash register, B. M. Shipley, 1,619,736; Mar. 1.
Cash register, B. M. Shipley, 1,623,3042; June 21.
Cash register, B. M. Shipley, 1,633,042; June 21.
Cash register, B. M. Shipley, 1,643,042; June 21.
Cash register, B. M. Shipley, 1,643,042; June 21.
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Cash register. B. M. Shipley. 1,651,477; Dec. 6.
Cash register. B. M. Shipley. 1,652,057; Dec. 6.
Cash register. A. L. Valpey. 1,616,520; Feb. 8.
Cash register. E. J. Von Pein. 1,630,814; May 31.
Cash register. E. J. Von Pein. 1,630,814; May 31.
Cash register. E. J. Von Pein. 1,630,814; May 31.
Cash register and adding machine, Combined. W. L.
Paden. 1,628,420; May 10.
Cash registers, Automatic ribbon-reversing mechanism
Acashier's Dec. Lippert. 1,628,164; May 16.
Cashier's robbery protector. H. Hagestedt. 1,623,674;
Casket. E. J. Greive. 1,620,544; May 6.
Casket. B. M. Shipley. Apr. 5.

Caslet. E. J. Greive. 1,629,544; Mar. 8.

Caslet. A. H. Niemever. 1,637,271; July 26.

Casket. A. H. Niemever. 1,637,271; July 26.

Casket, Burial. V. J. Fleeman. 1,622,777; Mar. 29.

Casket, Burial. V. J. Fleeman. 1,622,777; Mar. 29.

Casket, Burial. C. Massey. 1,636,237; July 19.

Casket, Burial. Z. Maulsby. Des. 72,523; Apr. 26.

Casket, Burial. J. N. McConnell. 1,648,492; Nov. 8.

Casket, Burial. J. N. McConnell. 1,648,492; Nov. 8.

Casket Jowering device. V. Phenix. 1,641,990; Sept. 13.

Casket-lowering device. V. Phenix. 1,641,990; Sept. 13.

Casket skid, and dolly, Combined. W. A. Hall. 1,639,035;

Aug. 16.

Casket sand the like, Pedestal or support for. G. H.

Caskets and the like, Pedestal or support for. G. H.

Caskets, Bastening or scaling. Casteria and delly, Commined. W. A. Hall. 1,639/0357, Casteria and the like. Pedestal or support for. G. H. Wolfram. 1,614,909; Jan. 18.

Caskets, Fastening or sealing device for burial. I. I. Imman. 1,640,410; Aug. 30.

Casserole. G. R. Ahrendus. Des. 73,220; Aug. 9.

Casserole. S. Brunt. Des. 73,061; July 19.

Casserole. J. Burian. Des. 74,138; Dec. 27.

Casserole cover. H. Lerner and A. Ginsburg. Des. 72,439; Apr. 12.

73,091; July 19.

Casserole holder. S. W. Farber. Des. 72,703-4; May 24.

Casserole of holder. S. W. Farber. Des. 72,703-4; May 24.

Casserole or similar article. G. R. Ahrendus. Des. 73,465; Sept. 20. Cast iron, Manufacturing malleable. M. Kubo. 1,634,586; Sept. 20.

Sept. 20.

Cast iron, Manufacturing malleable. M. Kubo. 1,634,586;
July 5.

Cast pipe. Centrifugally. D. T. Beatty. 1,614,863;
Cast pipe.

Caster. W. F. Herold. 1,620,657-6; Mar. 15.
Caster. W. F. Herold. 1,620,657-6; Mar. 15.
Caster. W. F. Herold. 1,649,526-9; Nov. 15.
Caster. W. F. Herold. 1,649,526-9; Nov. 15.
Caster. W. G. Johnson. Des. 73,844-45; Nov. 15.
Caster. G. J. Kalberer. 1,622,447; Mar. 29.
Caster. G. J. Kalberer. 1,622,447; Mar. 29.
Caster. B. Schultz. 1,634,631; July 5.
Caster. C. J. Kalberer. 1,624,521; July 19.
Caster. A. H. Hedem. 1,645,831; Oct. 18.
Caster. Caster. Castering and reclaiming device. R. S. Kirkpatrick. 1,625,213; Apr. 19.
Caster contains and releasing device. O. B. Woodrow. 1,613,004; Jan. 4.
Caster mechanism. M. E. Roe. 1,634,558; July 19.
Caster mechanism. M. E. Roe. 1,636,514; May 31.
C. 1614,894; July 19.
Caster mechanism. M. H. Roelett. 1,626,614; May 31.
Caster mechanism. M. W. Hazlett. 1,626,819; May 3. Caster mounting. M. F. Bayer. 1,630,514; May 31.
Caster mounting. J. C. Nelson and P. E. Gelbof.
1.614,894; Jan. 18.
Caster, Retracting. M. W. Hazlett. 1,626,819; May 3.
Caster, Sanitary. R. W. Denslow. 1,641,127; Aug. 30.
Caster, Side, and the like. W. F. Herold. 1,649,525;
Caster, Swlvel. C. W. Brostedt. 1,649,946; Nov. 22.
Caster wheel. E. Schultz. 1,739,860; Aug. 23.
Caster wheel. E. Schultz. 1,739,860; Aug. 23.
Caster wheel. G. W. Tanner. 1,619,599; Mar. 1.
Caster with brake and lock, Swlvel. W. R. Darnell.
1,632,435; June 14.
Casting. N. M. Austin. 1,648,471; Nov. 8.
Casting. C. Yuughan. 1,645,730; Oct. 18.
Casting. Capparatus. Centrifugal. J. Merle. 1,651,288;
Casting. Caparatus. Centrifugal. J. Reichold. 1,634,914; Casting apparatus, Centrifugal. L. Reichold. 1,634,914; July 5. Casting apparatus, Ingot. A. Forrest. 1,612,862; Jan 4. Casting apparatus, Metal. C. L. Lee and T. C. Van Degriff. 1,634,152; June 28. Casting appliance, Centrifugal. L. W. Ayers. 1,639,253; Aug. 16. Aug. 16.
Caster, Centrifugal. C. P. Wetmore. 1,630,043; May 24.
Casting, Combined stop lug and center filler. J. P. Will
limms. 1,630,407; Nov. 22.
Casting device for segmental plates. H. A. W. Wood.
1,623,991; Apr. 12.
Casting having chromium alloy surface. C. B. Jacobs.
1,632,704; June 14.
Casting machine. W. J. Christie. 1,631,399; June 7.
Casting machine. W. E. Clow. 1616,112; Feb. 1.
Casting machine. W. E. Clow. 1616,506; Jun. 25.
Casting machine. J. G. Koegle. 1,627,098; May 3.
Casting machine. Blank. R. T. McGee. 1,648,415; Nov.
Casting machine, Centrifugal. L. T. Knocke. 1,615,877; Feb. 1. Casting machine, Centrifugal. L. I. Yoemans. 1,643,265; Sept. 20.
Casting machine, Continuous centrifugal. L. T. Knocke. 1,634,150; June 28.
Casting machines, Assembling mechanism for. E. Carlson. 1,617,577; Feb. 15.

Casting machines, Metal-pouring apparatus for centrif-ugal. J. B. Hurst and B. B. Ball. 1,626,342; Apr. 26. Casting machines, Fipe mold for centrifugal. C. E. Wilder. 1,622,146; Apr. 5. Wilder. 1,622,146; Apr. 5. Wilder. 1,622,146; Apr. 5. Wilder. 1,622,146; Apr. 5. Of centrifugal. M. A. Mikesh. 1,643,253; Sept. 20. Casting metal under pressure, Automatic machine for. O. Eckert. 1,644,054; Oct. 4. Casting metals, Mold for. W. H. Smith. 1,621,472; Mar. 15. Casting method and apparatus. F. S. Youtsey. 1,634,482;

Casting method and apparatus. F. S. Youtsey. 1,634,482; July 5.
Casting mold. E. Boyle. 1,640,107; Aug. 23.
Casting mold. C. D. Pettis. Re16,727; Aug. 30.
Casting mold. C. D. Pettis. Re16,727; Aug. 30.
Casting molds. Making. A. Beck. 1,614,820; Jan. 18.
Casting of hollow bodies, Apparatus for the centrifugal. H. Burchartz. 1,648,442; Nov. 8.
Casting or couting system, Centrifugal. A. W. Gray. 1,636,228; July 19.
Casting patterns, Machine for operating upon. E. E.
Casting the formaking. C. H. Pape. 1,614,315; Jan. 11.
Casting the formaking. C. H. Pape. 1,614,315; Jan. 11.
Casting the formaking. The formaking. F. C. Granade.
1,614,360; Jan. 11.
Castings from molds or fasks, Method and apparatus for freeing centrifugally-cast. W. D. Moore. 1,624,364; Apr. 12.
Castings, Making metal. W. D. Moore. 1,614,846;

astings, Making metal. W. D. Moore. Jan. 18. 1.614.846:

Castings. Making metal. W. D. Moore. 1,614,846; Jan. 18.
Castings such as ingo molds, Finishing. R. G. Coates.
Castellatin July 130
Catalyst carrier, Production of. C. R. Downs. 1,636,685; July 26.
Catalyst for ammonia synthesis. L. H. Greathouse. 1,618,004; Feb. 15.
Catalyst for ammonia synthesis. L. H. Greathouse. 1,618,004; Feb. 15.
Catalyst apparatus. F. H. Bramwell. 1,618,265; Feb. 22.
Catalyst apparatus. F. H. Bramwell. 1,618,265; Feb. 22.
Catalyst cartying on. F. A. Canon and C. E.
Catalyst caectons, Carrying on. J. M. Sciden. 1,643,317; Nov. 1.
Catalystic reactions, Carrying on. J. M. Sciden. 1,643,517; Nov. 1.
Catamenial bandge. A. B. J. Kelly, 1,653,857; Dec. 27.
Catamenial sack and womb support. W. S. Peloubet. 1,634,555; July 5.
Catch. J. Buffington. 1,623,302; Apr. 5.
Catenary suspension system. J. Holzel. 1,653,855; Dec. 27.
Cathedral glass. G. L. Pilkington. Des. 72,029;

glass. G. L. Pilkington. Des. 72,029;

Feb. 15.
Cathera: E. Kallmeyer. 1,926,839: May 3.
Cathera: E. Kallmeyer. 1,926,839: May 3.
Cathera: E. Kallmeyer. 1,926,839: May 3.
Holborn. 1,525,776; Apr. 19.
Cathode devices. Protective system for hot. R. L. Davis. 1,649,391; Nov. 15.
Cathode rectifiers. Transformer connection for hot. E. W. Breisch. 1,652,557; Dec. 18.
Cathodes: Manufacture of oxide-coated. W. B. Gero Catoptrie light. H. C. Jensen. 1,629,506; May 24.
Cattle guard. A. J. Shaw. 1,618,555; Feb. 22.
Cattle guard. A. J. Shaw. 1,618,555; Feb. 22.
Cattle guard. A. J. Shaw. 1,634,056; Dec. 27.
Cattle stall, Adjustable. S. L. Hanson. 1,653,275;
Caustic alkall, edge. 1,634,544; Aux. 2.
Caustic alkall, edge. Production of. L. Bradley and E. P. McKeefe. 1,637,514; Aux. 2.
Caustic alkall, solutions, Regenerating. W. H. Allen. 1,647,764; Nov. 1.
Caustic fusions, Effecting. D. G. Rogers. 1,644,493; Oct. 4.

Caustle Oct. 4.

Caviar, Making. D. H. Smith. 1,623,601; Apr. 5. Cavings, Device for preventing. J. W. McCulloch and R. E. Francis. 1,645,766; Oct. 18. Celling and floor pipe plate. M. H. Paine. 1,651,624; Dec. 6.

Dec. 6.
Celling bands. Adjustable yoke for. W. A. Spott.
1.617,184; Feb. 8.
Celling connecter device. R. B. Benjamin. 1,646,808;
Oct. 25.
Celling furring, Supporting. G. F. Pawling. 1,625,866;
Apr. 26.

Apr. 26.

Celling light, M. Klein. Des. 72,852-3; June 14.

Cell and making the same, Frimary. M. L. Martus and E. H. Becker. 1,644,389; Oct. 4,839,983; Apr. 23.

Cell. Primary. M. L. Martus and E. II. Becker. 1,644,344; Oct. 4.

Cell transmitter, Multiple light. C. F. Jenkins. 1,641,641; Sept. 6.

Cell 1,641,633; Sept. 6.

Cell 1,641,631; Reh. 1,641,601; Sept. 6.

Cell 1,641,631; Aking. H. S. Asbenhurst. 1,618,639; Jan. 11. Ccks, Making. H. S. Asbenhurst. 1,618,639; Jan. 11.

Cellular I

Cellulose acetate and making the same. R. Baybutt and E. S. Farrow, jr. 1,635,026; July 5. Cellulose acetate, Bleaching. R. Baybutt and E. S. Farrow, jr. 1,623,519; Apr. 5. Cellulose-acetate composition. S. J. Carroll. 1,641,411-2; Sept. 6. Cellulose-acetate composition of low inflammability. S. J. Cellulose-acetate composition of low inflammability. S. J.

Sept. 6.

Cellulose-acetate composition of low inflammability. S. J. Carroll. 1,631,468; June 7.

Carroll. 1,631,468; June 7.

Carroll. 1,641,413; Sept. 6.

Cellulose acetate, Manufacture of. L. A. Levy. 1,652,024; Dec. 6.

Cellulose acetate, Manufacture of. H. J. Mallabar. 1,622,573; Dec. 13.

Cellulose acetate, Treating. E. S. Farrow, Jr. 1,634,986; July 5.

Cellulose and rubber, Combining. S. A. Ogden. 1,617,495; Feb. 13.

Cellulose composition. W. G. Lindsay. 1,620,977; Mar. 15.

Cellulose composition. W. G. Lindsay. 1,630,752; May 31. Cellulose composition and process. W. G. Lindsay. 1,616,910; Feb. 8. Cellulose compound and making same. L. Lillenfeld. 1,642,587; Sept. 13. Cellulose-containing materials. Altering viscosity of. Cl. F. Bassett. 1,620,938; Mar. 15. Cellulose-containing materials. Altering viscosity of. Cl. F. Bassett. 1,620,938; Mar. 15. Cellulose-centrology. Treatment of. G. H. Ellis. 1,641,965; Sept. 13. Cellulose-ester composition. J. G. Davidson. 1,617,237; Feb. 8. Cellulose-ester composition. G. L. Schwartz. 1,633,683; June 28.

Cellulose-ester composition. G. L. Schwartz. A, 100, 100-11. June 28. Cellulose ester composition, Actinism-proof. J. H. Clewell, fr. 1,647,435; Nov. 1. Cellulose ester compositions, and the composition for Cellulose ester compositions, det. J. E. Hirsh and A. D. Robson. 1,621,769; Mar. 22. Cellulose esters, Manufacturing. P. Berthon. 1,651,990;

polishing surfaces composed of. J. E. Hirsh and A. D. Robson. 1,621,780; Mar. 22.
Cellulose esters, Manufacturing. P. Berthon. 1,651,990; Cellulose esters, Solution of. J. G. Davidson. 1,644,417-20; Oct. 4.
Cellulose esters, Solution of. J. G. Davidson. 1,644,417-20; Oct. 4.
Cellulose thers, Reducing the viscosity characteristics of. P. C. Seel. 1,635,013; July 5.
Cellulose fabric, Cross-dyeing. J. C. Watson. 1,629,769; May 24.
Cellulose, Fermentation of. H. Langwell. 1,639,571; Aug. 16.
Cellulose, Fermentation of. H. Langwell. 1,639,571; Aug. 16.
Cellulose, Fermentation of. H. Langwell. 1,639,571; Aug. 16.
Cellulose fabr. Manufacture of high sliphaRichten and M. O. Schur. 1,643,336; Sept. 27.
Cellulose from the bagasse of sugar cane, Extracting the pure. E. C. H. Valet. 1,630,147; May 24.
Cellulose from the bagasse of sugar cane, Extracting the pure. E. C. H. Valet. 1,630,147; May 24.
Cellulose, Making soluble mixed low and high fatty-acid esters of. P. Berthon. 1,631,991; Dec. 6.
Cellulose, Manufacture of granular. R. Magondeaux. 1,623,549; May 10.
Cellulose, Manufacture of granular. R. Magondeaux. 1,623,549; May 10.
Cellulose product and making same. H. H. Clark. 1,630,343; Jan. 26.
Cellulose product and making same. H. H. Clark. 1,635,343; Jan. 26.
Cellulose product and making same. H. H. Clark. 1,635,343; Jan. 26.
Cellulose material, Bleaching. G. A. Richter and M. O. Schur. 1,639,704; Aug. 23.
Cement and apparatus therefor, Manufacture of fused.
Cement and dime burning. G. E. Heyl. 1,625,583; Apr. 26.
Cement and dime burning. G. E. Heyl. 1,625,583; Apr. 26.
Cement and dime burning. G. E. Heyl. 1,625,583; Apr. 26.
Cement and distribute of product and paratuse for handling. W. H. Drath. 1,634,255; July 5.
Cement and distribute of product and paratuse of hydraulic. D. Ger. Apr. 26.

handling. W. H. Drath. 1,004,2007, 3uny occupied.

handling. W. H. Drath. 1,004,2007, 3uny occupied.

Apr. 26.

Cement and lime burning. G. B. Heyl. 1,625,853;

Apr. 26.

Cement and the like, Manufacture of hydraulic. O. Gerlach. 1,627,170; May 3.

Cement block. C. A. Johnson. Des. 71,798; Jan. 4.

Cement block. C. A. Johnson. Des. 71,798; Jan. 4.

Cement block. C. A. Johnson. Des. 71,798; Jan. 4.

Cement block. C. A. Covey. 1,647,436; Nov. 4.

Cement composition. C. B. Kraus. 1,629,714; May 24.

Cument composition. R. S. Lindstrom. 1,633,790; Dement compositions. and preparation. A. M. Nicolson. 1,636,830; July 26.

Cement compositions, Material for use in. R. J. Wig. Reid. 732; Sept. 6.

R. Cament compositions, Material for use in. R. J. Wig. Reid. 732; Sept. 6.

Cement hardener and waterproofing to the main body and face of a concrete brick. Applying. C. S. Wert. 1,641,874; Sept. 6.

Cement hin-freder. R. W. Ryder. 1,628,197; May 10.

Cement-lined pipe, Method of and apparatus for making. 1,629,212; May 10.

Cement, Making. L. Kern. 1,623,876; Apr. 5.

Gement raw materials in rotary kilns. Treatment of. M. Vogel-Jorgensen. 1,627,585; May 10.
Cennent tile, Aggregate. G. N. Jeppson. 1,619,733; Mar. I. Treating wet raw materials in the manufacture Cement. Waterproof. H. V. Welch. 1,644,4964; Oct. 11.
Cennent. Waterproof. H. V. Welch. 1,644,4964; Oct. 11.
Cennenting apparatus. G. J. Gorsuch. 1,634,496; July 5.
Cementing apparatus. G. J. Gorsuch. 1,634,496; July 5.
Cementing bailer. S. D. Coates, P. H. Davis, and A. B. Jenks. 1,621,970; Mar. 22.
L. Galler, C. C. Cementing baed. H. A. and C. F. Davis. 1,629,022; May 17.
Cementing material. J. T. Griffin. 1,632,404; June 14.
Cementing material, J. T. Griffin. 1,632,404; June 14.
Cementing will. F. W. Huber. 1,647,033; Oct. 25.
Cementitious material, Apparatus for modding. J. P. Mc-Knight, 1,625,486; Apr. 19.
Cementitious material, Manufacturing. H. S. Spackman. 1,643,136; Sept. 20.
Cementitious material, Machine for mixing. D. W. Pve. commentitions material, Plastic. H. E. Brookey.

May 19.
Cementitions materials, Machine for mixing. D. W. Pye.
1,613,846; Jan. 11.
Cementitions mixture, Apparatus for effecting a continuous preparation and delivery of a. O. E. Bornhauser and J. E. Herman. 1,645,518; Gct. 18.
1,640,393; Aug. 30.
Centering device. F. L. Alben. 1,645,271; Oct. 11.
Centering machine. C. Schramm. 1,622,678; Mar. 29.
Centerpiece and flower block, Combined. W. H. Magee.
Des. 73,411; Sept. 6.
Centerpiece, Table. E. Magnussen. Des. 73,093;
July 19. Des. 73,411 Sept. 6.
Centerpiece, Table. E. Magnussen. Des. 78,093;
July 19.
Centrifugal apparatus. J. M. Schutz. 1,612,837; Jan. 4.
Centrifugal apparatus. J. M. Schutz. 1,639,538; Aug. 10.
Centrifugal apparatus and process for continuously separating liquids from solids. H. C. Behr. 1,642,662;
Sept. 13.
Centrifugal contact apparatus. P. M. Kuehn. 1,634,199;
June 28. June 28.

Centrifugal drier. G. H. Elmore. 1,634,868; July 5.

Centrifugal drums, Apparatus for lifting out and cleaning. K. J. Svensson and K. A. P. Norling. 1,635,233; July 12. July 12. Centrifugal extractor. T. A. Bryson and F. I. Williams. 1,640,978; Aug. 30. Centrifugal extractor. E. J. Carroll. 1,652,760; Dec. 13. Centrifugal fan separator. W. M. Barker. 1,616,566; Feb. 8. Feb. 8. Centrifugal fixture. C. G. Hawley. 1,612,815; Jan. 4. Centrifugal fixture, C. G. Hawley. 1,639,562; Aug. 16. Centrifugal machine. W. C. Coleman. 1,637,552; Aug. 2. Centrifugal machine.

Aug. 2.

Centrifugal machine.

L. D. Jones and A. U. Ayres.

Centrifugal machine.

C. D. Jones and A. U. Ayres.

Centrifugal machine.

C. D. Jones and A. U. Ayres.

Centrifugal machine.

C. A. Olcott. 1,652,968; Dec. 13.

Centrifugal machine.

C. T. Ordway. 1,620,568; May. 10.

Centrifugal machine.

C. T. Ordway. 1,620,568; May. 10.

Centrifugal machine and process involving the use of the same.

L. D. Jones and A. U. Ayres. Reif,640;

Centrifugal machine and process involving the use of the same.

L. D. Jones and A. U. Ayres. Reif,640;

Centrifugal machine and process involving the use of the same.

L. D. Jones and A. U. Ayres. 1,634,245-6;

June 28.

Centrifugal machines, Brake-actuating mechanism for.

W. Colclough. 1,634,651; July 5.

Centrifugal machines, Safety guard for. T. A. Bryson.

Centrifugal machines, Safety guard for.

Centrifugal machines, Safety switch for. L. C. Schenck.

1,633,039; June 21.

Centrifugal regulator.

L. A. Dolgnon. 1,635,314;

July 12. 1.633,039
Centrifugal
July 12.
Centrifugal
Centrifugal
Centrifugal
1.613,579
Centrifugal
Centrifugal separator. B. C. Carter. 1,619,652; Mar. 1. separator. R. Gamper. 1,614,357; Jan. 11, separator. J. W. Hinchley and C. S. Watson.; Jan. 4. L. D. Jones. 1,634,244; June 28. G. ter Meer. 1,651,421; Dec. 6. V. E. Metcalfe. 1,630,201; Centrifugal
May 24.
Centrifugal
Apr. 26.
Centrifugal separator. separator. T. C. Thomsen 1.625,919; spreader, W. Z. Pulliam. 1,644,031; Oct. switch. V. E. Johansen. 1,651,708; Dec. switch. B. Robinson. 1,647,374; Nov.

Centrifugal treatment of substances, Method and mechanism for. L. D. Jones. 1,634,243; June 28. Centrifuge, Analytical. T. Svedberg and J. B. Nichols. 1,648,369; Nov. 8. Centrifuge effluents, Method and mechanism for removing. L. D. Jones. 1,634,242; June 28. Ceramic and making the same. L. B. Bernheim. 1,654,401; Dec. 27. Ceramic and other products, Firing. C. T. Holcroft and C. E. Doll. 1,620,022; Mar. 8. Ceramic articles and producing them. A. F. Gorton. Ceramic articles, Making laminated. G. N. Jeppson and M. F. Beecher. 1,614,926; Jan. 18. Ceramic insulating material. H. H. Sortwell. 1,633,462; June 21. Ceramic insulating material. H. H. Sortwell. 1,633,462; June 21. Ceramic material. J. A. Jeffery and E. T. Montgomery. 1,631,730; June 7. Ceramic members, Making. F. C. Simms. 1,632,319; June 14. Ceramic process and product. T. C. and W. O. Prouty. 1,628,910; May 17.
Ceramic process and product. T. C. and W. O. Prouty. 1,628,910; May 17.
Ceramic products, Firing. W. L. Hanley, jr. 1,636,417; July 19.
Ceramic products, Firing. Plant for manufacturing. W. L. Ceramic products. Plant for manufacturing. W. L. Ceramic products. Production of. W. Vershofen. 1,628,522; May 19.
Ceramic and the like, Apparatus and process for burning. H. Koppers. 1,631,536; June 7.
Ceramic products. Production of. W. Vershofen. 1,628,522; May 19.
Ceramics and the like, Apparatus and process for burning. H. Koppers. 1,631,636; June 7.
Cereal beverage compounds. L. A. Negly and P. S. Black.
Cersal beverage compounds. Preparing. L. A. Negly and P. S. Black. 1,631,330; June 7.
Cereal cleaner and separator. C. A. Shultz. 1,632,293; June 21.
Cereal food product. F. Matzella. 1,642,507; Sept. 27.
Cereal severage of the S. Steinmetz. 1,637,091; Juny 26.
C. W. Chitty. 1,636,569; July 19.
Cerealius and drying of grain moistened for this purpose, Removal of the. S. Steinmetz. 1,637,091; July 26.
Certificate container. S. K. Wood. 1,654,228; Dec. 27.
Cerificate container. S. K. Wood. 1,654,228; Dec. 27.
Chain. F. W. Emrick. 1,652,3172; Apr. 5.
Chain. F. W. Emrick. 1,652,323; Dec. 13.
Chain. W. Kuehner. 1,626,416; Apr. 26.
Chain. H. V. Shirley, 1,620,613; Mar. 22.
Chain. H. V. Shirley, 1,620,613; Mar. 2.
Chain. H. V. Shirley, 1,620,613; Mar. 8.
Chain. All Miss. Steet conveyer. G. L. Morebead and F. S. O'Neil. 1,638,207; Aug. 9.
Chain. All Miss. Steet conveyer. Morse. 1,648,911; Nov. 15. Chain-adjusting device. F. L. Morse, 1.651.831: Chain anchoring member for vehicle wheels, Cross-, J. D. Collins. 1,647,784; Nov. 1.

Chain and part therefor. F. Müller. 1,649,845; Nov. 2.2.

Chain, Antiskid. C. F. Fisher. 1,627,025; May 3.

Chain, Antiskid. cross. W. J. Boyer. 1,651,493; Dec. 6.

Chain, Dracelet. Or Chile. Des. 71,539; Jan. 11.

Chain, Dracelet. Or the like, Fixible. R. S. Grant. 1,635,269; July 12.

Chain connector. V. B. Provost. 1,650,652; Nov. 29.

Chain, Conveyer. F. L. Furbush. 1,614,736; Jan. 18.

Chain, Conveyer. F. L. Furbush. 2,111,143,143.

Chain, Conveyer. E. P. Webster. 1,621,859; Mar. 22.

Chain, Conveyer. E. P. Webster. 1,621,859; Mar. 22.

Chain coupling. C. C. Haumerson. 1,627,776; May 10.

Chain coupling. C. C. Haumerson. 1,627,776; May 10.

Chain coupling. And tightener. L. Travis. 1,634,698;

July 5. Chain, Conveyer. E. F. Webster. 1,627,7859; Mar. 22.
Chain coupling. C. C. Haumerson. 1,627,776; May 10.
Chain Coupling and dightener. L. Travis. 1,634,698; 10.
Chain, Cutter. C. E. Davis. 1,644,181; Oct. 4.
Chain, Cutter. F. W. Vodoz. 1,628,016; Apr. 26.
Chain, Drive. F. W. Kottlowski. 1,624,892; Apr. 12.
Chain, Drive. F. W. Morson. 1,631,323; Dec. 7.
Chain, Drive. G. W. Woson. 1,631,323; Dec. 7.
Chain, Drive. G. W. Wilmot and F. H. Blatch. 1,629,755; May 24.
Chain fastener. J. W. Meade. 1,618,341; Feb. 22.
Chain fastener. J. W. Meade. 1,618,341; Jun. 21.
Chain book, Nonskid cross- L. Browne. 1,619,188;
Chain hook, poner and closer, Cross- J. Chenoweth. 1,646,346; Oct. 18.
Chain lack of the property o

Chain-link opening and closing device. F. A. Calkins.
1,622,627; Mar. 29.
Chain link, Sprocket. E. J. Armstrong. 1,653,832;
Chain link, Sprocket. E. J. Armstrong. 1,653,832;
Chain lock and rope or flexible-material misplacement,
Skid. W. A. Whitaker. 1,639,205; Aug. 16.
Chain-making machine. M. Olson. 1,624,663; Apr. 12.
Chain-making machine. J. Wenz. 1,637,758; Aug. 2.
Chain manufacturing machinery. J. II. Hewitt and B.
W. Harcourt. 1,627,972; May 10.
Chain, Mining-machine. F. L. Fulke.
Chain, Nonskid. J. Gaiser. 1,615,752; Jan. 25.
Chain, Nonskid. J. Gaiser. 1,615,752; Jan. 25.
Chain, Porental device. L. W. Jones. 1,647,801; Nov. 1.
Chain-operating device. L. W. Jones. 1,647,801; Nov. 1.
Chain openant. G. W. Goodridge. 1,646,999; Oct. 25.
Chain pendant. W. G. Dunbam. Des. 74,050; Dec. 13.
Chain pipe vise. S. J. Welter. 1,653,326; Dec. 20.
Chain pipe vise. S. J. Welter. 1,653,326; Dec. 20.
Chain, Power-transmission. W. J. Belcher. 1,638,388;
Aug. 9.
Aug. 9.
Aug. 1,448,654. Aug. 9.
Chain, Power-transmission, W. J. Belcher.
Oct. 4. 1,644,656; Oct. 4.
Chain ring, Trap. L. M. Dart and G. G. Harris.
1,634,177; June 28.
Chain-saw link and bushing therefor. S. J. Bens.
1,617,566; Feb. 15.
Chain, Sprocket. J. S. Orr. 1,642,459; Sept. 13.
Chain, Tension fastening for antislip. A. G. Hartung.
1,619,471; Mar. 1.
Chain tightener. R. N. Wilson. 1,628,019; May 10.
1,624,671 app. 30.
Chain-tightening device, Antiskid. E. Crowell. 1,632,664;
June 14. Chân-tightehing device, Antiskid. E. Crowell. 1,632,664; June 14. Chaim track drives. Chain wheel for. V. Jereczek. 1,633,764; June 24. Chaim, Traction. S. S. Kempf. 1,623,014; Mar. 29. Chain, Tractor. H. V. Law. 1,637,777 Aug. 2. Chain-wramping machine. C. B. Tutchison. 1,613,832; Jan. 11. Chain wrench. N. Douglass. 1,626,518; Apr. 26. Chaim wrench. C. J. Rewett. 1,643,825; Sept. 27, Chains, Cleaner device for tenter. C. Roemer. 1,614,395; Chains, Coupling means for. 0, 2. Cannall 1, 232,607. Jan. 11.
Chains, Coupling means for. O. G. Crannell. 1,632,697;
June 14.
Chains, Link joint for. S. J. Bens. 1,634,645; July 5.
Chains, Nonskid device for. R. Scott and G. H. Poulton.
1,650,302; Nov. 22.
Chains or belts, Link for. S. J. Bens. 1,634,644; July 5.
Chair: See—hair. hair: See—
Adjustable chair.
Baby's chair.
Beach chair.
Beach and joist chair.
Collapsible chair.
Convertible chair.
Dental chair. Revolving chair.
Rod chair.
Screed chair.
Support chair.
Swiveling chair.
Theater chair.
Therapeutic chair. Therapeutic chair.
Therapeutic chair.
Tip-up and like chair.
Toilet chair.
Twin chair.
Vibrating chair.
Wheel chair. Easy-chair. Folding chair. High chair. Faiding chair.

High chair.

Nursery chair.

Rail chair.

Rolling chair.

Reclining chair.

Des. 73.275; Aug. 23.

Chair. J. A. Antrobas. Des. 72.495; Aug. 23.

Chair. B. Raughler. Des. 73.249; Aug. 19.

Chair. C. H. De Frein. L650.897; Nov. 29.

Chair. R. G. Erskine. Des. 72.298; July 5.

Chair. R. G. Erskine. Des. 72.298; July 5.

Chair. R. G. Erskine. Des. 72.298; Aug. 23.

Chair. W. H. Gunlocke and G. J. Pike. 1,644,336; Oct. 4.

Chair. D. H. McGeough. 1,647.926; Nov. 1.

Chair. D. W. McLean. Des. 78.351; Sept. 27.

Chair. C. W. Weston. Des. 73.39; Aug. 23.

Chair. C. W. Weston. Des. 73.349; Aug. 23.

Chair. C. W. Weston. Des. 73.349; Aug. 24.

Chair. Aug. 30.

Chair. Aug. 30.

Aug. 30.

Aug. 30.

Aug. 30.

Aug. 30.

Combination. W. O. Seaman. 1.

Chair and scool. Combined. C. Orr. 1,618.220; Feb. 22.

Chair and swing, Collapsible. W. J. Steward. 1,640,380; Aug. 15.

Chair and swing, Collapsible. C. Hawims, 1,621,367; Mar. 15.

Chair and swing, Collapsible. O. Hawims, 1,621,367; Mar. 15.

Chair and swing, Collapsible. O. Hawims, 1,621,367; Mar. 15.

Chair and swing, Collapsible. O. Hawims, 1,621,367; Mar. 15.

Chair and swing, Collapsible. O. Hawims, 1,621,367; Mar. 15.

Chair and chair. A. J. Perron. 1,653,469; Dec. 20.

Chair attachment. A. J. Perron. 7,4085; Dec. 20. Lice, 9, Chair attachment. A. J. Perron. 1,653,469; Dec. 20, Chair black. F. P. Wanner. Des. 74,085; Dec. 13, Chair brace. G. W. Carter. 1,619,402; Mar. 1, Chair for infants, Collapsible. H. W. S. Hoy. 1,621,930; Mar. 22. Chair glides, Making, W. Raeburn, 1,617,294; Feb. 8. Chair headrest, Barber's, J. E. Lasater, 1,639,194; Aug. 16. Chair herbits, Tarbets Aug, 16, Aug, 16, Chair hub. S. M. Bump, 1,043,694; Sept. 27, Chair seat. C. A. Epps. 1,613,317; Jan. 4. Chair support. F. E. Hunter and H. L. Hooper, 1,644,924;

Chair table set. B. S. Livingood. 1,622,327; Mar 29. Chairs and the like, Canopy for. C. A. Blackwood. 1,639,074; Aug. 16. Chairs, Headrest for barber. J. J. Reeder. 1,929,306; May 17. Chairs, Holding device for. T. and E. V. Cote. 1,629,204; May 27. Chairs, Holding device for. T. and E. V. Cote. 1,629,204; May 17.
Chairs or similar articles of furniture, Drawer construction for. B. Blumental. 1,641,249; Sept. 6.
Chairs or stools and the like, Seat frame for. F. H. Head-Rey. 1,641,330; Sept. 6.
Chairs of S Chandeller, Arm 10. a. May 31. Chandeller, Base for. G. E. Villaret. Des. 73,016; May 31.

Chandelier, Base for. G. E. Villaret. Des. 73,016;
July 5.

Chandelier body, Arm for a. J. A. Boebringer. Des.
72,929; June 28.

Chandelier brace. F. Yokel. Des. 73,357; Aug. 23.

Chandelier brace. F. Yokel. Des. 73,357; Aug. 23.

Chandelier brace. F. Yokel. Des. 72,357; Aug. 23.

Chandelier mechanism. F. M. Lee, 21,643,665; Sept. 27.

Chandelier or article of similar nature.

T. J. Petersen.
Des. 72,109; Mar. 1.

Chandelier or article of similar nature.

T. J. Petersen.
Chandelier or article of similar nature.

T. J. Petersen.
Chandelier or article of similar nature.
T. J. Petersen.
Des. 73,196-7; Aug. 2.

Chandelier or article of similar nature.
Des. 73,196-7; Aug. 2.

Chandelier or article of similar nature.
Des. 73,196-7; Aug. 2.

Chandelier or article of similar nature.
Des. 72,081-82; May 17.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 72,120-1; Mar. 1.

Chandelier or article of similar nature.
Des. 73,137; Mar. 1.

Chandelier or article of similar nature.
Des. 73,137; Mar. 1.

Chandelier or article of similar nature.
Des. 73,137; Mar. 1. Chandeller or the like. M. Peinlich. Des. 73,288; Aug. 30.
Chandeller or the like. M. Peinlich. Des. 73,266; Aug. 16.
Chandellers, Medallion for. C. W. Logan. Des. 73,325; Aug. 23,
Changeable seat. S. Bursztyn. 1,618,697; Feb. 22.
Changeable-top table. F. Cacha. 1,649,888; Nov. 15.
Change making and ejecting mechanism. F. Hedley and
J. S. Doyle. 1,629,621; May 24.
Change-making device. F. Kingsley. 1,627,562; May 10.
Change-returning device. L. B. Nordiund. 1,631,326;
June 7.
Channel section, Curved. F. Hornby. 1,614,058; Jan. 18.
Changeling, Plural. R. A. Heising. 1,633,100;
June 21.
Channeling machine. H. A. Ballard. 1,623,225-6;
Apr. 5. Aug. 23. Changeable seat. Channeling machine. H. A. Bullatu. Apizo, Ed. v. Apr. 5.
Channeling machine. E. J. Raverty. 1.647.885; Nov. 1.
Chaplet. C. H. Reeder. 1.648.244; Nov. 8.
Chaplet. C. H. Reeder. 1.648.244; Nov. 8.
Chaplet. C. H. Reeder. 1.648.245; Nov. 8.
Chaplet. G. H. Reeder. 1.648.267.
Nicodemus. 1.621.195; Mar. 15c. O. Ernst and O.
Nicodemus. 1.621.195; Mar. 15c. O. Ernst and C.
Charge-forming device, Auxillary. A. J. Coppock. 1.638.637. Aug. 9. Nicodemus. 1,621,195; Mar. 1o.
Charge-foruming device, Auxiliary. A. J. Coppock.
1.635,567; Aug. 9.
Charging and voltage-regulating system, Automatic. H.
Charding and voltage-regulating system, Automatic. H.
Charding or similar article. I. P. Orlick. Des. 72,070; Feb. 22.
Chart. H. B. Tabor. 1,613,488; Jan. 4.
Chart. F. Wittenberg, ir. 1,639,916; May 31.
Chart-bolding cubinet for oculists. Huminated. J. B.
Chart-bolding cubinet for oculists. Huminated. J. B.
Chart-bolding cubinet for oculists. Huminated. J. B.
Chart, Trail. B. C. Lisk. 1,618,839; Feb. 22.
Chart, Trail. B. C. Lisk. 1,618,839; Feb. 22.
Charsis, Automobile. H. B. Cross. 1,638,292; Aug. 9.
Chassis, Automobile. H. E. Cross. 1,638,292; Aug. 9.
Chassis, Four-wheel rear-drive. M. M. Brockway.
1,650,066; Nov. 22.
1,650,066; Nov. 22.
1,650,069; Nov. 22.
1,640,069; Nov. 22.
1,640,069; Nov. 22.
1,650,069; Nov. 23.
1,645,268; Oct. 18.
Chassis support, Pocumatic. II. B. Stansbury.
1,645,826; Oct. 18.
Check. J. Hullock. 1,621,457; Mar. 15.
Check. J. Hullock. 1,621,457; Mar. 15.
Check. J. Hullock. 1,621,457; Mar. 15.

Chimney cleaner, W. O. Wold. 1,615,733; Jan. 25. Chimney cleaner, Adjustable. F. Buchholtz. 1,629,990; May 24. Chimney-cleaning device. G. C. Odell. 1,616,330; Feb. 1, Chimaware, Making decorated. W. N. Lewis. 1,841,820; Sept. 6. Check book. G. J. May. 1,646,033; Oct. 18. Check-book holder, Folding. H. O. Cooper. 1,650,608; Nov. 29. Check books, Stub holder for. F. Johnson. 1,635,625; Check Books, Stin Bouer Son.
July 12.
Check-controlled lock. M. H. Richardson and A. E.
Gebert. 1,624,980; Apr. 19.
Check-controlled machines, Slug detector for. A. A.
Caille, 1,627,726; May 10.
Check-controlled mechanism. J. M. Perry. 1,628,970; Sept. 6. Chip breaker. W. D. Johnson. 1,651,529; Dec. 6. Chip breaker. H. Roman. 1,651,551; Dec. 6. Chip-removing mechanis. A. Novick and E. Fish. 1,614,488; Jan. 18. Chirometer. G. R. Hayman. 1,648,899; Nov. 15. Chirometers, Applicator for. G. R. Hayman. 1,648,942; Nov. 15. Apr. 12. Check device, Safety. C. E. Loose. 1.633.114; June 21. Check-dispensing machine. G. S. Rider. 1,637,710; 1,648,942; Nov. 1b. Chiropractic adjusting and massaging device. T. H. David. 1,640,536; Aug. 30. Chiropractet table. E. Rosenquist. 1,616,065; Feb. 1. Chisel mortiser, Hollow-. G. T. Johnson. 1,614,304; Jan. 11. Aug. 2. Check draft. M. Zenther. 1,626,174; Apr. 26. Check-indorser-inking mechanism. H. Swanson. 1.617,879; Check draft. M. Zentner. 1,525,174; Apr. 25.
Check-indorser-inking mechanism. H. Swanson. 1,617,879;
Check-indorser machine. H. Swanson. 1,617,874;
Feb. 16.
Check, Parking. J. Dyer. 1,650,616; Nov. 29.
Check protector. R. I. Harris. 1,634,803; June 7.
Check protector. S. B. Hoffman. 1,634,105; June 28.
Check protector. E. Reubens. 1,634,105; June 7.
Check protector. E. Reubens. 1,634,105; June 7.
Check protector. F. E. Kielle. 1,621,196; Mar. 15.
Check protector. F. E. Kielle. 1,621,196; Mar. 22.
Check, Seat or hat. C. T. Rabert. 1,616,699; Feb. 8.
Check T. T. T. T. Bacon. 1,621,865; Mar. 22.
Check valve for respirating apparatus. A. B. Dräger. 1,621,498; Mar. 22.
Checker and chees board, Combined. N. Rapport. Des.
Checker change of the checker o Chlorinating solutions. J. H. MacMahon. 1,616,134: Crief. A. ton of water. B. T. Brooks. 1,613,438, Jan. 4. Chloring Recovery of J. A. Guyer and M. C. Taylor. Chloro derivatives of N.-Glhydro-1,2,1,2-anthraquinone-azine and making same. O. M. Bishop. 1,637,851; Aug. 2. agner and making same. U. M. Bisnop. 1,637,851; U.S. 11,618,324; Feb. 22. Chock. A. S. Hanmond. 1,168,324; Feb. 22. Chock. A. S. Hunt. 1,653,100; Dec. 20. Chock block. E. S. Evans. 1,651,260; Nov. 29. Chock block. E. S. Evans. 1,651,260; Nov. 20. Chock block. E. S. Evans. 1,637,577; Aug. 2. Chocolate-dipping machine. E. G. Lanzl. 1,637,577; Aug. 2. Chocolate-dipping table and cooler, Combined. J. Korkames. 1,638,041; Aug. 9. J. J. Jensen. 1,645,505; Chocolate-dipping fat-free. I. S. Hocker. 1,650,356; Nov. 22. Chocolate-dipping fat-free. I. S. Hocker. 1,650,356; Nov. 22. Checking device, R. O. Scott. 1,644,155; Oct. 4. Checking machine, D. B. Harding, 1,621,982; Mar. 22. Checking table, Foldable, W. J. Hausman, 1,638,805; Aug. 9. Checks, Protecting. C. A. MacCordy. 1,622,329; Mar. Nov. 22.
Chocolate products, Making. L. B. Hunter. 1,849,807;
Nov. 15.
Lead of the control of th Checkweighing and grading by weight, Machine for. E. B. Elider. 1,619,787; Mar. L. D. Checking machine. D. E. Harding. 1,648,845; Nov. 8. C. 1,634,410; July She same, Processed. E. E. Eldredge. Cheese, Apparatus for pressing. J. R. Meyers. 1,925,129; Apr. 19. Cheese cutter. N. and E. de Francisci. 1,651,918; Dec. 6. Cheese cutter. J. Eldridge and J. Schor. 1,648,611; May 31.
Choke coil with switching in tap transformer, Control of.
A. Hundt. 1,623,839; Apr. 5.
Choker hook. D. M. Bardon. 1,651,081; Nov. 29.
Choker hook. G. Nelson. 1,642,622; Sept. 13.
Choker hook. S. B. Stewart. 1,615,2624; Jan. 25.
Choker book. Automatic releasing. S. Ashdown. 1,643,561; Sept. 27. Canese Cutter. N. and E. de Flancisch. 1,631,918; Cheese cutter. J. Eldvidge and J. Schor. 1,648,611; Nov. 8.
Cheese cutter. J. F. Topinka. 1,623,288; Apr. 5.
Cheese cutter device. F. T. Whitmarsh. 1,625,441; Apr. 19.
T. R. Meyers. 1,625,130; Apr. 19.
Cheese mold. C. Pauly. 1,634,041; June 28.
Cheese mold. C. Pauly. 1,634,041; June 28.
Cheese, Treating. J. H. Wheeler and H. M. Scott. 1,639,825; Aug. 23.
Chemical composition. J. F. King. 1,639,213; June 21.
Chemical composition. J. F. King. 1,633,213; June 24.
Chemical mixing and feeding apparatus. W. H. Green. 1,638,131; Aug. 9.
Chemical reactions of physical processes, Method of and apparatus for carrying out. E. Buhtz. 1,629,200; May 17.
Chemical reactions or physical processes, Method of and apparatus for carrying out. E. Buhtz. 1,629,200; May 17.
Chemical reactions with liquids, Carrying out. E. H. Chemical-reactions with liquids, Carrying out. E. H. Chemical-resistant lining. G. H. Worrall. 1,628,760; May 17.
Chemical-resistant lining. G. H. Worrall. 1,628,760; May 17.
Chemical-reactions with liquids, Carrying out. E. Chemical-resistant lining. G. H. Worrall. 1,628,760; May 17.
Chemical-reactions with liquids, Carrying out. E. Chemical-resistant lining. G. H. Worrall. 1,628,760; May 17.
Chemical-reactions with liquids, Carrying out. E. Chemical-resistant lining. G. H. Worrall. 1,628,760; May 17.
Chemical-reactions with liquids, Carrying out. E. Chemical-resistant lining. G. H. Worrall. 1,628,760; May 17.
Chemical-reactions with liquids, Carrying out. E. Chemical-resistant lining. G. H. Worrall. 1,628,760; May 17.
Chemical-reactions with liquids, Carrying out. E. Chemical-resistant lining. G. H. R. R. Che Chopper, Stalk W. H. Medlock, 1,647,458; Nov. Chopper, Stalk W. H. Medlock, 1,647,458; Nov. Chopping and slicing machine, W. H. Donald, 1,6 Dec. 6. 1,652,132; Christmas tree, Artificial. T. Modlarz. 1,654,427; Dec. 27. Dec. 21.
Christmas-tree holder. J. W. Geyer. 1,614,952; Jan. 18.
Christmas-tree holder. J. S. Leedy. 1,617,765; Feb. 15.
Christmas-tree holder. C. D. Zeigler. 1,644,807; Oct. 11.
Christmas-tree reflector and lamp. L. L. Raymond. 1,632,850; June 21.
Christmas-tree support. C. E. A. O'Loughlin. 1,653,225;
Christmas trees, Reflector for. L. L. Raymond. 1,617,221; Feb. 8. Feb. 8.

Chromium compounds, Manufacture of. P. Welse. 1.631,170; June 7.

Chromium-piated carbon article. F. M. Becket. 1.630,688; May 31.

Chromium plating. H. C. Pierce. 1.645,927; Oct. 18.

Chromium steel scrap, Remelting. W. M. Farnsworth. 1.641,326; Sept. 6.

Chromophotographs on paper and chromodiapositives, Producing. F. Janzen. 1,613,515; Jan. 4.

Chuck. J. Bruckmann. 1,613,515; Jan. 4.

Chuck. J. H. Daunen. 1,613,672; Feb. 15.

Chuck. J. A. Edelmann. 1,634,536; July 5.

Chuck. C. N. Ellrich. 1,651,087; Nov. 29.

Chuck. G. A. Englund. 1,630,259; May 31.

Chuck. T. J. Fegley and G. O. Leopold. 1,653,762; Dec. 27. Feb. 8 Chick-brooding machine. J. D. Rayon. 1,650,042; Nov. 22.
Chick feeder. W. Ellman. 1,616,118; Feb. 1.
Chicken coop, Collapsible. E. S. Trimble. 1,620,143; Mar. 8.
Chicken-counting device. W. E. Fissell. 1,643,071; Sept. 20.
Chicken feeder. H. C. Badenhop. 1,633,917; June 28.
Chicken feeder. H. C. Badenhop. 1,633,917; June 28.
Chicken fountain. J. Imschweiler. 1,642,926; Sept. 20.
Chicken-toost hanger. G. F. Krengel. 1,653,773; Dec. 27.
Child's costumer. M. A. York. Des. 74,158; Dec. 27.
Child's costumer. M. A. York. Des. 74,158; Dec. 27. Dec. 27 Dec. 27.
Chuck. K. F. Gallimore. 1,647,220; Nov. 1,
Chuck. W. E. Knott. 1,636,421; July 19.
Chuck. J. E. Lovely. 1,654,512; Dec. 27.
Chuck. J. F. Morgal. 1,631,499; June 7.
Chuck. H. Sauveur. 1,623,705; Apr. 5.
Chuck. H. E. Sloan. 1,628,476; May 10.
Chuck. H. E. Sloan. 1,628,476; May 10.
Chuck. H. E. Sloan. 1,638,328; June 28.
Chuck actuating and driving mechanism. L. C. Cole. 1,650,693; Nov. 29.
Chuck. Automatic compensating. J. E. Lovely.
Chuck for hoding bits. J. H. Harris. 1,632,129; Dec. 6.
Chuck, Lathe. V. G. Jorner. 1,635,481; July 12. Dec. 27.
Child's costumer. M. A. York. Des. 74,158; Dec. 27.
Childing and aerating fluids and a device for carrying
out said process. T. A. Fee, fr., and H. Lamb.
1.645.742; Oct. 18.
Chinney. W. R. Gibson. 1.626,808; May 3.
Chinney. W. J. Meler. 1,627,105; May 3.
Chinney att. J. Meler. 4. F. Phillipp. 1,522,809; May 24.

72535-P-48

Chuck Magnetic J. E. Sears, jr., and A. J. C. Brookes, 1,626,535; July 19.
Chuck mechanism. R. S. Brown 1,646,680; Oct. 25.
Chuck, Self-centering. G. Fernaca. 1,613,909; Jan. 4.
Chuck, Well-drilling. W. Sheldon, 1,628,283; May 10.
Church, contribution chest. R. Anson. Des. 73,248; Church contribution enest. A. Z. Aug. 16.
Churn. D. Borland. 1,636,039; July 19.
Churn, mixing machine, and beater. G. P. A. Weisenborn. 1,624,701; Apr. 1,635,536; June 14.
Church, Automatica. 1,636,536; June 14.
C. Menningen. 1,648,144; Nov. 8.
Chute-Calvallation of the control of the cont 1,648,144; Nov. 8.
Chute-closing gate device. W. G. Winsor, fr. 1,649,941; Nov. 22.
Chute-Coising gate device. W. G. Winsor, fr. 1,649,941; Nov. 22.
Chute. Coil. H. McDonald. 1,633,341; June 21.
Chute. Coil. M. J. Kindrat and H. Zatzerkowny. 1,647,180; Nov. 1.
Chute. Coin. P. C. Smith. 1,638,234; June 21.
Chute for cellar windows, Coal. C. C. R. Carlson. 1,647,147; Feb. 8.
Chute. Nov. 1, 22.
Chute. lock. Railway-dump-car. R. E. Cartzdafner. 1,642,578; Sept. 13.
Chute. Wagon. A. W. Hamm. 1,644,521; Oct. 4.
Chute. Sor. The like. Trip gate for. P. C. Graham. 1,654,938; R. Geiser. 1,616,851; Feb. 8.
Cligar and cigarette dispensing device. E. Black. 1,650,181; Nov. 22.
Cigar and cigarette holder. H. L. Shuler. 1,626,320; Oct. 18.
Cligar and cigarette holder. B. E. Walberg. 1,628,937; Cligar and cigarette lighter. E. J. Marcouiller. Des. 73,850; Nov. 15.
Cligar and cigarette lighter, Automobile. B. L. Metzger, 1,622,334; Mar. 29.
Cligar band. L. L. Dorman and W. V. Gage. 1,647,906; Nov. 1.
Cligar-band feeding and moistening machine. W. H. Schussler. 1,634,653; June 28.
Cligar-band. Feeding and moistening machine. W. H. Schussler. 1,634,653; June 28.
Cligar-band reforating and crimping mechanism. F. X. Malocsay. 1,636,634; Dec. 27.
Cligar-band reforating and crimping mechanism. F. X. Malocsay. 1,616,539; Feb. 8. Feb. 8.

(Igar-banding machine. F. X. Malocsay. 1,627,794;
May 10.

(Igar-banding machine. F. X. Malocsay. 1,653,643;
Cigar-banding machine. M. Miller. 1,613,046; Jan. 4.

(Igar-banding machine. Band-conveying and adhesive-supplying means for. F. X. Malocsay. 1,652,647;
Dec. 27. supplying means for. F. A. Hausessy. Dec. 27. Cigar-banding machines, Moistening device for. F. X. Malocsay. 1,633,642; Dec. 27. Cigar box. A. A. Adamson. 1,021,704; Mar. 22. Cigar-box moistener. D. J. Gallagher. 1,637,814; Aug. 2, 4. E. Mullan. 1,644,816; Sept. 6. J. L. Lippard, and Cigar-bunch machine. R. R. Kitchel and J. E. Mullan. 1,646,012; Oct. 11. Cigar-bunching machine. W. H. Schussler. 1,621,088; Mar. 15. Cigar-bunching machine. W. H. Schussler. 1,634,690; Cigar-bunching machine. W. H. Schussler. 1,634,690; Cigar-bunching machine. W. H. Schussler. 1,634,690; Cigar-bunching machine. To J. A. Ward. 1,639,912; Cigar-cuses, Wick humldifier for. J. A. Ward. 1,639,912; July 5. Clgar cases, Wick humidifier for. J. A. Ward. 1,639,912; July 5.

Clgar cases, Wick humidifier for. J. A. Ward. 1,639,912;
Aug. 23.

Clgar cutter. T. H. Anderson. 1,628,570; May 10.

Clgar cutter. T. H. Anderson. 1,628,570; May 10.

Clgar holder. I. Q. Gurnee and A. A. Smith. Des. 72,012;
Feb. 15.

Clgar holder. J. Q. Gurnee and A. A. Smith. Des. 72,012;
Feb. 15.

Clgar holder, Humidor. H. R. Northup and C. L. Snyder.

Clgar holder, Safety. A. Bagamery. 1,633,431; June 21.

Clgar lighter. L. V. Aronson. 1,639,479; Aug. 16.

Clgar lighter. W. J. Butler. 1,637,457; Aug. 2.

Clgar lighter. J. H. Cohen. Des. 72,335; June 28.

Clgar lighter. H. Esterow. 1,646,087; Oct. 18.

Clgar lighter. H. Esterow. 1,646,085; Oct. 18.

Clgar lighter. H. Esterow. 1,646,085; Oct. 18.

Clgar lighter and advertising display stand, Combined.

V. E. Estrom. Des. 72,765; May 31.

Clgar lighter and almap, Combined. C. Graff. Des.

Clgar lighter and lamp, Combined. C. Graff. Des.

Clgar lighter and lamp, Combined. R. F. Schlele.

1,638,751; Aug. 9.

Clgar lighter, Electric. J. J. Gough. Des. 72,418;

App. 12.

Clgar lighter, Electric. J. J. Gough. Des. 72,418;

App. 12.

Clgar lighter, Electric. J. J. Gough. Des. 72,418;

App. 12.

Clgar lighter, Electric. J. J. Gough. Des. 72,418;

App. 12. Cigar lighter, Electric, J. J. Gough. Des. 72,418; Apr. 12. Cigar lighter, Electric. A. Schoeller. 1,622,263; Mar. 22. Cigar lighter, Electric. A. Schoeller. 1,622,263; Mar. 22. Cigar lighter, Electrical. H. Overen. 1,639,465; Jun. 25. Cigar lighter, Electrical. H. Overen. 1,639,465; Jun. 26. Cigar lighter, Spring-retracted, Electric. W. Leschman. 1,630,452; May 31. Cigar lighters, Dashboard attachment for. B. A. Benson. 1,616,173; Feb. 1,

Cigar machine, T. A. Horton, 1,629,163; May 17. Cigar machines, Transferring device for, J. F. Halstead, 1,626,410; Apr. 26. Cigar-making machine, A. Noel, 1,636,922; July 26. Cigar or eigarette holder, W. R. Larter, 1,653,049. Cigarette continue of the cont 1,631,295-6; Aug. 10
Cigarette-dispensing machine. J. Hantschel. 1,638,732;
Cigarette-dispensing machine. J. Hantschel. 1,638,732;
Cigarette holder. C. D. Rosan. 1,630,243; May 24.
Cigarette holder. M. J. Russak. 1,624,663; May 24.
Cigarette holder. H. N. Staats. 1,624,6673; Nov. 8.
Cigarette holder. A. F. Teigen. 1,623,635; Jan. 4.
Cigarette holder. A. F. Teigen. 1,632,645; Jan. 4.
Cigarette holder. A. Yessaian. 1,641,517; Sept. 6.
Cigarette holder and ash tray, Combined. R. Stockton. 1,614,265; Jan. 11.
Cigarette holder and stopped for the cigarette holder and stopped for the cigarette holder and the like. H. Potts. 1,623,635;
Cigarette holder and the like. H. Potts. 1,623,635;
Cigarette holder and the like. H. Potts. 1,623,635;
Cigarette holder, dayuer. and preserver. H. M. Power. Cigarette holder and the like. H. Potts. 1,623,635; Apr. 5.
Cigarette holder, damper, and preserver. H. M. Davenport. 1,643,703; Sept. 27.
Cigarette holder, dispenser, and lighter, Combination. L. Pengilly. Des. 73,332; Aug. 23.
Cigarette holder, Ring. A. E. Sharples. 1,645,877; Oct. 18.
Cigarette holder, Safety. C. E. Ferguson. 1,619,408; Mar. 1. Garactic holders, Ash receptacle for. C. Christensen. Cigarette holders, Ash receptacle for. C. Christensen. Cigarette holders, Attachment for. W. A. Pervler. 1,635,432; July 12. Cigarette holders, Protector means or guard for. D. Gologan. 1,639,983; Aug. 23. Cigarette lighter. D. S. and A. P. Brush. 1,631,514; Cigarette lighters, Casing for. L. V. Aronson. Des. 72,658; May 17. Cigarette lighters, Holder for. A. T. Stevenson. 1,651,418; Dec. 6. Cigarette-machine catcher. F. Di Ianni. 1,647,280; Cigarette-machine cut-off. W. B. Bronander. 1,637,803; Aug. 2. Cigarette-machine cut-off. J. F. Halstead. 1,647,352; Nov. 1. Cigarette-machine shafts, Device for intermittently driv-Nov. 1.

Cigarette-machine shafts, Device for intermittently driving. C. F. Röber. 1,623,978; Apr. 12.

Cigarette machines, Attachment for rod. M. P. E. Hohn. 1,614,554; Jan. 18.

Cigarette machines, Cut-off mechanism for. G. A. Weingartter. 1,616,208; Feb. 1.

Cigarette machines. Cutting device for. E. Danger.

Cigarette machines. Reeding mechanism for. C. W. Muller. 1,645,087; Oct. 11.

Cigarette machines, Winnowing device for. J. A. Stein. 1,647,255; Nov. 1. Muller. 1,645,067; Oct. 11.

(Igarette machines, Winnowing device for. J. A. Stein. 1,647,255; Nov. 1.

(1,647,255; Nov. 1.

(1,647,255 July 19.

(igarette-making machine, Portable, S. M. Brydges, 1.654_111; Dec. 27.

(igarette-making machines, Delivery-control device for, W. F. Grupe, 1.633,377; June 21.

(igarette-or cigar and match, Combination, F. Stone, 1.635,967; July 12.

(igarette-packaging machines, Feeding device for, W. B. Bronander, 1.647,265; Nov. 1.

Cigarette-packaging machines, Feeding mechanism for, 1. Lagaga, 1.628,500; May 10.

Cigarette-packing machine. E. Jagenberg. 1,615,626; Jan. 25. Cigarette papers, Case for. F. Merensky. 1,637,229; July 26. July 26. Cigarette-printing device. J. W. Sanders. 1,643,349; July 26.

Granette-printing device. J. W. Sanders. 1,643,349;
Sept. 27.

Granette-printing mechanism, Mount for the tongues of F. Di Innii. 1,630,488; May 31.

Cigarettes and other articles, Package for. A. del Hoyo y Tejada. 1,648,165; Nov. 8.

Cigarettes and the like, Extinguisher for. B. A. Travis. 1,622,140; Apr. 6.

Granettes, Machine for the manufacture of chocolate. C. Rober. 1,642,894; Sept. 20.

Cigarettes, Means for packing. G. C. Ekström, G. Thornton. 1,649,756; Nov. 15.
Chematographic and photographic view taking apparatus, Focusing device for. A. L. V. C. Debrie. 1,636,736; Tuly 26.
Chematographic film of the photographic view taking apparatus, Focusing device for. A. L. V. C. Debrie. 1,636,736; Tuly 26.
Chematographic film of the photographic film stretching. L. T. Troland. 1,613,300; Jan. 4.
Chematographic films, Etching apparatus for. J. M. Andrews. 1,613,303; Jan. 4.
Chematographic films, Etching apparatus for. J. M. Andrews. 1,613,303; Jan. 4.
C. Bouin. 1,642,918; Sept. 20.
Chematographic printer light control. J. A. Ball. 1,613,339; Jan. 4.
C. Bouin. 1,642,918; Sept. 20.
Chematographic projections, Apparatus for. E. C. Sold. 1,644,681; July 5.
Sold. 1,644,681; July 5.
Chematography, D. F. Comstock. 1,641,220; Sept. 6.
Chematography, Apparatus for composite. E. Schüfftan. 1,613,201; Jan. 4.
Distance of the photography of the photography. Photography of the phot Oct. 25.

Circuit breaker, Automatic. M. E. Greenway and R. W. Chambers. 1,627,029; May 3.

Circuit breaker, Automatic. E. D. Moore. 1,643,415; Sept. 27.

Circuit breaker, Automatic electric-. H. Schachtner. 1,629,640; May 24.

Circuit breaker device. W. E. Dean. 1,644,669; Oct. 11.

Circuit breaker, Electric-. R. W. Gregory. 1,629,528; Circuit breaker, Electric. G. S. Marston. 1,647,010; Oct. 25.

Circuit breaker for drying machines and the like, Automatic. J. E. Alexander and S. A. Staege. 1,623,611; Apr. 5. Apr. o. Circuit breaker for electric key punches, Automatic. W. W. Lasker. 1,643,778; Sept. 27. Circuit breaker or interrupter, Electrical. E. Aichele. 1,614,169; Jan. 11. Circuit breaker, Overload. C. R. Beall and R. B. Gilson. 1,636,037; July 19. Circuit breaker, Pressure-operated. J. N. Hanna. 1,616,317; Feb. 1. Circuit breaker, Pressure-operated. J. N. Hanna. 1,616,317; Feb. 1.

Circuit-breaker system, Automatic reclosing. A. E. Cruit-breaker system, Automatic reclosing. A. E. Cautherson, 1,641,723; Sept. 6.

Autherson, 1,641,723; Sept. 6.

Hamilton, 1,641,753; Sept. 6.

Circuit-breaker system, Automatic reclosing. W. S. H. Hamilton, 1,641,753; Sept. 6.

Circuit-breaker system, Automatic reclosing. B. W. Jones, 1,626,467; Apr. 26.

Circuit-breaker system, Automatic reclosing. E. O. Schweitzer, 1,645,508; Nov. 8.

Circuit-breaker system, Automatic reclosing. O. C. Traver. 1,635,061; July 5. Circuit breaker, Thermal. J. F. Smart. 1,632,420; June 14. Circuit breaker, Thermally-operated. P. B. Parks. 1,644,443; Oct. 4. Circuit breakers, Retarder for. C. N. Fairchild. 1,646,528; Oct. 25. Circuit breakers, Switch contact for. D. R. Davies. 1,618,669; Mar. 1. Circuit, By-pass selector. E. Jacobsen. 1,644,727; Oct. 11. Circuit closer. W. Banka. 1,625,973; Apr. 26. Circuit closer. H. W. Batcheller. 1,613,305; Jan. 4. Circuit closer. G. P. Beaston. 1,632,530; June 14. Circuit closer. G. P. Benston. 1,625,017; Apr. 19. Circuit-continuing device. H. A. Douglas. 1,634,404-5; July 5.
Circuit control, Thermostatic. A. E. Whittier. 1,623,568; Apr. 5.
Circuit controller. J. M. Johnson. 1,654,483; Dec. 27.
Circuit controller. J. T. Miller and M. Hanley. Circuit controller. J. T. Miller and M. Hanley. Circuit controller. Combined automatic and manual. L. P. Hutt. 1,637,042; July 26.
Circuit controller, Engine-controlled pneumatically-operated. L. B. Doman. 1,619,103; Mar. 1.
Circuit controller, Multiphiase thermally-actuated. G. A. Burnham. 1,652,1465; Dec. 13.
CIRCUIT. Controller, Speed. A. G. Shaver. 1,641,461; Circuit controller, Speed. A. G. Shaver. 1,641,461; Circuit controller, Thermosensitive. P. E. Klopster and Sept. 6. Circuit controller, Thermosensitive. P. E. Klopsteg and W. H. Stannard. 1.629,710; May 24. Circuit controller, Unit. R. C. Leake. 1,634,620; July 5. Circuit-controlling apparatus. B. F. Fuller. 1,640,542; Aug. 30. Circuit-controlling apparatus. M. A. Stein. 1,625,832; Apr. 26. Circuit-controlling device. A. R. Lewellen. 1,651,397; Dec. 6. Dec. 6.

Circuit-controlling mechanism. J. T. Miller and M. Hanley, 1,624,056; Apr 12.

Circuit interrupter. O. H. Eschholz. 1,630,477; May 31.

Circuit interrupter. G. E. Palmer. 1,645,292; Oct. 11.

Circuit interrupter. W. E. Paul. 1,623,851; Apr. 5.

Circuit interrupter. K. C. Randall. 1,654,809; Dec. 27.

Circuit interrupter. Automatic. J. H. Procter. 1,632,983; June 21.

Circuit interrupter, Automatic. J. H. Procter. 1,638,899; Aug. 16.

Circuit interrupter, High-speed. R. Logstädt. 1,649,034; Nov. 15.

Nov. 15.

Circuit interrupter, Indicating fluid. H. M. Blebel. 1,624,463; Apr. 12.

Circuit-interrupter system. J. W. Legg. 1,645,286; Oct. 11. Circuit-interrupter system. W. R. Wickerham. 1,654,316; Dec. 27. Circuit interrupters. Separating device for. T. S. Pukerud. 1,621,026; Mar. 15. Circuit-interrupting device. K. C. Randall and H. K. Ansligh. 1,637,381; Aug. 2. Circuit-interrupting system. H. A. Travers. 1,637,360; Aug. 2.
Circuit maker and breaker. J. R. Keyton. 1,652,123;
Dec. 6.
Circuit making and breaking device. S.
1,653,283; Dec. 20.
Circuit-protecting system. W. E. Hoyler. 1,644,525;
Oct. 4.

Circuit-protecting system. W. E. Hoyler. 1,644,527; Oct. 4. Circuit, Receiving. L. D. Kellogg. 1,626,239; Apr. 26. Circuit regulator, Automatic. P. O. Brown. 1,650,320; Nov. 22. Circuit-restoring relay. C. W. Kautz, jr. Re16,661; Circuit Sustation, M. G. Shull. 1632,645; Dec. 18. Circuit, Sustation, D. B. Robinson, 1.646,875; Oct. 25. Circuit, Substation. D. B. Robinson, 1.646,875; Oct. 25. Circuit, Substation. W. G. Shull. 1.632,645; Dec. 18. Circuit, Substation. W. G. Shull. 1.632,645; Dec. 18. Circuit, Substation, W. G. Shull. 1.632,645; Dec. 18. Circuit, Substation, Marchiele, B. E. Getchell. 1,026,233; Apr. 26. Circuit, Substation, and remote control, Selective. A. R. Circuit, Substation, and remote control, Selective. Circuit switch, Multiple. B. B. Getchell. 1,626,283; Apr. 26.
Circuit system and remote control, Selective. A. R.
Circuit system and remote control, Selective. A. R.
Circuit System and remote control, Selective. A. R.
Circuit Transformer. E. O. Scriven. 1.615,044; Jan. 18.
Circuiting rod, Short. P. Gosslar. 1,652,116; Dec. 6.
Circuits and switching apparatus therefor, Messenger call.
G. W. Janson. 1,649,323; Aug. 23.
Circuits, Apparatus for testing electric. W. Elmenthaler. 1,613,693; Jan. 1116g transmission. E. B.
Circuits, Compensating network for carrier transmission.
H. Fletcher. 1,613,607; Jan. 11.
Circuits, Control. P. W. Reynolds. 1,628,192; May 10.
Circuits, Control. P. W. Reynolds. 1,628,192; May 10.
Circuits, Electrical. T. E. Shea. 1,654,608; Dec. 27.
Circuits Flectrical. T. E. Shea. 1,654,608; Dec. 27.
Circuits For voice-operated devices, Delay. H. C. Silent. 1,633,615; June 28.
Circuits. Requency-control. R. B. Meyer. 1,654,184; Circuits, Frequency-control. R. B. Meyer. 1,654,184; Dec. 27. Circuits, Frequency translating. H. S. Black. 1,653,887; Dec. 21.

Circuits, Frequency translating.

Dec. 27.

Circuits, High-tension. H. B. Holthouse. 1,624,951; Circuits, High-tension. H. B. Holthouse. 1,624,951;
Circuits. High-tension. H. B. Holthouse. 1,624,951;
Circuits. 1. Inductance coil for high-frequency. G. A.
Joy. 1,648,388; Nov. 8.
Circuits, Interrupter for electric. S. Ruppel. 1,641,202;
Sept. 8.
Circuits, Method and apparatus for determining the
synchronism of alternating-current. G. H. Middlemiss.
1,636,527; July 19.
Circuits, Modulation system for frequency multiplier. A.
Circuits, Modulation system for frequency multiplier. A.
Circuits of fluid genriugs and fluid couplings, Arrangement for draining the chambers and passages of the
fluid. G. Bauer, R. Wilde, and H. Kluge. 1,613,154;
Jan. 4.
Circuits, Program-selecting. C. H. Fetter. 1,629,491;
May 24. Approximation of the coupling o fluid. G. Bauer, R. Wilde, and H. Kluge. 1,613,154; Jan. 4.
Circuits. Program-selecting. C. H. Fetter. 1,629,491; Circuits. Program-selecting. M. E. Strieby. 1,629,552; May 24.
Circuits. Program-selecting. J. F. Toomey. 1,628,696; May 17.
Circuits. Program-selecting. J. F. Toomey. 1,632,012; June. 14.
Circuits. Protection. A. Carpe and R. W. Deardorff. 1,646,444; Oct. 25.
Circuits, Protection. A. Carpe and R. W. Deardorff. Circuits, Protection. A. Wright. 1,649,884; Nov. 22.
Circuits, Esgulating transmission. H. Nyquist. 1,639,952; Circuits, Selective signaling. R. H. Mills. 1,616,103; Feb. 1.
Circuits, Substation. A. H. Inglis. 1,618,201; Feb. 22.
Circuits, System of multifrequency. R. W. Deardorff. Circuits, System of multifrequency. A. F. Rose. 1,650,655; Nov. 29.
Circuits, Transformer. W. J. Shackelton. 1,645,165; Oct. 11. Circuits, Oct. 11.
Circuits, Trunk. G. H. Peterson. 1,631,153; June 7.
Circuits, Wave-transmission control. J. Mills. 1,613,240;
Jnn. 4.
Circulating head. W. A. Trout. 1,625,172; Apr. 1,612,1012,1013,1014, V. Turck.
1,612,969; Jan. 4.
Circulating tube. J. F. Arthur. 1,639,252; Aug. 16.

Circulating tube. J. F. Artz Clamp: Nec. Adjustable clamp. Adjustable clamp. Battery clamp. Bed clamp. Bed clamp. Bench clamp. Beveling and sealing clamp. Rolitiess dead-end clamp. Rolitiess dead-end clamp. Cultivator-tool clamp.
Curtain-stretcher clamp.
Dead-ending clamp.
Derrick leg clamp.
Derrick leg clamp.
Drill-stem clamp.
Drill-stem clamp.
Electrode clamp.
Electrode clamp.
Fastering clamp.
Form clamp.
Ground clamp.
Hander clamp.
Hanger clamp. Building clamp. Button clamp. Button clamp.
Cable and trolley clamp.
Cable and trolley clamp.
Cable or wire clamp.
Car-roof clamp.
Car-wheel clamp.
Collar leak clamp.
Column clamp.
Column-form clamp.
Combination clamp.
Combination clamp.
Concrete-form clamp. Hanger clamp. Hat-block clamp. Hood clamp. Hose clamp. Hose-repair clamp. Knife glue clamp. Line clamp.

Clamp: See—
Meat clamp.
Panel clamp.
Pipe clamp.
Pipe-elevating clamp.
Pipe-supporting clamp.
Plate clamp.
Poole clamp.
Polish-rod clamp. Setting clamp.
Sucker-rod clamp.
Talistock clamp.
Take-off clamp.
Tent clamp.
Terminal clamp.
Trim-carrier clamp.
Tribe-repairing clamp.
Tybe-repairing clamp.
Tympolamp.
Tympolamp.
Tympolamp.
Tympolamp.
Tympolamp.
Tympolamp.
Tympolamp.
Tympolamp. Post clamp. Quick-action clamp. Radius-rod clamp. Rail clamp. Railway-transfer clamp. Radius-rod clamp.

Rail valuery-transfer clamp.

Rope clamp.

Sove clamp.

Sove clamp.

Sove clamp.

Sove clamp.

Clamp.

J. Arrington. 1629,246; May 17.

Clamp.

Clamp.

G. A. Covey. 1,653,990; Dec. 27.

Clamp.

Clamp.

R. Goulrand and A. Pache. 1,627,172; May 3.

Clamp.

J. M. Hargrave. 1,638,638; Aug. 16.

Clamp.

Clamp.

J. M. Hargrave. 1,638,638; Aug. 16.

Clamp.

Clamp.

C. G. E. Johnson. 1,634,834; July 5.

Clamp.

Clamp.

C. G. E. Johnson. 1,634,834; July 5.

Clamp.

Clamp.

R. Kirkhoff. 1,620,469; Mar. 8.

Clamp.

Clamp.

F. Lanaux. 1,615,948; Feb. 1.

Clamp.

Clamp.

J. H. Montague. 1,648,695; Nov. 8.

Clamp.

Clamp.

J. H. Montague. 1,648,695; Nov. 8.

Clamp.

Clamp.

J. H. Montague. 1,648,695; Nov. 8.

Clamp.

Clamp.

A. C. Patch. 1,645,621; Oct. 18.

Clamp.

Clamp.

A. C. Patch. 1,645,621; Oct. 18.

Clamp.

Clamp.

A. D. Purtle. 1,630,363; May 31.

Clamp.

Clamp.

Clamp.

A. D. Purtle. 1,630,363; May 13.

Clamp.

Clamp.

Clamp.

A. D. Purtle. 1,630,363; May 19.

Clamp.

Clamp.

Clamp.

A. D. Purtle. 1,630,533; May 19.

Clamp.

Clamp.

Clamp.

Clamp.

A. D. Purtle. 1,630,533; May 19.

Clamp.

Clamp.

Clamp.

Clamp.

Clamp.

A. D. Purtle. 1,630,533; May 19.

Clamp.

Clamp.

Clamp.

Clamp.

Clamp.

Clamp.

A. D. Purtle. 1,630,533; May 19.

Clamp.

Clam Mar. 8. Clamping device. L. P. Armstrong. 1,632,108; June 14. Clamping device. R. B. Beegle. 1,631,396; June 7. Clamping device. J. B. Benson. 1,643,737; Sept. 27. Clamping device. T. and S. J. V. Bovey. 1,621,490; Mar. 22. Star, 22.

Clamping device. G. N. Byl. 1,653,840; Dec. 27.

Clamping device. W. R. Ellis. 1,624,399; Apr. 12.

Clamping device. W. S. Lewis. 1,647,963; Nov. 1.

Clamping device. J. F. Loucks. 1,639,139; Aug. 16.

Clamping device. S. H. Tucker and S. B. Field.

1,636,830; July 26.

Clamping device, Box. E. C. Anschutz. 1,642,665;

Sept. 20. Sept. 20. Clamping device, End. R. W. Burns. 1.628,113; May 10. Clamping means. A. Alsaker. 1.638,230; Aug. 9. Clamping mechanism, Rail- A. E. Norris. 1,644,942; Oct. 11. Oct. 11.
Clamping or separating device. T. A. Rotsch. 1,639,111;
Aug. 16.
Aug. 16.
Clamping ring. J. Rogenger. 1,635,247; July 12.
Clamping rings for commutators, Making. J. J. Carter. 1,622,179; Mar. 22.
Clampis, Hanger for ear. G. V. Miller. 1,620,674;
Mar. 15. Mar. 19.

Clarifying and decolorizing agent and making the same.

M. L. Chappell, R. F. Davis, and M. M. Moore.
1.642.871; Sept. 20.

Clarifying and purifying liquids and waste waters. A. J.
Rawnestad. 1.619.036; Mar. 1.

Classifying or separating machine. P. H. Raun.
1.647.812; Nov. 1. Clasp: See—
Bill clasp.
Belt clasp.
Collar clasp.
Corset clasp.
Hair clasp.
Hose-supporte Lingerle clasp, Necktie clasp Muntin clasp. Pocket and pencil clasp. Hair clasp.

Hose-supporter clasp.

Jewelry clasp.

Clasp. F. Bernstein. 1,651,435; Dec. 6.

Classifier. H. S. Coc. 1,633,371; June 21.

Classifier. H. S. Coc. 1,633,371; June 21.

Classifier. H. S. Coc. 1,633,371; June 21.

Clasp. J. Couslin. 1,634,521; July 5.

Clasp. J. Couslin. 1,634,521; July 5.

Clasp. A. Tricker, 1,621,008; Mar. 15.

Clasp. R. K. Guinzburg. 1,617,948; Feb. 15.

Clasp. B. Hoppe. 1,616,634; Feb. 15.

Clasp. A. M. Kilby. 1,624,233; Apr. 12.

Clasp. E. Pierson. 1,635,836; July 12.

Clasp. E. Pierson. 1,635,836; July 12.

Clasp for bobbed bait. J. D. Lul. 1,637,492; Aug. 2.

Clasp for hand bags and like receptacles. D. Balazs. 1,642,836; Sept. 20. Classifier deck. A. H. Stebbins. 1,620,243; Mar. 8. Clay blocks and the like and method of molding, Mold for casting. J. M. Lambie and D. W. Ross. 1,625,947; for casting. J. M. Lambie and D. W. Koss. 1,020,941; Apr. 26.

Clay column, Apparatus for scarifying plastic. J. B. Clay or other plastic material, Apparatus for forming dovetail or undercut recesses in. L. Galisman and A. E. Brown. 1,629,660; May 24.

Clay products, Process and apparatus for burning. J. A. Reams. 1,639,271; Aug. 16.

Clay slips, Dehydrator for. J. P. Teter. 1,630,280; Clay issuering and expressing apparatus. W. L. Hanley. Clay tempering and expressing apparatus. W. L. Hanley, ir. 1,626,675; May 3.
Clay tempering and expressing apparatus. W. L. Hanley, ir. 1,626,675; May 3.
Clayware, Method and apparatus for burning. W. D. Ritchardson. 1,628,273; May 10.
Clays to adapt them for decolorizing and deodorizing oils, Treating. J. S. Potter, 1,649,386; Nov. 15.
Clean-out openings. Closure for. C. E. Chapman. 1,636,125; July 19.
Clean-up agents into evacuated vessels, Introduction of. W. C. Sproesser. 1,626,638; May 3.
Clean-up agents into evacuated vessels, Introduction of. W. C. Sproesser. 1,626,638; May 3.
Clean-up agents into evacuated vessels, Introduction of. W. C. Sproesser. 1,626,638; May 3.
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Clean-up agents into evacuated vessels, Introduction of. W. C. Sproesser. 1,626,638; May 3.
Clean-up agents into evacuated vessels, Introduction of. W. C. Sproesser. 1,626,638; May 3.
Clean-up agents into evacuated vessels, Introduction of. W. C. Sproesser. 1 Burner cleaner. Burner-tip cleaner. Carpet cleaner. Chimney cleaner. Clothes cleaner. Clothesline cleaner. Plaster cleaner. Rotary disk-cutter cleaner. Screen cleaner. Sewer cleaner. Conduit cleaner. Cotton cleaner. Cottonseed cleaner. Smoke cleaner.
Spark-plug cleaner.
Stair cleaner.
Still cleaner.
Suction cleaner.
Table cleaner.

Cottonseed cleaner.
Cutlery cleaner.
Dairy-equipment cleaner.
Dust-mop cleaner.
Ear-corn cleaner.
Flue-sheet cleaner.
Fruit-tray cleaner.
Fruit-tray cleaner.
Frunace-and boller cleaner.
Furnace and boller cleaner.
Furnace-radiator-flue cleaner. Tank cleaner. Thread cleaner. Tauk Tube cleaner. Vacuum cleaner. Vegetable cleaner Vegetable cleaner.

Waste-pipe cleaner.

Water-pipe cleaner.

Window cleaner.

Window or windshield er. Golf-ball cleaner. Grain cleaner. Keyboard cleaner. Lawn cleaner.

Keyboard cleaner.

Lawn cleaner.

Lawn cleaner.

Loom-bobbin cleaner.

Varn cleaner.

Varn cleaner.

Varn cleaner.

Cleaner.

T. Hagelthorn.

1,632,895; June 21.

Cleaner and deepener, 1,629,965; May 24.

Cleaner and deepener, Piston groove. G. C. Beck.

Cleaner and heat converter, Combination warm-air, L. M.

Thorson and K. B. Ward. 1,638,605; Ang. 9.

Cleaning and polishing apparatus, Mold. G. B. Arduser.

1,642,289; Sept. 13.

Cleaning and polishing machine. E. G. Greene.

1,615,622; Jan. 25.

Cleaning and polishing machine. Electric shoe.

H. Pow-ell and W. P. Groves. 1,624,768; Apr. 12.

Cleaning and polishing machine, Fruit. B. C. Suther
cleaning and polishing machine, Fruit. B. C. Suther
cleaning apparatus.

Cleaning apparatus.

J. Green. 1,651,766; Dec. 6.

Cleaning apparatus.

Cleaning apparatus.

Car. S. L. Smith. 1,631,045;

Nov. 29.

Cleaning apparatus, Snow.

J. W. Dillahunt. 1,621,156.

Cleaning apparatus, Snow-. J. W. Dillahunt, 1,621,156; Mar. 15. Cleaning bottles. C. H. Loew, 1,642,419; Sept. 13. Mar. 15.

Cleaning bottles, C. H. Loew. 1.642,419; Sept. 13.

Cleaning composition and making same. B. Balley.

1.635.244; July 12.

Cleaning composition and spot remover. L. N. Cohn.

Cleaning composition, Dirt and grease. J. Lenenberg.

1.624.055; Apr. 12.

Cleaning composition. Dry Powdered. J. Truman.

1.640.740; Aug. 30.

Cleaning composition for type and the like. R. B. Neidlg.

1.613.620; Jan. 11.

Cleaning containers. D. A. Dougherty. 1,629,486;

May 24.

May 24.
Cleaning device. P. E. Aström. 1,625,930; Apr. 26.
Cleaning device. W. H. Fliebmann. 1,628,585; May 10.
Cleaning device. H. Gray. 1,628,141; May 10.
Cleaning device. J. Holtzman. 1,630,084; May 24.
Cleaning device. U. Kent. 1,636,002; July 19.
Cleaning device. C. T. Schroyer and E. C. Dessem. 1,630,542; Nov. 22.
Cleaning device. J. E. Twitchell. 1,646,176; Oct. 18.
Cleaning device. Combined service bibling and vacuum. A.
Cleaning device. Form. W. H. Smith. 1,616,556; Feb. 8.
Cleaning device. Form. W. H. Smith. 1,616,556; Feb. 8.
Cleaning device. Form. W. M. A. Kirkwood. 1,647,138; Nov. 1.
Cleaning astrments by gasoline, System for. L. H. Clark.

Cleaning garments by gasoline, System for. L. H. Clark. Cleaning garments by gasoline, System for. L. H. Clark. Cleaning implement. M. E. Harber. 1,641,034; Aug. 30. Cleaning machine. J. Carroll. 1,645,317; Oct. 11.

Cleaning machine. J. M. Schultz. 1,622,166; Mar. 22. Cleaning machine. A. L. and M. O. Williams. 1,630,152; May 24. Cleaning machine for fruit, vegetables, or the like. A. O. Moe. 1,646,701; Oct. 25. Cleaning machine. Matrix. W. A. Wenzel and G. J. Randle. 1,648,794; Nov. S. Cleaning meat studiers. G. R. Napier. 1,622,045; Cleaning meat studiers. G. R. Napier. 1,622,045

Mar. 22.

Mar. 22.

Mar. 23.

Mar. 24.

Mar. 25.

Mar. 26.

Mar. 26.

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Mar. 26.

Mar. 26.

Mar. 26.

Mar. 27.

Mar. 2

Clearance gauge. L. N. Hampton. 1,632,067; June 14. Clearance unloader. F. van D. Longacre. 1,621,913; Mar. 22.

Mar. 22. Clearance unloader, Balanced chamber. W. Prellwitz. 1,616,986; Feb. 8. Clearance unloader, By-pass. S. B. Redfield. 1,616,989; Feb. 8.

Clearance unloader, By-pass. S. B. Redfield. 1,616,959; 60. 1. 611,990; Feb. 8. Clearance unloader, Three-chamber. S. B. Redfield. 1,616,901; Feb. 8. Clearance unloader, Two-chamber. S. B. Redfield. 1,616,988; Feb. 8. Clearance unloader, Two-chamber. S. B. Redfield. 1,616,988; Feb. 8. Cleat. E. A. Richadon. 1,617,418; Feb. 15. Cleat. B. A. Richadon. 1,617,418; Feb. 15. Cleat. Ganghoard. G. L. Dyer. 1,638,477; Aug. 9. Cleats, Making football. W. H. Albee. 1,648,873; Nov. 8. Clevis. K. Breecinski. 1,632,877; June 14. Clevis. J. A. James. 1,618,663; Feb. 22. Clevis. A. L. Nellson. 1,645,744; Oct. 18. Clevis hook. G. Zehnle. 1,650,735; Nov. 29. Climbing iron, Lineman's. W. Allahverdian. 1,632,688; June 14. Clinker-gemoving device. W. Gaughrin. 1,622,312;

Climbing Iron, Lineman's, W. Allahverdian. 1,632,688; June 14.
Clinker-temoving device. W. Gaughrin. 1,622,312; Mar. 29.
Clip: See—
Article clip.
Clip: See—
Clip: See—
Clip: See—
Clip: Paper clip.
Pen or peucli clip.
Pen or peucli clip.
Pen or peucli clip.
Pen or peucli clip.
Pen of peucli clip.
Pen or peucli clip.
Pen or peucli clip.
Screen-holding clip.
Screen-holding clip.
Screen-holding clip.
Spring c

June 7.

Clip for show cards, serviettes, and the like. J. W. Rooney. 1.644,280; Oct. 4.

Clip of fastener. R. T. Pollock. 1.641,096; Aug. 30.

Clip of ststener. R. T. Pollock. 1.621,208; Jan. 4.

Clip or support for horticultural and other labels. H. T.

Weeks. 1.631,632; Dec. 6.

Clip-setting device, Floor-strip. T. A. Moore. 1,632,242; June 14.

Clipper guard, Barber's. F. D. Young. 1,621,572; Clipper, Hair. V. Beauregard. 1,642,532; Sept. 13.

Clipper Burd, Barbers. F. E. Young. 1,621,512; Clipper, Hair. V. Beauregard. 1,842,522; Sept. 13. Clipper, Hair. V. Beauregard. 1,842,522; Sept. 13. Clipper, Hair. S. Z. Glbson. 1,617,682; Feb. 15. Clippers, Rair-collecting attachment for. J. L. Kaufmann. 1,618,713; Feb. 22. Clippers, Self-reculating device for electromagnetic. L. J. J. L. Kaufmann. 1,618,713; Feb. 22. Clippers, 1,622,693; Apr. 2,614,447; Feb. 8. Clipping machine. H. W. Orndoff. 1,653,729; Dec. 27. Clock. J. C. Burke. 1,623,907; Apr. 5. Clock. C. F. Bosch. 1,631,804; Dec. 6. Clock. W. E. Cooke. 1,630,831; May 31. Clock. C. H. Miller. 1,650,878; Nov. 29. Clock. J. Clock. D. C. Clock. C. C. C. Cooke. Sept. 1,630,831; May 31. Clock. C. L. Glard. Dec. 76,387; Aug. 30. Clock. Apr. 2,620,837; Aug. 30. Clock. Apr. 2,620,831; May 31. Clock. C. L. Glard. Combination. G. S. Tremaine. 1,628,076; Apr. 5. Clock and scale, Combination. F. E. Parkler. 1,634,039; June 28. Clock and scale, Combination. F. E. Parkler. 1,634,039; June 28. Clock and scale, Combination. F. E. Parkler. 1,634,039; June 28. Clock and watch movements. Timing device for the

June 28.
Clock and watch movements, Timing device for the balance-wheel units of, W. E. Porter. 1,625,499; Apr. 19.
Clock, Automobile. L. Edelmann. 1,639,598; Aug. 16.
Clock case. A. M. Holstein. Des. 71,793; Jan. 4.
Clock case. J. Katz. Des. 72,712; May 24.

Clock case. J. Katz. Des. 73,524-6; Sept. 27.
Clock case. J. Katz. Des. 73,846; Nov. 15.
Clock case. J. Kernesson Des. 71,804-9; Jan. 4.
Clock case. J. Kernesson Des. 71,804-9; Jan. 4.
Clock case. N. J. Nelson. Des. 72,327; Mar. 29.
Clock case. J. D. Richardson. Des. 72,331; Feb. 15.
Clock case. H. A. Schierholtz. Des. 72,332; Mar. 29.
Clock case. R. H. Whitchead. Des. 73,409; Sept. 13.
Clock case. G. H. Whitchead. Des. 73,409; Sept. 13.
Clock case. Or similar article. A. B. Welss. Des. 73,407; Sept. 13.
Sept. 13. Sept. 13, Clock casing. L. V. Aronson. Des. 72,811-12; June 14, Clock casing. R. V. Kohn. 1,619,674; Mar. 1. Clock casing. R. V. Kohn. 1,619,674; Mar. 1. Clock casing. L. Wilcox, jr. Rei6,611; Dec. 6. Clock, Cohn-controlled. A. A. Johnson. 1,628,408; Clock Coin-controlled. A. May 10.
Clock, Compound-pendulum. T. S. Casner. 1,63
Aug. 16.
Clock, Desk. F. Lux. Des. 73,849; Nov. 15.
Clock, Electric. B. and O. Newth. 1,617,217; Feb.
Clock, Electric and self-winding. C. S. Ham. 1,63
Clock. Compounds of the control of the contro 1,637,997; Clock, Electric-instruction of the control of the c ock mechanism, Noiseless. E. S. Ostler. 1,616,465; Feb. 8. Clock mechanism, Noiseless. E. S. Ostler. 1,623,266; Apr. 5. Clock movement. H. E. Warren. 1,615,664; Jan. 25. Clock, Rack-and-snail strike. F. X. Wehrle. 1,614,165; Jan. 11. 11. Reminder. C. R. Gains. 1,620,455; Mar. port. S. H. Moscovitz. 1, Clock, Reminder. C. R Clock-spring support. 1,621,894; Clock system, Synchronous, F. W. Wood. 1,641,940; Sept. 6. Clock system, Synchronous, F. W. Wood. 1,641,940; Sept. 6. Clock, Wall. J. H. Page. Des. 73,414; Sept. 6. Clock-winding mechanism. A. W. Fowler. 1,639,691; Clockworth Mang. 23.
Clockwinding mechanism, Electric, F. A. Feldkamp. 1,633,990; Aug. 23.
Clockwork mechanism, E. E. Lehwess. 1,619,943; Clockwork mechanisms, Locking means for the spring drums of. E. P. Lehmann. 1,615,227; Jan. 25. Clockwork-operated mechanical fuses for artillery pro-jectiles, Apparatus for timing. A. Varaud. 1,615,602; Jan. 25. Clocks and the force Jan. 25. Clocks and like instruments, Resilient crystal for, R. H. Whitehead and W. E. Porter, 1,646,841; Oct. 25. Clocks, Attachment for narm. W. Jenkins, 1,648,902; Nov. 15. Clocks, Device for controlling the operation of workmen's time, F. Wayman, 1,623,370; Apr. 5. Clocks, Sectic battery for. E. and O. Newth. 1,617,218; Clocks, heaters better, feb. 8.
Clocks, Mechanism controlling alarm in. B. and O. Newth. 1,630,207; May 24.
Clocks or the like, Devices for illuminating. M. C. Fox. 1,628,497; May 10.
Clocks, System of unifying a group of. M. Yokoyama. 1,627,601; May 3.
Closed-body ventilator. J. M. Crawford. 1,635,609; July 1,01 1,627,001, Closed-body ventuate. July 12. Closet: See— Marine water-closet. Water-closet. Marine water-closet.
Ventilating closes on 1,651,901; Dec. 6.
Closet connection. J. Bropson. 1,613,926; Jan. 11.
Closet connection. W. C. Groeniger and J. C. Crouwell.
1,618,188; Feb. 22.
Closet structure, Integral. W. C. Fain. 1,644,716; Oct. 11.
Closets, Coupling for. C. W. Fankbauser. 1,626,135;
Apr. 26. Clossets, Coupling for. C. W. Fankhauser. 1,626,135;
Apr. 26.

Closing bags. P. Gangler. 1,640,316; Aug. 23.

Closing bags. W. Fiegel and W. S. Binderich.

1,635,987; July 19.

Closure. L. B. Baltzley. 1,620,316; Mar. 8.

Closure. C. D. Collins. 1,630,785; May 31.

Closure. E. L. Greenewald. 1,625,688; Dec. 13.

Closure. P. P. Horni. 1,623,477; Apr. 5.

Closure. T. Jacques. 1,631,098; May 31.

Closure. N. T. F. Rad. 1,633,6437; July 19.

Closure. T. T. Rad. 1,633,6437; July 19.

Closure. C. J. Whitacre. 1,619,996; Mar. 8.

Closure. C. A. Zarobsky. 1,627,762; May 10.

Closure. C. A. Zarobsky. 1,627,762; May 10.

Closure. C. A. Zarobsky. 1,654,065-6; Dec. 27.

Closure. C. A. Zarobsky. 1,654,065-6; Dec. 27.

Closure. and its support. B. C. Webster. 1,628,865;

May 17.

may 14. Closure and operating same, Folding, W. B. Gervais 1,619,816; Mar. 8. Closure-applying machine. G. Ramsey, 1.653,470; Dec. 20. Closure-applying machine. O. N. Tevander. 1,635,514-15; July 12.

Closure, Bottle, W. B. and H. M. Bander, 20. Dec. 20. an and jar, J. F. Hanna, 1,651,023; Nov. 29. Closure cap. L. R. N. Carvalho, 1,642,010; Sept. 13. Closure cap. G. Ramsey, 1,640,962; Aug. 30. G. Welke. Closure-cap lock. F. A. McDonald and F. G. Welke. Closure Cap. D. R. H. C. Closure Cap. G. Ramsey. 1,640,962; Aug. 30. Closure cap. G. Ramsey. 1,640,962; Aug. 30. Closure cap. G. Ramsey. M. P. Cohoe. 1,615,504; Jan. 25. Closure caps. Novel. W. P. Cohoe. 1,615,504; Jan. 25. Closure caps to paper receptacles, Apparatus for securing. C. F. Dawson. 1,641,742; Sept. 6. Closure caps to paper receptacles, Method and apparatus for securing. C. F. Dawson. 1,641,742; Sept. 6. Closure caps to paper receptacles, Method and apparatus for securing. C. F. Dawson. 1,641,742; Sept. 6. Closure collapsible sidding. G. E. Petersen. 1,628,661; May 10. Closure device. I. H. Kendall. 1,618,882; Feb. 22. Closure device. R. D. Simpson. 1,630,222; May 24. Closure fastener. J. A. Rice. 1,618,353; Feb. 22. Closure fastener. J. A. Rice. 1,618,353; Feb. 22. Closure for collapsible tubes. L. J. Elsas. 1,647,215; Nov. 1. Closure for collapsible tubes. L. J. Elsas. 1,647,215; Nov. 1. Closure for water bags. M. B. Reach. 1,652,457; Dec. 13. Closure for mans for filing openings. J. W. Gray. 1,613,886; Jan. 11. Losure Jock. J. Baron. 1,633,508; June 21.
1. Glause Jack. J. Baron. 1,633,508; June 21.
1. Glause means for filling openings. J. W. Gray.
1. Closure member. P. J. Kroll. 1,646,154; Oct. 18.
1. Closure member. Mounting fort. J. W. Duppy. 1,615,937;
1. Glause member. Mounting fort. J. W. Duppy. 1,615,937; Feb. 1. Closure-member securing and bowing device, V. M. Alcaraz. 1,622,898; Mar. 29. Closure mounting and operating means. L. G. Siller. 1,622,886; Mar. 29. Closure operator. O. B. Dobbins. 1,613,649; Jan. 11. Closure operator. O. W. Johnson. 1,639,091; Aug. 16. Closure scal. J. E. Sharp. 1,622,647; Mar. 29. Closure scal. J. E. Sharp. 1,622,647; Mar. 29. Closure. W. E. H. Bell. 1,643,538; Closure. Scale of the contract of the sept. 27. Closure-swinging device. J. W. Sealock and M. De Graaf. 1,624,677; Apr. 12. Cloth, Apparatus for cleaning. G. Stone. 1,628,690; May 17. May 17.

Cloth, Apparatus for moire-finishing. J. J. Lyth. 1,635,091; July 5.

Cloth board or similar article, G. B. Scheffey. 1,616,873; Feb. 8.

Cloth board or winder, G. B. Scheffey. 1,616,874; Feb. 8.

Cloth board, winder, or similar article. H. B. Smith. 1,650,051; Nov. 22.

House and G. B. Scheffey. 1,616,898; Feb. 8.

Cloth boards, etc., Method and mechanism for covering. H. B. Smith. 1,631,940; June 7.

Cloth boards, Producing. H. B. Smith. 1,650,049; Nov. 22. Nov. 22. Cloth boards, Sample holder for. L. E. Masson. 1,641,857; Cloth Dearus, Sanjue Notes. Sept. 6.
Cloth bridge-table cover or the like, Embroidered. S. N. Mallouk. Des. 72,163; Mar. 8.
Cloth, Cleaning. C. W. Ebbert. 1,644,053; Oct. 4.
Cloth-cutting machine. D. S. Maimin. 1,615,288; Jan. 25.
Cloth-cutting machine. D. S. Maimin. 1,446,031; Oct. 18. Coth-entting machine. D. S. Maimin. 1.615,288; Jan. 25. Coth-entting machine. D. S. Maimin. 1.646,631; Oct. 18. Coth. Editing machine. D. S. Maimin. 1.646,631; Oct. 18. Coth. Filter-press. F. R. Furbish. 1.649,822; Nov. 22. Cloth gauge. W. H. O'Neill. 1.613,289; Jan. 25. Cloth gauge. W. H. O'Neill. 1.613,289; Jan. 25. Cloth gauge. W. H. O'Neill. 1.613,289; Jan. 25. Cloth-holding frame. L. S. Coth. Politic for the Coth. Cot Clothesline connection. S. J. Walaschek. 1,620,928; Mar. 15. Clothesline fastener. F. Alexander. 1,633,722; June 28. Clothesline holder. C. L. Kubista. 1,635,850; July 12. Clothesline holder. G. J. A. Molique. 1,632,616; June 14. Clothesline lock. S. Wood. 1,635,282; Aug. 9. Clothesline receiver, Self-locking. J. S. Great 1,626,728; May 3. Clothesline reel. F. W. Griffin. 1,649,224; Nov. 15. Clothesline reel. C. O. Swanson. 1,648,628; Nov. 8. Clothesline reel. C. O. Swanson. 1,648,628; Nov. 8. Clothesline support. A. and J. Russo. 1,639,275; Aug. 16.

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Clotheslines, Adjustable bracket for. H. S. Leggett. 1,645,334; Oct. 11.
Clotheslines, Adjustable support for. A. G. Festenburg and A. and H. Strooni. 1,616,314; Feb. 1.
Clotheslines, Adjustable support for. A. G. Festenburg and A. and H. Strooni. 1,616,314; Feb. 1.
Clotheslines, Supporting attachment for. J. C. Kindler and J. J. Kankas. 1,632,858; Dec. 27.
Clotheslines, Supporting attachment for. L. Hagen. 1,622,198; Apr. 5.
Clothesper. H. J. and J. A. H. Drew, and J. F. Gardiner. 1,621,108; M. 18.
Clothesper. G. Brady. 1,645,220; Oct. 11.
Clothespin. A. L. Broking. 1,635,937; Aug. 10.
Clothespin. A. L. Broking. 1,635,937; Aug. 10.
Clothespin. C. Gerbaczewski. 1,635,833; July 12.
Clothespin. J. Larson. 1,630,017; May 24.
Clothespin. P. H. W. Wendt. 1,634,892; July 5.
Clothespin. Machine for assembling. S. S. Tainter.
Clothespin. Machine for assembling. S. S. Tainter.
Clothespin. Machine for assembling. S. S. Tainter. 1,644,547; Nov. 1.
Clothespin. Stachine for assembling. S. S. Tainter. 1,644,545; Nov. 1.
Clothespin. 1,644,645; Nov. 1.
Clothespin. 1,644,645; Nov. 1.
Clothespin. 1,644,645,635; Oct. 4.
Clothespin. 1,644,645,635; Oct. 4.
Clothespin. 1,644,645,635; Oct. 4.
Clothespin. 1,644,645,635; July 26.
Clothespin. 1,644,645,635; Oct. 4.
                    Feb. 15.
Clothes protector. F. Wells. 1,636,885; July 26.
Clothes rack. H. W. Aumack. 1,644,503; Oct. 4.
Clothes rack. J. B. Felicety. 1,620,199; Mar. 8.
Clothes rack, Portable. C. H. Mercier. 1,624,796; Apr. 12.
Clothes support. C. F. Parks. 1,636,431; July 19.
Clothes washer. O. P. Greenstreet. 1,638,730; Aug. 9.
Clothes-washing apparatus. H. G. Dugun. 1,626,397; Apr. 26.
        Clothes washer.

Clothes washing apparatus. H. G. Dugan. 1,626,397;
Apr. 26.

Clothes winger. L. Cameto. 1,652,424; Dec. 13.

Clothes winger. H. Criner. 1,646,926; Aug. 30.

Clothes winger. S. N. McClean. 1,637,581; Aug. 2.

Clothes winger. G. Ragano. 1,628,554; May 10.

Clothes winger. W. A. Schnedler. 1,643,643; Sept. 27.

Clothes winger. W. P. Shattuck. 1,641,204; Sept. 6.

Clothes winger. W. P. Shattuck. 1,641,204; Sept. 6.

Clothes winger. W. A. Schnedler. 1,643,643; Sept. 27.

Clothing, Tally Apr. 12.

Clothing, Curtains, and the like, Suspension device for.

J. Ellberg. 1,613,447; Jan. 4.

Clothing, Tabric, and the like, Suspension device for.

J. Ellberg. 1,613,447; Jan. 4.

Clothing, Tabric, and the like, Apparatus for dyeing articles of. R. C. and A. B. Clark. 1,649,445; Nov. 15.

Cluster. Onstruction. C. Haswo. 1,653,845; Nov. 15.

Cluster. Onstruction. C. Haswo. 1,653,847; Jun. 24.

Clutch. J. L. Baldwin. 1,632,159; June 14.

Clutch. J. E. Craddick. 1,643,543; Sept. 13.

Clutch. J. E. Craddick. 1,643,543; Sept. 13.

Clutch. J. F. Gaylord. 1,642,207; Sept. 13.

Clutch. J. F. Gaylord. 1,642,107; Sept. 13.

Clutch. J. F. Gaylord. 1,642,107; Sept. 15.

Clutch. J. F. Gaylord. 1,642,107; Sept. 15.

Clutch. J. F. Gaylord. 1,642,107; Sept. 15.

Clutch. J. F. L. Kurschell 1,629,036; May 17.

Clutch. L. S. Kubiac. 1,618,127; Feb. 15.

Clutch. P. G. Leonard. Rel6,568; Mar. 8.
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Clutch device. A. de Jouëtte. 1,642,606; Sept. 15.
Clutch device. H. A. Meyers. Re16,565; Mar. 1.
Clutch device. W. C. Smith 1,619,892; Mar. 8.
Clutch driving mechanism, Friction- J. Katzman.
1,647,460; Nov. 1.
Clutch, Electromagnetic. C. Q. Payne. 1,622,261;
Mar. 22.
                                  Clutch, Electromagnetic. E. Price. 1,629,304; May 17.
Clutch, Electromagnetic friction. J. Bing. 1,622,939;
Mar. 29.
                              Mar. 29.

Mar. 29.

Litching action magnetically-operated friction. J. Bing. Clutch, 56; 1 Mly 50; 1 Mly 5
                 Clutch for power tränsmission. J. Kunices. 1,014,519; Jan. 11. Clutch for window regulators. P. J. Kurscheidt, Clutch Frietion. C. H. Aldridge. 1,618,259; Feb. 22. Clutch, Frietion. G. C. Carhart. 1,637,734; Aug. 2. Clutch, Frietion. A. A. Conway. 1,618,945; Jan. 11. Clutch, Frietion. A. A. Conway. 1,639,656; May 31. Clutch, Frietion. D. E. Gamble. 1,623,263; Apr. 5. Clutch, Frietion. D. E. Gamble. 1,623,267; Apr. 5. Clutch, Frietion. W. Geist. 1,625,201; Apr. 19. Clutch, Frietion. W. Geist. 1,625,201; Apr. 19. Clutch, Frietion. J. A. Guny. 1,637,184; July 26. Clutch, Frietion. J. Kalaf, fr. 1,635,086; July 5. Clutch, Frietion. J. Kalaf, fr. 1,635,086; July 5. Clutch, Frietion. J. Clutch, 1,637,184; July 26. Clutch, Frietion. J. Clutch, 1,637,184; July 26. Clutch, Frietion. W. Starkey. 1,640,472; Aug. 30. Clutch, Hinge. G. W. Zabel. 1,628,373; Apr. 26. Clutch, Hinge. G. W. Zabel. 1,628,373; Apr. 26. Clutch, Hydraulic. A. H. Manwaring. 1,624,841; Apr. 12.
                 Clutch, Hydraulic, A. H. anniversal Mar. 1.
Clutch, Hydraulic, V. A. Nelson, 1,619,751; Mar. 1.
Clutch, Load-limiting, R. Chilton, 1,632,539; June 14.
Clutch local-limiting, R. Chilton, 1,632,539; June 14.
Clutch local-limiting, R. Chilton, 1,632,539; June 14.
Clutch, Machine-tool. L. F. Nenninger, 1,625,738;
Clutch, Machine-tool. L. F. Nenninger, 1,625,738;
Clutch mechanism, C. H. Benedict, 1,628,219; May 10.
Clutch mechanism, W. E. Brughton, 1,649,283;
Ney, 15.
             Cittled mechanism. W. E. Broughton. 1,649,283;
Nov. 15.
Clutch mechanism.
H. H. Kessler. 1,648,478;
Littled mechanism.
H. H. Kessler. 1,648,748;
Littled mechanism.
H. A. Tuttle.
Clutch mechanism.
Clutch mechanism.
H. A. Tuttle.
Littled mechanism.
Clutch mechanism.
Clutch mechanism.
H. A. Tuttle.
Littled mechanism.
Clutch mechanism.
Clutch mechanism.
H. A. Tuttle.
Littled mechanism.
Clutch mechanism.
G. Wilcox.
Littled mechanism.
Littled mechani
                 Clutch-potenting mechanism. J. F. Wright. 1,632,865; June 7. Clutch-operating mechanism. J. F. Wright. 1,632,866; June 21. Clutch or brake, Self-adjusting. C. Stuart. 1,647,482; Nov. I. Clutch pedals, Lever control for. H. J. England. 1,632,929; June 7. Gamble. 1,652,905-7; Dec. 6. Clutch plate. H. E. Maynard. 1,613,689; Jan. 11. Clutch-protecting device. C. M. Hibbets. 1,636,959; July 26.
                     July 26.
Clutch-release coupling, F. A. Brinkman. 1,652,345;
                 Dec. 13.
Clutch release, Safety. R. H. Pratt. 1,646,458; Oct. 25.
Clutch-releasing device, Safety. T. A. Bowe. 1,627,313;
Clutch Felesse, Shreip.

Clutch-Releasing device, Safety. T. A. Bowe. 1,621,513, May 3.

May 3.

May 4.

May 5.

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May 9.

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May 1
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Clutches, Control element for. 1,635,599; July 12. Clutches, Safety device for. D. Jan. 18. C. Andrade, jr. D. Brodkey, 1,615,005;

Jan. 18.
Coal agitator. O. Aram. 1,649,333; Nov. 15.
Coal and ore, Apparatus for washing. G. W. Wilmot.
1,639,915; Aug. 23.
Coal and similar material, Weigher for. M. Gordon.
1,632,694; June 14.
Coal and the like, Drying. H. Fleissner. 1,632,829;
June 21.

June 22.

June 21.

Coal breaker, J. T. Norman, 1,618,721; Feb. 22 Coal, Braquetting, S. R. Wagel, 1,618,029; Feb. Coal, Briquetting bituminous, S. R. Wagel, 1,6 Feb. 15. 1,623,764;

Apr. 5. Conl-chute gate. E. A. Titus. Re16,633; May 24. Conl-chute J. C. Brackett. 1,614,182; Jan. 11. Coal-cutting machine. J. C. Brackett. 1,639,255; Aug.

16.
Coal, Distilling. R. G. Griswold. 1,635,667; July 12.
Coal drier. H. B. Carpenter. 1,650,427; Nov. 22.
Coal drill. J. Avbelj. 1,642,365; Sept. 13.
Coal drying. O. W. Randolph. 1,623,553; Apr. 5.
Coal feeder and separator and grader. J. T. Norman. 1,651,620; Dec. 6.
Coal from dirt and like foreign substances. Apparatus for separating. W. H. Berrisford. 1,648,716; Nov. 8.
Coal-grinding mill. M. W. Arrowood. 1,628,099;

Coal-grinding mill. M. W. Afrowood. 1902.000-May 10.
Coal-handling apparatus. A. Allen. 1.647,168; Nov. 1.
Coal-handling plant. G. S. Jaxon. 1,617,117; Feb. 8.
Coal jig. W. A. Relly. 1,646,422; Oct. 25.
Coal-loading machine. T. L. Johnson. 1,625,726; Apr. 19.
Coal-Method of and apparatus for breaking. P. G. Seigle and G. E. Dean. 1,629,838; Mar. 15.
Coal-mining apparatus. N. D. Levin. 1,638,447; Aug. 9.
Coal-mining apparatus. N. D. Levin. 1,638,447; Aug. 9.
Coal-mining explosive. W. O. Snelling. 1,631,670;
May 31.

May 31.

Coal-mining machine, M. P. Holmes. 1,652,529; Dec. 13.

Coal-spout-operating device. G. M. Wutzler, 1,633,914;

June 28.

Coal stoker and burner, Combined. J. C. St. Clair.
1633,465; June 21.

1633,465; June 21.

1. E. Bell. 1,641,470; Sept. 6.

Coal system. L. Gamer, 1,613,569; Jan. 4.

Coaster brake. L. G. Ouellet. 1,629,296; May 17.

Coaster, Child's. J. J. Behm. 1,620,296; May 17.

Coaster for children. F. W. Darling, 1,618,272; Feb. 22.

Coaster, Marble. G. M. Nelson. 1,615,342; Jan. 25.

Coaster-track structure. II. P. Schmeck. 1,621,337;

Mar. 15.

Coaster-track structure. W. H. Strickler. 1,642,275;

Coaster wagon, Convertible, F. A. Pearl. 1,625,422; Coaster wagon, Convertible, E. F. Hesch. 1,638,487; Aug. 9. Coaster wagon. W. M. Shewry, 1,623,443; Apr. 5. Coaster wagon. H. A. Trullinger, 1,620,926; Mar. 15. Coaster-wagon brake, E. S. Showers. 1,625,559; Coaster wagon, Convertible, F. A. Pearl. 1,625,422;

Conster wagon, Convertible, F. A. Pearl. 1,625,422;
Alv. 10.

Conster wagons, Steering mechanism for. W. Erni.
1,627,022; May 3.

Coat. D. Captarola. 1,646,274; Oct. 18.

Coat. D. Dalkner. 1,623,781; Apr. 5.

Coat. J. Palkner. 1,623,785; Apr. 19.

Coat. M. Siegel. Des. 7,235; Mar. 29.

Coat. M. Siegel. Des. 1,628,355; Apr. 19.

Coat. M. Siegel. Des. 1,628,365; Mar. 29.

Coat. M. Siegel. Des. 1,633,495; Jan. 4.

Coat. M. Siegel. Des. 1,633,495; Jan. 21.

Coating. W. H. Allen. 1,613,428; Jan. 4,20; Nov. 8.

Coating. W. H. Allen. 1,613,428; Jan. 4.

Coating. B. Talbot. 1,633,746; Dec. 27.

Coating articles. Process and apparatus for. F. Albburg.

Coating articles with glass, enamel, quartz, and metals, Device for M. U. Schoop. 1,617,166; Feb. 8.

Coating composition. C. D. Hocker. 1,638,359; July 5.

Coating composition. C. D. Hocker. 1,638,359; July 5.

Jan. 11.

Conting compositions. C. D. Hocker. 1,638,579; Aug. 9.
Conting for covered conductors and applying the same,
Protecting. O. A. Frederickson. 1,625,829; July 12.
Conting intervariaces of hollow bodies. R. P. Jackson.
1,622,1016; Mar. 15.
Courting machine. H. G. Weber. 1,616,724; Feb. 8.
Courting machine. Conting eylindrical objects. R. F.
Conting machine, Candy. D. Piccardo. 1,618,471;
Feb. 22.
Conting machine. Contributed. H. W. Biology. 1,112,221,222,232.

Coating machine, Centrifugal. H. W. Pleister. 1.618,779;

Feb. 22.
Conting. Machine for deposition of. R. G. Fordyce.
1.642.607; Sept. 13.
Continus. Machine for deposition of. R. G. Fordyce.
1.644.993; Oct. 12.
Conting. Machine for deposition of. R. G. Fordyce.
1.644.993; Oct. 12.
Conting material, Apparatus or tool for applying. J. J.
Preble and W. B. Thompson. 1.627,117; May 3.
Conting materials. Apparatus of tool for applying. J. J.
Conting materials. Apparatus of tool for applying. J. J.
Wynd and J. L. Schueler. 1,630,507; May 31.

Coating, Method of and apparatus for. P. J. Barord. 1.643,330; Sept. 27. Coating process. A. Eggiman and A. Perca. 1,640,185; Coating process. A. Eggiman and A. Perca. 1,640,185; Coating process. A. Eggiman and A. Perca. 1,640,185; Coating kemoval of. W. H. Allen. 1,639,070; Aug. 16. Coating kemoval of. W. H. Allen. 1,639,070; Aug. 16. Coatings. Removal of. W. H. Allen. 1,639,070; Aug. 16. Coatings. Removal of. W. H. Schatz. 1,637,281; July 26. Cobiler's jack. J. A. Young. 1,637,462; Aug. 2. Cock and switch, Combined. C. C. Farmer. 1,649,023; N. Nov. 15. H. F. Bickel. 1,642,215; Nov. 8. Cock, Angle. J. A. Clift. 1,616,351; Feb. 1. Cock. Automatic hydraulic ball. W. L. Gilchrist. 1,618,331; Feb. 22. Cock. Automatic hydraulic ball. W. L. Gilchrist. 1,639,1 Oct. 25. Cock. Automatic hydraulic ball. W. L. Gilchrist. 1,639,1 Oct. 25. Cock. Automatic hydraulic ball. W. L. Gilchrist. 1,639,1 Oct. 25. Cock. Automatic hydraulic ball. W. L. Gilchrist. 1,649,10 Oct. 25. Cock. Automatic hydraulic ball. W. L. Gilchrist. Cock, Automatic hydraulic ball. W. L. Gilchrist. 1,649,10 Oct. 25. Cock. Automatic hydraulic ball. W. L. Gilchrist. Cock, Gauge. F. L. Scott. 1,653,734; Dec. 27. Cock, Gauge. F. L. Scott. 1,653,734; Dec. 27. Cock, Gauge. F. L. Scott. 1,653,734; Dec. 27. Cock, Gauge. H. E. Walling. 1,618,119; Feb. 15. Cock having automatic seating plug, High-pressure. M. R. Slipley. 1,624,512; Apr. 12. Cock having automatic seating plug. High-pressure. M. R. Slipley. 1,624,512; Apr. 12. Cock having foating plug. Stop. M. R. Shipley. 1,642,973; Cock evice, Angle. G. W. Wildin and C. C. Farmer. 1,659,312; Nov. 22.

Cock having floating plug, Stop. M. R. Shipley, 1,642,973; Sept. 20.
Cock tlevice, Angles. G. W. Wildin and C. C. Farmer.
Cock, Fluid-control. J. F. Straitz. 1,648,613; Nov. 8.
Cock holder, Angles. S. H. Campbell. 1,645,689; Oct. 18.
Cock holder, Angles. B. H. Campbell. 1,628,693; May 3.
Cock of Valve, Gas. F. W. Moore. 1,628,263; May 10.
Cock, Plug. T. L. Brannen. 1,643,33; May 10.
Cock, Plug. T. L. Brannen. 1,643,33; May 10.
Cock, Plug. T. L. Brannen. 1,643,37; May 2.
Cock, Safety gas. C. J. Ermentraut. 1,618,071; Feb. 18.
Cock, Safety try. R. D. Valentine. 1,636,397; July 19.
Cocks, Operating mechanism for bleed. W. A. Calloway.
Cock, Safety try. R. D. Valentine. 1,636,397; July 19.
Cocks, Operating mechanism for bleed. W. A. Calloway.
Cocks, Safety feb. 1.

Coconut-shelling machine. J. F. Kohler. 1,645,602 (1.62,502).

Coconut-shelling machine. J. F. Kohler. 1,645,602 (1.62,502).

Cott. 18. Shelling. F. R. Schmitt. 1,626,861; Apr. 26. Code: Impulse combinations. Apparatus for transmitting. H. A. Wallace. 1,645,122; Oct. 11.

Cod-liver oil a highly concentrated substance rich in antirachitic and antixerophille vitamines and the product thereof, Obtaining from. C. Funk and H. E. Dubin. 1,629,074; May 17.

Coffee and making the same. B. C. Gerwick. 1,624,330; Apr. 12.

Coffee and making the same. B. C. Gerwick. 1,624,330; Apr. 12.

Coffee free from caffeine, Production of. F. Kündig. 1,629,512; May 24.

Coffee grinders or the like, Hopper for. M. K. Akers. Des. 72,340; Apr. 5.

Coffee, Improving the qualities of. O. Gewalt. 1,636,300; July 18.

Coffee, Improving the qualities of. O. Gewalt. 1,836,300; July 19.
Coffee maker. T. Magliano. 1,638,013; Aug. 9.
Coffee maker. I. D. Richheimer. 1,613,483; Jan. 4.
Coffeepot. M. Boutempl. 1,619,967; Mar. 6.
Coffeepot. M. Boutempl. 1,619,967; Mar. 6.
Coffeepot. W. Hude. 1,631,486; June 7.
Coffeepot. V. Lambert. 1,632,342; June 14.
Coffeepot. E. F. Lane. 1,624,666; Apr. 12.
Coffeepot. E. P. McClure. 1,643,309; Sept. 27.
Coffeepot attachment. G. Mrozek. 1,654,185; Dec. 27.
Coffeepot or analogous article. H. E. Nock. Des. 72,328;
Coffeenot or analogous article. H. E. Nock. Pos. 74,188;

Coffeepot or analogous article. H. E. Nock. Des. 74,153;

Coffee or analogous arrice. H. E. Aock. Des. 14,105; Coffee product and making stm. F. P. McColl. 1,641,446; Sept. 6, Coffee tablet and making same. F. P. McColl. 1,641,446; Sept. 6, Coffee trans. R. Cross. 1,640,648; Aug. 30. Coffee urn. R. S. Gehiert. 1,630,173; July 20. Coffee urn. apparatus. H. L. Reckard. 1,630,944; May 31. Coffee-urn apparatus. H. L. Reckard. 1,630,944; May 31. Coffee-urn apparatus. H. L. Reckard. 1,630,944; May 31. Coffee-urn attachment to automatically measure more than one substance simultaneously to deliver a combined uniform volume. D. M. Clark. 1,627,147; May 3. Coffee dam. Knockdown. K. Schoen. 1,633,131; June 21. Coffin case, Metallic. E. G. McMiller. 1,622,529; Coll. M. B. Grout. 1,625,465; Apr. 19. Coll. Adapter. E. C. Rodman. 1,635,096; July 5. Coll. Adapter. E. C. Rodman. 1,637,096; July 5. Coll. Adapter. E. C. Rodman. 1,647,259; Nov. 1; Coll. amplification unit, Choke. E. E. Hiler. 1,615,224; Jun. 25. Securities. Electrical. E. J. D. Lewsky.

Coli ampinessor and Jan. 25.

Coli and mounting, Electrical. F. J. De Lewsky.

Coli and Electrical and Colinary and Colina

Apr. 19. Apr. 143. Coll, Choke. A. G. Steinmayer. 1,646.502; Oct. 25. Coll core, Induction. G. S. Chauncey. 1,629,148; May 17. Coll, Electric. J. Le Gaucear. 1.614,309; Jan. 11.
Coll. Electrical. C. H. Franks. 1.633,577; June 28.
Coll former, A. O. Way. 1,623,766; Apr. 5.
Coll-forming device. L. A. Cole. 1,633,068; June 21.
Coll-forming device. L. A. Cole. 1,634,229; Sept. 13.
Coll, High-frequency. E. B. Frankerstone. 1,663,951; D. Coll. High-frequency. E. B. Frankerstone. 1,663,951; D. Coll. Property of the coll. Pro Feb. 1.

Colls, Method and apparatus for making edge-wound. G. H. Whittingham. 1,630,912; May 31.

Colls. Mounting for inductance. A. M. Weinkle. 1,644,213 (Oct. 4.

1,644,213 (Oct. 4.

1,67, Ferkins. 1,633,021; Dec. 20.

Coll Bank. J. F. Fungak. Des. 73,08; July 5.

Coll Bank. Nonrefiliable. F. O. Hong. 1,637,312; July 26. Coin bank, Nonrefillable. P. O. Houg. July 26.
Coin chute. W. A. Tratsch. 1,641,304; Sept. 6.
Coin collector. W. H. Edwards and R. S. Tucker. 1,652,239; Dec. 18.
Coin-control levers, Adjusting attachment for. H. F. Burt. 1,649,017; Nov. 15.
Coin-controlled apparatus. G. F. Higgins. 1,632,838; Con-controlled apparatus. G. F. Higgins. 1,632.838; Join-controlled apparatus. C. Lea, 1,628.852; May 17. Coin-controlled apparatus. H. L. Treichier. 1,649,425; Nov. 15. Coin-controlled apparatus. H. Walker, 1,652,919; Dec. 13.
Coin-controlled apparatus. J. B. Watling. 1,624,881; Coin-controlled apparatus. J. B. Watling. 1,024,881; Apr. 12.
Coin-controlled device. W. C. De Armond and W. R. H. Watt. 1,638,682; Aug. 9.
Coin-controlled Service and Preventer for. W. F. Dona-Coin-controlled lock. W. J. Dobkin. 1,628,711; May 17.
Coin-controlled lock. W. J. Dobkin. 1,628,711; May 17.
Coin-controlled lock. W. J. Dobkin. 1,628,711; May 17.
Coin-controlled lock. W. Gayle. 1,626,193; Apr. 26.
Coin-controlled lock. H. L. Johnson. 1,640,605; Aug. 30. 30. Coin-controlled lock. H. L. Johnson. 1,643,458; Sept. 27. Coin-controlled lock. F. W. Kassler. 1,633,411; June 21. Coin-controlled machine. A. Malkin. 1,644,067; Oct. 4. Coin-controlled machine. J. J. Scharli, jr. 1,621,756; Coin-controlled machine. J. J. Scharii, Jr. 1,621,756; Mar. 22.

Coin-controlled machines. Sing detector for. F. Hedley and J. S. Doyle. 1,630,427; May 31.

Coin-controlled messarians. M. Kindrat and H. Zatzer-Coin-controlled mechanism. C. Di Martino and E. Lindquist. 1,623,466; Apr. 5.

Coin-controlled mechanism. G. Giambra. 1,629,211; May 17.

May 17.

Loin-controlled mechanism. G. Giambra. 1,629,211; May 17.

Loin-controlled mechanism. G. Giambra. 1,629,411 (May 17.

Loin-controlled mechanism. G. Di Martino and E. Lindquist. 1,632,493; June 14.

Coin-controlled wending device. F. J. McFarland. 1,632,673 (June 14.

Coin-controlled wending machine. D. Lazar and H. A. Drew. 1,630,439; May 31.

Coin counter and stacker. P. C. Smith. 1,618,390; Coin-federy machine. E. J. Rrandt. 1,616,679. Feb. 8. Coin counter and stacker. P. C. Smith. 1,618.390: Feb. 2. Coin-delivery machine. Casing for a. E. J. Brandt. Des. 73.556: Oct. 4. C. Smith. Casing for a. E. J. Brandt. Des. 73.556: Oct. 4. C. Reilows. 1.650.488: Nov. 22. Coin-delevery machine. Kirch. 1.640.435. Ang. 26. Coin-detector. W. F. Kirch. 1.640.435. Ang. 26. Coin-freed apparatus. H. J. Dolama. 1.646.277; Oct. 18. Coin-handling machine. E. J. Brandt. 1.642.941; Oct. 4. Coin holder. J. C. Martine. 1.615.642; Jan. 25. Coin-holder. V. Pepe. 1.633.127; June 21. Coin holder. V. Pepe. 1.633.127; June 21. Coin holder. V. Pepe. 1.633.127; June 26. Coin-operated machine. Automatic. O. R. Barr. 1.621.230; Mar. 15. Coin-operated machine. Automatic. O. R. Barr. 1.621.230; Mar. 15. Coin-operated soap dispenser. A. Soderholm. 1.648.961; Oct. 4. Coin receptacle. D. L. Chandler. 1,637.549; Aug. 2.

Coin receptacle. F. Minto. 1.644,539; Oct. 4. Coin selector. G. F. Hochriem. 1,623,186; Apr. 5. Coin-wrapper crimper. W. B. Howard. 1,629,625; May 24. May 10.

May 10. Coke and producing the same. T. H. Hall. 1,650,126; Nov. 22. Coke and semicoke, Production of. E. B. G. Bascou. 1,618,563; Feb. 22. 1.618.563; Feb. 22.
Coke-handling mechanism. D. P. Finney. 1,618.701; Feb. 22.
Coke, Quenching H. M. Crossett. 1,614.456; Jan. 18.
Coking retort oven J. An Ackeren. 1,613.068; Jan. 4.
Coking retort oven J. An Ackeren. 1,613.068; Jan. 4.
Coling retort oven J. An Ackeren. 1,613.068; Jan. 4.
Collapsible box. M. Leiberman. 1,651,284; Nov. 29.
Collapsible box. M. Leiberman. 1,651,284; Nov. 29.
Collapsible case. M. J. H. Yerk and W. J. Baumberger. 1,623,600; Apr. 5.
Collapsible case. M. J. Bauer. 1,643.07; Sept. 20.
Collapsible case. M. J. Bauer. 1,643.07; Sept. 20.
Collapsible case. J. P. Burcher. 1,624.212; Apr. 12.
Collapsible rack. D. H. Bitney. 1,612.903; Jan. 4.
Collapsible tube. K. K. Kefer. 1,624.40; Apr. 122.
Collapsible tube. K. J. Zammalaron. 1,615.127; Jan. 18.
Collar. L. H. Gilmer. 1,642,544; Sept. 13.
Collar. L. H. Gilmer. 1,642,544; Sept. 13.
Collar. M. Kahn. 1,622,037; Mar. 22.
Collar. M. Kahn. 1,622,037; Mar. 22.
Collar. W. H. Rabell. 1,640,805; Aug. 30.
Collar. T. H. Gilmer. 1,647,550; Nov. 1.
Collar and curff and making the same. R. F. Bacon and C. H. Kidwell. 1,647,550; Nov. 1.
Collar and forming same. Coat. W. H. Kessel. 1,618,438; Feb. 22.
Collar, Apparel. P. F. Hesse. 1,643,497; Sept. 27.
Collar, Apparel. P. F. Hesse. 1,644,8497; Sept. 27.
Collar, Apparel. P. E. Hesse. 1,644,8497; Sept. 27.
Collar, Apparel. P. F. Hesse. 1,644,8497; Sept. Coke-handling mechanism. D. P. Finney. 1,618,701; Oct. 18.
Collar, Apparel. P. F. Hesse. 1,643,497; Sept. 27.
Collar buster and casing spear, Combined. P. Dietrich. 1,628,533; May 10.
Collar button. S. Kaufman. 1,629,822-3; May 24.
Collar button. W. R. Larter. 1,638,491; Aug. 9.
Collar-button guard. C. Heimgartner and O. Stierli. 1,628,137; Apr. 26.
Collar class, Soft. M. Kasper. 1,621,730; Mar. 22.
Collar, Coat. F. and H. Hohenstein. 1,638,692; Aug. 9.
Collar-disylay device. C. M. Connoily. 1,626,514; Apr. 26. Collar-display device. C. M. Connoily. 1,620,012; Apr. 26. Collar fastener. F. Wolf. 1,619,390; Mar. 1. Collar leak champ. J. W. French and E. D. Chabasol. 1,633,482; Aur. 9. Collar pad. W. H. Miller. 1,653,816; Dec. 27. Collar, Reversible. P. Sukrow. 1,637,540; Aug. 2. Collar pad. 2011. Collar, Seil-locking utive, R. R. Schall. 1,645,457; Oct. 11, Collar, Semisoft, R. Hunter, L,642,858; Sept. 20. Collar, Set-screwless, M. R. Schall. 1,645,457; Oct. 11, Collar, Soft. G. W. Jones and H. D. Roberson. 1,650,717; Nov. 29. Collar, Soft. N. E. Walter, 1,629,202; Nov. 15. Collar-stretching machine. M. L. Kaplan and M. Brandfish. 1,619,393; Mar. 8. Ollars, Holoi for breast. P. Clavier, 1,616,350; Feb. 1. Collare-treenforcing means. W. W. Burke. 1,614,278; Jan. 11. Collars, Hook for breast. P. Clavler. 1,616,350; Feb. 1. Collaret-renforcing means. W. W Burke. 1,614,278; Collaret-renforcing means. W. Burke. 1,614,278; Collecties. Controlling apparatus for. D. F. Brown and F. J. Raymer. 1,613,786; Jan. 11.
Collet. E. E. Minard. 1,646,926; Oct. 25.
Colloid of December of Molin. 1,650,088; Nov. 22.
Colloid products. Forming. S. A. Neideh. 1,643,080; Colloidal May 3.
Colloidal systems. Stabilizing. W. O. Herrmann and W. Haebnel. 1,629,161; May 17.
Color chart. E. F. Kern. 1,618,604; Feb. 22.
Color chart. E. F. Commaell. 1,617,024; Feb. 8.
1644,044; Oct. 4.
Color combinations. Determining. H. H. Adler. 1,630,347; May 17.
Color design. Producing relative. R. Sykora. 1,620,604; Color harmony device. H. H. Adler. 1,629,330; May 17.
Color mixer. H. Gruender. 1,613,468; Mar. 1.
Color printing compensator. E. A. Waller. 1,643,324; Sopt. 27. Sept. 2 the Allfane photo-engraving. B. F. Hutchi-con 11-618:544 Feb. 2. Color printing. Photogravure. B. F. Hutchison. 1.618.533 Feb. 22. Color screen, Light. C. L. Kellert. 1,648.234; Nov. 8. Color-scripg machine. R. E. Rundell. 1,526.359; Coloris or Find Parcelles A. A. and A. Ames, jr. Apr. 26 Color standards. System of. B. A. and A. Ames, jr. 1602,2731 Jan. T. G. Hitt. 1624,630: Apr. 12. Coloring agent. Flame. C. Ellis. 1,617,996: Feb. 15. Coloring composition and preparing same, Food. W. D. Bost. 1,616,739; Feb. 8.

754 Coloring for butter and oleomargarine, Powdered butter.

A. F. biles. 1,649,821; Nov. 22.
Coloring letters or figures impressed in metal tags, badges, etc. 0, M. Martin and C. M. Webster. 1,640,787; Aug. 30.
Coloring materials. J. P. Trickey. 1,627,939; May 10.
Coloring materials. J. P. Trickey. 1,627,939; May 10.
Coloring materials. J. P. Trickey. 1,627,939; May 10.
Coloring materials. J. P. Brickey. 1,627,939; May 10.
Coloring materials. J. P. Brickey. 1,616,91; Jan. 18.
Coloring materials. Production of polyazo. L. H. Flett.
1,616,850; Feb. S.
Coloringtenans, Fire-fame. J. A. Lahey. 1,625,475;
Colorimeter. J. P. Bader. 1,629,609; May 24.
Colorimeter. W. L. Patterson. 1,643,515; Sept. 27. Colorimeter. J. P. Bader. 1,629,609; May 24. Coloris, Device for selecting. H. H. Adler. 1,651,860; Dec. 6. Dec. 6.
Coloscope. E. J. Frangedakis. 1,633,443; June 21.
Colter. E. Morberg. 1,623,488; Apr. 5.
Colter. E. E. Wolf. 1,651,938; Dec. 6.
Colter, Plow. A. Craig. 1,627,177; May 3.
Colter, Rolling. F. L. Dewey. 1,636,810; July 26.
Column and guard. W. G. Kiefer. 1,617,762; Feb. 15.
Column clamp. C. L. Meyer. 1,634,111; June 28.
Column clamp. C. L. Meyer. 1,634,111; June 28.
Column clamp. Concrete. E. T. Corbin. 1,643,838:
Sept. 27.
Column clamp. with centium. Column clamp with castings. H. O. McMillan. 1,636,143; July 19. July 19.

Column-form clamp. E. E. Davis. 1,636,462; July 19.

Column joint, Deep-well. A. R. Weis. 1,647,386; Nov. 1.

Column spacer. H. M. Forker. 1,627,026; May 3.

Columns, Constructing. H. T. Kraft. 1,623,939; Apr. 5. Columns, Constru Comb: See— Barber's comb. Hair comb. Hair-cutting comb. Hair-retaining comb. Hair comb.
Body comb.
Hair-cutting comb.
Hair-cutting comb.
Hair-retaining comb.
Fine-tooth comb.
Hair-waving comb.
Foldable comb.
Fountain comb.
Comb. A. A. Elnett. 1,621,005; Mar. 15.
Comb. A. A. Elnett. 1,621,005; Mar. 15.
Comb. R. N. Hymer. 1,633,883; June 28.
Comb. G. Kohlmeyer. Des. 73,138; July 26.
Comb. H. E. Scott. 1,616,408; Jan. 25.
Comb. H. E. Scott. 1,644,242; Aug. 30.
Comb. A. Comb. And Description of the Comb and making the same, B. Ames.
July 26. 1.637.249: July 26.
Comb and making the same, Textile. G. J. Uzmann.
1.654,105; Dec. 27.
Comb. brush, and mirror, Combination. M. Koske.
1.626,415; Apr. 26.
G. F. Roberts. 1, 27,408; May 3.
Comb for naying underground electric conduits, Extension. C. D. Healy. 1,650,833; Nov. 29.
Comb bolder, Combination. E. J. Harka ess. 1,645,138; Oct. 11.
Combined machine. C. Straub. 1,646,796; Oct. 25.
Combing machine. J. J. G. G. Corman. 1,620,325;
Mats. S. machine. J. July. 1,640,705; Aug. 30. Combination puller. D. H. Bellow.

May 17.
Combination switch. W. Kalsling. 1,621,729 Mar. 22
Combination tool. R. C. Hofmaister. 1,624,788; Apr. 12
Combination tool. B. F. Shaughnessy. 1,615,410
Tan. 25. 8; Apr. 12. 1.615.410; Combination tool. B. F. Sunuguness.

Jan. 25.

Combs. brusbes, and the like, Attachment to folding.

B. Backes, 1,651,746; Dec. 6.

Combustible material, Tracting.

1,628,609; May 10.

Method and upparatus for preparaments.

Combustion. J. L. Breese, jr. 1,642,633; July 5.

Combustion. J. L. Breese, jr. 1,642,633; July 5.

Combustion. B. Valjean. 1,639,202; Aug. 16.

Combustion. B. Valjean. 1,639,202; Aug. 16.

Combustion. B. Valjean. 1,639,202; Aug. 16. Combustion apparatus. J. Good. 1,625,313; Apr. 19. Combustion apparatus. R. J. Sovereign. 1,634,857; Combustion chamber, H. W. Ash and W. B. Slemmer, 1.634.338; Dec. 27. Combustion chambers, Supplying heated air to. G. van Daam. 1,633,014; Aug. 16. Combustion-control apparatus. F. D. Potter. 1,618.474;

Feb. 22.
Combustion. Device for promoting. E. A. Earle. 1,637,741; Aug. 2.

Combustion engine. G. L. Bull. 1,629,677; May 24.
Combustion machines, Charging device for. F. Porsche.
Combustion machines, Coupling device for blowers of.
F. Porsche. 1,630,634; May 31.
Combustion system. A. J. Boynton. 1,634,570; July 5.
Combustion system. L. L. Scott. 1,625,629–80; Apr. 19.
Combustion testing apparatus. R. P. Brown. 1,615,503; Combustion-testing apparatus.

Jan. 25.

Comminuted solid material, Cooling. J. O. Jensen.
1,619,577; Mar. 1.

Comminuting material, Apparatus for. C. H. Birch.
1,646,184; Oct. 18.

Comminuting pasty and liquid materials, Apparatus for.

H. Horn. 1,617,520; Feb. 16.

Commode. F. J. Fieretti. 1,646,257; Oct. 18.

Commode. Automobile. G. N. Randle. 1,650,155; Communication device. M. J. Tracy. 1,635,650; July 12. Communication system. J. W. Horton. 1,641,431; Sept. 6. Commutation system. H. W. O'Neill. 1,624,672;
Apr. 12.
Apr. 12.
Apr. 12.
Apr. 13.
Apr. 14.
Apr. 15.
Apr. 15.
Apr. 16.
Ap Commutator: F. M. Rangall. 1023, 22; Sept. 0.
Commutator and making same. L. Bonsieur. 1,631,461;
Commutator brushes, Method of and apparatus for grinding. H. A. Lewis. 1,614,005; Jan. 11.
Commutator motor, Alternating-current. P. Rohde. 1,620,395; Mar. 8.
Commutators, Manufacture of. J. J. Carter. 1,633,922;
Commutators, Manufacturing. R. M. Critchfield. 1,641,414; Sept. 6.
Compact, Beauty. E. S. Tipton. 1,626,311-12; Apr. 26.
Compact case. C. N. Coryell. 1,625,114; Apr. 19.
Compact case. C. N. Coryell. 1,625,114; Apr. 19.
Compact case. E. officavirac. Des. 72,700; May. 24.
Compact holder. W. G. Kendall. 1,026,613; May. 2.
Compact holder. W. G. Kendall. 1,626,613; May. 3.
Compact holder. W. G. Kendall. 1,626,613; May. 3.
Compact holder. W. G. Kendall. 1,625,642; May. 6.
Compact holder. W. G. Kendall. 1,625,613; May. 3.
Compact press and making compacts. T. J. Lewis. 1,638,696; Aug. 9.
Compact tablets, wafers and the like, Machine for making. G. W. Mudd. 1,626,80; May. 8.
Compass attachment for writing implements. L. M.
Kirk. 1,649,353; Nov. 15.
Compass, Beam. K. Akashi. 1,619,750; Mar. 1.
Compass, Beam. K. Akashi. 1,619,750; Mar. 1.
Compass, Beam. R. B. Ware. 1,629,322; May. 17.
Compass, Darling P. J. Bungart. 1,629,142; May. 17.
Compass, Darling. P. J. Bungart. 1,629,142; May. 17.
Compass, Darling. P. J. Bungart. 1,629,142; May. 17.
Compass. Darling. P. J. Bungart. 1,629,142; May. 17. NOV. 22.

Compass, Drafting. P. J. Bungart, 1,629,143; May 17.

Compass, Floating. K. Breed. 1,614,228; Jan. 11.

Compass, Gyroscopic. H. C. Ford. 1,628,136; May 10.

Compass, Proted-type. L. Y. Kimura. 1,626,540; Apr. 26. Compass, Spring-mounted. W. O. White and H. G. Hatch. 1,640,167; Aug. 23.
Compensating mechanism. W. W. Benner and E. A. Hoener. 1,637,892; Aug. 2.
Compensator, Distortion. K. Küpfmüller. 1,638,536; Compensator, Distortion. K. Kuptmuller. 1,638,836; Aug. 9. W. H. Magee. Des. 72,862; June 14. Composing frame and color chart, Artist's. B. W. Greater and Color chart, Artist's. B. W. Greater and Color chart, Artist's. B. W. Greater article and forming the same, Flexible. A. L. Brown. 1,633,976; June 28. Composite article and making the same. R. W. Seabury. 1,625,749; Apr. 19. Composite articles, Forming. J. W. Fay. 1,639,652; Aug. 23. Composite product and making same. W. C. Geer. 1.617.588; Feb. 15. Composite structure. F. G. Okte. 1.635.800-1; July 12. Composition. M. P. Iding. 1.635.675; July 12. Composition article and manufacture. W. J. Gaven. 1.622.400; May 10. Composition articles, Making. W. J. Gaven. 1,620.538; Mar. 8.

Composition construction or heat-insulating material. W. K. Nelson. 1,641,641; Sept. 6.

Composition containing ethyl acetate, Removing. C. Bills. 1,618,866; Feb. 22.

Composition for cleaning signolules of moisture mistration of the containing signolules of moisture therein. C. H. Oblwiler. 1,638,272; Aug. 9.

Composition for covering stains on plaster walls. J. R. Chapman. 1,651,996; Dec. 6.

Composition for fulling cavities in trees. A. F. W. Vick. 1,652,222; Dec. 13.

Composition of mildows. J. F. Murray and J. Smith. 1,640,092; Aug. 23.

Nov. 8.

Composition for sealing leaks in tires and tubes and its production. F. W. Fischer and G. F. Dallas. 1,650,667; Nov. 29.

Composition for use in the manufacture of or for use/as varnishes and the like and making the same. H. W. Matheson, 1,565,089; Nov. 29.

Composition of material, Novel. O. A. Cherry. 1,616,741; Composition of material, Novel. O. A. Cherry. 1,616,741; Composition for repairing leaks. G. I. Ray. 1,648,869; Feb. 8.
Composition of matter. E. Aichele. 1,648,100; Nov. 8.
Composition of matter. R. P. Drummond. 1,620,877;
Mar. 15.
Composition of matter. T. De La Concha. 1,653,088; Composition of matter. T. De La Concha. 1,653,088.

Dec. 20 matter, a superrefractory body formed therefrom, and manufacturing the same. M. L. Freed. 1,644.244; Oct. 4.

Composition of matter and forming same. M. Darrin. 1,644.241; Oct. 4.

Composition of matter and forming same. M. Darrin. 1,654.711; Oct. 11 cer and producing the same. J. W. Composition 1,654.623; Dec. 27.

Composition 1,654.623; Dec. 27.

Composition of matter for treating animal tissue. C. Efflis. 1,621.528; Mar. 22.

Composition used for marking on cloth and the like. D. H. Shapiro. 1,22.333; Mar. 29.

Compound brake. E. P. Renaux. 1,639,149; Aug. 16.

Compound brake. E. P. Renaux. 1,639,149; Aug. 16.

Compound for filing holes in cast iron. F. N. Childs. Compound for filing holes in cast iron. F. N. Childs. Compound for removing paint and stains. J. W. Jones. 1,651,130; Nov. 29.

Compound insulating. J. M. Wilson. 1,638,557; Aug. 9.

Compound ining hear. M. Vilson. 1,638,557; Aug. 9.

Compound ining hear. M. Vilson. 1,638,557; Aug. 9.

Compound unit has been as a compound thing hear. M. Vilson. 1,632,367; Aug. 9.

Compound on the december of the compound wheel. T. J. Kelleher and H. Krump. 1,641,440; Sept. 6.

Compound wheel. T. J. Kelleher and H. Krump. 1,641,440; Sept. 6.

Compound of solutions of W. Minnich. 1,632,306; June 14.

Compress for fibrous materials. J. W. Wright and H. F. Compressor W. W. Minnich. 1,032,300, artitions of solutions of. W. Minnich. 1,032,300, artitles for fibrous materials. J. W. Wright and H. F. Compress for fibrous materials. J. W. Wright and H. F. Underwood. 1,616,838; Feb. 8.

Compressed-air retainers, Device for charging and discharging. A. Abel. 1,630,156; May 24.

Compresser W. W. Bavington. 1,623,378; Apr. 5.

Compressor. W. W. Bavington. 1,623,378; Apr. 5.

Compressor. J. O. Carrey. 1,614,274; Jan. 11.

Compressor. J. O. Carrey. 1,620,870; Mar. 15.

Compressor. A. D. Ferguson. 1,649,299; Nov. 15.

Compressor. F. A. Helleck. 1,649,298; Nov. 15.

Compressor. F. A. Helleck. 1,649,298; Nov. 15.

Compressor. F. M. Holmes. 1,623,596; Apr. 5.

Compressor. F. M. Knowles. 1,623,798; May. 52.

Compressor. F. W. Knowles. 1,623,798; May. 52.

Compressor. F. W. Knowles. 1,623,798; May. 52.

Compressor. F. W. Knowles. 1,623,798; May. 54.

Compressor. F. W. Knowles. 1,623,798; May. 54.

Compressor. F. W. Knowles. 1,624,798; May. 54. Compressor.
June 7.
Compressor. J. B. McMullen. 1.614,481; Jan. 18. D. G. Murray. 1,630,799; May 31. S. T. Nelson. 1,649,297; Nov. 15. W. Prellwitz. 1,649,076; Nov. 15. W. G. E. Rolaff. 1,632,385; June 14. C. W. Vollmann. 1,682,385; June 14. D. W. W. G. E. McMann. 1,683,333; June 14. D. Wilson. 1,643,333; Sup. 12. D. Wilson. 1,643,333; Sup. 12. C. S. Worth. 1,623,096; May 10. Air. H. M. Dunlap and D. M. Putnam.; Aug. 9. Compressor. Compressor. Compressor. Compressor, Air. H. M. Dunlap and D. M. Putnam. 1,635,144; Aug. 9. Compressor, Air. J. Nelson. 1,651,964; Dec. 6. Compressor apparatus. K. Frey. 1,635,5418; July 12. Compressor apparatus. W. Van Rijswijk. 1,552,747; Compressor apparatùs. W. Wilson. 1,634.062; June 28. Compressor, Automotive. N. A. Christensen. 1,633,764; June 28. June 28. Compressor, Automotive engine. N. A. Christensen. 1.633,770; June 28. Compressor, Centripetal. P. L. Crowe. 1644.565: Oct. 4. Compressor, Compensating-air. M. Riesner. 1,636,440; Compressor, July 19. Compressor control. N. A. Christensen. 1,640,597; Aug. 30. Compressor-controlling device. C. C. Farmer. 1,633,778: June 28.
Compressor-controlling mechanism. F. D. Holdsworth.
1,634,542; July 5.
Compressor, Direct-drive. N. A. Christensen. 1,633,767;
June 28. ressor, Engine-driven. N. A. Christensen. 1,633,766; June 28 Compressor, Fluid. F. B. Stearns. 1.638,418; Aug. 9. Compressor, Fluid. E. Wilson. 1.635,522; July 12. Compressor, Front-end. N. A. Christensen. 1,633,771; June 28. Apr. 26. r governor. N. A. Christensen. 1,626,076;

Compressor, Hand-actuated air. P. Voreaux. 1,651,913; Compressor housing. J. O. Carrey. 1,639,648; Aug. 23. Compressor, Jet-operated air. G. McKerahan. 1,652,177; Compressor, Lubricant. J. Bystricky. 1,642,940; Sept. 20. Compressor mounting. N. A. Christensen. 1,633,765; Compressor mouting.

June 28.

Compressor, Multicylinder automotive. N. A. Christensen.
1,633,769; June 28.

Compressor or pumping mechanism. F. A. Halleck.
1,633,699; June 28.

Compressor, Reciprocating. E. T. Williams. Re16,693; Compressor, Rotary. F. C. Bell. 1,615,824; Feb. Compressor, Rotary. A. Ruckstuhl. 1,616,992; Compressor, Rotary. C. W. Vollmann. 1,67 1,626,768 May 3. Compressor, Compressor, Rotary W. E., Mild. 1,653,814; Dec. 27. Compressor, Rotary air. H. Strong. 1,641,833; Sept. 6. Compressor unit, Automatic air. F. J. Rayfield. 1,638,212; Aug. 9. Compressor unloader. F. van D. Longacre. 1,614,138; Compressor unloader, C. W. Metzgar, 1,612,933; Compressor unloader, C. W. Metzgar, 1,6 Compressor unloader, C. W. Metzgar, 1,6 Compressor unloader. C. W. Metzgar. 1,612,933; Jan. 4. Compressor unloader. C. W. Metzgar. 1,614,143; Jan. 11. Compressor unloader. J. Naab. 1,623,489; Apr. 5. Compressor, Variable-capacity. M. Riesner. 1,634,491; July 10. Compressor, Variable-capacity air. B. V. Nordberg. 1,632,498; June 14. Compressor and condensers, Cooling device for. R. L. Alexander, W. Wishart, and H. H. Waters. 1,613,600; Compressors. Apparaint for unleading. W. H. Caller. Jan. 11.

Compressors, Apparatus for unloading. W. H. Callan. 1,645,798; Oct. 18.

Compressor-controlling mechanism. F. D. Holdsworth. 1,649,900; Nov. 22.

Compressors, Cooling. B. S. Aikman. 1,625,524; July 12.

Compressors, Cooling. B. S. Aikman. 1,625,524; July 12.

Compressors, Cooling. Comparate controlling means for. W. Raymond. 1,643,996; Oct. 4.

Compressors, Cylinder-cap construction for. H. E. Thompson. 1,634,635; July 5.

1,633,110; December 1,634,635; July 5.

1,633,110; December 1,634,635; July 5.

1,633,110; December 1,634,635; July 5. 1.653.110; Dec. 201.

Inducter for. J. Le Valley. Compressors, Governor for steam-driven. W. Raymond. 1.613.129; Sept. 20.

1.613.129; Sept. 20.

Compressors, Valve mechanism for. A. G. Enock. 1.649.394; Nov. 15.

Computing devices, Casing for. S. O. Nations. Des. Computing Best tument for balance corrections. A. F. Computing Best tument for balance corrections. A. F. Computing machine. I. S. Dement. 1.641.126; Aug. 30.

Computing machines, Feeding device for. W. A. Pringle. 1.627.201; May 3.

Computing machines, S. Shutter for. A. Vanderveld. 1.638.514; Aug. 9.

Computing wages, Machine for. J. C. Hurley. 1,617.640; Concentrating table. E. Deister. 1.644.113. Oct. 4 Concentrating table. E. Deister. 1.644.113; Oct. 4. Concentrating table. W. F. and E. Deister. 1,642,843; Sept. 20. Sept. 20.
Concentrating table. W. F. and E. Deister. 1,643,060;
Sept. 20.
J. B. Dodds. 1,627,157; May 3. Concentrating table. W. F. and E. Penser. 1,040,000-8, Sept. 20.
Concentrator. J. B. Dodds. 1,627,157; May 3.
Concentrator. E. H. Johnson and A. H. Winterton. 1,627,648; May 10.
Concentrator. A. H. Stebbins. 1,648,285; Nov. 29.
Concentrator deck. A. H. Stebbins. 1,622,471; Mar. 20.
Concentrator deck. A. H. Stebbins. 1,646,985; Oct. 25.
Concentrator deck. A. H. Stebbins. 1,643,285; Oct. 25.
Concentrator deck. A. H. Stebbins. 1,643,285; Oct. 25.
Concentrator table. A. H. Stebbins. 1,643,763; Oct. 21.
Concentrator table. A. H. Stebbins. 1,644,763; Oct. 21.
Concentrator deck. A. H. Stebbins. 1,644,763; Oct. 21.
Concentrator deck. A. H. Stebbins. 1,644,763; Oct. 21.
Concentrator table. A. H. Stebbins. 1,644,763; Oct. 21.
Concentrator deck. A. H. Stebbins. 1,644,763; Oct. June 28.

Concrete and like composition, Bituminous. M. Lévy.

Re16,821; Dec. 20.

Concrete and wooden bench, Combination. L. G. Haase.
1,628,362; May 10.

Concrete beams or ties, Casing or mold box for. B. Bauer.
1,628,385; May 10.

Concrete-block composition. M. E. Von Mach, jr.

Concrete-block machine. J. H. Miller. 1,636,102;
July 19.

Concrete-block mold. W. A. Threadgill. 1,631,901;
June 7.

Concrete building. T. L. Peterson. 1,618.886; Feb. 22. Concrete building construction. A. F. Bemis and H. W. Brown. 1,638,080; Aug. 9. Concrete building construction. A. A. Koivu. 1,616,977; Concrete building struction. A. A. Roya. 1,020,071, Feb. 8.
Concrete building structures, Casting in situ of. G. W. Rawlings. 1,642,893; Sept. 20.
Concrete building unit. T. J. Florey. 1,630,698; May 31.
Concrete buildings, Mold for. J. C. Poetz. 1,627,116;
Concrete column. R. E. Carrick. 1,628,228; May 10.
Concrete column. R. S. Ellis. 1,652,431; Dec. 13.
Concrete-column forms, Clamp for. H. O. McMillan. Reit 7,384. Sept. 13. Concrete-column forms, when, Reid, 3736, Sept. 13.
Concrete columns, Skeleton metal element for reenforced. S. Macomber. 1,653,055; Dec. 20.
Concrete construction, A. G. W. Wedberg, 1,626,897; Concrete construction, A. G. W. Wedberg. 1,626,897;
Concrete construction, Reenforced, W. S. Edge and R. C. Olmsted. 1,637,42; Ang. 2.
Concrete construction, Reenforced. T. J. Foster. 1,637,932; Aug. 2.
Concrete construction, Reenforced. H. L. Katz. 1,652,443; Dec. 13.
Concrete construction, System of. A. E. Troiel.
Concrete construction, System of. A. E. Troiel.
Concrete conveyers, Closure for pneumatic. H. B. Kirkland. 1,653,631; Dec. 27.
Concrete cribbing. E. H. Dresser. 1,627,599; May 10.
Concrete cribbing. Reenforced. R. H. Ford. C. F. Richardson, A. L. Greenabaum, and H. M. Priest. Rel6,689; July 26.
Concrete crib, Apparatus for locating, placing, and leveling borth seats for. J. H. Tromanhauser. 1,635,730; July 12. July 12. Concrete-distributing apparatus. A.T. Scannell. 1,649,785; Concrete form. F. Wistholz. 1,623,899; May 24. Concrete-form. Edmp. and tighterer form. Concrete form. Construction of reinforced. W. R. D. Innes and M. S. Stanley. 1,641,084; Aug. 30. Concrete floors, etc. Construction of reenforced. G. Ventolino. 1,617,929; Feb. 15. Concrete form. J. N. Heltzel. 1,628,316; May 10. Concrete form. J. N. Heltzel. 1,628,316; May 10. Concrete form. J. N. Heltzel. 1,628,316; May 10. Concrete form. T. M. Jones. 1,631,282; June 7. Concrete form. W. S. Smith. 1,647,202, Nov. 1. Concrete form. F. Wustholz. 1,223,151; Apr. 5. Concrete-form. F. Wustholz. 1,223,151; Apr. 5. Concrete-form. Concrete form. F. Wustholz. 1,628,899; May 24. Concrete forms, Clamp and tightener for. C. Phillips. 1,648,995; Nov. 15. Concrete forms, Clamp and tightener for. C. Phillips. 1,648,995; Nov. 15. Concrete forms, Clamp for. P. A. Melvin. 1,616,460; Feb. 8. Concrete forms, Form tie for. H. O. McMillan. Concrete mixer. G. E. Changer of the Concrete mixer. E. C. Leach. 1.634.648; June 28. Concrete mixers. Concrete mixers. B. Concrete mixers. C. L. Concrete mixers. C. L. Concrete mixers. C. L. Concrete mixer. C. L. Concrete mixer. C. L. Concrete mixer. C. C. Barrymore and R. A. Daddisman. 1.625.62; June 28. Concrete mixer. C. C. Barrymore and R. A. Daddisman. 1.625.62; Apr. 19. Concrete mixer. C. C. Barrymore and R. A. Daddisman. 1.625.62; Apr. 19. Concrete mixer. A. B. Gilson. 1.634.618; Dec. 27. Concrete mixer. A. B. Gilson. 1.634.618; Dec. 27. Concrete mixer. E. C. Leach. 1.647.410; Nov. 1. Concrete mixer. E. C. Leach. 1.647.410; Nov. 1. Concrete mixer. H. Powers. 1.620.287; Mar. 8. Concrete mixer. H. Powers. 1.620.287; Mar. 8. Concrete mixer. G. C. Leach. 1.647.410; Nov. 1. Concrete mixer. H. Owers. 1.620.287; Mar. 8. Concrete mixers. Charge-synchronizing means for. E. L. Tranaas. 1.652.161; Dec. 6. Concrete mixers. Charge-synchronizing means for. E. L. Tranaas. 1.652.161; Dec. 6. Concrete mixers. Charge-synchronizing means for. E. L. Tranaas. 1.652.161; Dec. 6. Concrete mixers. Charge-synchronizing means for. E. L. Tranaas. 1.652.161; Dec. 6. Concrete mixers. Charge-synchronizing means for. E. L. Concrete mixers. Charge-synchronizing means for. E. L. Concrete mixers. Universal mar. 1.652.622; Apr. 5. Concrete mixers. Synchronizing means for. S. Shafer, Jr. 1.630.221; May 24. Concrete mixers. Loading skip for. S. Shafer, Jr. 1.630.221; May 24. Concrete mixers. Synchronizing machine. Combination tandem. E. H. Memillan. 1.619.145; Mar. 1. Concrete mixers. Water-supply attachment for. P. W. Concrete mixers. Synchronizing machine. Combination tandem. E. H. Memillan. 1.619.145; Mar. 1. Concrete mixers. Water-supply attachment for. P. W. Adams. 1.620.614; Mar. 8. Concrete mixers. Synchronizing backet for. F. W. De Winney. 1.614.980; Jan. 18. Concrete paving, Reenforced. G. D. Apperts.
Concrete pile and making same, Protected. F. S. Hon-concrete, 1,620,103; May 17.
Concrete pile, Apparatus for making. M. M. Upson. 1,640,101; Aug. 23.

Concrete piles or columns, Construction of. A. Hiley. 1629.622: May 24. Concrete piles or columns, Construction of. A. Hiley. 1,634,231; June 28. Concrete piles, Sinking. M. Blumenthal. 1,629.947; May 24. May May 24.
Concrete pipe, Forming and laying continuous. T. De La
Mane. 1.648.382; Nov. 15.
Concrete-pipe machines. Compensating mechanism for.
C. P. Stewart. 1.648.788; Nov. 8.
Concrete pipe, Reenforced. D. W. Longfellow. 1.644.196; Oct. 4. Concrete pipe, Accumorcea. D. W. Longieriow. 1.011120. Oct. 4. Concrete posts, Method of and apparatus for making. D. B. Hanna. 1.651.819; Dec. 6. Concrete reenforcement. F. R. Wilson. 1,641,109; Aug. reenforcement, Holding clip for. C. L. Dewey. Concrete reenforcement, Holding clip for, C. L. Dewey. 1.629,485; May 24. Concrete. Reenforcing bar for. C. S. Boardman. 1.635.655; July 12. Concrete-reenforcing bond and connecter. F. Rebell. 1,624,802; Apr. 12. Concrete-reenforcing rods, Chair for. A. E. Klinger and F. C. Burkhardt. 1.613.351; Jan. 4. Concrete-road foundations and like Structures, Apparatus for breaking up. H. T. Cover and E. Bond. 1.814,110; Oct. 4.

Concrete, sandstone, clay, brickwork, and the like, Production of a cold glaze upon building material, such as.

K. Friedrich. 1,636,860; July 26.

Concrete-separating strips, Supporting device for. A. C. Fischer. 1,647,564; Nov. 1.

Concrete slabs. F. D. Copock. 1,637,215; July 26.

Concrete slabs, Device for connecting the abutting ends of. C. E. Bowers. 1,631,376; June 7.

Concrete sleeper, Reenforced. P. J. Soulas. 1,614,405; Jan. 11.

Concrete structure. R. S. Ellis. 1,651,516; Dec. 6. Connect structure. R. S. Ellis, 1,651,516; Dec. 6.
Concrete, structures, Building form for. G. L. Hagy.
1,631,029; May 32.
Concrete structures, Building reenforced. K. J. Ljunberg, 1,641,541; Sept. 6.
Concrete structures, Form for. F. W. Stevens. 1,621,568; Concrete structures, Form for. F. W. Stevens. 1,621,563; Mar. 22.
Concrete structures, Form fie for. J. B. Hawley, jr. 1,610,933; Mar. 8.
Concrete structures, Forming, C. E. Roop, L. M. Dieckmerer, and C. B. Barutio. 1,642,753; Sept. 20.
Mercer, and C. B. Barutio. 1,642,753; Sept. 20.
Green and C. B. Barutio. 1,642,753; Sept. 20.
Concrete structures, Reenforcing frame for. G. Greenlich. 1,613,392; Jan. 4.
Concrete structures, Reenforcing frame for. G. Greenlich. 1,613,392; Jan. 4.
Concrete structures, Brown. 1,635,816; July 12.
Concrete wall boxing. A. J. Cooper. 1,647,685; Nov. 1. Concrete-wall boxing, A. J. Cooper, 1.647.685; Nov. 1. Concrete wall construction, N. Garrett, 1,618,421; Concrete wall construction. A. darrett. 1,617.535; Feb. 22. Concrete wall construction. C. D. McArthur. 1,617.535; Feb. 22.

Concrete wall construction. C. D. McArthur. 1,617,536;
Feb. 15.

Concrete wall construction. Form for. W. R. Sproul and H. Layer. 1,628,752; May 17.

Concrete wall consequences. Constructing. F. P. Noe and S. M. Gooder. 1,623,632; May 17.

Concrete work. Expansion joint for. T. Rauschenbach. 1,643,257; Sept. 20.

Concrete work. Socket or receptacle for. A. S. Fishel and E. I. Goulder. 1,627,554; May 10.

Condensation. N. W. Thomson. 1,654,103; Dec. 27.

Condensation product. H. C. P. Weber. 1,630,365; May 3.

L. 1448,555; Nov. 8.

Condensation product and making same. M. Melamid. 1,643,683; Nov. 8.

Condensation product and making same. Water-soluble. K. Daimler, F. Marschall, and G. Balle. 1,635,883; July 12. July 12.
Condensation products and dyestuffs of the benzanthrone series, Manufacture of. A. Littringhaus, H. Nerescheme, and J. Littringhaus, H. Nerescheme, and J. Littringhaus, H. Nerescheme, J. Littringhaus, J. Littringhaus, J. Littringhaus, J. Littringhaus, J. Littringhaus, J. Litringhaus, J. Litri Sept. 27.
Condensation products of urea and formaldehyde, Manufacturing homogeneous glasslike. K. Ripper. ; Anr. 19.
; Anr. 19.
; Anr. 19.
; Dec. 20.
; Dec. 20.
; E. S. Bryant, 1.641.600; Sept. 6.
; E. B. Craft, 1.629.020; May 17.
A. Delas, 1.61.616.01; Feb. 8.
J. B. Dempster, 1.621.659; Mar. 22.
J. B. Dempster, 1.621.659; Mar. 22.
H. P. Donie, 1.644.242; Oct. 4.
W. Dubiller, 1.639.597; Aug. 16.
J. A. Fried, 1.619.201; Mar. 16.
G. F. Grace, 1.650.268; Nov. 22.
A. Haddock, 1.632.130; June 14.
T. P. Hagerman, 1.644.520; Oct. 4.
J. J. Hilliard, 1.628.866; Aug. 9.
R. E. Marbury, 1.626,684; May 3 1,625,285 Condensation 1,653,302; Do Condenser, E. Condenser, E.

Condenser.

Condenser, Condenser. Condenser. Condenser.

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Condenser.
Condenser.
Nov. 15.
Condenser.
                                                                                 R. E. Marbury. 1,635,556; July 12.
C. Metzger and E. Luetschen. 1,649,482;
Condenser, C. Metzger and E. Luetschen. 1,649,482;
Condenser, R. B. Millard. 1,616,701; Feb. 8.
W. H. Petit. 1,629,882; May 24.
Condenser, W. W. Bobinson. 1,633,289; June 28.
Condenser, W. W. Robinson. 1,633,289; June 21.
Condenser, T. T. Rodgers, M. A. Giblin, and F. K. and G. T. Moore. 1,623,360; Apr.63; Oct. 25.
Condenser, L. B. Snier, 1,636,328; July 19.
Condenser, J. H. Snith. 1,621,089; May 15.
Condenser, J. H. Snith. 1,621,089; May 15.
Condenser, H. R. Van Deventer. 1,619,223; Mar. 1.
Condenser, G. A. Yanochowski. 1,633,915; June 28.
Condenser, Adjustable, R. M. Klein. 1,641,635; Sept. 6.
L936,521; July 19.
Condenser and cooler, H. F. Hollister. 1,626,733; May 3.
Condenser and cooler. H. F. Hollister. 1,625,549; July 12.
Condenser and cooler. H. F. Hollister. 1,635,549; July 12.
Condenser and making the same, Fixed-capacity. S.
Siegel. 1,650,385; Nov. 22.
Condenser and making the same, Fixed-capacity. S.
Siegel. 1,650,385; Nov. 22.
Condenser and oil separator, Combination. F. C. Bell 1,620,713; Mar. 15.
Condenser control mechanism. C. E. Trube. 1,614,505; Condenser, cooler, and absorber. C. F. Braun. 1,623,617; Apr. 5.
   Jan. 18.
Condenser, cooler, and absorber. C. F. Braun. 1,623,617;
Apr. 5.
Apr. 6.
Condenser, Cotton. J. A. Taft. 1,645,530; Oct. 18.
Condenser drive, Mulriple. E. Ross. 1,615,041; Jan. 18.
Condenser drive, Variable. A. W. Franklin. 1,613,525;
Feb. 22.
Condenser, Electric. W. R. G. Baker. 1,631,665; June 7.
Condenser, Electric. H. A. Douglas. 1,617,618; Feb. 15.
Condenser, Electric. F. J. Kent. 1,623,863; Dec. 18.
June 28.
Electrical. W. A. Bockius. 1,635,566;
June 7.
June 28.
     Condenser,
June 28.
   June 28.
Condenser, Electrical. C. S. Francisco, May 17.
Condenser, Electrical. H. F. Herman. 1,629,867; May 24.
Condenser, Electrical. W. H. Huth. 1,633,019; June 21.
Condenser, Electrostatic. J. O. Gargan. 1,535,990;
T. Havden. 1,621,722;
   Condenser,
July 19.
Condenser,
Mar. 22.
Condenser,
Condenser,
Condenser,
     Condenser, Evaporative J. E. Bell. 1,619,284; Mar. 1. Condenser, Fixed. A. Moss. 1,642,688; Sept. 20. Condenser, Fixed. L. T. Rhoades. 1,626,565; Apr. 26. Condenser for automotive-vehicle engine radiators. F. R. Perry. 1,622,793; Dec. 13.
     Perry. 1
Condenser,
Aug. 23.
Condenser,
                                                                                   652.793; Dec. 13.
High-potential. W. Dubilier.
                                                                                                                                                                                                                                                                                                 1,639,650;
                                                                        High-potential electrical. J. A. Proctor. 5; June 21. installation. H. F. Schmidt. 1,638,645;
       Condenser
   Aug. 9.
Condenser, Movable dielectric. H. J. Murray. 1,641,946;
Sept. 6.
Condenser, Low-level jet. R. E. S. Geare and R. M. Nor-
strom. 1,622,945; Mar. 29.
Condenser mounting and adjusting mechanism. E. Tyr-
man. 1,632,691; Dec. 13.
Condenser, Multiple variable. W. M. Brower. 1,633,516;
Condenser, Multiple variable. F. A. Kolster. 1,641,593;
Sept. 6.
Condenser or cooler. N. H. Hiller and B. F. Safberg.
1,622,645; Mar. 29.
Condenser, Progressive. C. F. Braun. 1,640,748; Aug.
30.
     Condenser rotors, Constructing variable. C. P. Powers. Cond. Spie. Mar. 1. Condensers, Sectional. J. Price. 1.619.034; Mar. 1. Condenser, Snow. E. J. Jones. 1.643,121; Sept. 20. Condenser, Spiral plate. F. A. Borzych. 1.650,862; Nov. 29.
     Nov. 29.
Condenser structure. H. Le Van Horning 1,651,786;
Dec. 6.
Condenser, Subcooling. R. J. Pabodie. 1,625,821;
Apr. 26.
       Apr. 20.
Condenser, Surface, P. A. Bancel. 1,627,265; May 3.
Condenser, Surface, P. A. Bancel. 1,628,487; May 10.
Condenser, Surface. J. E. Goodwillie. 1,622,374;
Mar. 29.
     Mar. 29.
Condenser, Surface. J. F. Grace. 1,616,656; Feb. 8.
Condenser, Surface. F. Hodgkinson. 1,634,903; July 5.
Condenser, Surface. C. Hülsmeyer. 1,650,872; Nov. 29.
Condenser, Surface. J. F. Kirgan. 1,642,113; Sept. 13.
Condenser, Surface. J. Lorenz. 1,631,141; June 7.
Condenser, Surface. R. Lorenz. 1,631,141; June 7.
Condenser transmitter. A. Lorenz. 1,648,064; Nov. 8.
Condenser transmitter. A. Hund. 1,648,689; Nov. 8.
Condenser tube and tube-sheet connection. H. H. Finch. 1,616,893; Feb. 8.
Condenser-type henter. J. Price. 1,624,973; Apr. 19.
Condenser, Yacuum. H. J. Nolfe. 1,644,687; Sept. 6.
Condenser, Vacuum. H. J. Nolfe. 1,644,687; Sept. 6.
Condenser, Variable. J. R. Baruhart. 1,636,885; May 31.
Condenser, Variable. H. B. Baruhart. 1,636,885; May 31.
Condenser, Variable. H. L. Bradley. 1,641,514; Sept. 6.
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Condenser, Variable. E. W. Breisch and L. R. Golladay. 1,640,561; Aug. 30. Condenser, Variable. C. P. Brockway. 1,634,930; C. N. Cahusac. 1,618,974; Mar. 1. G. H. Clark. 1,631,360; June 7. H. G. Dorsey. 1,638,630; July 19. W. Dubiller. 1,646,236; Oct. 18. J. M. Enders. 1,641,749; Sept. 6. C. F. Goudy. 1,613,032; Jan. 4. C. Hardy. 1,620,620; Mar. 8. F. O. Hartman. 1,614,428; Jan. 11. F. O. Hartman. 1,632,468-50; Variable. Variable. Variable. Condenser, Variable. Condenser, Variable. Condenser, Variable. Condenser, Variable. Condenser, Variable. Condenser, June 14. Condenser, le. G. W. Hayden. 1,621,721; Mar. 22, ie. B. Jirotka. 1,628,537; Apr. 28. ie. H. Jirotka. 1,628,537; Apr. 28. ie. H. H. Jangley. 1,632,631; Aug. 2, le. R. H. Langley. 1,652,901; Dec. 13. ie. A. Leib. 1,631,599; June 7. ie. B. Lewis. 1,631,636; June 7. ie. B. H. Manson. 1,632,4487-8; Variable. Condenser, Condenser, Condenser, Variable. Condenser, Variable.
Condenser, Variable.
Condenser, Variable.
Condenser, Variable.
Condenser, Variable. Condenser, Condenser, Condenser, June 14. Time 14.

Condenser, Variable, Condenser, Variable, W. Reese, 1,650,465; Nov. 22.

Condenser, Variable, T. T. Rodgers, M. A. Giblin, F. K. Moore, and G. T. Moore, 1,621,379; Mar. 15.

Condenser, Variable, J. D. Sartakoff, 1,652,376; Condenser, Variable, J. D. Sartakoff, 1,652,376; Condenser, Variable, J. Scholtz and G. W. Sunday, 1,614,902; Jan. 18.

Condenser, Variable, F. E. Wope, Jr. 1,620,244; Mar. 5, Condenser, Variable, F. R. M. Wise and E. G. Danielson, 1,618,390; Feb. 22.

Condenser, Variable air. A. D. Cardwell, 1,626,391; Apr. 26. Condenser, Variable air. A. D. Cardwell. Apr. 26. Condenser, Variable electrostatic. W. Aull, jr. ondenser, Variable neutralizing. J. J. Wood. 1,618,255; Feb. 22.
Condenser, Vernier. F. Koch. 1,631,738; June 7.
Condenser, winding machine. F. C. Kroeger and H. E.
Norviel. 1,651,389; Sept. 6.
Condensers, Condenser-operatine. The mechanism for variable.
Condensers. Device (10,785 June 7.
Condensers. Device (10,785 June 7.
Condensers, Levice, 10,785 June 7.
Condensers, Levice, 10,785 June 7.
Condensers, Lauks, and such like vessels against corrosion,
Electrolytic system for protection of. A. S. and M. C.
Gush. 1,616,448; Feb. S. G. Grell. 1,645,881; Oct. 11.
Condensing apparatus. F. C. B. Lucke. 1,626,849-50;
May 3. g. apparatus. C. B. Lucke. 1,626,849-50; May 3.
Condensing apparatus. A. O. H. Petersen. 1,624,066; Condensing apparatus. A. O. H. Petersen. 1,624,066; Apr. 12.
Condensing device, Automatically governed. E. R. Hawley and C. W. Scott. 1,629,169; May 17.
Condiment holder. E. K. Allison. Des. 73,514; Sept. 27.
Condiment holder. B. D. Justin. 1,614,733; Jan. 18.
Conductor. Leading-in. V. L. Ronci. 1,644,632; Oct. 18.
Conductor. Leading-in. V. L. Ronci. 1,640,822; Oct. 18.
Conductor support. S. S. Matthes. 1,623,694; Apr. 5.
Conductor support. S. S. Matthes. 1,623,697; June 28.
Conductor support. W. S. Mayer. 1,639,527; Aug. 16.
Conduit box. R. P. Dumnire. 1,647,511; Nov. 1.
Conduit box. R. P. Dumnire. 1,647,511; Nov. 1.
Conduit-bushing adapter. T. H. Luddow. 1,632,843;
June 21. Conduit box. R. P. Dummire. 1,647,511; Nov. 1. Conduit-bushing adapter. T. H. Ludlow. 1,632,843; Conduit-bushing adapter. T. H. Ludlow. 1,632,843; T. Conduit cleaner. D. McGonagle. 1,617,068; Feb. S. Conduit cleaner. R. B. Scott. 1,627,122; May 3. Conduit construction. J. B. Fichtner and H. H. Crouch. Conduit construction. J. B. Fichtner and H. H. Crouch. Conduit construction. Trunking. J. M. Fitzgerald. 1,617,625; Feb. 15. Conduit coupling. H. K. Sweney. 1,652,064; Dec. 6. Conduit, Flexible. C. L. Sonen. 1,649,139; Nov. 15. Conduit, Sectional. Making the same. H. Parker. 1,448,974 Nov. 10. Conduits. Construction and installing subaqueous. W. F. Jones. 1,647,448; Nov. 1. Conduits. Construction and installing subaqueous. W. F. Jones. 1,647,448; Nov. 1. Conduits. Over for. E. F. McCue. 1,653,403; Dec. 20. Conduits. Over for. E. F. McCue. 1,653,403; Dec. 20. Conduits. or pipes. Bender for light-gauge. R. H. Henderson. 1,627,034; May 3. Conduits. Withdrawing cords from molded. T. E. Murray. 1,103,403; Mar. 1. Conduits. Withdrawing cords from molded. T. E. Murray. 1,103,403; Mar. 1. Ceccream cone. 1.619.362; Mar. 1.

Cone: See—
Ice-cream cone. Thum. 1,627,583; May 10.

Cone-making machine. D. W. Mitchell and G. O. Robinson, 1,639,097; Aug. 16.

Cone-pulley lubricator, 18.

Cone-pulley lubricator, Rypinski, L. W. Staunton, and S. Bourne. Des. 72,871; June 14.

Confection and making a confection. C. K. Nelson, 1,638,548; Aug. 9.

Confection and making the same. L. Belcher. 1,614,057; Jan. 11.

Confection, Coated. D. M. Freeman. 1,627,641; May 10.

Confection-coating machine, L. A. Smith. 1,635,015; July 5. Confection-filling machine. C. G. Hall. Mar. 15. Confection mold. J. Watkins. 1,627,421; May 3. Confectionery-coating machine. J. Massarella. 1,639,263; Aug. 16. Confectionery container. J. E. Mayhew. 1,613,282; Jan. 4. Confectionery container. J. E. Mayhew. 1,613,282; Jan. 4.
Confections and napkins, Holder for. J. D. Kohler. 1,623,926; Apr. 5.
Confections, Apparatus for freezing and molding. M. Confections, Implement for making coated. D. M Freeman 1,627,642; May 10.
Confections, Making. Z. E. Vose. 1,621,568; Mar. 22.
Confections, Making. Z. E. Vose. 1,621,568; Mar. 22.
Confections, Method and apparatus for making. E. Sprague, Jr. 1,645,260; Oct. 11.
Confections, Process and apparatus for making. C. M. Confections, Process and apparatus for making. W. S. Cloud. Re16,712; Aug. 28.
Confett, Garland. J. C. Fernandez. 1,652,855; Dec. 13.
Conical diaphragms, Apparatus for making. C. L. Farrand and E. Ross. 1,645,568; Oct. 11.
Conical projections to orthographic projections, Convercioning machines, Attachment for. J. J. McCallister. 1,652,787; Dec. 13.
Coning machines, Attachment for. J. J. McCallister. 1,652,787; Dec. 13.
Connecter. B. H. Bobo. 1,648,605; Nov. 8.
Connecter. B. H. Bobo. 1,648,605; Nov. 8.
Connecter. H. Finkle. 1,629,783; May 24.
Connecter. H. Finkle. 1,629,783; May 24. Connecter. May 24. Connecter. H. Finkle. 1,629,783; May 24.
J. Kachman. 1,647,097; Oct. 25.
H. R. Meyer. 1,630,401; May 31.
J. P. Ratigan. 1,643,587; Sept. 27.
E. H. Wiseman. 1,647,762; Nov. 1.
Automatic. G. A. Harmon. 1,613,825; Connecter. Connecter. Connecter, Connecter, Automatic. G. A. Barmon. 4,019,027, Jan. 11.
Connecter, Battery. E. E. Bilgart and F. P. Bartlett, 1,641,837; Sept. 6.
Connecter, Cordeau. W. O. Snelling. 1,652,4475; Dec. 27.
Connecter, Extension. P. Lauter. 1,645,957; Oct. 18.
Connecter head. J. Robinson. 1,633,227; June 21.
Connecter-head support. E. A. Robinson. 1,626,696; May 3. May 3.
Connecter member. C. Bramming. 1,632,112; June 14.
Connecters, Lock for automatic. M. A. Barber. 1,612,962; Connecting device. F. and C. A. Bourne. 1,638,978;
Aug. 16.
Connecting device. H. P. Chandler. 1,631,719; June 7.
Connecting device. W. F. Hendry. 1,647,355; Nov. 1.
Connecting link. W. F. Miller and I. Gordon. 1,635,539;
June 21.
Connecting member. F. Amiot. 1,623,956; Apr. 12.
Connecting member. F. De Benedetti. 1,652,976;
Dec. 18. Dec. 13.

Connecting rod. J. Stumpf. 1,644,756; Oct. 11.

Connecting rod, Articulated. G. D. Angle. 1,637,979; Connecting rod, Articulated. G. D. Angle. 1,637,979; Aug. 2.

Connecting-rod attachment. H. A. Strupp. 1,625,965; Apr. 26.

Connecting-rod. Cutter-bar. J. M. Wanamaker. 1,622,299; Mar. 29.

Oct. 4,97 of Connecting rods. Aligning and reaming machine for. W. Anb. 1,637,508; Aug. 2.

Connecting rods Aligning and reaming machine for. W. Anb. 1,637,508; Aug. 2.

Connecting rods and for other parts of machinery, Bear-Connecting rods and for other parts of machinery, Bear-Connecting two machines of the connecting two machines of the wided together. F. Mossberg. 1,630,668; May 31.

Connector, Resilient. C. R. Short. 1,631,228; June 7.

Console table. O. B. Bach. Des. 73,555; Oct. 11.

Constant-volume Faginator. L. R. Huff. 1,616,450; Feb. 8. Constant-volume regulator. L. R. Huff. 1,616,450; Feb. 8.
Con H. Lovering. 1,643,273; Sept. 20.
H. Lovering. 1,643,273; Sept. 20.
Construction material, Corner formation in metal-sheathed. G. R. Meyercord. 1,630,585; May 31.
Contact apparatus. M. D. Mann, jr., and H. M. Weir, 1,624,793; Apr. 12.
Contact apparatus. Liquid and Gas. F. H. Wagner. 1,637,975; Aug. at making same. W. M. Austin. 1,630,460; May 31.
Contact device. G. C. Cummings. 1,624,476; Apr. 12.
Contact device. G. C. Cummings. 1,624,476; Apr. 12.
Contact device. S. L. Miller. 1,632,709; June 14.
Contact device. G. C. Cummings. 1,624,476; Apr. 12.
Contact device. G. C. Cummings. 1,624,773, Apr. 9.
Contact making device. F. C. Bauer. 1,638,571; Aug. 9.
Contact-rectifying device. W. O. Snelling. 1,638,278; Aug. 9.
Contacting device. E. S. Ensign. 1,652,773; Dec. 13. Contacting device. E. S. Ensign. 1,652,773; Dec. 13. Contacting means. H. E. Boner. 1,637,468; Aug. 2. Container. C. J. Aulbach. 1,630,687; May 31.

Container. G. K. Bainbridge and S. W. Reynolds.
1,641,408; Sept. 6.
Container. J. W. Barron. 1,617,192; Feb. 8.
Container. H. L. Beach. 1,621,451; Mar. 15.
Container. G. R. Beach. 1,621,451; Mar. 15.
Container. P. C. P. Booly. 1,642,868; Sept. 20.
Container. L. H. Brodrick. 1,652,754-5; Dec. 13.
Container. R. R. Canavello. 1,641,317; Sept. 6.
Container. D. E. Carpenter. 1,636,458; July 19.
Container. J. Eckart. 1,644,521; Oct. 11.
Container. M. A. Ferst. 1,628,163; May 10.
Container. M. A. Ferst. 1,628,163; May 10.
Container. M. A. Ferst. 1,628,163; May 10.
Container. W. S. Grant. 1,649,223; Nov. 15.
Container. W. S. Grant. 1,649,223; Nov. 15.
Container. H. H. Honger. 1,657,172; Nov. 29.
Container. H. L. Heiter. 1,657,172; Nov. 29.
Container. H. H. Hongbaum. 1,641,272; Mar. 15.
Container. M. S. Hillyard. 1,641,272; Mar. 15.
Container. S. M. Johnson. 1,655,520; Nov. 22.
Container. J. Kaufman. 1,631,657-7; June 14.
Container. J. Kaufman. 1,633,699; Aug. 16.
Container. J. Kaufman. 1,639,699; Aug. 16.
Container. J. Kaufman. 1,639,699; Aug. 16.
Container. E. L. Lerson and C. A. Braunger. 1,645,545;
Jan. 25.
Container. R. L. Lerson and C. A. Braunger. 1,645,545;
Container. R. L. Lerson and C. A. Braunger. 1,645,545;
Container. R. L. Lerson and C. A. Braunger. 1,645,545;
Container. R. L. Lerson and C. A. Braunger. 1,645,545; Container. Jan. 25. Container. R. L. Lemon, 1,622,525; Mar. 29, J. M. MacDonald, 1,616,696; Feb. 8, J. M. MacDonald, 1,628,793; May 17, C. L. Marcus, 1,650,801; Nov. 29, T. S. Mason and E. L. Yuugk, 1,62 Container. Container. Container. Container. 1,627,042; May 3. Container. P. S. Moyer. 1,646,702; Oct. 25. W. Neil. 1,631,935; June 7. F. S. Oppenheim. 1,624,360; Apr. 12. F. S. Oppenheimer. 1,651,965; Dec. 6. A. E. Payson and W. R. Hastedt. 1,639,529; Container. Container. Container. A. E. Payson and W. R. Hastedt. 1,639,529; Aug. 16.
Container. W. E. Savage. 1,648,768; Nov. 8.
Container. M. Schwartz. 1,645,163; Oct. 11.
Container. A. W. Scotcher. 1,614,967; Jan. 18.
Container. A. W. Scotcher. 1,614,967; Jan. 18.
Container and blanks therefor. Corrugated-board. C. H.
Crowell. 1,631,521; June 7.
Container and contents therefor, Article of manufacture comprising. N. M. Hopkins. 1,639,699; Aug. 23.
Container and cover therefor. T. M. Frudden. 1,633,605;
Container and cover therefor. T. M. Frudden. 1,633,605;
Container and sealing means therefor. F. R. Burgess. 1,633,555-6; June 21.
Container and sealing means therefor. F. R. Burgess. 1,633,555-6; June 21.
Container, Aug. 30.
Container, Aug. 30.
Container, Beverage. I. Weisenfreind. Des. 73,884;
Nov. 15.
Container, Beverage. I. Weisenfreind. Des. 73,884;
Nov. 15.
Container, Collapsible. L. M. Collainer, 1,624,001; Oct. 13.
Container, Chemical. D. G. Griffin 1,647,155; Feb. 3.
Container, Chemical. D. G. Griffin 1,647,155; Feb. 22.
Container, Collapsible. A. Amsler. 1,648,545; Nov. 8.
Dec. 6.
Container, Collapsible. E. T. Johnson. 1,631,528;
Container, Collapsible. E. T. Johnson. 1,631,528;
Container, Collapsible. E. T. Johnson. 1,648,549; Oct. 26.
Container, Collapsible. E. T. Johnson. 1,648,549; Oct. 26.
Container, Collapsible. E. T. Johnson. 1,648,549; Oct. 26. Container, Collapsible. L. Korn. 1,646,544; Oct. 25. Container, Collapsible. J. W. Martin. 1,616,465; Jan. 25. Container, Collapsible. S. S. Wheian. 1,030,750; Cuntainer, Collapsible. S. S. Wheian. 1,030,750; Cuntainer. Aug. 23.
Container, Condiment, S. Schreiber, 1,652,585; Dec. 13.
Container construction, Metallic, L. D. Buhl. 1,648,718;
Nov. 8. Nov. 8.
Container, Cooling-medium. C. W. Huck.
Mar. 8.
Container, Cord and thread. H. F. Carlson and H. A.
Recen. 1,642,805; Sept. 20.
Container cover. W. G. Schneider. 1,625,335; Apr. 19.
Container cover. W. G. Schneider. 1,645,442; Jan. 29.
Container decoration. P. F. Webster. 1,647,489; Nov. 1.
Container, Developing. F. F. Lucas. 1,615,890; Feb. 1.
Container, Dispensing. R. G. Emerson. 1,653,896;
Container, Dispensing. R. G. Geake. 1,642,108; Dec. _ Container, Dinner-pail. C. C. Hoffman. 1.646.147: Container, Draining and dumping. A. D. Brune.
Container, Easy open. J. E. Gunter. 1,622,236;
Container, Easy open. J. E. Gunter. 1,622,236;
Container, Dec. 13. Dec. 13. Container, Folding. I. Appelbaum. 1,642,529; Sept. 13. Container, Folding. I. Appelbaum. 1,655,699; Dec. 27. Container, Food. J. Korkames. 1,634,029; June 25. Container for candy and other articles. M. Jones and B. E. Goldstein. Des. 71,800; Jan. 4.

Container for confections. A. Horowitz. 1,646,534; Oct. 25. Container for first-aid kits. A. E. Henderson. 1,644,830; Oct. 11.

Container for fragile articles. G. S. Fletcher. 1,650,337;
Container for fruit-canning apparatus. A. T. Gahan. 1,633,856; June 28.

Container for hair in permanent-waving process. W. S. Lewis and J. C. Murray. 1,619,798; Mar. 1.

Container for bams and the like. D. S. Ralston. 1,635,688; July 12.

1,635,685; July 12.

Container for powdered substances. A. H. Karwath. 1,633,106; June 21.

Container for table service. P. L. Ebarle. Des. 72,936; June 28.

Container for table service. P. L. Ebarle. Des. 72,936; June 28.

Container for table service. P. L. Container for table service. P. L. Ebarle. Des. 72,936; June 28.

Container for table service. P. L. Ebarle. Des. 72,936; June 28.

Container for table service. P. L. Ebarle. Des. 72,936; June 28.

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Container for table service. P. L. Ebarle. Des. 72,936; June 28.

Container for table service. P. L. Ebarle. Des. 72,936; June 28.

Container for table service. P. L. Ebarle. Des. 72,936; June 28. Container for fragile articles. G. S. Fletcher. 1,650,337; Nov. 22. Container, Frictortop, Feb. 1. Container, Garbage, C. T. Faas, 1,651,020, Nov. 29. Container, Gresse, C. F. Wallace, Re16,757; Nov. 22. Container, Gresse, C. F. Wallace, Re16,757; Nov. 22. Container, Hot-metal, C. P. Astrom. 1,616,074; Feb. 1. Container, Knockdown, F. Carlton, 1,650,262; Nov. 22. Container, Liquid-cleaner, F. E. Vickery, 1,615,603; Container, Knockdown. F. Carlton. 1,859,262; Nov. 22.
Container, Liquid-cleaner. F. E. Vickery. 1,615,603;
Jan. 25.
Container made of sulphur. W. H. Kobbe. 1,614,737;
Jan. 18.
Container, Metal. J. H. O'Nell. 1,639,349; Aug. 16.
Container, Metal. J. C. Talaferro. 1,635,521; Dec. 20.
Container, Movable live-fish. F. L. Holman. 1,616,126; Container, Movable live-fish. F. L. Holman-Container, Movable live-fish. F. L. Holman-Container, Paper. R. A. Bennett and A. M. Bootbby. 1,644,506; Oct. 4. Container, Perfume. G. Grunberg. 1,617,843; Feb. 15. Container, Perfume. G. Grunberg. 1,647,848; Feb. 15. Container, Pick. A. Miele. 1,645,918; Oct. 18. Container, Pick. A. Miele. 1,645,992; Oct. 18. Container, Powder. G. L. Ravit. 1,647,869; Nov. 1. Container, Razor-blade. S. D. Baker. Des. 73,993; Container, Sanitary food. F. Knaust. 1,616,262; Feb. 1. Container, Sanitary freezer. F. A. Anton. 1,647,109; Nov. 1. Container, Sanitary freezer. F. A. Anton. 1,647,169; Nov. 1. Container, Sealed metal. H. A. Fink. 1,619,411-12; Mar. 1. Container, Sealed metal. W. Plumb. 1,653,371; Dec. 20. Container, Sheet-metal. J. Coyle. 1,616,357; Feb. 1. Container, Sheet-metal. C. Hurley. 1,646,537; Oct. 25. Container, Socket-wrench. D. F. Graham. 1,017,109; Container, Sheet-metal. C. Hurley, 1,646,637; Oct. 20. Container, Socket-wench. D. F. Graham. 1,617,109; Reb. 8.

Container, Vacuum-fackted. W. B. Wright and W. M. Fairfax, 1,651,655; Dec. 6.

Containers, Adjustable supporting means for display. A. MacDougall. 1,616,980; Feb. 8.

Containers and supports, Separable connecter for sections of the supports, Separable connecter for sections and the like, Apparatus for cleaning. L. Deutsch and A. Pfeifer. 1,635,115; July 5.

Containers, Apparatus for producing seamless fibrous. R. E. Hall. 1,653,007; Dec. 20.

Containers, Eall for. J. F. Egenolf. 1,646,556; Oct. 25.

Containers, Cleaning machine for. E. H. Atwood, W. E. Wanner, C. A. Kiehle, and E. H. Wright. 1,646,570; Containers, Closure for. W. P. Harrison. 1,648,526; Feb. 22.

Containers, Closure for. W. F. Schweigert. 1,623,626; Apr. 5.

Containers, Closure for. W. F. Schweigert. 1,623,626; Apr. 5.

Containers, Closure for. W. F. Schweigert. 1,626,039; Apr. 26.

Containers, Closure for. R. J. Vaughan. 1,637,667; Aug. 2.

Linker, Lössyer for Shipping. K. F. Cooper. 1,616,539; Jan. 25.

Aug. 2.
Containers, Closure for. V. P. Wendle and M. L.
Hunker. 1.639,244; Aug. 16.
Containers, Closure for shipping, K. F. Cooper.
1.613,439; Jan. 25.
Containers, Compess closure for sheet-metal. C. T.
Containers, Content-clovel indicator for. G. M. Bechtel.
1.623,976; Apr. 26.
Containers, Display cover for. H. G. Kuck. 1,644,734;
Oct. 11.
Containers, Display cover for. H. G. Kuck. 1,644,734; Containers, Display cover for. H. G. Kuck. 1,644,734; Oct. 11.
Containers, 1.641,531; Sept. 6.
Containers, 1.620,892; Mar. 15.
Containers, Fatching device for sealed. A. D. Newcomb.
Containers, Fitting for. T. W. Ricke. 1,651,632; Dec. 6.
Containers, Forming cover-holding ring seats for. A.
1,639,661; Aug. 23.
Containers, Holder for. M. B. Nash. 1,645,392; Oct. 11.

Containers, Labeling. H. E. Bredemeier. 1,649,442; Nov. 15. Containers. Machine for applying closures to. T. E. Containers, Labeling. H. E. Bredemeier. 1,649,442;
Nov. 15.
Containers. Machine for applying closures to. T. E.
Containers. Machine for applying closures to. T. E.
Containers. Making. E. F. Hulbert. 1,638,035; Ang. 9.
Containers, Making. E. F. Hulbert. 1,638,035; Ang. 9.
Containers, Method and apparatus for repairing fluid,
E. C. Frurman. 1,610,154; Mar. 8.
Containers, Method of and machine for closing flexible.
Containers, Method of and machine for closing flexible.
Containers, Fouring spout for, liquid. F. Westerbeck. 1,648,794; Sept. 27.
Containers, Froess of and machine for making. A.
Containers, Screw cap for. G. E. Tornsjo. 1,644,697;
Oct. 11.
Containers, Stopper or closure for. F. Lobi. 1,640,508;
Aug. 30.
Containers, with pastes and the like, Filling. K. Kiefer.
Continuous press. A. Columbro. 1,638,981; Aug. 16.
Contour-milling machine. A. J. Gifford and B. S. T.
Bishop. 1,649,109; Nov. 15.
Contraction expansion joint. A. C. Fischer. 1,639,763;
Contraction of the contraction of the containers. 1,649,109; Nov. 15.
Contraction expansion joint. A. C. Fischer. 1,639,763;
Contraction loint. T. De La Mare. 1,644,149; Cet. 11. Contour recorder. J. G. Ritter. 1,649,042; Nov. 1b. Contraction expansion joint. A. C. Fischer. 1,639,763; Aug. 23.
Contraction joint. T. De La Mare. 1,644,914; Oct. 11. Control and supervisory system. J. B. Harlow. Control apparatus. 1,626,659; May 3.
Control apparatus. B. O. Austin and W. G. Horn. 1,626,659; May 3.
Control apparatus. A. H. Candee. 1,649,018; Nov. 15.
Control apparatus. E. F. Carter. 1,634,979; July 5.
Control apparatus. W. G. Horn. 1,647,293; Nov. 1,601,010; May 2,000; May 3,000; Ma Jan. 4.

Control equipment, Automatic. G. R. McDonald. 1,652,904; Dec. 13.

Control equipment, Automatic. M. A. Whiting. 1,652,882; Dec. 13.

Control equipment, Automatic substation. M. A. Whiting. 1,652,969; Dec. 13.

Control-head packer. E. V. Crowell. 1,648,377; Nov. 8.

Control-head packer. E. V. Crowell. 1,648,377; Nov. 8.

Control lever, Emergency. R. S. Gans. 1,614,294; Jan. 11.

Control levers, Mounting for. O. E. Hunt. 1,627,777; May 10 mechanism. R. L. Austin. 1,637,722; Aug. 2.

Control mechanism. J. M. Lucarelle. 1,652,029; Dec. 6.

Control mechanism. R. H. Rausch. 1,617,165; Feb. 8.

Control mechanism. R. H. Rausch. 1,617,165; Feb. 8. May 10.
Control mechanism. R. L. Austin. 1,637,729; Aug. 2.
Control mechanism. J. M. Lucarelle. 1,652,052; Dec. 6.
Control mechanism. B. H. Rausch. 1,631,1652; June 14.
Control mechanism. B. H. Rausch. 1,617,165; Feb. 8.
Control mechanism. J. E. Renholdt. 1,620,230; Mar. 8.
Control mechanism. E. B. Thurston. Reit,658; June 14.
Control method and apparatus. T. Appleby. 1,619,911; Control method and apparatus. T. Appleby. 1,613,911;
Mar. 8.
Control regulator. H. M. Stolier. 1,624,566; Apr. 12.
Control regulator. J. R. Kelley. 1,613,517; Jan. 4.
Control switch, Duplex. S. A. Hoge. 1,621,731; Mar. 22.
Control system. E. M. Bouton. 1,619,398; Mar. 1.
Control system. E. M. Bouton. 1,619,398; Mar. 1.
Control system. F. W. Hild. 1,622,724; Mar. 20.
Control system. F. W. Hild. 1,622,724; Mar. 20.
Control system. F. W. Hild. 1,622,724; Mar. 29.
Control system. F. W. Leith. 1,624,203; Sept. 13.
Control system. H. H. Johnston. 1,642,028; Sept. 13.
Control system. G. W. Müller. 1,614,146; Jan. 11.
Control system. G. W. Müller. 1,614,146; Jan. 11.
Control system. J. W. Thropp. 1,621,344; Mar. 15.
Control system. J. W. Thropp. 1,621,344; Mar. 15.
Control system. G. W. Wallace and H. K. Ibrig. 1,624,294; Apr. 12.
Control system, Automatic. F. P. Whitaker. 1,628,379;
May 10 system. Distant. H. W. Ewald. 1,614,192;
Jan. 11.
Control, System of. R. E. De Camp. 1,654,282; Dec. 27.
Control, System, Primemover. C. B. Taylor. 1,628,621;
May 10.
Controller. K. Berger. 1,630,516; May 31.
Controller. K. Berger. 1,630,516; May 31.

Controller. K. Berger. 1,630,516; May 31.
Controller. D. E. and E. F. Lewellen. 1,643,716; Sept. 27.
Controller. F. B. Miller. 1,634,671; July 2.
Controller, Reversing. A. C. Prescott. 1,633,825; June 28.
Controlling apparatus. F. J. Bast. 1,621,620; Mar. 22.

Controlling apparatus. E. A. Ulmann. 1,625,000; Apr. 10. Controlling apparatus, Attachment means for, W. A. Allen. 1,628,761; May 17. Controlling device. H. E. Campbell. 1,621,233; Mar. 15. Controlling device. J. O. Carrey. 1,642,141; Sept. 18. Controlling device. H. P. Sparkes. 1,622,815; Mar. 29. Controlling device and system employing the same. H. W. Brown. 1,534,973; July 5. Controlling instrument. E. H. Bristol. 1,641,944; Sept. 6. Controlling mechanism. G. A. Bouvier. 1,614,997; January 1,624,973. Jan. 18.
Controlling mechanism. G. Goddu. 1,651,452; Dec. 6.
Controlling mechanism. F. D. Holdsworth. 1,634,577;
July 5.
Controlling mechanism. M. P. Holmes. 1,645,004; Oct. Controlling mechanism. M. P. Holmes. 1.646,694; Controlling mechanism, Automatic, 1,628,989; May 17.
Controlling mechanism, Compressor 1,649,920; Nov. 22.
Controlling switch. J. P. Ellenb A. E. Loewy. Compressor-. C. B. Officer Convertible chair. E. Guenther. 1,631,811; June 7.
Convertible table. A. Peterson. 1,644,010; Aug. 30.
Converting motion, Mechanism for. A. F. Sanford.
1,632,923; June 21.
Conveyance guard. Child's-. F. Hornquist. 1,646,790;
Oct. 25. Cort. 25. Co. Conveyer. Nov. 22. F. W. Cutler. 1,629,776; May 24.
J. W. Greer. 1,635,406; July 12.
W. F. Hall, 1,631,124; June 7.
R. A. Hatfield. 1,635,303; July 19.
F. D. Hoffman. 1,615,338; Feb. 22.
J. G. Jones. 1,641,437; Sept. 6.
E. J. Lamy. 1,644,649; Oct. 4.
E. M. McVicker. 1,620,268; Mar. 8.
F. H. Meyer. 1,615,027; Jan. 13.
T. H. Oppenheim and E. Selhorst. 1,63 Conveyer. Conveyer. Conveyer. Conveyer. 1.639.808: Conveyer. Aug. 23. Conveyer. R. Peale. 1,640,959; Aug. 30. H. M. Shields. 1,652,419; Dec. 13. O. N. Tevander. 1,649,267; Nov. 15. O. N. Tevander. 1,651,981; Dec. 6. T. Thorsten. 1,627,364; May 3. H. L. Young. 1,650,971; Nov. 29. Adjustable roller. P. H. York. 1 Conveyer. Conveyer. Conveyer Jan. 1 1.614.816: Jan. 18.
Conveyer, and ejector, Ash. C. Wotruba. 1,626,490;
Apr. 26.
Conveyer, Ball. B. Lanza. 1,630,345; May 31.
Conveyer, Ball. B. Lanza. 1,630,345; May 31.
Conveyer belt and guiding the same. O. E. Segrin and C. J. Clemens. 1,628,436; May 10.
Conveyer belts, Support for. P. R. Hunter. 1,618,957; Feb. 22. Conveyer berts, support for. P. R. Hunter. 1,618,957; Telegraphic Flexible. H. Phillips and W. E. Hunt. 1,650,937; Nov. 22.
Conveyer, Flexible. H. Phillips and W. E. Hunt. 1,650,937; Nov. 22.
Conveyer, Hydraulic. F. L. Ward. 1,644,699; Oct. 11.
Conveyer burbleator. G. E. Petersen. 1,628,512; May 10.
Conveyer mechanism. R. Peale. 1,648,786; Sept. 27.
Conveyer mechanism and particularly conveyer pulley supports. G. D. Francisco. 1,630,651; July 19.
Conveyer, Overhead. R. A. McCurry. 1,630,959; May 31.
Conveyer, Overhead. R. A. McCurry. 1,630,959; May 31.
Conveyer, Overhead. R. A. McCurry. 1,630,959; May 31.
Conveyer, Peneumatic material, G. Bernert. 1,641,149; Sept. 6.
Conveyer Press. J. C. Ledbetter. 1,644,928; Oct. 11. Conveyer press. J. C. Ledbetter. 1,644,928; Oct. 11. Conveyer, Power-driven. A. J. Hartley. 1,643,986; Oct. 4.

Conveyer-roller feed. M. O. Haeger. 1.625,655; Apr. 19.

Conveyer supports. Stone shield for. B. Gronke. 1.646,452; Oct. 25.

Conveyer system. L. Threefoot and G. W. Elkin. 1.632,203-4; Yune 14.

Conveyer, Traveling. J. L. Herold. 1.652,277; Dec. 13.

Conveyer, Traveling. W. H. Robertson. 1.625,501;

Conveyer, Wrapping. and Isheling, Proching. B. P. Conveyer, Wrapping. CAPPAR Wrapping, and Jabeling machine. P. D. Parsons. 1, 1293-255; May 24.
Conveyers, Automatic transfer mechanism for. S. Olson. 1,638,429; July 19.
Conveyers or screens, Mechanism for operating reciprocating. R. S. Jacobsen. 1,631,435; Sept. 6.

Conveyors, Roller for gravity. G. W. Beulke and P. C. Wego. 1,622,758; Mar. 29. Conveyers, Transfer device for. O. E. Swartz. 1,629,323; May 17. Conveying and piling apparatus. H. A. E. Nilsson. Conveying apparatus. R. La France. 1,626,738; May 3. Conveying apparatus. A. G. Kinyon. 1,652,281; Dec. 13. Conveying apparatus. E. B. Powell and G. Todd. Conveying apparatus. N. H. Preble. 1,639,751; Aug. 23. Conveying apparatus. E. D. Sculbert. 1,654,860; Conveying apparatus. E. B. Tolman, jr. 1,632,206; June 14.

Conveying apparatus for use in connection with the manufacture of matches, Match-sticks. F. Mauge. 1,617,646;

Conveying mechanism. P. Q. Williams. 1,633,053;

June 21.

Conveying mechanism. P. Q. Williams. 1,650,408;

Nov. 22. Conveying June 14. apparatus. E. B. Tolman, jr. 1,632,206; Conveying mechanism. F. Q. Williams, 1,630,408; Conveyor, Leer. P. Q. Williams, 1,646,047; Oct. 18. Cooker. L. Sanguinetti, 1,651,730; Dec. 6. Cooker. C. F. Smith and C. Edwards. 1,624,989; Apr. 19. Cooker and mixer, Combined. A. Jacobson. 1,642,445; Cooker, Continuous. F. D. Chapman. 1,646,577; Oct. 25. Cooker, Continuous. F. D. Chapman. 1,643,637; May 24. Cooker, Electric. J. E. Smith. 1,630,237; May 24. Cooker, Fireless. F. V. Detwiler. 1,652,300; Dec. 18. Cooker, Fireless. H. Mock. 1,647,742; Nov. 1. Cooker, Protess. A. S. N. Olson. Des. 71,810; Jan. 4. Cooker, Potato-chip. R. A. Fontaino and T. H. Self. Cooker, Protessure. S. Graves. 1,653,476; July 12. Cooker, Rotary tubular crystallizer. F. Lafaulle. 1,649,601; Nov 15. Cooker, Steam. W. E. Cary and W. J. Miller. 1,617,235; Feb. 8. 1.649.601; Scooker, Steam. W. E. Cary and W. Cooker, Steam. W. McKenna. 1.628.895; May 17. Cooker, Steam. J. F. Waters. 1.628.248; Dec. 20. Cooker, Steam. J. F. Waters. 1.627.005; May 3. Cooker, Steam-pressure. F. W. Allen. 1.627.005; May 3. Cooker sweep. S. J. Ellis. 1.644.878; Oct. 11. Cooker, Waterless. E. T. Heinson. 1,630.071; Aug. 23. ... Ding and drying apparatus. C. Offenhauser. 1,630.071; Cohilingiriab. Cooking apparatus. C. Onemauser, 1,030,704, 10,104, 10 Cooking apparatus, Electrical. M. J. De Roos. 1,628,310; May 10. Cooking, Apparatus for. J. H. Wilson. 1,646,778; Oct. 25. Oct. 25. Cooking apparatus, Pretzel-. W. Ebrhart. 1,644,516; Oct. 4. Cocking appliance. G. H. Cxx. 1,642,604; Sept. 13. Cocking chestnuts. J. Aoki, 1,616,044; Fels. 8. Cocking chestnuts. J. Aoki, 1,630,614; Fels. 8. Cocking cherce, Electric. B. Mayer. 1,620,002; Mar. 8. Cocking pulp, Apparatus for. C. H. Allen. 1,632,779; June 21. Cooking receptacles, Cutlery holder for, A. Rove 1.627,575; May 10. Cooking utensil. E. A. Allison. 1.616.435; Feb. 8. Cooking utensil. A. Atwater. 1.622.075; Mar. 22. Cooking utensil. S. J. Bell. 1.632.226; June 14. Cooking utensil. C. F. Cullen. 1,630.787; May 31. Cooking utensil. C. F. Cullen. 1,630.787; May 31. Cooking utensil. M. A. Endicott. 1.648.725; Nov. 8. Cooking utensil. T. Geffas. 1.628.760; May 10. Geffas. 1.628.760; May 1.646.88 Cooking utensil. T. Geffas. 1.628,360; May 10. Cooking utensil. H. E. Grossenbacher. 1.646,858; Oct. 25. Cooking utensil. E. P. McClure. 1.635,189; July 12. Cooking utensil. J. E. Quieley. 1.618,675; Feb. 22. Cooking utensil. J. E. Quieley. 1.618,675; Feb. 22. Cooking utensil. H. M. Schwab. 1.630,806; May 31. Cooking utensil. H. M. Schwab. 1.630,806; May 31. Cooking utensil. H. M. Schwab. 1.630,806; May 31. Feb. 1. Cooking utensil with hinged and removable lid. E. Neumann. 1,633,494; June 21.
Cooking utensils and the like. Steam-escape device for. W. N. C. Louw. 1,638,589; Aug. 9.
Cooking utensils, Cover-indexing device and fastener for. R. N. Kircher. 1,630,303; Aug. 16.
Cooking utensils, Handle for. A. F. Lee. 1,625,731; Apr. 19. Apr. 19. Cooking v vessel, Domestic. M. S. Irish. 1,625 999; Cooking vessels, Appliance for. F. L. Housel. 1,622.587; Conking vessels, Detachable cover for. R. N. Kircher. 1,641.681; Sept. 6. Cooking vessels, Overflow device for. J. Barton. 1,616,4691; Feb. 1.

Cookstove, Camp. A. C. Sladky and J. Sladky. 1,635,643;
July 12.
Cookstove, Gas. B. F. Rodgers. 1,630,030; May 24.
Cooler: See—
Alr cooler.
Beverage cooler.
Bottle cooler.
Flash water cooler.
Water cooler.
Water cooler.
Water cooler. Flash water cooler. Water cooler. Milk cooler.
Cooler attachment. W. A. Schatz. 1,648,594; Nov. 8.
Cooling and condensation, Apparatus for. V. C. Canter.
1,622,024; Mar. 22.
Cooling and condensation, Apparatus, Beverage. F. W.
Holderle and C. L. Holderle. 1,626,935; May 3.
Cooling and ventilating, Method of and apparatus for.
L. L. Lewis. Rel 6,611; May 3.
Cooling apparatus, N. H. Hiller. 1,622,511; Mar. 29.
Cooling apparatus, Tr. Cooling apparatus for, Congeniable substances. O. C.
Schmidt. 1,630,864; May 31.
Cooling apparatus for cream and 1,634,910; July 5.
Cooling apparatus for cream and 1,634,910; July 5.
Cooling device. G. Harris. 1,626,084; Apr. 26.
Cooling device. G. Treck. 1,640,162; Aug. 28.
Cooling device. Liquid. G. D. Gates. 1,638,571; Aug. 9.
Cooling device. Liquid. G. D. Gates. 1,638,571; Aug. 9.
Cooling system. A. H. Eipert. 1,637,882; Aug. 2.
Cooling system. W. W. Muir. Rel6,676; July 12.
Cooling system. C. B. Fage and W. D. Burton. Cooling system. W. W. Muir. 1,000,000-7, may 240. Cooling system. C. B. Page and W. D. Burton. 1,646,659; Oct. 25. W. Rushmore. 1,651,157; Nov. 29. Cooling system. H. A. Stehmeyer and J. H. Voss. 1,648,931; Nov. 22. Cooling system, Automatic. W. W. Muir. 1,649,248; Cooling system, Automatic. W. W. Muir. 1,649,248; Cooling system, Automatic. W. W. Muir. 1,649,248; M. Marian, Transformer. C. L. Knotts, 1,624,346; Cooling system, Automatic. W. W. Mult. 1,042,245; Nov. 15.
Cooling aystem, Transformer-. C. L. Knotts. 1,624,346; Cooling aystems, Method of and device for preventing freezing of motor. H. R. Bernard. 1,634,394; July 5.
Cooling tower. J. S. Filoor. 1,632,397; June 14.
Cooling transformers. S. D. Sprong. 1,641,702; Sept. 6.
Cooling unit. J. P. B. Filse. 1,632,2283; June 14.
Cooling wheel. G. E. Cox. 1,649,511; Nov. 15.
Coop. S. S. Barker. Rel6,557; Jan. 18.
Coop. Gheten. A. E. Bugenhagen. 1,616,781; Feb. 8.
Cop. Chicken. A. E. Bugenhagen. 1,616,781; Feb. 8.
Cop. Chicken. A. E. Bugenhagen. 1,616,781; Feb. 8.
Cop. Cop. Transformer. C. T. Hatch. 1,644,472; Oct. 4.
Cooper, Hardening. W. H. Welser. 1,638,076; Aug. 9.
Cop holder or support. H. R. Blair. 1,652,601; Dec. 18.
Cop. Winding frame. O. Lambert. 1,623,191; Apr. 5.
Cop. Sing frame. O. Lambert. 1,623,191; Apr. 5.
Cop. Mult. C. F. Sanders. 1,647,11; Sont. 14. Cop-winding frame. O. Lambert. 1,623,191; Apr. 5. Coping and punching machine. H. L. Christie. 1,638,526; Aug. 9.

Aug. 9.

Gollbach. 1,633,001; Mar. 29.

Gollbach. 1,633,001; Mar. 29.

Gollbach. 1,633,001; Mar. 29.

Copper-darration process. W. E. Greenawalt. 1,614,668-70; Jan. 18.

A. Lieske and W. Bonrath. 1,649,539; Nov. 15.

Copper derivatives for combating animal and plant pests. M. Lieske and W. Bonrath. 1,649,539; Nov. 15.

Christensen. 1,613,922; Sept. 27.

Copper-lime dust. G. E. Sanders. 1,620,490; Mar. 8.

Copper Region. 1,613,922; Sept. 27.

Copper together with a formula applicable thereto, Restching half tones on. V. C. Ronning. 1,628,857;

Copper, sinc, and other metals from solutions containing chlorides and sulphates. K. Mattenkold and H. Schramm. 1,639,610; Aug. 16.

Copyholder. W. H. Gleeson. 1,640,121; Aug. 23.

Copyholder. W. H. Gleeson. 1,640,121; Aug. 23.

Copyholder. M. Hunt. 1616,639; Nov. 15.

Copy-holding apparatus. P. Grabler. 1,820,961; Mar. 15.

Copy-holding apparatus. P. Grabler. 1,820,961; Mar. 15.

Copy-holding apparatus. P. Grabler. 1,637,698; Aug. 2.

Cord. Attachment. C. E. Orndorf. 1,646,869; Oct. 25.

Cord. Attachment. C. E. Orndorf. 1,646,869; Oct. 25.

Cord. Connecter. W. Ile. 1,627,286; May 3.

Cord. Golding apparatus. P. Grabler. 1,820,227; July 12.

Cord. Connecter. W. Ile. 1,627,286; May 3.

Cord. Golding device. M. Castricum. 1,624,532–3; App. 12.

Cord. Connecter. M. Castricum. 1,624,532–3; App. 12.

Cord. Connecter. M. Castricum. 1,624,532–3; App. 12.

Cord. Connecter. M. Castricum. 1,624,532–3; App. 12. Cord holder, Adjustane aropage.

June 21.
Cord lock. F. F. Hillix. 1,643,658; Sept. 27.
Cord. Nonstretchable. J. H. Hunter. 1,644,529; Oct. 4.
Cord protecting and supporting device. M. R. Rodrigues. 1,617,866; Feb. 15.
Cord take-up. H. W. Robinson. 1,614,393; Jan. 11.
Cord take-up. H. W. Westbrook. 1,614,221; Jan. 11.
Cord take-up. H. W. Westbrook. 1,614,221; Jan. 11.
Cord take-up. S. A. Steere. 1,635,196; July 12.
Cordinge. Manufacture of. W. K. Lewis. 1,639,041;
Aug. 16. Cord holder, Adjustable droplight-. L. Moran. 1,633,344;

Cording device. L. A. Brooks. 1,637,804; Aug. 2. Cording machine. J., W., and H. Platt. 1,625,868; Core and churck, Collapsible. L. A. Moreland. 1,633,263; June 21.

Core and churck, Collapsible. L. A. Moreland. 1,633,263; June 21.

Core and method of and apparatus for coating same, Coated. F. W. Williard. 1,615,428; Jan. 25.

Core bar. J. E. Perry. 1,618,130; Feb. 15.

1,615,887; Feb. 1.

1,615,887; Feb. 1.

Core barel. C. H. Benckenstein. 1,619,328; Mar. 1.

Core box. Electrolytic. A. K. Laukel. 1,649,312; Nov. 15.

Core, Coated. H. G. Walker and A. T. March. 1,615,425;

Core, Collapsible. C. H. Terry. 1,631,838; June 7.

Core drill. W. C. Barnes. 1,034,865; July 26.

Core drill. M. C. Barnes. 1,634,836; July 26.

Core drill. T. L. Dec. 1,637,295-6; July 26.

Core drill. H. H. Halvotsen. 1,643,338; Sept. 27.

Core drill. W. H. Jones and M. Kinnebrew. 1,614,199; Jan. 11.

Core drill. J. S. Mitchell. 1,634,506; July 5. Core drill. J. S. Mitchell. 1,634,506; July 5. Core drill. J. S. Mitchell. 1,664,233; Dec. 27. Core drill. F. Oliver. 1,624,146; Apr. 12. Core drill. C. F. Osgood. 1,650,384; Nov. 22. Core drill. R. Wilcox. 1,653,245; Dec. 20. Core drill. Rotary, R. B. Moran and A. F. Spengler. Core drill. F. Oliver. 1,624,146; Apr. 12.
Core drill. C. F. Osgood. 1,650,364; Nov. 22.
Core drill. R. Wilcox. 1,653,245; Dec. 20.
Core drill. Rotary. R. B. Moran and A. F. Spengler.
1,626,249; Apr. 26.
Core drill. Kotary. W. N. Thompson. 1,615,921; Feb. 1.
Core. Expansion. J. R. Taylor and E. Wood. 1,640,013;
Core, Expansion. J. R. Taylor and E. Wood. 1,640,013; Core. Expansion. J. R. Taylor and E. Wood. 1,640,013; Aug. 23.

Core-extracting device. G. I. Keniston and C. E. Priestley. 1,650,017; Nov. 22.

Core for molds. H. C. Pfell. 1,630,357; May 31.

Core form, Collapsbile and portable. H. J. Yager. 1,620,011 pec. 6.

Core, Laminated. P. Paszkowski. 1,654,306; Dec. 27.

Core, Magnetic. W. Ehlers. 1,615,685; Jan. 25.

Core-making machine, Dry-cell. C. S. Affholder. 1,645,678; Oct. 18.

Core, Method of an apparatus for serving a. C. D.

Core, Multipart. M. Grydt. 1,638,846; Aug. 16.

Core-environment. M. Grydt. 1,638,846; Aug. 16.

Core-environment. R. M. Johnstone. 1,642,680; Sept. 20.

Core tip. 1,688,849; Nov. 8. Core, Multipart. M. Guyot. 1,638,846; Aug. 16, Core-supporting means. R. M. Johnstone. 1,642,680; Sept. 20.
Core tip. M. Hill. 1,648,399; Nov. 8.
Core tip. E. M. Hill. 1,648,399; Nov. 8.
Core tip. E. M. Hill. 1,648,399; Nov. 8.
Core tip. E. M. Hill. 1,648,399; Nov. 8.
Core tupe cutter. C. J. Roberts. 1,641,866; Sept. 6.
Cored article and producing such articles. R. E. McFarland. 1,615,094; Jan. 18.
Cored article and producing such articles. R. E. McFarland. 1,615,094; Jan. 18.
Cored carticles of hard rubber of the like, Making irregulation of the like, Ma

Cork textile rolls, Treatment of, H. F. Busch. 1,629,145; May 17. Corn and meal mill, Concentrated carcked. G. H. Haines. 1,653,459; Dec. 20. Corn-crib construction. E. B. Nelson. 1,646,398; Oct. 18. Corn-expansion machine. C. Suzuki. 1,646,308; Oct. 18. Corn-expansion machine. C. Suzuki. 1,647,483; Nov. 1. Corn from the cot, Machine for cutting green. F. W. Burpee. 1,623,085; Apr. 5. Corn gatherer and husker. U. A. Shirey. 1,616,283; Feb. 1. Corn, grains, and the like, Apparatus for cleaning, peelshelling. S. Camilla and F. Pagliani. Corn, grains, and the like, Apparatus for cleaning, peeling, or shelling. S. Camilla and F. Pagliani. 1,637,678; Aug. 2.
Corn harvesting and husking machine. A. C. Beckman. 2.
Corn huskers, Ulscharge spout for. T. H. Oppenheim and B. Selhorst. 1,647,714; Nov. 1.
Corn huskers, Gear case for. T. H. Oppenheim and B. Selhorst. 1,647,525; Oct. 11.
Corn huskers, Shaker trough for. A. Rosenthal. 1,629,303; May 24.
Corn husking machine. H. F. Freise. 1,635,400; Tuly 12.
Corn husking machine. W. W. Morral. 1,628,325; May 16. Corn-husking machine. W. W. Morral. 1,628,325.
May 10.
Coru-husking machine, T. H. Oppenheim and B. Selhorst.
1,621,682; Mar. 22.
Corn-husking machine, M. W. Sells. 1,634,758; July 5.
Corn-husking machine and method. R. Cover. 1,627,838;
May 10.
Corn-husking machines, Shaking screen mechanism for. T.
H. Oppenheim and B. Selhorst. 1,629,337; May 17.
Corn. Machine for handling and treating. M. W. Sells.
1,639,706; Aug. 23.
Corn pickers, Sept. 27.
Corn nubbliner. E. W. Hopkins. 1,621,928; Mar. 22.
Corn pickers, Motor attachment for. G. Puck. 1,645,868;
Oct. 18.
Corn picking and husking machine. S. W. Barnett. Oct. 18. Corn picking and husking machine. S. W. Barnett. 1,646,741; Oct. 25. Corn planter. J. M. Ray. 1,625,390; Apr. 19. Corn-planter attachment. H. Heronimus. 1,616,799; Corn planter. J. M. Ray. 1,625,390; Apr. 19.
Corn-planter attachment. H. Heronimus. 1,616,799;
Jan. 10.
Corn-plaster machine. O. G. Schmitt. 1,637,624; Aug. 2.
Corn plasters, Making. O. G. Schmitt. 1,637,624; Aug. 2.
Corn plasters, Making. O. G. Schmitt. 1,637,623; Aug. 2.
Corn plasters, Making. O. G. Schmitt. 1,637,623; Aug. 2.
Corn popper. J. G. Le Pere. 1,638,493; Aug. 9.
Corn popper. J. G. Le Pere. 1,638,493; Aug. 9.
Corn popper. J. G. Le Pere. 1,638,493; Aug. 9.
Corn popper. J. G. Lorenzon. 1,650,044; Nov. 22.
Corn sheller. W. M. Jordan and C. S. Nichols. 1,650,988;
Corn-popping machine. F. A. Hill. 1,621,113; Mar. 15.
Corn shellers and the like, Separating mechanism for.
E. M. Mitchell. 1,631,037; Nov. 29.
Corn-snapping mechanisms, Clearing device for. C.
Ducker. 1,627,021; May 3.
Corn-snapping mechanisms, Clearing device for. C.
Ducker. 1,627,021; May 3.
Corn-snapping proller. O. J. Schuld. 1,647,936; Nov. 1.
Corn turner. L. L. Sizelove. 1,613,486; Jan. 4.
Corner-bead C. E. Kens. 1,652,674; Dec. 132.
Corner-bead C. E. Kens. 1,652,674; Dec. 132.
Corner-bead, Apparatus for expanding metal. L. E.
Curtis. 1,624,642; Apr. 12.
Corner-bead-positioning device. C. A. Karelius. 1,651,712;
Corner-bracket. G. F. Voight. 1,642,392; Sept. 13.
Corner bracket. G. F. Voight. 1,642,392; Sept. 13. Corner bracket, G. F. Voight. 1,642,392; Sept. 13.
Corner guide and plumb rule. W. G. Elder. 1,643,880; Sept. 27.
Corner light. G. Graff. Des. 72,419; Apr. 12.
Corner mounts, Machine for making. L. S. Riley. 1,627,667; May 10.
Corner plate. L. C. MacDonald. 1,622,656; Mar. 29.
Cornice block. J. Lynch. 1,635,893; July 12.
Corner plate. L. C. MacDonald. 1,622,656; Mar. 29.
Corner block. P. L. Lynch. 1,635,893; July 12.
Corrosion. Prevention of. S. Fowler and E. Edser. 1,624,938; Apr. 19.
Corrosion. Prevention of. S. Fowler and E. Edser. 1,624,938; Apr. 19.
Corrosion. Prevention. C. H. Humphries. 1,614,303; Jan. 11. Corression-resisting coating on iron and steel and products thereof, Producing. C. H. Humphries, 1,614,303;
Corrugated board, Machine for manufacturing. J. Kramer and A. H. Israel. 1,629,561; May 24.
Corrugated sheet, Weided composite. P. H. Tront. 1,625,061; Apr. 19.
Corrugating and bending machine. W. J. McLaughlin. Corrugating steel bending machine. W. J. McLaughlin. Corrugating machine. D. V. Edwards. 1,623,467; Apr. 5.
Correct. T. G. Bowers. 1,643,109; Sept. 20.
Corset. W. R. Brock. 1,642,195; Sept. 13.
Corset. J. Leonard. 1,637,313; July 26.
Corset. J. Wom Halle. Re16,526; May 17.
Corset. M. Von Halle. Re16,526; May 17.
Corset and brassière, Combined. J. J. Kispert. 1,625,664; Apr. 19. Apr. 19.
Corset and brassière, Combined detachable. W. Somers.
1,638,787; Aug. 9.

Corset clasp. A. Kautzsch, 1,631,535; June 7. Corset, Maternity. A. H. Lockwood. 1,620,264; Mar. 8. Corset, Shaped seamless elastic. O. C. Wiese. 1,649,633; Corset, Snapeu seamless eastne. U. C. Wiese. 1,639,633;
Nov. 15.
Cosmettic case. J. L. Younghusband. 1,642,188; Sept. 12.
Cosmettic pira. A. Orzo. Des. 72,239, 72,187.
Cosmettic pira. A. Orzo. Des. 72,239, 72,187.
Cosmettic pira. A. Orzo. Des. 72,239, 72,187.
Cosmettic pad holder. W. G. Kendall. 1,644,916; Nov. 1.
Cosmettics. A. L. Davis. 1,629,996; May 17.
Cosmettics and like materials, Container for. B. R. Morrison. 1,650,028; Nov. 22.
Costume slip. A. C. Hofman. 1,618,193; Feb. 22.
Costumer. W. P. Neal. Des. 73,576; Oct. 4.
Costumer. and wardrobe, Combined. E. B. Skinner.
1,641,852; Sept. 6.
Cotterpin. 2. Tieldeman. 1,634,043; Oct. 4.
Cott. Exercising. F. T. Mittag. 1,641,188; Sept. 6.
Cot. Exercising. F. T. Mittag. 1,641,188; Sept. 6.
Cot. Folding. W. E. Brown. 1,632,114; June 14.
Cot for automobiles. W. C. Brye. 1,620,433; Mar. 8.
Cotter pin. E. W. Beatty. 1,621,346; Mar. 15.
Cotter-pin puller. W. H. Burke. 1,628,616; Aug. 9. Cotter-pin and staple pinter. F. F. Foote. 1,628,953;

Alay 24.

Alay 24.

Alay 25.

Cotton and hull separator. C. A. Brust. 1,628,451;

May 10.

Cotton and other fibrous materials, Apparatus for use in treating. J. W. Cook. 1,629,068; May 17.

Cotton and other fibrous materials, Opening, mixing, and blending. R. W. B. Sparkes. 1,632,931; June 21.

Cotton batting and making the same. E. A. Rogers. 1,642,509; Sept. 18.

Cotton blocker. J. E. Williams. 1,635,521; July 12.

Cotton chopper. A. H. Wilniert. 1,635,521; July 12.

Cotton chopper. A. H. Wilniert. 1,623,538; Apr. 5.

Cotton chopper and weeder. E. W. Beasley. 1,634,010; June 28.

Cotton chopper, Cross-row. H. A. Turner. 1,642,277; June 28. Cotton, chopper, Cross-row. H. A. Turner. 1,642,277; Sept. 13. Cotton-chopping machine. A. McGreger. 1,648,775; Cotton cleaner. C. J. Baker. 1,619,178; Mar. 1.
Cotton cleaner. T. G. Medders. 1,614,624; Jan. 18,
Cotton cleaning and reclaiming machine. J. E. Mitchell.
1,613,42; Jan. 4.
Cotton, Device for picking. I. Martinez. 1,634,621; 1.613,242; Jan. 4.
Cotton, Device for picking. I. Martinez. 1,634,621;
July 5.
Cotton-distributing mechanism. R. S. Curley. 1,630,375;
May 31.
Cotton-distributing mechanisms, Controlling apparatus
for. J. W. Woodward. 1,640,138; Aug. 23.
Cotton during spinning operations, Device for distinguishing different sorts of, J. Laurer. 1,645,432;
Cotton duster. R. L. Woodruff. 1,641,269; Jan. 11.
Cotton-dusting machine. W. H. Thompson. 1,646,224;
Oct. 18. Oct. 18.
Cotton fabrics, Produing woollike effects on. H. I.
Huey. 1,616,749; Feb. 8.
Cotton feeder and separator. E. L. Farley. 1,647,860; Cotton fleeder and separator. E. L. Farley, Nov. 1. Cotton fibers, Preparation of. P. Karrer. Nov. 29. Cotton file. A. S. Skelton. 1.649,263; Nov. 1.650.989: Cotton fibers, Preparation of. P. Karrer. 1,650,989; Nov. 29.
Cotton file. A. S. Skelton. 1,649,263; Nov. 15.
Cotton-gathering machine. D. M. Key. 1,615,330; Cotton gin. R. L. Willis. 1,642,982; Sept. 20.
Cotton gin. Compound vacuum. J. F. Levering. 1,646,060; Oct. 18.
Cotton-gin int flue. E. Munger. 1,646,656; Oct. 25.
Cotton gins, Rib rail for. I. Leech and T. H. Bradley. 1,630,018; May 24.
Cotton gins, Rib rail for. E. Mills. 1,628,797; May 1,620,018; May 24.
Cotton, Machine for opening and preparing. J. W. Goodroe. 1,632,372; June 14.
Cotton other threads containing cellulose, Treating. G. Tagliani. 1,633,617; June 28.
Cotton picker. H. N. Berry. 1,635,161; July 5.
Cotton picker. A. E. Brown. 1,624,308; Apr. 12.
Cotton-picking machine. W. T. Hoofnagie. 1,636,132; July 18.
Cotton-picking machine. F. and M. F. Phelps. 1,646,594; Oct. 25.
Cotton pickers. Automatic knock-off for. O. Brown. Courter, Mr. Briener, F. Paul At. F. Paeps. 1,046,504; Oct. 1,051,512; Oct. 11.

Cotton stapling. E. E. Chandler. 1,643,198; Sept. 20.

Cottonseed and product thereof, Preparatory treatment of. H. Bollmann. 1,653,201; Dec. 20.

Cottonseed cleaner. C. G. Kime. 1,027,202; May 10.

Cottonseed cleaner. C. G. Kime. 1,027,202; May 10.

1,654,263; Dec. 27.

Cottonseed hulls, Process and apparatus for delinting. T. J. Kidd. 1,634,263; Dec. 27.

Cottonseed hulls, Process and apparatus for delinting. T. J. Kidd. 1,634,263; Dec. 27.

Couche, A. Karemenko. Pse. 13,734; Oct. 25.

Couches, and the like. Spring-lifting mechanism for folding. H. J. Jacobs. 1,655,217; Nov. 22.

Couches, Post for. F. Chaffant. 1,616,740; Feb. 8.

Counter. W. T. Sherer. 1,626,033; May 24.

Counter, F. P. Stell. 1,629,963; May 24.

Counter and heel guard. M. M. Doran. 1,631,310; June 7.

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Counterbalancing device. L. M. Liewellyn and H. G. Pederson. 1,624,414; Apr. 12. Counterbalancing device. H. G. Pederson. 1,645,254;
            Rederson. 1624414; Apr. 12.

Cott. 11.

Counterbindencing device. H. G. Pederson. 1,645,254; Counterbindencing device. H. G. Pederson. 1,645,254; Countersinking machine. W. G. Aldeen. 1,624,648; Apr. 12.

Apr. 12.

Apr. 12.

Lounter, Fish-dressing. R. H. Holt. 1,617,484; Feb. 15.

Countersinking machine. W. G. Aldeen. 1,624,648; Apr. 12.

Counting and delivering folded products, Mechanism for. H. P. Clauberg. 1,616,075; Feb. 1.

Counting and indicating mechanism. A. Broadmeyer. 1,631,616; June 7, Cannon. 1,614,712; Jan. 18.

Counting machine, C. H. Veeder. 1,617,730; Feb. 15.

Counting machine, Can cover. J. R. Edwards. 1,641,476; Sept. 6.

Counting mechanism. M. D. Nolet. 1,647,143; Nov. 1.

Counting mechanism. O. L. Seward. 1,613,140; Feb. 15.

Counting mechanism. D. Seward. 1,613,140; Feb. 15.

Counting mechanism. M. D. Nolet. 1,647,143; Nov. 1.

Counting mechanism. O. L. Seward. 1,618,140; Feb. 15.

Counting sechanism. O. L. Sew
      1.635,782; July 12
Coupler, Biow-off. W. H. Clegg. 1.613,742; Jan. 11.
Coupler centering device. V. Willougaby. 1,616,603;
Coupler for miner's cars, Automatic. T. Kolinger and
L. Habunek. 1,621,419; Mar. 15.
Coupler prechanism. E. P. Kinne. 1,639,300; Aug. 16.
Coupler mechanism. E. P. Kinne. 1,639,300; Aug. 16.
Coupler-positioning device. V. B. Sisson. 1,636,153;
Cupler sclease riggings. W. C. Sleeman and A. J. Monfee.
1,634,693; July 5.
Coupler-gelease riggings, Separable. A. F. O'Connor.
1,625,144; Apr. 19.
Coupler schelase rigging, Separable. A. F. O'Connor.
1,625,144; Apr. 19.
Coupler schelase rigging, Separable. A. F. O'Connor.
1,625,144; Apr. 19.
Coupler schelase rigging, Separable. A. F. O'Connor.
1,646,5393; Apr. 19.
Coupler schelase rigging, Separable. A. F. O'Connor.
1,616,643; Feb. S.
Couplers, Operating means for. S. V. Coney. 1,614,654;
Jan. 18.
Coupling, See—
Air-brake coupling.
Car co
Electric coupling.
Fianged coupling.
Flexible adjustable coupling.
Flexible coupling.
Flexible coupling.
Frietton coupling.
Gas-line coupling.
Hose and pipe coupling.
Train-pipe coupling.
Train-pipe
                                                                                                                                                                                                                                            H. E. Brice, 1,629.375; May 17.
B. E. Cagnon, 1,652,705; Dec. 6.
C. W. Cassels, 1,647.044; Feb. 8.
H. P. Dahlstrand, 1,641,740; Sept. 6.
W. B. Flanders, 1,630,737; May 31. *
G. H. Fletcher and H. Rusby, 1,633,935;
                         Coupling.
Coupling.
Coupling.
            Coupling. C. W. Cassels. 1,617,044; Feb. 8. Coupling. H. P. Dablstrand. 1,641,740; Sept. 6. Coupling. W. B. Flanders. 1,630,737; May 31. Coupling. G. H. Fletcher and H. Rusby. 1,633,935; June 28. W. J. Gagnon. 1,650,505-6; Nov. 22. Coupling. H. W. Goff. 1,653,699; Dec. 27. Coupling. C. Hofsand. 1,639,609; Aug. 16. Coupling. R. A. Hage. 1,623,110; Apr. 5. Coupling. G. C. Hofsand. 1,639,609; Aug. 16. Coupling. J. F. Johnson. 1,647,136; Nov. 1. Coupling. G. C. Long. 1,634,153; June 28. Coupling. L. Reisfeld. 1,636,706; July 26. Coupling. G. C. Long. 1,634,153; June 28. Coupling. L. M. Sartain. 1,613,909; Jan. 11. Coupling. G. Stevens, 1r. 1,635,144; July 5. Coupling. G. Stevens, 1r. 1,635,144; July 5. Coupling. G. Stevens, 1r. 1,635,144; July 5. Coupling and hose, Steam Iron. J. J. Mulconroy. 1,619,583; Mar. 1. Coupling and making the same. J. W. Napler. 1,623,064; Apr. 5. Coupling device. S. M. Chase. 1,627,885; May 10. Coupling device. S. M. Chase. 1,627,885; May 10. Coupling device. S. M. Chase. 1,627,845; Aug. 2.
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Coupling device, H. J. Neufang, 1,648,317; NOV. 8. Coupling device, Electromaguetic. S. E. Anderson. 1,616,102; Feb. 1. Coupling device, Inductive. J. C. Gabriel. 1,641,925; Sept. 6.
     Coupling Sept. 6. device, Inductive, L. M. Hull and R. ... Coupling, 1,625,723; Apr. 19.

Coupling for armored hose, W. A. Johnson, 1,649,594;
       Coupling for lifting ropes and the like, Detachable. E. J.
Thunberg and H. G. A. Åkerlind. 1,618,851; Feb. 22.
Coupling for logs, Chain. E. Larsson. 1,619,675;
  Thunberg and Coupling for logs, Chain. E. Larsen. Mar. 1.
Coupling for railway cars, Emergency. P. L. Hudgins. 1.655.433; Dec. 20.
Coupling for suspended shaft casings. M. E. Layne. 1.652.368; Dec. 13.
Coupling for wires, etc. C. H. Ericson. 1,641,627;
  Coupon, Merchandising. V. J. Garvin. 1,613,881; Jan. 11.

Cover and strainer, Combined. F. W. Kuhnast. 1,624,745; Apr. 12.

Cover construction. 1,639,714; Nov. 15.

Cover dier, Electric. P. Fassier, 1,615,987; Jan. 11.

Cover deges, Machine for folding. C. H. Ohlsson. 1,640,515; Aug. 30.

Cover fastener. E. F. Loewer. 1,615,987; Feb. 1.

Cover holder. A. B. R. Moore. 1,646,782; Oct. 25.

Cover-operating mechanism for garbage, ash wagons, and the like. 1,642,643; Nov. 28.

Cover-operating mechanism for garbage, ash wagons, and the like. 1,647,648; Nov. 28.

Cover stainer. A. A. Phillips. 1,647,679; Nov. 1.

Cover, Spring sleeve, and lubricator, Spring. E. F. Hartzell. 1,659,942; Aug. 23.

Covering machine. R. A. McCauley. 1,640,903; Aug. 30.

Coverings and forming same. Refractory material sultable for. G. B. Luckett and J. A. Johnson. 1,643,888; Oct. 4.
  anie for. C. B. Luckett and J. A. Jonison. 1,002,058, Oct. 4.

Coverings, Method of and apparatus for laying protections of the control of the covers of closures, Implement for removing. C. A. MacIntosh. 1,645,107; Oct. 11.

Covers, Web notching and blanking mechanism for outside. C. H. Ohlsson. 1,640,466; Aug. 30.

Cow-tail tie. G. L. Short. 1,619,274; Mar. 1.

Cowl. H. C. Wehrfritz. 1,641,000; Aug. 30.

Cowl ventilator. H. C. Maise. 1,632,796; June 21.

Cowl ventilator. W. C. Zoller. 1,642,319; Sept. 13.

Cracker can A. Pittelkow. 1,645,772; Oct. 12.

Cracking apparatus. E. W. Hartman. 1,613,427; Feb. 22.

Cracking apparatus. E. W. J. L. Pickens. 1,654,430;

Craft, Over-water. J. B. Williams. 1,627,876; May 10.

Craft, Over-water. J. B. Williams. 1,627,876; May 10.

Craft, Over-water. J. B. Williams. 1,627,876; May 10.

Craft propulsion means. J. V. Martin. 1,644,787; Oct. 11.
  Craft propulsion means. J. V. Martin. 1,644,787; Oct. 11.

Crampling device. C. Gronski. 1,618,654; Feb. 22.

Cranberry-harvesting apparatus. H. B. Magiathlin.

Crane. E. B. Magiathlin.

Crane. E. W. Deady. 1,622,574; Mar. 29.

Crane. L. D. Nilson. 1,641,351; Sept. 6.

Crane. L. D. Nilson. 1,643,348; Sept. 27.

Crane. L. D. Nilson. 1,643,348; Sept. 27.

Crane. L. D. Nilson. 1,643,348; Sept. 27.

Crane. L. Green. 1,643,348; Sept. 27.

Crane. L. Green. 1,643,348; Apr. 19.

Crane. And motor stand, Combination. D. A. Snook.

1,614,697; Jan. 18.

Crane, Boat's. J. Petersen. 1,614,316; Jan. 11.

Crane, Boat's. J. Petersen. 1,614,316; Jan. 11.

Crane, Foundry ledle. A. Thomas. 1,629,539; Apr. 26.

Crane, Foundry ledle. A. Thomas. 1,629,184; May 17.

Crane. Traveling. A. Amaier. 1,614,769; Jan. 18.

Crane, Traveling. A. Amaier. 1,614,769; Jan. 18.

Crane, Traveling. A. E. Bater. 1,652,265; Dec. 13.

Crane, Traveling. A. E. Bater. 1,652,265; Dec. 13.

Crane, Traveling. A. E. Bater. 1,648,342; Sept. 27.

Crane, Wrecking. J. H. Staley. 1,629,592; May 24.

Cranes. Propolling mechanism for. E. G. Deucher.

1,630,377; May 31.
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Cranes, Trolley construction for. G. B. Moore. 1,627,746;
May 10.
Crank. M. Anthony. 1,623,469; May 24.
Crank. G. C. Trester. 1,640,168; Aug. 23.
L. Crank. G. Ditman mechanism. H. Ford.
Aug. 16.
Crank-case and pit drainer. A. M. Morrison. 1,651,616;
Dec. 6.
Crank-case construction. G. D. Angle. 1,619,012;
Crank-case heater. F. H. Hinkley. 1,629,829. May 17.
        Crank-case heater. F. H. Hinkley. 1,629382; May 17.
Crauk-case repair arm. H. Y. Hooper. 1,635,847;
Crank-case neater. F. H. Hinkiey. 1,629382; May 11.
Crank-case repair arm. H. Y. Hooper. 1,635,847;
Crank-case ventilator. J. D. Shannon. 1,654,147;
Dec. 27.
Crank cases, Apparatus for cleaning. W. L. Osborne. 1,633,283; June 21.
Crank cases, Electric heater for. J. H. Loper. 1,627,564;
May 10.
Kay 10.
Crank holder. W. J. Coultas. 1,622,028; Mar. 22.
Crank holder. A. Manchester. 1,615,592; Jan. 25.
Crank motion, Automatically-variable. A. E. Miller. 1,622,919; Mar. 29.
Crank shaft. F. A. Jimerson. 1,647,280; Nov. 1.
Crank shaft. K. R. Nolson. 1,651,665; Dec. 0.
Crank shaft. W. T. Crank shaft. Crank shaft. Ott. 1,647,280; May 24.
Crank shaft. G. W. Thompson. 1,630,035; May 24.
Crank shaft, Balunced. J. A. Oldson. 1,645,717-8;
Oct. 18.
Crank-shaft, formation. H. Ford. 1,624,228; Apr. 12.
     Oct. 18.
Crank-shaft formation. H. Ford. 1,624,228; Apr. 12.
Crank shaft, Six-throw, four-bearing balanced. J. A.
Oldson. 1,649,541; Nov. 15.
Crank shaft, Two-piece. W. F. Kasper. 1,613,835;
  Oldson, 1,649,541; Nov. 15.

Crank shaft, Two-piece, W. F. Kasper, 1,613,835; Jan. 11.

Crank shafts, Devlee for damping the oscillations of multiple. H. Föttinger, 1,636,050; July 19.

Crank shafts, Power take-off for engine. R. D. Caffarello, 1,629,949; May 24.

Crank-shaping machines, Bull-gear inclosure for. G. H. Knight, 1,624,934; Apr. 19.

Cranking device, Safety, R. L. Green, 1,651,695; Dec. 6.

Crankless mechanism. A. G. M. Michell, 1,613,116;

Cranks Plu attachment for. C. Furit, 1,652,617.
Jan. 4.

Cranks, Pin attachment for. C. Eurit. 1,652,617;
Dec. 13.

Crate. M. A. Brown. 1,636,804; July 26.

Crate. G. and G. A. Flagstad. 1,617,444; Feb. 15.

Crate. C. and G. A. Flagstad. 1,617,444; Feb. 15.

Crate. J. F. Manrer, 17. 1,625,133; July 5.

Crate. J. F. Manrer, 17. 1,620,585; Mar. 8.

Crate. C. A. Woolsey, 1,638,229; Aug. 9.

Crate. C. A. Woolsey and H. V. Bowman. 1,639,873;
Aug. 23.

Crate. C. A. Woolsey and H. V. Bowman. 1,644,865;
Crate. C. A. Woolsey and H. V. Bowman. 1,644,865;
Crate. C. A. Woolsey and H. V. Bowman. 1,644,865;
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Crate. C. A. Woolsey and H. V. Bowman. 1,644,865;
Crate. C. A. Woolsey and H. V. Bowman. 1,644,865;
Crate. C. A. Woolsey B. W. B. Bowesteel.
Crate Collapsible Stand B. V. Bowman. 1,644,865; Crate Boutle. H. H. and E. A. Gerding. 1,623,859; Apr. 19. Crate, Bottle. H. H. and E. A. Gerding. 1,625,859; Apr. 19. Crate, Collapsible. C. Flagstad. 1,646,224; Oct. 18. Crate, Collapsible. C. Flagstad. 1,646,224; Oct. 18. Crate, Collapsible Shipping. W. B. Hiatt. 1,651,121; Nov. 29. Crate, Folding. J. Cobb. 1,652,887; Dec. 13. Crate, Folding. T. J. Murray. 1,626,009; Apr. 26. Crate for furniture. Collapsible. E. F. Tarman. 1,619,895; Crate Folding. T. G. Collapsible. E. F. Tarman. 1,619,895; Crate Folding. T. Collapsible. E. F. Tarman. 1,619,895; Crate Folding. T. Collapsible. E. Gollapsible. E. Crate for furniture. Collapsible.
Crate for animals, Shipping. B. F. Tarman. 1,610,895; Mar. 8.

Crate for furniture, Collapsible and adjustable. E. F. Rau. 1,633,354; June 21.

Crate or box. B. E. Gaylord. 1,616,618; Feb. 8.

Crate, Portable collapsible. W. D. Thixton. 1,633,425; June 20.

Crate, Shipping. B. A. Stamp. 1,624,517; Apr. 12.

Crate, Shipping. H. A. Clark. 1,639,355; Aug. 10.

Crate, Shipping. J. W. Parks. 1,633,136; Dec. 20.

Crate, Shipping. J. W. Samples. 1,637,660; Aug. 2.

Crate, Shipping. J. W. Samples. 1,637,660; Aug. 2.

Craem-dispensing device. A. Slaten. 1,655,806; Nov. 29.

Cream-camover. E. G. Lambert. 1,622,852; Mar. 29.

Mar. Soving apparatus. G. Haberman. 1,610,973; Mar. 20.

Cream-removing device. A. T. Laws. 1,615,765; Jan. 25.
Cream-removing device. A. T. Laws. 1.615,765; Jan. 25. Cream saver, Sanitary. H. F. Rohrke. 1.629,369; May 17. Cream separator. C. E. Benedict. 1.625,385; Apr. 19. Cream separator. E. H. Fabrney. 1.631,194; June 7. Cream separator. E. H. Fabrney. 1.630,444; Nov. 22. Cream separator. W. A. Guyer. 1.630,444; Nov. 22. Cream. Skin. F. E. Goodall. 1.626,814; May 3. Cream. Sterilizing. B. H. Webb. 1.648,671; Oct. 25. Cream-testing device. H. Waagbo. 1.612,996; Jan. 4. Cream-treating process. R. K. Cooney. Rel6,576; Cream-testing device. H. Waagbo. 1.612,996; Jan. 4. Cream-treating process. R. K. Cooney. Rel6,576; Cream-testing device. H. Waagbo. 1.628,933; Feb. 22. Creamer attachment for coffee urns. Combination sanitary automatic. D. M. Clark. 1.618,363; Feb. 22. Creamer or similar article. F. Schmidt. Des. 72,282; Creasing and folding machine. F. Thomas. 1,620,986; Creasing device, Hand-operated. H. B. Walter. 1,633,655; June 28.
        Cream-removing device. A. T. Laws. 1.615,765; Jan. 25
Cream saver, Sanitary. H. F. Rohrke. 1.629,309
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Credit form, Mercantile, D. L. Cline. 1,637,985; Ang. 2. Credit slip, Authorizing apparatus. A. Block. 1,644,229; Oct. 4. Creel. R. P. Clark. 1,648,757; Nov. 8. Creel. J. O. McKean. 1,623,546; Apr. 5. Creel earrier. W. R. Davis. 1,635,528; July 12. Creel. J. O. McKean. 1,623,546; Apr. 5. Creel earrier. W. R. Davis. 1,635,528; July 12. Creels of July 14,1497; Apr. 1,643,649; July 12. Creels of July 14,1497; Apr. 1,643,748; June 21. Creeling frames, Automatic signal indicator for. A. J. Dion. 1,633,439; June 21. Dion. 1,634,447; Feb. 22. Crib and baby walking device, Combined. F. Urso. 1,649,142; Nov. 16. Crib, Floring. M. H. Hood. 1,639,141; May 31. Crib, Folding. M. M. Hood. 1,639,141; May 31. Crib, Folding. M. M. Hood. 1,639,141; May 31. Crib, Floring. M. L. McDaniel. 1,648,556-7; Nov. 8. Scribs of the like, Wheel mounting for. W. C. Baxter. Cribs, Top. 1,623,142; May 10. Crockes glass, Colorless. P. V. W. Gell, C. E. Gould, W. M. Hampton, and H. S. Martin. 1,634,162; June 28. Cross arm. C. W. Cassels. 1,629,949; Mar. 15. Cross arm. R. F. Hosford. 1,642,225; Sept. 13. Cross arm. R. F. Hosford. 1,642,225; Sept. 13. Crossing gate. M. R. Caputo. 1,635,326; Nov. 29. Crossing gate. M. R. Caputo. 1,635,326; Nov. 29. Crossing gate. Railway. R. E. Spraten. 1,648,022; Nov. 8. Crossing signal. J. B. Gebbard and H. Althaus. 1,620,690; Mar. 8. Crossing signal. J. B. Gebbard and H. Althaus. 1,620,690; Mar. 8. Crossing signal. J. B. Gebbard and H. Althaus. 1,620,690; Mar. 8. Crossing signal. J. B. Gebbard and H. Althaus. 1,620,690; Mar. 8. Crossing signal. J. B. Ge Credit form, Mercantile. D. L. Cline. 1,637,985; Aug. 2. Credit slip, Authorizing apparatus. A. Block. 1,644,229; Crotonaldehyde, Manufacture of condensation products of. W. Kropp. 1,640,899; Aug. 30. Crown-block bearing-sheave unit. E. Timbs. 1,649,995; Nov. 22. Crown blocks, Pulley support for. E. Timbs. 1,639,116; Crown blocks, runer superadus, 1619,224; Mar. 1,
Crown ring, J. M. Walsh, 1,619,224; Mar. 1,
Crown sheaves, Unitary structure for, E. Timbs and
L. E. Zerbe, 1,642,373; Sept. 20,
Crown stopper. C. Benetti, 1,626,500; Apr. 28,
Crucible, Electrothermic, C. E. Foley, 1,638,860; Aug. 9.

Crucibles and the like, Machine for the manufacture of.

H. E. Porter. 1,637,708; Aug. 2.

Crucibles and the like, Manufacturing. H. E. Porter.

1,637,707; Aug. 2.

1,637,707; Aug. 2.

Nov. 8.

Crucibles or clay pots, Cleaning the bottoms of. F.

Merian. 1,614,928; Jan. 18.

Crudic-oil motor, High-pressure. E. Schaeren. 1,646,042;

Oct. 18. e. and the like, Classifying. S. H. Dolbers and Oct. 18.
Crushed ore and the like, Classifying. S. H. Dolbear and B. L. Eastman. 1,624,134; Apr. 12.
Crusher. Sec.—
Disk crusher.
Dry-pan crusher.
Vegetable and fruit crusher.
Ore crusher.
Crusher. R. C. Newhouse. 1,641,776; Sept. 6.
Crusher. G. G. Sprado. 1,628,619; May 10.
Crusher and constructing the same. J. S. Bond.
Crusher and grass destroyer, Clod. J. M. Perrone. 1,647,717; Nov. 1.
Crusher and pulverizer. H. J. Shelton. 1,648,625; Nov. 8.
Crushers, Inner disk for disk. C. B. Andrews. 1,624,032; NOV. 8. Crushers, Inner disk for disk. C. B. Andrews. 1,624,032; Apr. 12. Crushing and grinding machine. A. C. Hamey. 1,627,506; May 3. May 3.

Crushing and sifting device, Pneumatically-fed. E.

Rarlbelmess, 1.635.527; July 12.

Crushing disk, E. B. Symous, 1.630.502; May 31.

Crushing machinery, Screen bar for, G. W. Borton, 1.624.886; Apr. 12.

Crushing roll, Segmental, C. W. Finger, 1.614.784;

Jan. 18.

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Crutch. J. A. Weis. 1,635.914; July 12.
Crystal detector. H. C. Adam. 1,633,059; June 21.
Crystal detector. L. Lane. 1,617.956; Feb. 15.
Crystal detector. B. A. Wright, 1,636,269; July 19.
Crystal growth, Getter for controlling. W. C. Sproesser.
Crystal detector. L. Lane. 1,017,300; Feb. 10.
Crystal detector. E. A. Wright, 1,656,269; July 19.
Crystal growth, by Ger for controlling. W. C. Sprosser.
Crystal growth, by Ger for controlling. W. C. Sprosser.
Crystal mounting. Piezo-electric. C. F. Rudolph.
1,649,081; Nov. 15.
Crystallizer. F. Lafeuille. 1,653,712; Dec. 27.
Crystallizing Hquids. G. T. Walker. 1,644,161; Oct. 4.
Cubing sliced material, Apparatus for. W. E. Leibing.
Cucurbocitrin. Preparation of. I. S. Barksdale.
1,626,321; Apr. 26.
Cuc tip. H. J. Grenier. 1,648,613; Nov. 8.
Cuc tip. and manufacture thereof. F. B. Seeberger.
1,624,393; Apr. 19.
Cuc-tip. Security of the Computer o
Feb. 8.
Cuff link. S. Bochonok. 1,651,437; Dec. 6.
Cuff link. S. Fischer. Des. 71,362; Feb. 8.
Cuff link. S. Fischer. Des. 71,362; Feb. 8.
Cuff link. C. W. Heasley. 1,645,907; Oct. 18.
Cuff link. J. S. Mitchell. 1,616,399; Feb. 8.
Cuff link. J. Pabst. 1,617,269; Feb. 8.
Cuff link. W. E. Roberts. 1,627,460; May 3.
Cuff, Reversible. J. K. Broderick. 1,651,370; Dec. 6.
Cuff, Reversible. J. K. Broderick. 1,651,370; Dec. 6.
Cutlinary implement. E. R. Caln and C. K. McMillan. 1,644,463; Oct. 4.
Culinary implement. N. P. Hayes. 1,638,486; Aug. 9.
Culinary machine, Automatic. H. E. Harkin. 1,618,190;
Feb. 22.
Culinary utensil. L. D. Hubbard. 1,627,697; May. 9.
Cultury weeps! L. D. Hubbard, 1,827,285; May 3. Cultury theusil, J. J. Kastner, 1,817,120; Feb. 8. Cultury vessel, W. W. Decker, Jr. 1,625,847; Apr. 26. Cultivating apparatus. L. M. Lee, 1,629,109; May 17. Cultivating implement, G. A. Newhouse, 1,643,898; Sept. 27.
                                                                                                                                                                                                                                                                                                                                                                                                                               June 21.
Cultivators,
    Cultivating implement. C. J. Rodriguez.
                                                                                                                                                                                                                                                                                                                             1,644,449;
    Cultivating implement. P. N. Torres. 1.644,315; Oct. 4. Cultivating means. G. T. Strite. 1,641,207; Sept. 6. Cultivator. W. P. Allen and E. H. Fincher. 1,621,764;
  Cultivating mea
  Mar. 22.
Cultivator.
                                                                                      H. E. Altgelt. 1,637,925; Aug. 2.
H. E. Altgelt. 1,642,201; Sept. 20.
A. Brigden. 1,622,488; Mar. 29.
D. Brink. 1,618,079; Jan. 4.
M. Evans. 1,625,302; Japr. 19.
F. J. Farrington. 1,622,863; Mar. 29.
J. R. Fell. 1,618,359; Feb. 1.
F. J. Foster. 1,618,302; Feb. 1.
F. J. Foster. 1,618,302; Feb. 1.
A. H. Galler. 1,638,768; Aug. 23.
A. H. Galler. 1,638,768; Aug. 23.
K. H. Griffith. 1,648,422; Oct. 11.
R. H. Griffith. 1,648,422; Oct. 12.
F. G. Griggs. 1,636,936; July 26.
P. Hennes. 1,648,024; Oct. 18.
B. S. Howell and G. M. Fast. 1,647,700;
    Cultivator.
Cultivator.
  Cultivator.
Cultivator.
Cultivator.
  Cultivator.
                                                                                   A. B. Johnson, 1,652,012; Dec. 6.
A. J. Kern. 1,622,120; Apr. 5.
N. D. Kern. 1,632,706; June 14.
J. Martikainen. 1,613,797; Mar. 1,
A. McEntee. 1,637,122; July 26.
W. Mills. 1,648,738; Nov. 8.
I. W. and L. E. Miller. 1,639,463; Aug. 16.
G. W. Molley. 1,615,595; Feb. 8.
J. M. Moyer and H. C. Hofoed. 1,645,507;
  Cultivator.
                                                                                                                                                                                                                                                                                                                       1,645,507;
Oct. 11.

Cultivator, J. H. Nixon. 1.628,181; May 10.

Cultivator, H. E. Orthman. 1.622,968; Mar. 29.

Cultivator, N. W. Palmer, 1.642,658; Nov. 1.

Cultivator, N. W. Palmer, 1.642,658; Nov. 1.

Cultivator, H. Petersen. 1.642,971; Oct. 4.

Cultivator, H. Petersen. 1.642,771; Oct. 4.

Cultivator, F. B. Salvesen. 1,628,748; May 17.

Cultivator, G. W. Stilgenbauer, 1,628,834; Apr. 26.

Cultivator, C. G. Stranddund. 1,644,642; Oct. 4.

Cultivator, C. G. Stranddund. 1,644,642; Oct. 4.

Cultivator, C. G. Stranddund. 1,644,642; Oct. 4.

Cultivator, J. D. Wriger, 1,630,398; Aun. 14.

Cultivator, J. D. Wriger, 1,634,328; Sept. 20.

Cultivator and weed cutter, Agricultural. C. J. Maheras.

1,640,786; Auc. 30.

Cultivator attachment. J. S. Davls. 1,643,200; Sept. 20.

Cultivator attachment. J. F. Gallup. 1,613,092; Jan. 4.
                Oct. 11.
                                                                                                                                                                                                                                                                                                                                                                                                                               Cup: See-Gold-collecting cup.
                  Jan 4
  Cultivator attachment, G. Hamersley,
                                                                                                                                                                                                                                                                                                                 1.616.417:
Feb. 1.
Cultivator attachment. O. J. Lewis. 1,639,777; Aug. 23
Cultivator attachment. H. 8. Poston. 1,615,518; Jan. 25
Cultivator attachment. A. C. Rippy. 1,617,029; Feb. 8
Cultivator attachment. H. F. Westriek. 1,639,358
                                                                                                                                                                                                                                                                                                                                 8; Jan. 20.
9; Feb. 8.
1,639,358;
                                                                                                                                                                                                                                                                                                                                                                                                                               Cup or s
Aug. 16.
Cultivator.
                    ltivator, Automatic rotary pulverizing. P. H. Mackle.
1,641,393; Sept. 6.
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Cultivator blade. A. L. Frieburg. 1,632,958; June 21. Cultivator blade. M. Ramsey. 1,641,050; Aug. 30. Cultivator, Cotton. C. Jones. 1,052,842; May 10. Cultivator, Disk. J. L. Johnson. 1,616,543; Feb. 10. Cultivator, Disk. H. F. Towner. 1,027,356; May 3. Cultivator fender. G. E. Nix. 1,622,656; Mar. 29. Cultivator fender. G. E. Nix. 1,622,656; Mar. 29. Cultivator for eliminating quack grass. L. Leonard and R. J. Beise. 1,620,510; Mar. 8. Cultivator, Garden. L. L. Lindsay. 1,618,382; Feb. 22. Cultivator, Garden. S. W. Shaw. 1,625,629; Apr. 26. Cultivator, Garden. S. W. Shaw. 1,625,629; Apr. 26. Cultivator, Hitch, Lister. I. B. Mycrs. 1,616,700;
          Feb. 8. Cultivator hopple. V. E. Penny and W. A. Keinke. 1.644,467; Nov. 1. Cultivator hopple. L. C. Summers. 1,644,757; Oct. 11. Cultivator, Motor. R. A. Keese. 1,612,823; Jan. 4. Cultivator, Riding. S. H. Tinsman. 1,830,772; May 31. Cultivator, Riding. S. H. Tinsman. 1,830,772; May 31. Cultivator, Seat-guide. J. P. Seaholm. 1,622,740;
Cultivator, Riomo-
Cultivator, Seat-guide.
Mar, 29.
Cultivator, Seat-guide.
J. P. Seaholm.
Cultivator, Seif-guiding and riding. A. L. Stewart.
1,626,888; May 3.
Cultivator, shield. E. E. Blume and C. Anderson.
1,630,415; May 31.
Cultivator, Sted-lister. J. M. Burkhalter. 1,646,007;
Cultivator, Sted-lister.
Cultivator, Seat-guide.

      July 12.
Cultivator-tool clamp. J. Spahn. 1,629,548; May 24.
Cultivator tooth. H. L. Carr. 1,650,007; Nov. 22.
Cultivator tooth. W. C. Warren. 1,622,2619; Mar. 29.
Cultivator tooth and sweep, Combined. P. Simons.
1,630,585; May 31.
Cultivator, Tractor-drawn. F. T. Court and A. B. Walker,
1,648,639; Nov. 8.
Cultivators, Attachment for. P. A. Caldwell. 1,633,394;
June 21.
   Cultivators, Attachment for. P. A. Caldwell. 1,633,394; June 21.
Cultivators. Attachment for. J. B. Vaughan and J. Terrell. 1,627,298; May 3.
Cultivators. Streakpin device for. C. G. Sigurd. 1,635,442; July 19.
Cultivators. Elevating and depressing mechanism for. S. K. Deanis. 1,943,163; Sept. 20.
Cultivators. Elevating and depressing mechanism for. S. K. Deanis. 1,943,163; Sept. 20.
Cultivators. J. Calliting device for riding. A. C. Dibble. 1,622,497; Mar. 29.
Cultivators. Calliting device for riding. A. C. Dibble. 1,622,497; Mar. 29.
Cultivators. Muches attachment for. W. T. Atchley. Cultivators. Plow-attachment for. B. S. Davidson. 1,612,855; Jan. 4.
Cultivators. Plow-attaching device for. B. S. Davidson. 1,612,855; Jan. 4.
Cultivators, Plow-attaching device for. B. S. Davidson. 1,612,855; Jan. 4.
Cultivators, Suled-diffing mechanism for. A. Eichsteadt. 1,617,239; Feb. S. Cultivators, Shield-diffing mechanism for. A. Eichsteadt. 1,617,239; Feb. S. Cultivators, Shield-diffing mechanism for. A. Eichsteadt. 1,617,239; Feb. S. Cultivators, Truck for disk. A. Wenndt. 1,619,904; Cultivators, Truck for disk. A. Wenndt. 1,619,904; Cultivators, Truck for disk. A. Wenndt. 1,619,904; Cultivators, Onliners, Closure for. D. M. Stump. 1,641,400; Cultivator containers, Closure for. D. M. Stump. 1,641,400;
      Cultivators, Truck for disk. A. Wenndt. 1,619,904; Mar. 8.
Culture containers, Closure for. D. M. Stump. 1,641,400; Sept. 6.
Culture germs, Apparatus for propagation of. F. J. Matchette. 1,618,461; Feb. 22.
Culvert, M. A. Quinn. 1,648,148; Nov. 8.
Culvert, Corrugated-metal. A. S. Cushman. 1,652,703;
      Dec. 13.
Culvert, Highway, H. L. Zander, 1,638,428; Aug. 9.
Culverts, Flow-increasing attachment for, F. A. Nagler, 1,643,953; Oct. 4.
Culverts, Hend-wall structure for, A. F. Fischer, 1,620,089; Mar. 8.
Cup: Ner-
Gold-collecting cup. Milking cup.
Grease cup.
Lubricant up.
Lubricant group.
Lubricant expeling cup.
Shaving cup.
Cup. J. Blaustein. 1.622.858; Mar. 29.
Cup. and making the same, Drinking. J. V. Weckbaugh.
1.654.499; Dec. 27.
Cup and producing same, Electrically-heated. J. H. Karlson. 1.649.67; Nov. 16.
Cup. J. Blaustein. 1.622.858; Mar. 29.
Cup and producing same, Electrically-heated. J. H. Karlson. 1.649.67; Nov. 16.
Cup. 1.633.831; June 28.
Cup dispenser. J. W. McCarthy. 1.623.853; Apr. 5.
Cup dispenser. J. W. McCarthy. 1.623.853; Apr. 5.
Cup dispenser. J. W. McCarthy. 1.623.853; Apr. 5.
Cup dispenser. J. W. Wessman. 1.634.666; July 5:
Cup. 1.623.330; Apr. 5.
Cup. 1.623.330; Apr. 5.
Cup. 1.623.330; Apr. 5.
Cup. 1.623.330; Apr. 5.
Cup measure. H. A. O'Haver. 1.622.967; Mar. 29.
Cup or similar article. G. R. Ahrendts. Des. 73.549; Oct. 4.
                                                                                                                                                                                                                                                                                                                                                                     Milking cup.
   Cup or similar article. S. W. Farber. Des. 73,029;
July 12.
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Cup or similar article. U. Hagmann. Des. 73,607; Oct. 11. cup or similar article. R. R. Kintz. Des. 72,931; Mar. 22. Cup or similar article. C. H. Walker. Des. 72,281; Mar. 22. Cup or similar article. C. H. Walker. Des. 72,281; Mar. 12. Cup or similar article. C. H. Walker. Des. 72,281; Mar. 12. Cup or similar article. C. H. Walker. Des. 72,281; Mar. 12. Cup or similar article. C. H. Walker. Des. 72,281; Mar. 12. Cup or similar article. C. H. Walker. Des. 72,281; Mar. 13. Cup. 14,1181; Aug. 23. Cups. Manufacture of paper. J. V. Weckbaugh. 1,646,802; Oct. 25. Cups. Frocess and apparatus for making. J. G. Norton. 1,023,197; Apr. 5. W. Moore and S. D. Moxley. 1,047,648; Nov. 1. Cupola durager. J. W. Moore and S. D. Moxley. 1,047,648; Nov. 1. Cupola furnace. A. Poumay. 1,640,251; Aug. 23. Cupolas and the like, Apparatus for charging. W. A. Griffin. 1,643,203; Sept. 20. Use for operating. F. K. Wial and G. S. Evans. 1,627,536; May. 3. Curb and gutter form. J. N. Heltzel. 1,637,998; Aug. 2. Curb and gutter form. R. M. Moss and O. B. Pulls. 1,615,178; Jan. 18. Inc. 1,643,960; Oct. 4. Curbing for the curbing Cup or similar article. U. Hagmann. Des. 73,607; Oct. similar article. R. R. Kintz. Current generator Continuous. T. C. Lennox. 1,635,000; July 5. Current generator, Continuous. E. Rosenberg. 1,650,851; Nov. 29.

 1.650.142; Nov. 22.
 C. Altwickler.
 1,625,760;

 Current motor, Alternating.
 S. R. Bergman.
 1,622,567;

 Mar. 29.
 S. R. Bergman.
 1,622,567;

 Current motor, Alternating.
 J. I. Hull.
 1,634,944;

 July 5.
 S. Krauss.
 1,630,390;

 Current motor, Alternating.
 C. W. Steen.
 1,641,704;

 Sept. 6.
 1,641,704;

 motor, Alternating. C. W. Steen. 1,641,704;

Current motor, Alternating-. C. A. M. Weber. 1,624,378; Apr. 12. Current motor, Alternating. H. Weischsel. 1.614.092-3: Jan. 11. Current motor, Alternating. H. Weischsel. 1,614,092-8; Current motor, Alternating. H. Weichsel. 1,643,327; Sept. 27. Current rectifier, Electric. S. Ruban. Sept. 2'.
Current rectifier, Electric. S. Ruben. 1,649,741-4;
Nov. 22.
Current rectifying and controlling system. B. T. Umsted
and E. N. Harris. 1,637,015; July 26.
Current-regulating apparatus. M. Morrison. 1,628,678; Current rectifying and controlling system. B. T. Umsted and E. N. Harris. 1,637,015; July 26.

Cand E. N. Harris. 1,637,016; July 26.
Current relay, Alternating. D. Grimes. 1,622,678; May 17.
Current relay, Alternating. H. G. Dorsey. 1,637,442; Current relarder. L. Jorgensen. 1,63,530; June 21.
Current selector, Alternatings. H. G. Dorsey. 1,637,442; Current selector, Alternatings. H. G. Dorsey. 1,637,442; Current supply means, Alternatings. W. J. Shackelton. 1,654,097; Dec. 27.
Current supply means, Alternatings. W. J. Shackelton. 1,654,097; Dec. 27.
Current supply means, Alternatings. W. J. Shackelton. 1,654,097; Dec. 27.
Current system. Remote-control carrier. E. F. Carter. 1,635,779; July 12.
Current-theft indicator. Continuous. T. C. Lennox. 1,635,797; July 12.
Current transmission. Electric. A. M. Curtis. 1,646,811; Oct. 25.
Current voltage. Arrangement for transforming direct. S. Salkawa. 1,629,097; Apr. 26.
Currents, Apparatus for inducencing alternating. L. Kuhn. 1,653,859; Dec. 27.
Currents, Apparatus for inducencing alternating. E. Raimondi. 1,642,432; Sept. 13.
Currents, Method and apparatus for producing alternating. F. Raimondi. 1,642,432; Sept. 13.
Currents, Method and apparatus for producing alternating. F. Raimondi. 1,642,432; Sept. 13.
Currents and olier, Automatic. E. Larson. 1,627,516; Curtain and swaing rollers, Control for. H. Smith. 1,630,770; May 31.
Curtain and shade bracket. O. Weresiuk. 1,630,649; May 31.
Curtain and shade bracket. O. Weresiuk. 1,630,649; May 31.
Curtain and shade bracket. O. Weresiuk. 1,630,649; P. P. S. Curtain and shade bracket. O. Weresiuk. 1,630,649; P. S. Curtain and shade bracket. O. Weresiuk. 1,630,659; P. S. Curtain and shade bracket. O. Weresiuk. 1,630,659; P. S. Curtain and shade bracket. O. Weresiuk. 1,630,649; P. S. Curtain and shade bracket. O. Weresiuk. 1,630,659; P. S. Curtain and shade bracket. O. Weresiuk. 1,630,659; P. S. Curtain and shade bracket. O. Weresiuk. 1,630,659; P. S. Curtain and shade bracket. O. Weresiuk. 1,630,650; P. S. Curtain and sha Dec. 20.
Curtain. Automobile. W. H. Pritchett. 1,627,457;
May 3.
Curtain-bar support or the like. H. W. A. Lehnert.
1,613,800; Jan. 11.
Curtain-barcket. J. Colone. 1,626,186; Apr. 28.
Curtain bracket. W. W. Huyser. 1,629,820; May 24.
Curtain cane. A. Dlouby. Des. 73,165-6-6, Jan. 2.
Curtain-drapping device. A. A. Moats. 1,637,704; Aug. 2.
Curtain, Fastener. J. Vodicka. 1,629,603; May 24.
Curtain, Fire-resisting. R. H. Greegor. 1,644,646; Oct. 4. Curtain, Cirè-resisting. R. H. Greegor. 1,644,646; Oct. 4.
Curtain fixture. W. C. Barrett. 1,630,748; May 31.
Curtain fixture. J. H. Boye. 1,630,778; May 31.
Curtain fixture. J. S. Eagan. 1,621,243; Mar. 15.
Curtain fixture. J. S. Eagan. 1,621,243; Mar. 21.
Curtain fixtures. Bracett. 1,643,026; June 21.
Curtain fixtures. Bracett. 1,642,026; Oct. 4.
Curtain fixtures. Bracett and rod coupling for. J. H.
Boye. 1,649,214; Nov. 15.
Curtain for vehicles, Sildable. F. G. Proctor. 1,618,022;
Curtain guide and support. Z. E. Russell. 1,646,493;
Oct. 25.
Curtain handle, Vestibule. P. G. Emery. 1,638,635;
Aug. 9.
Curtain handle, Vestibule. P. G. Emery. 1,638,635;
Curtain handle. Vestibule. J. Wittemann. 1,646,893;
Curtain holdback. F. A. Cokefair. 1,615,215; Jan. 25.
Curtain holdback. F. A. Cokefair. 1,615,215; Jan. 25. Curtain-light apparatus. E. H. Wuast. Jan. 4. 1,612,847; Curtain or drapery holder. B. Kleinbamer. 1,654,002; Dec. 27. Dec. 27.
Curtain pole, J. O. Crawford. Des. 71,939; Feb. 1.
Curtain-pole end. A. Dlouhy, Des. 72,004-5; Feb. 15.
Curtain-pole end. A. Dlouhy, Des. 72,251; Mar. 22.
Curtain-pole end. W. F. Hofmann. Des. 73,178-80;
Aug. 2. Cultain-noic citat. W. F. Hofmann. Des. 78,131;
July 28.
Curtain pull. C. W. Smith. 1,620,741; Mar. 15.
Curtain pul. G. A. Booth. 1,639,551; Aug. 18.

Curtain rod. J. H. Boye. 1,646,049; Oct. 18.
Curtain rod. E. M. Krist. 1,617,162; Feb. 8.
Curtain-rod bracket. A. C. Acker. 1,649,275; Nov. 15.
Curtain-rod bracket. J. H. Boys. 1,622,709, Mar. 29.
Curtain-rod bracket. J. H. Boys. 1,622,709, Mar. 29.
Curtain rod or similar article. F. J. Whincap. Des. 73,679-80; Oct. 18.
Curtain rod or similar article. F. J. Whincap. Des. 73,727-8; Oct. 25.
Curtain support. A. Foster. 1,648,171; Nov. 8.
Curtain size of the support. Combined. A. Givens. 1,636,601; July 19.
Curtain size of the support. Combined. A. Givens. 1,636,601; July 19.
Curtain size cher. L. N. Bourdeau. 1,638,242; Aug. 16.
Curtain stretcher. M. Ellis. 1,617,750; Feb. 15.
Curtain stretcher. M. Ellis. 1,617,750; Feb. 15.
Curtain stretcher. Clamp. C. G. Carlson. 1,632,295; June 21.
Curtain support. A. Monich. 1,631,219; June 7.
Curtain support. A. Monich. 1,631,219; June 7.
Curtain support. A. Monich. 1,631,219; June 7.
Curtain support. A. E. Robert. R. Re16,545; Feb. 8.
Curtain vehicle size. 10 Communication of the support of the support. 1,631,219; June 7.
Curtain support. A. Monich. 1,631,219; June 7.

Cutter: See—
Core-tube cutter.
Double carrying cutter.
Double carrying cutter.
Dough cutter.
Drill cutter.
Ensilage cutter.
Food cutter.
Glass cutter.
Green-vegetable cutter.
Hair cutter.
Ice-cream cutter.
Leacing cutter.
Leacing cutter.
Leacher-strip cutter.
Lean cutter. Pile-wire cutter. Potato cutter. Pulp-web cutter. Rope cutter. Rotary cutter. Scoring cutter. Screw cutter. Sheet-metal cutter. Spiral cutter. Stalk cutter. Strip cutter.
Tape cutter.
Thread and cord cutter.
Thread cutter. Leather-strip cutter.
Lens cutter.
Line cutter.
Meat cutter.
Metal cutter.
Milling cutter,
Molding cutter,
Nut and bolt cutter.
Packing cutter. Thread cutter.
Thong cutter.
Tile cutter.
Twine and rope cutter.
Valve-seat cutter.
Vegetable cutter.
Weed and grass cutter.
Well-casing cutter.
Windshield cutter.
Wing awtic cutter. My Carry Car Mar. 8.

Cutting compound distribution system. E. P. Bullard, jr. 1.635,702; July 12.

Cutting device. R. W. Donovan. 1.636,6312; July 26.

Cutting device. L. N. Hampton. 1.632,004; June 14.

Cutting device. L. N. Hampton. 1.632,004; June 14.

Cutting fan belts or the like. Macbine for. E. D. Putt and H. D. Stevens. 1.622,253; Mar. 22.

Cutting had, Rotary. T. C. Alfred. 1.628,870; May 17.

Cutting machine. W. H. Abbee. 1.635,166; July 12.

Cutting machine. F. Consoil. 1.645,181; Oct. 11.

Cutting machine. F. Consoil. 1.645,181; Oct. 11.

Cutting machine. P. S. Mitts. 1.613,048; Jan. 4.

Cutting machine. P. S. Mitts. 1.613,048; Jan. 4.

Cutting machine. P. Wolkogon-Wolynski. 1.633,755; June 28.

Cutting machine. Bias. J. W. Brundage. 1.635,581; June 28.

Cutting machine, Bias. J. W. Brundage. 1,635,531;

Cutting machine, Biscutt or like embossing and. T.

Vicars and E. L. Vicars. 1,627,679; May 10.

Cutting machine, Cloth. E. W. Hoosler. 1,644,381;

Oct. 4. Oct. 4. Cutting machine, Cloth. M. G. Sackerman and I. E. Heller. 1,619,605; Mar. 22. Cutting machine, Container. A. M. Ross. 1,649,194; Nov. 15. Cutting machine, Container. A. M. Ross. 1.634,194; Nov. 15.
Cutting machine, Flock. W. J. Decoteau. 1,634,741; Cutting machine, Grass. H. A. T. Stoakes. 1,649,868; Nov. 22.
Cutting machine, Portable cabbage. C. E. Smith and J. N. Karp. 1,638,416; Aug. 9.
Cutting machine, Warper. E. B. Wilhelm. 1,613,427; Cutting machine, Wrapper. E. B. Wilhelm. 1,613,427; Cutting machine, Control mechanism for veneer. C. Straub. 1,615,489; Jan. 25.
Cutting mechanism. F. M. Hargrave. 1,644,533; Oct. 4.
Cutting mechanism. G. L. Taylor. 1,655,129; Dec. 20.
Cutting or trimming device. W. G. Rounds. 1,622,053; Cutting press. C. F. Parcher, 1,613,766; Jan. 11.
Cutting trip or the like. G. L. Walker. 1,624,377; Apr. 12.
Cutting tool. H. Goldblatt. 1,624,136; Apr. 12.
Cutting tool. C. E. Hamilton. 1,628,315; May 10.

Cutting tool. J. H. Montstream. 1431,641; June 7. Cutting tool. T. C. Porter. 1,618436 Jan. 4. C. Porter. 1,618436 Jan. 4. C. Porter. 1,618436 Jan. 4. Cutting tool. A. G. Tanguay. 1,625,836; Apr. 26. Cutting tool. A. G. Tanguay. 1,625,836; Apr. 5. Cutting tool. Rotary. F. G. Echols. 1,623,933; Apr. 5. Cutting tools, Forming. A. W. Cochran. 1,631,623; June 7. Cutters, Device for stoning. C. C. Koeln. 1,613,174; Cutting tools, Forming. A. W. Cochran. 1631.623;
June 7.
Cutters, Device for stoning. C. C. Koeln. 1,613.174;
Jan. 4.
Yanamide of manures containing soluble organic mirrogen, Manufacture from. J. Breslauer and C. Goudet.
Cyanamide, Producing aqueous solutions of free. A. M. Muckenfuss. 1,622.731; Mar. 29.
Cyanide compound into ammonia, Converting. G. H. Buchanan and J. L. Osborne. 1,638.522; Aug. 9.
Cyanide compound into ammonia, Converting. G. H. Buchanan and J. L. Osborne. 1,638.522; Aug. 9.
Cyanide solutions, Preparation of alkali-metal. K. Andrich. 1,615.208; Jan. 25.
Cyanides from masses containing the same, Removing. C. B. Jacobs. 1,623.599; Apr. 5.
Cyanides, Producing heavy metal. R. W. Poindexter, Jr., Cyanides, Preparating lakali-metal. R. Apr. 12.
Cyanides, Producing heavy metal. R. F. Cooper. 1,614.623; Jan. 18.
Cyanogen compounds, Preparation of R. W. Poindexter and W. E. Olberg. 1,642.694; Sept. 20.
Cyanogen mercury compounds, Production of mulcear sub-Cycle. M. B. Ober. 1,636.327; July 19.
Cycle and like saddles, Manufacture of, H. and J. Jelley. 1,620.594; Mar. 8.
Cycle and similar lamp brackets, Locking device for. W. H. Brecknell. 1,642.297; Sept. 13.
Cycles, Free-wheel device and back-pead brake for. K. Müller. 1,618.215; Feb. 22.
Cyclohexyl phthalates and making same. E. B. Reid and G. L. Schwartz. 1,643.393; Sept. 27.
Cyclohexyl phthalates and making same. E. D. Reid and G. L. Schwartz. 1,643.393; Sept. 27.
Cyclohexyl phthalates and making same. M. Phillips. 1,630.357; Apr. 19.
Cylinder and head construction. R. Schneider. 1,622.813; Mar. 29.
Cylinder and wave testing device. P. B. Thal. 1,649.994; Nov. 22.
Cylinder and near errangement for high-pressure compounder and valve testing device. P. B. Thal. 1,649.994; Nov. 22.
Cylinder and valve testing device. P. B. Thal. 1,649.994; Nov. 22.
Cylinder and valve testing device. P. E. Thal. 1,649.994; Nov. 22.
Cylinder construction. F. Balzer. 1,622.275; Mar. 29.
Cylinder construction. F. Balzer. 1,623.637; May 17.
Cylinder construction. F. Balzer. Cutters, Jan. 4 Cylinder-head construction.

Nov. 22.

Cylinder head, High-power. O. F. Haibe. 1,640,421.

Cylinder High-speed collecting. A. Zimniewicz. 1,643,481;

Sept. 27.

Cylinder-head gevice. W. Johnson. 1,643,485; Sept. 27.

Cylinder-head grocess and apparatus. G. T. Voorhees.

1,653,749; Dec. 27.

Cylinder lock. G. Ledin. 1,641,767; Sept. 6.

Cylinder lock. G. Maxwell. 1,637,958; Aug. 2.

Cylinder lock. J. J. Murphy. 1,622,172; May 17.

Cylinder lock. S. C. Patterson. 1,652,953; Dec. 13.

Cylinder lock. S. C. Patterson. 1,652,953; Dec. 13.

Cylinder lock. Pin-tumbler. W. Wolff. 1,650,564; Cylinder lock. J. J. Murphy. 1,629,172; May 17.
Cylinder lock. S. C. Patterson. I. 1652,953; Dec 13.
Cylinder lock. Pin-tumbler. W. Wolff. 1,650,564;
Cylinder lubrication. R. W. Davenport. 1,632,119;
June 14.
Cylinder structure. Engine. A. Lieo and C. Baradat.
Cylinder structure. Engine. A. Lieo and C. Baradat.
Cylinder Structure. Locomotive. L. W. Hance. 1,649,687;
Nov. 15.
Cylinder, Washing-machine. W. K. Howe. 1,635,578;
July 12.
Cylinder Structure. 1,632,733; June 28.
Cylinders and the like and draining the same. Steambarted J. M. Arnot. 1,633,733; June 28.
Cylinders and the like, Rope or belt drive for drying.
G. Dod. 1,627,018; May 3.
Cylinders, Breaking device for hollow. W. S. Pierce, jr. 1630,759; May 31.
Cylinders, Discharging device for rotary. A. C. Beer. 1,623,527; Apr. 5.

Cylinders, Gripping member for. J. A. Steinmetz. 1,639.786; Aug. 23. Cylinders, Making air-cooled. H. M. Williams. 1,649,274; Cylinders, Supporting rotary. L. I. Yeomans. 1,642,834; Sept. 20. Cylindrical drier. C. H. Crowell. 1,642,361; Sept. 13. Cylindrical formations or hollow bodies from veneer or thin sheet wood, Method of and apparatus for producing. G. Schlesinger. 1,645,336; Oct. 18. Cylindrical objects, Apparatus for printing. F. C. Howes and F. L. Savagcau. 1,643,605; Sept. 27. Cylindrical Departing device for. W. D. Gladstone. D. Maria, C. L. Hertel. 1,642,994; Sept. 20. d. t.-nerolidol, Manufacture of. L. Ruzicka. 1,644,546; Oairy-equipment cleaner. B. F. Beatty. 1,627,824; May 10. Dairy-equipment cleaner. E. Shurts. 1,645,552,000. May 10.

Dairy -equipment cleaner. E. Shurts. 1,645,

Dairy machine. F. Kuchenmeister. 1,643,64

Dam and headgate. D. C. McCandless. 1,6

18. 1,645,356; Oct. 11, 18
Dam gate operating apparatus. D. Dalin and J. B. C.
Lockwood. 1,647,505; Nov. 1
Dam, River. J. M. L. A. Aubert. 1,624,571; Apr. 12.
Damper. J. M. Fackler. 1,652,712; Dec. 13.
Damper. J. M. Fackler. 1,652,712; Dec. 13.
Damper, Air-cooled. J. E. Shook. 1,649,749; Nov. 15.
Damper, Air-cooled. J. E. Shook. 1,649,749; Nov. 15.
Damper, Automatic. J. M. Fackler. 1,652,713; Dec. 13.
Damper, Automatic. J. M. Fackler. 1,652,713; Dec. 13.
Damper, Automatic. H. L. Fetterly. 1,622,710; Mar. 29.
Damper, Dackdraft. I. D. Morgan. 1,652,780; Dec. 13.
Damper construction. W. A. Schmidt. 1,634,659;
July 5, Damper, Contact-spring vibration. G. R. Lum. 1,613,616; Jan. 11, Damper control, Thermostatic. S. F. Richards. 1.622,973; Mar. 29. Mar. 29.

Damper device, Furnace. J. Vrba. 1,630,591; May 31.

Damper, Dome. R. S. Sutton. 1,616,094; Feb. 1.

Damper, For ventilator openings. J. R. Replogle.

1,632,216; Dec. 18.

Damper regulator. I. A. Backlund. 1,618,044; Feb. 15.

Damper regulator. J. V. Giesler. 1,628,140; May 10.

Damper regulator. J. L. Kimbaull. 1,649,707; Nov. 15.

Damper regulator. Temperature. H. A. Thrush.

1,645,866; Oct. 18.

Damper, Smoke. F. Beentsch and A. Stober. 1,618,905;

Damper, Stovepipe. J. Cowie. 1,627,613; May 3.

Damper, Vibration. E. W. Kellogg. 1,614,133; Jan. 11.

Damping device. W. E. Trumpler. 1,637,361; Mag. 2.

Dandelion digger and puller. H. G. Davis. 1,619,856;

Mar. 8. Dandelion digger and puller. H. G. Davis. 1.619,856; Mar. 8.
Danger signal. H. L. Goodnew. 1.615,821; Jan. 28.
Danger signal. P. G. Morres. 1.615,310; Jan. 25.
Dash and trouble light. A. Halin. 1530,843; May 31.
Dashboard control. G. F. Long. 1.631,277; June 7.
Dash control. A. R. Cooper. 1.637,737; Aug. 22.
Dashpot-controlled switch. G. O. Wilms. Re16,551; Feb. 15. Feb. 15. Date indicator, Mechanical. T. G. Thörnblad. 1,649,142; Nov. 15. Date pitter. L. C. De Forest, 1,622,309; Mar. 29. Date-recording instrument, J. R. Phelps. 1,652,324; Dec. 13. Davenport, M. D. Miesner, 1,649 719; Nov. 15. Davenport, Bed. E. A. Velds. 1,625,437; Apr. 19. Davenport, Swinging. J. T. Atkinson. 1,650,178; Davenport, Bed. E. A. Velds. 1.625.437; Apr. 19. Davenport, Swinging. J. T. Atkinson. 1.650,178; Nov. 22. Davit. C. H. Fuller. 1.613.030; Jan. 4. Davit. B. M. Schauman. 1.640.671; Auz. 30. Dead-center device. J. H. Towers. 1.636.395; July 19. Dead-center device. J. H. Towers. 1.636.395; July 19. Dead-center device. J. H. Towers. 1.636.395; July 19. Deagrafus, water. G. H. Gibson. 1.634.776; July 5. Deagrafus, R. C. Jones. 1.622.283; Mar. 29. Deagrafus, R. C. Jones. 1.634.764.60-2; Dec. 27. Decalcomania transfer sheet. J. O. Hartz. Des. 72.152; Mar. 8. Mar. 8.
Decantor. A. S. Reese. Des. 74 073; Dec. 13.
Decarbonizer. W. Davis. 1.622.705; Mar. 29.
Deck concentrator, Circular. A. H. Stebbins. 1.650,726; Deck concentrator, Circular., A. H. Stebbins. 1,650,726; Nov. 29.
Deck lild construction. W. Marshall. 1649,607; Nov. 10.
Deck screen, Multiple. H. S. Woodward. 1,039,678; Aug. 22.
Lild 1,476; F. Pb. 18.
Decolorizing medium. Absorbent. C. B. Davis. 1,618,149; F. Ch. 15.
Deconriging medium. Absorbent. Dec. 73,400; Sept. 6.
Deconriging box. F. Ebechart. Dec. 73,471-2; Nov. 29.
Deconriging. Apparatus for. P. F. Conwill. 1,044,238; Oct. 4.
Oct. 4. Decorating, Apparatus for P. F. Conwill, 1,044-238; Oct. 4, Oc

Decorticating device. E. Wiss. 1,613,149; Jan. 4. Decoy. W. H. Matthai. 1.617,075; Feb. 8. Decoy duck. J. V. Winter. 1.641,215; Sept. 6. Decoy, Flying-duck. J. R. Gelsinger. 1,629,442; May 17. Decoy for wild fowl and the like. G. Sinibaldi. 1,616,006; Feb. 1. Decoys, Device and method for anchoring live. W. A. Defect-removing and patch-cutting machine. M. E. Steger. 1,629,595; May 24. Deflector and light filter. W. G. Steln. 1,643,187; Sept. 20. Decign Devining method for anchoring live. W. A. Stefer. 1,628,595; May 24.

Deffector and light filter. W. G. Stein. 1,634,187; May 26.

Deffector and light filter. W. G. Stein. 1,634,187; May 26.

Deffector and light filter. W. G. Stein. 1,634,187; May 26.

Deffector Paper. L. R. Tufts. 1,636,217; July 19.

Deffector Paper. L. R. Tufts. 1,634,637; July 19.

Debydrator. C. G. Roasheime. 1,644,535; July 12.

Debydrator. C. G. Roasheime. 1,643,535; Nov. 1.

Delivery mechanism. M. T. Ashe. 1,622,651; Mar. 22.

Delivery paparatus. A. M. Lee. 1,647,530; Nov. 1.

Delivery mechanism. M. T. Ashe. 1,622,651; Mar. 22.

Delivery mechanism. M. T. Ashe. 1,622,651; Mar. 22.

Demonstrating machine. P. W. Mowry. 1,638,406; May. 9.

Demonstrating machine. P. W. Mowry. 1,638,406; Aux. 9.

Demonstrating machine. P. W. Mowry. 1,638,406; Aux. 9.

Demonstrating beset. H. C. McGregor and D. B. McGregor. 1,623,252; Apr. 5.

Demonstratine wheel. F. Felder. 1,653,264; Dec. 20.

Demountable wheel. A. C. Hynan. 1,649,349; Nov. 15.

Demonstratine wheel. G. Schenken. 1,651,006; Nov. 29.

Demountable wheel. A. C. Hynan. 1,649,349; Nov. 15.

Demonstratine wheel. G. Schenken. 1,651,007; Nov. 29.

Demountable wheel. A. C. Hynan. 1,648,543; Nov. 8.

Deffector Marken. 1,651,000; Nov. 20.

Demountable wheel. A. C. Hynan. 1,648,544; Nov. 15.

Demonstratine wheel. A. C. Hynan. 1,649,643; Nov. 15.

Demonstratine wheel. A. C. Hynan. 1,649,644; Dec. 20.

Demonstratine wheel. A. C. Hyna Aug. 2.
Dental compact. E. S. Tipton. 1,626.310; Apr. 26.
Dental cotton holder. R. J. Berkinshaw. 1,630,729;
May 31.
Dental engine. A. F. Pieper. 1,649,181; Nov. 15.
Dental equipment stand, Base assembly for. R. C. May 31.

Dental engine. A. F. Pieper. 1,649,181; Nov. 15.

Dental equipment stand, Base assembly for. R. C.

Angell. Des. 72,785; Juno. 7.

Angell. Des. 72,785; Juno. 1.

Angell. Des. 72 Dental foss holder, Sanitary, F. J. Raycratt. 1,618,301; Feb. 22.
Dental forceps, P. B. J. Griveau. 1,636,861; July 26.
Dental grinding device and process. J. W. Needles. Dental grinding device and process. J. W. Needles. Dental handplece wist-joint guard. G. A. Terry. 1,638,175; Aug. 9.
Dental handplece vist-joint guard. G. A. Terry. 1,638,2860; June 21.
Dental handplece vist-joint guard. G. A. Terry. July 8.
Dental hartrument. A. S. Wells. 1,638,914; Aug. 23.
Dental kit. A. De Lellis. 1,649,814; Nov. 22.

Dental light, J. A. Hand and C. R. Pelton, 1,642,367; Sept. 13. Dental machinery, C. A. Priest, 1,635,766; July 12. Sept. 13.
Dental machinery. C. A. Priest. 1,635.766; July 12.
Dental marking device. J. M. Cralgo. 1,629.861; May 24.
Dental matrix holder. D. R. Smith. 1,612.950; Jan. 4.
Dental model trimmer. R. E. Irish. 1,617,523; Feb. 15.
Dental model. J. Luks and J. M. Garnett. 1,633,262; Dental model trimmer. R. E. Irish. 1,617,523; Feb. 15. Dental mold. J. Luks and J. M. Garnett. 1,639,262; Aug. 15. Dental molding plate. S. Dobrik. 1,613,384; Jan. 4. Dental mouth mirror and water syringe, Combined. M. W. Gaillard. 1,647,862; Nov. 1. Dental plates and Leaver. Nov. 1. Dental plates and preparing the same, Laining for. E. K. Teters. Rel.67,64, oct. 4,622,910; Mar. 29. Dental plates and preparing the same, Laining for. E. K. Teters. Rel.67,64, oct. 4,622,910; Mar. 29. Dental replacement. Predetermining. B. F. Stenz. 1,654,387; Dec. 27. Dental surgery. Apparatus for. R. Niedermann. 1,614,760; Jan. 18. Dental triturating appliance. M. M. House. 1,637,569; Aug. 2. Dental unit. A. F. Pieper. 1,649,251; Nov. 15. Dental unit. A. F. Pieper. 1,649,251; Nov. 15. Dental wibratory matrix. T. Teragawa. 1,621,762; Mar. 2, Dental vibratory matrix. T. Teragawa. 1,634,058-9; June 28. Dental X-ray-film package. H. I. Marler. 1,631,497; June 7. Dentifice. P. H. Brownlee. 1,645,520, Oct. 18. Dental X-ray-film package. H. I. Marler. 1,631,497; June 7. Oct. 18. Dentifrice. R. H. Brownlee. 1,645,791-3; Oct. 18. Dentifrice. W. P. Larson. 1,632,336; June 21. Dentifrice. W. P. Larson. 1,632,336; June 21. Dentifrice. W. P. Larson. 1,632,336; June 21. Dentifrice. G. W. Nitardy, K. A. Bartlett, and F. F. Berg. 1,622,391; Mar. 29. Dentifrice compound. W. Bruck. 1,643,618; Sept. 27. Dentifrice compound. W. Bruck. 1,643,618; Sept. 27. Dentifrice are proposed by the compound of the compoun 1.615.212; Jan. 25.
Dentures in metal, Casting of, F. W. Nunn. 1,632,712; June 14.
Dendorant and insecticide, Solidified. E. E. Martin and H. W. Dietrich. 1.641,183; Sept. 6.
Deodorizing, Cooling, and debugging of the Production of the Solidified of the Production Derrick girts, Corner brace for tubular, C. J. Gougler.
1.643.887; Sept. 27.
Derrick, Hoisting, W. O. Bechman and F. G. Knudsen.
1.646.133; Oct. 18.
Derrick leg clamp, Sectional. W. F. Speakman and G. E.
Crockett, 1.616.995; Feb. 8.
Derrick or tower. J. W. Brown. 1.622.086; Mar. 22.
Derrick, Portable. J. Hansen. 1.653.432; Dec. 20.
Derrick, Revolving. J. W. Page. 1.627.249; May 3.
Derrick afety cage. M. Schwafel. 1.615.657; Jan. 25.
Derrick C. Semiportable. M. J. Sasgen. 1.650.656;
Derrick or assembly C. W. Lynch 1.636.852; July 19.
Derrick or assembly C. W. Lynch 1.636.852; July 19.
Derrick or assembly C. W. Lynch 1.636.852; July 19.
Derrick or assembly C. W. Lynch 1.636.852; July 19.
Derrick or assembly C. W. Lynch 1.636.852; July 19. Nov. 22.*

Derrick-top assembly. C. W. Lynch. 1,636,522; July 19.

Derrick, Well. S. O. Hale. 1,648,268; Nov. 8.

Derricks, Bottom-leg construction for well. D. D. Wertzberger. 1,636,886; July 26.

Derricks, Girt brace for. C. J. Gougler. 1,643,888; Sept. 27.
Desiceator. G. B. Ridley. 1,620,289; Mar. 1.
Desiceator. G. B. Ridley. 1,620,289; Mar. 2.
Desiceator. G. B. Ridley. 1,620,289; Mar. 2.
Desicans, Forming. O. W. Judkins. 1,645,534; Oct. 18.
Designs, pictures, and the like, Method of and composition for transferring. H. J. Hurt. 1,629,165; May 17.
Designs to a surface, Applying. L. S. Rosener. 1,638,364; Aug. 9.

Designs to textiles, Composition for transferring wall-paper, W. V. and I. M. MacGillyra, 1,652,949; Dec. 13. Desk. C. C. Fraser and J. A. Goss. 1,652,774; Dec. 13. Desk and file, Combination. J. A. Hughes. 1,640,277; Aug. 23. Aug. 23.
Desk and table, Combination. S. L. Murray. 1,645,769; Desk and table, Commington, Oct. 18.
Desk poly, Spinet. F. Schimmel. Des. 73,711; Oct. 25.
Desk body, Spinet. F. Schimmel. Des. 73,711; Oct. 25.
Desk bumper device. A. S. Newton. 1,626,955; May 3.
Desk, Child's. A. F. Peregoy. Des. 74,022; Dec. 6.
Desk construction, J. A. Hughes. 1,621,324; Mar. 15.
Desk construction, Metal. G. C. Brainard. 1,649,805; Nov. 22.
Desk for auction clerks, Portable. C. C. Carek. Nov. 22.

Nov. 22.

Desk for auction clerks, Portable. C. C. Carek.

1,613,440; Jan. 4.

Desk or cabinet, Watchmaker's. A. S. Thompson.

1,643,101; Sept. 20.

Desk, Portable. D. B. O'Kelly. 1,636,783; July 26.

Desk, Portable. D. B. O'Kelly. 1,636,783; July 26.

Mar. 22.

Desk set. Desk, Portable. M. E. Johnson. 1,621,931;

Mar. 22.

Desk set. M. Finstone. Des. 74,096; Dec. 20.

Desk set. M. Finstone. Des. 74,17; Mar. 8.

Desk set. B. W. Hanle. 1,629,574; May 24.

Desk set. B. W. Hanle. 1,629,574; May 24.

Desk set. B. W. Hanle. 1,629,574; May 24.

Desk set. Boudoir. M. Finstone, Des. 71,786; Jan. 4.

Sept. 6.

Sept. 6.

Desk set. Pad-bolding. M. Finstone. 1,648,545; Nov. 8. Desk set, Pad-holding. M. Finstone. 1,648,545; Nov. 8. Desk sets, Swivel support for. M. Finstone. 1,648,544; Nov. 8. Nov. 8.
Desk stand and penholder, Combined. R. Back and G. A.
Cooper. Des. 71,994; Feb. 15.
Desk, Student's portable. S. J. Holderman and R. E.
Cryder. 1,632,476; June 14.
Desks, Leg construction for metal. P. M. Wege.
1,637,503; Aug. 2.
Desulphurising coal. water, or mixed gases for illuminating or heating. E. Rafficer. 1,624,625; Apr. 12.
Detachable cap, Quick. A. E. Bronson. 1,637,332; Detector: See—
Automobile-theft detector.
Burglar detector.
Carbon-monoxide detector.
Weft detector.
Weft detector.
Weft detector. Crystal detector. Crystal detector. Detector and clip, Crystal, J. Buchanan. 1,652,927;
Dec. 13. Dec. 13.
Detector and controlling the same. E. L. Chaffee.
1.627,231; May 3.
Detector switch, Paper break, H. Berglund. 1,641,658;
Sept. 6. Detector tubes, Exhausting. R. T. St. James. 1,646,633; Oct. 25. Oct. 25.
Detectormeter. H. H. Duley. 1,633,980; June 28.
Detersive compound. J. F. Moseley. 1,627,446; May 3.
Detonator-control mechanism. J. H. Hammond. jr.
1,623,475; Apr. 5.
Detonator, High-explosive. A. Djidics. 1,617,675; Feb. 15.
Detonator igniter terminals, Method and apparatus for stripping. J. M. Olin and J. B. Smith. 1,626,119; Apr. 28. stripping. J. M. Olin and J. B. Smith. 1,626,119; Apr. 28.
Detonator igniter terminals, Method of and apparatus for forming. J. M. Olin, V. L. Davis, and J. B. Smith. 1,627,860; May 10.
Detonator package. F. W. Olin. 1,631,756; June 7.
Detonators, Method and apparatus for making igniter control of the con Device for correcting respiration. K. Hürtl. 1,635,272;
July 12.
Device for determining a difference in length. H.
Gerdlen. 1,644,333; oct. 4.
Device for protecting liquid containers from bursting.
J. Vautice. 1,648,467; Nov. 8.
Device for rectaining bermanent waves in hair. J. D.
Device for regulating the indvance of a band with reference to a chematographic apparatus controlling said band. C. E. E. Delacommune. 1,633,478; June 21.
Device for regulating the indvance of a band with reference to a chematographic apparatus controlling said band. C. E. E. Delacommune. 1,633,478; June 21.
Device for retaining hernial supporting pads in place.
J. G. Homan. Reid-792; Nov. 22.
Display a cow's tail. L. Andröszkiewicz.
Textuse. Manufacture of large-grained. W. B. Newkirk.
1,640,717; Aus. 30.
Di-acylacety-larylenediamine and making same. A. Zit-scher and R. Schmitt. 1,634,690; June 28.
Diagnostic analysis. W. Smith. 1,622,887; Mar. 29.
Diagnostic instrument. H. L. De Zeng. 1,618,870-1;
Mar. 1.
Diagnostic instrument. H. L. De Zeng. 1,621,641;
Mar. 15.
Diagnostic instrument. H. L. De Zeng. 1,623,582;
July 12.

Diagnostic instrument. H. L. De Zeng. 1,638,986; Aug. 16.
Diagnostic Instrument. D. D. Evins. 1,648,939; Nov. 15.
Diagram holder. H. Ruscher. 1,631,986; June 14.
Dialar. H. H. Longley. 1,631,687; June 7.
Dial control, Illuminated. S. A. Shapiro. 1,639,618; Aug. 16.
Dial gauge. W. B. Hughes. 1,617,485; Feb. 16.
Dial gauge. W. B. Hughes. 1,617,485; Feb. 16.
Dial indicator. R. J. O. Simpson. 1,625,765; Apr. 29.
Dial indicator and similar apparatus. B. Gase. 1,634,329; Dial scale and similar apparatus. B. Gase. 1,634,329; Dat scare and July 5, 21 July 5, 2012. Special scare and July 5, 2012. Special scare and July 6, 22 July 8, 22 Dial-testing circuit. R. B. Miller. 1,624,422; Apr. 12.
Dial; Vernier tuning. A. W. Franklin. 1,619,338;
Mar. 1.
Diamino-diaryl-urea, Manufacture of. F. Heinze.
1,617,847; Freb. 15.
Diamond ague. W. S. Myers. 1,616,080; Feb. 1.
Diamond ague. W. S. Myers. 1,625,463; Apr. 19.
Diamonds, Hand device for cutting and polishing. A.
Anzelewitz. 1,636,671; July 19.
Anzelewitz. 1,636,671; July 19.
Diaphragm. A. Nymn. 1,638,365; June 28.
Diaphragm. A. Nymn. 1,638,365; June 28.
Diaphragm and making same. C. Messick. 1,645,110;
Oct. 11.
Diaphragm buffer mechanism. N. C. Thalhelmer. Oct. 11. buffer mechanism. N. C. Thalheimer. Oct. 11. buffer mechanism. N. C. Thalheimer. Diaphragm device, Flexible. C. C. Farmer. 1,626,673; May 3. Diaphragm face plates, Buffer mechanism for. A. E. Small. 1,653,069; Dec. 20. Diaphragm for light pressure, Sensitive. J. Ely 1,653,0,292; May 31. Diaphragm for loud speakers, Utilizing fabric of aircraft as. J. M. Coburn and B. Knapp. 1,628,230; Diaphragm muffer. B. Q. Jones. 1,622,150; Mar. 22. Diaphragm muffer. B. Q. Jones. 1,622,150; Mar. 22. Diaphragm muffer. B. Q. Jones. 1,622,150; Mar. 22. Diaphragm pressure-responsive. H. Y. Norwood. 1,630,306; May 31. Diaphragm sounder. K. Wenz. 1,614,858; Jan. 18. Diaphragm structure. H. J. Waddell. 1,646,376; Oct. 18. Diaphragm structure. H. J. wauten. 18.
Diaphragms, Apparatus for making conteal. C. L. Farrand and B. Ross. 1,641,327; Sept. 6.
Diaphragms, Vibration modifier for. J. G. Nolen.
Diaphragms and J. S. Manton. 1,639,724-5; Aug. 23.
Diathermic apparatus. J. Pernet. 1,641,095; Aug. 30.
Diathermic apparatus for treatment of internal organs adjacent to the rectum. D. B. Catlin. 1,614,875; Aug. 30.
Diathermic paparatus for treatment of internal organs adjacent to the rectum. D. B. Catlin. 1,614,875; Aug. 30.
Diathermy device. F. H. Relinders. 1,628,808; May 17.
Diathermy device. adjacent to the rectum. D. B. Catin. 1,614,875;
Jan. 13, Vertice F. H. Reijnders. 1,628,506; May 17.
Diathermy ear applicator. J. D. Poliard. 1,623,552;
Apr. 5.
Diazo compound and making same. Stable. G. de Montmollin and G. Bonhôte. 1,629,906; May 24.
Dibble. G. L. Ford. 1,629,142; May 17.
Dice box. L. Bonell. 1,629,142; May 17.
Dice box. L. Bonell. 1,629,142; May 17.
Dice-throwing machine. Casing for. W. D. Walker. Des. 73,626; Oct. 11.
Dichroic inks, Production and utilization of. C. Bittinger. 1,629,250; May 17.
Dictating machine or similar article. Casing for a. F. C. Dicyandiamid, Making. G. Barsky. 1,618,504; Feb. 22.
Dicyandiamid, Making. G. Barsky. 1,618,504; Feb. 22.
Brick die.
Embossing die.
Quick-opening die. Die. Seembossing die.
Bride die. Printing die. Quick-opening die Thread-cutting die Wire-drawing die.

Die head. W. A. Leonard. 1,617,854; Feb. 15.
Die head. E. W. Mikaelson, 1,618,665; Feb. 22.
Die head. H. T. Shearer. 1,681,556; June 7.
Die head, Nonrotary self opening. A. F. Breitenstein
and E. A. Barteit. 1,648,832; Sept. 27.
Die head, Self-Opening. A. F. Breitenstein. 1,639,719; Die heat, Nontents sur bennig.

and E. A. Barteit. 1,643,632; Sept. 27.

Day 23.

Die head, Self-opening. R. M. Strickland. 1,639,719; May. 23.

Die head, Self-opening. R. M. Strickland. 1,639,712; Aug. 23.

Die mechanism. E. N. Miller. 1,648,559; Oct. 25.

Die mechanism. M. Schwartz. 1,618,961; Jan. 11.

Die opening and closing mechanism. J. A. Kinney. 1,643,662; Sept. 27.

Die plates, Guide for. C. H. Boyd. 1,613,980; Jan. 11.

Die press. H. Greenberg. 1,629,268; May 17.

Die plates, Guide for. C. H. Boyd. 1,613,980; Jan. 11.

Die perss. H. Greenberg. 1,629,268; May 17.

Die plates, H. Greenberg. 1,629,268; May 17.

Die stock. I. W. Nonmeman. 1,644,4143; Oct. 4.

Diestock. I. W. Nonmeman. 1,644,4143; Oct. 4.

Diestock. T. Petersen. 1,618,048; Feb. 15.

Dies, Making. A. R. Braden. 1,624,929; Apr. 19.

Dies, Maning. A. R. Braden. 1,624,929; Apr. 19.

Dies, Maning. A. R. Braden. 1,624,929; Apr. 19.

Dies, Maning. 1,647,415; Nonmens of the making cutting. M. Dielectric carbon compounds by means of fondzed gases, Bringing about physical and chemical changes in. H. B. R. Vogel. 1,621,143; Mar. 13,907; May 8.

Differential F. W. Secok. 1,625,120; Apr. 26.

Differential Grive, A. Lougheed. 1,625,264; Apr. 19.

Differential driving mechanism. O. E. Hunt. 1,616,627; Feb. 8.

Differential mechanism. O. E. Hunt. 1,616,627; Feb. 8. Differential driving mechanism. S. R. Dodus. A. D. S. Apr. 12.

Apr. 12.

Differential mechanism. F. M. Lewis. 1,619,141; Mar. 1.

Differential mechanism. F. M. Lewis. 1,619,141; Mar. 1.

Differential mechanism. M. B. Morgan. 1,641,190; Sept. 6.

Sept. 6.

The definition of the desired state of the desired state of the desired state. The desired state of the desired state of the desired state. Posthole digger. Pennut and potato digger. Pointo digger.

Pennut digger. Pennut and potato digger. Pointo digger.

Pennut digger.

Digging apparatus. C. E. Payne. 1.647,840: Nov. 1.

Digging device. J. Miotke. 1.633,777; Dec. 27.

Digging device. J. Miotke. 1.633,777; Dec. 27.

Digging machine. Ditch. J. S. Walch. 1.639,871;

Digging machine. Ditch. J. S. Walch. 1.639,871;

Digging machine. Ditch. J. O. Donnelly and F. D. Simminger. 1.643,649; Sept. 27.

Dlydroxy perylene. Manufacturing. A. Zinke and A. Kilngler. 1.629,194; May 17.

Dike or revertment. A. W. Farney. 1.641,966; Sept. 13.

Dike or revertment. A. W. Farney. 1.641,966; Sept. 13.

Dilator. H. W. Naylor. 1.625,306; Apr. 26.

Dilator. A. F. Keitz. 1.629,119; May 17.

Diluent separator. S. W. Briggs. 1.646,724; Oct. 25.

Dilutometer. C. M. Larson and C. L. Knopf. 1.635,553; July 12.

Dimensional figures from two-dimensional records of the sample of the samp Dimitro-anthraquinone, Making 2-7. B. Stein. 1,622,168; Mar. 22.

Dintro perylene quinone, Manufacturing. A. Zinke. 1,642,263; Sept. 13.

Dinner plate or similar article. Decalcomania strip for. H. Rabermann. Des. 73,657; Oct. 18.

Dioxydiaminoarsenobenzene, Preparation of solutions of Dioxydiaminoarsenobenzene. Preparation of solutions of Dipara xylvikumaidine. W. Scott. 1,642,139; Sept. 13.

Diphenylamine from smokeless powder, Removing. D. G. Butts. 1,650,689; Nov. 29.

Dipper-door latching and unlatching means. J. A. Orndorf. 1,629,634; May 24.

Dipper-tront construction. W. Bager, W. Lehman, and Dipper-tront construction. W. Bager, W. Lehman, and Dipper-tront of the present the proper solution of the proper solution. C. A. Psilander. 1,620,132; Mar. 8.

Dipping apparatus. J. H. Theiss. 1,616,397; Feb. 1. Dipping apparatus. J. H. Theiss. 1.616.397; Feb. 1. Dipping machine, Automatic. S. S. Roby. 1,628,431; May 10. Dippa. May Dipping machine, Automatic. S. S. Roby. 1,028,431;
May 10.
Direct P. and J. Dietrich and W. E. Miner.
Direct-firm trap. E. C. Wiley. 1,638,900; Aug. 16.
Direction and temperature indicating device. C. E. Swenson. 1,628,006; May 10.
Direction. Finding. R. D. Fay. 1,619,017; Mar. 1.
Direction finding and indicating system. F. A. Hubbard. 1,645,810; Oct. 18.
Direction indicator. W. C. P. Baldwin. 1,633,303:
Direction indicator. C. E. Bials. 1,656,855; Nov. 29
Direction indicator. G. A. Cummings. 1,648,879; Now. 8.
Direction indicator. A. Durchin. 1,632,437; June 14.

Direction Indicator. I. Edlund. 1,615,746; Jan. 25. Direction Indicator. A. F. Haddad. 1,629,501; May Direction Indicator. C. H. Johnson. 1,630,014 9,501; May 24. 1,630,014-15; May 24.

Direction indicator. G. E. Metherd. 1,646,159; Oct. 18. Direction indicator. G. E. Metherd. 1,646,159; Oct. 18.
Direction indicator. R. H. Morris. 1.641,774; Sept. 6.
Direction indicator. W. J. Parks and L. B. Frans.
Direction indicator. E. Petzoid and M. Söhnel.
1,651,904; Dec. 6.
Direction indicator. E. Petzoid and M. Söhnel.
1,651,904; Dec. 6.
Direction indicator. W. P. Wiemann. 1.622,895; Mar. 29.
Direction indicator. W. P. Wiemann. 1.622,895; Mar. 29.
Direction indicator for vehicles. A. Müller. 1,644,847; Oct. 26.
Direction indicator for vehicles. J. S. Santiago.
1,645,454-6; Oct. 11.
Direction indicator Motor-vehicle. A. J. Allard.
1,683,429; Aug. 9.
Direction indicator for vehicle. A. J. Allard.
1,643,849; Aug. 9.
Direction indicator for vehicle. A. J. Constitution of the first processing for the first proce | Direction signal, J. R. West. 1,647,896; Nov. 1. |
Direction signal, Automobile. G. Schock. 1,621,338; |
Mar. 15. |
Direction signal, Automobile. J. S. Warbls. 1,654,060; |
Direction signal, W. L. Carter. 1,613,931; Jan. 11. |
Directory. C. S. Cowles, 1,637,685; Aug. 1,614,719; Jan. 4. |
Directory. J. O'Leary. 1,616,464; Feb. 8. |
Directory. J. O'Leary. 1,616,464; Feb. 8. |
Directory. Telephone. W. M. Clark. 1,650,430; Nov. 22. |
Dirigible Bulloon. F. H. Bassett. 1,633,238; June 21. |
Dirigible-light mounting. R. R. Freund. 1,631,480; |
Dirt collector, Centrifugal. S. L. Joiner. 1,637,257; July 26. |
Dirt collector, Centrifugal. S. L. Joiner. 1,637,257; July 26. |
Dirt collector, Centrifugal. S. L. Joiner. 1,637,257; July 26. |
Dirt collector, Centrifugal. S. L. Joiner. 1,637,257; July 26. |
Dirt collector, Centrifugal. S. L. Joiner. 1,637,257; July 26. | July 26
Dirt conditioner. G. W. Stark. 1,650,409; Nov. 22.
Distappearing seat. R. C. Matthews. 1,649,608; Nov. 16.
Discharge bar for neutralizing static electricity. W. H.
Chapman. 1,653,599; Dec. 20.
Discharge from containers, Regulating. B. Bruhn.
1,640,528; Aug. 30.
Discharge-spip exparatus. J. Van Ackeren. 1,616,561; Feb. 8. Feb. 8.
Discharge unloader. S. B. Reddield. 1,637,875; Aug. 2.
Disconnecting switch. H. J. Crabbs. 1,638,379; June 28.
Dish and cover, Combination. A. L. Alaj. 1,635,918; Dish and the word, Combination. A. L. Alai, 1,635,918, July 12, 12, 18th, Covered. B. Magnussen. Des. 72,763; May 31, Dish, Covered. E. Magnussen. Des. 72,775; May 31, Dish, Covered. E. H. Sebring. Des. 72,716; May 31, Dish, Covered. H. Witte. Des. 72,050; Feb. 15. Dish drainer. M. E. Hatcher. 1,622,909; Mar. 29. Dish drainer. P. J. Leonard. 1,617,064; Feb. 8. Dish drainer and tub cover, Combination. M. H. Rossner. 1,643,906; Sept. 27. Dish drier. A. G. Andrews. 1,646,179; Oct. 18. Dish drier. A. G. Andrews. 1,646,179; Oct. 18. Dish mon and scraper, Combination. A. Sacks. 1,643,857; Sept. 27. Dish mon and scraper, Combination. A. Sacks. 1,643,857; Sept. 27. Dish mon and scraper, Combination. A. Sacks. 1,643,857; Sept. 27. Dish mounting. S. Foreman. Des. 72,010; Feb. 15. Jan. 25. Dish or similar article. F. Schmidt. Des. 72,277; Mar. 22. Dish or similar article. C. H. Walker. Des. 71,991; Feb. 8. Dish or similar article. C. H. Waiker. Des. 14,591; Feb. S. similar article, Vegetable. J. Harrison. Des. Dish, Paper A. Moore. 1,627,050-1; May 2. Dish, Service. R. Halev. Des. 73,519; Sept. 27. Dish, Service. R. Heloian. 1,643,450; Sept. 27. Dishes and the like. Device for washing. J. T. McGrath. 1,642,933; Sept. 20. Dishes or similar articles, Border panel for metal. E. T. Beck. Des. 72,884; June 21. Dishes or similar articles, Side panel for metal. E. T. Dishes or similar articles, Side panel for metal. E. T. 19ishwasher. E. Krafft. 1,653,577; Dec. 20. Dishwasher. E. Krafft. 1,653,577; Dec. 20. Dishwasher. J. F. Patterson. 1,631,045; May 31. Dishwasher. J. F. Patterson. 1,632,203; Apr. 5. Dishwashing apparatus. J. Fassio. 1,646,142; Oct. 18. Dishwashing machine. G. P. Anstis. 1,633,803; June 28. Dishwashing machine. G. P. Anstiss. 1,639,834; June 28.

Dishwashing machine. P. E. Barker. 1,624,380; Apr. 12. Dishwashing machine. P. E. Barker. 1,624,461; Apr. 12. Dishwashing machine. G. S. Blakeslee. 1,619,236; Dishwashing machine.
Dishwashing machine.
Dishwashing machine.
Dishwashing machine.
Dishwashing machine.
J. J. Gioney. 1,633,396; June 21:
Dishwashing machine.
E. Gilbertson. 1,653,7376; Aug. 2:
E. Gilbertson. 1,653,749; Oct. 18. Dishwashing machine, R. Harvey and A. P. Washlake. 1,623,182; Apr. 5. Dishwashing machine. A. G. Haskins. 1,632,182; June 14. Dishwashing machine, N. H. Henderson, 1.626.194: Apr. 26.
Dishwashing machine. R. J. Irvin. 1,633,669; June 28.
Dishwashing machine. M. J. Kehoe. 1,632,007; June 14.
Dishwashing machine. T. J. and M. J. Kehoe. 1,631,968; June 14. machine. J. Knapp. 1,615.844; Feb. Dishwashing machine. A. W. McQuaide. 1,65 Dec. 27. 1.654.466; Dishwashing machine. A. W. McQuaide. 1,634,466; Dec. 27, Dishwashing machine. G. L. Obmart. 1638,549; Aug. 9. Dishwashing machine. G. L. Obmart. 1638,549; Aug. 9. Dishwashing machine. G. Webb. 1,654,355; Dec. 27. Dishwashing machine. G. Webb. 1,654,355; Dec. 27. Dishwashing machine. G. Webb. 1,654,355; Dec. 27. Dishwashing machine. F. A. Wilcox. 1,633,800; June 28. Dishwashing machine. F. A. Wilcox. 1,633,800; June 28. Dishwashing machine. F. A. Wilcox. 1,633,800; June 28. Dishwashing machine. F. A. Wilcox. 1,638,800; June 28. Dishrectant and making same. M. Engelmann. 1,618,371–2; Feb. 22. Disinfectant composition. G. G. Gordon. 1,619,861; Mar. 8. Dishwashing machine. J. G. Gordon. 1,619,861; Mar. 8. Dishrecting appartus. M. Trootneff and J. Gromeeko. 1,648,774; Oct. 25. Dishrecting composition. M. Engelmann and A. R. Albright. 1,618,369; Feb. 22. Dishrecting or cleansing spray for bygienic and medical purposes. Producing a. J. Freng and E. Bergve. Dick. 2ct. 4,643,938; Oct. 4,643,938; Oct. 2ct. 4,643,938; Disintegrating machine, D. C. Addicks. Oct. 4.

Oct. 4.

Disintegrating mill. A. Leggemann. 1.647,183; Nov. 1.

Disintegrating mill. S. D. Wells. 1.647,555; Nov. 1.

Disintegrator. G. W. Nelson. 1.628,419; May 10.

Disk and method and apparatus for making the same.

Spray. A. P. Keller. 1.638,531; June 21.

Disk bit. W. S. Holdaway. 1.620,889; Mar. 15.

Disk bit. Central-shank-reaming. F. W. Hild. 1.627,179;

May 2.

Disk bit. Central-shank-reaming. F. W. Hild. 1.627,179;

May 2.

Disk bit. Central-shank-reaming. F. W. Hild. 1.627,179;

May 3.

Disk bit. Central-shank-reaming. F. W. Hild. 1.627,179;

May 3.

Disk bit. Central-shank-reaming. F. W. Hild. 1.627,179;

May 3.

Disk bit. W. S. Holdaway. 1.620,889; Mar. 16. May 3. sk boring tool, Rotary-. S. A. D. Cox. 1,618,270; Feb. 22.
Disk brake. W. R. Hendrix. 1,652,130; Dec. 6.
Disk brake. J. L. Price. 1,649,185; Nov. 15.
Disk crusher. E. B. Symons. 1,616,240; Feb. 1
Disk cutters, Forming. W. T. Woods. 1,614,332; Jan. 11.
Disk drill, Rotary. J. W. Loy. 1,646,620; Oct. 25.
Disk drill, Rotary. W. J. Wilson and A. J. Cartton.
1,651,859; Dec. 6.
Disk harrow. W. L. Paul. 1,639,104; Aug. 16.
Disk, Prism-lens. C. F. Jenkins. Re16,789; Nov. 22.
Disk, Thermostatic. A. Colby. 1,654,320; Dec. 27.
Disk, Thermostatic. L. J. Greenawalt. 1,654,519; Disk, Ther Dec. 27. Disk wheel. Disk wheel. Disk wheel. G. H. Forsyth. 1,630,740; May 31. G. H. Forsyth. 1,652,433; Dec. 13. J. Klee. 1,651,715; Dec. 6. T. E. Murray. 1,614,567; Jan. 18. R. H. Pierce and G. A. Anderson. 1,64 Jan. 18. erson. 1,643,172; Disk wheel. Sept. 20. Disk wheel. Sept. 49.
Disk wheel. F. C. Schoenthal. 1,640,378; Aug. 30.
Disk wheel. F. C. Schoenthal. 1,642,735; Dec. 13.
Disk wheel. D. M. White. 1,644,163; Oct. 4.
Disk wheel. W. E. Williams. 1,617,978; Feb. 15.
Disk Wheel, Automobile steel. W. E. Williams. 1,640,063; Disk wheel, Demountable-rim. W. E. Williams. 1,650,781; Disk wheel, Februs J. H. Doty, 1,631,928; June 7, Nov. 23.

Nov. 23.

Nov. 24.

Nov. 25.

Nov. 26.

Nov. 2 Disk wheels, Cart. C. Seutebath.

1,619,025; Mar. 1.

Disk wheels, Lifting lever for. E. A. Nelson. 1,624,356; Apr. 12.

Disk wheels, Machine for straightening. J. Bushek. 1,647,211; Nov. 1.

Disklike element, Making an annular laminated. R. M. Pierson. 1,622,043; Mar. 22.

Disks. Machine for trimming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Machine for the machine triming the edges of molded. C. Disks. Machine for the machine triming the edges of molded. C. Disks. Machine for the machine triming the edges of molded. C. Disks. Machine for the machine triming the edges of molded. C. Disks. Machine for trimming the edges of molded. C. Disks. Mach Nov. 1. Dislodging mechanism. N. D. Levin. 1,639,741; Aug. 23. Disodium phosphate, Manufacture of. H. H. Meyers. 1,048,656; Nov. 8.

Dispatch carrier, Pneumatic. E. C. Bengel. 1,645,495;
10t. 1.1.
Dispatch carrier, Pneumatic. J. G. Maclaren.
1,613,471; Jan. 4.
Dispatch carriers, Closure device for pneumatic. W. H.
Dinspel. 1,647,788; Nov. 1.
Dispatch systems, Controlling apparatus for pneumaticJ. G. Maclaren. 1,625,903; Apr. 26.
Dispatch systems, Power-control apparatus for pneumaticJ. T. Cowley. 1,619,707; Mar. 1.
Dispatch systems, Power-control device for pneumaticJ. T. Cowley. 1,619,707; Mar. 1.
Dispatch systems, Power-control mechanism for pneuDispatch systems, Power-control mechanism for pneu1,615,909; Feb. 1.
Dispatch unit, Single-tube pneumatic. J. G. Maclaren.
1,615,909; Feb. 1.
Dispatch unit, Single-tube pneumatic. J. J. Stoctzel.
1,020,214; Apr. 26.
Dispenser. E. S. Henson. 1,625,096; Dec. 20.
Dispenser. C. T. Newton. 1,620,286; Mar. 8.
Dispenser. W. G. Woods and N. T. Snaw. 1,649,435;
Nov. 15.
Dispenser w. G. Woods and N. T. Snaw. 1,649,435;
Nov. 15.
Dispenser perfume. P. F. W. Muller. 1,644,432; Oct. 4.
Dispensing and advertising device. H. A. Jones.
1,025,944; Apr. 26.
Dispensing and advertising device. H. A. Jones.
1,025,944; Apr. 26.
Dispensing and weighing machine, Automatic. C. E.
Dispensing apparatus. C. S. Choy. 1,656,430; Dec. 20.
Dispensing apparatus. C. S. Choy. 1,656,430; Dec. 20. Nov. 22
Dispensing apparatus. C. S. Choy. 1.653.430; Dec. 20.
Dispensing apparatus. C. G. Hall. 1.642.200; Sept. 13.
Dispensing apparatus. F. Huber. 1.639.564; Aug. 16.
Dispensing apparatus. J. and H. J. Reuther. 1.653.267; Sept. 13.
Dispensing apparatus. J. and H. J. Reuther. 1.653.267; Dispensing apparatus. S. Schreiber. 1.631.430; June 7.
Dispensing apparatus. and operating same. L. Rothschild and E. G. Clements. 1.641.783; Sept. 6.
Dispensing apparatus. Beverage. J. M. Travis. 1.619.278; Mar. 1.
Dispensing apparatus, Coin-controlled. J. McGranighan.
Dispensing apparatus, Coin-controlled. J. McGranighan.
Dispensing apparatus, Liquid. G. Cippola. 1,614,344; Jan. 11. Jan. 11.

Dispensing apparatus, Lubricant. E. W. Davis. 1.651.256; Nov. 29.

Dispensing apparatus, Safety mechanism for. L. E. Baker. 1.634.617; July 5. 1.638.778; Aug. 9.

Dispensing container. R. Stewart. 1.619.770; Mar. 1.

Dispensing container, B. Stewart. 1.619.770; Mar. 1.

Dispensing container, Beverage. W. E. Leibing. Des. 73.824; Aug. 23.

Dispensing container for lubricating grease, etc. L. Ware. 1.625.963; Apr. 26.

Dispensing containers, Closure for. F. McLaughlin. 1.614.677; Jan. 1. C. W. Fisiar. 1.651.687; Dec. 6.

Dispensing device. G. A. Hultenius. 1.627.647; May 10.

Dispensing device. G. Kirkegaard. 1.622.831; Mar. 29. Dispensing device. Dispensing device. Dispensing device. W. D. La Rue. 1,613,614; Jan. 11.
Dispensing device. B. H. Little. 1,622,899; Apr. 5.
Dispensing device. L. Marchione. 1,628,943; May 3.
Dispensing device. L. Marchione. 1,628,943; May 3.
Dispensing device. L. R. J. Miele. 1,634,7561; Aug. 2.
Dispensing device. J. E. Fage. 1,634,560; Nov. 22.
Dispensing device. J. B. Perry and J. Milinare. College device. J. H. Pleper. 1,634,594; July 5.
Dispensing device. J. R. Routh. 1,618,731; Feb. 22.
Dispensing device. J. J. Seelman. 1,623,798; Apr. 5.
Dispensing device. L. K. N. Vartabellan. 1,618,118;
Dispensing device. E. K. N. Vartabellan. 1,618,118;
Dispensing device. A. O. on R. M. Warryick. 1,620,178; Dispensing device. E. O. and R. M. Warwick. 1,620,178; Mar. 8. Dispensing device, G. H. Woode, A. B. Denison, and Dispensing device, Phys. J. 621.861; Mar. 22.

Dispensing device, Article, J. C. Jensen and O. L. Miles, 1,620,766; Mar. 15.

Dispensing device, Grease, M. J. Morton. 1,652,318; Dec. 13. Dispensing device, Grease-, M. J. Morton. 1,052,815; Dec. 18.
Dispensing device, Straw-, G. B. Shoun. 1,646,983; Oct. 25.
Dispensing machine. A. F. Files. 1,625,461; Apr. 19.
Dispensing machine. M. Goldman. 1,644,371; Oct. 4.
Dispensing machine. S. Hameon. 1,632,207; June 21.
Dispensing-machine case. P. R. Hoopes. Des. 73,228; Aug. 9.
Dispensing machine, Cup. T. M. Prudden. 1,648,147;
Nov. 8. Dispensing machine, Selective. W. C. Cutler. 1,619.293; Mar. 1. Dispensing machines, Coin-controlled actuating mecha-nism for. F. R. Oliver. 1,633,675; June 28. Dispensing material from rolls. Mechanism for. W. M. Whelldon, 1,625,179; Apr. 19.

Dispatch carrier, Pneumatic-. E. C. Bengel. 1,645,495;

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Dispensing nechanism, Seed. W. A. Van Brunt. 1639;317; Ang. 6.
Dispensing receptede. A. Moshelm. 1,636,063; July 19.
Dispensing service. J. A. Conques. 1,639,329; Aug. 16.
Dispensing service. W. A. Seidemann. 1,627,870; May 10.
Dispensing receptacle. A. Moshelm. 1,636,663; July 19. Dispensing service. W. A. Seidemann. 1,627,870; May 10. Dispensing service. W. A. Seidemann. 1,627,870; May 10. Dispensing stand. G. H. Russell. 1,621,905; Mar. 22. Dispensing top. L. S. Burbank. 1,637,546; Aug. 2. Dispensing top. L. S. Burbank. 1,637,546; Aug. 2. Dispensing tupe. S. J. Lewis. 1,622,526; Mar. 29. Dispensing tube. S. J. Lewis. 1,622,526; Mar. 29. Dispensing tube. S. J. Lewis. 1,622,526; Mar. 29. Dispensing tube. B. F. Baker. 1,620,748; Mar. 15. Dispensing matter into finely-divided form. H. L. Glaze. 1,625,203; Apr. 19. Dispensing matter into finely-divided form. H. L. Glaze. 1,625,203; Apr. 19. Dispensing matter into finely-divided form. H. L. Glaze. 1,625,203; Apr. 19. Display and vanity case. Combination. T. J. Lewis. 1,638,638; Aug. 9. Display and vending apparatus. C. E. Karst. 1,628,466; May 17. B. Kessler. 1,629,673; May 24. Display apparatus. A. Bernstein. 1,622,409; Mar. 29. Display apparatus. A. R. Castille. 1,614,714; Jan. 18. Display apparatus. B. S. De Vries. 1,645,335; Oct. 11. 25. Display apparatus. B. S. De Vries. 1,645,335; Oct. 11. 25. Display apparatus. J. Schwartz. 1,648,527; Nov. 25. Display apparatus. J. Schwartz. 1,648,527; Nov. 25. Display apparatus. J. Schwartz. 1,648,527; Nov. 8. Sonders. 1,624,647; Apr. 26. Display board or similar article. S. H. Harris. Des. 73,128; July 26. Display board or similar article. S. H. Harris. Des. 73,128; July 26. Display box. E. E. Aspiund. 1,60,870; Aug. 30. Display box. M. L. Baker. 1,635,695; Dec. 20. Display box. M. L. Baker. 1,635,695; Dec. 20. Display box. M. Calles Display box. M. L. Baker. 1,636,087; July 5. Display box. M. Calles Displa
             Display case. J. Erdoes. 1,618,178; Feb. 22.
Display case. W. T. Hending. 1,644,675; Oct. 11.
Display case. T. L. Sopher. 1,633,461; June 21.
Display case. H. Steinruck. 1,640,583; Aug. 30.
Display case, Advertising. C. D. Oversmith. Des. 71,886;
Jan. 18.
          Jan. 18. Display case, Biscuit. J. L. Emanuel and P. I. Jacoby. 1617,799; Feb. 15. Display-case closure. A. G. Stephens. 1,643,632; Sept. 27.
      Sept. 27.

Display case, Handkerchief-. R. W. Eldridge. 1,620,808;
Mar. 16.

Display case or roll for flat-metal tableware. L.

Schaeter. 1,650,393; Nov. 22.

Display case, Refrigerator. J. Acurso, jr. 1,612,790;
Display case, Refrigerator. E. F. Deacon. 1,639,841;
Aug. 23.

Display case, Refrigerator. E. F. Deacon. 1,639,841;
Aug. 24.

Display case, Refrigerator. E. F. Deacon. 1,631,780;
Display chest for silverware. A. L. Zietung. 1,631,780;
Display case, 1,521,522.
      June 7.
Display container.
Display container.
H. A. Feigelman. 1.620,810; Mar. 15.
Display container.
H. B. Freeman. 1,622,164; Mar. 22.
Display container.
Display container.
Display container.
R. F. Myrick. 1,638,208; Auc. 9.
Display container.
Display container.
J. Staubly. 1,628,439; May 10.
Display container.
A. J. Tanner. 1,616,707-8; Feb. 8.
Display container.
A. J. Tanner. 1,625,171; Apr. 19.
Display container.
A. J. Tanner. 1,625,171; Apr. 19.
Display container.
A. J. Tanner. 1,627,171; Apr. 19.
Display container.
A. J. Tanner. 1,647,820; Nov. 1.
   Display Container. A. J. Tanner. 1.610. 1071.

Display container. A. J. Tanner. 1.622.171. Apr. 19.

Display container. A. J. Tanner. 1.627.171. Apr. 19.

Display container. A. J. Tanner. 1.647.820. Nov. 1.

Display container. Duplex closure for. H. Hermani. 1.620.156; Mar. 8.

Display counter, Refrigerated. J. F. Barghausen. Rc16.595; Apr. 19.

Rc16.595; Apr. 19.

Rc16.595; Apr. 19.

Rc16.595; Apr. 19.

Rc26.595; Apr. 19.

Rc27.595; Apr. 19.

Rc27.595; Apr. 19.

Rc27.595; Apr. 19.

Rc27.595; Apr. 19.

Display device. J. B. Barnett. 1.631.785; June 7.

Display device. Z. D. Brumberg. 1.620.944; Mar. 15.

Display device. B. Drauberg. 1.620.944; Mar. 15.

Display device. G. F. Egan. 1.654.244-6; Dec. 27.
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Display device.
Display device.
A. R. Griffes. 1,648.987; Nov. 15.
Display device.
J. P. Hohmann. 1,630,744; May 31.
Display device.
S. N. Hone. 1,642,437; Spr. 28.
Display device.
J. H. Kogge. 1,622,607; June 14.
Display device.
A. H. Kogge. 1,622,607; June 14.
Display device.
Display device.
J. H. Molloy 1,448,025; Nov. 8.
Display device.
Display device.
P. H. Monroupe. 1,651,536; Dec. 6.
Display device.
Display device.
P. H. Monroupe. 1,651,536; Dec. 6.
Display device. Display device. S. N. Hope. 1,642.497; Sept. 13.
Display device. L. A. Leppke and J. H. Scharf. 1,624.741;
Apr. 12.
Bisplay device. P. H. Monarque. 1,651,536; Dec. 6.
Bisplay device. P. H. Monarque. 1,651,536; Dec. 13.
Display device. J. J. Smith. 1,638,754; Aug. 28.
Display device. J. Usoskin. 1,619,095; Mar. 1.
Bisplay device. J. Usoskin. 1,619,095; Mar. 1.
Bisplay device. J. Usoskin. 1,619,095; Mar. 1.
Display device. Automobile. J. 652,356 Pec. 23.
Display device, Automobile. J. 652,356 Pec. 23.
Display device, Automobile. J. de J. Santos. 1,617,724;
Display device, Automobile. J. de J. Santos. 1,617,724;
Display device, Sample. F. Wolf. 1,644,318; Oct. 4.
Display device, Sample. F. Wolf. 1,644,318; Oct. 4.
Display deside. Apr. 12.
Display deside. Apr. 12.
Display device, Des. 73,675-6; Nov. 15.
Display form and making same. L. W. Giaberman. Des. 73,908; Nov. 22.
Display form and making same. L. W. Reinhardt. 1,623,931; Apr. 5.
Display forms, Producing. O. G. Fuller. 11,613,989;
Display holder. L. Flier. 1,653,500; Dec. 20.
Display holder. T. J. Rabitzer. 1,642,086; Sept. 13.
Display package. F. G. Fisher. 1,633,779; June 28.
Display package. F. G. Fisher. 1,633,779; June 28.
Display package. F. G. Fisher. 1,633,779; June 28.
Display plaque and method of making. W. Van Diest. 1,620,046; Mar. 8.
Display package. F. G. Fisher. 1,633,779; June 28.
Display rack. H. S. Best. 1,626,501; Apr. 26.
Display rack. H. S. Best. 1,636,501; Apr. 26.
Display rack. H. Display rack. T. J. Abele. 1,629,313; Mar. 8.
Display rack. T. J. Abele. 1,629,313; Mar. 8.
Display rack. T. J. Abele. 1,629,313; Mar. 9.
Display rack. C. Bell and M. S. Kessler. 1,635,201;
Display rack. H. S. Best. 1,638,236; Aug. 9.
Display rack. C. Deutschle. 1,634,456; July 5.
Display rack. C. Deutschle. 1,634,456; July 5.
Display rack. G. H. Hofth. 1,619,420; Mar. 15.
Display rack. G. H. Hofth. 1,619,420; Mar. 16.
Display rack. G. Johansson. 1,637,578; Aug. 2.
Display rack. R. B. Mitchell. 1,612,937; Jan. 4.
Display rack. W. W. Istansfield 1,648,548; July 5.
Display rack. C. Widen. 1,640,971; Aug. 30.
Display rack. C. Widen. 1,640,971; Aug. 30.
Display rack. C. Widen. 1,640,971; Aug. 30.
Display rack. G. Johansson. 1,637,578; Apr. 26.
Display rack. G. C. Widen. 1,640,971; Aug. 30.
Display rack. G. Widen. 1,652,622; Apr. 26.
Display sample. Gevice. F. J. Garcrety 1,627,231; May 3.
Display stand. A. L. L. Brown. 1,615,630; Apr. 26.
Display stand. J. E. Printson. 1,635,032; Jan. 25.
Display stand. L. L. Brown. 1,635,323; Jan. 25.
Display stand. J. E. Friedman. Des. 73,693; Oct. 25.
Display stand. J. E. Friedman. Des. 73,693; Oct. 25.
Display stand. J. E. Friedman. Des. 73,693; Oct. 25.
Display stand. J. E. Friedman. Des. 73,693; Oct. 26.
Display stand. J. E. Friedman. Des. 73,693; Oct. 25.
Display stand. J. E.

Display stand, Jewelry. M. Horn, 1,615,275; Jan. 25. Display stand or similar article. B. F. Muldoon. Des. 73,412; Sept. 6. Display stand, Rotatable. J. B. Vogler. 1,627,130; 73,412; Sept. 6.
Display stand, Rotatable, J. B. Vogler. 1,627,130; May 3.
Display stands or similar articles, Leg for. G. R. Wanier. Des. 71,857; Jan. 11.
Display support, Piece-goods. A. J. Dobbin. 1,617,676; Display support, Vending. E. O. Tinsley. 1,639,787; Aug. 23.
Display at able. T. W. Timson. 1,644,289; Oct. 4.
Displaying and selling merchandise. W. P. Pitt. 1,651,905; Dec. 6.
Displaying device. H. H. Hendsch. 1,637,305; July 26.
Displaying information, advertisements, and the like, Nov. 18.

Nov. 18.

Nov. 18.

Nov. 18.

Nov. 18.

Nov. 18.

Displaying information, advertisements, and the like, Apparatus for. E. Roscoe. 1,648,364; Nov. 8.

Disruptive effects, Method of and apparatus for obtaining. J. M. Sheedy and W. Myers. 1,631,290; June 7.

Distance by echo, Method and apparatus for determining. 19.

Distance control for movable parts. G. Piel, jr. 1,652,794; Dec. 13.

Distance finder. J. M. Washburn. 1,617,612; Feb. 15.

Distillation. D. M. Allan. 1,621,294; Mar. 29.

Distillation. D. M. Allan. 1,622,864; Mar. 29.

Distillation. J. S. Morgan. 1,622,864; Mar. 29.

Tor fractional. 27.

Distillation apparatus. E. R. Hamilton. 1,614,791; Jan. 18. Jan. 18.
Distillation apparatus. W. K. Lewis. Distilling apparatus. W. K. Lewis. 1,626,346; Apr. 26.
Distillation, Fractional. N. E. Loomis and W. K. Lewis. 1,646,619; Oct. 25.
Distillation process and apparatus, Fractional. H. Koppers. 1,646,698; Oct. 25.
Distilling apparatus. W. E. Brown, 1,620,593; Mar. 8.
Distilling apparatus. W. E. Brown, 1,620,593; Mar. 8.
Distilling apparatus. J. H. Burlingham. 1,626,228; Apr. 26.
Distilling materials. H. B. Cannon. 1,651,994; Dec. 6.
Distilling materials. H. B. Cannon. 1,651,994; Dec. 6.
Distributing block. H. J. Nenno, 1,618,021; Feb. 15.
Distributing device, Material. F. C. Spencer. 1,641,300; Sept. 6. 1.626.346: Sept. 6.
Distributing plate, Multiple. B. P. Doppke. 1,615,168; Jan. 18.
Distributing switch. H. Sanner. 1,653,313; Dec. 20.
Distribution of intelligence, System of. L. M. Dieterich.
1,623,126; May 10.
Distribution system. E. F. W. Alexanderson. 1,620,506; Mar. 8. Distribution system. R. D. Evans. 1,619,337; Mar. 1. Distribution system. R. D. Evans. 1,631,449; Dec. 6. Distribution, System of. T. F. Barton. 1,631,715; Distribution, System of. C. L. Fortescue. 1,647,348; Distribution, System of. J. F. Peters. 1,649,125; Nov. 15. Distribution and loader, Straw of retrilizer. W. E. Bruce. 1,644,870; Jan. 18. Distribution heads, Cleaning device for. J. Stewart. 1,636,038; July 19. B. H. Anibal. 1,631,185; June 7. Ditch gate P. Roots. 1,630,407; May 31. Ditch maintainer. G. E. Kernes. 1,636,136; July 19. Ditch maintaining drag. D. Atthins, fr., F. O. Anderson, and E. E. Lindsey. 1,637,673; Aug. 2. O. Anderson, and E. E. Lindsey. 1,637,673; Aug. 2. Ditching machine. J. G. Lindeman. 1,632,303; June 14. Ditching machines, Digging member for. H. H. Barber. 1,623,957; Apr. 12. Ditches, Machine for cutting and dredging. H. Kleinwort. 1,614,070; Jan. 11. Diarett: product and making the same. P. Caccia. Dividing box. F. H. Tanner. 1,654,225; Dec. 27. Divider, Combination. A, Van Gale. 1,630,773; May 31. Dividable box. F. H. Tanner. 1,654,225; Dec. 27. Divider, Combination. A, Van Gale. 1,630,773; May 31. Dividable box. F. H. Tanner. 1,654, P. H. Gaa. 1,650,704; Nov. 29. Dividing and spacing instrument. H. Adler. 1,624,031; Distribution, System of. C. L. Fortescue. 1,647,348; Nov. 29.
Dividing and spacing instrument. H. Adler. 1,624,031;
Apr. 12.
Diving board. W. S. Brown. 1,635,204; July 12.
Diving sinker for deep-sea angling. C. B. Sanford. 1,645,874; Oct. 18.
Dock. E. W. McCullers. 1,643,464; Sept. 27.
Dockage tester. C. W. Carter. 1,644,872; Oct. 11.
Docking apparatus. E. Johnson. 1,614,131; Jan. 11.
Document-Dinding clamp. S. J. Bablan. 1,644,625; Document-binding clamp. S. J. Babian. 1,644,625; Oct. 4s. Aidinc the sorting of. J. H. Fuller. Documents, Aidinc the sorting of. J. H. Fuller. Documents, Subsequenting rabbit for. J. L. Shaughnessy. 1,628,518; May 10. Docr-racing apparatus. A. V. Wilson and H. F. Wilson. 1,647,067; Oct. 25. Dog shield. B. F. Plola. 1,642,310; Sept. 13. Dog shield. B. F. Plola. 1,642,310; Sept. 13. Dog shield. E. F. C. Sittkus. 1,616,575; Feb. 8. Down of the Like Lace. S. N. Mailouk. Des. 72,210; May 15.

Doily or the like, Table. A. L. Ejk. Des. 73,650; Oct. Dolly or the like, Table. A. L. Ejk. Des. 73,650; Oct. Dol. M. S. Barnet. Des. 73,737; Nov. 1. Doll. W. Bell. Des. 72,737; Nune 7. Doll. W. Berndt. Des. 72,739; May 31. Doll. J. M. Bell. Des. 72,739; May 31. Doll. J. A. Bolton. 1,630,240; May 24. Doll. H. T. Chinn. 1,632,171; June 14. Doll. W. M. Conselman. Des. 72,001; Feb. 15. Doll. B. Goldenberg. 1,644,827; Oct. 11. Doll. K. Knudsen. Des. 73,088; July 19. Doll. E. W. McCarroll. Des. 71,844; Jan. 11. Doll. E. W. McCarroll. Des. 71,844; Jan. 11. Doll. H. T. Fayne. 1,615,401; Jan. 25. Doll. E. W. McCarroll. Des. 71,844; Jan. 11. Doll. G. D. Fullman. 1,617,498; Feb. 15. Doll. G. Stein and W. M. Heller. 1,631,738; Dec. 6. Doll. C. Stein and W. M. Heller. 1,631,738; Dec. 6. Doll. E. H. Ufford. Des. 72,782; May 31. Doll. E. W. McCarroll. Des. 72,782; May 31. Doll. G. 16,845; Feb. 8. Combination. O. E. Dentvelle. 1,618,635; Feb. 8. Doll. Bouncing. J. H. O'Neill. 1,624,072; Oct. 4. Doll eyes, Movable. C. Reinhardt and B. Pelz. 1,619,763; Doll eyes, Movable. C. Reinhardt and B. Pelz. 1,619,763; Doll of R. A. H. Ont. 1,627,751; May 3. Mar. 1.
Doll head. R. A. Hopf. 1,627.511; May 3.
Doll made of fibrous materials. E. A. Francke. 1,612,805; Doli made of abrous materials. B. A. France, 1,012,806; Jan. 4.
Doll manufacture, Wig for. P. Harris. 1,628,591; May 10.
Doll, Musical. H. D. Du Bois. 1,621,157; Mar. 15.
Doll, Novelty. G. E. Austin. 1,619,383; Mar. 1.
Doll or similar article. J. G. Stokes. Des. 72,502; Apr. 19. Doll, Novelty, G. B. Austen.

J. C. Stokes. Des. 72.502;

Doll, Paper, M. T. Basinger. 1,621.231; Mar. 15.

Doll, Paper, M. T. Basinger. 1,621.231; Mar. 15.

Doll, Paper, M. T. Basinger. 1,634.189; June 28.

Doll, Radio speaking. N. C. Smith. 1,652.839; Dec. 13.

Doll, Smilling. P. J. Christensen. 1,618,671; Feb. 22.

Doll, Stuffed. S. A. Kelchner. Des. 73,659; Oct. 18.

Boll, Talking. O. A. Garland. 1,622.441 Share. 26.

Doll, Stuffed. S. A. Kelchner. Des. 73,659; Oct. 18.

Doll, Talking. O. A. Garland. 1,622.441 Share. 26.

Cct. 11.

Dolls and other figure toys, Forming eye openings in the heads of. L. J. Grubman. 1,639.033; Aug. 16.

Dolls and other figure toys, Forming eye openings in the heads of. L. J. Grubman. 1,639.033; Aug. 16.

Dolls and parts thereof from cellulose derivatives, Manu
Dolls, Attachable fierlibt upper cyclid for. P. D. Melers. 1,648,418; Nov. 8.

Doll's eye with locking mechanism. W. Sörgel. 1.

1,648,418; Nov. 8.

Doll's eyes with losking mechanism. W. Sörgel. 1,621,139; Mar. 15.

Doll's eyes with lashes. A. Konoff. 1,620,667; Mar. 15.

Doll's eyes with lashes. A. Konoff. 1,620,667; Mar. 15.

Doll's Subber 1, A. Rumer. 1,622,134; Mar. 1,622,777; Dec. 13. Dec. 13.
Dolly and Jack, Combination. G. F. Nash. 1,650,031;
Nov. 22. Nov. 22.

Dolly retainer. A. E. Peters. 1,653,968; Dec. 27.

Dome light. T. A. Galt. 1,651,592; Dec. 6.

Dome light. G. Graff. Des. 73,405; Sept. 6.

Domestic boiler. R. Kania. 1,616,059; Feb. 1.

Door. M. R. Guilbert, F. 1,653,170; Dec. 20.

Door. A. Kirschbaum. 1,619,578; Mar. 1.

Door-actualing means, Garage. T. McInerney. 1,634,954; Jul. 21.

Door and aurtain. F. D. Ritter. 1,628,757; May 3.

Door and ladder structure, Silo. J. Cowin. 1,652,428; Dec. 13. Dec. 13.

Door and mounting, Dumping. W. M. Sheehan. 1,628,922;
May 17.

Door and operating mechanism therefor. A. Rush and
R. H. Greegor. 1,629,973; May 24.

Door and securing punels therefor, Garage. C. G.

Door and securing punels thereto, Automobile. W. S.

Smith. 1,643,395; Sept. 27.

Door and step, Manually operable. H. Rowatree.
1,627,749; May 10.

Door and table, Combined. C. F. Berry. 1,632,268; June 14

Door and the like helder. J. H. Brubn and J. F. Becker. 1.615.357; Jan. 25.

Door and window screen catch and fastener. B. Moore. 1.629.725; May 24.

Door bell and light-control switch. P. D. Monica. 1.00431 [1.0041]

Door bulk. P. Lang. 1.622.791; Mar. 29.

Door bolk. P. Lang. 1.622.791; Mar. 29.

Door burner. C. J. Williams. 1.623.767; Apr. 5.

Door burner. C. J. Williams. 1.623.767; Apr. 5.

Door burners. Support for. 1.628.826; May 17.

Door burners. Support for. Miss. 1.67, Mal. 82, 82, 490; Apr. 18.

Door burners. Support for. T. P. Williamsh. 1.624,960; Apr. 18. Apr. 19.

Door - butt gauge. T. P. Willoughby. 1,642,474;
Sept. 13.

Door catch. K. H. Beck and E. H. Blackburn.
1,627,825; May 10.

Door catch. W. H. L. Delmer. 1,645,234; Oct. 11.

Door catch. G. A. Moon. 1,642,167; Sept. 13.

Door catch. A. W. Scott. 1,622,926; Mar. 29.

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Door catch, Clip. I. C. Larson, and G. S. Cooper. 1,636,697; July 26.
Doorcheck. H. E. Anderson. 1,621,305; Mar. 15.
Doorcheck. J. P. Brennan. 1,612,904; Jan. 4.
Doorcheck. J. P. Brennan. 1,612,904; Jan. 4.
Doorcheck. J. M. Conicy. 1,649,635; Moy. 15.
Doorcheck. J. M. Conicy. 1,649,635; Moy. 15.
Doorcheck. A. F. Hickie. 1,624,836; Apr. 12.
Doorcheck. A. F. Hickie. 1,624,836; Apr. 12.
Doorcheck A. F. Hickie. 1,624,836; Apr. 12.
Doorcheck A. F. Hickie. 1,624,836; Apr. 12.
Doorcheck A. F. Hickie. 1,624,834; Moy. 24.
Doorcheck B. H. Ripple. 1,629,120; May 17.
Doorcheck B. H. Ripple. 1,629,134; Nov. 29.
Door closer. B. Brady. 1,624,910; Apr. 19.
Door closer. F. Hensel. 1,550,834; Nov. 24.
Door closer. F. Hensel. 1,550,834; Nov. 24.
Door closer. H. Schmidt. 1,652,244; June 21.
Door closer. F. Hensel. 1,550,834; Nov. 27.
Door closer. F. Hensel. 1,550,834; Nov. 29.
Door closer. F. Hensel. 1,550,83
Door, Colling. W. C. Grant, E. J. Thomas, and G. W. Drew. I, 621, 171, Mar. 22.
Door construction, Metal. E. V. Coulston. 1,623,334; Apr. 5.
Door construction, Refrigerator. R. A. Riek. 1,654,094; 70 construction, Refrigerator. R. A. Riek. 1,654,094; 70 construction, Refrigerator. R. A. Riek. 1,654,094; 70 construction mechanism. J. O. Neikirk. 1,634,081; 8ept. 20.
Door-control mesans. A. A. Nelson. 1,639,747; Aug. 23.
Door-control mesans. M. A. Nelson. 1,639,747; Aug. 23.
Door-control system. C. S. Klumpp. 1,636,746; July 26.
Door-control system. C. S. Klumpp. 1,636,746; July 26.
Door fastener. J. G. Miller. 1,624,964; Apr. 19.
Door fastener. J. A. Hicks. 1,647,226; Nov. 1.
Door fastener. A. Zukor. 1,636,947; July 26.
Door fastener. A. Zukor. 1,636,947; July 26.
Door fastening. H. Sakalian. 1,645,352; Oct. 11.
Door fastening. H. Sakalian. 1,645,352; Oct. 11.
Door, Fires. S. P. Smurr. 1,641,506; Sept. 6.
Door, Fireproof dry-kiln. D. D. Bundrick. 1,647,080; Door, Fireproof dry-kiln. D. D. Bundrick. 1,647,080; Door, Fording. L. C. Thorne. 1,628,764; May 3.
Door for cutonosed boxes. C. B. Counts. 1,619,784; Mar. 1,
Door for cottonseed boxes. C. B. Counts. 1,619,784; Mar. 1,
Door, Fireproof. C. C. R. Counts. 1,619,784; Mar. 1,
Door, Fireproof. C. G. Gilpin. 1,623,874; Apr. 5.
Doorframe anchor. H. Scarth. 1,642,715; Sept. 13.
Door, furnace. H. R. Welss. 1,636,763; May 17.
Door, Grain. E. Dugaw. 1,628,958; May 17.
Door, Grain. E. Dugaw. 1,628,958; May 17.
Door, Grain-car. C. I. Twedt and M. Hegg. 1,630,680; May 31.
Door, Grain-car. C. I. Twedt and M. Hegg. 1,630,680; May 31.
Door, Grain-car. C. I. Twedt and M. Hegg. 1,630,680; May 31.
Door, Grain-car. C. I. Twedt and M. Hegg. 1,630,680; May 31.
Door, Grain-car. R. B. Badura. 1,627,548; May 10.
                 May 31.

Door, Granary. B. S. Badura. 1,627,548; May 10.

Door guide. S. C. Evans. 1,654,163; Dec. 27.

Door handle. B. J. Goldsmith. 1,633,177; June 21.

Door handle. V. R. Shinkez. 1,634,342; July 5.

Door handle, Making. J. Goodman. 1,256,278; Apr. 26.

Door handle, Outside. F. B. Greene. Des. 73,256;

Aug. 16.

Door hanger. J. M. Crum. 1,647,610; Nov. 1.

Door hanger. R. W. Disbro. 1,650,435; Nov. 22.
           Aug. 10.
Door banger, I. M. Crum. 1,647,610; Nov. 1.
Door banger, R. W. Disbro. 1,650,435; Nov. 22.
Door hanger, G. H. Knight. 1,639,378; Aug. 16.
Door hanger, M. A. Possons. 1,640,250; Aug. 23.
Door hanger, C. T. Schneider. 1,647,976; Nov. 1.
Door banger and track structure. N. B. Shelly. 1,622,400;
Mar. 29.
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Mar. 29.

Door, Hatchway. G. W. Lyons. 1.647,836; Nov. 1.

Door holder. L. J. Gingras and A. St. Onge. 1,626,810; May 3.

Door holder. B. Hurd. 1,629,387; May 17.

Door holder. F. A. Letzau. 1,628,502; May 10.

Door holder. L. W. Williams. 1,633,202; June 21.

Door holder and check device, Combined. J. Deenhan. 1,621,674; Mar. 22.

Door holding attachment. H. L. Ferris. 1,636,468; July 13.

Door-holding device. S. Fronrath. 1,634.070; June 28 Door-holding device. C. B. Mitchell. 1,626.007; Apr. 26 A. R. Nicolai. 1,618,348; Feb. 22 Door, Hopper, R. Metcalf and M. Jones. 1,625,671; Apr. 19. Door, Irrigation. S. A. Carlsson. 1,633,395; June 21. Door Jamb, Adjustable. C. B. Ricken. 1,614,318; Jan. 11. Door knob. C. F. Rood. 1,630,032; May 24. Door-knob fastener. W. R. Schiage. 1,621,174; Mar. 15. Door knob or similar article. M. F. Camera. Des. 73,828; Nov. 15.

Door-knob spindle. W. C. Werst. 1,623,324; Apr. 5.

Door knob spindle. W. C. Werst. 1,623,324; Apr. 5.

Door knobs and automobile handles, Protector for glass and metal. G. Jones. 1,633,988; June 28.

Door knocker. M. Flekard. Des. 72,236; June 28.

Door knocker or similar article. B. L. S. Doggett. Des. 72,080; Feb. 22.

T2,080; Feb. 22.

T2,080; Feb. 22.

T4,242; Sept. 13.

Mat 23,111 device, Car. G. A. Hull. 1,626,834; Mat 23,111 device, Car. 73,429; N Door-latchin May 3. Door lock, Door lock, Door lock, Door lock, G. Diete. 1,613,023; Jan. 4. F. J. Dowling. 1,623,679; Apr. 5. S. Edelson. Des. 72,822; June 14. S. Edelson. 1,653,167; Dec. 20. J. P. Fredrick. 1,633,086; Aug. 16. W. H Hofman. 1,635,714; July 12. W. Marshall and F. Kiehler. 1,616,459; Door lock. C. Throne. 1894,2424; Nov. 15.
Door lock and electric switch. C. Norton. 1,649,484;
Nov. 162;
N Door mechanism, Oven's J. 1. Ruteau, Appl. Aug. 23.

Door, Metal. A. J. Connell and J. Cohen, 1,618,814; Feb. 22.

Door, Metal. E. H. Ellison and A. W. Beckstrom, 1,620,451; Mar. 8.

Door, Metalic car. A. S. Barrows, 1,636,891; July 26, Door, Metalic car. A. S. Barrows, 1,636,891; July 26, Door mortising machine. R. L. Carter. 1,621,061; Mar. 15. Door-mortising machine. R. L. Carter. 1,621,061; Mar. 15
Door mounting, Furnace-. D. S. Tewksbury and E. Newton. 1,631,840; June 7.
Door mounting, Oven. S. H. Hobson. 1,634,358; July 3.
Door opener. A. G. Rayburn. 1,617,864; Feb. 15.
Door opener, Electric. C. A. Martindale. 1,630,127; Mag 24. Door opener, Garage- M. J. Lewis. 1,653,862; Dec. 27. Door opener, Safety electric. P. A. Caron. 1,638,240; Aug. 9. Door opener, Safety electric. P. A. Caron. 1,638,240; Aug. 9.
Door opening and closing apparatus, Electric. L. A.
Philbin. 1,614,255; Jan. 11.
Door opening and closing mechanism. J. A. Crewes.
1,621,469; Mar. 15.
Door opening and closing mechanism, Sliding. N. C.
Tahleimer, 1,649,626; Nov. 15.
Door-opening device. W. G. Petersen. 1,634,233; Door-opening means, Garage. W. W. De Long. 1,617,796; Fcb. 15.

Door-opening mechanism. C. J. Carlisle. 1,622,088; Mar. 22.

Door operating and locking device, Car. R. S. Smith.

1.643.352; Sept. 27.

Door operating and sealing mechanism. G. Madland and
W. W. Darrow. 1.654.180; Dec. 27.

Door operating and supporting mechanism, Garage. J. P.

Fredrick. 1.641.160; Sept. 6.

Door-operating apparatus, Electrically-controlled. P. R.

Forman. 1,(22.3173; Apr. 5.

Door-operating apparatus, Emergency. F. Hedley and
1. S. Doyle. 1.652.623; Dec. 18.

1. S. Doyle. 1.652.623; Dec. 18.

Door-operating device, Automatic. J. Lemma. 1,654.334;

Dec. 27.

Door-operating device, Electromechanical. G. C. Webb. Door-operating device, Electromechanical. G. C. Webb. 1,642,317; Sept. 13. Door-operating device, Garage-. D. E. Green. 1,614,789; Jan. 18. Door-operating means. C. A. Connelly. 1,641,067; Aug. 50.

Door-operating means. T. Flemming, 1,639,130; Aug. 16.

Door-operating means. H. W. Shonnard. 1,649,989; Nov. 22.

Door-operating mechanism. F. P. Angell. 1,631,907; June 7,

Door-operating mechanism. A. Campbell. 1,615,796; Jan. 25.

Door-operating mechanism. P. R. Dobson. 1,650,332; Door-operating mechanism. T. M. Ferguson. 1,625,250; Door-operating mechanism. S. B. Haseltine. 1,631,127; Door-operating mechanism, ling. 1.646,025; Oct. 18. Door-operating mechanism. M. Johnsen and F. C. Hol-F. R. Lemon. June 14.
Door-operating mechanism.
July 12.
Door-operating mechanism.
Mar. 29. F. R. Lemon. 1.635,758: J. L. Quinn. 1,622,394; Door-operating mechanism. A. E. Thomas. 1,645,168; Oct. 11.

Dogroperating mechanism. R. C. Walter. 1,641,210; Sept. 6.

Sept. Door-operating mechanism. R. C. Walter. 1.641.210: Door, Oven. F. A. Gercich and J. B. Gardner. 1,652,008; Dec. 6.
Door, Oven. M. A. Possons. 1,642,285; Sept. 20.
Door panel. M. White. 1,632,719; June 14.
Door panel. Movable. H. P. Stevens. 1,627,579; May 10.
Door-pocket strap. W. S. Turner. 1,616,009; Feb. 1.
Door protector and gang board, Inside- C. B. Cannaday. 1,628,776; Apr. 5.
Door, Refrigerator. W. H. Whittier. 1,630,100; May 24.
Door, Serven. H. A. Hansen. 1,653,274; Dec. 20.
Door seal, Car. S. K. Wood. 1,653,079; Dec. 20.
Door seal, Car. S. K. Wood. 1,653,079; Dec. 20.
Door searly means. Gar. T. J. Novak and F. J.
Door, Service. A. R. Rossman. 1,626,157; Apr. 26.
Door shaft-operating means. Dump. A. Campbell. 1,617,576; Feb. 15.
Door, Steel. A. Washberg and W. W. Darrow. 1,627,216;
May 3.
Doors D. K. Krochling. 1,616,265; Feb. 1. May 3.

Doorstop, C. C. Read. 1,634.886; July 5.

Doorstop, A. McKenbaher, 1,616.285; Feb. 1.

Doorstop, A. McKenbaher, 1,616.80; Jan. 11.

Door stop and catch device, Combination. S. B. Haseltine, 1,640,035; Aug. 23.

Door stop and holder. W. P. Doolittle. 1,645,186; Oct. 11. Oct. 11.

Door structure, J. H. Rowley. 1,624.760; Apr. 12.

Door structure, Furnace. A. S. McCleave. 1,645,764;
Oct. 18.

Door supporting and raising means. A. Campbell. 1,615,797; Jan. 25.

Door, Vehicle-operated garage. H. H. Wolff. 1,613,973;
Jan. 11. Door window finish-strip assembly. W. Marshall. 1.630.534: May 31. Door, Wooden panel. J. C. De Penning. 1,635.466; Marshall. July 12.

Doors and other movable elements, Lock hinge for. A.

F. Walters. Rel6,671; July 12.

Doors and the like, Adjusting device for. L. G. Prisley.

1,637,655; Aug. 2.

Doors and windows, Hinge for. K. Klohn. 1,614,071;

Doors. A. Tuberstie. Dollar, Airformatic catch for garage. F. M. Brown. 1.614,868; Jan. 18.
Doors, Auxiliary fastener for. P. Belvin. 1635,920; July 12.
Doors, Control mechanism for. E. B. Smith. 1,646,460; Oct. 25. Oct. 25

Doors, Control mechanism for motor-actuated. F. Hedley and J. S. Doyle. 1.634.665; July 5. Doyle. 1.634.665; July 5. Doors. Control system for coiling. J. F. Winn. jr. 1.649.797; Nov. 15. Doors. Device for Lagonary of the fitting and banging of. Doors. Device for opening and closing garage. E. S. Hall. 1.631.698; Dec. 6. Doors. Device for opening and closing garage. E. S. Hall. 1.631.698; Dec. 6. Doors. Draft and rain excluder attachment for. R. Baskinn. 1.630.821; May 31.

Doors. Electric interlock for elevator. R. S. Peelle. Doors. Electromechanical bar interlock for elevator. P. Lang. 1.615,090; Jan. 18.

Doors, Finger guard for foldable bus. C. J. Kuhu. 1,626,844; May 3. Doors, gates, etc., Bolt for. D. Booth. 1,646,136; Oct. 18. 18.
Doors, Hinge construction for. W. Marshall. 1,854,426;
Dec. 27.
Dors, Hinge for. C. V. Hill. 1,627,329; May 3.
Doors, Latch device for refrigerator. T. O. Schrader. 1,625,12; Sept. 13.
Doors, Lever-control bolt for. J. Pokorney. 1,628,478;
May 10. May 10.

Doors, Lock for elevator. C. J. Anderson. 1,615,607;
Jan. 25.

Doors, Lock for hotel-guest-room. E. S. B. Smith. 1,63,313; Sept. 13.

Doors, Lock for hotel-guest-room. E. S. B. Smith. 1,63,313; Sept. 13.

Doors, Means for excluding draughts from under. W. Scott and S. D. Marjoribanks. 1,643,132; Sept. 20.

Doors of railway coaches, System for operating the exit and the state of the s Doors, Lock for elevator. C. J. Anderson. 1,615,607; Jan. 25. May 31.
 Double-throw switch.
 M. Guett.
 1,634.185;
 June 28.
 Double-wall conductor pipe.
 C. J. Holub.
 1,652.827;
 Double wrench.
 M. J. Tully.
 1,629.886;
 May 24.
 Doubling and twisting machines, Attachment for silk.
 M. Kieffer.
 1,623.685;
 Apr. 5.
 Douche means.
 A. Bouchery.
 1,652.889;
 Dec. 13.
 Dough-conditioning machine.
 A. Benz.
 Jr.
 1,643.366; Dough-cond Sept. 27 Sept. 27.
Dough cutter. W. W. Stauffer. 1,618,685; Feb. 22.
Dough-depositing machine. A. W. Copland. 1,624,316;
Apr. 12.
Dough divider, Coffee ring. A. Oertel. 1,629,295;
May 17. May 17.

Dough-dividing machine. C. Dorn. 1,619,104; Mar. 1.

Dough-forming machine. J. A. Cozzone. 1,653,036; Dec. 20.

Dough layer, Packaged unbaked. M. I. Byrnes. 1,642,804; Sept. 20.

Dough mixing and conditioning machine. F. X. and B. J. Lauterbur. 1,651,092; Nov. 29.

Dough molder. W. G. Kirchhoff. 1,620,559; Mar. 8.

Dough molder. F. H. Van Houten. 1,631,992; June 14.

Dough-molding machine. H. F. Johnson. 1,653,211; Dec. 20. Dough moulders, Extender attachment for. E. T. Parson. 1,642,563; Sept. 20.
Douehnut machine and the like. C. E. Carpenter. 1,641,118; Aug. 30.
Doughnut machine. Greaseless. J. A. Burrichter. 1,632,115; June 14. 1.622.115; June 14.

Dough, Producing commercial baking. D. S. Donovan and
J. R. Brown. 1,617.514; Feb. 15.

C. A. Gibbau. 1,649.144; Nov. 15, 1625.036; Apr. 19.

Dough-rolling machine. J. Kukis. 1,625.036; Apr. 19.

Dough-rolling machine. J. Kukis. 1,650.758; Nov. 29.

Dough ddle. R. H. Fish. 1,644.573; Oct. 4.

Dovetali on onstruction. Adjustable. E. E. Lundberg.

1,640.953; Aug. 30.

Dovetalling machine. B. A. Linderman. 1,651.897;

Dovctailing mechanism. R. L. Carter. 1,651.610;

Dec. 6. Dec. 6. Dec. 6.

Doweling machine. J. M. Myrdal. 1.624.274; Apr. 12.
Dowel indicator. J. T. Lipn. 1.635, 719; July 12.

Down indicator. J. T. Lipn. 1.635, 719; July 12.

Torif appliance. C. Daurberty. 1.628, 123; May 10.
Draft appliance. F. W. Fritchey. 1.648, 894; Nov. 15.
Draft appliance. W. Hagedorn. 1, 1628, 721; May 17.
Draft appliance. W. Hagedorn. 1, 1628, 721; May 17.
Nov. 8.

Nov. 8.

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Draft appliance, Railway. W. J. Regan. 1,648,325; Nov. 8.

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Nov. 8.

Nov. 9.

Nov. 1,622,762; Mar. 29.

Norft control. C. M. Norberg. 1,622,762; Mar. 29.

Norft controler, Hydraulic. W. L. Morris. 1,645,713; Oct. 18.

Norft coupling. J. Burbach. 1,637,854; Aug. 2.

Norft coupling. J. Burbach. 1,637,854; Aug. 2.

Norft coupling. G. Strandlund. 1,653,877; Dec. 27.

Norft coupliager. G. Strandlund. 1,653,877; Dec. 27.

Norft coupliager. H. Chilcoat. 1,613,085; Jan. 4.

Norft coupliager. L. Rusconl. 1,647,888; Nov. 1.

Norft coupliager. A. E., E., and J. Schruth. 1,64,768; Oct. 25.

Norft coupliager. J. Wurzer. 1,668,083; Nov. 29.

Draft coupliager. J. Wurzer. 1,663,083; Nov. 29.

Draft coupliager. J. Wurzer. 1,648,088; Nov. 29.

Draft gauge. L. M. Ellison. 1,616,633; Feb. 1.

Draft gauge, Multiple. L. M. Ellison. 1,612,838; Jan. 4.

Draft regulator. C. Prichard. 1,628,428; May 10.

Parft regulator. C. Prichard. 1,628,428; May 10.

Parft regulator. C. Prichard. 1,628,428; May 10.

Parft regulator, Chimney. J. Subert. 1,633,687; June 28.
                  Draft appliance, Railway. W. J. Regan. 1,648,325;
      Drutt regulator, Altomatic. J. L. Breese, Jr. 1,623,687;
May 171 equilator, Chimney-. J. Subert. 1,633,687;
Draft rigging. D. S. Barrows. 1,637,098; July 26.
Draft rigging. D. S. Barrows. 1,650,974; Nov. 29.
Draft rigging. B. W. Kadel. 1,643,4388; July 5.
Draft rigging. B. W. Kadel. 1,643,438; July 5.
Draft rigging. B. W. Kadel. 1,634,366; July 5.
Draft rigging. R. T. Kaapp. 1,944,1087; Aug. 16.
Draft rigging. R. T. Kaapp. 1,944,087; Aug. 16.
Draft rigging. R. T. Kaapp. 1,944,087; Aug. 16.
Draft roke. E. George, Jr. 1,648,339; Nov. 8.
Draft roke. M. Geonway, Jr. 1,628,170; May 10.
Draft pokes, Manufacturing. B. W. Kadel. 1,633,670;
June 28.
Drafting and lay-out instrument. G. L. Terna. 1,618,788;
Feb. 22.
Drafting device. J. O. Fortin. 1,633,628; June 28.
            Dratting and my-duc instructions for the Lagrangian of the Lagrang
Drafting instrument. J. C. Beem. 1,632,267; June 14. Drafting instrument. G. A. Haederer. 1,650,269; Nov. 22.
Nov. 23.
Nov. 23.
Nov. 24.
Nov. 25.
Nov. 25.
Nov. 26.
Nov. 26.
Nov. 27.
N
            Drain of May 31.
      Drain device, Automatic. A. L. Mitchell. 1,630,628; May 31.
Drain flushers, Faucet connection for. J. H. Laney. 1,647,804; Nov. 1.
1.621,251; Mar. 15.
Drain protector. C. Burkelman. 1,651,321; Nov. 29.
Drain trap. C. W. Anderson. 1,634,530; July 5.
Drain trap. G. D. Casper. Rel.67,52; Oct. 4.
Drain trap. D. Morris. 1,225,561; Apr. 19.
Drain trap. Morris. 1,225,561; Apr. 19.
Drain trap. N. Morris. 1,225,561; Apr. 19.
Drain trap. N. Morris. 1,225,561; Apr. 19.
Drain control of the state of the st
                  Drawbar reverse lock. V. H. Jackson. 1,624,501; Drawbar support, Antifriction. E. E. Duffy. 1,628,356; May 10.
Drawbridge. T. E. Brown. 1,618,267; Feb. 22.
Draw works. M. B. Davis. 1,642,230; Sept. 13.
Draw works, Rotary. L. H. Keim and R. E. Kline. 1,628,847; May 17.
Draw works with cooling apparatus. E. Timbs. 1,613,680; Jan. 11.
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Drawer guide. W. Conwell and C. Mahoney. 1,622,422;
Mar. 23.
Drawer pull. N. V. D. Brock. Des. 71,901; Jan. 25.
Drawer pull. E. Burton. Des. 73,640; Oct. 18.
Drawer pull. E. Burton. Des. 73,640; Oct. 18.
Drawer pull. E. L. Knapp. Des. 72,798; June 7.
Drawer pull. E. L. Knapp. Des. 72,798; June 7.
Drawer pull. M. H. Rosenthal. Des. 72,725; May 24.
Drawer gull and latch. O. A. Jacobson. 1,650,636; Drawer stop. A. Pilla. 1,623,634; Apr. 26.
Drawer support, Extension. C. S. Moore. 1,640,664; Aug. 30.
Drawing and Spinning machine. L. P. Frieder, P. S.
Huntley, and J. W. Hollas. 1,614,465; Jan. 18.
Drawing apparatus. P. L. Ormischen. 1,622,229; Mar. 22.
Drawing demonstrator, Mechanical. R. F. Ashbrook. 1,639,448; Aug. 16.
Drawing dies or stones, Machine for drilling. S. Loewen. 1,639,448; Aug. 16.
Drawing dies or stones, Machine for drilling. S. Loewen. 1,629,839; May 24.
Drawing instrument. G. Bennett. 1,651,504; Dec. 6.
Drawing instrument. C. Bennett. 1,651,504; Dec. 6.
Drawing instrument. T. F. McCaffery, fr. 1,619,427; Mar. 1.
Drawing instrument. T. F. McCaffery, fr. 1,619,427; Mar. 1.
Drawing instrument. Self-adjusting. J. M. Angeletti. 1,633,303; June 28.
Drawing machine. G. Gillesple. 1,617,632; Feb. 18.
Drawing machine. G. Gillesple. 1,617,632; Feb. 18.
Drawing machine. G. Gillesple. 1,627,632; Peb. 15.
Drawing press. F. J. Rode. 1,635,681; Aug. 16.
Drawing Reproducing. A. H. Adams. 1,651,011; Nov. 29.
Drawing langer and press. P. J. Rode. 1,635,045; Nov. 29.
Drawing breather. D. Honfeld 1,632,662; June 14.
Drawings, Apparatus for producing animated. E. Hurd. 1.633.547; June 21.
Drawings, Reproducing. A. H. Adams. 1,651.011; Nov. 29.
Dredge sluice jig. D. Steel. 1,651.046; Nov. 29.
Dredge sluice jig. D. Steel. 1,651.046; Nov. 29.
Dredge of the producing. H. O. Bedgood. 1,632.602; June 14.
Dredging, M. A. Xuille. 1,636.205; July 19.
Dredging machine. V. F. Casey. 1,619.550; Mar, 8.
Dredging pipes, Coupling sleeve for. N. C. Bray. 1,629.302; May 10.
Dress, K. E. Burns. Des. 73.897; Nov. 15.
Dress, K. E. Burns. Des. 73.897; Nov. 29.
Dress. K. E. Burns. Des. 74.094; Dec. 20.
Dress. T. Davis. Des. 72.309; Mar. 29.
Dress. T. Davis. Des. 73.001; July 5.
Dress. R. Lemoine. Des. 78.001; July 5.
Dress. R. Lemoine. Des. 78.001; July 5.
Dress. M. Siegel. Des. 72.01; July 19.
Dress. M. Siegel. Des. 72.01; Apr. 19.
Dress. M. Siegel. Des. 72.511; Apr. 26.
Dress. M. Siegel. Des. 72.532; June 21.
Dress. J. C. Worth. Des. 72.323; June 21.
Dress. Advanced J. M. Carnerball. 144.0470; Nov. 15.
Dress and apron, Combination. R. Voorsanger. 1,647,385; Nov. 1.

Dress, Pantaloon. P. M. Crane. 1,626,024; Apr. 26.
Dress pattern. T. McCampbell. 1,649,479; Nov. 15.
Dress Reversible. B. H. Dryer. 1,630,838; May 31.
Dress Reversible. B. H. Dryer. 1,630,838; May 31.
Dressing carrier. B. C. Anderson. 1,614,585; Jan. 18.
Dressing wheel. A. P. Slade. 1,646,501; Oct. 25.
Dressing wheel. A. P. Slade. 1,646,501; Oct. 27.
Clothes drier.
Clothes drier.
Clothe drier.
Cover drier.
Cover drier.
Cover drier.
Cover drier.
Cover drier.
Drier. G. C. Chapman. 1,645,738; Oct. 18.
Drier. C. J. Crane. 1,648,440; Nov. 8.
Drier. J. A. Dole. 1,618,176; Feb. 22.
Drier. G. Komarek. 1,648,243; Septing. 5.
Drier. G. Oppenhauser. 1,629,221; Mar. 29.
Drier. J. Roberts. 1,646,259; Oct. 18.
Drier. J. Schuman and B. E. Frank. 1,620,577; Mar. 8.
Drier. W. Stricker. 1,642,223; Oct. 18.
Drier. Oxoveyer for a W. M. Schwartz. 1,615,237; Jan. 25.
Drier and cleaner, Grain. J. H. Woodward. 1,645,568;
        Jun. 20. Drier and cleaner, Grain. J. H. Woodward. 1,645,568; Oct. 18. Drier felt, Asbestos. E. v. Asten. 1,638,721; Aug. 9. Drier felt, Handle and other strip material, Rack. A. O. Hurxthal, 1,624,763; Apr. 12. Drier for sheet material. A. J. Vance. 1,632,750; June 14.
        Drier for tubular fabrics. M. M. Kasanof. 1,647.449;
Nov. 1.
Drier or dehydrating plant. F. F. Knipschild. 1,645,760;
Oct. 18.
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Driers, Air baffle for. F. Kershaw and A. O. Hurxthal. 1,642,446; Sept. 13. Driers, Condensation remover for steam-heated. J. Young. 1,640,019; Aug. 23. Driers, Girt for loop. A. O. Hurxthal. 1,613,460; Jan. 4. Driers, beaters, or the like, Seal for. R. R. Jones. 1,633,548; June 21. Driers, Recovering soluble matter from air currents in. Driers. Recovering soluble matter from air currents in. Driers. Stream-circularies. Feb. 1. Polity. 1,643,972-3; Oct. 4. System for. J. O. Woodsome. 1,643,972-3; Oct. 4. Schmidt. 1,628,918; May 17. Drill: See—
 11.
19.
g. 1,644,142 ;
   Oct. 4.

Orill-bit-blade construction. G. B. Sipe. 1,647,669; Nov. 1.

Drill bit, Reamer. A. D. Alford. 1,631,449; June 7.

Drill bit, Rock. W. J. Kirby. 1,627,909; May 10.

Drill bit, Rotary. L. C. Black. 1,621,921; Mar. 22.

Drill blades, Manufacturing thin. H. W. Pleister. 1,628,634; May 17. Swartz. 1,617,554; Feb. 15.

Drill blades, W. Cary. 1,620,440; Mar. 8.

Drill-collar, Protector. P. McLaren. 1,613,039; Jan. 4.

Drill collar, Releasable. T. A. Creighton. 1,621,683; Mar. 2.
    Mar. 22.
Drill connection, Rotary. M. C. Risher. 1,650,301;
Nov. 22.
 Nov. 22.

Nov. 22.

Drill cutter. F. L. Scott and L. H. Wellensiek. 1.647,758; Nov. 1.

Drill heads, Lubricating system for. D. C. Klausmeyer. 1.655,576; Dec. 20.

Drill-heating furnace. H. K. Fox. 1.628,964; May 17.

Drill holder. R. M. Galloway, W. F. Bockhoff, and J. M. Meloy. 1,645,948; Oct. 18.

Drill holder. F. J. Peters. 1,631,286; June 7.

Drill holder, Bock. W. H. and J. H. Goodland. 1,636,934; July 26.

Drill holder, Swivel-head. J. V. Nelson. 1,623,747; Drill mechanism. J. W. Doyle. 1,630,628; May 31.

Drill orboring machine, Coal. W. J. Thomas. 1,626,568; Apr. 26.

Drill pipe, Collapsible. D. J. Scott. 1,635,289; July 12.

Drill pipes in well-boring apparatus, Slips for supporting. B. C. Pearson and J. Childs. 1,645,750; Sept. 27.

Drill-rod device, Antislip. L. Orwig. 1,620,913; Mar. 15.
   15, Drill set. L. R. Hupp. 1,643,378; Sept. 27.
Drill set. S. P., Shell. 1,653,786; Dec. 27.
Drill socket. W. Käsmaler. 1,634,716; July 5.
Drill spindles, Brake mechanism for. D. C. Klausmeyer. 1,634,149; June 28.
Drill-steel centraliser. C. C. Hansen. 1,614,123; Jan. 11.
Drill-steel centraliser. G. M. Nell and W. G. Kale.
   Drill-steel retainer. G. M. Nell and W. G. Kale.
1.637,912; Aug. 2.
Drill-steel retainer. A. H. Skaer. 1,613,139; Jan. 4.
Drill-steel-retaining device. C. A. Hultquist. 1,647,628;
    Nov. 1. Retailing device. A. Hurquist. 1,641,626; Drill steels, Centralizer for. J. F. Mock. 1,644,026; Oct. 4. Drill-stem clamp. G. R. Livergood. 1,637,383; Aug. 2. Drill-supporting structure. J. E. Shaw. 1,629,745; May 24.
May 24.

1.020 848; Mar. 15.

Drilling and countersinking tool. M.

1.020 848; Mar. 15.

Drilling and the like, Apparatus for.

1.623.250; Apr. 5.

Drilling apparatus. M. A. Baker. 1.623.0

Drilling apparatus. I. S. Boyd. 1.613.5'

Drilling apparatus. F. F. Davis. 1,628.0

Drilling apparatus. F. A. Halleck. 1,627.0

Drilling apparatus. E. C. Morgan. 1,624.22

Drilling apparatus. W. Sheldon. 1,634.08

Drilling apparatus. Deep-well. C. E. Re

Drilling apparatus. Deep-well. C. E. Re
                                                                                                                                                                                                                              M. B. Wilder.
                                                                                                                                                                                                                                            C. D. King.
                                                                                                             5.
M. A. Baker. 1.623.084; Apr. 5.
L. S. Boyd. 1.613.555; Jan. 4.
F. F. Davis. 1.622.033; May 10.
F. A. Halleck. 1.627.539; May 3.
N. Madson. 1.627.291; May 3.
E. C. Morgan. 1.649.911; Nov. 22.
W. Sheldon. 1.634.087; June 28.
E. Whinnen. 1.649.998; Nov. 22.
Deep-well. C. E. Red. 1,636.667;
    July 19.
Drilling apparatus, Deep-well-, C. E. Reed. 1,649,858;
Nov. 22.
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Drilling apparatus, Deep-well rotary. C. E. Reed. 1.642,463; Sept. 13. Deep-well rotary. E. A. Reed. Drilling apparatus, Deep-well rotary. E. A. Reed. Drilling apparatus for deep wells, Rotary. C. E. Reed. 1.653,629; Dec. 27. Drilling apparatus, Flexible pipe slip for. F. J. O'Brien. 1.657,620; July 26. Drilling apparatus, Gil-well. W. Sheldon. 1.621,689; Drilling apparatus, Gil-well. W. Sheldon. 1.621,689; Drilling apparatus, Rotary deep-well. C. E. Reed. Mar. 22. Drilling apparatus, 1,636,664; July 19. Drilling apparatus, July 5. Rotary deep-well-, C. E. Reed. Prilling apparatus, Well. W. Sheldon, 1,634,917; Drilling apparatus, Well. E. Smith, 1,641,206; Sept. 6. Drilling bit. G. B. Louderback, 1,615,547; Jan. 25. Drilling bit. W. W. Mills. 1,643,962; Oct. 18. Drilling bit. W. W. Mills. 1,645,962; Oct. 18. Drilling bit, Rotary, W. T. Woods, 1,615,261; Jan. 25. Drilling clamp, Wire-line. C. Gartling, 1,634,869; July 5. Drilling clamp, Wire-line. C. S. Wright, 1,621,616; Mars 22. Drilling concrete, etc., Tool for, A. W. Machlet, 1,629,581; May 24. Drilling, core bit and plug for. W. L. Acker, 1,642,572; Sept. 13. Drilling cutter and bearing therefor, Well. C. E. Reed, 1,636,663; July 19. Drilling cutter and bearing therefor, Well. C. E. Reed, 1,636,663; July 19. Drilling device. C. Wolkerstorfer, 1,618,900; Feb. 22. Drilling device. C. Wolkerstorfer, 1,618,900; Feb. 22. Drilling device. C. Wolkerstorfer, 1,628,865; Mar. Well-, W. Sheldon, 1.634.917: 15.

Drilling device, Wire-cable well-, F. F. Davis.
1,621,191; Mar. 15.

Drilling, filling, and sealing hollow bodies, Device for.
R. Siegert. 1,643,260; Sept. 20.

Drilling and, Making. F. Arbon. 1,637,511; Aug. 2.

Drilling machine. G. H. Gilman. 1,632,401; June 14.

Drilling machine. G. H. Gilman. 1,632,401; June 14.

Drilling machine. G. H. Gilman. 1,635,475; July 12.

Drilling machine. G. H. Gilman. 1,635,475; July 12.

Drilling machine. G. H. Gilman. 1,644,2444; Sept. 20.

Drilling machine G. H. Gilman. 1,644,120; Oct. 4.

Drilling machine and the like. A. M. Johnson. 1,617,910;

Feb. 15. Drilling machine, Automatic. E. Feb. 15.
Drilling machine, Automatic. E. J.
1,652,247; Dec. 13.
Drilling machine, Electric. M. H. Nesbitt. 1,652,833;
Drilling machine, Electric. M. H. Nesbitt. 1,652,833;
Dric. 13.
Dric. 13.
Rotary. J. Dec. 18 machine, Multiple-spindle. E. P. Bullard. fr. Drilling 703, July 12. Drilling machine of well-boring apparatus, Rotary- J. Childs. 1,628,032; May 10. Drilling machine or drilling rig. L. A. Krupp. 1,649,239; Nov. 15. Nov. 15.

Pulling machine, Radial. G. Feather. 1,631,256;
June 7.

Pulling machine, Rotary. H. M. Harris and O. H.

Attridge. 1,622,363; May 10.

Pulling machine, Well. G. L. Lane and W. E. Sykes.

1,621,636; Mar. 22.

Pulling mechanism. G. G. Gartin. 1,653,268; Dec. 20.

Pulling mechanism. T. R. E. Rundqvitt. 1,654,514;

Pulling mechanism. T. R. F. Rundqvitt. 1,654,514;

Pulling mechanism. H. Tardiff. 1,653,240; Dec. 20. Drilling mechanism. H. Tardiff. 1,653.240; Dec. 20.
Drilling mechanism. H. Tardiff. 1,653.240; Dec. 20.
Drilling mechanism, Holder for. E. C. Holmes.
1,663,683; June 7.
Drilling mechanism, Rock. E. G. Gartin. 1,651,199;
Nov. 29.
Drilling mechanism. Rock. C. F. Osgood. 1,641,451; Nov. 29.
Drilling mechanism, Rock. C. F. Osgood. 1,641,451;
Sept. 6. Sepf. 6.

Drilling or chiseling away rock, Device for. K. P. zu
Löwenstein. 1,622,896; Mar. 29.

Drilling rigs, Well. G. P. Gephart. 1,636,631; July 19.

Drilling rigs, Crank for. E. E. Greve. 1,621,665; Mar. 22.

Drilling stores. Elevator for oli-well. K. D. Neely.

The stores of Drilling wells, Rotary bit for. A. Stewart. 1,637.594; Aug. 2.

Drills, Attachment for track. M. Schroyer. 1,613,809;
Jan. 11.

Drills, Chuck for rock. L. C. Bayles. 1,649,651; Nov. 15.

Drills, Combined washer and shield for. H. W. Fletcher. 1,641,261; Sept. 6.

161,666; Feb. 8.

Drills, Front head for percussive. E. Penberthy. 1,632,921; June 21.

Drills, Handle for rock. W. Prellwitz. 1,644,030; Oct. 4.

Drills, Making tubular. J. T. Wright. 1,651,795; Dec. 6.

Drills, Making tubular. G. Schmarine. C. C. Hansen. 114,656,660

Drills, Operating track. E. J. Honl. 1,634,943; July 5.

Drills, Portable mounting for electric. C. A. Mowles 1,630,205; May 24.
Drills, Press-wheel boxing for grain. A. M. Strecker. 1,624,022; Apr. 12.
Drills, Reversing mechanism for electric. R. A. Norling. 1,632,671; June 14.
Drills, Rotation mechanism for rock. C. C. Hansen. 1,633,526; June 21.
Drills, Tractor hitch for. H. B. Bozard. 1,636,802; July 20.
Drills, Tractor hitch for. H. B. Bozard. 1,636,802; July 20.
Drills, Tractor hitch for. H. B. Bozard. 1,636,802; July 20.
Drills, Tractor hitch for. H. B. Bozard. 1,636,802; July 20.
Drills, Grispenser. H. C. Smith, 1,639,619; Aug. 16.
Drink-dispensing machine. J. H. McLellan. 1,634,036; June 28.
Drink mixer. C. M. Ball, jr. 1,633,470; June 21. June 28.

June 2 Drinking fountain. H. W. Taylor. 1,624,081; Apr. 12. Drinking fountain. H. W. Taylor. 1.635,446; July 12. Drinking fountain, Automatic. O. C. White. 1,653,525; Dec. 20. Dec. 20.

Drinking fountain, Inclined-nozzle. F. Mueller and A. C. Schuermann. 1,630,206; May 24.

Drinking fountains. Cooling device for. C. W. Carter 1,642,228; Sept. 13.

Drinking glass. R. I. Ratner. Des. 72,188; Mar. 8.

Drinking glass. O. Thesen. 1,651,485; Dec. 6. Drinking glass. O. Thesen. 1,651,485; Dec. 6. Drinking glass. W. Bpicer. 1,615,485; Feb. 15.

Dripping level. W. Bpicer. 1,617,638; Feb. 15.

Dripping larm. H. L., and A. Pierce. 1,615,647; Jan. 25. Drive not pulse. W. J. Rappley. 1,631,889; June 7. Drive rof rolling his. A. Drender, C. W. Spicer. 1,617,988; Feb. 15. Drip-pan alarm. H. L., and A. Pierce. 1,615,647; Jan. 25. Drip sheet. T. M. Taylor. 1,630,639; May 31. Drip went, Circulating. A. Buss. 1,619,238; Mar. 1. Drive gate, Automatic. J. Landis. 1,624,256; Apr. 1. Drive gate, Automatic. J. Landis. 1,624,256; Apr. 1. Drive mechanism, Friction. A. A. Dennis. 1,629,452; May 17. Drive-shaft puller. W. J. Rappley. 1,631,889; June 7. Drive-shaft puller. W. J. Rappley. 1,631,889; June 7. Driver for driving thin-walled dowels into railway sleepers. M. Ruping. 1,615,889; Feb. 22. Drovs. 22. decontrolling mechanism. J. Derry. 1,650,197; Driving bit. J. S. Peistel. 1,220,520. J. Driving bit. J. S. Peistel. 1,220,520. J Driving and controlling mechanism. J. Derry. 1,600,197; Nov. 22.

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Nov. 27. Jan. 11. Driving mechanism. R. L. Lee. 1,649,962; Nov. 22. Driving mechanism and method. T. A. Bryson. 1,638,239; Aug. 9. Driving mechanism, Friction. C. McPherson. 1,647,412; Nov. 1. Drum, Sheet-metal. C. H. Draper. 1,649,292; Nov. 15.

Drum, Shipping. H. E. McCrery. 1,643,252; Sept. 20. Drum, Snare. C. H. Strupe. 1,638,106; Aug. 9. Drum-snare-adjusting means. H. A. Hiers. 1,615,69 Jan. 25. Drum, Shipping, H. E. McCrery, 1,643,252; Sept. 20. Drum, Snare. C. H. Strupe, 1,631,100; Aug. 9. Drum-snare. adjusting means. H. A. Hiers. 1,615,699; Jan. 25. Drum-supporting device. W. D. Gladstone. 1,630,701; Drum trap. R. Wensley. 1,631,446; June 7. Drums, Cymbal holder for. B. C. Streeper. 1,641,558; Sept. 6. Drums, sleeves, and the like, Adjustable bearing mechanism for. G. R. Tanffe. 1,635,797; June 28. Drums, sleeves, and the like, Adjustable bearing mechanism for. G. R. Tanffe. 1,635,797; June 28. Dry battery. H. M. R. Dam. 1,613,685-6; Jan. 4. Dry battery. E. J. Reich. 1,640,617; Jan. 20. Dry cell. C. G. Birdail. 1,641,524; Sept. 6. Dry cell. G. G. Birdail. 1,641,524; Sept. 6. Dry cell. G. G. Birdail. 1,641,524; Jan. 4. Dry cell. F. H. Clrves. 1,631,262; June 7. Dry cell. W. F. Hendry. 1,644,017; Oct. 4. Dry cell. W. F. Hendry. 1,644,017; Oct. 4. Dry cell. H. de Olaneta. 1,623,719; Apr. 5. Dry cell. V. Yingwo. 1,624,727; Dec. 27. Dry cell. V. Yingwo. 1,634,004; June 28. Dry cell and electrode therefor. G. W. Helse, H. H. Thompson, and N. K. Chaney. 1,624,409; Apr. 12. Dry cells, Lining for. C. P. Deibel. 1,634,038; Dac. 27. Dry cells, Lining for. C. P. Deibel. 1,634,038; Dac. 27. Dry cells, Lining for. C. P. Deibel. 1,634,038; Dac. 27. Dry cells, Lining for. C. P. Deibel. 1,634,047; Jun. 28. Dry cells, Lining for. C. P. Deibel. 1,634,047; Jun. 29. Dry cells, Lining for. C. P. Deibel. 1,634,047; Jun. 29. Dry cells, Lining for. C. P. Deibel. 1,634,047; Ju Aug. 9. 1,615,699; like, Apparatus for the. F. Dewhurst. 1,653,761; Dec. 27.
Drying and storing dried material preparatory to processors, Method; of and apparatus for. W. F. Hosford. Storing material. Method of and apparatus for. A. B. Brown. 1,625,461; Jap. 19.
Drying and storing material. Method of and apparatus for. A. B. Brown. 1,625,461; Jap. 19.
Drying apparatus. J. L. Buckley. 1,618,913; Feb. 22.
Drying apparatus. G. W. Christoph. 1,623,691; May 31.
Drying apparatus. B. B. Chiel. 1,643,665; Sept. 20.
Drying apparatus. B. Chiel. 1,643,665; Sept. 20.
Drying apparatus. F. Head. 1,631,483; June 7.
Drying apparatus. S. C. Hunt. 1,623,543; Jan. 11.
Drying apparatus. E. C. Reader. 1,639,942; May 24.
Drying apparatus. F. A. Secord. 1,621,855; Mar. 22.
Drying apparatus. E. H. Zeun. 1,629,942; May 24.
Zeun. 1,629,943; May 24.
Drying apparatus. L. H. Zeun. 1,629,842; May 24.
Drying apparatus. 1,625,876; July 12.
Drying apparatus. Apparatus for. T. W. W. Forrest. Drying apparatus, Rotary. H. A. Marston. 1,649,839; Nov. 22.
Drying berries, Apparatus for. T. W. W. Forrest. 1,632,180; June 14.
1,632,180; June 14.
1,632,180; June 14.
1,632,180; June 14.
1,634,181; June 14.
Drying gases, Method and agent for. W. Müller. 1,644,439; Cat.
1,644,439; Oct. 4.
Drying hay or other products, Apparatus for. C. J.
Tucker and L. J. Chapman. 1,642,469; Sept. 13.
Drying machine. C. F. Gregg. 1,652,276; Dec. 13.
Drying machine. J. Morshead and H. H. Wigglesworth. 1,620,262; May. 3.
Drying machine. S. A. Staege. 1,624,371; Apr. 12.
Drying machine. H. H. Wigglesworth. 1,627,529; May. 3.
Drying machine. H. H. Wigglesworth and W. P. Greiner.
Drying machine, Centrifugal. J. S. Gage. 1,636,177; July 19.
Drying machine, Centrifugal. W. H. Himes. 1,649,115; Nov. 15.

780 Drying machine, multiple-cylinder. G. Dod. 1,630,331; May 31.
May 31.
Drying material. J. E. Alexander. 1,645,366; Oct. 11.
Drying means a large superficial area, Imparting to. E. Smolczyk. 1,633,995; June 24.
Drying rack. M. W. McArdle. 1,632,032; June 14.
Drying rack. A. M. Wilson. 1,617,281; Feb. 8.
Drying system. Air. H. C. Cole. 1,632,032; June 14.
Drying system. Air. H. C. Cole. 1,032,931; July. 22.
Dulal-dired wheel. L. D. Kay. 1,640,635; Aug. 23.
Dumb-bell bolt. J. J. Williams. 1,618,619; Feb. 22.
Dump body. L. Fleetwood. 1,618,871; Feb. 22.
Dump body. J. C. Gay, R. E. Smith, and H. J. Quirk, 1,615,627; Jan. 25.
Dump body. C. L. Nein. 1,615,131; Jan. 18.
Dump bodies, Double-pivot support for. E. A. Dewald. 1,653,038; Dec. 20.
Dump-bottom extractor. E. J. Carroll. 1,633,570; June 28. Dumping apparatus, C. C. Avery. 1654.032; Due. 27. Dumping apparatus, C. C. Avery. 1654.032; Due. 27. Dumping apparatus, R. R. Raddatz, 1,615.404; Jan. 25. Dumping apparatus, R. Raddatz, 1,615.404; Jan. 25. Dumping apparatus, Ash-can. N. Selman and J. W. Young, 1,614.400; Jan. 11. Dumping apparatus, Elevating, E. R. Barrett, Dumping apparatus, Elevating, E. R. Barrett, Dumping apparatus, Elevating, E. R. Barrett, Dumping appliance, J. J. Dougherty, 1,621,462; Mar. 15. Dumping device. H. F. Flowers. 1,624,323; Apr. 12.
Dumping skip or hopper, Self-loading. B. Pederson.
1,616,466; Feb. 8.
Duplicating. D. Gestetner. 1,615,221; Jan. 25.
Duplicating. D. Gestetner. 1,650,868; Nov. 29.
Duplicating apparatus. E. Lichtenstein. 1,630,395;
May 31.
Duplicating apparatus. E. Lichtenstein. 1,651,924;
Dec. 6. Diec. G. Spiratus. D. Delication of the control of Sept. 13.
Dust arrester, G. A. Boesger, 1,621,824; Mar. 22.
Dust cap and lock nut, Combination. A. T. Christian, 1,627,480; May 3.
Dust cap and tire gauge, Combination. H. L. McPherson, 1,626,294; Apr. 26.
Dust-cap construction. A. E. Bronson, 1,627,374; May 3. Dust catcher, Centrifugal. C. G. Hawley. 1,622,644; Dust catcher, Centrifugal. C. G. Hawley. 1,622,644; Mar. 29.
Dust collector. R. F. Feind. 1,628,601; May 10.
Dust collector. A. F. Mangold. 1,626,852; May 3.
Dust collector. H. Miscampbell. 1,656,292; Nov. 22.
Dust-cytacting unit. A. H. Stebbins. 1,629,593; May 24.
Dust-cytacting unit. A. H. Stebbins. 1,629,593; May 24.
Dust-ged mechanism. Coal. E. S. Salyards. 1,645,932; Oct. 18.
Dust from and settling fur, hair, and the like material, Extracting. S. W. Howarth. 1,626,339; Apr. 26.
Dustmop cleaner. A. and A. D. W. Rado. 1,614,968; Jan. 18. Dustpan. W. P. Fries. 1,645,806; Oct. 18. Dustpan. W. C. Rice. 1,639,899; Aug. 23. Dust receiver. F. H. Willcox. 1,629,244; May 17. Dust-removing instrument, Eye. S. Genchy. 1,652,778; Dec. 13.

Dust separator, A. M. Goodloe. 1,649.220; Nov. 15.

Dust separator, Centrifugal. C. G. Hawley. 1,622,643; Dust separator, Centrifugal, C. G. Hawley. 1,622,643; Mar. 29.

Dust-settling machine. F. H. Campbell. 1,616,303; Feb. 1.

Duster, F. F. Dorsey. 1 633,076; June 21.

Duster, Flour. H. F. Tierike. 1,642,519; Sept. 13.

Dusting machine. P. W. Wilcox. 1,643,144; Sept. 20, Dusting machine. P. W. Wilcox. 1,643,144; Sept. 20, Dusting machine. P. W. Wilcox. 1,643,144; Sept. 20, 10,100, July 12.

Dye composition. J. M. Matthews. 1,630,624; May 31.

Dye composition containing soluble-cotton yellow. G. H.

Wenker. 1,647,162; Nov. 1.

Dye, Disazo. J. P. Penny. 1,647,145; Nov. 1.

Dye of diphenyl urea and chromotrope neid, Dlazo. R. J.

Ptether. 1,617,244; Peb. 8.

Dye solution. K. Lüttih. 1,635,628; July 12.

and A. Sautwell. 1,053,997; June 28.

June 3. Manufacture of vat. M. P. Schmidt. 1,625,826;

Author 3. Manufacture of vat. M. P. Schmidt. 1,625,826;

Dyestuffs of the anthraquinone series, Vat. A. Holl. 1,627,738; May 10.

Dyestuffs of the thioindigo series, Green blue to green vat. R. Herz and J. Müller. 1,623,410; Apr. 5.

Dyestuffs, Preparation of azo. W. Neelmeier and T. Nocken. 1,650,099; Nov. 22.

D. Oston. 1,650,099; Nov. 22.

D. Oston. 1,650,099; Nov. 22.

Dyestuff and making same, Greenish-yellow azo. H. Wagner and A. Funke. 1,644,003; Oct. 4.

Dyestuff and making same, Greenish-yellow azo. H. Wagner and A. Funke. 1,644,003; Oct. 4.

Dyestuff ard making same, Greenish-yellow azo. H. Wysen and making same and the state of the st June 14.

Dyestuffs, Brown substituted benzidine wool, W. Neelmeier, 1.646.793; Oct. 25.

Dyestuffs, Chromiable brown, disazo, W. Neelmeier, T. Nocken, and W. Rebner, 1.643.222; Sept. 20.

Nocken, and W. Rebner, 1.643.222; Sept. 20.

Straub, 1.626.169; Apr. 26.

Dyestuffs containing chromium and making same, Azo, H. Gubler, H. Stabel, and F. Straub, 1.623.065; Mar. 29.

Dyestuffs containing chromium and making the same. Dyestuffs containing chromium and making the same. Dyestuffs containing chromium and making the same. Dyestuffs, C. Sulphur black, O. Zeller and C. Waldman, 1.630.618; May 31.

Dyeling, W. Herzberg and H. Oblendorf, 1.640,657; Aus. 30. 1,630,818; May 31.

Dyeing, W. Herzberg and H. Ohlendorf. 1,640,657;

Aug. 30.

Dyeing, P. Rabe. 1,622,122; Mar. 22.

Dyeing, M. E. Tice. 1,652,649; Dec. 13.

Dyeing actyl cellulose or fabrics containing the same and new products for use therein. J. Baddliey, A. Shenberdson, H. Swann, J. Hill, and L. G. Lawrie. 1,616,103; Feb. 1. Dyeing acidyl celluloses. P. Rabe and W. Schepss. 1.645.450-1; Oct. 11.
Dyeing and oxidizing machine, J. C. McFalls. 1,619.263; Mar. 1. Dyeing and oxidizing machine. J. C. McFalls. 1,619,263;
Mar. 1.
Mar. 29.
Mar. 1.
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Mar. 1.
Mar. 1.
Mar. 29.
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Mar. 29.
Mar. 1.
Mar. 29.
Mar. 20.
M Mar. 29.

Dyeing machines, Paddle wheel for. A. S. Kobout.

1,648,771; Nov. 8.

Dyeing machines, Yarn rack for. J. H. Thompson.

1,614,410; Jan. 11.

Dyeing materials comprising cellulose acetate and products produced. G. H. Ellis. 1,618,415; Feb. 22.

One of the comprising cellulose acetate and products produced. G. H. Ellis. 1,618,415; Feb. 22.

Include the comprising cellulose acetate and products produced. G. H. Ellis. 1,618,415; Feb. 22.

Dyeing on the comprising cellulose acetate and prodproduced. For the complex cellulose acetate and products produced. The cellulose acetate acet 1.614,408; Jan. 11.

Dyeing on the fiber, Fast. T. Kircheisen. 1.646.296;
Oct. 18.

Oct. 18.

Taglian. 1.648,710: Nov. 15.

Dyeing or coloring of products made with cellulose accinte. G. H. Ellis. 1,618,413-14; Peb. 22.

Dyeing Piece. T. J. Bachofen. 1.644,461; Oct. 4.

Dyeing Pieces, Viscosci-filament. S. A. Neldich.

Dyeing skeins, Apparatus for. O. T. Dehle. 1,621,238;
Mar. 15. Dyeing textile materials. H. B. Smith. 1.623.709: Apr. 5. Dyeing warps. E. E. Carlson and L. A. Stead. 1,646,526; Oct. 25. Dyeings, Obtaining fast-colored discharges on fast. W Cotton. 1.638,475; Aug. 9.

Dyeings, Production of fast. F. Peterhauser. 1,645,925; Dyeings, Production or Rest. F. retermines Oct. 18.
Dyes and making same, Intermediate products for the Gubler, and O. Kaiser. 1,625,530; Apr. 19.
Dyes and making same, Intermediate products for the synthesis of azo. H. Fritzsche, E. Krummenacher, H. Gubler, and O. Kaiser. 1,625,531; Apr. 19.
Dyes and making same, Intermediate products for the synthesis of azo. H. Fritzsche, E. Krummenacher, H. Gubler, and O. Kaiser. 1,625,533; Apr. 199.
Dyes and manufacture, Tetrakisazo. J. B. Oesch. 1,615,551; Jan. 25.
Dyes, Black sulphurized naphthol. C. H. Marschalk. 1,641,182; Sept. 6.
Dyes, Black sulphurized naphthol. C. H. Marschalk. 1,641,182; Sept. 6. 1,641,182; Sept. 6.
Dyes, Making intermediate products for the manufacture of azo. H. Fritzsche, E. Krummenacher, H. Gubler, and O. Kaiser. 1,625,532; Apr. 19.
Dyes, Manufacturing. W. Penecke. 1,615,646; Jan. 25.
Dynamite, Lov-density. J. Marshall. 1,614,447; Jan. 11.
Dynamite magazine, Transportable. G. M. Norman. 1,625,491; Apr. 19.
Dynamo. J. G. Campbell. 1,634,770; July 5.
Dynamo. J. G. Campbell. H. T. Lang. 1,623,846;
Dynamo-Gettric machine. H. T. Lang. 1,623,846; Apr. 5.

Dynamo-electric machine, J. C. Lincoln. 1,618,962; Cdr. 1.631,143; Jufe 7.
Dynamometer, Fluid. J. Tracy. 1.642,095; Sept. 13.
Dynamometer gauge. T. H. Frost and P. Heymans. 1.623,238; Apr. 5.
Ear-corn cleaner. M. Bakker. 1.621,575; Mar. 22,
Ear phone. D. A. Reynolds. 1.630,028; May 24.
Earplece for sound receivers. H. Morser. 1.615,028;
Jnn. 18. Far protector, A. A. Thompson, 1,619,772; Mar. 1.
Ear protector, B. M. Walsh, 1,651,650; Dec. 6.
Ear protector, G. H. and V. E. Wiegand, 1,628,4
May 10. 1.628.483: Earring. R. Hahn. Des. 73,566; Oct. 4.

Ear-testing device. M. J. Haffey. 1,642,923; Sept. 20.

Earth-boring drill. C. E. Reed. 1,636,665-6; July 19.

Earth boring, Rotary for. E. E. Grove. 1,612,974;

Earth boring, Rotary 10t. B. b. b. 2014.

Barth, Compacting. C. N. Friz. 1,650,827; Nov. 29.

Earth-treating process. Fuller's. R. R. Rosenbaum.
1,649,193; Nov. 15.

Earth-working implement. J. B. Smith. 1,628,562;
May 10.

Earthen material to metal, Applying. F. S. McCullough.
1,615,022; Jan. 18.

Earthy material, Machine for treating. R. E. Bressler.
1,622,762; Mar. 29.

1,022,762; Mar. 29.

Easel. N. E. Harris. 1,637,255; July 26.

Easel. H. G. Huebner. 1,634,715; July 5.

Easel, Display. G. H. Ailes. 1,627,133; May 3.

Easel, Display. G. H. Ailes. 1,627,133; May 3.

Easel, Folding. P. O. Mattson. 1,625,904; Apr. 26.

Easel, Folding. Wire. E. Ramin. 1,648,243; Nov. 8.

Easel mount, Foldable. J. A. Cameron. 1,635,030;

Eastly 5.

Eastly 5.

Eastly 5.

Eastly 6.

Easel mount, Foldable. J. A. Cameron. 1,635,030;

Eastly 6.

Eastly 7.

Easel Sept. 20.

Baves-trough lehow, M. Rachlin. 1,642.556; Sept. 13.

Baves-trough hanger. C. G. Inman. 1,630.746; May 31.

Baves-trough hanger. F. C. Richner. 1,635.699; July 12.

Baves-trough hanger. S. Wilson. 1,639.854; July 12.

Baves-trough hanger. S. Wilson. 1,639.854; July 12.

Baves-trough hanger. S. Wilson. 1,639.864; July 24.

Bonite, Manufacturing porous bodies, disphragms, filters, and the like of. M. Wilderman. 1,651.667; Dune 74.

Bonite, Manufacturing porous bodies, disphragms, filters, and the like of. M. Wilderman. 1,651.667; June 74.

Bodie folder. W. M. Whelldon. 1,625.173; Apr. 19.

Edge folder. W. M. Whelldon. 1,625.173; Apr. 19.

Edge folder. W. M. Whelldon. 1,625.173; Apr. 19.

Edge tools and specifi composition of sited for same, Manufacturing. A. E. G. T. Von Vegesack. 1,644,097; Oct. 4. Oct. 4. dge-trimming machine. L. E. Topham.

1,616,715; Feb. 8.

Edger, G. S. Sergeant. 1,654,435; Dec. 27.

Edging machine. L. H. Fisher. 1,636,469; July 19.

Edging machine. L. H. Gaisman and C. Schumacher.

1,637,074; July 26.

1,637,074; July 28.

Edging machine. P. H. Lange. 1,616,741; Jan. 28.

Edging machine. P. H. Lange. 1,616,741; Jan. 28.

Edging machine. A. Maynard. 1,619,358; Mar. 1.

Educational and amusement device. A. C. Daman.

1,647,276; Nov. 1.

Educational and game device. H. Wolke. 1,617,831;

Educational and game device. H. Wolke. 1,634,289;

July 5. Educational apparatus. J. O. B. Jacobsen. July 5. Educational apparatus. P. E. Klopsteg. July 19. Educational apparatus. C. A. Peterson. Feb. 8. 1,636,234; 1,617,272;

781 Educational appliance. J. J. R. Guichard. 1,630,939; May 31. Educational appliance. D. Vershbinsky. 1,624,450; Educational Applications of the Control of the Control of the Control of Cont Educational device. A. E. Miller. 1.641,773; Sept. 6. Educational device. G. E. Randall. 1.614,390; Jan. 11. Educational device. J. W. Studebaker. 1,617,657; Feb. 15.
Educational device. J. W. Studebaker. 1,617,657
Educational device for teaching spelling. H. H. Steele.
1,619,160; Mar. 1.
Educational work and play, Base frame for primary.
A. H. Stewart. 1,627,211; May 3.
1,643,131; Cept.
1,643,130; Cept.
1,643,130; Cept.
1,643,130; Cept.
1,643,130; Cept.
1,643,130; Nov. 1.
1,643,131; Cept.
1,643,130; Cept.
1,643,130 Egg-candling device. W. B. Hausman. 1,652.983; Dec 13. Egg-candling device. W. B. Hausman. 1,652,983; Dec 13. Egg-case filler. J. F. Schloemer. 1,644,898; Oct. 11. Egg-cases, Apparatus for removing contents of. H. G. Collis. 1,639,487; Aug. 16. Egg-carter. N. B. Parrish. 1,631,055; May 31. Egg-carte. B. A. Lange. 1,618,831; Feb. 22. Egg-carte. D. M. Russell and J. H. Shley. 1,621,904; May 31.

Egg separator. C. L. Christian and J. R. Boustead.
1,646,682; Oct. 25.

Egg sheller. J. T. Snapp. 1,618,682; Feb. 22.

Egg supporting and turning device. D. M. Torrance.
1,643,102; Sept. 20.

Egg-testing device. M. Shapiro. 1,643,093; Sept. 20.

Egg tray. E. G. Calkins. 1,616,782; Feb. 8.

Egg-turning device. G. M. Turpin. 1,638,072; Aug. 9.

Egg-turning rack. H. A. Hilton. 1,616,072; Feb. 8.

Eggs. Device for canding. E. H. Mueller. 1,638,870;

Aug. 16.

June 21.

Blectric air heater, W. W. Hicks. Des. 73,432–3; Sept. 13.

Sept. 13.

Beater. W. W. Hicks. Des. 73,502; Sept. 20.

Blectric and air switch, Automatic. H. E. Drabing. 1,643,239; Sept. 20.

Blectric and the like machine, Magneto- M. Schäfer, W. Hähnle, and W. Walther. 1,650,873; Nov. 29.

Blectric apparatus. P. C. Hewitt. 1,638,158; Aug. 1,642,400; Sept. 13.

Blectric apparatus, Controlling. M. Buchholz. 1,642,398; Sept. 13.

Blectric apparatus, Controlling ilquid-insulated. M. Blectric apparatus, Protecting. M. Buchholz. 1,640,310; Aug. 23.

Electric apparatus, Protecting. M. Buchholz. 1,640,310; Aug. 28.

Electric apparatus, Protecting. M. Buchholz. 1,640,310; Aug. 28.

ectric apparatus, Protecting Buchholz, 1,642,397; Sept. 13. ectric apparatus, Protection liquid-insulated. W. Electric Buchnolz. 1,042.397; Sept. 13. Electric apparatus, Protection of, M. Buchholz. 1,642,402; Sept. 13. Electric apparatus, Protective system for. M. Buchholz. 1,640,309; Aug. 23.

Electric apparatus serving as a dynamo or motor and as an engine starter. L. Lanquetia. 1,644,065; Oct. 4. Electric apparatus, System of protection of. M. Buchbolz. 1,642,406; Sept. 13. Electric-appliance support and connection. J. W. Hooley. Electric-appliance support and connection. J. W. Hooley. 1,647,002; Uct. 25.
Electric-arc. C. Wown. 1,637,237; July 26.
Electric-arc cutting and welding apparatus. Transformer for. F. C. Owen. 1,647,928; Nov. 1.
Electric-arc. welding apparatus, Transformer for. F. C. Owen. 1,619,753; Mar. 1.
Electric-arc. welding apparatus, Transformer for. F. C. Owen. 1,619,753; Mar. 1.
Electric assembling machine. E. N. Taylor. 1,648,010; Nov. 8. Electric audible signal. F. E. Detmers. 1,622,862; Mar. 29. Electric battery and making the same. E. Powers. 1,634,850; July 5. Electric-byracket outlet. O. A. Frederickson. 1,624,547; Electric-bracket outlet. O. A. Frederickson. 1,624,547;
Apr. 12.
Electric brake. J. Joyce. 1,652,362; Dec. 13.
Electric brake. H. Karl. 1,649,567; Nov. 15.
Electric brake. O. F. Shepard. 1,628,202; May 10.
Electric bulb, Incandescent. F. L. Weiss. 1,641,495;
Sept. 6.
Electric bulb, Plural-filament. E. R. Cloward. 1,636,460;
Electric bulb. Electric circuit-control device. C. E. Sickler. 1,619,638; Mar. 1.

Electric-circuit-controlling apparatus. S. G. Fisher. 1,631,024; May 31.

Electric-circuit-controlling apparatus. J. W. Townley. 1,627,367; May 3.

Electric-circuit-controlling apparatus. J. E. Long. Electric-circuit interrupter, Repeating. E. Aichele. 1,614,223; Jan. 11.

Electric-circuit making and breaking relay. R. Hase. 1,629,967; Mar. 15.

Electric-circuits, Apparatus for controlling. W. Schwagerman. 1,638,961; Mar. 22.

Electric circuits, Prince device for. C. J. Saxtell. 1,629,332; May 17.

Electric circuits, Regulation of. F. L. Re Qua. 1,625,232; Apr. 19.

Electric circuits, Thermal protective device for. O. Dreyer. 1,636,693; July 26.

Electric condenser. O. Burger. 1,621,058; Mar. 15.

Electric condenser. W. Dubliler. 1,627,493; May 3.

Electric condenser. W. Dubliler. 1,624,7493; May 3.

Electric condenser. H. B. Reppart. 1,625,094; Apr. 19.

Electric condenser, variometer, and the like, Variable. A. F. Holliday. 1,621,253; Mar. 15.

Electric condenser, variometer, and the like, Variable. A. F. Holliday. 1,621,273; Mar. 15.

Electric condenser, Paper-insulated. J. R. Long. July 26.

Electric conductor, Composite. D. Basch. 1,637,033; July 26.

Electric conductor, Paper-insulated. J. R. Long. 19.

Electric conductor terminal. O. H. Maurer. 1,625,485; Apr. 19. Electric conductors, Connecter for. R. C. Armen. 1.648.887; Nov. 15. Connecter for. F. F. Hillix. 1.643.689; Sept. 27. Electric conductors, Metal cross arm for supporting. L. H. Hardin. 1.640.828; Aug. 30. Electric conductors, Reel for. A. E. F. Moone. 1,636,193; July 19. July 19.

Electric conduits. Connecter for. H. E. Plunkett. 1.650,233-4: Nov. 22.

Electric connecter. J. Berg. 1,627,306; May 3.

Electric connecter. A. H. Simmons. 1.637,059; July 26.

Electric connecter for branch circuits. A. W. Relser. 1,526,875; May 3.

Electric connecting system for the purposes of telecontrol. M. Schuler. 1.648,915; Nov. 15.

Electric connection device. F. Hartmann. 1,649,305; Nov. 15.
Electric contact plug. E. C. Pénin. 1,628,683; May 17.

Electric control device, E. L. Fonseca. 1,622,635; Mar. 29. Electric control device, Pressure-actuated. I. B. McCabe. 1,636,191; July 19. Electric control system, Selective. S. Olson. 1,645,619; Oct. 18. Electric controller. H. E. Campbell. 1,652,391; Dec. 13. Electric controller. J. E. Sederholm. 1,619,960; Mar. S. Electric controller. Operating mechanism for. C. T. Evons. 1,638,838; Aug. 16. Electric-cord anchorage. W. P. Leaby. 1,625,477; Apr. 19. Electric controllers, Operating mechanism for. C. T. Evans. 1,638,838; Aug. 16.

Electric-cord anchorage. W. P. Leaby. 1,625,477; Apr. 19.

Electric-cord connector. G. Davies and A. C. Mires. 1,613,647; Jun. 11.

Electric-cord reporting device. J. F. Hubener. 1,636,587; July 19.

Electric-cord reporting device. J. F. Hubener. 1,636,563; July 19.

Electric-corystal apparatus, Piezo- C. W. Hough. 1,619,125; Mar. 1.

Electric-cystal apparatus, Piezo- E. L. Powell. 1,619,125; Mar. 1.

Electric-cystal apparatus, Piezo- E. L. Powell. 1,646,652; Nov. 1.

Electric-current-affecting device. H. J. Murray. 1,647,652; Nov. 1.

Electric current, Apparatus for controlling and distributing. E. Roucayrol. 1,621,279; Mar. 15.

Electric current, Apparatus for controlling and distributing. E. Roucayrol. 1,621,279; Mar. 15.

Electric current affecting device. W. E. Knowles. 1,649,354; Nov. 15.

Electric-current-dispensing device. W. E. Knowles. 1,649,354; Nov. 15.

Electric-current regulator. T. P. Peterson. 1,623,492; Electric-current regulator. T. P. Peterson. 1,623,492; Electric-current regulator. T. P. Peterson. 1,623,492; Electric-current regulator. Automatic. W. Langdon-Davies and A. Soames. 1,615,018; Jan. 18. Electric-current regulator. T. P. Peterson. 1,633,492; Aprilor and A. Soames. 1,615,018; Jan. 18.

Davies and A. Soames. 1,615,018; Jan. 18.

Electric current to vacuum tubes, Apparatus for supplying. F. Zacher. 1,623,569; Apr. 5.

1,616,162; Feb. Theratory distributor of. E. S. Sandberg. 1,635,569; July 12.

Electric currents, Crystal detector of. H. M. Dowsett. 1,645,523; Oct. 18.

Electric currents, Eliter for periedic. M. K. Zinn. 1,632,614; June 21.

Electric currents, Eliter for periedic. M. K. Zinn. 1,632,614; June 21.

Electric currents, Eliter for periedic. M. K. Zinn. 1,632,614; June 21.

Electric currents, Crystal detector of. E. S. Sandberg. 1,642,691; June 21.

Electric currents, Eliter for periedic. M. K. Zinn. 1,632,614; June 21.

Electric currents, Optical means for generating, amplifying. Aug. 3.

Location of the complex of the comp Dec. 21. General device for. H. L. Grant. Re16,544; Feb. 8. Electric differential control system. E. Granat. 1,616,794; Feb. 8. Dlectric differential control system. E. Granat. 1,616,794; Feb. 8.

Detric-discharge device. E. E. Charlton. 1,648,293; Dlectric discharge device. J. B. Johnson. 1,632,080; June 14.

Electric-discharge device. Low-impedance. H. C. Snook. 1,629,009; May 17.

Electric-discharge devices, Circuit for. R. W. Chestnut. 1,647,605; Nov. 15.

Electric-discharge devices, Control apparatus for. O. E. Buckley. 1,649,016; Nov. 15.

Electric discharge devices, Electrode for. F. Skaupy, M. Pirani, F. Bahr, and W. Febse. 1,640,428; Aug. 30.

Electric discharges, Controlling the distribution of. E. L. Harrington. 1,616,044; Feb. 1.

Electric distribution, System of. H. Bany. 1,615,670; Electric distribution, System of. F. J. Champlin. 1,626,451; Apr. 26.

Electric distribution, System of. F. J. Champlin. 1,626,451; Apr. 26.

Electric distribution, System of. F. J. Champlin. 1,626,451; Apr. 26.

Electric distribution, System of. J. F. Spease. 1,651,844; Electric distribution system. P. Torchio. 1,652,261; Electric distribution system. P. Torchio. 1,652,261; Electric diving installation. N. Japolsky and M. Kostenko. 1,617,394; Feb. 15.

Electric diving installation. N. Japolsky and M. Kostenko. 1,617,394; Feb. 15.

Electric diving installation system. A. G. Landeen. 1,847,998; Nov. 8.

Electric extension plugs, Attachment for an. E. T. Seasock. 1,635,507; July 12.

Electric fitting. M. Peterson and M. J. Danlelson 1,035,903; July 12.

Electric fitting. W. A. Stacey. 1,639,541; Aug. 16.

Electric fitting. W. A. Stacey. 1,639,541; Aug. 16. Electric-discharge device. E. E. Charlton. 1,648,293;

Electric-fixture attachment. P. W. Sprecher. 1,649,497; Electric furnace. F. W. Speciel. 1,000-2001, 11. Electric furnace. F. A. J. Fitz Gerald. 1,648,508; Sept. 21. Electric furnace. F. A. J. Fitz Gerald. 1,648,085; Oct. 18. Electric furnace. F. A. J. Fitzgenaid. 1,643,808; Sept. 27. Electric furnace. F. A. J. Fitzgenaid. 1,643,808; Sept. 27. Electric furnace. F. A. J. Fitz Geraid. 1,643,088; Sept. 27. Electric furnace. F. Foley. 1,640,826; Aug. 30. Electric furnace. L. H. Giddings. 1,632,126; June 14. Electric furnace. L. H. Giddings. 1,632,126; June 14. Electric furnace. A. E. Greene. 1,634,419; Dec. 27. Electric furnace. A. D. Keena. 1,641,704; Sept. 6. Electric furnace. A. D. Keena. 1,624,344; Apr. 29. Electric furnace. A. D. Keena. 1,624,344; Apr. 12. Electric furnace. A. D. Keene. 1,624,344; Apr. 12. Electric furnace. A. D. Keene. 1,626,434; Apr. 28. Electric furnace. J. A. Seede. 1,626,431; Apr. 28. Electric furnace. J. A. Seede. 1,626,431; Apr. 28. Electric furnace. J. A. Seede. 1,636,058; Nov. 29. Electric furnace. J. A. Seede. 1,630,638; Nov. 29. Electric furnace. E. L. Smalley. 1,614,321; Jan. 11. Electric furnace. J. A. Seede. 1,630,638; Nov. 29. Electric furnace. J. M. Weed. 1,630,678; May 10. Electric furnace. J. W. Veed. 1,630,675; May 10. Electric furnace. J. W. Weed. 1,630,675; May 10. Electric furnace. J. W. Weed. 1,630,675; May 10. Electric furnace. J. C. Woodson. 1,623,367; June 28. Electric furnace. J. J. Woodson. 1,633,367; June 28. Electric furnace. J. J. C. Woodson. 1,633,367; June 28. Electric furnace. J. J. Kept. P. L. J. Miguet. 1,654,139; Oct. 18. Cot. 18. June 19. Jun Electric governor. H. K. Whitehorn. 1,646,672; Oct. 25.
Electric grate. I. M. Marks. Des. 73,005-6; July 5.
Ellectric hair curier. A. J. Buchl. 1,631,189; June 7.
Electric heat element. S. L. Kelly. 1,649,033; Nov. 15.
Electric heater. C. C. Abbott. 1,631,831; June 7.
Electric heater. A. W. Daniel. 1,635,573; June 28.
Electric heater. A. W. Daniel. 1,635,573; June 28.
Electric heater. A. W. Daniel. 1,635,573; June 28.
Electric heater. G. Eaton. Des. 73,560; Oct. 4.
Electric heater. G. Eaton. Jes. 73,560; Oct. 4.
Electric heater. A. Johnson. 1,634,648; July 19.
Electric heater. A. Johnson. 1,636,369; July 19.
Electric heater. A. J. Kercher and W. W. Hicks. 1,617,918; Feb. 15.
Electric heater. W. F. Long. 1,615,350; Feb. 1.
Electric heater. W. F. Long. 1,615,350; Feb. 1.
Electric heater. W. F. McCormick. Des. 73,439; Sept. 13.
Electric heater. J. E. Sederholm. 1,620,296; Mar. 8.
Electric heater. J. E. Sederholm. 1,620,296; Mar. 8.
Electric heater. R. S. Smart. 1,634,046; June 28.
Electric heater. H. N. Shaw. 1,629,744; May 24.
Electric heater. H. A. Zioln. 1,623,649; May 31.
Electric heater des or similar article. A. H. Simmons. Des. 72,336; Mar. 28.
Electric heater creuits, Switching arrangement for. W. R.
Walker. 1,630,252; May 24.
Electric heater for waving or curiing the halt. E. F. Walker.

Electric heater, Clampon. F. L. Found.

Sept. 13.

Electric heater for waving or curling the hair. E. F.

Suter. 1,617,138; Feb. 8.

Electric heater, Manifold. W. Besser. 1,625,448;

Light heater, Manifold. W. Besser. 1,625,448; Bettier Heater, Manifold. W. Besser. 1,625,448; Apr. 19.

Bettier heater, Manifold. W. Besser. 1,625,448; Apr. 19.

Electric heater unit. O. A. Colby. 1,638,829; Aug. 16.

Electric heaters, Making. E. N. Lightfoot. 1,640,361; Aug. 30.

Electric heating device. A. and M. Bersted. 1,622,485; Mar. 29.

Electric heating device. L. Reichold. 1,613,770; Jan. 11.

Electric heating unit. A. D. Keene and K. Ehrgott. Electric heating unit. A. D. Keene and K. Ehrgott. Electric heating unit. A. D. Keene for the color of the color o

Filectric indicating means. M. J. Huggins. 1,617,287; Feb. 8. Electric ionic medication. Instrument for. W. Richter. 1,652,327; Dec. 13.

Electric iron. C. A. Brewer. 1,649,506; Nov. 15. Electric iron. F. A. Fahrenwald. 1,648,169; Nov. 8. Electric iron. J. M. Wintrob. 1,631,779; June 7. Electric-iron cord holder. W. G. Aufenast. 1,644,661; Oct. 11.
Electric jump-spark coil. C. H. Thordarson. 1,629,132;
May 17.
Electric key socket. C. S. Mallett and W. J. Aldis. Early 1. The paper cont. C. S. Mallett and W. J. Aldis. 1,628,415; May 10. Electric key socket. C. S. Mallett and W. J. Aldis. 1,628,415; May 10. Electric-lift machine and the like. J. B. M. Knutsen. 1,623,349; Apr. 5. Electric lifts and the like, Apparatus for the control and operation of. J. B. M. Knutsen. 1,639,190; Aug. 16. Dec. 72,085; Mar 1. R. Buchanan and R. H. Abbott. Dec. 72,085; Mar 1. Electric-light bulb. Multiple-color. G. M. Parks. 1,649,975; Nov. 22. Electric-light bulbs, Mask for. E. G. Chase. 1,625,591; Edpt. 191; Edpt. 1,625,591; Apr. 1. Sept. 18. Electric-light bulbs, Mask for. E. G. Chase. 1,642,646; Sept. 18. Electric-light equipment. L. P. Graner. 1,652,981; Dec. 18. Dec. 13.
Electric-light fixture. N. E. Chapman. Des. 73,897-8;
Nov. 22.
Electric-light fixture. G. B. Kurtzon. 1,644,926;
Oct. 11. Electric-light fixture. G. Lipschutz. Des. 72,215; Mar. 15. Electric-light fixture. G. Lipschutz. Des. 72,714;
May 24.
Electric-light fixture. G. Lipschutz. Des. 73,386; Electric-light fixture. G. Lipschutz. Des. 73,706; Oct. 25. Electric-light fixture. C. W. Logan. Des. 72,320; Mar. 29. Electric-light fixture, Hanging. J. Short. Des. 73,873; Electric-light fixture, Hanging. J. Short. Des. 73,873;
Electric-light fixtures, Arm for. C. W. Logan. Des. 72,376; Apr. 5.
Electric-light fixtures, Bobeche for. J. R. Buchanan and R. H. Abbott. Des. 72,086; Mar. 1.
Electric-light fixtures or similar articles, Bridge arm for. F. M. Foritz. Des. 72,570-2; May 3.
Electric-light fixtures or similar articles, Column for. Electric-light fixtures or similar articles, Column for. Electric-light fixtures, Wall plate for. C. W. Logan. Des. 72,321; Mar. 29.
Electric-light fixtures, Wall plate for. F. Yokel. Des. 73,354; Aug. 23.
Electric-light fixtures, Wall plate for. F. Yokel. Des. 73,354; Aug. 23.
Electric-light fixtures, H. A. Walker. 1,652,964; Electric-light shade. W. W. Dunn, jr. Des. 73,371; Aug. 30. Aug. 30. Electric-light shade. L. H. Oliver. 1,616 Electric-light-socket adapter. M. Baum. Nov. 15. 1,616,227; Feb. 1, aum, Des. 73,821; Electric-lighting fixture. H. Friedman. Des. 71,789; Electric-lighting fixture. H. Friedman. Des. 71,678; Jan. 4, Blatting fixture, H. Friedman. Des. 71,964-8. Electric-lighting fixture or similar article, Arm for an. G. E. McFadden. Des. 73,854; Nov. 15. Electric-lighting fixture or similar article, Decorative metal panel for an. G. E. McFadden. Des. 73,855; Nov. 15. Nov. 15.
Electric-lighting fixture or similar article, Scroll arm for an. G. E. McFadden. Des. 73,853; Nov. 15.
Electric-lighting fixture or similar article, Wall-bracket back for an. G. E. McFadden. Des. 73,851; Nov. 15.
Electric-lighting fixtures or similar articles, Canopy for.
Electric-lighting switch, Door-controlled. J. M. Kern. 1,619,134; Mar. 1.
Electric-lighting switch, Door-controlled. J. M. Kern. 1,652,364; Dec. 13.
Electric lighting wall fixture or similar article, G. E. McFadden. Des. 73,852; Nov. 15.
HcFadden. Des. 73,852; Nov. 15.
Electric lighting wall fixture or similar article, G. E. HcFadden. Des. 73,852; Nov. 15.
Electric lighting wall fixture or similar article, G. E. Electric lighting wall fixture or similar article. A. Berth. Electric lighting wall fixture witch for. A. Berth. Electric lighting pulsespoket base and plug for. J. W. 1628,222; May 10.

Blectric Hights, Dual-socket base and plug for. J. W. Maclemie. 1,649,906; Nov. 2.2.
Electric low-speed unit. O. Cullman, 1,637,106; July 26, Electric machine and winding therefor, Dynamo. W. H. Powell. 1,628,611–13; May 10.

Electric machine and winding therefor, Dynamo. W. H. Powell. 1,641,644; Sept. 6.

Electric-machine armatures and windings for same, Building dynamo. V. G. Apple. 1,631,186; June 7.

Electric machine, Dynamo. F. Kesselring. 1,623,199; Constant State of the Const Electric machine, Dynamo-. M. L. Norris. 1,646.211; Oct. 18. Electric machine, Dynamo-. S. G. Nottage. 1,643,785; Sept. 27. Electric machine, Dynamo-. R. Pohl. 1,645,070; Oct. 11.

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Electric machine, Dynamo-. H. K. Schrage. 1,632,628;
        June 14
Electric m
Aug. 16.
                                                                     machine, Dynamo-, S. A. Staege. 1,638,890;
    Aug. 16, Statege 1,638,890; Electric machine, Dynamo-, H. M. Stoller. 1,618,825; Electric machine, Dynamo-, H. M. Stoller. 1,641,359; Sept. 6. Electric machine for continuous current, High-speed dynamo-, M. Kostenko and N. Japolsky. 1,624,254; Apr. 12.
    Apr. 12.
Electric machine, Inclosed dynamo-. D. P. Thomson.
1.652,134; Dec. 6.
Electric machine, Magneto-. M. A. Pattay and E. Jaque-
mot. 1.648,564; Nov. 8.
Electric machine with split poles. H. Papst. 1,620,608;
                       Mar. 8, ectric machinery, Cooling. R. Rüdenberg. 1,631,765; June 7.
Mar. 8. Electric machinery, Cooling. R. Rüdenberg. 1,631,765; June 7. Electric machinery, Testing. A. Ytterberg. 1,624,457; Z. Electric machines and apparatus, Machine for tightening the insulation applied on winding bars of. E. Haefely. 1,633,741; June 28. Electric machines. Brush-shifting arrangement for dynamo. J. I. Hull. 1,648,688; Nov. 3. Electric machines. Control of dynamo. A. A. Pollock. Electric machines. Cooling of dynamo. P. Faber. 1,653,845; Dec. 27. Electric machines. Frame for dynamo. J. F. Lincoln. 1,629,877; May 24. Electric machines. Protective device for dynamo. H. C. Hastings and C. J. Sarjeant. 1,631,726; June 7. Electric machines. Regulating of control system for Electric machines, Regulating system for dynamo. R. E. Doberty. 1,633,808; June 28. Electric machines, Regulating system for dynamo. V. Karapetoff. 1,646,822-5; Oct. 25. Electric machines, Regulating of dynamo. F. Laszlo. 1,229,081; May 17. Electric machines, Ventilation of dynamo. G. Lawinnek. 1,945,694; Oct. 11. Electric machines, Ventilation of dynamo. G. Lawinnek. 1,945,694; Oct. 11. Electric machines, Ventilation of dynamo. G. Lawinnek. 1,945,694; Oct. 11. Electric machines, Ventilation of dynamo. F. Laszlo. 1,229,081; May 17. Electric machines, Ventilation of dynamo. F. Laszlo. 1,945,694; Oct. 11. Electric machines, Ventilation of dynamo. H. La Parker. 1,636,909; July 26. Electric measuring instrument. L. A. Paine. 1,620,126; Mar. 8. Electric meter. G. Spertl. 1,618,002; Mar. 1 ap. 25.
    Electric meter. W. H. Pratt. 1,637,408; July 26. Electric meter. G. Spertl. 1,618,002; Mar. 1. Electric meter. G. Spertl. 1,618,002; Mar. 1. Electric meter. B. A. Warner. 1,615,731; Jan. 25. Electric meter and the mounting thereof. F. W. Erickson. Electric meter circuit. F. P. Church. 1,618,058; Feb. 15. Electric-meter circuit. F. P. Church. 1,618,058; Feb. 15. Electric motor. E. N. Baker. 1,627,949; May 10. Electric motor. E. N. Baker. 1,627,949; May 10. Electric motor. S. C. Benson. 1,632,999; Dec. 20. Electric motor. H. W. Jeannin. 1,632,831; Aug. 9. Electric motor. F. W. Merrill. 1,631,877; June 14. Electric motor. H. W. Jeannin. 1,632,832; June 24. Electric motor. H. W. Sandin. 1,634,832; June 25. Electric motor. H. W. Shinewski. 1,635,872; July 5. Electric-motor-control system. A. H. Jackson. 1,633,102; June 21. June 21.
    Electric motor-control system. A. H. Jackson. 1,633,102; June 21.
Electric motor, Inclosed and ventilated. C. L. Daun and P. E. Keller. 1,645,496; Oct. 11.
Electric motor-operated machines, Coin control for. G. W. Werner. 1,641,212; Sept. 6.
Electric motor, Reciprocating. H. E. Fox. 1,637,813; Aug. 2.
Electric motor, Reciprocating. C. S. Weyandt. 1,651,306; Nov. 29.
Electric musical recorder. A. Barbieri. 1,637,674; Nov. 8.
Electric operating mechanism. C. L. Perry. 1,648,741; Nov. 8.
    Nov. 8.

Electric oscillations, Arrangement for generating. O. Von Bronk. 1.645.557; Oct. 18.

Electric outlet. W. W. Dodge, jr. 1,648.582; Nov. 8.

Electric overload protective system. J. Pfretzschner. 1.630.214; May 24.

Electric plates, Preparing plezo-. A. Hund. 1,649.828; Nov. 22.

Electric plug. W. H. Clark. 1,627.594; May 10.

Electric plug. T. W. Kirkman. 1.645.656; Oct. 18.

Electric plug. Multiple-socket. I. F. Giles. 1,650.869; Electric plug. Multiple-socket. I. F. Giles. 1,650.869; Electric prover-teamsmission system. A. M. Taylor.
      Electric power-transmission system. A. M. Taylor.
1,638,647; Aug. 9.
Electric press. A. R. Braun. 1,644,911; Oct. 11.
Electric protective system. M. Buchholz. 1,642,405;
Sept. 13.
      Sept. 13.
Electric receptacle. J. W. Phelps. 1,623,205; Apr. 5.
Electric rectifier. M. B. Stazak. 1,647,418; Nov. 1
Electric regulator. F. A. Byles. 1,650,604; Nov. 29.
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Electric regulator. F. A. Byles. 1,652,928; Dec. 13.
Electric regulating system. W. Brückel. 1,641,732;
Sept. 6.
  Sept. 6.
Electric relay, L. B. Turner. 1,642,861; Sept. 20.
Electric sadiron. J. E. Marsden. 1,644,139; Oct. 4.
Electric safety apparatus. J. D. Lewis and A. Pinto.
1,646,028; Oct. 18.
Electric safety device. C. E. Hanny. 1,640,761; Aug. 30.
Electric safety device. C. E. Hanny. 1,640,761; Aug. 30.
Electric signal. C. W. Dunham. 1,647,838; Nov. 1.
Electric signal impulses, Method of and apparatus for amplifying. H. F. Herbig. 1,643,713; Sept. 27.
Electric signaling and indicating apparatus. H. M.
Proud. 1,629,049; May 17.
Electric-socket cover. J. A. Boehringer. Des. 72,928;
Electric socket structure. M. Herskovitz. 1,627,238;
May 3.
    June 28, Electric socket structure. M. Herskovitz. 1,627,238; May 3. Electric socket support and housing. F. A. Frerichs. 1,638,662; Aug. 9. Electric socket switch, W. F. Conklin. 1,632,174; Electric analysis.
       June 14.

Electric spark gap. C. L. A. M. Leblanc. 1,613,709;
Jan. 11.

Jan. 12.

Jan.
    Electric switch.
Electric switch.
Electric switch.
Electric switch.
                                                                                                                                           C. E. Anderson. 1,627.394; Msg. 3.
E. G. K. Anderson. 1,642,528; Sept. 13.
A. A. A. Atwood. 1,628,448; Msy 10.
F. A. Boedtcher. 1,636,895; July 26.
G. A. Burnham. 1,631,913; June 7.
P. C. Butte. 1,628,70; Sept. 20.
H. E. Campbell and E. F. Mekelburg.
       Electric switch.
Electric switch.
Electric switch.
Electric switch. G. A. Burnam. 1,031,1913; Julie I. Electric switch. H. E. Campbell and E. F. Mekelburg. 1,638,617; Aug. 9. H. Chason. 1,641,134; Aug. 30. Electric switch. C. Christensen and F. G. Langley. 1,653,685; Dec. 20. Christensen and F. G. Langley. 1,653,085; Dec. 20. Electric switch. H. P. Clausen. 1,624,391; Apr. 12. Electric switch. H. P. Clausen. 1,624,391; Apr. 12. Electric switch. H. P. Clausen. 1,624,391; Apr. 12. Electric switch. E. B. Condit. 1,650,190; Nov. 22. Electric switch. E. L. Connell Rel6,737; Sept. 18. Electric switch. E. L. Connell Rel6,737; Sept. 18. Electric switch. G. L. Cragg. 1,634,455; July 5. Electric switch. G. L. Cragg. 1,634,455; July 5. Electric switch. F. C. Davis. 1,630,695; Nov. 15. Electric switch. F. C. Davis. 1,630,695; Nov. 15. Electric switch. R. C. Deale. 1,640,755; Aug. 30. Electric switch. F. C. Deale. 1,640,755; Aug. 30. Electric switch. F. C. Deale. 1,632,965; Jun. 21. Electric switch. H. A. Douglas. 1,034,408; July 5. Electric switch. H. A. Douglas. 1,034,408; July 5. Electric switch. H. O. Engstrom. 1,638,658; Aug. 9. Electric switch. H. O. Engstrom. 1,638,568; Aug. 9. Electric switch. C. T. Evans and W. H. Holder. 1,649,893; Nov. 22.
    Electric switch.
Electric switch.
1,649,893; No
Electric switch.
Electric switch.
Electric switch.
                                                                                                                                         v. 22.
C. C. Ferguson. 1.653.354; Dec. 2:
H. J. L. Frank. 1,633.578; June
H. G. French. 1,632.592; June 14.
A. C. and E. G. Gaynor. 1,641,2
    Electric switch.
Sept. 6.
Electric switch.
Electric switch.
Electric switch.
Electric switch.
                                                                                                                                                   B. E. Getchell. 1,622,907; Mar. 29,
B. E. Getchell. 1,648,385; Nov 8,
D. D. Gordon. 1,645,528; Oct. 18,
M. Guett. 1,643,210; Sept. 20,
F. Henke. 1,649,500; Nov. 15,
J. H. Hewltt. 1,649,604; Nov. 15,
E. M. Hewlett and W. K. Rankin. 8
       Electric switch.
Electric switch.
    Electric switch.

1,648,684; Nov.
Electric switch.
Electric switch.
Electric switch.
Electric switch.
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Electric switch. G. F. Scott. 1.630.359; May 31.
Electric switch. H. E. Slade. 1,618.784; Feb. 22.
Electric switch. H. A. Spahr. 1.620,165; Apr. 26.
Electric switch. B. A. End L. Spero. 1,621,661; Mar. 22.
Electric switch. E. E. Springer and R. A. Harry.
Electric switch. E. Strauch. 1,615.245; Jan. 25.
Electric switch. B. A. Tetzlaff. 1.644.797; Oct. 11.
Electric switch. B. A. Tetzlaff. 1.644.797; Oct. 11.
Electric switch. G. B. Thomas. 1,628,480; May 10.
Electric switch. G. B. Thomas. 1,628,480; May 10.
Electric switch. G. B. Tomas. 1,631,841; June 7.
Electric switch. G. B. Wadsworth. 1,614,652; Jan. 11.
Electric switch. G. B. Wadsworth. 1,614,652; Jan. 11.
Electric switch. W. R. Walker. 1,638,131-2; Aug. 9.
Electric switch. W. R. Walker. 1,638,312-2; Aug. 9.
Electric switch gear of the draw-out type, Metal-clad.
W. Anderson and H. W. Clothier. 1,620,792; Mar. 15.
Electric switch, Interlocking. W. B. Burke and E. G.
Weiler. 1,636,342; July 26.
Electric switch mechanism. Time-controlled. L. T. Fenning. 1,636,341; Apr. 19.
Oct. 4, 265,411; Apr. 19.
Cot. 4, 265,411; Apr. 19.
Electric switch, Multiple-break. L. A. Brown. 1,638,984;
Electric switch, mechanism Time-controlled. L. T. Fen-
Electric 1,654,411 Apr. 13.

Electric 1,654,411 Apr. 13.

Electric 1,654,411 Apr. 14.

Oct. 4, white member. C. D. Platt. Des. 73,579;
Oct. 4, white member. C. D. Platt. Des. 73,579;
Oct. 4, white member. C. D. Platt. Des. 73,579;
Oct. 4, white member. C. D. Platt. Des. 73,579;
Illectric switch, Multiple-break. L. A. Brown. 1,636,984;
Mov. 3, Electric switch, Persure. J. F. Winkler. 1,647,949;
Nov. 1.

Electric switch, Push-button. F. Decraene. 1,636,501;
July 19.

Electric switch, Push-button. F. Decraene. 1,636,501;
July 19.

Electric switch, Push-button. F. Decraene. 1,636,501;
July 19.

Electric switch, Thermostatically-operated. R. W. Mc-
Brien. 1,645,201; Oct. 11.

Electric switch. Thermostatically-operated. R. W. Mc-
Brien. 1,645,201; Oct. 11.

Electric switches, Elevent approach of the property of the switches and other a paratus, Contribusal mecha-
Electric switches, Elevent approach of the property of the switches and other and the switches and the switches and other a paratus, Contribusal mecha-
Electric switches, Elevent approach of the switches, Elevent switches, Elevent switches, Elevent switches, Elevent switches, Elevent approach of the switches, Elevent switches, Electric switches, Elevent switches, Electric switches, Elevent switches, Electric terminal, Elevent switch, Electric switches, Elevent switch, Electric terminal, Elevent switch, Legal, 1,634,132; June 22, Electric terminal, Elevent switch, Legal, 1,634,132; Dec. 27, Electric thermostatic switch, A. U. Hook. 1,622,721; Electric thermostatic switch, A. U. Hook. 1,633,852; Sept. 27.

Electric train control switch, E. Sentshall, 1,634,903; Mc. Canadall, 1,650,431; Nov. 22.

Electric trai
              Electric toasting device. M. F. Fitzgerald. 1,639,403; Aug. 16. Electric torch for welding, brazing, and cutting. G. W. Crandall. 1,650,431; Nov. 22. Electric train control. W. E. Scutchall. 1,617,169; Electric transmission system. E. Granat. 1,622,438; Sept. 13. Electric transmission system. E. II. Jacobs and C. F. Schnonmaker. 1,629,552; Mar. 8. Electric truncheon torch. A. McMurray. 1,637,650; Aug. 2. wpporizer. M. Katzman. 1,628,784; May 17. Electric wall bracker. F. Craih. Des. 7,1862, Jan 18.
                   Aug. 2. Electric vaporizer. M. Katzman. 1,628,784; May 17. Electric wall bracket. F. Craib. Des. 71,862; Jan. 18. Electric wall-bracket pf. Craib. Des. 73,369; Jan. 28. Electric wall-bracket plate. J. A. Boehringer. Des. 72,230; June 28. Electric water heater. J. A. Boehringer. Des. 72,532; June 28. Electric water heater. S. D. Nesmith. 1,640,047; Aug.
                   Electric water heater. N. F. Strauss. 1.644.0747; Ans. E. S. D. Nesmith. 1.640.047; Ans. E. S. D. Strauss. 1.614.974; Jan. 18. Electric wave filter. R. A. Helsing. 1.613.949; Jan. 11. Electric wave filter. R. S. Johnson. 1.613.952; Jan. 11. Electric-wave-modulating system. R. V. L. Hartley. 1.633.016; June 21. Electric-wave producing and changing device. H. J. Murray. 1.629.727; May 24. Electric wave signaling system. F. M. Ryan. 1.652.995; Dec. 1.8. Electric waves. Arrangement of connections for sending Electric waves. Control of F. Mohr. 1.636.146; July 19. Electric waves. Control of F. Mohr. 1.636.146; July 19. Electric wedding. T. E. Murray, fr. 1.640.798; Aug. 30. Electric wedding. Thand shield for. F. M. Bowers. 1.652.973; Dec. 13. Electric wedding. Resistance-regulating apparatus for. A. Smith. 1.653.070; Dec. 20.
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Electric welding tool. D. A. Reynolds. 1,617,354; Feb. 15. Electric welding tool. D. A. Reynous. 1,011,007, Feb. 15. Electric-wire housing. J. D. Price. 1,643,725; Sept. 27. Electric-wire sand cables, Insulating paper for. J. R. Long. 1,613,179; Jan. 4. Electric wires, Apparatus for the manufacture of. H. B. Electric wires, Apparatus for the manufacture of. H. B. Electric wires, Connecter for. W. Hughes. 1,619,517; Mar. 1. Electrical abrasion process. M. S. Clawson. 1,620,519; Mar. 8. Electrical apparatus. V. Bush. 1,617,178; Feb. 8. Electrical apparatus. V. Bush. 1,617,181; Feb. 8. Electrical apparatus. V. Bush. 1,621,144 Apr. 12. Apr. 26.
Electrical apparatus.
Electrical apparatus.
Electrical apparatus.
Electrical apparatus.
Electrical apparatus.
1,625,996; Apr. 26.
Electrical apparatus.
1,629,866; May 24 T. W. Case. 1,624,314; Apr. 12. T. W. Case. 1,631,085; May 31. T. W. Case. 1,647,502; Nov. 1. L. O. Grondahl and H. M. Ryder. Bleetrical apparatus.

1, 629,866; May 24.

Bleetrical apparatus.

C. F. Kettering, 1,650,524;

Bleetrical apparatus.

C. G. Smith.

Bleetrical apparatus.

Bleetrical apparatus.

C. G. Smith.

Bleetrical apparatus.

C. G. Smith.

Bleetrical apparatus.

C. G. Smith.

Bleetrical apparatus.

C. C. Warner.

C. Warner.

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Bleetrical apparatus.

C. P. White.

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Bleetrical app L. O. Grondahl and H. M. Ryder. Electrical appliances, Extension cord for J. M. Wither, Wilson, S. Electrical apparatus for treating nerves, muscles, and blood. J. W. Kennedy, 1,636,568; July 19. Electrical apparatus, High-potential. J. A. Proctor. 1,614,762; Jun, 18. Electrical apparatus, High-potential. J. A. Proctor. 1,612,762; Jun, 18. Electrical apparatus, Winding for K. K. Palueff. 1,629,462; May 17. Electrical appliance. F. P. Withers. 1,652,191; Dec. 13. Electrical appliances, Extension cord for. J. M. White. 1,636,973; July 26. Electrical appliances, Stiend for use with. B. Hughes. Electrical budding terminal. J. L. Polk. 1,642,042; Sept. 13. Sept. 13.

Electrical brake. H. V. McCormick. 1,615,767; Jan. 25.

Electrical bulbs. Exhausting. J. S. Van Horne.
1,634,002; Oct. 4.

Electrical chiles, Identification of. W. H. Martin.
1,632,003; June 14.

1,651,019; Nov. 29.

Electrical circuits, Method and apparatus for interrupting. W. Dubliler. 1,623,531; Apr. 5.

Electrical circuits, Safety device for. O. Dreyer.
1,647,282; Nov. 1.

Electrical circuits, Safety device for. O. Dreyer.
1,647,282; Nov. 1.

Electrical circuits, Safety device for. Nov. 15.

Electrical communication. W. L. Carlson. 1,649,098; Nov. 15.

Nov. 15. Electrical condenser. M. Clark. 1,619,597; Mar. 1.
Electrical condenser. W. T. Ditcham. 1,614,459; Jan. 18. Electrical condenser. P. E. Gilling. 1,624,332-4; Apr. 12. Electrical condenser. W. J. Rickets. 1,622,052; Mar. 22. Electrical condenser. J. M. Stewart. 1,632,352; June 14. Electrical condenser. G. F. A. Stone. 1,623,653; June 14. Electrical condenser. Variable. L. R. McDonald. 1,623,741-2; Apr. 5. Electrical conductor, Insulated. F. L. Roman and H. T. Winsemius. 1,649,942; Nov. 22. Electrical conductor terminal. J. E. Patten. 1,650,295; Nov. 22. Electrical conductor with reenforcing core. A. O. Austin. 1,626,776; May 3. Electrical conductors, Connecter for. E. R. Barany. 1,634,065; June 28. L.034.000; June 25.

Connecter for. W. F. Hendry.
L654.254; Dec 27.

Electrical conductors, Connecter for. C. H. Lundy.
L635.760; July 12.

Electrical conductors, Joint between. R. W. Armstrong and I. E. McCabe. 1,640,869; Aug. 30.

Electrical conductors, Manually-carried transporting device for. H. A. Bittick, 1,623,823; Apr. 5.

Electrical conductors, Supporting means for. A. M. MacParland. 1,654,338; Dec. 27.

Electrical conduit. O. A. Frederickson. 1,622,032; Mar. 22.

Electrical-conduit-crossover system. J. Schilz. 1,631,224; June 7. Electrical connecter Edutical connecter, M. Alden. 1,651,660; Dec. 6.
Electrical connecter, E. Alschuler, 1,617,474; Feb. 15.
Electrical connecter. W. Jr. elsech. 1,633,974; June 28.
Electrical connecter. M. U. Callau. 1,631,914; June 7.
Electrical connecter. W. J. Gagnon. 1,635,8580-32; E. M. U. W. W. P. Gisske. 1,636,413; July 19. W. F. Hessel. 1,647,697; Nov. 1. G. J. Meuer. 1,646 037; Oct. 18. J. B. Telford. 1,642,345; Sept. 18. F. L. Weaver and M. F. Campion, Electrical connecter. Electrical connecter. Electrical connecter. Electrical connecter. Electrical connecter, J. B. Telford. 1,642,345; Sept. 13. Electrical connecter, F. L. Weaver and M. F. Campion, 1,629,189; May 17. Electrical connecter, W. S. Werner. 1,648,518; Nov. 8. Electrical connecter and fixture support, Combination. R. B. Benjamin. 1,637,463; Aug. 2ck. F. Diehl. 1,635,631; July 12. Electrical connecter and terminal clock. F. Diehl. 1,635,631; July 12. Electrical connecter device. R. B. Benjamin. 1,618,909; Feb. 22. Electrical connecter device, R. B. Benjamin. 1,639,125; Aug. 16.
Electrical connecter device. R. B. Benjamin. 1,646,806; Oct. 25.
Electrical connecter device. M. Guett. 1,650,870; Electrical connecter device. M. Guett. 1.650,870;
Nov. 29.
Electrical connecter device and fixture support, Combination. R. B. Benjamin. 1,629,568; May 24.
M. G. Skenz. 1,639,437; Aug. 18 wall and plug type.
M. G. Skenz. 1,639,437; Aug. 18 wall and plug type.
Electrical connecter with automatic circuit breaker. T.
Klötzll. 1,614,306; Jan. 11.
Electrical connection unit. H. F. Richardson. 1,639,310;
Aug. 16.
Electrical connection. C. C. Berry. 1,631,550; June 7.
Electrical connection. P. Roberg. 1,631,550; June 7.
Electrical connection. A. A. Warner. 1,631,550; June 7.
Electrical connection. A. A. Warner. 1,631,550; June 7.
Electrical connection block. J. Sacbs. 1,645,453; Oct. 11.
Electrical connection block. J. Sacbs. 1,645,453; Oct. 11.
Electrical connects. Adjusting. L. L. Nettleton. 1,633,431; July 5.
Electrical contacts, Insulated mounted for. V. R. Despard. 1,633,005; June 21.
Electrical control system. P. Charpentier. 1,624,158; Apr. 12.
Electrical control system. R. C. Coupland. 1,639,987; Aug. 22.
Electrical control system. F. W. Gay. 1,639,487; Aug. 23. Aug. 23.
Electrical-current-limiting system. F. W. Gay. 1,625,464; Diectrical-current-imitting system. F. Apr. 19.

Apr. 19.

Electrical device. C. C. Van Voorbis. 1,614.506; Jan. 18.

Electrical device and the manufacture thereof. J. H.

Cohen. 1,639.258; Aug. 16.

Electrical device for emitting light flashes and interrupting circuits. P. T. Weeks. 1,647.595; Nov. 1.

Electrical devices, Strain relief for the terminal connections of. W. Miller. 1,646.038; Oct. 18.

Electrical devices, Supporting means for. J. A. Warren. 1,646.038; oct. 2,641.613; Sept. 6.

Electrical discharge device. P. K. Devers. 1,640,443; Oct. 1,640,643; Oct. 1,640,644; Oct. 1, Electrical discharge device, E. R. Lectrical discharge device, W. H. T. Holden. 1,636,054; July 19.
Electrical discharge tubes, Manufacture of luminous. R. Electrical discharges, Regulator for. W. D. Coolidge. 1,631,626; June 7.
Electrical distribution and control, System of. C. F. Kettering and W. A. Chryst. 1,642,034; Sept. 13.
Electrical distribution system. A. H. Kehoe. 1,642,031; Sept. 13.
Electrical distribution, System of. E. M. Bill. 1,633,804; Sept. 13.
Electrical distribution, System of. E. M. Bill. 1,633,804;
June 28.
Electrical-disturbance-eliminating system. I. G. Wilson.
1,645,174; Oct. 11.
Electrical-disturbance-eliminating system. I. G. Wilson.
1,645,174; Oct. 11.
Electrical-distribution sound waves, Apparatus for translating. W. Herdman. 1,616,20; Feb. 8.
Electrical-energy variations, Production of. C. G. Smith.
1,617,173; Feb. 8.
Electrical fittings, Casing for. W. Meschenmoser.
1,622,333; Mar. 29.
Electrical fittings. J. A. Volk, jr. 1,648,704; Nov. 8.
Electrical faxture banger. J. E. Hummell. 1,634,578;
July 5. Electrical fixture hanger. J. E. Hummell. 1,634,578; July 5. Electrical-fixture-supporting device. R. B. Benjamin. 1,613,013; Jan. 4. Electrical fixture-supporting device. R. B. Benjamin. 1,636,278; July 19. Electrical-fixture-supporting device. C. L. Hopkins. 1,646,482; Oct. 25. Electrical-fixture-supporting device. C. L. Wilhite. Dev. 75,547; Sept. 27. Electrical fixture-supporting system. W. Dornig. Electrical fixture-supporting system. W. Dornig. Electrical fixed feeding apparatus, Switch for. A. Nagel. 1,637,425; Aug. 2. Electrical fixed, C. O'Brien, 1,645,344; Oct. 1. Electrical generator. W. A. Marrison. 1,647,645; Nov. 1.

Electrical heater. C. C. Garey. 1,620,537; Mar. 8. Electrical heater plug, Thermostatic-control. L. M. Kap-lan. 1,641,002; Aug. 30. Electrical heating appliance. A, Pfau, jr. Des. 72,186; Hung. J. Scott-raggart. 1,634,390; Dec. 27.

Blectrical impulses into graphic representations, Apparatus for converting. C. F. Jenkins. 1,650,361; Nov. 22.

Electrical impulses, System for transmitting. A. Barnay. 1,623,714; Apr. 5.

Electrical inclosing box, Knock-out-type. R. K. Mason. 1,623,634; May 31.

Electrical indicating instrument. J. R. Barnhart. 1,630,834; May 31.

Electrical inductances, Adjusting. I. L. Milton. 1,615,130; Jan. 18.

Electrical instrument. T. L. Lee. 1,632,609; June 14. Adjusting. 1. L. Milton. 1.615,130; Jan. 18. T. L. Lee. 1,632,609; June 14. Electrical instrument for medical treatment. Y. Murray. 1,641,345; Sept. 6. Electrical instrument for medical treatment. Y. Noishiki. 1,625,675; Apr. 19. Electrical instruments, Case for. E. F. Weston. Des. 73,768; Nov. Lients, Vernier adjustment means for. N. 1641,768; Mar. 29. Electrical interference, Preventing. R. B. Shanck. 1,633,611; June 28. Electrical interrupter. A. Leighton. 1,621,673; Mar. 2. Electrical machine. C. A. Mudge. 1,612,828; Jan. 4. Electrical machine. C. A. Mudge. 1,612,828; Jan. 4. Electrical machine. G. A. Glaubitz. 1,637,132; July 26. Electrical machine. Rotor for. A. Glaubitz. 1,637,132; July 26. Electrical machines, Rotor for. A. Glaubitz. 1,637,132; July 26. Electrical machines, Rotor for. A. Glaubitz. 1,637,132; Electrical machines, Windling for. L. Rochel. 1,637,132; Electrical machines, Winding for. L. Roebel. 1,653,784; Electrical machines with split poles, Supporting housing for. H. Papst. 1,625,051; Apr. 19. Electrical measurement, Device for. M. C. Hall. 1,682,241; Dec. 18. Electrical measuring instrument. R. G. Arey. 1,620,622; Electrical measuring instrument. R. G. Arey. 1,620,622; Mar. 15. Electrical measuring instrument. C. E. Foster. 1,624,135; Apr. 12. Electrical measuring instrument. D. R. Lamont. 1,648,898; Nov. 15. Electrical measuring instrument. R. T. Pierce. 1,654,308; Dec. 27. Dec. 27.

Dec. 12.

Dec. 1 cal overloads, Indicating, J. Samper. 1,635,348; Electrical July 12 Electrical precipitator. W. A. Schmidt. 1,650,097 Nov. 22. Electrical protective apparatus. F. R. Parker. 1,640,516; Aug. 30.
Electrical protective system. C. L. Fortescue. 1.649.025;
Nov. 15.
Flectrical regulating apparatus. E. J. Blake. 1.638.923;
May 31.

May 31.

May 31.

May 31. May 31. Electrical regulating device. H. A. Flammer. 1.613.606; Jan. 11. Electrical regulating system. F. W. Springer. 1,645,724; Oct. 18. Diectrical relay. G. W. Baughman, 1633,384; Dec. 20. Electrical relay. R. M. Gilson, 1627,322; May 3. Electrical relay. L. O. Grondahl, 1,628,931; May 3. Electrical relay switch, G. Dumont, 1613,446; Jan. 4. Electrical resistance grid. C. T. Evans. 1,614,920;

Electrical supply, System of. H. Dean. June 7.
Flectrical switch. F. Aldendorff. 1,624,202; Apr. 12.
Electrical switch. H. K. Ansingh. 1,623,964; Apr. 12.
Electrical switch. L. W. Auge. 1,652,293; Dec. 13.
Electrical switch. L. W. Auge. 1,652,293; Dec. 12.
Electrical switch. J. Dominicask. 1,927,158; May. 3.
Electrical switch. J. Dominicask. 1,927,158; May. 3.
Electrical switch. B. H. Jacobs. 1,631,268; June 7.
Electrical switch. S. A. Swanson. 1,646,797; Oct. 25.
Electrical switch. W. F. Wells. 1,637,246; Aug. 24.
Electrical switch. W. F. Wells. 1,637,246; Aug. 24.
Electrical switch mechanism. F. A. Holt. 1,654,373;
Dec. 27.

Electrical switch mechanism. F. A. Holt. 1,654,373;
Dec. 27.

Electrical switch. M. Electrical switch. Electrical switch. C. F. Wells. 1,634,373;
Dec. 27.

Electrical switch. E Electrical switch mechanism. F. A. Holt. 1,654,373; Dec. 27.
Electrical switch mechanism. C. F. Wolford. 1,622,301; Mar. 29.
Electrical switching apparatus. R. M. Gilson. 1,619,860; Electrical swivel connection. A. G. Adam. 1,649,276; Nov. 15.
Electrical synchronizing system. E. L. Grunenwald. 1,625,314; Apr. 19.
Electrical system. W. B. Churcher. 1,639,883; Aug. 23.
Electrical system. W. E. Monzles. 1,614,141; Jan. 11.
Electrical system. W. E. Monzles. 1,614,141; Jan. 11.
Electrical systems. W. E. Monzles. 1,614,141; Jan. 11.
Electrical systems. Gontrol for. G. V. Heidt. 1,646,860; Electrical systems. Gontrol for. G. V. Heidt. 1,646,860; Electrical terminal. E. Schenk. 1,634,689; July 5.
Sept. 13.
Electrical terminal. E. Schenk. 1,634,689; July 5.
Electrical terminal. E. Schenk. 1,634,689; July 5.
Electrical testing apparatus. G. A. Campbell. 1,651,440; Electrical terminal. E. Schenk. 1,634,689; July 5. Electrical testing apparatus. G. A. Campbell. 1,651,440; Electrical testing apparatus. J. M. Coote. 1,637,472; Aug. 2. Electrical testing system. M. B. Long. 1,647,236; Nov. 1. South 1,647,236; Nov. 1. South 1,647,236; Jan. 18. Electrical time switch. C. W. Brown. 1,645,163; Jan. 18. Electrical transformer. F. C. Owen. 1,637,238; July 26. Electrical transformer. A. B. L. Scaues. 1,647,314; Electrical transformer. A. B. L. Scanes, 1,647,314; Nov. 1, 20 Control of the Con July 5. Electrical translating device. M. C. Hopkins. 1,630,010; May 24. transmission device. A. Michoud. 1,630,900; May 31. May 91. Electrical transmission of pictures, Method of and apparatus for secret. G. S. Vernam. 1.613,686; Jan. 11. Electrical transmitter. H. C. Ford. 1,627,168; May 3. Electrical transmitting system. E. M. Staples. 1,622,357; Electrical variations, Production of. C. G. Smith. 1,617,172; Feb. S. Blectrical vibrator. W. E. Gray. 1,628,405; July 12. Electrical variations, Production of. C. G. Smith. 1,617,172; Feb. S. Blectrical variations, Production of. C. G. Smith. 1,617,172; Feb. S. Blectrical variations, Production of. C. G. Smith. 1,617,172; Feb. S. Electrical variations, Production of. C. G. Smith. 1,617,172; Feb. S. Electrical variations, Production of. C. G. Smith. Electrical vibrator. F. C. Perrem. 1,628,605; July 12. Electrical vibrator. F. C. Perrem. 1,628,602; May 17. Electrical voting apparatus. A. G. Turck. 1,650,247; Nov. 22. Nov. 22. Electrical wiring system, H. S. Walker. 1.626.570: Apr. 26. Electrically-controlled cut-out. K. S. Hensley. 1,623,115; Electrically-controlled curous. As the controlled curous Apr. 5.
Electrically-driven extractor. E. J. Carroll. 1,649,889;
Nov. 22.
Electrically-driven indicators, Mechanism for converting movement into a step-by-step rotational movement particularly applicable to. C. E. Prince. 1,613,533; Jan. 4.
Electrically driven machines, Control means for. E. J. Carroll. 1,643,197; Sept. 20.
Electrically-driven spinning centrifugal apparatus. P. Minck. 1,641,091; Aug. 30.

Electrically exhibiting a danger signal on a locomotive, Device for. H. Jacoby. 1,642,303; Sept. 13. Electrically-heated device and manufacture thereof. E. N. Lightfoot. 1,617,489; Feb. 15. Electrically-heated steam brush. E. J. Rohne. 1,629,738; May 24: Electrically-heated utensils, Stand for. G. B. Ratterman, 1,613,194; Jan. 4. Electrically-operated automatic winding device. M. Yokoyama, 1,624,301; Apr. 12. Electrically-operated burners, Control J. C. Johnson, 1,631,093; May 31. Electrically-operated devices, Timer for. E. A. Rutenber, 1,622,002; Mar. 22. Everices, Timer for. E. A. Rutenber, 1,632,003; June 28. Electrically-operated indicating device. E. S. C. Betteley, 1,644,102; Oct. 4. Electrically-operated switch. C. D. Ainsworth, 1,650,172; Nov. 22. Nov. 22. lectrically-released brake. J. W. Dodd. 1,629,781; Electrically-released brake: J. May 24. May 24. Electrically-welded bubble tower. R. Stresau. 1,630,037; Electrically-welded bubble tower. R. Stresau. R. Stres May 24.

Bettrically-welded bubble tower. R. Stresau. 1,630,037; May 24.

Lettrically-welded bubble tower. R. Stresau. 1,630,037; May 24.

Lettricity, Generating and distributing system for. C. F. Stroot I. 1644,168; Oct. 4.

Electricity meter. F. Holden. 1,653,961; Dec. 27.

Electricity meter. F. Singer, P. Paschen, and G. Reime. 1,645,299; Oct. 11.

Electricity meter, Commutator. J. Harris. 1,648,898; Nov. 15.

Electricity meter, Induction. J. Harris. 1,648,898; Nov. 15.

Electrocardiograph, Portable. H. E. Nichols. 1,647,710-11; Nov. 1.

Electrocardiograph, Portable. H. E. Nichols. 1,647,710-11; Nov. 1.

Electrochemical means for preventing corrosion. R. V. A. Mills. 1,646,736; Oct. 23.

A. Mills. 1,646,736; Oct. 23.

Electrode G. R. Lewers. 1,633,372; July 5.

Electrode and degasifying the same, M. Morrison. 1,615,994; Feb. 1.

Electrode and making the same, Dry-cell. K. H. W. Ramsay. 1,644,4746; Oct. 11.

Electrode clamp. R. H. Wappler. 1,644,803; Oct. 11.

Electrode, Clamping. R. H. Wappler. 1,644,803; Oct. 11.

Electrode, Clamping. R. H. Wappler. 1,640,061; Aug. Electrode, Clamping. F. H. Wappler. 1,652,804; Dec. 13. Electrode device, Incandescent. C. Samson. 1,620,397; Electrode device, Incancescent. C. Samson. 1,620,897; Mar. 8. Electrode, Disthermic. M. Stern. 1,633,649; June 28. Electrode of Dry-cell. H. D. Hodge. 1,638,995; Aug. 16. Electrode element and production thereof, Storage-battery. T. A. Edison. 1,649,579; Nov. 15. Electrode-feeding means. W. B. Jaspert. 1,643,773; Sept. 27. Sept. 27.

Electrode-feeding means. G. A. Lovett. 1,642,452; Sept. 18. for accumulators, Manufacture of lead. Litrasser. 1,641,241; Sept. 6.

Electrode for storage batteries, Negative. R. C. Benner and L. C. Werking. 1,649,280; Nov. 15.

Electrode High-frequency vesical. M. Molony. 1,620,828; Mar. 15.

Electrode holder. L. E. Muller. 1,634,957; July 5.

Electrode holder. C. F. Short. 1,628,926; May 17.

Electrode holder. L. E. Woodland. 1,653,141; Dec. 20.

Electrode holder. S. Woodland. 1,653,141; Dec. 20.

Electrode folier. J. E. Woodland. 1,653,141; Dec. 20.

Electrode Metal-coated. E. L. Sufft. 1,626,104; Apr. 26. Apr. 26. Electrode of the filter-press type, Electrolyzer. R. Pechkranz. 1,643,900; Sept. 27.
Electrode, Self-baking. J. Westly. 1,613,212; Jan. 4.
Electrode, Festing. A. F. Williams. 1,650,779; Nov. 29.
Electrode to be applied to the human body and making
same. E. Last. 1,626,617; May 3.
Electrodes, Welding. O. H. Eschholz. 1,652,107; Dec. 6.
Electrodes, Apparatus for recoving dust from precipitator.
Electrodes, Einder for securing medical. W. A. Laurie.
1,637,829; Aug. 2.
Electrodes, Euliding up self-baking. M. O. Sem.
1,639,007; Aug. 18.
Electrodes for electrolytic apparatus, Manufacture of. 1.639,007; Aug. 16.
Electrodes for electrolytic apparatus, Manufacture of, R. D. Mershon. 1,617,163; Feb. 8.
Electrodes in fused electrolytes, Profecting carbon or graphite E. A. Ashcroft. 1,655,605; Dec. 20.
Electrodes, Making channeled continuous. C. W. Söderberg. 1,640,735; Aug. 30.
Electrodes of storage batteries, Preparing positive. A.
Cellino, 1,640,922; Aug. 30.
Cellino, Froduction of, E. Kleinschmidt. 1,639,188; Aug. 16. Electrodes to carriers, Machine for securing plate-shaped. If de Jong, 1,639,687; Aug. 23.

Electrodeposition of chromium. C. Hambuechen. Reif.558; Apr. 19.

Electrohydraulic brake. B. S. Alkman. 1,622,480; Mar. 29. Electroionic relay. F. W. Meyer. 1,649,036; Nov. 15.

Electrolocomotives, Driving means for. H. Dollmann. 1,029,206; May 17. Electrolyte seal and making the same. E. A. Schumacher. 1,647,021; Oct. 25. and electrode therefor. W. G. Electrolyte apparatus Mar. 8. and electrode therefor. W. G. Electrolytic capital Mar. 8. and electrode therefor. W. G. Electrolytic cell. E. R. Monarelli. 1,648,963; Nov. 15. Electrolytic cell. E. Romanelli. 1,648,963; Nov. 15. Electrolytic cell. E. Sorensen. 1,613,966; Jan. 11. Electrolytic cell. E. Sorensen. 1,613,966; Jan. 11. Electrolytic condensers, Electrode for. C. F. Holmboe. 1,633,284; June 14. Electrolytic condensers, Electrode for. C. Aalborg. 1,637,325; Aug. 2. Electrolytic condensers, Electrode for. C. Alborg. 1,633,0224; May 24. Electrolytic method and apparatus. K. E. Stuart. 1,630,224; May 24. Electrolytic rectifier. L. P. Bensing. 1,645,085; Oct. 11. Electrolytic rectifier. L. P. Bensing. 1,645,685; Oct. 11. Electrolytic rectifier. L. P. Bensing. 1,647,639-60; Nov. 1. Electrolocomotives, Driving means for. H. Dollmann. 1.629.206: May 17. Nov. 1: Electrolytic rectiner. W. abortisol. 1,041,043-049, Nov. 1: Electrolytic reflector. S. W. Jenks. Re16,733; Sept. 6. Electrolytically-deposited iron, Heat treatment of. N. B. Pilling. 1,630,449; May 31. Electromagnet. C. D. Ainsworth. 1,627,821; May 10. Electromagnet. R. A. Binke. 1,622,089; Mar. 22. Electromagnet apparatus. F. G. Creed. 1,046,234; Oct. 18.
Electromagnetic apparatus for recording sound. A. F.
Sykes. 1,621,180; Mar. 15.
Electromagnetic apron feeder. J. P. Bethke. Re16,673; Electromagnetic brake. R. V. Morse. 1,629,084; May 17. Electromagnetic chuck. J. Bing. 1,647,951; Nov. 1, Electromagnetic control. L. Saives. 1,652,329; Dec. 13. Electromagnetic device. E. R. Carichoff. 1,648,674; G. W. Elmen. Electromagnetic device. 1,620,878; Mar. 13.
Electromagnetic device. F. E. Field. 1,616,
Siectromagnetic device. H. C. Harrison.
May 17.
Electromagnetic device. H. C. Harrison.
June 14.
Electromagnetic device. E. P. W. Jones. 1,620,
Electromagnetic device. 1,616,180; Feb. 1,628,666; June 14.

Electromagnetic device.
Electromagnetic device.
Electromagnetic device.
Electromagnetic device.
E. D. Mead. 1,652,459; Dec. 13.
Electromagnetic device.
D. D. Miller. 1,652,499; Dec. 13.
Electromagnetic device.
R. Nordenswan and A. S. Curtis.
1,644,789; Oct. 11.
Electromagnetic device
B. W. Jones and N. A. Wolfe. 1,620,555; Mar. 8.
Electromagnetic device producing a constant moving force. A. Epitaux. 1,631,801; June 7.
Electromagnetic driver.
L645,583; Oct. 18. Electromagnetic device p force. A. Epitaux. 1,65 Electromagnetic driver. C. 1,645,583; Oct. 18. Electromagnetic element. Nov. 8. R. J. Miller. 1.648,460: Electromagnetic indicator. F. G. Brewster. 1,638.614; Aug. 9 Extra two magnetic operating means and motor controller employing the same. R. W. Coff. 1,638,812 June 28. Electromagnetic power-transmitting means. C. B. Mills. 1,633,464; June 21. Electromagnetic relay. D. C. Crowe. 1,645,897; Oct. 18. Electromagnetic relay. J. Erickson. 1,641,256; Sept. 6. D. C. Crowe.
J. Erickson.
J. Erickson.
J. Erickson.
D. D. Miller, 1,645,897; Oct. 18. 1,641,256; Sept. 6. 1,646.956; Oct. 25. 1,651,684; Dec. 6. 1,652,491; Dec. 13. Electromagnetic relay. Electromagnetic relay. 1,652,491; Dec. 13. C. A. Brigham. lectromagnetic relay sound reproducer. Electromagnetic s 1,620,631; Mar. Electromagnetic s Lectromagnetic sound reproducer. L. 1,621,562; Mar. 22.
Electromagnetic sound reproducer. 1,619,161; Mar. 1.
Electromagnetic switch. L. M. Aspinwa Jan. 11 Staunton. W. H. Stevenson. L. M. Aspinwall. 1.614.173: Electromagnetic sw'tch. D. M. Bliss. 1,630,650: May 81. Electromagnetic switch. D. L. Lindquist, E. L. Dunn, and D. C. Larson. 1,646,029; Oct. 18. Electromagnetic switch. E. P. Oswald. 1,625,820; Apr. 26. 1,625.509; Apr. 19. de. 1,646,943; Oct. Electromagnetic switch. N. Togami. 1, Electromagnetic switch. H. N. Wade. Electromagnetic therapeutic-compress-heating appliance.
J. N. De Quer. 1.624.397; Apr. 12.
Electromagnetic time-element device. C. H. Chapman.
1.638.322; Aug. 9. According to the clement device. C. H. Chapman. 1,638,322; Aug. 9. Electromagnetically-operated device. C. D. Ainsworth. 1,642,288; Sept. 13. Electromators, Lubricating device for vertical. R. W. H. Hofstede-Crull. 1,654,211; Dec. 27. Electron device and operating. A. W. Hull. 1,628,466; May 10. Electron device, High-voltage, H. C. Rentschler, 1,626,693; May 3.
Electron-discharge apparatus, W. K. Kearsley, jr. 1,533,102; Dec. 20.
Electron-discharge apparatus, M. Morrison, 1,616,702; Feb. 8. Electron-discharge apparatus. O. W. Pike. 1,614,154;

Electron-discharge device. P. Gavin. 1.645,904; Electron-discharge device. T. R. Griffith. 1,645,904; Nov. 1.
Electron-discharge device. T. R. Griffith.
Nov. 1.
Electron-discharge device. A. Haddock.
July 19.
Electronic-discharge device. W. F. Hendry.
May 10. Electron-discharge device. 1,647,617; 1.635.992: 1.628.045: Electron-discharge device. W. G. Houskeeper. May 31. 1,635,999; Electron-discharge device. W. G. Houskeeper. July 19.
Electron-discharge device. W. G. Houskeeper. Aug. 30 Electron-discharge device. W. G. Houskeeper. 1,642,498; Sept. 13. Electron-discharge device. W. G. Houskeeper. 1,647,994; Nov. 8. Electron-discharge device. R. I. Hulsizer. 1,628,982; May 17. Electron-discharge device. F. L. Hunter, jr., and S. W. Crowley. 1,647,996; Nov. 8. Electron-discharge device. R. W. King. 1,613,612; Jan. 11.
Electron-discharge device.
muir. 1,648,312; Nov. 8.
Electron-discharge device.
Nov. 1. K. H. Kingdon and I. Lang-W. H. Manthorne. 1,647.238; Electron-discharge device. R. C. Mathes. 1.640.462: Aug. 30. Electron-discharge device. A. Mayrogenis. 1.616.914: Feb. 8. Electron-discharge device. A. Mavrogenis. 1.629.171: May 17. Electron-discharge device. A. Mayrogenis. 1.638.499: Aug. 9. Electron-discharge device. V. L. Ronci. 1.616.139: Electron-discharge device. V. L. Ronci. 1,624,562; Electron-discharge device. V. L. Ronci. 1,628,999; May 17. Electron-discharge device. V. L. Roncl. 1.636.015 : Electron-discharge device. V. L. Ronci. Electron-discharge device. P. Schwerin. 1.615.958 : Feb. 1. Electron-discharge device. J. H. Thompson. 1,827.127; Mny 3. Electron-discharge device and operating the same. G. M. E. Moday and E. E. Charlton. 1,643.458; Nov. Electron-discharge devices, Electrode structure for. W. F. Hendry. 1,632.135; June 14. Electron-discharge tubes, Grid for. E. Schrack. 1,654.471; Dec. 27. Electron-emitting eathode and preparing the same. F. Electron-emitting cathode and preparing the same. Electron-emitting cathode and preparing the same. H. Miller. 1,640.710; Aug. 30. Electron-emission device. H. J. Round. 1,654.518; ectron-emission device. Dec. 27. H. J. Round. 1.654.513: Dec. 27.

Electron metal, Production of a weather proof oxide layer on. W. Pleper. 1,642,309; Sept. 13.

Electron tube. H. A. Brown. 1,653,544; Dec. 20.

Electron tube. W. Daumann. 1,613,503; Jan. 4.

Electron tube. H. M. Pingen. 1,644,744; Oct. 11.

Electron tube. H. M. Pingen. 1,644,744; Oct. 11.

Electron tube. amplifying apparatus. R. S. Fisher. 1,630,118; May 24.

Electron-tube apparatus. F. A. Kolster. 1,637,864; Aug. 2. Libes, Antimicrophonic shield for, Donald. 1,615,468; Jan. 25.
Electron tubes, Energizing. E. Vroom. L. R. Me-Donald Lives, Energizing, D. Letton Lives, Energizing, D. Letton Lives, E. F. Janeke, 1,647,364; Nov. 1, 1,647,364; Nov. 1,647, Electropheumatic brake. C. C. Farmer. 1,626,605; May 3. Electropheumatic brake. C. C. Farmer. J. C. McCune. 1,622,430; Mar. 29. Electropheumatic brake. T. H. Thomas. 1,653,130-5; Dec. 20.

Electroresponsive apparatus. H. A. Thompson, 1.629.011: May 17.

Electroresponsive cell. C. H. Zierdt. 1,641,564; Sept. 6.

Electroresponsive device. P. M. Conrad. 1,640,238;

Oct. 18.

1.619.318; Mar. 1.

Electrostatic relay device. S. Ruben. 1,631,764; June 7.

Electrotherapeutic apparatus. L. Dunn. 1,647,512;

Nav. 1.

Nav. 1. Electrotherapeutic apparatus. K. Fukuyama. 1,615,508; Jan. 25. Electrotherapeutic device. S. S. Ebel. 1,648,116; Nov. 8. Electrotherapeutical apparatus. E. Northcott and J. W. Warford. 1,653,819; Dec. 27. Electrotherapeutical device. W. J. Herdman. 1,617,157; Pch. 8. Electrotype plates, Machine for cleaning. W. R. Lakeman. 1,633.216; June 21,

Electrotypes, Making. J. J. Walsh. 1,649,876; Nov. 22. Electrovision. R. D. Parker. 1,648,065; Nov. 8. Elements, Making expansible collapsible. H. C. Mallory. 1,617,857; Feb. 15. Elewating, and distributing material, Apparatus for. J. Elevating and distributing material, Apparatus for. J. E. B. Bushnell. 1,645,542; Oct. 18. Elevating and distributing material, Apparatus for. J. Elevating apparatus. H. S. Germond, fr., and H. Green. 1,628,239; May 10. Elevating apparatus. H. S. Germond, fr., and H. Green. 1,628,239; May 10. Elevating device. G. McCall. 1,646,759; Oct. 25. Elevating mechanism. M. P. Holmes. 1,614,630; Jan. 11. Ede elevator. Electric elevator. Casing elevator. Pneumatic elevator. Electric elevator. Fletchie elevator. Sucker-rod elevator. Fletchie elevator. Fletc Burger. 1,625,290; Apr. 19.
Elevating device. G. McCall. 1,646,759; Oct. 25.
Elevating mechanism. M. P. Holmes. 1,614,030; Jan. 11.
Bed diveror.
Buttocks elevator.
Casing elevator.
Flex deviator.
Electric elevator.
Flex deviator.
F Cet. 11.

Elevator safety appliance. T. L. R. Jones. 1,614,675;
Jan. 18.

Elevator safety stop. G. Ordog. 1,626,553; Apr. 26.

Elevator safety stop, Noiseless. W. F. McMahon.

1,620,033; Mar. 8.

Elevator support. G. A. Edwards. 1,622,943; Mar. 29.

Elevator system. J. R. Jackson, jr. 1,632,376; June 14.

Elevator system. Electric. G. B. Grosvenor. 1,632,225-6;

June 14. Elevators, Apparatus for controlling. F. E. Boardman. 1.635,073; Apr. 19.
Elevators, Brake for. J. M. Rohlfing. 1,631,340; June 7.
Elevators, Collapsible handle for portable. F. L. Eledmann. 1.631,477; June 7.
Elevators, Control system for electric. E. W. Seeger. 1,645,075; Oct. 11.
Elevators, Controller for electric. E. B. Thurston. 1.633,434; Dec. 20. Elevators, 0 1,653.443; 1.633.435 Dec. 20. and like apparatus. Safety device for A Telebmann. 1.645.835; Oct. 18. Elevators. Electrically-lluminated floor indicator for passenger. J. F. Jones. 1.651,710; Dec. 6. E. J. Ouellette. 1,613,122; Jan. 4. Elevators, Floor selector for, J. Dunlop and J. F. Clancy, 1,027,320; May 8. Clancy, 1,027,320; May 8. Corpush-button, J. D. Schaigh, 1,615,364; Jan. 25. Elevators, lifts, or the like, Safety catch for, J. Wüstenhöfer, 1,638,386; June 28. Elevators, Safety apparatus for, W. J. Albersheim and H. S. Konheim, 1,613,215; Jan. 4.

Elevators, Safety device for. M. Scheinfeld. 1,640,873; Aug. 30. Aug. 30.
Elevators, Signaling system for. W. S. Smith. 1,635,586;
July 12.
Ellipsograph. K. Kiefer. 1,623,348; Apr. 5.
Petiodal, and N. J. Nelson. 1,644,205; July 12.
Ellipsograph. K. Kiefer. 1,623,348; Apr. 5.
Ellipsograph. O. Rettedal and N. J. Nelson. 1,644,205; Oct. 4.
Ellipsograph. A. C. Sanders. 1,626,430; Apr. 26.
Embalming, Hydraulic blood aspirator for. G. H. Hurst, jr. 1,617,254; Peb. 8.
Emblem, Interchangeable. H. C. Logan. 1,623,693; jr. 1.617,254; Feb. 8.
Emblem, Interchangeable. H. C. Logan. 1,623,698;
Apr. 5.
Emblem key. S. Marcus. Des. 71.880; Jan. 18.
Emblossing. J. H. Matthews. Rel6,718; Aug. 23.
Embossing. H. Mock. 1,648,461; Nov. 8.
Embossing die. W. R. Ecke and J. H. Matthews. 1,653,692; Dec. 27.
Embossing dies. C. Chisholm. 1,612,907; Jan. 4.
Embossing machine. J. E. Johnson. 1,639,733; Aug. 23.
Embossing machines, Latch for. A. H. Bates. 1,627,684;
Embroidered edgings, Forming. R. Loeb. 1,616,421;
Teb. 1. M. Cabattl. Pag. 71,812; Jan. 4. Embroidered edgings, Forming. R. Loeb. 1,616,421; Feb. 1.
Embroidered fabric. W. Schmid. Des. 71,812; Jan. 4.
Embroidered lace medallion. H. Schwarber. Des. 78,447; Sept. 13.
Embroidering machine, Automatic. L. Schwarzmann. 1,626,256; Apr. 26.
Embroidering machines, Jacquard mechanism for. M. Hadam. 1,645,449; Sept. Z. D. Becker. 1,646,383; Embroidery and process. E. D. Becker. 1,646,383; Oct. 25. Embroidery frame. P. Carbone. 1,636,681; July 26. Embroidery frame. D. Delciello. 1,649,340; Nov. 15. Embroidery-hoop clamp. C. D. Baldwin. 1,631,355; Embroidery-Boop clamp. C. D. Baidwin. 1,631,355; June 7. Barlown. 1,652,343; Dec. 13. Embroidery machine. M. Hadam. 1,618,529; Feb. 22. Embroidery machines. M. Hadam. 1,618,529; Feb. 22. Embroidery machines. Trimming device for. A. Mistretta. 1,620,373; Mar. 8. Trimming device for. A. Mistretta. 1,620,373; Mar. 8. Lenkergency brake. H. Everett. 1,640,492; Aug. 30. Emergency brake. H. Everett. 1,640,492; Aug. 30. Empreying garbase bins into garbage-collecting receptacles or carrying off cars in dust-proof manner, Device for. Emptying garbase bins into garbage-collecting receptacles or carrying off cars in dust-proof manner, Device for. Emptying garbase bins into garbage-collecting receptacles or carrying off cars in dust-proof manner, Device for. Emptying garbase bins into garbage-collecting receptacles or carrying off cars in dust-proof manner, Device for. Emptying garbase bins into garbage-collecting receptacles of carrying off cars in dust-proof manner, Device for. Emulsionan. 1,643,693; 321 hours, p. 26. Emulsions. Breaking betroleum. C. C. Averill. 1,617,740–1; Feb. 15. Emulsions. Breaking water-in-oil. C. C. Averill. 1,617,733; Feb. 15. Emulsions. Breaking water-in-oil. C. C. Averill. Emulsions. Production of. W. Krannich, H. Krzikalla, and C. Schuster. 1,652,016; Dec. 6. Emulsions. Separating oily. G. W. Coggeshall and A. Reilly. 1,643,698; Sept. 27. Endiched for melectrical conductors, Removing. W. G. Houskeeper. 1,653,805; Dec. 27. Enamel. Group production of the move for manner of th Embroidery machine. M. Bretschneider. 1 652 343 • Houskeeper. 1.653.805; Dec. 27.

Hammel, Phosphorescent luminous. F. Sauvagé. 1,637,963;

Lang. 2. S. E. Klucas. 1,626,414; Apr. 26.

End gate. R. E. Nash and H. Von Spreecken. 1,632,747;

June 14.

End gate. J. C. Poth. 1,635,905; July 12.

End gate. H. O. Wenzel. 1,634,224; June 28.

End gate. J. C. Poth. 1,635,905; July 12.

End gate. J. C. Poth. 1,635,242; June 28.

End gate. J. C. Poth. 1,638,224; June 28.

End gate and platform, Combined. J. H. Keesee.

End gate and ramp, Combined. L. C. Buffington. 1,639,873; Aug. 22.

End-gate for wagons. J. Wilhelm. 1,632,692; Oct. 25.

End gate for wagons. J. Wilhelm. 1,632,692; Dec. 13.

End-gate scoop board. T. D. Beintema. 1,637,631; Aug. 2.

End-gate scoop board. T. D. Beintema. 1,637,631; Aug. 2.

End-marching machines, Board kicker for. C. A. Killebrew. 1,638,310; Aug. 9.

End-post protector. H. N. and A. N. Stamos and T. W.

Brown. 1,622,614; Mar. 29.

End wrench. A. Dickey. 1,641,252; Sept. 6.

Ed. Lang. 1,618,207; Feb. 22.

Lordless-belt conveyers, Carrier for. F. E. Smith. 1,629,054;

May 17.

Endless drier for macaroni. G. Bagnani. 1,634,009;

June 28.

Hersey. 1,628,978; May 17. Energy fran Hersey. 1, ine: Seetransformers, Automatic regulator for. R. E. ey. 1,628,978; May 17. Air engine.

Air engine.

Air engine.

Air engine.

Automobile engine.

Blowing engine.
Brake engine.
Combustion engine.
Dental engine. Explosion engine.

Beating engine.

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Engine: See—
Explosive engine.
Fluid-actuated engine.
Fluid engine.
Gas engine.
Gasengine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Reciprocating engine.
Regenerator engine.
Revolving valve-sleeve gas
                                               Gas engine.
Gasoline engine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         engine.
Rotary engine.
Rotary steam engine.
Sliding-base engine.
Steam engine.
Turbine engine.
Two-cycle engine.
Two-cycle internal-combustion engine.
                                           Gasoline engine.
Heat engine.
Hot-air engine.
Hydraulic engine.
Internal-combustion engine.
        Hydraulic engine.

Internal-combustion engine.

Logging engine.

Logging engine.

Two-cycle engine.

Two-cycle engine.

Two-cycle internal control of the co
Engine. A. L. FOWEII. 1,646,110; Oct. 18. Engine. H. R. Shoopman and S. Shindo. 1,642,217; Sept. 13. E. D. Smyrser. 1,623,502; Apr. 5. Engine. E. D. Smyrser. 1,623,504; Apr. 50. Engine. B. Windell. 1,636,834; July 26. Engine. R. Windell. 1,636,838; July 21. Engine. R. Windell. 1,636,839,88; July 21. Engine. R. Windell. 1,636,839,835; July 26. Engine. R. Windell. 1,636,839,835; July 26. Engine. R. Windell. 1,636,836; July 26. Engine. R. Schneider. 1,626,760; May 3. Engine. Engine. R. Schneider. 1,626,760; May 3. Engine. Compressor. Automotive. N. A. Christensen. 1,633,836; July 26. Engine. Compressor. Automotive. N. A. Christensen. 1,633,835; July 26. Engine. Control. Hoisting. W. J. Lilly and H. H. Logan. 1,624,261; Apr. 12. Engine-control device, Gas. J. M. Craig. 1,618,753; Feb. 22. Engine. Control. Hoistings. H. Marles. 1,644,261; Oct. 4. Engine-cooling system. L. P. Barlow. 1,632,582-4; June 14. June 14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.642.217:
                 June 14.
Engine-cooling system. L. P. Barlow.
June 14.
Engine-cooling system. J. Good. 1,616,96
Engine-cooling system. H. C. Mallory.
Dec. 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.632.582-4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1,616,966; Feb. 8.
Mallory. 1,651,827-8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mallory.
                 Engine-cooling system. S. W. Rushmore.
Mar. 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.621.755;

Dnzine-cooling system.
M. R. 122.
Engine-cooling system.
P. J. Schwalbenberg.
1,652,736;
Engine-cooling systems.
Attachment for a gas.
E. M. Bremer.
1,626,448;
Apr. 26.
Engine-cooling systems.
Particle of the cooling systems.
Engine-cooling systems.
Particle of the cooling systems.
Particle of the cooling systems.
Particle of the cooling systems.
Engine cank cases.
Combination magneto contact and officenductor for R. W. Ransdell.
Rel6,532; Jan. 11.
Engine cylinder of the translation magneto contact and officency of the cooling systems.
Engine cylinder and making same.
Internal-combustion.
A. Gehres.
1.643.719;
July 5.
Engine-cylinder scavenging mechanism.
H. A. Gehres.
1.644.777;
Oct. 11.
Engine-cylinder scavenging mechanism.
A. Moore.
Engine driven machines.
Gradually speeding up.
E. Engine equipment,
Internal-combustion.
J. Milton.
J. L. Milton.
J. L. 1645.979;
Oct. 18.
Engine-cylaust tester.
E. J. Kates.
J. L. Milton.
J. L. 20.
J. L. Milton.
J. L. 1612.381;
Jan. 4.
J. L. 1612.381;
Jan. 4.
J. L. Milton.
J. L. Milton.
J. L. 1612.381;
Jan. 4.
J. L. Milton.
J. L. Milton.
J. L. 1612.381;
Jan. 4.
J. L. Milton.
J. L. Milton.

             I.616,594; Feb. 8.

Bagine-exhaust tester. E. J. Kartes. 1,652,213; Dec. 20.

Engine for control devices, Hydraulic. C. L. Howse.

I.612,818; Jan. 4.

Engine for rock dills, Rotary. A. H. Katterjohn.

Bagine for rock dills, Rotary. A. H. Katterjohn.

I. G. Robinson.

I.646,931; Oct. 25.

Engine fuel-injection device. Internal-combustion. W. P.

Widdowson. 1,613,000; Jan. 4.

Engine fuel system. J. Good. 1,629,500; May 24.

Engine governor. W. T. David. 1,653,259; Dec. 20.

Engine lating for the fuel of th
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Engine lubrication. C. E. Bonner. 1,634,768; July 5. Eugine lubrication system, Internal-combustion. R. L. Skinner. 1,640,856; Aug. 30.
Engine manifold. G. Growe. 1,613,995; Jan. 11.
Engine manifold. Internal-combustion. C. Breer. Engine mounting. A. J. Baker. 1,652,159; Dec. 13.
Engine mounting. A. J. Baker. 1,652,159; Dec. 13.
Engine on the combustion. E. L. Skinner. 1,650,773; Nov. 29.
Engine operation, Steam. V. Z. Caracristi. 1,627,075; Engine operation, Steam.
 Engine or pump. H. A. F. L. M. Warschau. 1,613,210;
Jan. 4.
  Engine or pump, Rotary. B. R. Planche. 1,636,486;
July 19.
Engine of Pump, Rotary. B. R. Flanche. 1,600,200; Engine pairticularly steam engine, Gas or vapor, C. L. Cook. 1,627,427; May 3. Engine piston, Internal-combustion. J. Fabian. 1,642,432; Sept. 13. Engine rotary valve member, Internal-combustion. E. M. Bournonville. 1,624,388; Apr. 12. Engine shelfs. 33. Hopporting Inling for Jordan. A. L. Engine stellars. 43. Hopporting Inling for Jordan. A. L. Engine stater. 45. Hopporting Inling for Jordan. A. L. Engine stater. O. Brisbois. 1,621,102; Mar. 15. Dragine starter. O. Brisbois. 1,623,338; Dec. 20. Engine starter. O. Brisbois. 1,633,616; Dec. 20. Engine starter. O. Brisbois. 1,635,616; Dec. 20. Engine starter. M. B. Jackson. 1,652,361; Dec. 18. Engine starter. M. B. Jackson. 1,652,361; Dec. 18. Engine starter. M. B. Jackson. 1,652,361; Dec. 18. Engine starter. W. L. McGrath. 1,637,422; Aug. 2. Engine starter.
 Engine starter. W. L. McGrath. 1.637.422; Aug. 2. Engine starter. W. L. McGrath. 1.650.638-9; Nov. 29. Engine starter. W. L. McGrath. 1.650.638-9; Nov. 29. 1.633.863; June 28. Engine starter, Gas. R. Chilton. 1,625.793; Apr. 26. Engine starter, Gas. P. E. Mack. 1,644.932; Oct. 11. Engine starter, Magnetic. O. Brisbols. 1,653.618; Dec. 27.
 Entire starter mechanism. F. F. Dorsey. 1,646,643;

Oct 23.

Engine starters and the like, Gear-shifting mechanism for.

V. C. Hodges. 1,642,109; Sept. 13.

Engine starters, Drive for. C. Ringwald. 1,634,515;

July 5.
 Engine-starting apparatus. Z. C. Bradford. 1,618,858; Feb. 22. Engine-starting apparatus. W. A. Chryst. 1,638,925;
  June 28.
Engine-starting apparatus.
July 5.
                                                                                                W. A. Chryst.
 Engine-starting apparatus.
Aug. 30.
                                                                                                 W. A. Chryst. 1,640,753;
 Engine-starting apparatus.
Aug. 9.
Engine-starting apparatus.
Aug. 9.
                                                                                                 L.
                                                                                                            H. Davis.
                                                                                                                                                        1,638.246;
                                                                                                             W. Elsey,
                                                                                                 G.
  Engine-starting apparatus. G. W. Elsey.
                                                                                                                                                         1.640.758:
  Aug. 30.
Engine-starting apparatus.
                                                                                             G. W. Elsey, 1.641.418-19:
 Sept. 6. Engine-starting apparatus. F. J. Hardman. 1,641,383; Sept. 6. Engine-starting apparatus. F. J. Hardman. 1,641,426; Sept. 6. Engine-starting apparatus. W. O. Kennington. 1,638,265;
  Aug. 9.
Engine-starting apparatus. F. C. Kroeger. 1,634,751;
 July 5.
Engine-starting apparatus. J. W. Morrison. 1,640,714;
  Aug. 30.
Engine-starting apparatus. W. W. Riedel,
                                                                                                                                                      1.638.214:
          Aug. 9.
  Engine-starting device. A. Avis. 1.632,264; June 1.652,920; Dec. 13. Engine-starting device. M. Wild and O. Gol Engine-starting.
                                                                                                                                                          Goldberg.
  Engine-starting mechanism. W. A. Chryst. Sept. 6.
                                                                                                                                                        1,641,373;
  Engine s
Feb. 1.
                             stop, Automatic. C. E. Hoover.
                                                                                                                                                        1,615,904;
 Engine-st.
June 21.
             gine-stopping device. J. J. Rutledge. 1,633,386;
June 21.

Engine-supply valve and reverse levers, Single control means for steam. J. E. Dunlap and E. M. Horn. 1.647.859; Nov. 1.

Engine units. Actuating mechanism for auxiliary. A. F. Masury. 1.654.087; Dec. 27.

Enzine with cylinders arranged in two opposite lines, Internal-combustion 1.55.

Engine with cylinders arranged and L. J. H. Engine with four or more working cylinders, Explosion. S. Lindequist. 1.634.249; June 28.

Engine with inclined cylinders, Internal-combustion. G. C. Cappa 1.634.017; June 28.

Engine with rotary valve, Internal-combustion. G. Larkin. 1.642.734; Sept. 20.

Elsehof, 1.646.185; Oct. 18.

Engine working with an injection air compressor. Four-cycle Internal-combustion. F. Müller. 1,634.468; July 5.
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Engines, Abstraction of lubricating oil from the oil vapor in crank cases of Diesel. R. Traill and R. Strachan. Engines, Accelerator for automobile. C. W. Hicks. 1,655,685; Dec. 20.
Engines, Accelerator for automobile. C. W. Hicks. 1,651,181; Nov. 29.
Engines, Air controller of the like, Bearing for. J. Engines, Air controller for gas. C. A. Criqui and E. T. Larkin. 1,614,544; Jan. 18.
Engines, Air intake for internal-combustion. E. C. Florey, 1,623,721; Apr. 5 unstion. W. L. and E. L. Glasser, A. E. Larkin. 1,614,544; Jan. 18.
Engines, Air intake for internal-combustion. E. V. Morris. 1,619,029; Mar. 1.
Engines and improved oil engine, Operating oil. C. Ryder, 1,618,229; Feb. 2brication of. A. H. R. Fedden and L. F. G. Entiler. 1,618,870; Feb. 22.
Engines and motor vehicles, Starting gear for fixed explosive motor. A. de Changy. 1,628,710; May 17.
Engines and motors, Valve for. J. U. Jones. 1,620,355; Mar. 8.
Engines and motors, Valve for. J. U. Jones, 1,620,355; Mar. 8.
Engines and motors, Valve for. J. U. Jones, 1,620,355; Mar. 8.

Mar. S. Mar. S. Mar. 1, 1,648,611; San. 97.

Engines and moutis, varye 10. J. J. Jonies. 1,02,030, Engines and operating the same, Cooling system for Internal-combustion. W. W. Muir. 1,648,511, Sept. 27. Engines, Apparatus for lubricating internal-combustion. A. L. Clayden. 1,628,117; May 10. Engines, Apparatus for operating fire. C. Gordijn, jr. 1,613,165; Jan. 4. Engines, Apparatus for supplying combustible mixture to internal-combustion. O. Ebersbach. 1,641,964; Sept. 13. Engines, Apparatus for supplying fuel to internal-combustion. S. J. Fingree. 1,622,750; Apr. 5. Eng. 1. S. Danielsson. 1,617,378; Feb. 1,601. Combustion. Programs, Attachment for gas. W. H. Alleman. 1,630,286; May 31.

May 3. Attachment for gas. P. F. Siegmann. 1,646,321;
Endine. Attachment for internal-combustion. J. C. McClain. 1,640,790; Aug. 30.
Engines, Attachment for internal-combustion. J. E. Milles. 1,621,376; Mar. 15.
Bugines, Automatic charge-heating control for internal-Bugines, Automatic tul-out for. W. R. Hamilton. 1,613,631; Jan. 11.
Engines, Automatic drain for water-cooled. T. H. Andrews. 1,649,277; Nov. 15.
Engines, Automatic drain for water-cooled. T. H. Andrews. 1,649,277; Nov. 15.
Engines, Automatic accordance for marine. E. F. J. Brelland. 1,643,574; Sept. 27.
Eng. 1,644,810; Oct. 11.
Engines, Automatic inflator arranged on and actuated by internal-combustion. H. Surlemont. 1,621,179; Mar. 15.

interpal-combustion. H. Suriemont. 1,621,173; Mar. 15. Engines, Automatic regulator for internal-combustion. L. Ferrette. 1,625,719; Apr. 19. Engines, Automatic rotary-valve clearance regulator for internal-combustion. V. F. Zehodiakin. 1,644,908; oct. 11.

Oct. 11.

Engines, Automatic starting device for internal-combustion. P. Viet. 1,639,582; Aug. 16.

Burgines, Automatically controlling the ignition systems of internal-combustion. J. Johnstone, P. J. and A. E. Allen. 1,654,220; Dec. 27.

Engines, Auxiliary air and fume supply for explosive. A. V. Chapin. 1,619,330; Mar. 1.

Engines, Auxiliary air control for gasoline. W. G. Marsh. 1,619,082; Mar. 1.

Engines, Auxiliary air-inlet device for internal-combustions. A. Rela. 1,650,388; Nov. 22.

Engines, Auxiliary air-inlet device for internal-combustion. A. J. P. Bertschy. 1,627,139; May 3.

Engines, Auxiliary tiel device for internal-combustion. R. H. Knapp. 1,627,563; May 10.

Engines, Biffuel system for gas. C. Cornwell. 1,635,460; July 12.

July 12.

Bagines, Bitter system for gas. C. Cornweil. 1,635,469; July 12.

Bagines, Camburetor for internal-combustion. C. Carlsson. 1,639,396; Aug. 16.

Bragines, Carburetor for internal-combustion. J. Sleber. 1,623,760; Apr. 5.

Bragines, Carburetor for internal-combustion. F. F. Strat-Bagines, Carburetor for internal-combustion. F. F. Strat-Grant Strategy of the strategy of t

Engines, Combined motormeter, vapor trap, and filler cap for radiators of Internal-combustion. K. W. E. Hamann. 1,615,737; Jan. 25.
Engines combined with a fuel injector, Cylinder head of internal-combustion. V. Archaouloff. 1,633,158;

Engines, Combined motormeter, vapor trap, and miner cap for radiators of internal-combustion. K. W. E. Hamann. 1.615,737; Jan. 25.

Engines, Compressed-air starting device of internal-combustion. V. Archaouloff. 1,633,158; Dunie 21.

Engines, Compressed-air starting device of internal-combustion. A. U. S. Danielsson. 1632,023; June 14.

Engines, Compressors, and the like, Air-cooling of the cylinders and pistons and other working parts of internal-combustion. A. G. M. Michell. 1,621,943; Mar. 22.

Engines, Construction and mounting of a valve-scaling mechanism for internal-combustion. R. W. A. Brewer. 1,637,793; Aug. 2.

Engines, Construction and mounting of a valve-scaling mechanism for internal-combustion. R. W. A. Brewer. 1,637,793; Aug. 2.

Engines, Control device for compressor. L. F. Hoffman. 1,654,641; Dec. 27.

Engines, Controlling device for marine. E. F. J. Breland. 1,025,978; Apr. 26.

Engines, Controlling device for marine. E. F. J. Breland. 1,025,978; Apr. 26.

Engines, Cooling arrangement for internal-combustion. F. A. Howard and J. R. Wright. 1,623,053; Apr. 5.

Engines, Cooling internal-combustion. J. W. Hudson. 1,612,868; Jan. 4.

Engines, Cooling internal-combustion. W. W. Muir. 1,625,773; Apr. 19.

Engines, Cooling internal-combustion. W. W. Muir. 1,635,737; Apr. 19.

Engines, Cooling internal-combustion. W. W. Muir. 1,635,737; Apr. 19.

Engines, Cooling system for internal-combustion. P. Whites. 1,618,614; Feb. 2.

Engines, Cooling system for gas. H. J. Edwards. 1,945,188; Oct. 11.

Engines, Cooling system for internal-combustion. W. W. Muir. 1,649,247; Nov. 15.

Engines, Cooling system for internal-combustion. W. W. Muir. 1,649,247; Nov. 15.

Engines, Cooling system for internal-combustion. W. W. Muir. 1,649,247; Nov. 15.

Engines, Cooling system for internal-combustion. W. W. Muir. 1,649,631 Aug. 30.

Engines, Cooling system for internal-combustion. W. W. Muir. 1,649,631 Aug. 30.

Engines, Cooling system for internal-combustion. W. W. Muir. 1,649,638; Nov. 15.

Engines, Cooling system for

Engines, Cylinder head for all types of water-cooled internal-combustion. J. T. Bootes. 1,643,659; Engines, Cylinder head for sleeve-valve internal-combustion. E. R. Burtnett. 1,837,519; Aug. 2. Engines, Cylinder structure for internal-combustion. H. R. Setz. 1,623,639; Apr. 5. Engines, Device for supplying moistened air to internal-combustion fit. A. Labbe. 1,619,871; Mar. 8. A. Hammond. 1,642,876; Sept. 20. nal-combustion. A. Hammond. 1,642,876; Sept. 20. nal-combustion. G. A. Lauver. 1,622,254; Apr. 5. Engines, Driving gear for locomorives equipped with internal-combustion. W. Dobrowolski and O. Gluther. 1,623,254; Apr. 5. Engines, Driving gear for locomorives equipped with internal-combustion. F. R. Smith and S. M. Viale. 1,630,544; May 31. Engines, Electrical testing angearants for fault pressure. 1,630,544; May 31. Engines, Electromechallent valve-operating means for internal-combustion. L. N. Bland. 1,632,531; June 14. Engines, Electromechallent valve-operating means for internal-combustion. L. N. Bland. 1,632,531; June 14. Engines, Exhaust device for. H. T. Herr. 1,632,896; July 21. Engines, Exhaust silencer for internal-combustion. J. Engines, Exhaust silencer for internal-combustion. J. Engines, Exhaust silencer for internal-combustion. J. Engines, Exhaust device for. H. T. Herr. 1,632,896; July 20.

June 21. Exhaust silencer for internal-combustion. J. Neil. 1,638,780; Aug. 9. Englase, Explosive chamber for gas. J. B. McKeown. 1,620,365; Mar. 8. Englase, Fan drive for. E. J. Hall. 1,643,622; Sept. 27

792 Engines, Flame plug for internal-combustion. J. M. Clark. 1.621.581; Mar. 22 were-transmission for internal-combustion. Engines. Flexible Fuley. 1.621.977; Mar. 22. Brgines, Fluid-copied rotary valve for internal-combustion. K. F. Barker. 1.622.0111; Apr. 26. Engines, Fluid-operable lubricator and feeder for. F. K. Murphy and R. W. Retterer. 1.620.911; Mar. 15. Engines, Fluid-operable lubricator for. F. K. Murphy and R. W. Retterer. 1.620.911; Mar. 16. Engines, Fluid-operable lubricator for. F. K. Murphy and R. W. Retterer. 1.620.121; Mar. 8. Engines, Force-feed lubricator for. F. K. Murphy and R. W. Retterer. 1.620.121; Mar. 8. Engines, Force-feed lubricating system for hydrocarbon. C. A. Winslow and E. J. Hall. 1.638.281; Aug. 9. Engines, Force-feed lubricator for. F. K. Murphy and R. W. Retterer. 1.620.121; Mar. 8. Engines, Freel-control in internal-combustion. H. Junkers, 1.636.938; July 26. Engines, Fuel-control in internal-combustion. H. Junkers, 1.636.938; July 26. Engines, Fuel-control ing device for internal-combustion. J. G. Artherg. 1.653.754; Dec. 27. Engines, Fuel-control ing device for internal-combustion. J. G. Artherg. 1.653.754; Dec. 27. Engines, Fuel-control ing device for internal-combustion. R. Crain. 1.642.679; Sept. 13. Engines, Fuel-development for internal-combustion. R. Crain. 1.642.579; Sept. 13. Engines, Fuel-feed apparatus for internal-combustion. Engines, Fuel-feed device for internal-combustion. J. Engines, Fuel-feed device for internal-combustion. Schwerdteger. 1.617.501; Feb. 15. Engines, Fuel-feeding device for internal-combustion. O. and G. Svensson. 1.624.024; Apr. 12. Engines, Fuel-feeding device for internal-combustion. A. G. Redmond. 1.631.884; June 14. Engines, Fuel-feeding system for internal-combustion. A. G. Redmond. 1.631.884; June 14. Engines, Fuel-feeding system for internal-combustion. A. G. Redmond. 1.631.884; June 14. Engines, Fuel-feeding system for internal-combustion. A. G. Redmond. 1.631.884; June 14. Engines, Fuel-feeding feeder for internal-combustion. A. G. and G. Svensson. 1,624,024; Apr. 12.
Bagines, Fuel-feeding system for internal-combustion. A. H. Van Deventer. 1,645,836; Oct. 18.
Engines, Fuel for internal-combustion. J. W. Orelup. 1,649,485; Nov. 15.
Engines, Fuel for internal-combustion. J. W. Orelup. 1,649,485; Nov. 15.
Engines, Fuel heater for internal-combustion. H. E. Bagines, Fuel-injection device for internal-combustion. R. Himmelsbach. 1,638,032; Aug. 9.
Engines, Fuel-injection device for internal-combustion. T. Rochefort. 1,616,335; Feb. 1.
Engines, Fuel-injection system for oil. O. A. Banner. Engines, Fuel-injection for internal-combustion. R. Hildebrand. 1,625,606; Apr. 19.
Engines, Fuel-injector for internal-combustion. B. E. Marchalle, Fuel-injector for internal-combustion. B. E. Gardines, Fuel-injector for internal-combustion. D. E. Gardines, Fuel-injector for internal-combustion. J. L. Fay 1,626,798; May 3.
Engines, Fuel-injector for internal-combustion. J. L. Fay 1,626,798; May 3.
Engines, Fuel-injector for internal-combustion. J. L. Fay 1,626,798; May 3.
Engines, Fuel-injector for internal-combustion. J. L. Fay 1,626,798; May 3.
Engines, Fuel-injector for internal-combustion. J. L. Fay 1,626,798; May 3.
Engines, Fuel-injector for internal-combustion. M. J. Murrhy. 1,615,999; Dec. L. Governor for internal-combustion. G. Engines, Fuel-supply means for combustion. J. Good. Engines, Fuel-supply means for combustion. J. Good. Engines, Fuel supply means for heavy oil. E. H. Tartrals. 1,623,074; Apr. 5.
Engines, Fuel supply means for heavy oil. E. H. Tartrals. 1,623,074; Apr. 5.
Engines, Fuel supply means for heavy oil. E. H. Tartrals. 1,623,074; Apr. 5.
Engines, Fuel supply means for heavy oil. E. H. Tartrals. 1,623,074; Apr. 5.
Engines, Fuel supply means for heavy oil. E. H. Tartrals. 1,623,074; Apr. 5.
Engines, Governor for explosive. C. A. Robertson. 1,640,571; June 24.
Engines, Gover Jan. 4. Governor for gas. W. Peterson. 1,643,516;
Sept. 27.
Sept.

Engines, Heat control for internal-combustion. J. R. Francis. 1,626,727; May 3. Engines, Heat retainer for. J. B. Kitch. 1,629,394; Francis. 1,626,727; May 3.

Engines, Heater for internal-combustion. J. R.

Engines, Heater for internal-combustion. J. F. Sloan.
1,615,049; Jan. 18.

Engines, High-pressure pump for Diesel. H. I. A. Dorner.
1,628,637; May 17.

Engines, Humidifying device for use with internal combustion. A. J. Coppock. 1,631,369; June 7.

Engines, Engintion apparatus for Internal-combustion. L.
M. Woolson. 1,616,939; Feb. 8.

Engines, Engition apparatus for Internal-combustion. F. H.

Engines, Ignition in internal-combustion. M. J. P. Barbarou. 1,622,871; Mar. 29.

Dagines, Ignition-testing device for internal-combustion.

C. D. Bourcier. 1,632,166; June 14.

Engines, Impulse equalizer for Internal-combustion. G.

H. Scully. 1,637,245; July 26.

Engines in vehicles, Mounting. F. H. Royce. 1,648,061;

Nov. 8. H. Scully. 1,637,245; July 26.
Engines In vehicles, Mounting. F. H. Royce. 1,648,061; Nov. 8.
Engines, Increasing valve lifter for gas. B. F. Schmidt. 1,654,032 Dec. 27.
L. 1,654,032 Dec. 27.
L. 1,654,032 Dec. 27.
L. 1,652,032 Liquid fuel into internal-combustion. S. D. Olsen. 1,629,633; May 24.
Engines, Iniet manifold for internal-combustion. E. R. Burtnett. 1,632,880; June 21.
Engines, Intake-manifold arrangement for W-type internal-combustion. G. D. Angle. 1,622,472; Mar. 22.
Engines, Lacketing arrangement for internal-combustion. E. R. Engines, Jacketing arrangement for internal-combustion. W. Mauss. 1,653,718; Dec. 27.
Engines, Lacketing arrangement for internal-combustion. W. Mauss. 1,653,718; Dec. 27.
Engines, Lacketing arrangement for internal-combustion. G. L. 1,617,618, L. 1,617,618, L. 1,617,618, L. 1,617,618, L. 1,618, L. Nov. 8. Engines, Lubrication of sleeve-valve. W. S. Fisher. 1,634,826; July 5.

Engines, Lubrication system for internal-combustion. E. H. Belden. 1,623,461; Apr. 5.

Engines, Lubrication system for internal-combustion. R. L. Skinner. 1,634,209; Apr. 5.

Engines, Manifold construction for internal-combustion. R. L. Skinner. 1,624,229; Apr. 12.

Engines, Manifold construction for internal-combustion. N. N. Sher. 1,624,275; Apr. 12.

Engines, Manifold for internal-combustion. R. K. Jack. 1,651,393; Dec. 6.

Engines, Manifold for multicylinder internal-combustion. A. P. Brush. 1,634,823; July 5.

Engines, Manifold heater for internal-combustion. A. G. Engistord and S. E. Bolton. 1,641,728; Sept. 6.

Engines, Manifold heater for internal-combustion. A. G. Engistord and S. E. Bolton. 1,641,728; Sept. 6.

Engines, Manifold heater for internal-combustion of internal-combustion. S. D. Olsen. 1,625,739; Apr. 19.

Engines, Mechanism for facilitating the starting of internal-combustion. C. Y. Knight. Rel6,757; Oct. 4.

Engines, Method and means for starting internal-combustion. F. A. Braches, Method and means for supplying fuel to hydro-Engines, Method and means for starting internal-combustion. F. A. Braches, Mixing device for internal-combustion. E. Engines, Mixing device for internal-combustion. E. Engines, Mixing device for internal-combustion. E. Thornton. 1,633,050; June 21.

Engines, Mixture-forming means for internal-combustion. E. Dec. 27.

Engines, Mixture-forming means for internal-combustion. E. Engines, Mixture-forming means for internal-combustion. E. Engines, Mixture-forming means for internal-combustion. E. Dec. 27.

Engines, Mixture-forming means for internal-combus Engines Muffler for gas. C. W. Hall. 1,654,078; Dec. 27.
Engines, Muffler for gas. B. Stockfieth and F. W. Burger. 1,633,934; Dec. 27.
Engines, Muffler for internal-combustion. F. A. Nelson. 1,637,347; Aug. 2.

Engines. Oil-purifying apparatus for hydrocarbon. J. A. Watson. 1,630,876; May 31.

Bugines. Oil-purifying apparatus for hydrocarbon. J. A. Watson. 1,651,495; Dec. 6.

Engines. Oil refiner for internal-combustion. C. E. Lilley. 1,624,967; Apr. 19.

Ensign. 1,615,363; Jan. 25.

Engines. Oiling system for internal-combustion. F. S. Baster. 1,614,773; Jan. 18.

Engines. Oiling system for internal-combustion. A. Taub. Engines. Oiling system for internal-combustion. A. Taub. Engines. Oiling system for internal-combustion. A. Taub. Engines. Oil may system for internal-combustion. A. Taub. Engines. Oil more driven vehicles, Air-admission-control device for internal-combustion. V. Alder. 1,650,587; Nov. 29. device for internal-combustion, V. Alder. 1,680,587; Nov. 29.

Engines on shipboard, Compressed-air Installation for Internal-combustion. W. Hefti. 1,618,335; Feb. 22.

Engines, Operating constant-pressure internal-combustion W. 18. S. Whaley. 1,645,169; Oct. 11.

Engines, Piston for Internal-combustion. N. H. Ament. 1,614,768; Jan. 18.

Engines, Piston for Internal-combustion. O. E. Jorgensen. 1,626,838; May 3.

Engines, Piston for Internal-combustion. D. E. Willis. 1,627,719; May 10.

Engines, Piston for Internal-combustion. D. E. Willis. 1,627,719; May 10.

Engines, Piston for Internal-combustion. D. E. Willis. 1,627,719; May 10.

Engines, Preumatic stripper attachment for carding. E. Clark. 1,614,103; Jan. 11.

Engines, Pressure fuel-feed system for hydrocarbon. A. E. Berdon. 1,639,645; Aug. 23.

Engines, Pressure fuel-feed system for hydrocarbon. A. E. Berdon. 1,639,645; Aug. 23.

Engines, Process and apparatus for cooling internal-combustion. W. W. Muir. 1,630,070; May 24.

Ingines, Process of and apparatus for cooling internal-combustion. W. W. Muir. 1,630,070; May 24.

Engines, Process of and apparatus for improving the efficingless. Reatomizing device for internal-combustion. W. M. Will. 1,627,627; May 10.

W. M. Willy. 1,627,627; May 10.

Engines, Renowable lining shelf for Jordan. A. L. R. Bolton. 1,642,327; Sept. 13. Mar. 29.

Bagines, Remet valve for gas. E. E. Young. 1,622,937;
Mar. 29.

Bagines, Ronvable lining shell for Jordan. A. L. R.

Bolton. 1,642,327; Sept. 13.

Bolton. 1,642,327; Sept. 13.

A. Howitz. 1,624,342; Apr. 12.

Engines, Retarding meaning for internal-combustion. C. G. Barrett. 1,650,929; Nov. 29.

Engines, Reversing and control mechanism for internal-combustion. O. E. Jorgensen. 1,635,684; July 26.

Barlines, Rotary valve for internal-combustion. O. H.

Hodges. 1,651,207; Nov. 29.

Engines, Rotary valve for internal-combustion. T. D.

Werbitzky, 1,619,226; Mar. 1.

Barlines, Rotary-valve mechanism for. R. M. Lovejoy. 1,622,762; Mar. 1.

Engines, Rotary-valve mechanism for. R. M. Lovejoy. 1,622,762; Mar. 1.

Engines, Safety device for internal-combustion. J. P.

Geraghty, 1,652,113; Dec. 6.

Engines, Safety device for internal-combustion. J. P.

Geraghty, 1,652,113; Dec. 6.

Engines, Safety device for internal-combustion. J. 5,1066; Nov. 29.

Engines, Safety device for internal-combustion. J. 5,1060; Nov. 29.

Engines, Safety device for internal-combustion. J. 5,1060; Nov. 29. L601,006; Nov. 29. Engines, Safety starting crank for internal-combustion. A. E. Babceck. 1,630,595; May 31. Engines, scavenging, fuel-humidifying, and volatilizing process and apparatus for internal-combustion. J. P. Farnham. 1,629,335; Apr. 26. Engines, Scavenging pump of internal-combustion. O. Mader. 1,629,878; May 24. Engines, Scaling means for rotary. F. A. Bullington. 1,644,664; Oct. 4. 1.644.564; Oct. 4

Engines, Scliadjusting valve-actuating rod for internalcombustion. W. M. Anderson. 1.613.815; Jan. 11.

Engines, Senarator and viporizer for internal-combustion. G. Wirrer. 1.629.565; May 24.

Engines, Speed-controlling apparatus for. E. T. Hull.

1.620.764; Mar. 15.

Engines, Speed-controlling apparatus for internal-combustion. E. T. Hull. 1.620.763; Mar. 15.

Engines, Speed-controlling apparatus for internal-combustion. E. T. Hull. 1.620.763; Mar. 15.

Engines, Speed-controlling apparatus for internal-comLG15.467; Jan. 25.

Engines, Starter for. M. B. Jackson. 1.648.946; Oct. 25.

Engines, Starter for. M. B. Jackson. 1.648.946; Nov. 15.

Engines, Starter for. M. B. Jackson. 1.648.946; Nov. 15.

Engines, Starter for. M. B. Jackson. 1.651.127;

Nov. 29. Engines, Starter for M. B. Jackson. Nov. 29. Engines, Starter for gas. H. W. Gauld. Mar. 1. 1,619,414;

Engines. Starting crank for internal-combustion. C. Fryine. 1,644,619: Oct. 4.
Engines. Starting device for internal-combustion. V. R. Clark. 1,620,988: Mar. 15.
Engines. Starting device for internal-combustion. V. R. Clark. 1,620,988: Mar. 15.
Engines. Starting device for internal-combustion. V. B. Melson. 1,622,289: Mar. 29.
Regines. Starting device for internal-combustion. V. B. Nelson. 1,622,289: Mar. 29.
Engines. Starting device for internal-combustion. G. E. Heywood. 1,616,680-61; Aug. 29.
Engines. Starting internal-combustion. C. F. Heywood. 1,620,747; Mar. 15.
Engines. Starting system for internal-combustion. F. Allison. 1,620,747; Mar. 15.
Engines. Starting internal-combustion. F. Allison. 1,620,747; Mar. 15.
Engines. Steam superheater for steam. W. Schmidt. 1,618,230: Feb. 22.
Engines. Supercharger for internal-combustion. S. M. Uniternal Steam Steam Superheater for steam. W. Schmidt. 1,618,230: Feb. 22.
Engines. Superharger for internal-combustion. S. M. Uniternal Steam Superheater for Steam. W. Schmidt. 1,618,230: Feb. 22.
Engines. Supplementary exhaust for internal-combustion. A. A. West. 1,643,912; Sept. 27.
Engines. Supplementary exhaust for internal-combustion. A. 1,622,623; Apr. 12.
Engines. Supplementary exhaust for internal-combustion. A. 1,624,623; Apr. 12.
Engines. Support of acco. F. M. Royce and A. G. Elliott. 1,624,611 Apr. 12.
Engines. Tappet for internal-combustion. W. Stevenson. Engines. Temperature control for marine. E. C. Stafford. 1,643,424; Sept. 27.
Engines. Temperature control for the air constituent of fuel for explosive. E. H. Gross. 1,639,032; Aug. 18.
Engines. Temperature control for finernal-combustion. J. A. Kinnard. 1,633,299; Aug. 16.
Engines. Temperature regulator for internal-combustion. J. A. Kinnard. 1,633,299; Aug. 16.
Engines. Temperature regulator for internal-combustion. J. A. Kinnard. 1,633,299; Aug. 16.
Engines. Temperature indicator for. C. A. Dunham. 1,614,919; Jan. 18.
Engines. Thermostatic heat control for internal-combustion. J. A. Kinnard. 1,633,299; Aug Engines, Timer quastroom of the property of th Oct. 15. Valve gear for power. J. Lucian.
July 5.
Engines, Valve gear for steam. B. V. Nordberg. 1,643,853;
Sept. 27.
Engines, Valve gear for steam. J. Stumpf. 1,625,632;
Ann. 19. Sept. 27.

Engines. Valve gear for steam. J. Stumpf. 1,625,632;
Apr. 13.

Apr. 14.

Apr. 15.

Engines. Valve gear in internal-combustion. M. J. B.

Barbarou. 1,622,641; Apr. 5.

Engines. Valve gearing for internal-combustion. F. S.

Easter. 1,614,709; Jan. 18.

Engines, Valve mechanism for combustion. E. A. Sperry. 1,627,219; May 3.

Engines, Valve mechanism for internal-combustion. J. O.

Almen. 1,637,017; July 26.

Engines, Valve mechanism for internal-combustion. D. B.

Engines, Valve mechanism for internal-combustion. H.

Ford. 1,640,118; Aug. 23.

Engines, Valve mechanism for internal-combustion. G. Fornaca. 1,631,410; June 7.

Engines, Valve mechanism for internal-combustion. E. H.

Grubert. 1,617,710; Feb. 15.

Engines, Valve mechanism for internal-combustion. E. H.

Grubert. 1,617,710; Feb. 15.

Engines, Valve mechanism for internal-combustion. R. C.

Knowles. 1,642,156; Sept. 13.

Engines, Valve-port arrangement for internal-combustion. G. D. Angle and H. E. Morehouse. 1,634,971; July 5. Engines, Vapor-cooling system for internal-combustion. L. P. Barlow. 1,632,585-6; June 14. Engines, Vaportzer and preheater for internal-combustion. M. Beck. 1,619,496; Mar. 1. Engines, Vaportzer for explosive. J. C. Fulkerson. Engines, Vaporizer and preheater for internal-combustion. M. Beck. 1,619,496; Mar. I. Brighes, Vaporizer for explosive. J. C. Fulkerson. 1,636,470; July 19. Engines, Vaporizer for gasoline. R. H. Johnson. 1,625,661; Apr. 19. Engines, Vaporizer for internal-combustion. P. D. Intones, Vaporizing apparatus for internal-combustion. J. Good. 1,628,308; Aug. 9. Engines, Vaporizing apparatus for internal-combustion. J. Good. 1,625,312; Apr. 19. Engines, Vaporizing attackment for internal-combustion. Engines, Vaporizing attackment for internal-combustion. W. Muir. 1,643,510; Sept. 27. Engines, Water circulator and air moistener for water-cooled internal-combustion. W. W. Muir. 1,643,510; Sept. 27. Engines Water circulator and air moistener for water-cooled internal-combustion. R. Beck. 1,623,229; Apr. 5. Engines with scavenging ports. Cylinder for historial-combustion.

cooled internal-combustion. R. Beck. 1,623,229;
Engines with scavenging ports, Cylinder for two stroke internal-combustion. H. Becker. 1,645,757; Oct. 18.
Engines, Working substance for heat. R. Davenport. 1,619,194; Mar. 1.
Engraved plates with electros in a solid plate, incorporating. W. J. Maginnis. 1,643,390; Sept. 27.
Engraving apparatus. R. T. Dieges. 1,612,967; Jan. 4.
Engraving machine. P. A. Brock. 1,617,570; Feb. 15.
Engraving machine. P. A. Brock. 1,617,570; Feb. 15.
Engraving machine. B. H. Ruhlman. 1,620,757; Mar. 15.
Engraving machine. B. Fornplum and W. Jennerjahn.
I,642,555; Sept. 18.
Engraving machine. G. Turner. 1,625,602; Apr. 19.
Engraving machine. H. G. Turner. 1,625,602; Apr. 19.
Engraving machine. H. G. Turner. 1,625,602; Apr. 19.
Engraving or like machine. W. S. Eaton. 1,621,317;
Mar. 15.
Engraving process and device. S. E. Rice. 1,648,782;
Nov. 8.

Mar. 15.

Engraving process and device. S. E. Rice. 1,648,782;
Ensilage cutter. C. W. Keith. 1,621,510; Mar. 22.
Ensilage cutter. C. W. Keith. 1,621,510; Mar. 22.
Enriance protector, Automatic. G. L. Tracy. 1,632,683;
June 14.
Entries from cards or sheets or the like on a collective sheet. Apparatus for mechanically copying. M. F.
Entries from cards or sheets or the like on a collective sheet. Apparatus for mechanically copying. M. F.
Envelope. S. M. Alfeilli. 1,640,688; Aug. 30.
Envelope. G. F. Hogan. 1,624,137; Apr. 12.
Envelope. G. F. Hogan. 1,624,137; Apr. 12.
Envelope. H. E. Konlan. 1,632,763; July 12.
Envelope. D. E. McGalan. 1,632,763; July 12.
Envelope. D. R. McGalan. 1,642,148; Oct. 11.
Envelope. J. C. Waiters. 1,625,578; Apr. 26.
Envelope. H. A. Wolf. 1,629,582; May 24.
Evelope. M. A. Wolf. 1,629,682; May 24.
Evelope. M. A. E. Naugle. 1,632,669; June 14.

June 14.

Euvelope and the like and carrier therefor. T. H. Krueger.

Lively 18.

Lively 1

Oct. 25. Envelope feeder, C. L. Post. 1,629,450; May 17. Envelope-filling machine. G. F. Russ. 1,633,350; June 21.

June 21.

Envelope folding and sealing device. O. Widmater. 1,645.842; Oct. 18.

Envelope folding and sealing device. O. Widmater. 1,645.842; Oct. 18.

Envelope folder. E. Treuchl. 1,649.935; Nov. 22.

Envelope holder. E. Treuchl. 1,649.935; Nov. 22.

Envelope machine. A. Novick. 1,631.146; June 7.

Envelope machine. A. Olray. 1,634.980; June 28.

Envelope machine. J. Stiriss. 1,613.915; Jan. 11.

Envelope machine. Finiting attachment for. E. F.

Envelope machine. Finiting attachment for. E. F.

Envelope-making machine. J. M. Townsend. 1,638,895; Aug. 16.

Aug. 16.

Envelope opener. E. E. Fleming. 1,624,590; Apr. 12.

Envelope opener. A. R. Irvine. 1,649,699; Nov. 15.

Envelope opener. A. R. Irvine. 1,649,699; Nov. 15.

Envelope opener. F. E. E. Fleming. 1,649,699; Nov. 18.

T. Hugo. 1,648,769; Nov. 8.

Envelope, Patent. J. C. Johnson. 1,639,566; Aug. 16.

Envelope, Pyraline document-holding. C. J. Gutberlet. 1,620,392; Mar. 15.

Envelope, Safety. J. W. Weiker. 1,637,894; Aug. 2.

Envelope-safeting device. E. B. Gray. 1,632,648; June 14.

Envelope-window-cutting device. A. Olgay. 1,619,365;
Mar. 1, 1,619,365;

Envelopes and the like, Fastener for. J. G. Swab. 1.619.382; Mar. 1. Envelopes and the like, Metal safety seal for. L. Unger. 1.651.664; Dec. 6.

Envelopes and the like, Sheet-folding mechanism for. A. Novick. 1,616,982; Feb. 8. Envelopes, Apparatus for lining. G. E. P. Collins. 1,627,149; May 3. Envelopes, Clip for bandless filing. P. A. Hoffman. Envelopes and the like, Sheet-folding mechanism for. A. Novick. 1,616,982; Feb. 8
Envelopes, Apparatus for liming. G. E. P. Collins. 1,627,149; May 3.
Envelopes, Clip for bandless filling. P. A. Hoffman. 1,613,827; Jan. 11.
Envelopes, Machine for forming, printing and assembling. E. Conti. 1,625,350; Apr. 19.
Envelopes, Machine for making one-piece window. G. W. Envelopes, Making. J. G. Swah. 1,618,787; Feb. 22.
Envelopes, Making. J. G. Swah. 1,618,787; Feb. 22.
Envelopes, Manufacture of. T. Hugo. 1,648,768; Nov. 8.
Eraser cleaner. L. E. Joslin. 1,641,000; Aug. 30.
Eraser cleaner, Blackboard. L. H. Ward. 1,619,899; Mar. 8.

Ster-resin composition and preparation. J. G. E. Wright and W. J. Bartlett. 1,634,969; July 5. Esters from aldehydes, Making. C. O. Young. 1,630,593;

Esters from aldehydes, Making. C. O. Young. 1,630,593; May 31.

Esters, Making. H. E. Buc. 1,651,666; Dec. 6.

Etching apparatus. J. Baker. 1,463,234; Sept. 20.

Etching machine. F. T. Powers. 1,651,966; Dec. 6.

Etching machines, Stamp-inking device for. F. T. May. 1,644,646; Nov. 1.

Etching of rubber principally for the obtention of impression prints, Chemical process for the. E. Sardou. 1,614,936; Jan. 18.

Electric Preservation of. F. W. Nitardy. 1,632,309; Ethyl chloride. Production of. H. Suida. 1,637,972; chloride, Production of. H. Suida. 1,637,972;

Ethyl chloride, Froduction, Aug. 2, 1902 (1992), 2002 (19

Jan. 4. Evaporation gaptaratus. W. L. Bauger. 1,612,301; Jan. 4. Evaporation meter. R. L. Gilles. 1,625,310; Apr. 19. Evaporation, Prevention of. R. E. Wilson. 1.647,424; Nov. 1.

Evaporator. C. W. Aiken. 1.621.862; Mar. 22. Evaporator. I. Merlis. 1.622.918; Mar. 29. Evaporator. I. Merlis. 1.638.697; Aug. 9. Evaporator. J. Price. 1.637.081; Feb. 8. Evaporator, Bent-tube. R. C. Jones. 1.617,119; Feb. 8. Evaporator, Film-type sectional. J. Price. 1.617,082; Feb. 8.

Feb. 8.

Evaporator, Sap. S. C. Nichols. 1,614,016; Jan. 11.

Evaporator system. Low-heat-level. L. E. Sebald.

1,623,941; Apr. 5.

Evaporators, Submerged drain cooler in. R. C. Jones.

1,652,204; Dec. 18.

Evening and grading machine. M. T. Denne. 1,651,588;

Dec. 6.

Dec. 6.

Examining tubes and cavities in the body, Device for, G. Loeck. 1.643.718; Sept. 27.

Examining tubes and cavities in the body, Device for, G. Wolf. 1.643.732; Sept. 27.

Excavating. O. E. Strehlow. 1.644.288; Oct. 4.

Excavating apparatus. W. A. Whitmire. 1.626.019; Apr. 26.

Excavating. 4.633.037; Dec. 20.

Excavating devices, Guide for. H. L. Bolton. 1.652.555;

Excavating devices, Guide for. H. L. Bolton. 1.652.555;

Dec. 13. Excavating dippers and the like, Door for. J. O'F. Clark. 1,653,620; Dec. 27. Excavating machine. T. L. Loftus. 1,619,875; Mar. 8. Excavating machine. F. C. Marshall. 1,623,194;

Excavating machine. F. C. Marshall. 1,623,194; Apr. 5. Excavating machine. B. Rolph. 1,625,912; Apr. 28. Excavating machinery, Dipper for. W. M. Bager, W. Leliman, and E. C. Ruhloff. 1,642,185; Sept. 13. P. A. Orton. 1,622,283; Mar. 22. Excavating machines, Longitudinally-extensible boom for. G. A. Vaughn. 1,630,231; May 24. Excavator and dredge, Combined. B. A. Speegle. 1,643,694; Sept. 20. Excavator-bucket extension. G. T. Rosselle. 1,648,783; Excavator-bucket extension.

Nov. 8. Excavator bucket with digging teeth, Endless-chain. C. Rorabeck. 1,638,099; Aug. 9. Excavator dippers. Mechanism for operating said con-trolling. G. T. Ronk. 1,627,869; May 10.

1.650.768;

Excevence, Ground. M. De Grassi. 1,639,245; Aug. 16. Exchange system, Automatic. F. M. Slough. 1,617,669; Exerciser. T. S. Benice. 1,625,447; Apr. 19. Exerciser. H. Q. Guth. 1,638,196; Aug. 9. Exerciser. Athletic spring. A. C. Schad. 1,618,538; Jan. 4. Exerciser, Body. J. F. Davidson. 1,618,273; Feb. 22. Exerciser, Muscle. A. Giraldi. 1,623,869; Apr. 5. Exercising apparatus. J. Benniger. 1,650,417; Nov. 22. Exercising apparatus. L. Frankenfeld. 1,623,670-1; Apr. 5. Exercising apparatus, N. E. Goodrich. 1.647.616: Nov. 1. Exercising apparatus. R. H. Noe. 1.633.124 Exercising apparatus. G. A. Reynolds. Exercising apparatus. R. H. Noe. 1.633.124; June 21. Exercising apparatus. G. A. Reynolds. 1,641,857; Sept. 6. Exercising apparatus. G. V. Rosi. 1,618,847; Feb. 22. Exercising apparatus. G. V. Rosi. 1,618,847; Feb. 22. Exercising apparatus. G. V. Rosi. 1,618,847; Feb. 22. Exercising apparatus. G. V. Rosi. 1,626,818; Oct. 25. Exercising device. H. S. Munnich. 1,620,910; Mar. 15. Exercising device. H. E. Minnich. 1,620,910; Mar. 15. Exercising ever muscles, Apparatus for. J. M. Powell. 1,638,058; Aug. 9. Exhaust and like silencer. W. H. Martin. 1,641,394; Sept. 6. Exhaust box. W. de Back. 1,638,760; Aug. 9. Exhaust box. W. de Back. 1,638,760; Aug. 9. Exhaust box. W. de Back. 1,638,760; Aug. 9. Exhaust box of deviations of the control 1.633,124; June 21 1,641,355; Mar. 1.

Exhibitor, Changeable. G. R. Price. 1,619,155; Mar. 1.

Expanding air, Utilizing. J. W. Doyle. 1,630,835; May 31.

Expanding mill. G. J. Thust. 1,644,552; Oct. 4.

Expanding tool. M. T. Peterson. 1,614,627; Jan. 18.

Expanding tool. A. A. Roesch. 1,621,335; Mar. 15.

Expansible bracelet. J. Smith, jr. 1,629,976; May 24.

Expansible collapsible element. H. C. Mallory. 1,624,348; Apr. 12.

Expansible collapsible element. H. C. Mallory. 1,639,742; Aug. 23. Apr. 12.

Expansible collapsible element. H. C. Mallory. 1,639,742;
Aug. 23.

Expansible collapsible elements, Making. H. C. Mallory.

Expansible collapsible elements, Producing. H. C. Mallory.

Expansible collapsible elements, Producing. H. C. Mallory.

Expansible collapsible elements, Producing. H. C. Mallory.

Expansible fastering. J. A. Dedouch. 1,619,568-9;
Mar. 1.

Expansion-contruction joint, Deformable. A. C. Fisher.

1,622,311 Mar. 29.

Expansion joint, J. P. McDonald. 1,625,557; Apr. 19.

Expansion joint, Hinged. A. C. Fischer. 1,637,178;

July 26.

Expansion shelds, Setting tool for. R. E. Ogden.

1,636,831; July 26.

Expansion engine. C. F. G. Kjellberg. 1,614,736;

Explosion engine. A. Schaff. 1,653,877; Dec. 27.

Explosion engine. A. Schaff. 1,653,877; Dec. 27.

Explosive. H. H. Champney. 1,650,186; Nov. 22.

Explosive. A. Segay. 1,620,696; Mar. 15.

Explosive, Ammonium-nitrate. E. M. Symmes. 1,613,335; Feb. 8. Explosive, Ammonium-nitrate. E. M. Symmes. 1,613,385; Jan. 4. Explosive and percussion caps, Manufacturing detonating compositions for. E. von Herz. 1,625,966; Apr. 26. Explosive blow-out switch. J. P. Medlin. 1,654,467; Explosive and percussion caps, Manufacturing deconating compositions for. E. von Herz. 1.625,666; Apr. 26. Explosive blow-out switch. J. P. Medlin. 1,654,467; Explosive Brisant. B. J. Flirischiem. 1,624,664; Apr. 5. Explosive cap. W. Eschbach. 1,623,664; Apr. 5. Explosive cap. W. Eschbach. 1,623,664; Apr. 5. Explosive cap. W. Eschbach. 1,623,664; Apr. 5. Explosive cap. W. Eschbach. 1,623,634; Apr. 5. Explosive engine. F. H. Bergeim. 1,620,715; Mar. 15. Explosive engine. M. M. Kane. 1,633,833; Aug. 16. Explosive engine. M. M. Kane. 1,653,656; Dec. 27. Explosive Nitroglucoside. R. C. Moran. 1,635,657-8; Explosive powder and making same. A. S. O'Neil. 1,627,663; May 10. Explosive powder and making same, Smokeless. F. I. and E. du Explosive powder. Making a smokeless. F. I. and E. du Explosive powder. Making a smokeless. F. I. and E. du Explosive powder. Smokeless. F. I. and E. du Pont. 1,627,694; May 10. Explosive powder. Smokeless. F. I. and E. du Pont. 1,623,636; June 28. Explosive Continers with. C. G. Young. 1,633,656; June 28. Explosives, Continer for 28. Explosives (Apr. 19. Explosives). Mar. 22. Eye-testing apparatus. W. P. Reaves. 1,650,76 Nov. 29. Eye-testing cabinet. E. D. Tillyer. 1,630,281; May Eye-testing device. E. J. Brown. 1,633,658; June 28.

Explosives, Producing. F. H. Bergelm. 1,637,726; Aug. 2. Exposure meter. G. Ramsey. 1,651,151; Nov. 29. Expressing apparatus. A. W. French. 1,648,477; Nov. 8. Extensible fender. G. Lolli. 1,632,979; June 21. Extension table. J. H. Dold. 1,662,772; Dec. 13. Extension table. B. A. Henricson. 1,647,224; Nov. 1. Extension table. H. Kriger. 1,635,501; Aug. 18. Extension table. H. Nyholm. 1,635,699, June 25. Extension table. H. Nyholm. 1,635,699, June 25. Extension table. W. P. Suer. 1,622,644; Mar. 29. Extension table, W. P. Suer. 1,622,644; Mar. 29. Extension table, Revolving-leaf. P. Nyholm. 1,653,900; June 28. Extension time, Revorting team.
June 28.
Extension unit, W. G. Reeves. 1,621,275; Mar. 15.
Exterminating injurious forms of life and composition therefor. H. Maxwell-Lefroy, 1,613,402; Jan. 4.
Exterminator, E. J. Seaver, 1,837,246; July 26.
Exterminator, Boll-weevil. E. F. Gomez. 1,837,254; Exterminator, Boll-wevell. E. F. Gomez. 1,637,254;
July 26.
Exterminator, Boll-wevell. E. F. Gomez. 1,637,172;
July 26.
Extinguisher, Cigarette. R. E. Burress. 1,637,172;
July 26.
Extinguisher, Pail. O. R. Erwin. 1,640,117; Aug. 23.
Extinguishing fires, Device for. L. R. Titcomb and H. S.
Ashnun. 1,644,290; Oct. 4.
Extracting and cleaning machine, Cotton. J. E. Mitchell.
1,640,420; Aug. 30.
Extracting fats. H. Atwell. 1,648,102; Nov. 8.
Navarre. 1,620,567; Mar. 8.
Extraction method and apparatus. H. Buel. 1,636,550;
July 19.
Extraction process and apparatus. W. F. Holzheuer.
Re16,739; Sept. 20.
Extraction security of the control fractor.
Boll extractor.
Bushing extractor.
Centrifugal extractor.
Dump-bottom extractor.
Electrically - driven extrac-Juice extractor. Overdriven extractor. Sinew extractor.
Tack and nail extractor.
Valve-core extractor.
Valve-pin extractor.
Weed and root extractor. Electrically - driven extract Valve-pin extractor.

tor. Ved and root extractor.

Extractor. H. J. Farter. 1.641.780; Sept. 6.

Extractor. H. J. Farter. 1.641.780; Sept. 6.

Extractor-operating plant, Centringal. N. R. Andrews and J. J. Neuman, 1.615.433; Jan. 25.

Extruder. W. G. Bond. 1.655.687; Nov. 29.

Extrusion machine. P. E. Welton. 1.652.189; Dec. 13.

Extrusion machine. O. H. Rechard. 1.614.256; Jan. 11.

Extrusion press. A. Bonn. 1.654.109; Dec. 27.

Eyephow pencils and the like, Container for. A. H. Bosworth. 1.637.451; Aug. 2.

Eye-exercising device. I. Fox. 1.647.117; Oct. 25.

Eye-exercising device. I. Fox. 1.647.117; Oct. 25.

Eyeglass. M. Mayer, K. Finckh, and F. Koref. 1.633.248; Jun. 18.

Eyeglass construction. G. E. Nerney. 1.635.65; Jan. 11.

Eyeglass construction. G. E. Nerney. 1.634.643; Jan. 18.

Eyeglass construction. G. E. Nerney. 1.635.799; July 12.

Exercises construction. G. E. Nerney. 1.635.799; July 12.

Exercises construction. G. E. Nerney. 1.635.799; July 12.

Exercises construction. E. D. Nerney. 1.635.799; July 12. Eyeglass July 5. July 5.

Eyeglass construction. E. D. Nerney. 1,635,799; July 12.

Eyeglass construction. G. E. Nerney. 1,645,658; Oct. 18.

Eyeglass construction. W. H. Siddall. 1,635,142; July 5.

Eyeglass frame. L. Gunkelsberg. Des. 73,900; Nov. 22.

Eyeglass frame. J. Gasparl. Des. 73,077; July 10, 10.

Eyeglass frame. G. E. Nerney. Des. 73,077; July 10, 10.

Eyeglass frame. G. E. Nerney. Des. 73,077; July 10, 10.

Eyeglasses on Spectacles. J. W. S. Searles.

Lyeglasses L. R. Briggs. 1,647,124; Nov. 1.

Eyeglasses or spectacles. J. T. Evans. 1,619,659; Mar. 1.

Eyemodel. L. R. Ingersoll. 1,630,044; May 31.

Eye mounting. B. Laphin. 1,644,735; Oct. 11.

Eye mounting. B. Taphin. 1,644,735; Oct. 11.

Eye mounting. B. Taphin. 1,644,735; Oct. 11.

Eye mounting. F. Taphin. 1,647,735; Oct. 11. Eye mo... Jan. 18. Jan. 18. Eyepiecc-prism combination for use in range finders of the self-contained base type. J. M. Strang. 1,634,695; July 5. Eye-protective glass. W. W. Coblentz. 1,637,439; Aug. 2. Eye protector. E. Hentsch. 1,638,251; Aug. 16. Eye protector. 10. Eye protector. 10. Eye protector. 10. Eye protector. 10. Eye St. K. Konoff. 1,639,824; Mar. 15. Eye set. A. Konoff. 1,621,072; Mar. 15. Eye shade. A. L. Mallory. 1,630,193; May 24. Eyesiade for auto drivers. O. and L. Westgaard. 1,655,139; Dec. 20. Eyes shield. C. F. Thompson. 1,637,002; July 26. Eye shield. C. F. Thompson. 1,637,002; July 26. Eye shield. C. F. Thompson. 1,637,002; July 28. Eye shield. C. F. Thompson. 1,637,002; July 28. Eye tang. Stitchless. D. Silberman. 1,639,305; June 24. Eye tang. Stitchless. D. Silberman. 1,639,305; June 24. Eye tape, Stitchless. D. Silberman. 1,632.805; June 21. Eye-testing apparatus. T. J. Arneson. 1,622,215; Mar. 22.

Fabric : Sec-Parachute fabric. File textile fabric. Printed fabric. Waterproof abrasive fabric. Wire fabric. Bed-spring fabric. Cellulose fabric. Cord-tire fabric. Cord-tire fabric.
Pulled woven fabric.
Waterproof abrasive fabric.
Knitt fabric.
Knitte fabric.
Fabric.
Fabric.
Fabric.
Fabric.
Fabric.
Fabric.
Fabric.
H. J. Moore.
1,622,250; Mar. 22.
Fabric.
Fabric.
Moore.
1,638,400; June 21.
Moore.
Lissa, 100; June 21.
Moore.
E. Falor.
Lissa, 22; May 17.
Fabric-cutting machine.
H. A. Denmire.
1,617,013; Feb. 8. Fabric-cutting machine. O. I. Judelshon. Fabric-cutting hauthure, Aug. 30.
Fabric. Decorating, J. Knollema. 1,618,832; Feb. 22.
Fabric-feeding apparatus. F. Tandel. 1,615,415; Jan. 25.
Fabric, Flocked volle. K. G. Currier and J. Heinrich.
Des. 71,957-9; Feb. 8.
Fabric-folding machine. J. and P. Cook. 1,653,149;
The 104. Fabric for corsets, bandeaux, brassières, and the like, Making. E. R. Mills and C. J. Hazelton. 1,617,604; hig. E. R. Mills and C. J. Hazerton, 1,011,003, Feb. 13. Feb. 15. Fabric for garment construction, Reenforced. E. M. Orlow, 1,631,601; June 7. Fabric-forming machine, Tubular. J. E. Fefel. 1,644,116: Orlow. 1,631,601; June 7.
Fabric-forming machine, Tubular-, J. E. Fefel. 1,644,116; Fabric-inspection apparatus. H. Cruger. 1,615,216; Jan. 25.
Fabric, Manufacture of colored mesh. R. H. Berkley. 1,018,375; Jan. 41.
Fabric-measuring machine, Retail and wholesale. J. J. May 10.
Fabric, Method of and apparatus for making composite. P. H. Walsh. 1,620,307; Mar. 8.
Fabric of nonflaceld strands, Apparatus for producing. F. R. R. Heley. 1,047,311; Nov. 1.
F. B. R. Riley. 1,047,311; Nov. 1.
F. B. R. Riley. 1,047,311; Nov. 1.
Fabric or similar article, Frinted. H. A. Denmire. 1,617,012; Feb. 22.
Fabric or similar article, Printed. H. R. Terhune. Des. 72,076; Feb. 22.
Fabric or similar article, Frinted. H. R. Terhune. Des. 72,076; Feb. 22.
Fabric, Poss. 1,632,760; June 14.
Fabric, Painted. J. H. Mack. Des. 72,378; Apr. 5.
Fabric, Printed. J. H. Mack. Des. 72,378; Apr. 5.
Fabric, Finted. W. H. Adams. Des. 72,539; May 3.
Fabric, Finted. W. H. Adams. Des. 72,539; May 3.
Fabric, Finted. W. H. Adams. Des. 72,539; May 3.
Fabric, Finted. W. H. Adams. Des. 72,539; May 3.
Fabric, Faprairing torn. G. Gailopin. 1,620,884; Mar. 15.
Fabric-roll holder. G. Graham and A. C. Helmus. 1,626,089; Apr. 26.
Fabric-spearing torn. G. Gailopin. 1,620,884; Mar. 15.
Fabric-spearing mechanism. A. C. Mason. 1,647,837; Nov. 1.
Fabric-spreading apparatus. F. Hinnekens. 1,642,486; Nov. 1. Fabric-spreading apparatus. F. Hinnekens. 1,642,496; Fabric steading and stretching means. M. M. Kasanof. 1.648.614; Nov. 8. Fabric stretcher. A. N. Miller. 1,653,919; Dec. 27. Fabric-testing machine. C. L. Dennis. 1,632,591; Fabric-testing machine. C. L. Dennis. 1,692,5991; June 14. Fabric treatment. J. R. Hogate and L. E. Spence. 1,622,444; Mar. 29. Fabric-triuming apparatus. Z. Podbradsky. 1,635,343: Fabric-weaving machine. J. E. Fefel. 1,629,952; May 24. Fabric-weaving machine. J. E. Fefel. 1,634,413; July 5. Fabric with patterns printed thereon. J. R. Freeman. 1.616.080; Feb. 1. Fabricated articles, Machine for assembling parts or clements of. W. I. Martin. 1,639.700; Aug. 23. Fabricated board. C. W. Utzman. 1,638.280; Aug. 9. Fabricating agglomerated masses, Apparatus for. R. Bowen. 1,646.885; Oct. 25. Fabricating structural members. M. A. Baker. 1,646.885; Oct. 25. Mar. 1. Fabrica and the like, Washing and cleaning, II.
Spindler, 1,615,146; Jan. 18.
Spindler, 1,615,146; Jan. 18.
Spindler, 1,615,146; Jan. 18.
Spindler, 1,615,146; Jan. 18.
Spindler, 1,615,146; Jan. 21.
Spindler, 1,616,146; Jan. 21.
Spindler, 1,616,146; Jan. 21.
Spindler, 1,617,123; Feb. 8.
Spindler, 1,617,123; Feb. 8.
Spindler, 1,617,123; Feb. 8.
Spindler, 1,617,124; Feb. 8.
Spindler, 1,61

Fabrics, Making compound, E. R. Dexter. 1,650,266; Nov. 22.
Pabrics, Making selvaged-edged. W. C. Fisher. 1,639,224; Aug. 16.
Fabrics, Method of and apparatus for feeding. H. I. 1,645,001; Oct. 11.
Fabrics, Method of and apparatus for passing threads into. R. Rossmann. 1,646,257; Oct. 11.
Fabrics, Description, S. M. Cadwell and O. H. Smith. Face lifter. S. Cocrott. 1612,801; Jan. 4.
Face shield, Sanitary. P. H. McKay. 1,648,315; Nov. 8.
Face lifter. S. Cocrott. 1,612,801; Jan. 4.
Face shield, Sanitary. P. H. McKay. 1,648,315; Nov. 8.
Facet cutting machine. W. Augenstein. 1,646,375; Oct. 18.
Facial composition. M. Bucci. 1,634,974; July 5.
Facial composition. M. Bucci. 1,634,974; July 5.
Facial composition. M. Bucci. 1,634,974; July 5.
Facial winkle-removing device. O. J. Rogers. 1,643,090; Sept. 20.
Facial winkle-removing device. H. A. Skinner. 1,629,460; May 17.
Facing blocks, Support and backing for terra cotta or other. F. C. Davis. 1,642,242; Sept. 20.
Fan. J. E. Foster. 1,649,161; Nov. 15.
Fan. J. E. Foster. 1,649,161; Nov. 15.
Fan. J. E. Foster. 1,649,161; Nov. 15.
Fan. F. J. McKurdie. 1,642,255; Bept. 13.
Fan. F. J. McKurdie. 1,642,255; July 12.
Fan. Automobile. C. Rossin. 1,638,379; Aug. 9.
Fan. G. H. Schleter. 1,633,576; July 12.
Fan. Automobile. C. Rossin. 1,635,731; July 20.
Fan. Automobile. K. C. Fairman and F. N. Wagner. Pan. 1,640,401; July 12.
Fan. Automobile. K. C. Fairman and F. N. Wagner. Pan. Blade. K. L. Farker. 1,635,132; Aug. 9.
Fan blade and center. S. A. Xippas. 1,622,337; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Sept. 27.
Fan. Blade and center. S. A. Xippas. 1,623,371; Se Fun, Electric. E. Goldfain and S. Fowler. 1,631,411; June 7. Fan, Electric. R. R. Turner and R. R. Turner, jr. 1,650,165; Nov. 22. Keeney. 1,627,608; May 10. Fan, Exhaust. 10. Fan, Enersible. J. E. Stock. 1,650,776; Nov. 29. Fau, Hand. S. Minunno. 1,622,556; June 14. Fan, Hand. A. Rodriguez. 1,622,594; Mar. 8. Fan housing construction. C. E. Scott. 1,646,319; Oct. 18. Fan histaliation. S. Bolozky and S. Pearl. 1,636,038; Fan histaliation. S. Bolozky and S. Pearl. 1,636,038; Fan Machine-operated portable. H. Gattl. 1,204,557; Fan, Machine-operated portable. H. Gatti. 1,620.457: Mar. 8. Mar. R.

Fan mechanism, Motor-vehicle. R. D. Ananson. 1,651,356;
Dec. 6.

D Fan mechanism, Motor-vehicle. R. D. Ananson. 1,651.356; Fare-registering device. G. E. Schacht. 1,643,907;
Sept. 27.

A. B. Brackbill. 1,647,123; Nov. 1.

Farm gate. F. M. Ross. 1,617,135; Feb. 8.

Farm gate. J. C. Schult. 1,630,736; Mar. 15.

Farm miplement. T. B. Kelly. 1,652,292; Dec. 20.

Farming implement. J. R. Rumos. 1,633,905; June 28.

Farrowing house. Folding. H. Knudsen. 1,635,942; July 12.

Pastener. A. G. Anderson. 1,625,406; Apr. 10.

Fastener. A. G. Anderson. 1,625,406; Apr. 10. July 12.

Fastener, A. G. Anderson. 1,625,496; Apr. 19.
Fastener, A. G. Anderson. 1,651 337; Nov. 29.
Fastener, L. P. Armstrom. 1,641,835; Sept. 6.
Fastener, E. S. Curr. 1,646,345; Oct. 18.
Fastener, F. S. Curr. 1,646,345; Oct. 18.
Fastener, F. S. Curr. 1,647,789-1; Nov. 1.
Fastener, F. S. Curr. 1,647,789-1; Nov. 1.
Fastener, F. S. Curr. 1,643,981; Oct. 4.
Fastener, M. F. Curr. 1,641,916-17; Sept. 6.
Fastener, M. F. Curr. 1,644,791; Nov. 1.
Fastener, F. Degueldre and L. Demaret, nee Degueldre. 1,629,779; May 24.

Fabrics, Making compound. E. R. Dexter. 1,650,266;

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Fastener. E. Dresner. 1,620,611; Mar. 9, Fastener. D. Dyresen. 1,563,418; Dec. 27, Fastener. D. Dyresen. 1,563,418; Dec. 27, Fastener. D. Dyresen. 1,563,418; Dec. 27, Fastener. H. T. Eastin. 1,642,106; Sept. 13. Fastener. R. E. Frey. 1,646,285; Oct. 18. Fastener. R. E. Frey. 1,646,285; Oct. 18. Fastener. A. S. Mackensie. 1,617,818; Feb. 15. Fastener. A. S. Mackensie. 1,617,818; Feb. 15. Fastener. A. S. Mackensie. 1,617,818; Feb. 15. Fastener. G. E. Penter. 1,645,619; Oct. 4. Fastener. V. Owen. 1,646,641; Oct. 4. Fastener. V. Owen. 1,646,641; Oct. 4. Fastener. W. H. Pierce. 1,651,504; Dec. 6. Fastener. A. G. Sianton. 1,637,602; Aug. 9. Fastener. H. A. Widmer. 1,642,539; Apr. 6. Fastener. H. A. Widmer. 1,642,598; Sept. 13. Fastener. H. A. Widmer. 1,633,066; June 28. Fastener and construction equipped therewith, Separable. D. Bourque. 1,650,486; Nov. 22. Fastener. and hanger, Paper. B. Kumagai. 1,648,408; Fastener. and hanger, Paper. B. Kumagai. 1,648,408; Fastener, Bag-frame. W. C. Hiering and E. J. Walter. 1,625,666; Apr. 19. Fastener, Bak-frame. W. C. Hiering and E. J. Walter. 1,625,666; Apr. 19. Fastener, Belt. E. F. Gingras. 1,653,524; Dec. 27. Fastener, Belt. A. Gidsholl. 1,648,395; Nov. 8. Fastener, Carement. L. Wensel. 1,652,548; Dec. 18. Fastener, Casement. L. Wensel. 1,653,624; Dec. 27. Fastener, Closure. M. J. Valsvig. 1,633,870; Aug. 23. Fastener, Closure. M. J. Valsvig. 1,633,670; Aug. 23. Fastener, Closure. M. J. Valsvig. 1,633,622; Mar. 1.
Fastener, Chain. V. A. Bean. 1,648,104; Nov. 8. Fastener, Closure. M. J. Valsvig. 1,639,870; Aug. 23. Fastener, Clothesline. W. J. Rnitter. 1,550,364; Nov. 22. Fastener, Clothesline. W. J. Rnitter. 1,550,364; Nov. 22. Fastener, Door. E. L. Hill and W. J. Webber. 1,654,256; Dec. 27. Fastener, Door. E. L. Hill and W. J. Webber. 1,654,256; Dec. 27. Fastener, Door. C. F. Kline. 1,654,221; Dec. 27. Fastener, Door. C. F. Kline. 1,654,221; Dec. 27. Fastener, Door. G. F. Wild. 1,637,166; July 26. Fastener, Door. G. F. Wild. 1,637,166; July 26. Fastener, Door. G. F. Wild. 1,637,166; July 26. Fastener, Door. L. E. Kliner. 1,652,030; Dec. 6. Fastener, Double-pointed-plu. G. Boden. 1,649,766; Nov. 15. Fastener, Double-pointed-plu. G. Boden. 1,649,766; Nov. 15. Fastener dements, Machine for making multiple. J. E. Terrant. 1,649,854; Nov. 22. F. Dec. 20. Fastener for containers. W. T. S. Brown. 1,653,613; Dec. 20. Fastener for containers. W. T. S. Brown. 1,653,453; Dec. 20. Fastener, Grain-car-door. W. P. Flynn. 1,653,453; Dec. 20. Fastener, Grain-car-door. W. P. Flynn. 1,653,453; Dec. 20. Fastener, Grain-car-door. W. P. Flynn. 1,653,453; Dec. 20. Fastener, Metal-sheet. W. H. Deasy. 1,505,194; Nov. 15. Fastener, Metal-sheet. W. H. Deasy. 1,505,194; Nov. 15. Fastener, Metal-sheet. W. H. Deasy. 1,505,194; Nov. 15. Fastener or jun, Garment. R. C. Morris. 1,618,384; Feb. 22. Fastener, Paper. S. R. Brown. 1,651,653,543; Dec. 20. Fastener, Paper. S. R. Brown. 1,651,653,642; Dec. 20. Fastener, Paper. S. R. Brown. 1,651,656; Dec. 13. Fastener, Paper. S. R. Brown. 1,651,656; Dec. 20. Fastener, Paper. S. R. Brown. 1,651,656; Dec. 20. Fastener, Paper. S. R. Brown. 1,651,656; Dec. 20. Fastener, Paper. S. R. Brown. 1,651,656; Dec. 13. Fastener, Sash. J. F. Flannery. 1,652,556; Dec. 18. Fastener, Sash. J. F. Flannery. 1,652,556; Dec. 
             | Pastener, Separable | D. M. Burmister. 1,632,856; Dec. 13, Dec. 27, Separable | D. M. Burmister. 1,638,321; Aug. 9. Separable | D. M. Burmister. 1,638,321; Aug. 9. Separable | F. S. Carr. 1,647,782-2; Nov. 1. Fastener, Separable | F. S. Carr. 1,647,782-2; Nov. 1. Fastener, Separable | M. F. Carr. 1,651,340; Nov. 20. Fastener, Separable | J. Draher and A. J. Krieger. 1,615,113; Jan. 18. Fastener, Separable | G. H. Ewell 1,652,140; Dec. 6. Fastener, Separable | G. H. Ewell 1,632,645; Jan. 11,628,373; May. 3. Fastener-setting machine. J. K. Diamond. 1,623,783; Apr. 5. Fastener-setting machine. A. R. Havener. 1,632,374; June 14. Separable | A. M. Maddaton. 1,619,265; Mar. 1.
                           Fastener, Suppose and the supp
                           Fastener stringers, Making. G. Sundback. 1,655,320; Dec. 20.
Fastener strip or fly for garments. L. Rosenman. 1,623,361; Apr. 5.
Fastener to bind loose sheets of paper. R. Weilenmann. 1,647,409; Nov. 1.
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Fastener, Tool handle. P. E. Rowe. 1,635,961; July 12. Fastener, Window. E. M. Brown. 1,635,351; July 19. Fastener, Window. A. G. Cameron. 1,635,461; Dec. 27. Fasteners, Applying. J. H. Reed. 1,622,957; Apr. 26. Fasteners, Machine for forming. T. Sibley. 1,622,977. May 3.
Fasteners, Machine for making divergent. V. Ragona.
1,639,895; Aug. 25.
Fasteners, Method and machine for inserting. A. E.
Fasteners, Method and Jan. 25.
Fasteners, Setting members of separable. J. Draher and
A. J. Krieger. 1,642,411; Sept. 13.
Fastening apparatus. Metal-container sealing-closure. F.
C. Thorton. 1,640,655; Aug. 36,638; Oct. 25.
Fastening clamp. A. R. Baker. 1,646,638; Oct. 25.
Fastening clamp. A. R. Baker. 1,646,638; Oct. 25.
July 5. Covers, Device for. G. Loke. 1,634,619;
July 5. May 3. Fastening July 5. | Fastening device. C. R. Bumbarger. 1,648,673; Nov. 8. Fastening device. O. J. Craig. 1,620,874; Mar. 1,628,619; July 5. Gastening device. O. J. Craig. 1,620,874; Mar. 1,628,619; Jan. 25. Fastening device. M. H. Hartzell. 1,613,698; Jan. 25. Fastening device. M. H. Hartzell. 1,613,698; Jan. 25. Fastening device. C. C. Jensen. 1,622,612; Apr. 19. Fastening device. C. E. Kohn. 1,622,612; Apr. 19. Fastening device. C. C. Jensen. 1,622,612; Apr. 19. Fastening device. L. F. Phillips. 1,650,649; Nov. 29. Fastening device. L. F. Phillips. 1,650,649; Nov. 29. Fastening device. D. I. Reiter. 1,619,764; Mar. 1, Fastening device. D. I. Reiter. 1,619,764; Mar. 1, Fastening device. W. E. E. Commonder. 1,624,765; Apr. 19. Gay. 1,625,692; Apr. 26. Fastening device. M. E. E. Commonder. 1,624,765; Apr. 19. Fastening device. B. A. Sterling. 1,612,992; Jan. 4. Fastening device. B. A. Sterling. 1,623,27; Aug. 18. Fastening device. A. Zeindlhofer, sr. 1,623,610; Apr. 5. Fastening device. A. Zeindlhofer, sr. 1,623,610; Apr. 5. Fastening device. Marchale. R. D. Hyatt. 1,649,473; Fastening device. Marchale. R. D. Hyatt. 1,649,473; Fastening device. Fastening device. Marchale. R. D. Hyatt. 1,649,473; Fastening device. Suction. E. O. Lundblad. 1,652,488; Fastening device. Suction. E. O. Lundblad. 1,652,488; May 10.
Fastening device, Suction. E. O. Lundblad. 1,652,488;
Dec. 13.
Fastening for push and pull handles, Concealed. J. Kubelka. 1,652,018; Dec. 6.
Fastening for water-closet-seat sections. W. R. Wood.
1,653,421; Dec. 20.
Fastening inseam, Metallic. C. C. Blake. 1,628,599; Fastening May 10. Fastening-inserting machine. E. B. Barber. 1,649,503; Nov. 15. Fastening-inserting machine. E. B. Barber. 1,649,503; Nov. 15.
Fastening-inserting machine. J. W. Cosgrove. 1,642,014; Sept. 13.
Fastening-inserting machine. G. Goddu. 1,642,729; Sept. 20.
Fastening-inserting machine. G. Goddu. 1,653,006; Dec. 20. Fastening-inserting machine. T. H. Seely. 1.623,279: Apr. 5.

Fastening-inserting machines. W. T. B. Roberts.

1.651.469; Dec. 6.

Fastening-inserting machines, Economizer for. D. MacArthur. 1,643.389; Sept. 27.

Fastening-inserting mechanism. G. Goddu and F. L.

Mackenzie. 1,620,200; Mar. 8.

Fastening-inserting mechanism. F. L. Mackenzie and

Fastening mechanism. B. Dec. 1,1619,803; Mar. 8.

Fastening means. C. Hardy. 1,612,218; Jan. 4.

Fastening means. M. Kosofsky. 1,616,190; Feb. 1.

Fastening means. C. R. Teits. 1,648,105; Nov. 8.

Fastening means. C. R. Teits. 1,648,105; Nov. 8.

Fastening means. W. E. H. Bell. 1,643,365;

Sept. 27. Apr. 5 Fastening mechanism. Fastening mechanism. W. E. H. Bell. 1,643,365; Sept. 27. Fastenings, Machine for inserting. L. Holden. 1,625,363; Apr. 19. Fat composition, Edible. H. E. Dubin. 1,624,164; Apr. 12. Apr. 12

Fats, Extracting, H. V. Atwell. 1,648,670; Nov. 8,
Fats from textiles, Extracting. A. Bell and W. A.
Meyer. 1,636,251; July 19.
Fats or oils into fatty acids and glycerine. Decomposing.
A. S. Richardson and C. V. Conicy. 1,622,974; Mar. 29.
Faucet. W. F. Albrecht. 1,636,875; July 12.
Faucet. W. F. Albrecht. 1,636,875; July 12.
Faucet. W. H. Brooker. 1,656,877; Dov. 27.
Faucet. W. H. Brooker. 1,656,877; Dov. 27.
Faucet. J. W. Burnett. 1,639,236; Aug. 16.
Faucet. J. Clinton. 1,642,101; Sept. 13.
Faucet. J. Clinton. 1,642,101; Sept. 13.
Faucet. G. W. Cooke. 1,646,629; Aug. 30.
Faucet. F. Gestep. 1,658,639; Dec. 27.
Faucet. F. J. MacKay. 1,658,639; Dec. 27.
Faucet. B. L. Malloyv. 1,634,672; July 5.
Faucet. B. L. Malloyv. 1,634,672; July 5.
Faucet. H. H. Meyer and E. C. Reehorst. 1,614,079; Jan. 11. Faucet. 1 Jan. 11. Jan. II.
Faucet, J. C. Ross, 1.616.826; Feb. 8.
Faucet, L. Ruege, 1.632.418; June 14.
Faucet, W. Tibble, 1.638.020; Aug. 97.505; Apr. 19.
Faucet, Paucet, C. N. Wagenseller, 1.625.404; Apr. 19.
Faucet, C. N. Wagenseller, 1.625.404; Apr. 19.
Faucet attachment, F. Joseph and I. P. Creamer, 1.623.248; Apr. 5.
Faucet paucet, 1.625.404; Apr. 19.
Faucet, 1.625.248; Apr. 5.
Faucet, 1.625.248; Apr. 5.
Faucet, 1.625.248; Apr. 5.
Faucet, 1.625.248; Apr. 5. Faucet h

Faucet, Combination hot and cold water. E. H. Carder 1,646,575; Oct. 25. Faucet, Compression. E. M. Alfonzo. 1,619,781; Mar. 1, Faucet, Compression. W. G. Stewart. 1,628,689; 1,619,781; Mar. 1. ewart. 1,628,689; Faucet, Compression. W. G. Stewart
Faucet, Compression. W. G. Stewart
Faucet, Dispensing. G. N. Hein, F. L. Platt, and R. R.
Impey, 1,636,817; July 26.
Faucet, Dispensing. W. E. Leibing. 1,640,945; Aug. 30.
Faucet, Dispensing. W. E. Patnaude. 1,613,548; June 7.
Faucet, Dispensing. W. A. Schatz, 1,651,731; Dec. 6.
Faucet, Float-controlled. A. B. Cravath. 1,639,556;
Aug. 18.
Faucet, Fluid-heating. K. Tramp. 1,637,205; July 28.
Faucet, Fluid-heating. K. Tramp. 1,637,205; July 28.
Faucet, Fluid-heating. R. H. Mueller. 1,647,190; Nov. 1. Faucet, Fluid-heating. K. Tramp. 1,637.205; July 26. Faucet, Laundry-tub. R. H. Mueller. 1,647,190; Nov. 1. Faucet, Liquid-dispensing. T. E. Davis. 1,641,534; Sept. 6 Sept. 6. Faucet, Measuring, W. A. Schatz. 1,648,593; Nov. 8. Faucet, Mixing, W. A. England. 1,630,695; May 31. Faucet or valve. R. A. Card. 1,634,771; July 5. Faucet, Pedal-actuated. G. O. Dougherty. 1,627,020; Faucet, Receptacle-actuated. C. W. Hathaway. 1,637,221; July 26. July 26.
Faucet, Safety. C. J. Gordon and D. D. Goldberg.
1.633,581; June 28.
Faucets, Attaching means for combination. R. C. ZanFaucets, Flow regulator for. O. W. Vallier. 1,625,921;
Apr. 26.
Faucets or the like, Indicating means for, F. Pilkington.
1,642,264; Sept. 18.
Faucets, Shut-off for sink. O. W. Vallier. 1,612,844;
FJan. 4. and M. Horner. 1,631,265; 1,022,7 1.644,264; Sept. 15.

Faucets, Sut-off for sink. O. W. Vallier. 1,612,844;
Jan. 4.

Jan. 4. Jan. 18.
Feed means, Safety. W. Doellner. 1,627,491; May 3.
Feed mechanism, Flat. L. E. La Bombard and M. H.
Sidebotham. 1,634,672; June 28.
Sidebotham. 1,634,672; June 28.
Sidebotham. 1,634,672; June 28.
Feed mechanism, Stitcher. M. Christensen. 1,615,534; Jan. 25.
Feed mechanism, Stitcher. M. Christensen. 1,614,716; Feed mechanisms, Electric-motor control for. R. D. Given. 1,648,689; Nov. 8.
Feed mixer, Wet. G. F. Hinkley. 1,635,321; July 12.
Feed, Producing animal. A. B. Schreiber. 1,638,964; Aug. 16.
Feed regulator. G. G. Merchen. 1,621,009. May 15. Aug. 16.
Feed regulator. G. G. Merchen. 1,621,022; Mar. 15.
Feed regulator. F. E. Bruce. 1,652,756; Dec. 13.
Feed. Stock. L. K. Braren. 1,636,406; July 19.
Feed stuff. Producing. C. S. Miner and G. Steerup.
1,627,921; May 10.
Feed table. A. Olson. 1,626,352; Apr. 26.
Feed tank. R. Warrienr. 1,638,607; Aug. 9.
Feed water, Delivering preheated. J. Stumpf. 1,616,239; Feb. 1. Feed-water heater. E. E. Merckle, 1,652,037; Dec. 6. Feed-water heater. S. A. Moss. 1,628,471; May 10. Feed water, Heating boiler. G. H. Gibson. 1,641,138; Feed water, Heating boiler, G. H. Gibson. 1,641,138; Aug. 30. Feed-water regulator. J. M. Barrett. 1,650,108; Nov. 22. Feeder, E. W. Boyer. 1,617,988; Feb. 15. Feeder, J. J. Nevills. 1,624,175; Apr. 12. Feeder, B. E. Stone. 1,030,982; May 31. Feeder and exerciser, Poultry. Combined. W. H. Schieller, 1,620,688; Feeder and exerciser, Poultry. Combined. W. H. Bebli. Mar. 15.
Feeder and waterer for poultry, Combined. W. H. Robisson. 1,614,394; Jan. 11.
Feeder, Automatic. L. K. Aldrich. 1,631,181; June 7.
Feeder, Automatic. C. E. Bennett. 1,629,334; May 17.
Feeder, Automatic. N. I. Harmon. 1,615,368; Feb. 1.
Feeder bushlups. C. Heykonrath. 1,651,026; Nov. 29.
Feeder bushlups. C. Maging gilss. J. M. Lents. 1,642,841; Sept. 20. | Feeder Automatic. F. Herkenrath. 1,651,026; Nov. 29. Feeder bushings, 1.642,881; Sept. 20. Feeder, Chick. W. A. McCollough. 1.617.339; Feb. 15. Feeder, Chicken. W. D. Botterbusch. 1,631,462; June 7. Feeder, Chicken. C. Kassy. 1,623,840; Apr. 5. Feeder, Chicken. F. Parterson. 1,649,250; Nov. 15. Feeder, Chicken. F. Parterson. 1,649,250; Nov. 15. Feeder, Edward L. G. Schroeder and G. Forslund. 1,637,132; July 26. F. Callenter and G. Forslund. 1,1637,132; July 26. F. Callenter and G. Forslund. 1,1631,172; July 26. F. Callenter and G. Forslund. 1,1631,172; Mar. 1,1641,172; Mar. 1,1641,172; Mar. 1,1641,173; Mar. 1,1651,135; Nov. 29.

Feeder, Glass. L. D. Soubler. 1,631,230; June 7. Feeder, Hog. W. Dannenberg. 1,642,944; Sept. 20. Feeder, Knockdown self. J. E. Anderson. 1,655,976; Dec. 27. Feeder of mill waste fuel for domestic heating plants. Feeder, Heg. W. Dannenberg. 1,642,944; Sept. 20.
Feeder, Knockdown self. J. E. Anderson. 1,653,976;
Feeder of mill waste fuel for domestic heating plants,
Automatic. I. T. Woodruff. 1,618,501; Feb. 22.
Feeder, Poultry. F. W. Lord. 1,632,738; June 14.
Feeder, Poultry. F. Seikman. 1,634,778; June 14.
Feeder, Poultry. E. Williams. 1,631,778; June 7,
Feeder, Knary. R. J. Waterworth. 1,630,522; May 31.
Feeder, Poultry. E. Williams. 1,631,778; June 7,
Feeder, Knary. R. J. Waterworth. 1,630,522; May 31.
Feeder, Gan applying machinery, Can-cover, G. W. Mudd.
1,648,003; Nov. 8.
Feeding and applying matchinery, Can-cover, G. W. Mudd.
1,648,003; Nov. 8.
Feeding and controlling material, Device for, W. Ross.
1,651,633; Dec. 6.
Feeding and cutting machine, Label. B. B. Guenther.
1,621,666; Mar. 22.
Feeding and cutting machine, Driving mechanism for web. H. M. Barber. 1,650,028; Nov. 29.
Feeding and cutting machine connected in gangs. S.
Feeding and mixing machine connected in gangs. S.
Snyder. 1,625,917; Apr. 26.
Feeding and packing pulverulent material, Machine for.
B. A. Marsh. 1,618,439; Feb. 22.
Feeding day plaratus. F. C. Morrow.
1,623,625 (Dec. 13.
Feeding day feeder. F. X. Malocsay, 1,627,792; May 10.
Feeding device. E. B. Berkowitz. 1,646,230; Oct. 18.
Feeding device. F. X. Malocsay, 1,627,792; May 10.
Feeding devic Feeding Feeding device for roll stationery. H. H. Konerman and A. E. Imbus. 1,620,666; Mar. 15. Feeding device, Poultry-. C. E. Cloward, jr. 1,630,831; May 31. Feeding device, Poultry-. E. P. Steinback. 1,629,979; May 24. May 24.
Feeding device, Wire-. R. Knable. 1,616,453; Feb. 8.
Feeding machine. S. Madsen. 1,622,836; Mar. 29.
Feeding machine. F. X. Malocsay. 1,655,641; Dec. 27.
Feeding machine. C. L. Post. 1,622,8376; Apr. 12.
Feeding machine. W. E. Taylor and Z. Hoffman. 1,645,555; Oct. 18.
Feeding machine, Dry-material. E. E. Harper. 1,616,970;
Feeding means, Material-. H. L. Merrick. 1,641,448;
Sept. 6. Feeding mechanism. F. J. Ruby. 1,615,137; Ján. 18. Feeding mechanism. Automatic. F. X. Malocsay. 1,627,793; May 10. Feeding mechanism. Automatic cattle. H. Halvarsson. Feeding-mechanism deflector. L. C. Steele. 1,643,686; Sept. 27. Feeds, Apparatus for producing livestock. C. R. Mabee. 1,641,340; Sept. 47. Feeler mechanism. T. H. McGowan, sr. 1,651,144; Feel. Amaging for treasing the L. J. Karnf. 1,648,949; Nov. 29.
Feet, Apparatus for treating the. L. J. Karpf. 1,648,949;
Nov. 15.
Felling machine. M. D. Brody. 1,622,414; Mar. 29.
Fell batt. H. M. Scott. 1,647,022; Oct. 25.
Fell tabtt. C. T. S. McDermott. 1,629,923; May 24.
Felt making, Mercuryless hair-secreting process for. C. and E. Pichard. 1,622,838; Mar. 29.
Felted fabric and the manufacture thereof. E. A. Peroglo. 1,631,692; June 21,141,26,231; June 14.
Fence. A. H. Ball 1,147,136; June 28.
Fence. J. Ward. 1,633,649; June 28.
Fence. J. Ward. 1,633,649; June 28.
Fence attachment, Foultry. H. S. Small. 1,638,966;
Aug. 16. Aug. 16.
Fence construction. H. G. Thomson. 1,643,277; Sept. 20.
Fence construction. H. G. Thomson. 1,650,245; Nov. 22.
Fence-fastening device. H. G. Thomson. 1,631,942; Fence guard. G. Lotz. 1.630.441; May 31.
Fence guard. G. Lotz. 1.630.441; May 31. Apr. 19.
Fence guard. G. Loiz. 1.630.441; May 31.
Fence guard. Wire. J. W. Morris. 1.644.846; Oct. 11.
Fence guard. Wire. J. W. Morris. 1.644.846; Oct. 11.
Fence machine. J. M. Dennim. 1.625.244; Apr. 19.
Fence machine. J. M. Dennim. 1.625.244; Apr. 19.
Fence panel. Fortable. J. W. Hudnell. 1.046.293; Oct. 18.
Fence, Portable. D. D. Brinkerhoff. 1.613.349; Jan. 4.
Fence. Portable. D. D. Brinkerhoff. 1.613.349; Jan. 4.
Fencepost. C. E. Christenaed. 1.668.126; July 19.
Fencepost. C. E. Christenaed. 1.668.126; July 19.
Fencepost. P. J. Hindmarsh. 1.629.663; May 24.

Fencepost. A. S. Hook. 1,639,638; Aug. 16. Fencepost. C. K. Jackson. 1,631,820; June 7. Fencepost. H. C. Jones. 1,637,645; Aug. 2. Fencepost. J. W. Meaker and W. P. Gleason. 1,639,195; Aug. 16.

Aug. 16.

Fence post. T. F. McKeon. 1,649,909; Nov. 22.

Fencepost. U. Myer. 1,626,862; May 8.

Fencepost. H. L. Thomas. 1,644,009 for the company of the company Fence, Wire. A. M. Haught, 1,617,249; Feb. 8. Fencing construction. C. K. Jackson, 1,623,873; Apr. 5. Fencing Serviction. C. R. Jackson. Jos., 102-5,815; P. F. Fencing Serviction. C. Cultivator fender. Automobile fender. Cextensible fender. Automobile safety fender. Vehicle fender. Fender and brake, Vehicle. B. Icre. 1,642,879; Sept. 20, Fender and luggage carrier, Combined. H. G. Reymouth. 1,619,451; Mar. 1. L62,845; Mar. 12. Fender brace. R. B. Fegged. 1,627,770; Aug. 2. Fender guard, Automobile. F. A. Wernig. 1,651,079; Nov. 29. Fender rack. W. N. Vance. 1,620,841; Mar. 15. Fermentation apparatus. G. B. Thomas. 1,633,618; June 28. June 28. June 28. June 28. June 28. June 28. Fermentation apparatus. G. B. Thomas. 1,633,618; June 28. Fermentation thus. P. Caccia. 1,614,184; Jan. 11. Fer Apr. 5.
Fern stand. F. L. Lewis. Des. 71,803; Jan. 4.
Fern stand or article of similar nature. S. A. Flowers.
Des. 72,313; Mar. 29.
Ferner stand. C. Kowalski. Des. 72,319; Mar. 29.
Ferric oxide, Manufacture of. D. G. Zalocostas. 1,630,881;
May 31.
Ferric sulphate, Manufacture of. B. Hart. 1,644,250;
Oct. 4. J. M. Rugh. 1,650,390; Nov. 22.

Ferrophosphorus, Making. E. V. Rawn. 1,613,125; Jan. 4.
Ferrophosphorous, Manufacture of. J. Warner. 1,646,268;
Oct. 18.
Oct. 18.
Libeto in solution, Oxidizing. A. Elliott. Oct. 18. alphate in solution, Oxidizing. A. Elliott. Ferrilage 19. 19. Fortiles, Process of and machine for making. G. M. Stevenson. 1,629,813; May 24. Fertilizer. E. Dedolph. 1,621,875; Mar. 22. Fertilizer distributing machine. A. W. Koch. 1,628,546; May 10. Fertilizer distributor. W. E. Bruce. 1,624,210; Apr. 12. Fertilizer distributor. W. E. Bruce. 1,624,210; Apr. 12. Fertilizer distributor. H. R. Clark. 1,632,540; June 14. Fertilizer distributor. G. M. MCTyr. 1,627,698; May 10. Fertilizer distributor. C. T. Ray. 1,613,411; Jan. 4. Fertilizer distributor. C. T. Ray. 1,613,431; Jan. 4. Fertilizer distributor. L. E. Roby. 1,619,795; Mar. 1. Fertilizer distributor. J. L. Woodward. 1,617,228; Feb. 8. Fertilizer distributor. F. A. N. Houer.
Fertilizer distributor. J. L. Roy 1, 1613, 1935, Mar. 1, Fertilizer distributor. J. L. Woodward. 1,617,228; Feb. 8.
Fertilizer distributors, Atjachment for. E. M. Cole. 1,627,955; May 10.
Fertilizer distributors, Atjachment for. E. M. Cole. 1,621,955; May 10.
Fertilizer of the state of the

Fiber-bearing materials, Apparatus for treating. N. K. Davis. 1,624,717; Apr. 12. Fiber board, Manufacture of. R. W. Hilton. 1,624,599; Davis. 1.624.717; Apr. 12.

Fiber board, Manufacture of. R. W. Hilton. 1.624.599; Apr. 12.

Fiber-board, Manufacture of. R. W. Hilton. 1.624.599; Apr. 12.

Fiber-board, Manufacture of. R. W. Hilton. 1.624.591; Apr. 12.

Fiber composition, Machine for making, W. G. O'Brien. 1.645.068; Oct. 11.

Fiber conditioner, R. B. Smith and T. R. Lovern. 1.618.893; Feb. 22.

Fiber, Method and apparatus for treating. A. F. Richter Fiber, Method and apparatus for treating. A. F. Richter Fiber, Method and apparatus for treating. G. A. Richter. 1.632.502; June 21.

Fiber, Sizing and finishing articles of. F. M. Kern. 1.637.487; Aug. 2.

Fibers and fabrics of a protein nature, Dyeing of animal. S. W. Wilkinson. 1.628.484; May 10.

Fibers for spinning purposes, Treating. L. Ubbelohde. 1.629.243; May 14.

Fibers for spinning purposes, Treating. L. Ubbelohde. 1.623.335; Sept. 27.

Fibers, Weighing. O. Berg and M. Imboff. 1.634.012; June 28. 2. R. W. Hilton. 1,624,599; Fibers, Welghing. O. Berg and M. Imhoff. 1,634,012; June 28.
Fibrous article and producing such article. F. S. KochDiscourse 1,646,825; Oct. 29.
Fibrous articles, Manufacture of nonplaniform. M. Koppleman. 1,618,289; Feb. 22.
Fibrous articles, Method and apparatus for producing.
H. G. Walker and A. T. March. 1,615,424; Jan. 25.
Fibrous articles, Method of and apparatus for making.
J. S. Little. 1,615,392; Jan. 25.
Fibrous composition and articles 3,588; Apr. 5.
Fibrous composition, Apparatus for and method of making articles from. F. Beebe. 1,628,393; Apr. 5.
Fibrous material and making the same. C. Hering.
1,636,511; July 19.
Fibrous material and producing the same, Fire-resistant.
A. Winogradoff. 1,645,172; Oct. 11.
Fibrous material in aligned condition, Method and apparatus for supplying. E. Anderson. 1,636,977; July 26.
Fibrous material in aligned condition, Method and apparatus for supplying. E. Anderson. 1,636,977; July 26.
Fibrous material, Machine for and method of applying
varnish to sheets of. L. T. Frederick. 1,624,094;
Apr. 12. varnish Apr. 12. ADI. 12.

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ADI. 14.

ADI. 1 Time 28.

Fibrous pulp, Apparatus for the manufacture of hollow bodies from. R. Lechthaler. 1.626.847; May 3. Fibrous vegetable material, Treating. R. Forsyth. 1.646.087; Oct. 18.

Fibrous waste from machines, Elimination of. E. Gminder. 1.637.340; Aug. 2.

Field winding. L. M. Ferkins. 1.630.757; May 31.

Fife. N. T. E. Skinner. 1.618.892; Feb. 22.

Fifth wheel. G. F. Honold. 1.613.292; Jan. 11.

Figure of animated objects. K. Hergershausen. 1.626.533; Apr. 26.

Figure of animated objects. K. Hergershausen. 1.626.533; Apr. 26.

Figure wheel, Adjustable. W. G. Orth. 1.615.399; Jan. 25.

Filmment-dyeing apparatus. S. A. Neidich. 1.627.059; Filmment-dyeing apparatus. Filament-dyeing apparatus. S. A. Neidich. 1,627,059; Filament-dyeing apparatus. S. A. Neidich. 1,627,059; May 3.
Filaments and films formed from viscose, Dyeing. W. Mendel. 1,632,20; June 21, 100.
Mendel. 1,632,20; June 21, 100.
Mendel. 1,614,431; Jan. 11.
Filaments Machine and method of mounting. J. J. Higgins. 1,647,624; Nov. 1.
Filaments, Making long crystal tungsten. R. Jacoby. 1,048,690; Nov. 8.
Filaments, Making long crystal tungsten. R. Jacoby. 1,048,690; Nov. 8.
Filaments, Mcthod of and apparatus for forming. D. K.
File. A. Pushnell. 1,634,450; July 5.
File. A. Pushnell. 1,634,450; July 5.
File. M. E. Nordan. 1,631,212; June 7.
File. J. S. Small. 1,622,390; Apr. 12.
File. J. S. Small. 1,622,390; Apr. 12.
File. J. S. Small. 1,642,594; Nov. 1.
File. J. S. Small. 1,647,543; Nov. 1.
File. H. B. Womack. 1,616,403; Feb. 1.
File, binder, and the like. G. E. Doughty and H. Forth. 1,636,408; July 19. May 3. Filaments and

File clip. W. J. Milette. 1,644,198; Oct. 4.
File container for loose-leaf sheets. J. Schade. 1,622,003;
Mar. 22.
The container for loose-leaf sheets. J. Schade. 1,622,003;
Mar. 22.
The container for loose sheets, magazines, and the like.
O. J. C. Rils. 1,614,991; Jan. 18.
File holder, M. G. Riggs. 1,618,604; Feb. 22.
File holder, Drawing. A. H. Memmier. 1,652,370;
Dec. 13. J. K Cassell. 1,624,776. Apr. 12. File C. 13.
File Jacket. R. Cassell. 1,424,776; Apr. 12.
File Jacket. B. C. Bardiel. 1355,210; July 12.
File pocket, Vertical. B. F. Ahlquist. 1,622,753; Mar.
Filing and indexing apparatus. I. Becket. 1,626,6.
May 3.
Filing and indexing equipment. C. E. Attw. 1,626,661; 1,626,442; Apr. 26. Filing and indexing equipment. C. E. Attwood. Filing and indexing equipment. J. T. Quigley. 1,616,508; Feb. 8. Filing and indexing equipment. J. T. Quigley. 1.637,534; Filing and indexing equipment. J. T. Quigley. 1.007,007, Aug. 2.
Filing and posting system. C. N. Jackson. 1,628,320; May 10.
Filing card. W. M. Hind. 1,652,716; Dec. 13.
Filing cards and the like, Device for. J. T. Quigley.
Filing case. A. H. Andersson. 1,621,304; Mar. 15.
Filing device. J. M. Hurley. 1,644,676; Oct. 11.
Filing device. R. J. Keays and E. I. Coffey. 1,646,696; Oct. 26. Filling device. R. J. Keays and E. I. Coffey. 1,646.696; Oct. 25.
Fliing device. B. I. Ouchie. 1.635.859; July 12.
Fliling device. B. I. Ouchie. 1.635.859; July 12.
Fliling device. D. I. Samerica 1.635.859; July 12.
Fliling device. R. M. Smith. 1.626.886-1; May 3.
Fliling device. R. M. Smith. 1.626.886-1; May 3.
Fliling device. R. M. Smith. 1.626.886 May 3.
Fliling device. R. M. Smith. 1.626.8979; May 3.
Fliling device. R. M. Smith. 1.626.8979; May 3.
Fliling device. R. M. Smith. 1.626.8797; May 3.
Fliling device. R. M. Smith. 1.626.889-1; May 3.
Fliling device. R. M. Smith. 1.626 witz. 1.618,842; Feb. 22.
July 25,
Filing machine or jig saw. B. A. Yarrington. 1.636,729;
July 26,
Filing systems, Guide card for vertical. T. J. Amberg.
Filing systems, Guide card for vertical. T. J. Amberg.
Filing systems for reclaiming and sharpening. J. T.
Cordrey, 1.648,112; Nov. 8.
Files, Making. E. Coenen. 1.645,895; Oct. 18.
Fili box. F. F. Rike, 1.654.095; Dec. 27.
Filled gummer Cotta and making the same. C. H.
Filled gummer Cotta and making the same. C. H.
Filler construction. M. Weber. 1,612,43; Feb. 1.
Filler construction. M. Weber. 1,612,43; Feb. 1.
Filler or the panels of animal pens. C. O. Lesher.
I.020,976; Mar. 15.
Filler openings, Closure for. J. A. Jensen 1,654,501;
Filler openings, Closure for. A. W. Oswald. 1.631.06;
May 31.
Filler with rubber. Mixing a soluble. C. H. Campbell.
I.640,818; Aug. 39. Barry. 1,647,170; Nov. 1.
Filling and packing machine. E. Jagenberg. 1,624,664;
Apr. 12.
Filling and weighing machine. W. L. Taylor. 1,648,077;
Nov. 8.
Filling compound, Tooth-canal. W. S. Fisher. 1,641,844;
Sept. 6. Sept. 6.
Filling device. O. Pratt. 1.626.050; Apr. 26.
Filling-end clearer. W. M. Tyson. 1.628.565; May 10.
Filling-end clearer. W. M. Tyson. 1.643.727; Sept. 27.
Filling-end controller. J. T. Kirk. 1.651.091; Nov. 29.
Filling machine. K. Kiefer. 1.635.754; July 1.520.960; May 31.
Filling machine. H. Melum and G. P. Berger. 1.630.960; May 31.
Filling machine. L. D. Nelson. 1.628.177; May 10.
Filling machine. D. S. Paterson and G. B. Petsche. 1.624.864; Apr. 12.
Filling machine, Bag. A. Wertenbruch. 1.616.016; Elling machines. Feb. 1.
Filling machines, Attachment for. H. M. Crumbaugh and H. M. Wilson, sr. 1.640.482; Aug. 30.
Filling machines, Silding attachment for. L. E. Parker. 1.647,745; Nov. 1.
Filling station, Self-operating. L. P. Starkey. 1.650.882; Nov. 29.
Filling-station valve and key. A. Knittel. 1,629,797; May 24.

May 24.

May 24.

May 24.

May 24.

Filling unit. C. H. Ehlers. 1,614,780; Jan. 18.

Filling unit. C. H. Ehlers. 1,614,780; Jan. 18.

Filling unit. C. H. Ehlers. 1,620,518; Mar. 2.

Filling current. H. E. Butler. 1,620,518; Mar. 8.

Filling current. H. E. Butler. 1,625,529; July 5.

Filling current. H. E. B. Mihee. 1,629,285; May 17.

Filling feed, Intermittent. A. F. Victor. 1,625,665; Apr. 19.

Filling apparatus. F. J. Kincade. 1,631,137; Juny 11.

Filling correnting machines, Feed device for. E. M. Kratz. 1,649,960; Nov. 22. 24

Film holder, Cut. W. F. Folmer. 1,631,479; June 7. Film holder, Cut. W. F. Folmer. 1,641,420; Sept. 6. Filmilke hands from cellulose solutions and similar initial materials, Production of. E. Czapek and R. Weingand. 1,641,322; Sept. 6. Film or plate pack, Photographic. M. Romanowicz and J. Romanowicz. 1,641,867; Sept. 6. Film-pack construction. A. A. Ruttan. 1,638,552; Aug. 9. Aug. 9.
Film pack, Cut., C. Boniforti, 1,613,379; Jan. 4.
Film-printing machine and method. R. John. 1,654,291; Film rewinder, Automatic. D. L. Matheson, 1,653,964; Film rewinders, Automatic switch for. J. A. Hudson, 1,635,478; July 12. Film-spirity machine. J. De Hness, 1,628,589; May 10. Film spool. H. A. De Vry. Re16,762; Oct. 4. Film spool. H. A. De Vry. 1,620,605; Mar. 18. Film sprocket guide. A. S. Howell. 1,624,731; Apr. 12. Film-sprocket guide. A. S. Howell. 1,624,731; Apr. 12. Film-tensioning mechanism, Automatic. F. E. Garbutt. 1,629,029; May 17. Film-tensioning mechanism having individual spools, Automatic. F. E. Carbutt. 1,629,030; May 17. Film-type evaporator, Vertical. L. E. Sebald. 1,631,162; Film-type evaporator, Vertical. L. E. Sebald. 1,631,162; Film-type evaporator, Vertical. tomatic. F. E. Carbutt. 1,629,030; May 17.
Film-type evaporator, Veritical. L. E. Sebald. 1,631,162;
June 7.
Film which includes a layer of polymerized vinyl chloride,
Laminated. R. L. Stinchield. 1,627,385; May 10.
C. T. Uliev. 1,616,010; Feb. 1.
Films in projection apparatus, Deriving gear for. W.
Keichmann. 1,621,334; Mar. 15.
Films in spaced coil forms, Holding. L. Czako.
1,624,586; Apr. 12.
Films, Method of and apparatus for treating continuous.
J. Shaw and J. W. Berwick. 1,615,047; Jan. 18.
Films or the like, Process and device for the development, fixing, washing, etc., of photographic or cinematorphic. M. A. Unger. 1,621,291, Mar. 15.
FORTHAM CONTROL OF THE CONTROL Jan. II.
Filter. S. S. Amdursky. 1630,257; May 31.
Filter. J. Astrom. 1.651,797; Dec. 6.
Filter. D. F. Fesler. 1630,480; May 31.
Filter. D. E. Glese. 1.632,360; June 21.
Filter. H. L. Guy and T. Blacklock. 1611,118; Mar. 1.
Filter. F. D. Herbert. 1414,643; Sept. 6.
Filter. F. D. Herbert. 1414,643; Filter. J. Hermann and M. Stauber. 1.649,405; Nov. 15.
Filter. J. Herschkowitsch and P. Prausnitz. 1,620,815;
Filter. A. W. Konstann. 1600, 1000, Mar. 15.

Filter. A. W. Kogstrom. 1633,818; June 28.

Filter. J. M. Lobit. 1,640,198; Aug. 23.

Filter. C. W. McKinley. 1651,400; Dec. 6.

Filter. J. F. Nelson. 1,619,584; Mar. 1.

Filter. J. Koumann. 1,647,808; Nov. 1.

Filter. E. Robertson. 1,629,085; May 17.

Filter. T. F. Seitz and G. H. Seitz, jr. 1,650,548; Nov. 22.

Nov. 22.

Nov. 22.

Nov. 22.

Filter. R. L. Smith. 1,617,504; Feb. 15.

Filter. J. E. Spalding and R. L. Archer. 1,630,079; May 24.

May 24. Filter. J May 24 May 24. Filter. E. de Stubner. 1,620.083; Mar. 8. Filter. G. J. Wiggenborn. 1,625.442; Apr. 19. Filter. J. N. S. Williams. 1,642.864; Sept. 20. Filter aid and making same. H. S. Thatcher. 1, Filter. J. N. S. Williams. I.642,864; Sept. 20. Filter ald and making same. H. S. Thatcher. I.632,458; June 14. Flor. Alt. F. K. Ewing and S. R. Cummings. 1,628,397; Filter. Alt. D. V. Greene. 1,639,132; Aug. 16. Filter and cooler, Combined oil. F. C. Hawkins. 1,618,889; Jan. 11. Filter cakes from filter mediums. Removing. A. L. Genter and J. A. McChakell. 1,649,581; Nov. 15. Filter cakes from filter mediums. Removing. A. L. Genter and J. A. McChakell. 1,649,581; Nov. 15. Filter. Continuous battery oil. Fl. A. Hills. 1,638,201; Aug. 9. Filter. Continuous battery oil. Fl. A. Hills. 1,638,201; Aug. 9. Filter. Edectrical wave. E. Dietze. 1,636,737; July 26. Filter, Electrical wave. E. Dietze. 1,636,737; July 26. Filter, Fluid. B. H. Lundbore. 1,648,73; Nov. 1. Filter, Fluid. B. H. Lundbore. 1,648,73; Nov. 8. Filter, Gasoline. W. C. Glover. 1,624,832; Apr. 12. Filter, Gasoline. W. C. Glover. 1,624,832; Apr. 12. Filter, Liquid. R. A. Mermann. 1,634,285; July 9. Filter, Liquid. R. A. Mermann. 1,634,285; July 9. Filter, Liquid. R. A. Mermann. 1,634,285; July 9. Filter, Claud. R. A. Mermann. 1,634,285; July 9. Filter, Claud. R. A. Mermann. 1,634,256; Apr. 12. Filter, Oil. H. C. Bohmsack. 1,624,526; Apr. 12. 1.632.458:

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Filter, Oil. W. G. Burhans. 1,632,461; June 14.
Filter, Oil. E. Kaegt. 1,631,594; June 7.
Filter oil. C. B. Jainke. 1,644,728; Oct. 11.
Filter, Oil. R. A. Walker. 1,630,504; May 31.
Filter press. A. M. Capra. 1,621,767; Mar. 22.
Filter press. A. M. Capra. 1,621,767; Mar. 22.
Filter, Rotar vacuum. W. Mauss. 1,612,873; Jan. 4.
Filter, Rotar vacuum. W. Mauss. 1,612,873; Jan. 4.
Filter, Water. V. B. Haag. 1,629,269; May 17.
Filter, Water. V. B. Haag. 1,629,269; May 17.
Filter, Water. C. Hungerford. 1,634,783; July 5.
Filter, Water. M. C. Meyers. 1,645,712; Oct. 18.
Filter, Water. R. A. North. 1,630,274; May 31.
Filter, Water. L. Z. Rabjohn and R. W. Hollenberg.
Filter, Water. O. E. Schulz. 1,653,473; Dec. 20.
Filter, Water. O. E. Schulz. 1,653,473; Dec. 20.
Filter, Water. O. E. Schulz. 1,653,473; Dec. 20.
Filter, Water. O. E. Schulz. 1,652,423; Dec. 13.
Filtering apparatus. W. E. Belke. 1,652,423; Dec. 13.
        Filtering apparatus. B. Eneke. 1,624,655; Apr 12.
Filtering apparatus. B. Bramwell. 1,620,431; Mar. 8.
Filtering apparatus. B. Bramwell. 1,620,431; Mar. 8.
Filtering apparatus. L. Ewald. 1,639,933; Aug. 23.
Filtering apparatus. J. D. Lalor. 1,652,173; Dec. 13.
Filtering, Apparatus for. W. H. Furness. 1,643,299; Sept. 27.
Filtering apparatus. Rotary-drum. L. Hertenbein. 133,739; July 28.
Filtering device. J. James. 1,621,413; Mar. 15.
Filtering device. W. B. Pumphrey. 1,633,604; June 28.
Filtering device. W. B. Pumphrey. 1,633,604; June 28.
Filtering material and making the same. H. Blumenberg. Jr. 1,649,386; Nov. 15.
Filtering material and preparation thereot. H. A. Hills. 1,621,723; Mar. 22.
Filtering medium and making same. R. N. Riddle. 1,643,031; Sept. 20.
Filtering medium, Making a. R. N. Riddle. 1,643,032; Filtering tank. L. Cobb. 1,615,701; Jan. 18.
             Sept. 20.
Filtering tank. L. Cobb. 1,615,071; Jan. 18.
Filters of large surface, Cleaning sand.
1,617,654; Feb. 15.
Filtration. H. W. Blaisdell. 1,614,947; Jan. 18
Filtration. Apparatus for. N. C. Christensen. 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A. Sivade.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.641.736:
             Filtration system. H. W. Blaissdell. 1,630,371; May 31. Fittation W. B. Nickerson. 1,550,376; Nov. 22. Finder. Adjustable. A. F. Newlands and E. Fosbery. 1,648,688; Oct. 25. Fine-tooth comb. Sanitary. K. Nagai. 1,643,512; Sept. 27.
Fine-tooth comb, Sanitary, K. Nagai. 1,643,512; Sepi. 27.
Finger attachment. M. Dovidaitis. 1,640,490; Aug. 30.
Finger-anil trimmer. R. K. Rex. 1,629,967; May 24.
Fingerprint device. R. W. Ferris. 1,618,522; Feb. 22.
Fingerprints, Apparatus for taking. I. E. Hitt.
1,018,432; Feb. 22.
1
    Mar. 8.

Finger ring or article of similar nature. B. Gross. Des. 72,477; Apr. 19.

Finger ring or article of similar nature. B. Gross. Des. 72,896; June 21.

Finish remover. F. H. Lang. 1,615,089; Jan. 18.

Finishing machine. C. A. Bilss. 1,648,049; Nov. 8.

Finishing machine. H. D. Billo: 1,613,449,170, 12.

Finishing machine. L. S. Macdonald. 1,644,931; Oct. 11.

Finishing machine. J. F. Standish. 1,636,333; July 19.

Fire alarm. J. G. Tremain. 1,630,550; May 31.

Fire-alarm apparatus. C. E. Koontz. 1,628,647; May 10.

Fire alarm. Automatic. C. E. Koontz. 1,628,647; May 10.

Fire alarm, Automatic. C. C. Bettenhausen. 1,618,322; Feb. 22.
    Fire alarm, Automatic. C. C. Bettenhausen. 1,618,322; Feb. 22.
Fire alarm, Portable. A. M. de S. Greaves. 1,624,866; Apr. 12.
Fire-alarm signal, Automatic. F. H. Gruettner. 1,644,124; Oct. 4.
Fire-alarm system. J. M. Johnson. 1,620,107; Mars. 8.
Fire and burglar alarm system. J. H. Bruhn. 1,614,275; Jan. 11.
Fig. 10. A. Toffteen. 1,639,117; Aug. 16.
Fig. 10. A. Toffteen. J. L. Nicholson. 1,628,180; M. J. C. Construction. J. L. Nicholson. 1,628,180; M. J. C. C. M. J. C. C. S. 
Firearm. K. J. and J. E. Glans. 1,632.892; June 21.
Firearm. M. W. Howell. 1,615.385; Jan. 25.
Firearm. C. C. Loomis. 1,632.531; Aug. 9.
Firearm. C. C. Loomis. 1,633.531; Aug. 9.
Firearm. C. C. Loomis. 1,633.531; Aug. 9.
Firearm. C. A. Nelson. 1,625.798; May 25.
Firearm. C. A. Nelson. 1,625.798; May 17.
Firearm. G. Nicholson. 1,630,404; May 31.
Firearm. d. Micholson. 1,630,404; May 31.
Firearm. and alloy for making same. F. A. Fahrenwald.
Re16.556; Feb. 22.
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Firearm, Automatic. J. M. Browning. 1,618,510; Feb. 22.
Firearm, Automatic. J. M. Browning. 1,628,226;
May 10.
Firearm, Automatic. V. Capolupo. 1,639,425; Aug. 16.
Firearm, Automatic. G. Norman. 1,637,234-5; July 26.
Firearm sight. W. R. Parker. 1,633,924; Dec. 27.
Firearm sight. W. R. Parker. 1,633,924; Dec. 27.
Firearm with recolling barrel, Automatic. C. Sondini and V. Castelli. 1,612,305; Jun. 4.
Firearms, Breech-closing mechanism for automatic. G. Wingon. 1,648,833,100g, mechanism for automatic. J. M. Browning. 1,629,632; May 24.
Firearms, Danger signal for. L. P. Smith. 1,624,876; Apr. 12.
Firearms, Electric target practice annaratic for. E. W. J. al. Browning. Algosophy, R., 1988.

Firearms, Danger signal for. L. P. Smith. 1,624,876;

Firearms, Electric target practice apparatus for. E. H. Strong. 1,645,881; Oct. 18.

Firearms, Freid strip for. C. Sutter. 1,620,408; Mar. 8.

Firearms, Freid strip for. C. Sutter. 1,620,408; Mar. 8.

Firearms, Freing mechanism for automatic. J. M. Browning. 1,629,651; May 24.

Soncial. 1,630,277; Aug. 19.

Firearms, Sight for. C. E. Blizard. 1,618,749; Feb. 22.

Firearms, Sight for. C. E. Blizard. 1,618,749; Feb. 22.

Firearms, Sight ing indicator for. J. W. F. Lamont and H. Dickinson. 1,624,247; Apr. 12.

Firearms she residues deposited by lead bullets and smokeless and semismolecless powder. Method of and complex forms of the strip of the str Hawley 1,648,307; Nov. 8.
Fire-box inner casing. O. A. Toffteen. 1,636,761;
July 26.
Fire-box kiln, Single-, W. E. Wilson and H. G. Lykken.
1,627,720; May 10.
Fire box, Water. P. McNulty. 1,617,817; Feb. 15.
Fire boxes, Apparatus for distributing gas and air in.
J. C. Law. 1,639,642; Aug. 16.
Fire boxes, Baffle plate for boiler. C. E. Johnson.
1,642,371; Sept. 13.
Fire brick. O. Nygaard. 1,621,267; Mar. 15.
Fire-bridge, J. Langer. 1,620,216; Mar. 8.
Fire-control apparatus. G. W. Beatty. 1,612,851;
Jan. 4. Fire-control apparatus. J. B. Henderson. 1,621,201; Mar. 15. Rire-control mechanism. R. L. Goetzenberger. 1,616,183; Feb. 1. Feb. 1.

Fire-control system, Antiaircraft. R. L. Coetzenberger. 1,618,822; Jan. 11.

Fire-cracker, T. G. Hitt. 1,638,994; Aug. 16.

Fire-damp indicator. O. Martienssen. 1,652,448; Dec. 13.

Fire door. H. D. Barbee. 1,638,787; Jan. 28.

Fire door. H. D. Barbee. 1,638,787; Jan. 28.

Fire escape. B. Gilowitz. 1,615,753; Jan. 25.

Fire escape. W. W. Phillips. 1,647,841; Nov. 1.

Fire escape. W. W. Phillips. 1,647,841; Nov. 1.

Fire escape. G. Scholer. 1,629,698; May 3.

Fire escape. G. Scholer. 1,629,641; May 24.

Fire escape. G. Scholer. 1,629,641; May 24.

Fire-escape. B. F. Katzer. 1,616,924; Feb. 8.

Fire-escape. Paparatus. J. Ratzer. 1,616,924; Feb. 8.

Fire-escape. Automatic. G. Nykolyshak. 1,625,221; Apr. 19. Apr. 19. Fire escape, Porch. H. E. Hodgson. 1,640,702; Aug. 30. Fire escape, Portable. P. C. Canizaro. 1,647,684; Nov. 1. Fire escapes, Safety device for. E. Bocchino. 1,641,798; Sept. 6. Fire escapes, Safety device for power-operated, F. Hetzelberger, 1,637,190; July 26.
Fire extinguisher. G. W. Burke, jr. 1,634,975-6; July 5. July 5. Fire extinguisher. E. L. Burns. 1,633,312; June 21. Fire extinguisher. D. Estes. 1,653,844; Dec. 27. Fire extinguisher. D. Estes. 1,653,844; Dec. 27. Fire extinguisher. G. E. Ferguson and L. G. M. Timpson. 1,635,364; July 12. Fire extinguisher. J. L. Fohlen. 1,650,985; Nov. 29. Fire extinguisher. J. L. Fohlen. 1,650,985; Nov. 29. Fire extinguisher. F. Hallkman. 1,842,808 Sept. 13. Fire extinguisher. F. Hallkman. 1,642,608 Sept. 13. Fire extinguisher. F. G. Johnston. 1,633,254; June 21. Fire extinguisher. C. O. Johnston. 1,634,233; Nov. 8. Fire extinguisher. C. O. Johnston. 1,634,235; June 21. Fire extinguisher. P. G. MacGregor. 1,628,255; May 10. Fire extinguisher. P. G. MacGregor. 1,653,865; Dec. 27. Dec. 27.

Fire extinguisher. G. J. Mead. 1.638.050; Aug. 9.

Fire extinguisher. C. R. Nevin. 1.647.880; Nov. 1.

Fire extinguisher. K. Schmidt. 1.638.5507; Aug. 9.

Fire extinguisher. A. F. Thompson. 1.620.142; Mar. 8.

Fire extinguisher. A. E. Waggoner. 1.623.510; Apr. 5.

Fire extinguisher. A. E. Waggoner. 1.623.510; Apr. 5.

Fire extinguisher. Aug. Aug. 1.623.610; Apr. 5.

Fire extinguisher. Aug. Aug. 1.623.610; Apr. 5.

Fire extinguisher. Aug. 1.623.610; Apr. 5.

Fire extinguisher, Chemical. A. B. Phister. Re16,662; June 21.

June 21.

June 21.

Fire extinguisher for oil and gas wells. E. A. Kliewer.

1.640.838; Aug. 30.

Fire extinguisher for oil wells. E. A. Kliewer.

1.640.839; Fire-extinguisher holder, Built-in. L. Lewis. 1,648,615; Nov. 8.

Fire extinguisher mounting. O. D. Buell and H. J.

Miller. 1,645,584; Oct. 18.

Fire extinguisher, Nonfreezing. A. C. Badger. 1,643,363; Sept. 27.

Sept. 27.

Fire extinguisher of the liquid type. C. Herbline. 1,617,251; Feb. 8.

Fire extinguisher, oil-well-controlled. T. B. Hawley. 1,633,813; June 28.

Fire extinguisher, Portable. F. E. Krauss. 1,627,039; May 3. Fire extinguisher, Pump-gun R. W. McMullen. 1,649,718; Nov. 15. Nov. 15.

Fire extinguishers and the like, Pressure indicator for. E. A. Louder. 1,646,968; Oct. 25.

Fire extinguishers, Cartridge for. A. Vezzani. 1,623,289; Apr. 5. Sussets, Cartringe 101. A. Vezani. 1,020,250, Fire extinguishers or similar articles, Pump handle for. C. Brown. Dec. 72,546; May 3. Fire-extinguishing and like apparatus. E. J. Bechard 1,630,251; May 31. Fire-extinguishing apparatus. O. R. Erwin. 1,640,116; Fire-extinguishing apparatus. O. R. Erwin. 1,640,116; Aug. 23.

Fire-extinguishing apparatus. G. W. Polk and G. W. Fire-extinguishing apparatus. Mixer and distributor. O. R. Erwin and W. D. Witter. 1,629,490; May 24.

Fire-extinguishing composition. F. L. Dunlap and N. T. Ewer. 1,624,398; Apr. 12.

Fire-extinguishing and Production of. L. Burgess. 1,653,147; Dec. 20.

Fire-extinguishing assi June 21.

Fire extinguishing solutions, Revivifying. C. B. White. 1,646,046; Oct. 18.

Fire-extinguishing system, Marine. V. G. W. Gilbert and F. H. Stenicke. 1,650,267; Nov. 22.

Fire-fighter, Frairie. H. B. Morter. 1,629,044; May 17.

Fire-grate. M. Stohr. 1,618,500; Feb. 22.

Fire-grate, M. Stohr. 1,618,500; Feb. 22.

Lumley. 1,648,316; Nov. 8.

Fire-bose protector. M. Shoman. 1,653,127. Dec. 20.

Fire-kindling material. P. L. Pauloson. 1,626,965; May 3.

Fire-lighter, Automatic. W. Richardson. 1,622,378; Mar. 29. Aug. Fire Mar. lighter, Automatic. Fire lighter, Automatic. W. Richardson. 1,622,738; Mar. 29.
Fire-lighting device. H. Stieler. 1,652,258; Dec. 13.
Fire-locater. F. W. Fisher. 1,615,507; Jan. 25.
Fire-locater. F. W. Fisher. 1,615,507; Jan. 25.
Fire-locater. F. W. Fisher. 1,615,507; Jan. 25.
Fire-locater. F. W. Fisher. 1,619,453; Mar. 1.
Fire-locater. G. D. Alford. 1,644,219; Oct. 4.
Fire-locater. G. D. Alford. 1,644,219; Oct. 4.
Fire-locater. W. Fisher. 1,638,226; Aug. 30.
Fire-locater. W. Fisher. 1,638,226; Aug. 30.
Fire-locater. W. Fisher. 1,649,937; Nov. 15.
Fire-locater. S. Mogyrofs and S. Visi. 1,629,223; May 17.
Fire-locater. S. Mogyrofs and S. Visi. 1,629,223; May 17.
Fire-locater. S. Mogyrofs and S. Visi. 1,629,223; May 17.
Fire-locater. S. Mogyrofs and S. Visi. 1,629,223; May 17.
Fire-locater. S. Mogyrofs and S. Visi. 1,629,223; May 19.
Fire-locater. S. Mogyrofs and S. Visi. 1,629,223; May 19.
Fire-locater. S. Fire-locater. S. Fire-locater. S. Fire-locater. S. Fire-locater. S. F. Nickels. 1,653,465, Dec. 20.
Fire-locater. S. B. Nickels. 1,653,465, Dec. 20.
Fire-locater. T. A. Sala. 1,621,135; Mar. 15.
Fire-locater. T. A. Sala. 1,621,135; Mar. 15.
Fire-locater. T. A. Sala. 1,621,135; Mar. 15.
Fire-locater. S. Brown. Des. 71,399; Feb. 15.
Fire-locater. S. Brown. Des. 71,399; Feb. 15.
Fire-locater. S. Francon-Locater. S. R. Shown. 1,631,696; June 7.
Fire-locater. A. Sala. 1,621,135; Mar. 15.
Fire-locater. A. Sala. 1,621,135; Mar. 15.
Fire-locater. S. R. Shown. Des. 71,399; Feb. 15. Fireplaces, Air heating system for. J. 1,645,586; Oct. 18.
Fireplaces, Damper for. M. Serdyn. M. Cesa. Fireplaces, 1.650.159: Fireplaces, Netal screen for, F. Bertram. 1,635,573; Fire-plotting apparatus. F. Rawson. 1,651,908; Dec. 6. Fire pot. J. R. Johnson. 1,620,353; Mar. 8. Fire-pot. postruction. O. J. Groehn and W. Blaskewitz. 1,618,981; Mar. 1. Pro-preparatus. J. P. O'Neill. 1,644,603; Oct. 4.

Fire-producing device, Automatic. L. A. Nevière.
1,627,923; May 10.

Fireproof building. H. Sorensen. 1,620,139; Mar. 8.

Fire-proof buildings. Construction of. H. Sorensen.
1,628,164; Apr. 26.

Fire-proof composition. A. McIntyre. 1,628,171; May 10.

Fire-proof construction. and clip for use therein. S.

Macomber. 1,614,248; Jan. 11.

Fire-proof safe door. C. Bartels. 1,616,249; Feb. 1.

Fire-proof safe door. C. Bartels. 1,616,249; Feb. 1.

Fire-protective device. A. J. Loepsinger. 1,634,838,
July 5.

Fire-protective system. F. W. Parsons. 1,617,415; Fire-receiving wall. L. S. Abbott. 1,624,200; Apr. 12, Fire-resisting structure. F. O. Ludlow. 1,652,314; Dec. 13
Fire shield,
Dec. 13.
Fire shield,
Dec. 13.
Fire shutter.
W. E. Duncanson. 1,617,439; Feb. 15.
Fire shutter,
W. E. Duncanson. 1,617,439; Feb. 15.
Fire shutter, Automatic. W. E. Duncanson. 1,617,438;
Feb. 15.
Fire shield, Dec. 16.
Left, 1440; Feb. 15.
Fire-sprinkler system, Automatic. W. E. Duncanson.
1,617,440; Feb. 15.
Fire-sprinkler system, Automatic. H. M. Minnis.
1,637,621; Aug. 2.
Fire starter. F. C. Holmes. 1,644,882; Oct. 11.
Fire starter, Firetion, J. C. Ramsey. 1,629,638; May 24.
Fire-stripping machine. W. C. Stevens. 1,634,820;
July 5.
Letter, A. J. Ebner. 1,622,577; Mar. 29.
July 5.
Letter, A. J. Ebner. 1,622,577; Mar. 29. Dec. 13. re shield, Air-regulating. Fire-stripping magaine.

July 5.

Fire-tube boiler. A. J. Ebner. 1,622,577; Mar. 29.

Fireworks holder. R. S. Moushon. 1,634,232; June 28.

Fired ceramic blocks, Producing. P. G. Willetts.

1,626,269; Apr. 26.

Firing of automatic weapons, Apparatus for regulating the speed of continuous. R. Francart. 1,614,981;

[Apr. 18] Jan. 18.

Fires, Apparatus for extinguishing. O. R. Erwin. 1,629,027; May 17.

Fires, Extinguishing. K. H. Klefer. 1,632,339; June 14.

Fires in the cargo spaces of vessels, Apparatus for detecting and extinguishing. H. S. Orr. 1,628,182; May 10.

June 14.

Fish and the like, Handling and preserving. D. E. Knowlton and E. W. Donnigan. 1,621,257; Mar. 15.

Fish at traps, Removing and catching the scales of G. H. Hitton and T. W. March. 1,640,590; Aug. 30.

F. H. Hitton and T. W. March. 1,640,590; Aug. 30.

F. G. H. Hitton L. E. Lees. 1,643,504; Sept. 27.

Fish-catching machine. E. Lees. 1,643,504; Sept. 27.

Fish-catching apparatus. H. E. Blecker. 1,619,560; Mar. 1. Mar. 1. Fish-cleaning apparatus. P. W. Lindquist. 1,624,173; Fish-ceauling machine. S. C. Anker-Holth. 1,614,587;
Jan. 18.
Flat-cleaning machines. Automatic feed for. J. F.
Heinbockel and A. V. Sullivan. 1,653,206; Dec. 27.
Flish creel. C. Barber. 1,652,387; Doc. 18.
Jish-clutting machine. H. E. Bergen. 1,623,67; May 24.
Flish-dressing machines. Finning unit for. W. M. McCay.
1,618,540; Feb. 22.
Flish-dressing machines. Finning unit for. W. M. McCay.
1,618,540; Feb. 22.
Flish-dressing machines. Finning unit for. W. M. McCay.
1,618,540; Feb. 22.
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1,618,540; Feb. 22.
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1,618,540; Feb. 22.
Flish-dressing machines. Finning unit for. W. M. McCay.
1,618,540; Feb. 22.
Flish-dressing machines. Finning unit for. W. M. McCay.
1,618,640; May 1,622,118; Mar. 22.
Flish-dressing machines. 1,622,118; Mar. 22.
Flish-hook. A. Goodgame. 1,623,870; Apr. 5.
Flish-hook and bait, Concealable releasably-secured. R.
Danielson. 1,638,923; Aug. 16.
Flish-hook artificial minnow. C. M. Reed. 1,633,419; June 21.
June 21.
Flish-hook Rangless. H. M. Sykes. 1,620,497; Mar. 8.
Flish-hook Rangless. H. R. Ackerman. 1,620,583; May 24.
Flish-hook Rangless. H. R. Ackerman. 1,620,589; Mar. 8.
Flish-hook Rangless. H. R. Ackerman. 1,620,589; Mar. 8.
Flish-hooking device. J. G. Fennell. 1,614,331; Jan. 18.
Flish-line reel. G. S. Kine-bott, vr. 1,628,537; Apr. 20.
Flish ure. F. W. Hobbs. 1,620,972; Mar. 18.
Flish lure. E. P. Johnson. 1,644,884; Oct. 11.
Flish lures, Controller for. J. A. Dienner and A. C.
Mabee. 1,627,078; May 3.
Flish-Machine to decapitate and clean. H. L. Stafford. 133,200. June 14. Apr. 12. Fish-cleaning machine. S. C. Anker-Holth. 1,614,587; Aug 30. 1.070.309. H. L. Stafford. 1,532,200; June 14. Fish machine to decapitate and clean. H. L. Stafford. 1,632,200; June 14. Fish net. S. Hosko. 1,636,096; July 19. Fish-oil powder, Producing. W. E. Miller. 1,622,390; Mar. 29. Mar, 29.

Mar, 29.

Tshpole holder, E. V. Nunlist. 1.619.152; Mar, 1.

Tshpond with sewage supply. K. Imhoff. 1.643.273;

Sent. 20. Fish-positioning machine. S. C. Anker-Holth. 1,614.588; Pfsh-positioning means. O. Hovden. 1.642.444; Sept. 13. Tfsh-positioning means. O. Hovden. 1.642.444; Sept. 13. Tfsh-positioning means. O. Hovden. 1.642.444; Sept. 1. Fish-roots, Red Inck for A. G. Hull. 1.644.429; Oct. 4. Fish-roots and the first form of the firs Fish-segregating mechanism. Sept. 13. Sept. 13.

Pish-tape puller, W. Rose, 1,628,744; May 17.

Pish trap. P. M. Joyal, 1,621,017; Mar. 15.

Pish trap. L. Watner, 1647,627; C. 64,500;

Pish trap. L. Watner, 1647,627; C. 64,500;

Pishing and bunting otter, J. Hansen, 1,642,582;

Sept. 13.

Pishing annaratus, B. C. Heckman, 1,619,512; Mar. 1.

Pishing apparatus, C. F. Schneider, 1,632,506; June 14.

Pishing apparatus, C. M. Rodgers, 1,638,215; Aug. 9.

Fishing bait, Artificial. O. W. Peterson. 1,627,455; May 3. May 3.

Fishing device. A. F. Dice. 1,625,988; Apr. 26.

Fishing device. N. Young. 1,624,456; Apr. 12.

Fishing ind. F. J. Peckham. 1,623,202; June 14.

Fishing ind. F. J. Peckham. 1,619,147; Mar. 1.

Fishing line. E. J. Babitt. 1,614,642; Jan. 18.

Fishing line. J. Korkames. 1,634,030; June 28.

Fishing line. E. A. Dahqiquist. 1,627,637; May 10.

Fishing lure. E. A. Dahqiquist. 1,627,637; May 10.

Fishing lure. D. A. Shirley and C. A. Braidwood. Des.

72,039; Feb. 15.

Fishing ure. A. D. and D. M. Skelly. Re16,636; 72,00 Fishing 1 May 24 Sept. 20.

Fishing rod, Telescopic. C. A. Tredwell. 1,625,510;
Apr. 19.

Fishing rods, Line-drying attachment for. L. Kraemer.
1,627,514; May 3.

Fishing rods, Line guide for. P. A. Haberl. 1,627,643;

Fishing rods, Jane guide for. P. A. Haberl. 1,627,643;

Fishing rods, Manufacture of split bamboo. L. J. Lane.
1,645,612; Oct. 18.

Fishing rods, Reel seat for. C. Heddon and J. T. Welch.
1,624,052; Apr. 12.

Fishing rods, Strain-applying device for. L. C. Mathey.
1,613,522; Jan. 4.

Fishing rods, Strain-applying device for. L. C. Mathey.
Fishing takele box and line winder and dryer, Combined.
E. C. Mead. 1,635,378; July 12.

Fishing tool. E. L. Boettler. 1,651,803; Dec. 6.
Fishing tool. C. A. Brust, jr. 1,615,229; Jan. 25.

Fishing tool. C. A. Brust, jr. 1,615,24; May 10.

Fishing tool. G. A. Brust, jr. 1,615,24; May 10.

Fishing tool. Me. King. 1,625,843; May 3.

Fitting. J. J. Quinn. 1,650,731; Nov. 27.

Fitting. J. J. Quinn. 1,650,731; Nov. 27.

Fitting. Supply, waste, and overflow. A. N. Pasman.
1,625,069; Apr. 19.

Fixture-attaching strap. M. A. Tierney. 1,618,610;
Freb. 22. Fixture-attaching strap. Mar. 22. M. A. Tierney. 1,621,566; Fixture-attaching strap. M. A. Tierney. 1,621,566; Mar. 22.
Fixture-attaching strap. M. A. Tierney. 1,642,796; Sept. 20.
Fixture-attaching strap. M. A. Tierney. 1,642,796; Sept. 20.
Fixture-control. H. E. Norviel. 1,624,114; Apr. 12.
Fixture naper. G. B. Hoobler. 1,639,342; Aug. 16.
Fixture support. J. Abrachinsky. 1,653,530; Dec. 20.
Fixture support and base, Combination. D. Schell. 1,623,813; Apr. 5.
Fixture-support and base, Combination. D. Schell. 1,623,813; Apr. 5.
Fixture-support and base, Combination. D. Schell. 1,623,813; Apr. 5.
Fixture-support and base, Combination. D. Schell. Fixture-support and base, Combination. D. Schell. 6,622; Apr. 23.
Fixture-support and base, Combination. D. Schell. 6,623; Apr. 23.
Fixture-support and base, Combination. D. Schell. 6,623; Apr. 23.
Fixture-support and base, Combination. D. Schell. 6,623; Apr. 23.
Flag boder. J. B. Blaw. 1,63,083; Dec. 20.
Fixture-support and Base 1,640,242; Apr. 23.
Flag bolder. J. B. Blaw. 1,63,083; Dec. 20.
Flag bolder for automobile radiators. R. G. Archer, sr., and R. G. jr. Des. 72,542; May 2, 184, G. Archer, sr., and R. G. jr. Des. 72,542; May 3, 184, G. Archer, sr., and R. G. jr. Des. 72,542; May 3, 184, G. Archer, sr., Oct. 25.
Flagpole. J. E. Dayls. 1,645,645; Oct. 18. Oct. 25.
Flagpole, J. E. Davis. 1,645,645; Oct. 18.
Flagpole, Counterbalanced. L. P. Bolander. 1,613,979; Jan. 11.
Flagpole holder. J. A. Gerow and A. C. Cannon. 1,648,220; Nov. 8.
Flagpoles, Base for. A. Newcomb. Des. 73,939; 1.648.220; Nov. 8.
Flagpoles. Base for. A. Newcomb. Des. 73.939;
Nov. 22.
Flagpoles, Protective housing for attachment to. J. E.
Davis. 1.645.631; Oct. 18.
Flag protector. J. E. Davis. 1.646.015; Oct. 18.
Flag staff. R. G. Conklin. 1.632.726; June 14.
Flag stand. N. Losuess. Des. 73.189; Aug. 2.
Flag support not actuating device therefor. R. T. Walton. 1.631.667; June 7.

Fing support, Rotatable. R. T. Walton. 1,631,566; June 7. Flags or other emblems, Building or composing designs of. H. W. Bible. 1,652,162; Dec. 6. Flame-arc furnace. J. Jonas and W. Niggeler. 1,650,072; Nov. 22. Flange. Closet reenforcing. A. E. Swanson and D. Morgan. 1,645,663; Nov. 8. E. Swanson and D. Morgan. 1,646,63; Nov. 1,636,957; July 26. Flange on overflow connection for drains, Adjustable. W. J. Frost. 1,651,838; Dec. 6. Flange-pin remover. A. M. Hughes. 1,630,942; May 31. Flange softer, Ratchet. H. N. Long. 1,638,519; June 28. Flangesway guard for highway crossings. P. E. Gerhard. 1,645,273; Oct. H. Toughless skeleton. H. P. Blum. 1,630,325; May 31. Flanges drouping. T. E. Murray. 1,648,026; Nov. 8. Flanged fin. W. B. Klemperer. 1,628,988; Apr. 5. Flanges, Machine for forming. F. Geiger and G. C. Swift. 1,614,116; Jan. 11. Flaped composition of the composition of Flag support, Rotatable. R. T. Walton. 1,631,566; June 7. Flash light, L. Compton and F. E. Gaivin. 1,617,793; Feb. 15.
Flash light, J. A. Schiffner. 1,621,955; Mar. 22.
Flash light, J. A. Schiffner. 1,621,955; Mar. 22.
Flash light, J. L. Shannon. 1,613,203; Jan. 4.
Flash light, R. J. Smith. 1,624,686; Apr. 12.
Flash light and circuit tester, Combination. B. M. Rydzy. 1,653,699; Dec. 27.
Flash light and handle, Combined. I. Jones. 1,638,039; Flash light and handle, Combined. II. Flath ingit and indices of the control of the contr Flash-light casings, same, Apr. 6, Apr. 6, Flash and Flash and Flash and Flash and Flash and Flash light for doors. T. J. Hendrickson. 1,647,061, Get. 25, Flash light for doors. T. J. Hendrickson. 1,647,061, Oct. 25, Flash-light holder. E. L. Thorp. 1,621,645; Mar. 22, Flash-light holder, apparatus. L. Sguin and A. Sesuin. Flash light for doors. T. J. Hendrickson. 1,647,001;
Cot. 25.
Cot. 26.
Cot. 27.
Cot. July 5.
Flations, Holder for. A. J. Larson. 1,637,120; July 26.
Flatoring product, Manufacturing a true maple. J. W.
Sale and J. B. Wilson. 1,642,789; Sept. 20.
Flax and other plants, Machine for barvesting. S. Allingham. 1,631,612; June 7.
Flax-cleaning machine. G. A. Lowry. 1,640,461;
Aux. 30. Flax-testing machine. A. V. Cleland. 1,639,926; Aug. 23. | Plax-testing machine. A. V. Cleland. 1,639,926; Aug. 23.
| Plect. 13. | Plect. 14. | Plect. 15. | Plexible. | Pl 1,645,715; 26. n. W. A. McGee and J. E. O'Brien.

H. Peigné. 1.635,496; July 12. S. Polluk. 1,620,285; Mar. 36. Classis: 1,640,652; Aug. 39. G. Stidmore, jr. 1,646,427; Oct. 25. J. A. Smitmans. 1,633,740; D. C. 27. A. Sundh. 1,642,907; Sept. 20. C. F. Taylor. 1,634,965; July 5. R. A. Teel. 1,623,857; Apr. 5. W. A. V. Thomsen. 1,648,078; Flexible coupling. Nov. 8.
Flexible coupling. W.
Flexible coupling. W.
1,635,565; July 12.
Ville clement. J.
Ville L. H. W. E. Trumpler. 1,654,312; Dec. 27, W. E. Trumpler and C. R. Soderberg. 1,053,005; July 12. K. Wood. 1,645,510; Oct. Flexible clement. J. K. Wood. 1,645,510; Oct. Flexible joint. L. H. Gillick. 1,614,667; Jan. 18. Flexible joint. L. H. Gillick. 1,629,094; Mar. S. Flexible joint. E. H. Gillick. 1,639,800; Aug. 23. Flexible joint. E. H. Gold and E. A. Russell. 1,63 Flexible joint. B. H. GHIEK. ROSHOEV. AUS. 20.
Flexible joint. B. H. Gold and B. A. Russell. 1,639,771;
AUS. 23.
AUS. 24.
AUS. 25.
AUS. 26.
AUS. 27.
AUS. 27 Float chamber. T.C. Whitehead 1,692,298; May 10. Float control device. L. W. Browne. 1,626,504; Apr. 26. Float device, Decanting and filtering. S. L. Goldman. 1,644,248; Oct. 4. Gregory. 1,633,292; June 21. Gregory. 1,633,292; June 21. Gregory. 1,633,292; June 21. Gregory. 1,633,292; June 21. Gregory. 1,633,293; May 10. Float or bobber. Casting-line. A. F. Hahn. 1,652,858; Dec. 13. Float, Single-wall reenforced high-pressure. G. W. Osborn. 1,633,968; Dec. 27. Floater. A. E. Fowle. 1,614,114; Jan. 11. Floating vessels. Construction for. R. E. Ellis. 1,647,515; Nov. 1. Floating vessels. Construction of. J. W. Isherwood. 1,622,830; Mar. 29. Floodgate and controllable headgate, Convertible automatic. K. J. Thoreby. 1,634,639; July 5. Gregory 1,630,183; May 24. Floor and colling construction. F. M. Kandle. 1,630,183; May 24. Floor and colling construction. J. J. R. Meyers. 1,615,003; Jan. 18. Floor and colling construction. J. J. R. Meyers. Floor and vold tile, Tool and machine for fettling. M. A. Schweiker and J. R. Westbrook. 1,639,616; Aug. 18. Floor construction. C. J. Beckwith. 1,642,324; Sept. 18. Floor construction. F. H. Fletzsch. 1,623,300; Nov. 18. May 17. Thore construction. F. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. F. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. F. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. F. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. F. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. R. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. R. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. F. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. R. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. R. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. R. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. R. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. R. H. Fletzsch. 1,623,500; Nov. 18. May 17. Floor construction. R. H. Fletzsch Floor construction, Renforced concrete, J. Lally. 1,625,900; Apr. 26. Floor covering. J. B. Campbell. 1,637,762; Aug. 2. Floor covering. A. Reppes. 1,614,127; Jan. 11. Floor covering. A. C. Sloate. 1,649,750; Nov. 15. Floor covering. A. C. Sloate. 1,649,750; Nov. 15. Floor covering. Article of manufacture suitable for. H. H. Duke. 1,642,845; Sept. 20. Floor coverings. Apparatus for applying nonslipping material to. G. McLarty. 1,625,883; Apr. 26. H. Read Floor drain. R. Smallbrook. 1,648,701; Nov. 8. Floor drain and back pressure water trap, Combined. W. V. Bulman. 1,629,457; May 17. Floor, Elastic composition. F. E. Bocklow and W. O. Listing. 1,635,982; July 19. Floor-imishing apparatus. J. T. Garton. 1,619,571; Mar. 1. Listing. Floot-insisting apparatus. J. T. Garton. 1,619.611,
Mar. 1.
Ploot forms. Bracket for concrete. E. C. Marqua.
10.2528; Mar. 20.
10.2528; Mar. 20.
10.2528; Mar. 20.
10.0526; Mar. 10.
10

Floor, Lowering. T. M. Brintnall. 1,651,178; Nov. 29, Floor mat. J. J. O'Toole. 1,633,951; June 28, Floor oller. A. Weber. 1,626,991; May 3, Floor or platform structure. A. J. Hall. 1,614,296; Jan. 11. Floor plate. R. H. Irons. Des. 73,834; Nov. 15,642440; Floor polisher. W. A. and H. A. Hee. 1,642,440; Sept. 13.
Floor polisher. R. C. Od
Floor polisher, H. S. Ste
Floor-polishing machine. R. C. Odell. 1,614,680; Jan. 18 H. S. Stevens. 1,616,767; Feb. 8 machine. E. E. Lockwood. 1,6 1.626.742: May 3.
Floor-scraping machine.
Feb. 8. R. Grabowski. Fig. 8.

Floor-scripping machine. J. W. Stubblefield. 1,614,855;

Floor-scripping machine. W. S. Finnell. 1,628,770;

May 17.

Floor slabs and the like of cork and similar materials,

Munnfacturing. J. E. Jensen. 1,(40,655); Aug. 30. May 11.

Floor slabs and the like of cork and Simila Manufacturing. J. E. Jensen. 1.640.653; p. Manufacturing building. R. V. Yeager. Only S. Floor structure, Composite. P. H. Bevier, Oct. 18.

Floor-surfacing machine. L. M. Gries. 1,627,000; 1.646.183; Aug. 30. Floor-surfacing machine. O. B. Jacobson. 1.635.480; July 12. Floor-surfacing machine. W. Paschall. 1.625.740: Floor-surfacing machine. W. Paschall. 1,625,740; Apr. 19.
Floor-surfacing machines, Handle for. R. E. Lewis. 1,630,854; May 31.
Floor vent. A. J. Filkins. 1,648,014; Nov. 8.
Floors, Making. J. M. Tobin. 1,646,667; Oct. 25.
Floors, Recafforcing concrete. O. Konrad. 1,623,252; Apr. 3.
Apr. 5. J. Carter 1,627,634, Apr. 2. Apr. 5.
Flooring. C. J. Carter. 1,637,634; Aug. 2.
Flooring and making the same, Block. J. O. Fulton. 1,622,104; Mar. 22.
Flooring and similar purposes, Metal and concrete structure for. B. A. Prince. 1,645,622; Oct. 18.
Flooring block. W. Dalton. 1,632,590; June 14.
Flooring-end matcher. W. S. Sherman. 1,628,335; May 10.
Flooring-end matcher. W. S. Sherman. 1,628,335; May 10.
Flooring-end matcher. W. S. Sherman. 1,628,335; May 10.
Flooring-material. T. R. Munez. 1,622,103; Mar. 22.
Flooring-material. T. R. Munez. 1,622,103; Mar. 22.
Plooring material. T. B. Muuroe. 1,626,117; Apr. 26.
Flooring, Method and arrangement for making naked. V. K. Hultin. 1,622,829; Mar. 20.
Flooring, Prefinished. K. E. Crooks.
Flooring, Prefinished. K. E. Crooks.
July 5.
Flooring, Prefinished. K. B. Crooks.
July 6.
July 6.
July 6.
July 7.
July 7.
July 7.
July 8.
July Pleas holder. C. B. Bowling and H. Bulman. 1,623,231; Apr. 5.
Flotation agent and making the same. B. L. George. 1,647,793; Nov. 1.
Flotation apparatus. T. M. Owen and M. P. Dalton. 1,623,559; Apr. 12.
Flotation apparatus. T. M. Owen and M. P. Dalton. Flotation device. A. Black. 1,643,049; Sept. 20.
Flotation device. A. Black. 1,643,049; Sept. 20.
Flotation machine. F. De Mier. 1,646,351; Oct. 18.
Flotation machine. G. Il feeder for. A. C. Daman. 1,627,014; May 3.
Flotation method and apparatus. D. L. Forrester. Flotation process. A. W. Hahn and C. M. Nokes. 1,649,685; Nov. 15.
Flotation separating process. E. A. Hall and G. R. Sanders. 1,635,615; July 5.
Flotation separating process. E. A. Hall and G. R. Sanders. 1,635,615; July 5.
Flotation separating process. E. A. Hall and G. R. Sanders. 1,635,615; July 5. Floss holder. C. B. Bowling and H. Bulman. 1,623,231; Flour in rover. E. J. Sullivan. 1,630,143; May 24.
Flour improver and manufacture. D. J. Block. 1,826,910; May 3.
Flour, Making caramelized. J. Wallos. 1,650,308; Nov. 22.

Flour-maturing method and apparatus. J. I. Logan.

1.640,109; Aug. 23.

Flour mill. D. S. Athony. 1.645,847; Oct. 18.

Flour mill. D. S. Athony. 1.645,847; Oct. 18.

Flow box, Sight. E. B. Ford. 1630,335; May 31.

Flow boxes, Mixer for Fourdrinier. A. Aldeich.

1.629,088; May 17.

Flow-control fitting. J. Bijur. 1,632,772; June 14.

Flow-controlling apparatus. C. H. Allen. 1,632,780;

June 21.

Flow-controlling apparatus. C. H. Gibson. 1,619,258; June 21.

June 21.

June 21.

Mar. 1.

How controlling apparatus. G. H. Gibson. 1,619,253;

Mar. 1.

Flow indicator. R. E. Hanson. 1,639,342; Aug. 16.

Flow indicator. A. Herz. 1,653,177; Dec. 20.

June 21.

June 21. May 24: C. M. Anderson. 1.625.583; Apr. 1 Flow meter. C. R. H. Bonn. 1.637.927; Aug. 2. Flow meter. J. M. Dayton. 1.627.234; May 3. Flow meter. G. E. Decker. 1,641,744; Sept. 1.

Flow meter. E. N. Fales. 1,635,040; July 5. Flow meter. G. P. Luckey. 1,631,746; June 7. Flow meter. V. E. Metcalfe and F. Mallen, jr. 1,648,496; Flow meter. V. E. Metcalfe and F. Mallen, fr. 1,648,496; Nov. 8.
Flow meter. J. F. O. Stratton. 1,628,216; Apr. 26.
Flow meter. L. W. Thompson. 1,650,664; Nov. 29.
Flow meter and the like. L. W. Thompson. 1,614,217;
Flow meter and the like. L. W. Thompson. 1,614,217;
Flow meter and the like. L. W. Thompson. 1,614,217;
Flow meter and the like. L. W. Thompson. 1,614,217;
Flow meter and the like. L. W. Thompson. 1,614,217;
Flow meter and the like. L. W. Thompson. 1,614,217;
Flow meter and the like. L. W. Thompson. 1,614,217;
Flow meter and the like. L. W. Thompson. 1,614,529;
Flow residence of the like. L. W. Thompson. 1,614,529;
Jan. 18.
Flow programs and the like. L. W. Hirst. 1,625,414; July 12.
Flower box D. W. Hirst. 1,625,414; July 12.
Flower box A. Bronellic. 1,635,33; July 12.
Flower box A. Bronellic. 1,635,33; July 12.
Flower box A. Bronellic. 1,635,33; July 14.
J. 623,720; Apr. 5.
Flower curling machine, Artificial. O. Ganio, G. Avondoglio, and O. Grassis. 1,626,523; Apr. 26.
Flower holder. A. J. Bennett. 1,645,577; Oct. 18.
Flower holder. R. G. Cowan. Des. 72,594–601; May 10.
Flower holder. R. G. Cowan. Des. 72,594–601; May 10.
Flower holder. M. Karabin, J. Skocziek, and K. F. Manni. 1,627,649; May 10.
Flower holder. M. Karabin, J. Skocziek, and K. F. Manni. 1,627,649; May 10.
Flower holder. M. F. Schmeiske. 1,618,888; Mar. 8.
Flower holder. W. F. Schmeiske. 1,618,888; Mar. 8.
Flower holder. W. F. Schmeiske. 1,619,888; Mar. 8.
Flower holder. W. R. Shoch. 1,628,856; Apr. 5.
Flower holder. W. R. Shoch. 1,628,850; Apr. 5.
Flower holder. W. R. Sh Nov. 8. Flow meter, J. F. O. Stratton. 1,626,216; Apr. 26. Flow meter, L. W. Thompson. 1,650,664; Nov. 29. Flow meter and the like. L. W. Thompson. 1,614,217; 1,652,941; Dec. 13. ing. G. A. Schaefer. Fluid from wells, Apparatus for removing. G. A. Schaefer. Fluid true wells, Apparatus for removing. G. A. Schaefer. Fluid title burner. E. O. Erik-son and G. V. Johansson. 1,643,579; Sept. 27. Fluid generator, Motive. M. E. Bigelow. 1,624,464; Apr. 12. Apr. 12. Fluid meter. R. B. Ambrose and J. W. Patterson. 1,635,355; July 12. Fluid meter. R. C. Enyart. 1,641,840; Sept 6. Fluid meter. A. J. Granberg. 1,651,885; Dec. 6. Fluid meter. G. K. V. Johanson. 1,626,538; Apr. 26. Fluid meter. J. W. Ledoux and M. M. Borden. 1,649,602; Nov. 15. Fluid meter. J. C. Wilson. 1,614,702; Jan. 18.

Fluid motor. D. Bonetto. 1,646,723; Oct. 25. Fluid motor, Expansible. J. J. Le Duc. 1,645,761; Oct. 18. Oct. 18. Fluid-operated brake. E. E. Lasure. 1,645,105; Oct. Fluid-operated motor. J. A. Kallbeck. 1,641,001; Aug Fluid-operated motor. A. H. Katterjohn. 1,629,0 Fluid-operated motor. A. H. Katterjohn. 1,629,035; May 17.
Fluid-operated motor. W. G. Naismith. 1,629,226; May 17.
Fluid-operated percussive tool. C. A. Hultquist. 1,626,087; Apr. 26.
Fluid-pressure brake. J. M. Dapron. 1,644,568; Oct. 4.
Fluid-pressure brake. C. C. Farmer. 1,615,867; Jan. 25.
Fluid-pressure brake. C. C. Farmer. 1,644,569; Oct. 4.
Fluid-pressure brake. C. C. Farmer. 1,650,368; Ovc. 22.
Fluid-pressure brake. C. C. Farmer and T. H. Thomas. 1,626,269; Oct. 4.
Sept. 20.
Fluid-pressure brake. R. S. McIntosh. 1,643,165; Sept. 20.
Fluid-pressure brake. T. H. Thomas. 1,653,136; Dec. 20. Fluid-operated May 17. Sept. 20.
Fuid-pressure brake. T. H. Thomas. 1,653.136; Dec. 20.
Fluid-pressure-brake system. B. S. Aikman. 1,633,756; June 28.
Fluid-pressure-charging device. C. C. Farmer. 1,653,161; Fluid-pressure control. J. F. Johnson. 1,647,135; Nov. 1. Fluid-pressure device. B. A. Linderman. 1,651,212; Fluid-press Nov. 29, Fluid-pressure devices, Control valve for. H. W. Buckman and H. Prentice, 1,632,168; June 14, Fluid-pressure motor. E. G. Gartin, 1,621,663; Mar. 22, Fluid-pressure motor, Geared-reduction, J. J. N. Van Hamersveld, 1,653,765; Dec. 27.
Fluid-pressure-operated device. C. T. Crocker. 1,623,780; Apr. 5 Apr. 5.
Fluid-pressure-operated device. O. C. Ritz-Woller. 1,613,904; Jan. 11.
Fluid-pressure-operated gate. C. F. Hetherington. 1,615,273; Jan. 25. 1,615,273; Jan. 25.
Fluid-pressure operating mechanism for reciprocating members. R. L. Morgan. 1,633.557; June 21.
Fluid-pressure regulator. R. L. Dennison. 1,632,024; June 14.
Fluid-pressure regulator. E. Frölich. 1,635,989; July 19.
Fluid-pressure regulator. F. H. Viets. 1,622,689; Mar. 29.
Fluid-pressure system. H. W. Shonnard. 1,645,076; Oct. 1.
Fluid-pressure fool. E. Panhastis. 1,624,579. Fluid-pressure system. H. W. Snommu. Oct. 11.
Fluid-pressure tools. E. Penberthy, 1,624,179; Apr. 12.
Fluid-pressure tools, Throttle handle for. E. W. Stevens.
1,616,929; Feb. 8.
Fluid-prescript of the state of th May 3.

Fluid-supply lines, Automatic cut-off for pressure-. P. D. Sconpouly. 1,619,500; Mart. 1,613,797; Jan. 11.

Fluid-tank indicator. E. E. Newby, 1,648,593; Nov. 15.

Fluid-tank indicator. E. E. Newby, 1,648,593; Nov. 15.

Fluid-testing device. J. J. Groetken. 1,638,333; Aug. 8.

Fluid-transfer device. C. C. Campus. 1,641,942; Sept. 6.

Fluid-translating device. H. F. Schmidt. 1,614,574;

Jan. 18. Jan. 18.
Fluid transmission. M. D. Simpson. 1,637,968; Aug. 2.
Fluids, Apparatus for controlling. J. F. Donnelly.
1,619,335; Mar. 1.
Fluids, Apparatus for separating. H. T. Groves and J.
W. Cushman. 1,633,858; June 28.
Fluids, Apparatus for straining. F. Bailey and F. H.
Jackson. 1,615,609; Jan. 25.
Fluids, Clarifying system for cleaning. W. L. Scherer,
1,613,135; Jan. 4.
Fluids, Device for dispensing. D. Kapuczin. 1,615,287;
Feb. 22.
Fluids, Device for dispensing. D. Kapuczin. 1,618,436;
Feb. 22.
Fluids, Device for dispensing. D. Kapuczin. 1,618,436;
Feb. 22. Feb. 22.
Fluids, Elevating. C. O. Haskell. 1,626,236; Apr. 26.
Fluids. Method of and apparatus for measuring turbidities and color of. W. G. Exton. 1,635,470;
July 12. July 12.
Fluids of different densities, Apparatus for mixing. F.
Jost. 1,646,913; Oct. 25.
Fluids, Process and apparatus for concentrating. W. A.
Gibbons and M. G. Shepard. 1,651,764; Dec. 6.
Fluids, Tap for. C. S. Philips. 1,629,303; May 17.
Fluorescent material and preparing same. S. E. Sheppard. 1,648,510; Nov. 8.
Fluorides, Manufacture of. F. Sander. 1,642,896;
Sept. 20. Sept. 20.

Fluoroscopic protector. E. Hollander. 1,636,419; July 19.

Flush box. J. Werner. 1.620,503; Mar. 8.

Flush siphon. S. S. Williamson. 1,617,295; Feb. 8.

Flush switch. W. J. Newton. 1,617,295; Feb. 8.

Flush tank. G. M. Mejchan. 1,613,670; Jan. 11.

Flush tank and deodorizer, Automatic. J. Burcham. 1,648,296; Sept. 20.

Flush-tank ball seat. P. B. Hale. 1,624,234; Apr. 12.

Flush-tank fitting. Rocking-handle. A. W. Wellington.

Flush-tank mechanism. L. C. Vanderlip. 1,616,500; Fb. 8.

Feb. 8.

Flush tanks and the like, Snap action valve for. H. C. Eustis. 1,637,444; Aug. 2. Flusher, Automatic sewer. C. R. Lion. 1,642,659; Sept. 13. Flushing apparatus. J. Vergara. 1,645,264; Oct. 11. Flushing device, Automatic. F. Brown. 1,643,108; Flushing apparatus. J. V. Flushing apparatus. J. V. Flushing device, Automatic. F. Bruwn. Flushing device, Automatic. F. Bruwn. Flushing device, Automatic. F. Bruwn. Flushing mechanism. L. G. and J. F. Giardino. Flushing mechanism. O. H. Theleen. 1,612,953; Jan. 4. Flushing system. H. W. Meyer. 1,652,038; Dec. 6. Flushing tank. N. J. Gondolf. 1,625,311; Apr. 19. Fluting machine. C. A. Frahm. 1,638,481; Aug. 9. Flux applied in soldering aluminum and its alloys. O. Spengler. 1,653,482; Dec. 20. Plux applied in soldering aluminum and its alloys. O. Spengler. 1,653,482; Dec. 20. Plux applied in soldering aluminum and its alloys. O. Spengler. 1,653,482; Dec. 20. Plux applied in soldering aluminum and its alloys. O. Spengler. 1,653,482; Dec. 20. Plux applied in soldering and v. J. Lund. 1,626,282; Apr. 26. Fly and insect trap. A. G. Carlson. 1,629,816; May 24. Fly book. P. H. Martinson. 1,623,429; Apr. 5. Fly catcher. E. L. Hamborg and V. T. Lobdell. J. Ply apper appliance. F. A. Hahb. 1,643,118; Sept. 20. Fly-paper appliance. F. A. Hahb. 1,643,118; Sept. 20. Fly-paper appliance. F. A. Hahb. 1,643,118; Sept. 20. Fly swatter. J. Azamber. 1,628,486; May 10. Fly swatter. J. Azamber. 1,628,486; May 16. Fly swatter. J. Azamber. 1,628,486; May 16. Fly swatter. F. R. Sullivan. 1,650,548; Nov. 22. Flytrap. R. J. Harris. 1,626,530; Apr. 26. Flytrap. R. J. Harris. 1,626,530; Apr. 26. Flytrap. R. J. Harris. 1,626,530; Apr. 26. Flytrap. R. Taylor and J. W. Cooper. 1,632,635; Flywheel and balancing same. J. O. Carrey. 1,620,871; Flywheel and balancing same. Flushing Flushing Nov. 8. Mar. 15.
Flying apparatus. R. A. Bibard. 1,629,198; May 17.
Flying, Apparatus for. M. Watter. 1,622,811; June 21.
Flying boat and like aircraft. R. J. Mitchell. 1,642,666;
Sept. 20.
Flying machine. M. M. Arndt. 1,623,613; Apr. 5.
Flying machine. W. D. Clark. 1,650,118-14; Nov. 22.
Flying machine. L. F. Coe. 1,624,475; Apr. 12.
Flying machine. A. Hanschke, nee Sachs. 1,631,661: Flying machine. A. Hanschke, ne6 Sachs. 1,631,861:

Flying machine. J. F. Haussmann. 1,635,364; July 12.

Flying machine. E. G. Kinzie. 1,635,892; July 12.

Flying machine. H. Klemm. 1,651,716; Dec. 6.

Flying machine. A Sartini. 1,622,676; Mar. 29.

Flying machine. A Sartini. 1,622,676; Mar. 29.

Flying machine. A Sartini. 1,622,676; Mar. 29.

Flying machines, Ascertaining the flying helght of. A.

Behm. 1,630,689; May 31.

Heden. 1,635,452; Jan. 25.

Flying machines, Erection of the hulls and the like of.

H. Junkers. 1,618,536; Feb. 22.

Flying machines, Erection of wings and the like for.

H. Junkers. 1,625,029; Apr. 19.

Flying machines, Erection of wings and the like for.

H. Junkers. 1,625,029; Apr. 19.

Flying machines, Landing chassis for. C. Dornier.

Le23,961; Apr. 12.

Flying machines, parachutes, and the like, rubber surfaces, and protecting surfaces, Supporting surface, Supporting surface, Supporting surface, Supporting surface, E. Falkenthal. 1,613,348; Jan. 4.

Flying machines, C. E. Godley, 1,626,407; Apr. 26.

Foodder cutter. J Diek. 1 268,104; Apr. 24. Flying machine. June 7. Mar. 1. Focusing device. C. E. Godley, 1,626,407; Apr. 26. Fodder cutter. J. Dick. 1,625,194; Apr. 19. Foldable comb. H. Scholl. 1,636,870; July 26. Foldable comb. C. Strauss. 1,616,930; Fcb. 8. Foldable rack. H. E. Williams. 1,625,694; Apr. 19. Foldable table. A. Thiede. 1,646,175; Oct. 18. Folder. H. A. W. Wood. 1,640,017; Aug. 23. Folder and gauge, Combination advertising. R. H. K. fon. 1,637,7715; Aug. Easel. J. Blyth. 1,651,72 Folder for photographs, Easel. J. Blyth. 1,651,72 Folder Tendering of M. Hilken, Sr. 1,629,077; May. R. H. Kea-1,651,748; Folder for photographs, Easel. J. Blyth. 1,651,748; Dec. 6.
Dec. 6.
Folder, Production of, M. Hölken, sr. 1,629,077; May 17.
Folding back rest, J. W. Sullivan. 1,625,106; Apr. 19.
Folding back P. Szuhánszké 1,654,437; Dec. 27.
Folding back. E. M. Pitts. 1,648,280,487; Dec. 27.
Folding back. E. M. Pitts. 1,648,280,487; Dec. 27.
Folding chair. W. C. Rastetter. Rel6.742; Sept. 20.
Folding chair. W. C. Rastetter. 1,634,761; June 14.
Folding chair. W. C. Rastetter. 1,638,879; Jun. 18.
Folding chair. W. C. Rastetter. 1,638,879; Jun. 19.
Folding machine. W. Clauberg. 1,626,600; May 3.
Folding machine. R. S. Dulton. 1,651,190; Nov. 29.
Folding machine. W. L. Dixon. 1,648,450; Nov. 8.
Folding machine. Setc., Temperature control for. O. E.
Cook. 1,626,515; Apr. 26.

Folding machines, Packer deliveries for. II. M. Barber. 1,015,610; Jan. 25.
Folding machines, Pressing device for. W. F. Lauten-schlager. 1,631,040; May 31.
Folding machines, printing machines, and the IRE.
Sheet-feeding mechanism for. G. Spiess. 1,614,088; Sheet-feeding mechanism for. G. Spiess. 1,614,088; Jan. 11. Folding machines, Sheet-feed controller for. J. Luley and J. P. Brunner. 1,646,652; Oct. 25. Folding method and product. W. L. Dixon. 1,633,849; June 28. Jan. 11.
Folding machines, Sheet-feed controller for. J. Luley and J. P. Brunner. 1,646,632; Oct. 25.
Folding machines are product. W. L. Dixon. 1,633,849; Folding screen. W. L. Wadsworth. 1,635,199; July 12.
Folding stand. E. Beastburn. 1,632,100; Dec. 6.
Folding stand. P. M. Basford. 1,614,618; Jan. 18.
Folding stand. P. M. Burman. 1,631,390; Jan. 11.
Folding stand. J. Casall. 1,647,223; Nov. 1.
Folding stand. P. M. Burman. 1,641,233; Nov. 1.
Folding stand. F. N. Blair. 1,620,061; Mar. 8.
Folding table. F. N. Blair. 1,620,061; Mar. 8.
Folding table. F. N. Blair. 1,620,061; Mar. 8.
Folding table. G. D. Converse. 1,644,818; Oct. 11.
Folding table. H. Davis. 1,634,572; July 2.
Folding table. H. J. Gilbert. 1,675,5362; May 10.
Folding table. H. J. Gilbert. 1,644,672; Oct. 11.
Folding table. H. J. Gilbert. 1,644,672; Oct. 11.
Folding table. H. J. Gilbert. 1,644,672; Oct. 11.
Folding table. H. H. Warner. 1,644,335; Oct. 4.
Folding table. W. J. King. 1,635,279; July 2.
Folding table. W. J. King. 1,635,279; July 2.
Folding table. W. J. Warner. 1,644,500; Oct. 4.
Folding table. A. L. Warner. 1,644,500; Oct. 4.
Folding table. A. L. Warner. 1,644,500; Oct. 4.
Folding table. A. Warner. 1,646,500; Oct. 4.
Folding table. A. Warner. 1,644,500; Oct. 4.
Folding table. A. Warner. 1,646,500; Oct. 4.
Folding table. A. Warner. 1,646,500; Oct. 4.
Folding table. A. Warner. 1,646,500; Oct. 4.
Folding table. A. Warner. 1,640,500; Oct. 4.
Folding table. A. Warner. 1,640,500; Oct. 4.
Folding table. A. Warner. 1,640,500; Oct. 4.
Folding table. A. Warn Food-preserving can. E. M. Lang, jr., 3d. Re16,629; May 24.
Food product. A. K. Balls. 1,642,320; Sept. 13.
Food product. R. G. Hess. 1,635,273; July 12.
Food product. A. E. Kidd, jr. 1,620,898; Mar. 16.
Food product. K. D. Loose. 1,649,21; Oct. 25.
Food product. J. J. Reynolds. 1,647,749; Nov. 1.
Food product. E. H. Twight. 1,624,153; Apr. 12.
Food product and making same. A. H. Moore. 1,634,113;
Food product and making same. A. H. Moore. 1,634,113; June 28
Food product and making the same. C. Feldhusen.
1,631,023; May 31.
Food product and preparing the same. F. E. Southway.
1,655,852; Dec. 27.
Food product and product resulting therefrom, Preparing
Food product, Machine for forming a. S. H. Perky.
1,645,155; Oct. 11.
Food products. Apparatus for treating D. R. Bailey.
1,625,707; Apr. 19.
Food products. Making. C. Hoffman. 1,640,152; the conditional products of th Aug. 23.
Food products, Making. C. Hoffman. 1,640,193; Aug. 23.
Food products, Preserving. J. Barry. 1617,006; Feb. 8.
Food products, temoving sulphur dioxide and compounds
Food products, Treating. W. W. Willison. 1,637,668;
July 26.
Foodstuffs and the like, Apparatus for processing. C. H.
Durke. 1,627,770; May 10.
Foodstuffs. Dranmenting. A. Martin. 1,624,670; Apr. 12.
Foodstuffs. Dranmenting. V. Martin. 1,624,670; Apr. 12.
Foodstuffs. Wall 1,624,670; Apr. 12.
Foodstuffs. Dranmenting. V. A. Smith. 1,627,466;
May 3. Food substances, Preparing. W. A. Smith. 1,021,400, May 3. Poods and commodities, System and means for dispensing. L. Lyndon and R. I. Blakeslee. 1,624,267; Apr., 12.

Foods and the product obtained thereby, Method in pre-paring. C. Birdssye. Re16,740; Sept. 20.
Foot accelerator. J. H. M. Michon, 1,613,764; Jan. 11.
Foot-accelerated switch. C. L. Wolfe and J. A. Fauto. Foot. Artificial. G. M. Frink. 1,628,498; May 10.
Foot. Artificial. G. M. Frink. 1,628,498; May 10.
Football. A. Klemte. 1,618,950-1; Feb. 22.
Football. Celast to shose, Applying. W. H. Albee.
1,651,572; Dec. 6.
Football. Came apparatus. A. E. Schurch. 1,633,040;
Football. The same apparatus. J. J. Lipp. 1,645,707;
Oct. 18. Football-playing device. A.
June 14. B. Foans. 1.632,439: Football protective harness. H. Goldsmith and W. A. Sonnett. 1,640,654; Aug. 30. Foot control. G. R. Powell. 1,630,760; May 31. Foot-corrective appliance. J. B. Saums. 1,614,934; Jan. 18.
Foot covering, B. L. Henry. 1.653,705; Dec. 27.
Foot covering, Ornamental. H. M. G. Könicke. 1,640,898;
Aug. 30. Aug. 30.
Foot covering, Outer. L. M. Radway. 1,651,631; Dec. 6.
Foot for legs, Removable. A. E. Rosenthal and W. E.
Claria. 1,651,000; Nov. 29.
Foot-measuring devide. M. J. O'Sullivan. 1,636,754; 1.636.754: Foot-measuring devices July 26.

July 26.

Foot pad. W. T. Birch. 1,625,187; Apr. 19.

Foot pad.

Foot pad.

F. W. Bacon. 1,638,266; July 19.

Foot rest. H. Borgwann, 1,642,328; Sept. 13.

Foot rest. G. B. Long. 1,621,423; Mar. 15.

Foot rest. A. T. Potter and A. B. Medville, 1,637, 1.637,588; Foot rest. A. T. Potter and A. B. Medville. 1,637,588; Aug. 2.
Foot rest and robe container, Combination. E. R. Heller. 1,612,723; Mar. 1.
1,619,723; Mar. 1.
1,640,239; Aug. 23.
Foot shield. F. J. Wojcik. 1,626,489; Apr. 26.
Footstep Examining-table. H. S. Allison. 1,649,053; Nov. 15.
Footstool, Automatic. W. Pertram. 1,618,221; Feb. 22.
Foot support. H. R. Rogers. 1,634,516; July 5.
Foot switch. H. P. MacLagan. 1,625,481; Apr. 19.
Foot switch, Combination. M. M. Williams. 1,643,230; Sept. 20.
Sept. 20.
Sept. 20.
Footwear. J. C. Loomis and H. W. Banks 3d, 1,640,948; Aug. 20.
Footwear. J. Solomon. 1,640,857; Aug. 30.
Footwear. A. T. Weedle. 1,632,570; June 14.
Footwear. Antislip attachment for. A. P. Anderson. 1,616,498; Jan. 25.
Footwear. Apparatus for making rubber. F. J. MacFootwear. Apparatus for making rubber. F. J. MacFootwear. Apparatus for making rubber. F. J. Mac-Footwear, Apparatus for making rubber. F. J. Mac-donald. 1,629,920; May 24.

Footwear, Apparatus for the manufacture of rubber-soled. C. H. R. Collins. 1,642,013; Sept. 13.

Footwear, Auxiliary sole for. J. L. G. Dykes. 1,637,809; Aug. 9 Aug. 2. Aug. 2. Footwear, Machine for the manufacture of. G. De Vooght. 1,638,186; Aug. 9. Footwear, Preparing. W. J. De Witt. 1,633,075; Footwear, June 21. June 21.
Footwear, Rubber. H. C. Harrison. 1,634,540; July 5.
Footwear, Visually determining the fit of. J. J. Lowe.
1,014,988; Jan. 18.
Footings, Mold for. O. H. Townsend. 1,627,754; May 10.
Forage mill. H. J. Olson. 1,545,770; Oct. 18.
Force-feed lubricator. W. A. Gordon. 1,649,026; Nov. 15.
Fore-feed dubricator. J. W. Woodruff. 1,650,321; orce-feed May 31. May St. Morreactor. J. W. Woodrull. 1.630.521, May St. Morreactor. Automatic. J. W. Woodruft. 1.639.017; Aug. 16. Porceps, Dental. O. Cantor. 1.626,226; Apr. 26. Porceps, Animal. W. Hylarides. 1.619,299; Mar. 1. Forceps, Dental. O. Cantor. 1.626,226; Apr. 26. Porceps, For use in the manufacture of plates used in dental prostheries. E. Moisan. 1.614,389; Jan. 11. General prostheries. E. Moisan. 1.614,389; Jan. 11. Forge, Electric. G. A. E. Janes. 1.634,365; July 5. Forge, Electric. G. A. E. Janes. 1.634,365; July 5. Forge, Electric. G. A. E. Janes. 1.634,365; July 5. Forge, Balls from long bars. A. Canda. 1.638,808; July 26. Porsing calking and yarning irons. Dies for. L. C. Bayles and H. W. Morrow. 1.631,082; Nov. 29. Porging machine. F. A. Halleck. 1.642,201; Sept. 13. Forging machine. F. A. Halleck. 1.630,399; May 31. Forging machine. S. T. Nelson. 1.630,581.-4; Nov. 22. Forging mechanism. F. A. Halleck. 1.638,259; Aug. 9. Forging mechanism. F. A. Halleck. 1.638,259; Aug. 9. Forging mechanism. F. A. Halleck. 1.638,259; Aug. 9. Forging fool. R. Armour. 1.621,573; Mar. 22. Forging fork. Lifting fork. Sandwich fork.

Harness frame.
Hoist and tilting frame.
Inductance-coil frame.
Land-roller frame. Lens frame, Locomotive frame Lens frame.
Locomotive frame,
Locomotive rame,
Motor-vehicle frame,
Moto Lifting fork.
Fower fork.
Fower fork.
Form clamp. G. F. Eppley. 1.649.952; Nov. 22.
Form clamp. W. C. Giggal. 1.627.085; May 3.
Form clamp. C. T. Goude and O. Kelley. 1,648.342;
Nov. 8.
Form for shaping articles, Adjustable. W. H. Frater. 1,640.827; Aug. 30.

Form-holding yoke. J. E. McFarland. 1,632,141; June 14. Form-lifting mechanism. R. J. Sims. 1,618,557; Feb. 22. Form, Sectional. A. J. Penote. 1,632,846; June 21. Former and stripper, Vertical. A. J. Lewis. 1,613,281; Nov. 1.

Fountain: See—
Chicken fountain.
Drinking fountain.
Boda fountain.
Soda fountain.
Soda fountain.
Soda fountain.
Fountain and animal trough, Combined drinking. H. A.
Liening. 1,632,842; June 21.
Fountain and aquarium, Combination. C. W. Goodsman.
1,649,683; Nov. 15.
Fountain and aquarium, Combination. C. W. Goodsman.
1,649,683; Nov. 15.
Fountain from the A. H. Johnson. 1,629,389; May 17.
Fountain for livestock, Drinking. J. B. Hawkins.
1,643,645; Oct. 18.
Fountain for poultry, Sanitary drinking. E. V. Dennis.
1,613,985; Jan. II.
1,643,488; Sept. 27.
Fountain-pen rack. J. A. Fremon and A. S. De Haven.
1,641,846; Sept. 6.
Fountains. Bubbler 4.
Fountains. Bubbler 4.
Rel 6,605; Apr. 26.
Fountains. Cooling device for drinking. H. C. Ridler.
Rel 6,605; Apr. 26.
Fountains, Valve for animal drinking. A. F. Kiliazing.
1,640,194; Aug. 22.
Fountains, Valve for animal drinking. A. F. Kiliazing.
1,640,194; Aug. 22.
Fountains Valve for animal drinking. A. F. Kiliazing.
Fountainer drawhead. E. Toenniessen. 1,624,815;
Fourdriner machine and process of paper making. G. S. Apr. 12.
Fourdrinier machine and process of paper making. G. S.
Witham, ir. 1.629.607; May 24.
Fourdrinier machines, Shaker mounting for. A. Aldrich,
1,629.087; May 17.
Four-wheel brake. A. L. Putnam. 1,652.214; Dec. 13.
Four-wheel brake. A. C. Woodruft. 1,648.335; Oct. 18.
Fowl catcher. T. Feppard. 1,629.0464; May 17.

Frame: Sec—
Airship frame.
Awning frame.
Babbitting frame.

and eyeglass twisting,

Printing frame. Quilting frame. Racket frame. Babbitting frame.
Bag frame.
Bed frame.
Cap spinning frame.
Car-truck side frame.
Cloth-holding frame.
Cop-winding frame.
Embroidery frame.
Engine frame.
Grille frame.
Harnass frame.
Harnass frame. Racket frame.
Sash frame.
Side frame.
Spectacle and frame.
Spinning frame.
Spinning, twis like frame. Suspension frame. Tender frame. Toy-balloon frame. Track side frame.
Truck frame.
Truck side frame.
Trube frame.
Vanity-case frame.
Vehicle frame.

Frame structure. W. H. Cater. 1,626.393; Apr. 26. Framing device. A. D. Brixey. 1,634,769; July 5. Framing tool and bevel protractor. S. Owen. 1,616,820; Feb. 5. Feb. 5. Depth gauge and lifting mechanism for. E. M. Cole. 1,634,412; Dec. 27. Frames, Making floral-design. W. H. Woerner. 1,617,188; Frames, Making floral-design. Frames, Making Horal-design. W. H. Woerner. 1,617,188; Feb. 8, Stop motion for drawing. W. J. Scott. 1,635,698; July 12. Frames. Suspension means for tube. E. F. Hathaway. 1,621,406; Mar. 15. Frankfurter-roll-forming machine. K. Scherdel. 1,631,697; June 7, Frand-preventing device. D. L. Chandler. 1,619,654; Fraud-preventing device. D. L. Camana M. A. Heyman and W. MrcOmb. 1,641,429; Sept. 6. W. A. Heyman and W. McComb. 1,641,429; Sept. 6. 1,645,782; Oct. 18. Freeing method R. E. Kolbe. 1,641,441; Sept. 6. Freezing of drainpipes, Device for preventing. S. Kraus. 1,652,784; Dec. 13. Freezing press. J. G. Burns and H. S. Davis. 1,620,993; Mar. 15. Freezing press. J. G. Burns and H. S. Davis. 1,620,993; Mar. 15. Mar. 15.

Mar. 16.

S. Glennan. 1,641,139; Aug. 30.

Freight, Apparatus for handling. B. F. Fitch. 1,643,489; Freight, Apparatus for handling. B. F. Fitch. 1,648,301; Nov. 8.

Freight, Apparatus for loading and unloading. B. J. Triay, fr. and P. L. Farmer. 1,632,253; June 14.

Freight brake, Light and load. H. F. Bickel. 1,635,737; July 12.

P. Freight and ding apparatus. A. H. Bates. 1,612,901; Freight-handling apparatus. Preight-handling apparatus. A. H. Bates. 1,612,901; Jan. 4.
Freight-handling apparatus. B. F. Fitch. 1,630,736: May 31.
Freight hook. J. L. Valliere. 1,640,102: Aug. 23.
Freight hook. J. L. Valliere. 1,640,102: Aug. 23.
Freight hook. J. L. Valliere. 1,640,102: Aug. 23.
Freight hook. J. L. Valliere. 1,640,682; Oct. 25.
Freight, Transporting. B. F. Fitch. 1,613,887; Jun. 4.
Frequency changer. G. H. Junp. 1,646,682; Oct. 25.
Frequency changes, System for indicating. E. T. Burton. 1,647,270; Nov. 1.
Frequency changes, System for indicating. E. T. Burton. 1,647,270; Nov. 1.
Frequency changing aggregate. R. E. Hellmund. 1,627,326; May 3.
Frequency meter. J. W. Horton. 1,641,973; Sept. 13.
Frequency meter. J. W. Horton. 1,641,973; Sept. 13.
Frequency transformer. Long-wave or intermediate. J.
H. Pressley, 1,647,372; Nov. 1, 1,635,729; July 12.
Friction brake. R. W. Thomson. 1,643,334; Sept. 27.
Friction brake. R. W. Thomson. 1,634,334; Sept. 27.
Friction coupling. F. Lobe. 1,638,773; Aug. 9.
Friction coupling. F. Lobe. 1,638,773; Aug. 9.
Friction coupling. F. Lobe. 1,638,773; Aug. 9.
Friction coupling. Centrifugal. J. W. A. Elling and B. Heger. 1,650,201; Nov. 22.
Friction element and making same. P. D. Greenstein. 1,644,110; Nov. 15. Friction element and making same. P. D. Greenstein. 1.649.110; Nov. 15.
Friction gripping means. A. Cousinard. 1,617,745; Feb. 15. Frechon lining and making the same. J. D. Rohrer. 1,640,373; Aug. 30, Fringe and method of making. C. B. Stretch. 1,637,882; Aug. 2. Frock. M. V. Brunk and D. D. Harrison. 1,637,518; Aug. 2. Aug. 2.
Front guide. W. M. Kelly, 1,615,174; Jan. 18.
Front rod. S. P. Hull. 1,621,884; Mar. 22.
Front-wheel brake. H. Perrot. 1,640,577; Aug. 30.
Frost-preventing and irrigating device, Combined. R. H.
Lloyd. 1,632,611; June. 4.
Lloyd. 1,632,611; June. 4.
Lloyd. 1,632,611; June. 4.
Frest-preventing and irrigating device, Combined. R. H.
Lloyd. 1,632,611; June. 4.
Frest-predicting. W. C. Arsem. 1,616,172; Feb. 1.
Fructose production. W. C. Arsem. 1,616,167; Feb. 1.
Fruit and nut picker. C. Kellogg. 1,650,706; Nov. 29.
Fruit and other articles, Machine for wrapping. R. A.
Dickinson. 1,635,035; July 5.
Fruit and solution therefor, Treating. T. M. Cramer
Fruit and Solution therefor, Treating. T. M. Cramer
Fruit and Louncell. 1,635,431; July 12.
Thornton. 1,643,429; Sept. 27.
Fruit and the like. Composition for treating. E. M.
Brogden. 1,628,945; May 17.
Fruit and vegetable squeezer. N. Archidiacano. 1,653,831;
Dec. 27.
Fruit and wegetable squeezer. N. Archidiacano. 1,653,831; Dec. 27.
Fruit. Administration for harvesting. H. W. Bartlett.
Fruit. Solid Apr. 26.
Fruit. Container paid. J. H. Woodall. 1,632,722; June 14.
Fruit. Config. Gevier. T. F. Cooney. 1,638,769; Aug. 9.
Fruit drier. J. T. Thomasen. 1,624,639 j. Apr. 12.
Fruit grader. F. W. Culter. 1,638,002; June 21.
Fruit grader. F. W. Culter. 1,638,002; June 21.
Fruit grader. F. Stebler. 1,651,847; Dec. 6.
Fruit. grader. F. Stebler. 1,651,847; Dec. 6. Fruit in the preparation of fruit for market. Treatment of. W. R. Barger, L. A. Hawkins, and C. P. Blatz. 1,632,579; June 14.

Fruit-juice extracting and display device. J. Fazio. 1,617,383; Feb. 15.
Fruit-juice-extracting machine. G. N. Hughes. 1,620,551; Mar. 8.
Fruit-juice extractor, F. Enssle. 1,634,774; July 5.
Fruit-juice extractor. A. W. Thompson. 1,649,755;
Nov. 15. Fruit-ja. May 10. it-juice extractors, Molding. W. M. Bristol. 1,627,884; Fruit juice, M: 1,636.890; July 1.636.890; July 26.
Fruit, Making glacé. E. E. Jacobs. 1,631.487; June 7.
Fruit, Making glacé. E. E. Jacobs. 1,631.487; June 7.
Fruit, Making glacé. E. E. Jacobs. 1,631.487; June 7.
Fruit, packing device. G. O. Reshaw. 1,617,663; Feb. 15.
Fruit pecler. D. Heller and A. C. Parlini. 1,640,656;
Aug. 30. Making concentrated. W. M. Zorn. Aug. 30.
Fruit picker.
W. D. Hughes. 1,626,402: Apr. 26.
Fruit picker.
W. D. Hughes. 1,619,731; Mar. 1.
Fruit picker:
W. D. Hughes. 1,619,731; Mar. 1.
Fruit picker:
W. D. Hughes. 1,619,731; Mar. 1.
Fruit picker:
D. Fruit picker:
D. E. Richardson. 1,643,809; Oct. 11.
Fruit picker:
D. E. Richardson. 1,642,311; Sept. 13.
Fruit-picking and thinning device.
D. E. Richardson. 1,623,977;
June 21.
Fruit preserves, Method and manufacture of. W. B. McLaughlin. 1,634,295; July 5.
Fruit, Preserving. O. H. Hansen. 1,625,207; Apr. 19.
Fruit, Preserving. R. D. McDill. 1,630,129; May 24.
Fruit, Preserving. R. D. McDill. 1,630,129; May 24.
Fruit, Preserving. R. D. McDill. 1,630,129; May 31.
Futi press. F. B. Davis. 1,653,991; Dec. 27. Fruit, Preserving or canning. S. L. Crawford, 1,631,017; May 31.
Fruit press. A Wurdack, 1,636,204; July 31.
Fruit press. A Wurdack, 1,636,204; July 31.
Fruit press. A Wurdack, 1,636,204; July 31.
Fruit scrubber and polisher. H. T. Demarest. 1,631,925; June 7.
Fruit scrubber and polisher. H. T. Demarest. 1,631,925; June 7.
Fruit sizer. J. B. Von Canon. 1,643,190; Sept. 20.
Fruit stemmer and cleaner. R. P. Frist. 1,617,105; Feb. 8.
Fruit-tray cleaner. D. H. Gray. 1,617,756; Feb. 15.
Fruit, Treating dried. R. D. Robinson and C. S. Ash. 1,649,488; Nov. 15.
Fruit-tray cleaner. D. H. Gray. 1,617,756; Feb. 15.
Fruit-tray cleaner. D. H. Gray. 1,617,756; Feb. 17.
Fruit-tray cleaner. D. H. Gray. 1,617,756; Feb. 17.
Fruit-tray cleaner. D. H. Gray. 1,617,636; Feb. 15.
Fruit-tray cleaner. D. H. Gray. 1,617,636; Feb. 15.
Fruit-tray cleaner. D. H. Gray. 1,617,636; C. J. Greenstreet. 1,619,202; Mar. 1.
Fruits and vegetables and other perishable commodities for shipment, Precoling. N. H. Gay. 1,617,630; Feb. 15.
Fruits and vegetables, Machine for mashing. V. E. The-Fruits and vegetables, Machine for mashing. Feb. 15.
Fruits and vegetables, Machine for mashing, V. E. The-baud and S. Wesselius. 1,619,550; Mar. 1.
Fruits and vegetables, Sizing machine for, J. D. Grabill. 1,630,227; July 19.
Fruits, etc., Machine for washing, grading, and peeling. Randall and C. E. Cobert. 1,1648,823; Nov. 8.
Fruits, K. Machine and C. E. Cobert. 1,1648,823; Nov. 8.
Fruits, Machine for preparing, C. H. Ayars. 1,640,745; Aug. 30.
Fruits, Machine for pitting drupaceous. P. Jepson. 1,617,909; Feb. 15.
Frying apparatus. A. R. Pitman. 1,630,309; May 31.
Fruits and succepan and such like vessel. E. M.
Fuel and lubricant segregating system for internal-combustion engines. C. S. Clark. 1,618,860; Feb. 22.
Fuel and making same. T. B. Mohler. 1,625,133; Apr. 19. Puel and making same, Artificial. M. F. Maginis, 1.615,463; Jan. 25.
Fur and making same, Combustible. L. Kirschbraun. Puel and making same, Hydrocarbon. L. Kirschbraun. 1.614,559; Jan. 18.
Fuel and making same, Motor. L. Kirschbraun. 1.014,735; Jan. 18.
Fuel and obtar oils from water contaminated therewith, 1.618,118.
Fuel and producing same. C. J. Greenstreet. 1,623,241; Apr. 5. Apr. 5.

Fuel and producing the same, Fluid. E. J. Barth and F. Hovell. 1,638,314; Aug. 9.

Hovell. 1,638,314; Aug. 9.

Fuel. Apparatus for burning powdered. E. Burg. 1,618,808; Feb. 22.

Fuel. Apparatus for distributing. F. Rochefort. 1,614,493; Jan. 18.

Fuel. Apparatus for reatomizing. E. O. Weeks. 1,650,406; Nov. 22.

Fuel. Apparatus for the manufacture of carbonized. S. R. Illingworth. 1,645,861; Oct. 18.

Fuel atomizer. W. Stevenson. 1,630,410; May 31.

Fuel atomizer. W. Stevenson. 1,630,410; May 31.

Fuel briquetting. P. E. Welton and G. H. Wadsworth. 1,642,055; Sept. 13.

Fuel briquettes, Carbonizing. B. B. A. Zwoyer, 1,632,052; June 14.

Fuel briquettes, Carbonizing. B. B. A. Zwoyer, 1,632,052; June 14. Fuel burner. Fuel burner. July 19. G. F. Embshoff, 1,640,759; Aug. 30.
 C. Fischer and A. Simonet. 1,636,597; Fuel burner. W. J. Haddock. 1.643.889; Sept. 27.

Fuel burner. J. H. Hunt. J. T. Fitzsimmons, and G. F. Embshoff. 1,613.706; Jan. 11. Fuel burner. J. A. Willners. 1,625,635; Apr. 19. Fuel burner. Centrifugal fuid. F. S. Denison. 1,627,690; May 10. Fuel burner, Centrifugal fuid. F. S. Denison. 1,631,404; Fuel burner, Centrifugal fluid. F. S. Denison. 1,631,404; June 7.
Pucl burner, Gaseous. J. E. Kresky. 1,616,051; Feb. 1.
Fuel burner, Liquid. R. C. Hopkins. 1,650,627; Nov. 29.
1,654,194; Dec. 27.
Fuel burners, Fire pot for. H. A. Tedman. 1,639,153; Aug. 16.
Fuel burners, Fire pot for. H. A. Tedman. 1,639,153; Aug. 16.
Fuel burning apparatus, Liquid. G. E. Goodridge. 1,638,563 (burner, Finely-divided. H. Kreisinger. 1,645,651; Oct. 18.
Fuel burning, Method and apparatus for. H. Adams. 1,630,159; May 31. B. E. Getz. 1,650,799. Nov. 29.
Fuel-burning system. B. E. Getz. 1,650,799. Nov. 29.
Fuel combustion of liquid. E. G. Hodges. 1,649,696; Nov. 15.
Fuel combustion system, Pulverized., C. W. E. Clarke. 1,620,191; Mar. 8.
Fuel composition. S. P. Marley and W. A. Gruse 1,645,109; Oct. 11.
Fuel-consumption indicator. R. W. Schroeder. 1,641,295; Sept. 6.
Fuel control. M. E. Chandler. 1,623,166; Apr. 5.
Fuel control. M. E. Chandler. 1,623,166; Apr. 5.
Fuel-control system. G. A. Robertshaw. 1,627,341; Fuel-control system. G. A. Robertshaw. 1,627,341; Fuel-control system. G. A. Robertshaw. C. Bright. Fuel-control system. G. Canton. C. Bright. Puel-control system. G. A. Robertshaw. C. Bright. Puel-control system. G. A. Robertshaw. C. Bright. Puel-control system. G. Canton. G. C. Bright. Puel-control system. G. C. C. Wenter G. Bright. Puel-control system. G. A. Robertshaw. C. Bright. Puel-control system. G. C. C. Wenter G. Bright. Puel-control system. G. C. C. Wenter G. Bright. Puller G. Brigh Fuel-distilling apparatus. F. E. Hobson. 1,614,028; Jan. 11.
Fuel economizer. R. N. Murakami. 1,638,015; Aug. 9.
Fuel economizer. D. Nybakker. 1,618,465; Feb. 22.
Fuel economizer. F. H. Roth. 1,637,591; Aug. 2.
Fuel economizer. F. H. Roth. 1,637,591; Aug. 2.
Fuel economizer. P. S. L. West. 1,616,401; Feb. 1.
Fuel economizer and decarbonizing device. R. R. Ross. 1,619,830; Mar. 8.
Fuel-feed control mechanism. L. A. Witter. 1,636,582;
Fuel-feed system, Pressure. A. E. Berdon. 1,647,768;
Nov. 1. Puel-feed system, Pressure. A. E. Berdon. 1,647,768; Nov. 1.

Fuel, Feeder for powdered. V. Z. Caracristi. 1,614,713; Jan. 18.

Fuel feeder, Pulverized. H. R. Collins. 1,631,119; June 7.

Fuel feeding and metering system. T. A. Banning, jr. 1,631,356; June 7.

Fuel feeding and metering system and apparatus. T. A. Banning, jr. 1,631,356; June 7.

Fuel-feeding device. V. A. Searles. 1,649,133; Nov. 15.

Fuel-feeding device, Solenoid-operated. W. Van Guilder. 1,653,855; Dec. 27.

Fuel-feeding mechanism. C. H. Quinn. 1,637,028; July 26.

Eracke. 1,619,808; Mar. 8.

Fuel for automotors. E. F. Chandler. 1,622,572; Mar. 29.

Fuel for automotors. E. F. Chandler. 1,622,572; Fuel for use in internal-combustion engines. 8, Iserman. Bullion automotors. E. F. Chaudier. 1,622,62; Duel for use in internal-combustion engines. S. Iserman, W. Vernet, and E. Q. Moses. 1,654,259; Dec. 27. Fuel furnace, Pulverized. L. H. Bergman. Rel16,828; Dcc. 27. Fuel, Gaseous. J. Harris. 1,637,187; July 26. Fuel, Gaseous. J. R. Rose. 1,628,067; May 10. Fuel gases, Manufacture of. C. Cooper and D. M. Fuel, Gaseous. J. R. Rose. 1,628,067; May 10. Fuel gases, Manufacture of. C. Cooper and D. M. Fuel, Gaseous. J. R. Rose. 1,628,067; May 10. Fuel gases. Manufacture of Keess. 1,638,772; Aug. 9. Fuel heater. L. C. Weinberg. 1,634,968; July 5. Fuel igniter. L. C. Weinberg. 1,634,968; July 5. Fuel igniter, Stove. H. W. Robbert. 1,625,870; Apr. 26. Fuel in furnaces, Method and apparatus for controlling the combustion of. J. W. Griswold. 1,644,123; Oct. 4. Fuel-injection systems, Rellef mechanism for. P. L. Fuel-injection systems, Rellef mechanism for P. P. L. Fuel-injection systems, Rellef mechanism for Fuel, Ma. May 31. Sugy 51.
Fuel material and producing same, Binding. T. Nagel.
1.628.208; Apr. 26.
Fuel, Method and apparatus for burning. D. S. Jacobus.
1.630.387; May 31.
Fuel, Method and apparatus for carbonization of subdivided. S. McEwen. 1.648.856; Nov. 8.
Fuel, Method of and apparatus for preparing, feeding,
and burning pulverized. L. H. Bergman. 1,627,766;
May 10.

uel mixtures, Homogenizing fluid. W. A. Edwards. 1,627,161; May 3. uel oils. Apparatus for burning. C. E. Chapman. 1,629,774; May 24. I'uel regulator, Automatic. L. Ferrette. 1,644,717; Oct. 11. Fuel saver. A. L. Strong. 1.642,831; Sept. 20. Fuel-saving device. N. J. Russell. 1613,907; Jan. 11. Fuel-stoking device. C. H. Hall and W. Lloyd. 1,638,396; Fuel-supply device. C. F. Kettering. 1,624,139; Apr. 12. Fuel-supply device, Reserve. M. B. Harris, 1,613,703; Fuer-supply device, Reserve- M. B. Harris. 1,613,703; 148-121; 148 Sept. 27. W. Brown. I.614548; Jun. 18. Fact vaporizer. M. J. Cahn. 1.653,738; Dec. 27. Fuel vaporizer. M. J. Cappock. I.653,738; Dec. 27. Fuel vaporizer. W. E. Shore. 1.627,671; May 10. Fuel vaporizer, Liquid. J. Hutchinson. 1,624,249; Apr. 12. Fuel vaportzer, Liquid. J. Hutchinson. 1,624,249; Apr. 12.
Fuel, Vaporizing. C. F. Larzelere and C. H. Neumeyer. 1,623,233; Apr. 5.161.
Fuels, Treating artifacil. H. E. Wetherbee and W. L. Fuels, Using low-compression. C. F. Kettering and T. Midgley, Jr. 1,635,216; July 12.
Fulcrum, Reversible. C. A. Eenz and E. E. Van Cleave. 1,613,014; Jan. 4.
Pulled woven fabric. E. Mundorf. 1,615,517; Jan. 25.
Fullers earth, Furnace for the treatment of spent. Fuller was the farmed for the treatment of spent. Collect Science (1998) Jan. 4.
Jan. 4. Thus C. 1,630,044; May 2.
Jan. 4. Thus C. 1,613,299; Julian. 1,610,100. Fuller's earth, Furnace for the freatment of spent.
R. E. Wilson, 1,630,044; May 24.
Fuller's earth, Revivifying. L. A. Tarbox. 1,613,299;
Fulling mill. E. J. Wilson. 1,645,210; Oct. 11.
Fume control, Process and device for. R. S. Perry.
1,650,152; Nov. 22.
Fume-disposal apparatus for workbenches. J. LindDurg. 1,624,107; Apr. 1,649,254; Nov. 15.
Fumigant, Container for dissipating a. W. A. Drushel,
1,630,337; May 31.
Fumigant, Container for dissipating a. W. A. Drushel,
1,630,337; May 31.
Fumiganting. W. L. Landis and G. H. Buchanan.
1,613,390; Jan.
4.
Fumigating apparatus. P. M. Gross and R. B. Arnold.
1,634,394; July 5.
Fumigating, Apparatus for. J. D. Neuls. 1,618,775; Feb. 22.
Fumigating, Apparatus for. J. D. Neuls. 1,618,775; Feb. 22.
Fumigating, Apparatus for. J. D. Neuls. 1,618,775; Feb. 22.
Fumigating, Apparatus for. J. D. Neuls. 1,618,775; Feb. 22.
Fumigating, Apparatus for. J. D. Neuls. 1,618,018;
Fumigating, decolorising, and the like treatment of air,
Apparatus for. F. C. Addrew. 1,614,817; Jan. 18.
Fumigation applicator. K. F. Cooper. 1,642,920;
Sept. 20.
Funding apparatus. P. M. Gross and W. S.
Fungicide and preparing same. J. H. Reedy and W. S.
Fungicide and preparing same. J. H. Reedy and W. S.
Brock. 1,620,229; Mar. 8.
Fungicide ontsining copper and making the same. J. D.
Jenkins and B. F. Berr. 1,635,089; Aug. 9.
Funnel. J. H. Lo Bel. 1,638,446; Aug. 9.
Funnel. J. H. Mooney. 1,651,633; Dec. 6.
Funnel. P. T. Murphy. 1,622,801; Mar. 29.
Funnel. J. H. Mooney. 1,651,633; Dec. 6.
Funnel. P. T. Murphy. 1,622,801; Mar. 29.
Funnel. J. H. Mooney. 1,651,633; Dec. 6.
Funnel. P. T. Murphy. 1,622,801; Mar. 29.
Funnel screen. R. A. Blunck. 1,650,317; Nov. 22.
Fur and treating the same, Carroting. P. Conner.
Fur beauting sheets used in the manufacture of garments and garment trimmings, Producing. H. Wasserman.
J. Graf, SSS. Aug. 2.
Furnel screen. R. A. Blunck. 1,650,317; Nov. 22.
Fur and treating the same, Carroting. P. Conner.
Fur beauting sheets used in the manufacture of garments and garment trimmings,

Fur testing and cutting device. E. Müller. 1,645,391; Fur testing and cutting C. J. Solomon, 1,621.285;
Mar. 16.
Furs, Skeleton form for headpleces of. J. Peitzer,
1,636,575; July 19.
Furane, Manufacture of. W. C. Wilson, 1,636.030; Furane, M July 19. Furnace: See—
Air-heating furnace.
Annealing furnace.
Annealing or heating fur-Liquid-fuel furnace. Melting furnace. Metal furnace. Metal furnace.
Metallurgical furnace.
Muffle furnace. nace.
Blast furnace.
Boiler furnace.
Cupola furnace.
Dentist's furnace.
Drill-heating furnace. Mume furnace.
Normalizing furnace.
Oil-burning furnace.
Open-hearth furnace.
Ore furnace. Drill-heating furnace. Dross furnace. Electric furnace. Flame-arc furnace. Fuel-burning furnace. Gas-heated furnace. Glass furnace. Glass-tank furnace. Recuperative furnace. Refuse furnace. Regenerative furnace. Resistance furnace. Resistance furnace. Retort furnace, Reverberatory furnace, Roasting furnace. Rotary furnace. Glass-tank furnace, Heat-treating furnace, Heating furnace, Hot-air furnace, Hot-water furnace, Inductance furnace, Smelting furnace. Stoker furnace. Underfeed stoker furnace. Hot-water furnace. Inductance furnace. Inductance furnace. Weiding furnace. Induction furnace. Weiding furnace. Induction furnace. Weiding furnace. J. C. Anderson. 1.650,886; Nov. 29. Furnace. J. F. Baker. 1,638,8908; Aug. 16. Furnace. I. Barchinan. 1,643,648; Nov. 15. Furnace. I. Barchinan. 1,643,648; Nov. 15. Furnace. J. Bruchan. 1,643,648; J. H. J. Furnace. J. Boucek and J. Halick. 1,630,162; May 24. Furnace. A. G. Boyd. 1,622,087; Apr. 5. Furnace. J. B. L. Breese, jr. 1,627,591; May 10. Furnace. A. A. Bruder. 1,643,632; Nov. 1. Furnace. R. K. Dawson. 1,623,086; Anz. 15. Furnace. S. F. Ezloff. 1,647,987; Nov. 8. Furnace. F. A. Fahrenwald. 1,624,043; Apr. 12. Furnace. S. French. 1,622,083, Mar. 15. Furnace. S. French. 1,620,863, Mar. 15. Furnace. S. French. 1,620,683; Mar. 15. Furnace. S. French. 1,620,683; Mar. 15. Furnace. R. G. Gruwald. 1,621,066; Mar. 15. Furnace. R. G. Gruwald. 1,621,066; Mar. 15. Furnace. A. B. Kidder. 1,615,087; Jan. 18. W. H. Lartz. 1,618,346; Feb. 2. Furnace. W. E. Lewis and D. W. Williams, 1,622,595; Marn. 29. Furnace. F. A. Lippert. 1,613,615; Jan. 11. Wall furnace. Welding furnace. F. A. Lippert, 1,613,616; Jan. 11.
M. F. May. 1,615,197; Jan. 18.
J. McLean. 1,624,962; Apr. 19.
A. F. Nelson. 1,616,196; Feb. 1.
A. N. Otis. 1,646,213; Oct. 18.
W. J. Fees. 1,625,169; July 24.
I. S. Pieters. 1,637,169; July 24.
A. L. Schelhammer. 1,615,226 Jan. 25.
A. L. Schelhammer. 1,615,226 Jan. 25.
J. F. O. Stratton. 1,640,056; Aug. 23.
J. F. O. Stratton. 1,640,158; Aug. 23.
H. Tielkemeyer. 1,650,749; Nov. 29.
A. J. M. A. R. van der Does de Bije. 1,625,954; Furnace. urnace. urnace, I. Furnace. Furnace. Furnace. Apr. 26. Furnace. Nov. 1. F. H. Waite and G. W. Davey. 1,647,160; Nov. 1.

Furnace. U. Wedge. 1,653,681; Dec. 27.

Furnace. G. C. Weideman. 1,626,576; Apr. 26.

Furnace. G. D. White. 1,629,606; May 24.

Furnace adapted for the heating and the unwinding of rolls of wire. A. F. Jacquemin. 1,642,613; Sept. 18.

Furnace and apparatus for utilizing shale or other bituminous materials. S. V. Bergh. 1,618,566; Feb. 22. Furnace and boiler cleaner. F. E. Roberts. 1,647,817; Furnace and boiler cleaner. F. E. Roberts. 1,647,817; Nov. 1.
Furnace and cooling device. T. E. Murray. 1,623,746; Furnace and ignition means therefor, Oil-burning. J. L. Breese, jr. 1,633,567; June 28.
Furnace and operating the same. F. W. Brooke. 1,626,268; Apr. 26.
Furnace and operating the same. A. L. Culbertson. 1,637,473; Aug. 2.
Manker. 1,648,001: Nov. 8.
Furnace and thermostatic control therefor, Oil-burning. J. L. Breese, jr. 1,633,066; June 21.
Furnace apparatus. J. E. Bell. 1,616,675; Feb. 8.
Furnace apparatus. J. E. Bell. 1,616,675; Feb. 8.
Furnace arch. M. Bainter. 1,644,166; Oct. 4.
Furnace arch. M. Hamilton. 1,036,000; July 19.
Furnace arch. M. Hamilton. 1,036,000; July 19.
Furnace arch. C. J. Huber. 1,629,706; May 24.
Furnace arch construction. L. H. Hosbein and R. D. Furnace arch construction. L. H. Hosbein and R. D. Foltz. 1,628.318; May 10.

Furnace-arch construction. A. O. Jackson. 1,617,759; Furnace-arch construction. A. O. Jackson. 1,617,759; Feb. 15. Furnace-arch Construction. N. D. Stevens and L. H. Hosbein. 1,628,284; May 10. Furnace attachment. C. J. Kinaggs. 1,648,950; Nov. 15. Furnace connet. A. G. Scherer. 1,615,888; Feb. 1. Furnace casing. C. D. Hyatt. 1,634,643; July 5. Furnace-charging apparatus. C. A. Wulf. 1,641,651; Sept. 6.

Furnace circuit, High-frequency. F. Gerth and W.
Fischer, 1.642.198; Sept. 13.

Furnace construction. A. E. Grunert and A. D. Bailey.
1.164.237; Jan. 11.

Furnace construction. A. E. Grunert and A. D. Bailey.
1.1647.161; Nov. 1.

1.647.161; Nov. 1.

1.647.485; Nov. 1.

F. H. Waite and G. W. Davey.
1.647.485; Nov. 1.

Furnace-door fastener. H. W. Morreall. 1,642.621;
Sept. 18. Sept. 6. Furnace Furnace-door fastener. H. W. Morreall. 1,642,621; Sept. 13.

Furnace-dovrooperating device. D. S. Tewksbury and Furnace for electrical treatment of gases for the purposes of oxidation of atmospheric nitrogen or for other purposes. B. Thomas. 1,634,311; July 5.

Furnace for heating or melting metals. A. Zilliacus. 1,643,569; Sept. 27.

Furnace for melting glass, and other like Furnace for melting glass, Regenerative. R. D. Pike. 1,635,507; Dec. 20.

Furnace for gupplying drying gases. D. E. Mansfield. 1,629,921; May 24.

Furnace for the treatment of pulverulent granular or Furnace for the treatment of pulverulent granular or 1.634,027; June 28.

Furnace for treating refractory ores containing precious metals. G. W. B. Evans. 1,636,467; July 19.

Furnace for treating refractory ores containing precious metals. G. W. B. Evans. 1,636,467; July 19.

Furnace for treating responsible for the furnace for treating refractory ores containing precious metals. G. W. B. Evans. 1,636,467; July 19.

Furnace for treating responsible for the furnace fuel-feeding apparatus. T. Johnson. 1,633,640; Julie 28. June 28.

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June 2 30.
Furnace or stove, Heating, G. Striffler, Apr. 26.
Furnace radiator. W. J. Weiland, 1,641,213
Furnace-radiator-flue cleaner. E. W. 1.635,810; July 12.
Furnace radiator, Warm-air. H. Jaegler. May 17. 1.626.054: Weiland. 1,641,211; Sept. 6. 1,628,780: May 17.
Furnace regulation. G. H. Gibson. 1,627,893; May 10.
Furnace regulation. C. H. Smoot. 1,630,977; May 31.
Furnace regulator. J. Goldberg. 1,639,906; July 26.
Furnace-regulator unit. A. H. McCulloch. 1,615,021;
Jan. 18.
Furnace resistor, Electric. T. A. Reid. 1,645,293;
Oct. 11.
Furnace resistor mounting. J. C. Woodson. 1,617,393;
Feb. 15. Furnace-roof construction. G. F. Lenk. 1,629,668: Furnace-roof structure. D. A. Benson. 1,623,860; Apr. 5.
Furnace structure. Air-cooled. F. H. Waite and G. W.
Furnace system, Electric. J. Beckmann. 1,633,665
Furnace system, Electric. J. Beckmann. 1,634,665
Furnace system. June 7.
Furnace wall. M. Liptak. 1,639,138; Aug. 16.
Furnace wall. B. H. Snow. 1,627,349; May 3.
Furnace wall. C. A. Strachota. 1,639,711; Aug. 23.
Furnace wall. C. A. Strachota. 1,639,711; Aug. 23.
Furnace wall. C. B. H. Waite and G. W. Davey.
Furnace-wall or F. H. Waite and G. W. Davey.
Furnace-wall construction. R. S. Riley. 1,624,009;
Apr. 12.
Furnace-wall construction, Corner-fill. G. P. Reintjes.
1,639,270; Mar. 1.
Furnace wall, Cooled. F. B. Biglow. 1,636,894;
July 26. Furnace-wall protection. H. Krelsinger.
Nov. 15.
Furnace wall, Ventilated. M. Liptak.
July 12. 1 649 121 . 1.635.851: Furnace-water-pan construction. J. P. Kolla. 1,619,261; Mar. 1.
Furnace with blast heater. E. Vanderstein. 1,649,201; Nov. 15. Furnaces, Air-draft system for. J. Reid. 1,646,111; Oct. 18. Furnace Air indicating and regulating apparatus for. Furnaces Air-moistening apparatus for hot-air. D. Handelan. 1.632.836 June 21. Furnaces and other apparatus. Controlling the tempera-ture in. N. H. Freeman. 1.614.732; Jan. 18.

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June 1.

Furnaces, Control for electric. E. C. Glitzke. 1,650,624;

Furnaces, Control for fluid-fuel. H. J. Sauvage. 1,643,839; Sept. 27.

Furnaces, Cut-out for electric. E. L. Smalley. 1,651,972;

Dec. 6. Furnaces, Cut-out for electric. E. L. Smalley. 1,651,972; Dec. 6.
Furnaces. Damper regulator for. B. J. Tryner. 1,636,537; July 19.
Furnaces, Device for adding combustion in. J. W. George. Furnaces, Electrode control for arc. T. F. Baily. 1,634,483; July 5.
Furnaces, Electrode device for electric. O. Sandvold, O. Rye, and O. Platou. 1,617,136; Feb. 8.
Furnaces, Electrode mechanism for electric. A. E. Greene. 1,616,737-8; Feb. 8.
Furnaces, Flectrode of the formation of the forma Furnaces, Operating electric. S. Arnold, 3d. 1,629,196; May May May 1, 10 of the property of t

Furniture, Feb. 22. Combination. P. G. Gardner. 1,618,922; Furniture, Feb. 22 Combination. W. F. Turner. 1.618.737: Furniture, Nov. 8. Furniture, Combination. M. P. Zostas. 1,648,529; e, Combination article of. J. Beck. 1,645,683; Furniture, Combination article of. J. Beck. 1,645,688; Oct. 18.

Furniture construction. E. Morris. 1,633,345; June 2, Furniture construction. T. H. Wittliff. 1,651,430; Dec. 6.

Furniture, Convertible, J. A. Arton. 1,637,797; Aug. 2.

Furniture for paper-box dies and type compositions. W. W. Shinnick. 1,635,964; July 12 c. R. Armstrong. 1,650,293; Nov. 22. Lurinture, Hospital, W. W. Morey and E. R. Armstrong, 1,650,293; Nov. 22. Purniture-joint-securing means. C. L. Kessler. 1,649,903; Nov. 22. Furniture leg slide. W. H. Noelting. 1,638,355; Aug. 9. Furniture, Meth. H. Laughlin. 1,647,519; Nov. 1. Furniture, Store. W. P. Bott. 1,614,35; Jan. 25. Furniture trim and keeper. W. H. Noelting and A. I. Brokav. 1,622,735; Mar. 29. Furniture Wall. H. G. Talbott. 1,633,423; June 21. Furned skins, Machine for fleshing. R. Olds. 1,649,725; Nov. 15. Furning and fastening daylog. Furring and fastening device. L. Hommel. 1,638,853; Aug. 16. Furring and fastening device. J. L. Sullivan. 1,649,625; Nov. 15. Furring and fastening device, J. L. Sullivan. 1,649,625; Nov. 15.
Furring construction. G. F. Pawling. 1,625,865; Apr. 26.
Furring plate. G. F. Voight. 1,618,132; Feb. 15.
Furrow tepper. L. Sanwell. 1,649,622; Nov. 15.
Furrow tepper. L. Sanwell. 1,649,622; Nov. 15.
Furrow tepper. L. Sanwell. 1,649,622; Nov. 15.
Furs. and leather, Tanning and dyeing. V. Zettlitz. 1,649,502; Nov. 15.
Furs. skin, hairs, feathers, or the like, Dyeing. O. Kaltwasser and H. Kirchhoft. 1,643,246; Sept. 20.
Furs. C. Bennett. 1,634,324; Sept. 20.
Furs. C. W. Engelman. 1,624,322; Apr. 12.
Furs. G. P. McDonnell. 1,650,996; Nov. 29.
Furs. E. L. Ogle. 1,645,541; Oct. 18.
Furs. C. W. Engelman. 1,624,322; Apr. 12.
Furs. G. P. McDonnell. 1,650,905; Aug. 16.
Furs. C. W. Engelman. 1,624,322; Apr. 12.
Furs. and use holder, Electric. A. J. Bowle. 1,614,646; Jan. 18.
Furs. and Junction block. J. A. Wilhelml. 1,650,252; Nov. 22.
Furs. and Junction block. J. A. Wilhelml. 1,650,252; Aug. 9.
Furs. Cortifugal. B. Pantoflicek. 1,614,537; Jan. 18.
Furs. Centrifugal. B. Pantoflicek. 1,614,537; Jan. 18.
Furs. Centrifugal. B. Pantoflicek. 1,614,547; Jan. 18.
Furs. Deconating. N. Greenwall. 1,651,693; Nov. 8.
Furs. Deconating. J. S. Barker. 1,648,603; Nov. 8. Apr. 12.

Fuse plug and socket. C. B. Jones. 1,634,905; July 5.

Fuse-plug cap assembly. N. W. Nutt. 1,037,274; July 26.

Fuse-plug holder. W. W. Weida. 1,586,569; July 19.

Fuse plug, Multiple. F. W. Williams. 1,644,960; Oct. 11.

Fuse plug, Renewable. H. J. Wheeler. 1,634,810; July 5.

Fuse plug, screw type, with indicator. J. B. Glowackl. 1,636,102; July 1,636,182; July 1,640,392; Aug. 30.

Fuse spitter, Blasting. T. Spears. 1,651,479; Dec. 6. Fuse switch, Repeating. L. B. Green. 1,652,782; Dec. 13. Fusing material and delivering the same. L. H. Moulthrop. 1,652,409; Dec. 13. Fuses. Manufacturing water-tight electric. N. Schmitt, 1,614,210; Jan. 11. Fuses, Teating. S. Palmer. 1,645,346; Oct. 11.

Fuses within runs, Mechanism for setting. J. C. Karnes. 1,631,211; June 7. N. Hieok. 1,629,102; May 17. Fusible material. Machine for working cylindrical members of. P. A. Favre. 1,031,074; June 7. Fusible solids, Comminuting. C. Marx. 1,614,566; Jan. 18. Gaiter. H. Bunnenberg. 1,621,153; Mar. 15. Gaiter. H. Gaiter. H. T. Bunne. 1,615,339; Feb. 1. Gaivanic cell. H. D. Nyberg. 1,624,851; Apr. 12. Gaivanic cell. H. D. Nyberg. 1,624,851; Apr. 12. Gaivanic cell. H. D. Nyberg. 1,624,851; Apr. 12. Gaivanic cell and electrode therefor, Primary. G. W. Heise and E. A. Schumacher. 1,615,839; Feb. 1. Gaivanic graph for the control of th A. A. Allinger. 1,628,446; May 10. L. G. Brinkman. 1,625,980; Apr. 26. R. A. Britsow. 1,637,517; Aug. 2. V. P. Brun. 1,652,270; Dec. 15. L. L. Dempsey. 1,616,216; Feb. 1 W. A. Fette. 1,634,180; June 28. T. Flanagan. 1,617,243; Feb. 8. W. W. Gall and F. B. Connelly. 21. Game apparatus. T. I Game apparatus. T. I Game apparatus. Game apparatus. G. Game apparatus. G. Game apparatus. S. I Game apparatus. S. I Game apparatus. S. I Game apparatus. G. G. Game app Apr. 5 Game apparatus, Baseball. E. V. BRODITT. 1,022,008; Apr. 5 Game apparatus, Baseball. S. J. Brutofski and J. Armstrong 1,640,878; Aug. 30. Game apparatus, Baseball. J. C. Fennessy. 1,651,686; Dec. 6. Sept. 0.

Game apparatus, Baseball-, L. E. Stewart. 1,642,093;
Sept. 13.
Game apparatus, Bowling-, R. H. Morton. 1,650,029;
Game apparatus, Football-, R. H. Anderson. 1,648,601;
Nov. 8.

Game apparatus for multisix-color game. A. Sandel. 1.622,055; Apr. 19.
Game apparatus, Geographical educational. J. T. Lomas. 1.633,404; Dec. 20.
Game, Arithmetical. V. D. Brittingham. 1,619,849; Mar. 8.
Game ball. C. W. Coffield. 1,622,421; Mer. 29. 1,653,464; Dec. 20.

Game, Arithmetical. V. D. Brittingham. 1,619,849; Mar. 8.

Game, Barthmetical. V. Coffield. 1,622,421; Mar. 29.

Game, Barthmetical. E. C. C. Kirkham. 1,615,956; pp. 26.

Game, Baseball. C. C. Kirkham. 1,615,956; pp. 26.

Game, Baseball. E. D. J. Mattern and H. N. Walker. 1,634,296; July 5.

Game, Baseball. E. C. Wagner. 1,619,279; Mar. 1.

Game board. E. Falan. 1,621,186; Mar. 16.

Game board. E. Falan. 1,621,186; Mar. 16.

Game board. E. Falan. 1,621,186; Mar. 10.

Game board. G. E. Brown. 1,624,469; Apr. 12.

Game board. G. E. Brown. 1,624,469; Apr. 12.

Game board. C. Dietrichs. 1,644,514; Oct. 4.

Game board. H. Himmelman. Des. 73,033; July 12.

Game board. L. Rosen. Des. 73,124; July 5.

Game board. L. K. Rosen. Des. 73,122; July 5.

Game board. F. A. Sullivan. 1,637,922; Aug. 2.

Game board. W. W. Thom, A. S. T. Lagaard, and A. M. Walzer. Des. 73,764; Nov. 1.

Game board, Forball. J. M. Conley. 1,614,881; Jan. 16,000; July 24.

Game board, Forball. J. M. Conley. 1,614,881; Jan. 16,000; July 24.

Game board, Forball. J. M. Conley. 1,614,881; Jan. 16,000; July 24.

Game, Goord, Forball. J. M. Conley. 1,614,881; Jan. 16,000; July 24.

Game, Goord, Forball. J. M. Conley. 1,614,881; Jan. 16,000; July 24.

Game, Goord, Forball. J. M. Gonley. 1,614,881; Jan. 26.

Game, Gooth. A. Vallat. 1,640,259; Aug. 23.

Game, Gooth. A. Vallat. 1,640,259; Aug. 23.

Game, Card. H. H. Ross. 1,623,681; June 14.

Game, Card. A. B. Copeland. 1,638,433; Aug. 9.

Game, Card. H. H. Ross. 1,632,881; June 14.

Game, Card. H. H. Ross. 1,632,881; June 14.

Game, Card. M. H. Whaley and C. W. Eckenwiler. 1,640,995; Aug. 23.

Game carrier. J. F. Calvert. 1,650,491; Nov. 22.

Game, Card. H. H. Ross. 1,634,197; Tune 28.

Game counter. K. E. Brewer. 1,613,575; Jan. 4.

Game, Card. H. B. Ross. 1,614,605; Oct. 18.

Game counter. M. E. Bosley and L. J. Kane. 1,616,884; Feb. 8.

Game counter. M. E. Bosley and L. J. Kane. 1,616,884; Feb. 8.

Game counter. M. E. Bosley and L. J. Kane. 1,616,884; Feb. 8.

Game counter. M. E. Bos Game counter, K. E. Brewer, 1,613,675; Jan. 4.
Game, Covered indicating chance disk. S. O. Jacks.
1,640,998; Aug. 30.
Game device. M. E. Bosley and L. J. Kane. 1,616,884;
Game device. M. E. Bosley and L. J. Kane. 1,616,884;
Game device. M. E. Bosley and L. J. Kane. 1,616,884;
Game device. M. E. Bosley and L. J. Kane. 1,650,135;
Game device. Pin-ball. F. A. Rockwell. 1,647,583;
Game device. Pin-ball. F. A. Rockwell. 1,647,583;
Game device. D. W. Smith. 1,613,204; Jan. 4.
Game device. J. Stierl. 1,633,634; July 5.
Game device. J. Stierl. 1,633,634; July 5.
Game device. Prize. S. Weidenfeld. 1,625,922; Apr. 26.
Game, Educational. J. A. Harrison and G. R. Wylie.
Game, Educational. J. A. Harrison and G. R. Wylie.
Game, Educational. G. R. Wylie and J. A. Harrison.
1,617,362; Pcb. 15.
Game, Educational. G. R. W. Ziegler, 1,635,734-5, July 12.
Game, Educational. Gr. W. Ziegler, 1,635,734-5, July 12.
Game, Educational. Gr. R. F. Sergel and L. H. Meyers.
Game, Educational. Gr. R. F. Sergel and L. H. Meyers.
Game, Edicational ard. R. F. Sergel and L. H. Meyers.
Game, Electric. L. E. Meade. 1,648,956; Nov. 15.
Game, Edicational ard. R. F. Sergel and L. H. Meyers.
Game, Electric. L. E. Meade. 1,648,956; Nov. 15.
Game, Electric. D. S. Littleford, Jr. 1,637,734; July 2.
Game, Indoor football. L. P. Thornton. 1,615,491;
Jan. 25.
Game, Japanese peanut ping-pong. A. T. Hayssbl.
1,660,218; July 5.
Game Mechanical Seeball. J. Bamber and J. I. Mundell.
1,630,215; Nov. 22.
Game of skill. J. H. Myre. 1,644,890; Oct. 11.
Game mechanism. Slide. J. H. Myre. 1,644,890; Oct. 11.
Game mechanism. Slide. J. H. Myre. 1,644,890; Oct. 11.
Game of skill. J. C. W. C. Campbell. 1,634,451; July 5.
Game of skill. J. C. W. C. Campbell. 1,634,51; July 8.
Game projectile. W. C. Campbell. 1,634,451; July 8.
Game projectile. W. C. Campbell. 1,634,451; July 6.
Game france. E. S. Neuzil. 1,639,893-4; Aug. 30.
Game france. E. E. Neuzil. 1,632,671; Dec. 13.
Game france. R. F. Hoskin. 1,632,671; Dec. 13.
Game table. E. F. Hoskin. 1,632,671; Dec. 13.
Game tabl

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Garage. M. C. Tunison. 1,614,905; Jan. 18.
Garage. W. F. Watson. 1,630,553; May 31.
Garage dor, Automatically-operated. D. Szalla. 1,624,814;
Apr. 12.
Apr. 12.
Garage structure. R. MacDonald, Jr. 1,638,230; Aug. 10.
Garage structure. R. Ivin. 1,843,948; Oct. 4.
Garage turntable. H. Willbanks. 1,647,978; Nov. 1.
Garbage and refuse, collection, incineration, vacuum cleaning. and ventilation system. J. B. Harris.
1,048,846; Nov. 8; W. Oke. 1,613,621; Jan. 11.
Garbage can, Sanitary. O. F. Radcliffe. 1,637,656; Aug. 2.
   Aug. 2.
Garbage can, Sanitary. A. Turnbull. 1.622.853; Mar. 29.
Garbage container. J. L. Booth. 1,613.690; Jan. 11.
Garbage container, Sanitary. A. W. Nelson. 1,651,220;
Nov. 29.
Garbage receptacle. B. W. Reynolds. 1,612,986; Jan. 4.
Garbage reduction. R. D. MacLaurin and C. C. Smith.
1,626,853; May 3.
Garden-hose supporter. B. C. Hamilton. 1,637,523;
Aug. 2.
 Apr. 5.

Garment, Combination. E. M. Dewey.

Nov. 8.
                                                                                                                                                                                                                                                  1,648,580;
      Garment construction. N. Zuck. 1,620.853; Mar. 15. Garment conveyer. L. B. H. and W. L. Bixler. 1,645,315; Oct. 11.
    Oct. 11. Garment-cutting device. G. R. Mather. 1,642,964; Sept. 20. Garment fastener. I. C. Fife. 1,643,883; Sept. 27. Garment fastener. J. M. and K. R. Mills. 1,612,935; Jon. 1
    Jan. 4.
Garment-fastener means. L. Roseman.
                                                                                                                                                                                                                                                  1.644.357:
Garment for bables, Creeping. A. F. Jagoe. 1,618,012; Feb. 15.
Garment hanger. E. Fischer. 1,615,748; Jan. 25.
Garment hanger. E. Fischer. 1,621,160; Mar. 15.
Garment hanger. H. Gibson. 1,638,844; Aug. 16.
Garment hanger. H. Gibson. 1,638,844; Aug. 16.
Garment hanger. H. Kautman. 1,641,893; Sept. 6,1
Garment hanger. H. Kautman. 1,641,883; Sept. 6,1
Garment hanger. H. Miller. 1,652,870; Dec. 13.
Garment hanger. E. M. Miller. 1,652,870; Dec. 13.
Garment hanger. E. M. Miller. 1,652,870; Dec. 13.
Garment hanger. H. Smith. 1,619,992; Mar. 8.
Garment hanger. H. Smith. 1,619,992; Mar. 8.
Garment hanger. Locked safety. B. Welss. 1,636,264; July 19.
Garment hanger or the like, Support for. L. Jonnes. 1,628,623; May 10.
Garment-hanger retainer. J. Ritter, jr., and M. Rasmus-Garment, Hanger below. J. Garment hanger. 1,622,641; Dec. 13.
Garment holder and protector. R. W. Dawn. 1,618,066; Feb. 15.
Garment, Nether. A. M. Schneider. 1,633,610; June 28.
Sept. 20.
Garment pattern. A. C. Goosman. 1,618,874; Feb. 22.
Garment pattern. A. C. Goosman. 1,618,874; Feb. 22.
Garment press. F. Balzer. 1,624,726; Apr. 19.
Garment press. W. H. Dorsey. 1,640,751; Aug. 30.
Garment press. F. Geldhof. 1,624,726; Apr. 12.
Garment press. F. Geldhof. 1,624,726; Apr. 12.
Garment press. F. W. Lindemann. 1,620,366; Mar. 8.
      Garment for babies, Creeping. A. F. Jagoe. 1,618,012;
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Garment press. J. H. Taylor and J. P. Singiser. 1,639,353; Aug. 16. Garment press. C. E. Warcam. 1,637,598; Aug. 2. Garment press, Air-cooling. G. A. Braun. 1,647,769; Nov. 1.
Garment press, Electric. J. C. Ledbetter. 1,644,920;
Oct. 11.
County Press Electric. J. C. Ledbetter. 1,654,332; Oct. 11.

Garment press, Electric. J. C. Ledbetter. 1,654,332;
Dec. 27.

Garment presser. O. L. Lance. 1,821,116; Mar. 15.

Garment presser and creaser. V. A. Stevens. 1,629,230;
May 17.

Garment-pressing machine. F. E. Baker and W. L.

Taylor. 1,641,131; Aug. 30.

Garment protective. C. H. Davis and H. W. Lueck.

Garment protective. D. and E. L. Lavkoff. 1,849,077. Garment, Profective C. H. Davis and H. W. Luck. 1,842,677; Sept. 20.

Garment protector. D. and E. J. Levkoff. 1,643,077; Sept. 20.

Garment protector. W. D. Schilke. 1,628,433; May 10.

Garment, Reducing. B. G. Work and L. N. Slade.

Garment, Reducing. B. G. Work and L. N. Slade.

Garment retainer. M. Rasmussen. 1,653,658; Dec. 27.

Garment retainer. A. Walsman. 1,626,218; Apr. 20.

Garment retainer. A. Walsman. 1,626,218; Apr. 20.

Garment retainer. A. Walsman. 1,626,218; Apr. 20.

Garment sleeve with detachable and reversible cuff.

Target and the state of the state o removing. Manufacturing. S. Dansell, Sept. 27. Garments, Shoulder strap for ladies'. M. B. Laird. 1,616,267; Feb. 1. Garments, Varying the size of, M. Paley. 1,642,627; Garme "1,616,267; Feb. 1.

Garments, Varying the size of. M. Paley. 1,642,627; Sept. 13.

Garmett, Varying the size of. M. Paley. 1,642,627; Sept. 13.

Garnett machine, T. W. Allen. 1,630,158; May 24.

Garter, R. F. Bartel. 1,634,163; Dune 20.

Garter, M. M. Ben. 1,634,163; June 2.

Garter, C. Glovacki. 1,631,261; June 7.

Garter, C. Glovacki. 1,631,261; June 7.

Garter, G. H. Muar. Des. 71,846; Jan. 11.

Garter, C. B. Namiot. 1,636,107; July 19.

Garter, W. R. Smith. 1,643,183; Sept. 20.

Garter, J. R. Sarbuck. 1,636,720; July 26.

Garter, J. M. Scheinberg. 1,636,720; July 26. Garter inicid. Z. J. Kegl. 1.642 030; Sept. 13.

Man. 29.
Gas.-absorption apparatus. M. Mauran. 1,619,430;
Man. 29.
Gas. Activation by means of hydrogen-free carbon-bearing.
J. W. Marden, T. P. Thomas, and J. E. Conley.
1,622,635; May 3.
Gas-analysis apparatus, K. L. Tate. 1,633,352; June 21.
Gas analyzing apparatus, Continuously-operating. O.
Rodhe. 1,644,951; Oct. 1,634,634; Oct. P. Wolff.
Gas and air or oxygen for combustion, Delivering a mixture of, G. Keith, Rel6,796; Nov. 22.
Gas and apparatus therefor, Removal of sulphureted hydrogen from. E. W. Smith and T. C. Finlayson.
1,622,477; May 10.
Gas and coal gas, Making mixed water. W. D. Wilcox.
1,652,386; Dec. 13.
Gas and contact apparatus, F. H. Wagner.
Gas and liquids storing device. F. G. Keyes. 1,622,523;
Gas and liquids storing device. and liquids storing device. F. G. Keyes. 1,622,523; Mar. 1.

Gas and oil separator. F. W. Harris. 1.620,096; Mar. 8.

Gas and oil separator. G. A. and G. Overstrom.

1.632,919; June 21.

Gas and oil separator. G. A. and G. Overstrom.

Gas apparator. G. O. Curme, jr., and H. E. Thompson.

1.638,434; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.638,434; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.635,620; July 12.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.635,620; July 12.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,620; July 12.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,620; July 12.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,620; July 12.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.632,943; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.632,943; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.632,943; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.632,943; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.635,620; July 12.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,743; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.632,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.632,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.636,843; Aug. 9.

Gas. Apparatus. G. O. Curme, jr., and H. E. Thompson.

1.6 fein. Some Gas appliances, Strey.

Oct. 18.
Gas at Januares, Variety of Gas appliances, Carterian Gas at a known rate, Measuring and deliverage Gas at a known rate, Measuring and deliverage Gas burner. W. B. Bastlan, 1.622.820; Mar. 29.
Gas burner. W. A. Beckett. 1,644.505; Oct. 4.
Gas burner. C. C. Chappelle. 1,620.071; Mar. 8.
Gas burner. H. Holleman. 1,641.838, Sept. 6.
Gas burner. H. Holleman. 1,641.838, Sept. 6.
Gas burner. E. C. Hughs.
Gas burner. W. W. Kennedy. 1,647.137; Nov. 1.
Gas burner. W. Kennedy. 1,647.137; Nov. 1.
Gas burner. H. E. Kerr. 1,613,611; Jan. 11. Measuring and delivering. C. V.

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Gas burner. G. B. Killam. 1,616,807; Feb. 8.
Gas burner. H. W. O'Dowd. 1,649,972; Nov. 22.
Gas burner. H. W. O'Dowd. 1,649,972; Nov. 22.
Gas burner. M. J. Robert. 1,622,972; Mar. 29.
Gas burner. M. J. Robert. 1,622,972; Mar. 29.
Gas burner. C. W. Sievert. 1,648,329; Nov. 8.
Gas burner. A. F. Thompson. 1,637,014; July 26.
Gas burner. A. F. Thompson. 1,637,014; July 26.
Gas burner. A. R. Wilson. 1,630,378; May 12.
Gas burner. C. W. Sievert. 1,648,329; Nov. 8.
Gas burner. C. F. Heckel and E. Messer.
Gas burner control. E. H. Ryon. 1,629,228; May 17.
Gas-burner-control mechanism. R. T. Windt. 1,625,010;
Apr. 19.
 Gas-burner-control mechanism. R. T. Windt. 1,622,010; Apr. 19.
Gas-burner deflector. S. A. D. Cox. 1,618,269; Feb. 22
Gas-burners, Automatic cut-off for. E. Kauffeld.
1,628,049; May 10.
Gas-burners, Automatic safety appliance for. M. B.
Matson. 1,640,045; Aug. 23.
Gas-burners, Water heater for. C. J. Aldradge.
1,612,909; Jan. 4.
Gas-cock, Automatic safety. J. Balthasar and H. Gentz.
1,642,007; Sept. 13.
Gas-cocks, Safety plug-lock for. J. H. George. 1,644,578:
Oct. 4.
Government of the company of
 Oct. 4.
Gas-combustion apparatus, Safety device for. L. Hill.
1,616.495; Feb. 8.
Gas compressor. C. W. Vollmann. 1,632,155; June 14.
Gas compressor, Fluid. J. Frankenberg. 1,629,495;
                     May 24.
   Gas compressor, High-pressure. E. Prestage. 1,614,851;
Jan. 18.
   Gas compressors, Valve for. C. W. Vollmann. 1,627,680;
May 10.
 May 10.

Gas containing carbon monoxide, Process and apparatus for treatment of. W. H. Kniskern. 1,614,072; Jan. 11.

Gas control. D. H. Shogran. 1,628,337; May 10.

Gas-control appliance. J. W. Brown. 1,624,132; Apr. 12.

Gas-control cock. H. B. Hatton, jr. 1,639,431; Aug. 16.

Gas cut-off. F. E. Ereb. 1,636,986; July 19.

Gas cut-off, Automatic. R. R. Hardway. 1,617,156; Feb. 8.
   Gas cut-off, Compensating. L. Hill. 1,626,609; May 3. Gas device or cock, Safety. R. L. Uhl. 1,633,504; June 21.
   June 21.
Gas distribution. R. G. Griswold. 1,645,137; Or
Gas engine. J. Picketts. 1,643,584; Sept. 27.
Gas engine. B. C. Stickney. 1,641,05; Aug. 30,
Gas engine, Two-cycle. B. F. Augustine. 1,
Gas engine, Two-cycle, B. F. Augustine. 1,623,296; A cogine, Two-cycle, B. F. Augustine. 1,623,296; A cogine, Two-cycle, B. F. Augustine. 1,623,296; Gas feed, Automatic, H. W. Hart, 1,619,931; Mar. 8, Gas feed, Augustine. 1,639,780; Aug. 23, Gas for cutting and welding purposes. J. R. Rose. 1,628,066; May 10. Gas from a gas supply to a gas receiver, Device for directing the flow of. J. F. Key. 1,652,675; Dec. 13, Gas from condensers. Removing foreign. G. Hilger. 1,636,512; July 19. Gas from petroleum oil. Manufacturing. E. M. Clark. N. E. Loomis, and F. A. Howard. 1,651,115; Nov. 29. Gas from sulphite digesters, Cooling and utilizing the heat content of relief. G. A. Richter. 1,616,703; Feb. 8. Gas-generating apparatus. L. P. Sebille. 1,629,125;
                                                                                                                                                                                                                                                                                                                                 1,623,296;
 Gas-generating apparatus. L. P. Sebille. 1,629,125; May 17. Gas-generating apparatus. H. F. Smith. 1,619,441; Mar. 1.
 Mar. 1.

Gas-generating machines, Ascertaining, increasing, and maintaining the efficiency of water- M. E. Benesh. 1,622,864; Mar. 15.

Gas generator. J. J. Georgi. 1,632,285; June 14.

Gas generator. C. Owens. 1,613,123; Jan. 44.

Gas generator. E. E. Percey. 1,624,491; Apr. 12.

Gas generators. In the furnace, Soft-scraping hearth Gas generators. Left 71, Oct. 18.

Gas generators. Carbide indicator for. O. Kass. 1,644,662; Oct. 4.
Apr. 5.
Gas heater.
                                                                                         E. Pepin. 1,640.248; Aug. 23
C.P. Price. 1,528.427; May 10.
W. L. Sharp. Des. 72.273—30 May 24.
W. L. Sharp. Des. 72.273—30 May 24.
S. W. L. Sharp. Des. 73.346; Aug. 23.
W. L. Sharp. Des. 73.346; Aug. 23.
V. L. Sharp. Des. 73.58; Oct. 4.
J. B. Slattery. Des. 72.288; Mar. 22.
A. Steffen. Des. 74.778; Dec. 13.
C. J. Waltemade. 1,648.035; Nov. 8.
     Gas heater.
   Gas heater
 Gas-heater grill.
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Gas heater, Mounted. N. Benenati. 1,632,587; June 14. Gas heater, Radiant. A. L. Spangler. Des. 73,543; Sept. 27. as heaters, Burner for radiant. H. Kielberg. 1,643,607; Sept. 27. Gas holder. Sept. 24.
Gas holder. G. T. Horton. 1,621,929; Mar. 22.
Gas holder. G. T. Horton. 1,621,934; Mar. 22.
Gas holder. G. T. Horton. 1,651,894; Mar. 22.
Gas holder. A. T. Williams. 1,630,647; May 31.
Gas holders. Crown support for. A. W. Seels. 1,628,002; das holder. A. H. T. Williams. 1,630,647; May 31, 638 holders, Crown support for. A. W. Seels. 1,628,002; May 10. 6as-igniting device. S. J. Woods. 1,035,104; July 5. Gas illuminating devices, Safety apparatus for. L. Hill. L616,493; Feb. S. Automatic shut-off device for. W. G. Gas in stem locomotives, Method of and apparatus for producing and burning. F. N. Poignand. 1,618,136; Feb. 15. Gas jet and igniting same. A. V. Conover. 1,622,464; Apr. 5. Gas-kinding burner. G. Hammer. 1,627,362; May 3. Gas-kinding burner. G. Hammer. 1,627,369; Mar. 22. Gas-kinding burner. G. Hammer. 1,627,502; Moy. 55. Gas-loc coupling. H. F. Dyck. 1,648,673; Nov. 55. Gas-main stopper. P. Goodman. 1,627,502; May 3. Gas, Making carbureted water. A. C. Klein. 1,630,300-1; May 31. Gas, Making carbureted water. A. E. Shippel. 1,630,316; Gas, Making carbureted water. A. E. Shippel. 1,630,316; May 31.

Gas, Making combustible. W. D. Wilcox. 1,624,644; Apr. 12.

Gas mantle and making the same. C. E. Bliss and F. A. Gas, Making comoustune. W. D. Wilcox. 1,024,042; Apr. 12.
Gas mantle and making the same. C. E. Bliss and F. Wegener. 1,638,682; Aug. 23.
Gas manufacturer. W. S. Yard and E. N. Percy. 1,649,640; Nov. 15.
Gas meter. G. K. V. Johanson. Rei6,642; May 31.
Gassmeter attachment. C. B. Gamble. 1,641,079; Aug. 30.

Gas meter, Dry. S. Simpson. 1,642,899; Sept. 20.
Gas-meter mechanism. W. A. Gaugh. 1,629,031; May 17.
Gas meters inclosing a vertically-slidable body, Scaling means for use in. K. Jagschitz. 1,636,963; July 26.
Gas meters, Resetting device for. E. A. Kerstein. 1,627,183; May 3.
Gas, Method and apparatus for the compression or expansion of a. E. J. Creel. 1,641,121; Aug. 30.
Gas, Method and apparatus for the storage and the transportation of. P. N. Lucas-Girardville. 1,651,521; Dec. 6. 30 Gas, Method and apparatus for the storage and the transporation of. P. N. Lucas-Girardville. 1,651,521; Dec. 6.
Gas, Method of and apparatus for quantitative determination of. R. P. Mase. 1,634,331; July 5.
Gas mixer. F. W. Gault, jr. 1,613,388; Jan. 4.
Gas mixer. F. W. Gault, jr. 2,613,388; Jan. 4.
Gas mixer. S. Ostroff. 1,626,423; App. 26.
Gas motor. F. J. Wingler. 1,659,812; May. 29.
Gas of uniform sulphur-dioxid content. Process and apparatus for producing a. H. Howard. 1,650,358; Nov. 22.
Gas. oil. and sand separator. T. H. Chandler and W. H. Stignil. 1,649,870; Nov. 15.
Gas. pressure. Device for regulating. G. Wünsch. 1,620,707; Mar. 15.
Gas-pressure regulator. C. V. Ewan. 1,648,387; Nov. 8.
Gas-pressure regulator. C. V. Ewan. 1,684,387; Nov. 8.
Gas-pressure regulator. H. Rosenthal. 1,630,408; May 31. May 21.

Gas-pressure regulator. J. M. Wilkins and L. N. Rohr. 1.618,396; Feb. 22.
Gas producer. W. Climie. 1.650,187-8; Nov. 22.
Gas producer. A. C. Treviño. 1,624,694; Apr. 12.
Gas producer and boiler, Combined. V. D. McDonnell.
Gas princing.
Gas purification. F. W. Sperr, jr., and D. L. Jacobson. 1.652,393; Dec. 27.
Gas purification. F. W. Sperr, jr., and D. L. Jacobson. 1.653,933; Dec. 27.
Gas purifier. C. G. Hawley. 1,612,812; Jan. 4.
Gas, Purifying. W. H. Fulweller and C. W. Jordan. 1.632,251; June 14.
Gas-purifying apparatus. T. W. Stone. 1,632,251; Gas-purifying apparatus. C. I. Tenney and P. W. Thawer. Gas-purifying apparatus. C. I. Tenney and P. W. Thayer. 1.632.457: June 14. 1,632,497; June 14.
Gas, Purifying illuminating. E. J. Brady. 1,626,664;
May 3.
Gas regulator F. Gaunt, M. B. Reynolds, and R. C.
Hughes, 1,626,581; Apr. 26.
Gas safety pinte. H. F. Prefontaine. 1,623,812; Apr. 5.
Gas scrubher. E. Anderson. 1,623,262; June 14.
Gas-separating apparatus. M. M. Reynolds. 1,623,636; Apr. 5.

Gas separation. H. Dumars and W. S. Bowen. 1,622,134;
Mar. 22.
Gas stove and range, Combined. S. H. Hobson. Des.
72,094; Mar. 1.
Gas supply for certain purposes, Apparatus for controlling
and regulating. T. Clarke. 1,653,386; Dec. 27.
1,634,775; July 5.
Gas tip and producing carbon black. C. A. Barbour, fr.
1,635,736; Dec. 20.
Gas treating articles, Apparatus for. A. H. Warth.
1,641,712; Seqt. 6.
Gas, Use of incapacitating. R. B. Lawrence. 1,614,739;
Jan. 19.

Gas washer. K. Matheus. 1,617,534; Feb. 15. Gas-washing system. F. H. Willcox. 1,632,672; June 14. Gaseous currents, Silencer for. A. H. Green. 1,627,324; May 3. Gaseous matter in human bodies, Process of and ap-

Gas-washler, K. Matheus. 1,617,524; Feb. 15.
Gas-washing system. F. H. Willicox. 1,622,572; June 14.
Gaseous currents, Silencer for. A. H. Green. 1,627,324; May 3.
Gaseous matter in human bodies, Process of and apparatus for ascertaining the change. H. W. Knipping. 16.
Gaseous mediums with liquids, Treating. E. M. Salerni. 1,634,698; Oct. 4.
Gaseous mixtures, Apparatus for ascertaining the composition of. H. Heinicke. 1,648,247; Oct. 18.
Gaseous mixtures, Apparatus for separating the constitu-Gaseous mixtures, Device for the simultaneous obtainment of the compression and the circulation of. G. L. B. Patart. 1,633,998; June 28.
Gaseous mixtures, Device for the simultaneous obtainment of the compression and the circulation of. G. L. B. Patart. 1,633,998; June 28.
Gaseous mixtures, Separating. J. Le Rouge. 1,626,345; Apr. 26.
Gaseous mixtures, Separating. J. Le Rouge. 1,626,345; Apr. 26.
Gaseous mixtures, Separating. J. Le Rouge. 1,626,345; Apr. 26.
Gaseous mixtures, Separating. J. Le Rouge. 1,626,345; Apr. 26.
Gaseous mixtures, Separating. J. Le Rouge. 1,626,345; Apr. 26.
Gaseous mixtures, Separating. J. Le Rouge. 1,626,345; Apr. 26.
Gaseous mixtures, Separating. J. Le Rouge. 1,626,345; Apr. 26.
Gaseous mixtures, Separating of the constituents of. G. Claude. 1,620,192; Mar. 8.
Gases and liquids from pressure systems, Apparatus for drawing off. L. C. Huff. 1,662,171; Dec. 13.
Gases, Apparatus and the concentration of. S. Ruben. 1,627,204; May 3.
Gases, Apparatus for analyzing. J. Aliberg and P. J. Gases, Apparatus for collenging, or separating. G. J. Urici. 1,637,597; Aug. 2.
Gases, Apparatus for collenging, or separating. Gases, Device for proportionate feeding of. F. Mangamell. Gases, fumes, and the like, Process and apparatus for. G. S. Purtyman. 1,652,956; Dec. 13.
Gases, Device for proportionate feeding of. F. Mangamell.

Casket Preserving. A. Yancey. 1.644.457; Oct. 4.
Gasket Sealing. T. J. Snyder. 1.625.963; Apr. 26.
Gasket Sealing. T. J. Snyder. 1.625.963; Apr. 26.
Gasket-seating machine. W. S. Edwards. 1.625.800;
Apr. 26.
Gaskets fabric for. E. J. Trainer. 1.646.466; Oct. 25.
Gaskets for internal-combustion engines, Gas-mixing.
C. M. Tannill. 1.629.410; Mar. 8.
Gaster, Medical Computatus for making. J. KinderGasoline and hydrocarbons, Process and material for
treating. A. H. Ackerman. 1.653.032; Dec. 20.
Gasoline, Apparatus for reclaiming used. W. C. Glover.
1.638.373; Aug. 16.
Gasoline-distinger. C. L. Ostrander. 1.646.102; Oct. 18.
Gasoline-distinger. G. L. Ostrander. 1.646.102; Oct. 18.
Gasoline-distinger. S. P. W. Fenton. 1,638,687;
Aug. 9.
Gasoline-dispensing apparatus. P. W. Fenton. 1,638,687;
Aug. 9.

Gasoline-dispensing device. G. A. Schwenzer and H. L. Stackhouse. 1,653,231; Dec. 20. Gasoline-dispensing device. W. E. Splain and H. L. Stackhouse. 1,636,652; July 19, Gasoline-dispensing stand. N. Henningsen. 1,634,541;

Gasoline-dispensing system. O. T. Graham. 1,633,483; June 21, Gasoline-dispensing system. C. Schock. 1,633,458;

June 21.

Gasoline-dispensing tank. M. G. Volcker. 1,642,634;
Sept. 13.

Gasoline engine. F. Hoffner. 1.626,196; Apr. 26.
Gasoline engine. L. J. Root. 1.617,607; Feb. 15.
Gasoline filling apparatus. E. L. Jenkinson. 1.650,837;

Gasoline digine.

Gasoline diling apparatus. E. L. Jenkinson. 1.650,837;
Nov. 29.

Gasoline from mineral oil, Apparatus for completely separating. A. E. Pew, jr., and H. Thomas. 1,645,969;
Oct. 18.

Gasoline from underground storage tanks, System for dispensing. C. Schock. 1,633,459; June 21.
Gasoline gauge. A. C. Alexander and O. K. Hagen. 1,653,688; Dec. 27.
Gasoline gauge. H. M. Cooper. 1,629,994; May 24.
Gasoline gauge. F. A. and J. F. Groves. 1,639,341; Aug. 16.

Aug. 16.
Gasoline gauge. H. Mossbach. 1,635,382; July 12.
Gasoline gauge. J. D. Reekie. 1,621,274; Mar. 15.
Gasoline gauge. J. D. Reekie. 1,621,274; Mar. 15.
June 28.
Gasoline, Manufacturing. H. Thomas. 1,624,692; Apr. 12.
Gasoline, Method of and apparatus for making. F. E.
Gilmore. 1,649,345; Nov. 15.
May 10.
May 10

Gasoline or the like, Can for. H. M. Roussle. 1,627,807; May 10.

Gasoline, Producing. H. B. Setzler. 1,629,810; May 24.

Gasoline-pump casing. E. E. Elekmeyer. Des. 72,701; May 24.

Gasoline-pumps, Audible indicator and meter for. R. E. McLain and O. D. Daniel. 1,647,806; Nov. 1.

Gasoline receptacle. A. M. Goodykoontz. 1,623,107; ADD. 6, Recovering. F. E. Hosmer. 1,613,108; Jan. 4.

Gasoline, Recovery of. E. C. Herthel and T. de C. Tifft. 1,643,585; Nov. 8.

Gasoline-reserve control. C. O. Fisher. 1,613,028; Jan. 4.

Jan. 4. Gasoline station, Home. E. E. Hassler. 1,645,594; Oct. 18.

Oct. 18.
Gasoline tank. W. B. Stout. 1,616,008
Gasoline tank and filter, Reserve.
1,617,868; Feb. 15.
Gasoline-tank cap lock. C. A. Robe
July 26. 1,616,008; Feb. 1. teserve-. J. A. Skaggs. lock. C. A. Roberts. 1,637,279;

July 25, tank, Unleakable and unflammable. M. de asoline act. 1,516,116; Peb. 1.
Gasoline, Treatment of. M. W. Harriger and W. J. Baker. 1,619,206; Mar. 1.
Gasometers, Coating. R. Mezger. 1,630,202; May 24.
Gasometers, Sealing material for. R. Mezger. 1,641,089;

Aug. 30. Gastroscope. G. Loeck. 1,632,612; June 14.

Gastroscope. Gate: See—
Ash gate.
Automatic gate.
Automatic regulating gate.
Automobile operating gate.
Coal-clute gate.
Dirch gate.
Dirch gate.
Dirch gate. Drive gate. Safety gate. Elevator gate. Traffic gate. End gate. Traffic gate. Farm gate. Vehicle end Farm gate. Water gate.

Hydraulic gate. Railway-crossing gate. Railway gate. Regulating gate. Return gate.
Return gate.
Head gate.
Safety gate.
Traffic gate.
Vehicle end gate.
Vehicle-operated gate.

Faird gate.

Fluid - pressure - operated Water gate.

Gate gate.

Gate gate.

Gate J. A. Dodd. 1,623,894; July 12.

Gate. J. A. Dodd. 1,623,894; July 12.

Gate. J. A. Dodd. 1,623,894; July 12.

Gate. J. S. Fitch and J. F. Tobin. 1,642,876; Sept. 20.

Gate. J. S. Fitch and J. F. Tobin. 1,642,876; Sept. 27.

Gate. J. S. Fitch and J. F. Tobin. 1,643,297; Sept. 27.

Gate. A. D. Hagerman. 1,619,819; Mar. 8.

Gate. G. M. Horner. 1,624,160; Apr. 12.

Gate. Gate. G. M. Horner. 1,624,160; Apr. 12.

Gate. A. D. Kaiser. 1,630,704; May 31.

Gate. L. Liepoid. 1,635,571; July 5; Jan. 18.

Gate. J. W. Matthews. 1,615,095; Jan. 18.

Gate. J. W. Matthews. 1,615,095; Jan. 18.

Gate. L. B. Norris. 1,649,849; Nov. 22.

Gate. R. A. Sallee. 1,640,135; Aug. 23.

Gate. R. A. Sallee. 1,640,135; Aug. 23.

Gate. R. A. Sallee. 1,625,703; May 17.

Gate. C. G. White. 1,625,703; May 17.

Gate. C. G. White. 1,625,703; May 17.

Gate Construction. W. Hodde.

Gate for skip hoists, Pivoted. C. P. Ross. 1,653,589;

Dec. 20.

Gate-latching mechanism. T. J. Moore. 1,650,146;

Gate-latching mechanism. T. J. Moore.

Nov. 22.
Gate lock. R. D. Stewart. 1,642,976; Sept. 20.
Gate lock. Foldable. J. Kaufman. 1,651,894; Dec. 6.
Gate mechanism. M. Kushlan and H. E. Young.
Gate mechanism for freight elevator hatchways. J.
Pedersen. 1,627,994; May 10.
Gate opening and closing device, Automatic. L. Hanford. 1,664,461; Dec. 27.
Gate of door operating mechanism. T. E. Robinson.
Gate of door operating mechanism. T. E. Robinson.

May 10. Gate or door operating mechanism. T. E. Robinson. 1.632.506; June 14. Gate or valve operating system. G. R. Steere. 1,619,003; Mar. 1.

Gate propeller, Automatic. J. R. Jackson. 1,638,202; Aug. 9. Gate-supporting means. J. M. Thompson. 1,616.558; Feb. 8.

Gates, Automatic latch mechanism for. E. A. Bigler. 1.642.534; Sept. 13. Gates, doors and the like, Mechanism for opening and closing. A. D. Thomas. 1,628,443; May 10.

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Gaies, Latching means for. F. Schiey. 1,020,1027, Mar. 8.
Gates, Scaling device for hydraulic. E. L. Broome. 1,648,533; Nov. 8.
Gauge: See-
Air gauge.
Air gauge.
Band-tying gauge.
Breaker-arm gauge.
Breaker-arm gauge,
Bricklayer's gauge.
Butt cauge.
Butt cauge.
Butt cauge.
Rafet gauge.
Rafet gauge.
Rafet gauge.
     Gates.
                                                                                   Latching means for. F. Schley. 1,620,134;
                       Bricklayer's gauge
Butt gauge.
Caliper gauge.
Carpenter's gauge.
Clearance gauge.
                                                                                                                                                                                                                                                                                                                 Rafter gauge
Reflection ga
                                                                                                                                                                                                                                                                                                                                                                                                                gauge.
                                                                                                                                                                                                                                                                                                                 Retard gauge.

Retard gauge.

Ring gauge.

Safety-appliance gauge.

Saw gauge.
                       Clearance gauge.
Cloth gauge.
Compound gauge.
Cylinder gauge.
Dial gauge.
Diamond gauge.
Dimension gauge.
Door-butt gauge.
Deaft gauge.
                                                                                                                                                                                                                                                                                                                 Saw-tooth gauge.
                                                                                                                                                                                                                                                                                                                 Sawyer's gauge.
Shingling gauge.
                                                                                                                                                                                                                                                                                                                 Skirt gauge.
Skirt-length gauge.
                         Draft gauge.
Dynamometer gauge.
                                                                                                                                                                                                                                                                                                                 Strain gauge.
Strand gauge.
                                                                                                                                                                                                                                                                                                                 Strand gauge.
Sugar gauge.
Tank gauge.
Tappet clearance gauge.
Terminal difference gauge.
                            Float gauge.
Flow-registering gauge.
                       Flow-registering gauge,
Gasoline gauge,
Gear-tooth gauge,
Hinge-recess gauge,
Limit gauge,
Limit-pin gauge,
Liquid gauge,
Liquid euge,
Liquid-evel gauge,
Locomotive-feed-pump
                    Cear-tooth gauge.
Hinge-recess gauge.
Limit pange.
Liquid-level gauge.
Liquid-level gauge.
Locomotive-feed-pump Yearum gauge.
Lumber gauge.
Lumber gauge.
Measuring gauge.
Measuring gauge.
Measuring gauge.
Measuring fauge.
Measu
  Gauge. A. Gauge. J.
        Gauge.
Gauge.
        Gauge.
Gauge. H. J. Newell and F. V. Fermoil. 1,648,500; Nov. 8.

Gauge. W. H. Reiman. 1,650,653; Nov. 20.

Gauge. H. A. Schwarz, ir. L. 13,3 G78; Jan. 11.

Gauge. D. A. Schwarz, ir. L. 13,3 G78; Jan. 11.

Gauge. D. A. Schwarz, ir. L. 13,3 G78; Jan. 12.

Gauge. E. N. Stickler. 1,647,552; Nov. 1.

Gauge. J. C. Tapp. 1,623,643; Apr. 5.

Gauge. J. C. Tapp. 1,623,643; Apr. 5.

Gauge. J. W. Thompson. 1,654,102; Dec. 27.

Gauge. J. Wahl and O. Melzer. 1,053,145; June 21.

Gauge. J. W. Thompson. 1,654,102; Dec. 27.

Gauge. J. W. W. Tripp. 1,632,637; June 14.

Gauge. J. C. Wheelock. 1,635,2821; Aug. 10.

Gauge and holder, Thread. J. Bath. 1,654,293; Dec. 27.

Gauge cock. J. W. Grantland. 1,632,403; June 14.

Gauge cock. L. V. Stone. 1,616,287; Feb. 1.

Gauge device. H. O. McMillan. Reif6,529; Jan. 11.

Gauge device. H. O. McMillan. Reif6,529; Jan. 11.

Gauge cock. L. V. Stone. 1,616,287; Feb. 1.

1,632,632; Apr. 5.

Gauge for paper-mill jordans, Pressure. W. P. Feeney. 1,655,038; Nov. 29.

Gauge-glass and feed-glass protection. J. Ludwin and A. Howard. 1,623,481; May 17.

Gauge of N. F. Sallsigh. 1,631,769; June 7.
                         Nov
Nov. 8.

Gauge rod. N. E. Salsich. 1,631.769; June 7.

Gauge-rod wiper, Oil.- H. J. Sevigny. 1,653,315; Dec. 20.

Gauge stabilizer. Primary. H. W. Price and J. B.

Meriam. 1,622.843; Mar. 29. 21.

Meriam. 1,622.843; Mar. 29. 1.640,600; Aug. 30.

Gauge funing device. Finger. L. C. Bachelder.

1,648.572; Nov. S.

Gauge wheel and colter, Combined. C. G. Strandlund.

1,629.372; May 10.

Gauges, Adapter for water. P. B. Huyette. 1,615.204;

Gauges, Adapter for water. P. B. Huyette. 1,615.204;
  Gauges, Automatic shut-off for water, E. P. Prator, 1,610.828; Mar. 8. Gauges, Fitting for gas-pressure, P. Goodman, 1,643.886; Sept. 27.
  Gaugis or similar articles. Plunger for pressure. P. E. Pulverman. 1,629.887; May 24. Gauging device, Combination. M. M. Johnson. 1,630,299; May 31.
May 31, achine. J. G. Ayers, Jr. 1,617,663; Feb. 15.

Gaugling machine. J. G. Ayers, W. H. Chapman, and M. E. Berlowitz. 1,627,638; May 10.

Caugling machine. J. B. Burton. 1,652,298; Dec. 13.

Gaugling machine. J. B. Burton. 1,652,298; Dec. 13.

Gaugling machine. F. C. Griswold and W. H. Chapman. 1,627,699; May 10.

Cenr. J. O. Bean. 1,648,715; Nov. 8.

Genr. A. E. Norton. 1,647,191; Nov. 1.

Genr. F. Wildhaber. 1,647,191; Nov. 1.

Genr. F. Wildhaber. 1,647,191; Nov. 1.

Genr. F. Wildhaber. 1,647,191; Nov. 1.

Genr. A. E. Norton. 1,647,191; Nov. 1.

Genr. A. E. Norton. 1,647,191; Nov. 1.

Genr. A. E. Norton. 1,647,191; Nov. 1.

Genr. F. Wildhaber. 1,647,191; Nov. 1.

Genr. F. Wildhaber. 1,647,191; Nov. 1.

Genr. A. E. Norton. 1,647,191; Nov. 1.

Genr. F. G. Goodwin. 1,648,191; Nov. 1.

Genr. A. E. Norton. 1,647,191; Nov. 1.

Genr. A. E. Norton. 1,647,191; Nov. 1.

Genr. J. G. Goodwin. 1,648,191; Nov. 1.

Genr. A. G. Goodwin. 1,648,191; Nov. 1.

Genr. A. E. Norton. 1,647,191; Nov. 1.

Genr. J. G. Goodwin. 1,648,191; Nov. 1.

Genr. J. G. Goodwin. 1,648,291; Nov. 1.

Genr. J. G. G. Goodwin. 1,648,291; Nov. 1,648
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Gear and making same, Composite. L. T. Frederick. 1,636,411; July 19.
Gear and making the same, Ring. F. J. Black. 1,632,818; June 21. June 21.

Gear and making the same, Silent. J. R. Gammeter. 1,638,255; Aux. 9.

Gear and means for controlling the same, Variable-speed. Gear L. Chorlon. 1,619,701; Mar. 1.

1,633,052 June 21.

Gear apparatus, Draft. S. Hansson. 1,635,409; July 12.

Gear, Automatic compensating. C. L. Starkey. 1,647,480; Nov. 1.

Gear, Baby-carriage. G. Stinger. 1,546,004. Gear, Baby-carriage, G. Stinson. 1,643,910; Sept. 27. Gear blanks, Forging. C. A. Brauchler. 1,632,533; Genr. Change-speed. H. Austin. 1,639,174; Aug. 16.
Genr. Change-speed. H. Austin. 1,613,174; Aug. 16.
Genr. Change-speed. H. Austin. 1,635,526; July 12.
Genr. Change-speed. C. G. Garrard. 1,613,749; Jan. 11.
Genr. Change-speed. G. A. von Soden-Fraunhofen.
1,639,174; Aug. 16.
Genr. Change-speed. G. A. von Soden-Fraunhofen.
1,639,174; Aug. 16.
Genr. Change-speed. H. Hustin. 1,640,808; Aug. 30. Gear-canaging mechanism. J. L. Holland-Lett., 1,624,234; App. 12. Gear, Combined international states of the control of the co Nov. Nov. 1.
Gear-cutting machines, Tool mechanism for. M. H. Johanson. 1,643.813; Sept. 27.
Bear Comments of the Francisco of the Gear, Doube-reduction. K. Baumann. 1,030,399; Gear, Darit. L. T. Canfield. 1,616,441; Feb. 1, Gear, Draft. E. F. Carry. 1,637,071; July 26. Gear, Draft. W. H. Cotton. 1,614,657; Jan. 18. Gear, Draft. W. H. Cotton. 1,614,829; Apr. 19. Gear, Draft. W. H. Cotton. 1,648,296; Apr. 19. Gear, Draft. L. E. Endisey. 1,627,737; May 3. Gear, Draft. L. E. Endisey. 1,627,737; May 3. Gear, Draft. L. E. Endisey. 1,627,737; May 3. Gear, Draft. W. J. Regan. 1,624,365; Oct. 4. Gear, Draft. W. J. Regan. 1,644,456; Sept. 6. Gear, Draft. W. J. Regan. 1,624,367; Xept. 29. Gear, Draft. T. G. Spipey. 1,650,772; Nov. 29. Gear, Draft. T. G. Spipey. 1,650,772; Nov. 29. Gear, Draft. C. H. Tomlinson. 1,645,408; Oct. 11. Gear, Draft. E. L. Vun Dorn. 1,646,0070; Nov. 20. Gear, Draft. H. E. Vun Dorn. 1,646,0070; Nov. 20. Gear, Draft. H. E. Vun Dorn. 1,647,677; May 10. Gear, Electric switch. E. Waterhouse. 1,643,634; Sept. 2. Sept. Anny 10.

Gent Dictric switch, E. Waterhouse. 1,643,634;

Gent Electric valve-operating. J. L. MacPherson and E. N. Sorensen. 1,618,937; Peb. 22.

Gear, Electrical switch. W. A. Coates and D. R. Davies. 1,638,919; Aug. 16.

Genr, Engine-valve. J. B. Brown. 1,635,172; July 12.

Genr, Engine-valve. J. B. Brown. 1,655,152; Nov. 22.

Genr, Flexible. G. M. Eaton. 1,652,520; Dec. 13.

Genr for airships. H. H. D. Klinker. 1,618,441; Feb. 22.

Genr for airships. Mooring. V. C. Richmond and G. H. Scott. 1,619,680; Mar. 1.

Genr for automobiles and the lke. Change speed. H. won Doenming. 1,635,296; July 12.

Genr for looms, Crank-shaft. W. H. Bahan. 1,616,406; von Doenming. 1.000-200; Vor. V. H. Bahan. 1,616,406; P.C. Gear for looms, Crank-shaft. W. H. Bahan. 1,616,406; P.C. L. V. Templin. 1.651,742; Dec. 6. Geor for rotation in two directions and with direct coupling, neutral position, and brake, Change-speed. H. F. H. Uvrjens. 1,642,346; Sept. 13. Gear, Friction differential. N. Trbojevich. 1,612,954; Jan. 4. Jan. 5. Jan. 5. Jan. 6. Nov. 22.

Gen-generating machine, C. G. Olson, 1.642,554; Sept. 13.

Sept. 14.

Sept. 16.

Sept. 16

Genr key-retaining means, Draft-, K. F. Nystrom. 1,645,51; Oct. 3, Genr, Lever draft. E. C. Washburn. 1,626,258; Apr. 26. Genr, Lever draft. E. C. Washburn. 1,626,258; Apr. 26. Genr lock. L. F. Brown. 1,647,033; Oct. 25. Genr lock, Transmission. F. D. Carpenter. 1,048,754; ov. 8. r mechanism, Reversing. A. Daniel. Gear mechanism, Reversing.

May 10.
Gear mechanism, Reversing. A. E. Rhoades. 1,649,977;
Gear mechanism, Reversing. A. E. Rhoades. 1,649,977; Gear mechanisms, Soundproofing. H. Ford. 1,638,118; Aug. 9.
Gear, Molded, H. C. Bierman, 1.637,331; Aug. 2.
Gear mounting, Self-aligning, R. Chilton, 1,637,806; Gear mounting, Sen-angung, A. Cambon, Aug. 2. Gear, Noiseless. J. M. Taylor. 1,613,489; Jan. 4,627,799; Mar. 1. monthaltering, C. W. and J. C. Rounds. 1,619,799; Mar. 1. monthallic. E. J. Guay and C. W. Mansur. 1,648,422; Oct. 18. Gear-operating device, Valve. M. Birkigt. 1,639,583; Aug. 16. Gear, Planetary. R. Matteucci. 1,648,142; Nov. 8. Gear, Planetary reduction. E. K. Baker. 1,637,847; Aug. 2. ear, Planetary-reduction. E. K. Baker. 1,644.222; Gear, Power reverse. M. H. Roberts. 1,651,8 Gear, Power-transmission. A. H. Munro. Jan. 4. 1,651,838; Gear puller, Clamping, G. M. Brewer, 1,648,106; Nov. 8. July 12.

Gear, Rear alighting. E. H. Van Valkenberg. 1,649,046;
Nov. 15.

Gear, Releasing poppet-valve. R. C. Stevens. 1,618,581;
Jan. 4.

Gear, Reverse. J. T. Dickson. 1,655,262; Dec. 26.

Gear, Reverse. J. T. Dickson. 1,655,262; Dec. 26. Jan. 4.
Gear, Reverse. J. T. Dickson. 1,653,262; Dec. 20.
Gear, Reversing. K. Berger. 1,641,614; Sept. 6.
Gear, Reversing. A. T. Nabstedt. 1,2624,756; Apr. 12.
Gear-roughing machine. J. Edgar. 1,641,666; Sept. 6.
Gent. sectional replacement. A. Kantor. 1,645,550; Gear, Sectional replacement. A. Kantor. 1,548,500; Nov. 8. Gear, Segmental flywheel, J. E. Walker. 1,645,268; Oct. 11. Grar, Self-aligning. P. Herbst. 1,647,177; Nov. 1. Gear set, Transmission. 1. O. Thorley. 1,640,628; Aug. 30. Gear, Slart and detachable. W. H. Schulze. 1,648,200; Aug. 30.

Gear, Shaft and detachable. W. H. Schulze. 1,648;
Nov. 8.

Gear shaper, Spur. M. Maag. 1.645,106; Oct. 11.

Gear shift. B. F. Schmidt. 1,626,975; May 3.

Gear shift. E. R. Springer. 1,615,777; Jan. 25.

Gear-shift-control apparatus. F. A. Fucl. 1,638, 1,638,802: Gear-shift-control apparatus. F. A. Fucl. 1,638,802; Aug. 9.
Gear-shift-lever ball, Self-locking. J. A. Dewire. 1,614,603; Jan. 18.
1,614,603; Jan. 18.
Witte. 1,646,076; Oct. 18.
Gear-shift mechanism. J. S. Alspaugh. 1,643,935; Oct. 4.
Gear-shift mechanism. E. P. Lorch. 1,639,460; Aug. 16.
Gear-shift mechanism. B. F. Schmidt. 1,926,974;
May 3.
Gear-shift mechanism. B. F. Schmidt. 1,926,974;
May 3.
Gear-shift mechanism. Hand-operated. B. F. Schmidt. 1,926,974;
Gear-shift schmism, Hand-operated. B. F. Schmidt. Gear-shift stop. F. Reinhard. 1,614,998; Jan. 18.
Gear-shift stop. F. Reinhard. 1,619,955; Mar. 8.
Gear-shift, Transmission. C. F. Gaine. 1,615,220;
Jan. 25. Gear shifting device, Pheumatic. C. W. Burton, jr. 1,822,947; June 21. Gear-shifting mechanism. C. O. Guernsey, 1,624,867; Apr. 12. Gear-shifting mechanism. A. G. Wagner. 1,648,728-9: Gear-Speed-reducing. T. L. Fitzpatrick. 1,641,842; Speed-reducing. T. L. Fitzpatrick. 1,641,842; Aug. 30. Gent, Speed-reducing, T. L. Fitzpatrick, 1,511,525, Sept. 6.

Gent, Spied-reducing, C. Waseige, 1,619,552; Mar, 1,

Gear, Spielring draft, B. W. Kadel, 1,624,742; Apr. 12,

Gear, Spring draft, C. H. Tomlinson, 1,645,361; Oct. 11,

Gear, Siering, M. Bray, 1,638,318; Aug, 9.

Gear teeth, Cuttling, E. Wildhaber, 1,653,686; Dec. 27,

Gear teeth, Finishing, C. H. Schurr, 1,642,179; Sept. 18,

Gear-testin, Finishing, C. H. Schurr, 1,642,179; Sept. 18,

Gear-testing machine, C. G. Olson, 1,619,483; Mar, 1,

Gear-testing machine, Gevel. C. H. Logue, 1,624,415;

Abr. 12. Apr. 12.
Genr tooth. S. A. S. Hammar. 1,613,702; Jan. 11.
Genr-tooth gauge. J. A. McIntosh. 1,612,077; Sept. 13.
Genr, Toothed. H. N. Anderson. 1,619,963; Mar. 8.
Genr, Transmission. G. T. Pollard. 1,625,564; Apr. 19.
Genr, Transmission. W. R. Steuart. 1,648,969; Nov. 15.

Gear transmission, Clutch mechanism for a constant-mesh. P. MacKenzie. 1,638,590; Aug. 9. Gear transmission, Reduction-. H. D. Else. 1,632,123; Geer transmission, Reduction-. H. D. Else. 1,632,123; June 14. June 14. June 14. June 14. June 14. June 15. June 14. June 15. June 16. June 16. June 16. June 16. June 17. Jun Genring T. H. Oppenheim and Jan. 18. Genring T. H. Oppenheim and Jan. 18. Genring J. T. Williams. 1.620.849; Mar. 15. Genring. J. C. Williamson. 1.648,751; Nov. 8. Genring. J. C. Williamson. 1.648,751; Nov. 8. Genring. Change-speed A. Laub. 1.623,418; Apr. 5. Genring. Change-speed friction. W. Stockicht. 1,637,664; Apr. 2. Change spur, M. Streit. 1,622,264; Mar. 22. Apr. Change spur, M. Streit. 1,622,264; Mar. 22. Garing, Change spur, M. Streit. 1,622,264; Mar. 22.
Gearing, Clutch mechanism for transmission. J. F.
Gaylord. 1,646,646; Oct. 25.
Gearing-clutching means, Transmission. S. Pozder.
1,647,632; Nov.
1,647,632 June 21.

Genting for motor-driven vehicles. Transmission. J. D.

Garlick 1,650,621; Nov. 29.

Gearing for motor vehicles, Change-speed. C. H. Caton.
1,618,054; Feb. 15.

Genting for oil-well rigs. W. F. Reschke. 1,645,623;
Oct. 18. Oct. 18: Gearing for rear axle of autos. J. E. Yeager. 1,633,203; Gearing for rear axle of autos. J. E. Yeager. 1,633,203; Gearing. Planetary transmission. J. S. Barnett. 1,641,655; Sept. 6. Gearing. Power-transmitting. E. C. Hatcher. 1,618,927; Feb. 22. Gearing, Reduction. R. C. Allen. 1,634,863; July 5. Gearing, Reduction. K. Baumann. 1,632,989; June 21. Gearing, Reduction. A. M. MacFarland. 1,624,416; Gearing, Reduction Gearing, Reduction Apr. 12. Gearing, Resilient. Gapti, Meslient R. Jensen, 1,637,379; Aug. 2.
Genring, Reversing, H. A. Tuttle, 1,646,126-7; Oct. 18.
Genring, Reversing device for toothed. F. Ljungström.
1,614,203-4; Jan. 11.
Genring, Spiral bevel, N. Trbofevich, 1,647,157; Nov. 1.
Genring, Suppnsion, Transmission. C. E. F. Ahlm. | Gearing Spiral bevel | N. Trongevich | Low-Life | Nov. Let | C. E. F. Ahlm. | C. E. F. Ah June 28.
Gearing, Transmission. C. E. F. Ahlm. 1,647,981; Nov. 8.
Gearing, Transmission. L. I. Lewis. 1,638,348; Aug. 9.
Gearing, Transmission. L. V. Meicher. 1,641,187;
Gearing, Transmission. L. V. Meicher. 1,641,187; Gearing, Transmission. W. C. Pitter, 1,641, Gearing, Transmission. J. M. Simpson. Gearing, Transmission. J. M. Simpson. 1,641,902; Sept. 6. mpson, 1,631,937; Gearing Transmission. C. E. Starr. 1.623,213; Apr. 5.
Gearing, Transmission. C. E. Starr. 1.623,213; Apr. 5.
Gearing, Variable-speed. J. F. Gaylord. 1.620,724;
M. O. Reeves. Gearing, Variable-speed. J. F.
Gearing, Variable-speed reduction. M. O. Reeves,
1.624.895; Apr. 12.
Gearing, Variable transmission. K. D. James. 1,626,611; 1.622.599.
Gearing, Variable transmission. A. D.
May 3.
Gears and hobs, Apparatus for determining the accuracy
of. H. Mensforth and F. A. Cowell. 1.614.448;
Jan. 11.
Jan. 11.
Jan. 11.
Jan. 11.
Jan. 11.
Jan. 11.
Jan. 11. Jan. 11.

Gears and making the same, Blank for, A. C. Hoof, 1,638.012; Aug. 9.

Gears and the like, Pulling device for, J. W. Miller, 1,633.453; June 21.

Gears, Apparatus for and method of cutting. F. Finsen, 1.613.880; Jan. 11.

Gears, Apparatus for finishing high-grade. W. F. Hoke, 1.630.845; May 31.

Gears, Generating. N. Trbojevich. 1,633.951; June 21.

Gears, Grinding. R. W. Schrott, 1,633.955; June 28.

Gears, Hob for cutting. E. C. Head, 1,618.429; Peb. 22.

Gears, Hob for worm. B. G. Anderson. 1,648.470; Nov. 8.

Geometrical instrument. L. P. Kolodge. 1,623,623;
Apr. 5.
Geometrical instrument. J. Liberty. 1,622,158; Mar. 22.
Germicide. J. W. Churchman. 1,614,281; Jann. 11.
Germinator, Seed. O. H. Pershing. 1.635,498; July 12.
Getter and applying the same. D. MacKae. 1,626,682;
Getter and art he application thereof. D. MacRae and H.
K. Richardson. 1,623,351; Apr. 5.
Gin. N. B. Henry. 1,630,005; May 24.
Girder. L. S. Lachman. 1,620,362; Mar. 8.
Girder. L. S. Lachman. 1,620,362; Mar. 8.
Girder. C. L. S. Lachman. 1,620,362; Mar. 1,631,624; Mar. 1,631,624; Mar. 1,631,624; Mar. 1,631,634; Aug. 9.
Girder, Circular. F. Jornby. 1,614,269; Mar. 1,631,634; Mar. 1,631,632; Mar. 1,631,634; Mar. 1,631,634; Mar. 1,631,634; Mar. 1,631,634; Mar. 1,631,634; Mar. 1,634,634; Mar. 1,63 Gears, Hobbing, E. C. Head. 1,618,956; Feb. 22. Gears, Locomotive power-reverse. T. A. Banning, fr. 1,642,193; Sept. 13. Gears, Lubrication system for train of. J. G. Krenzke. 1,631,537; June 7. Gears, Machine for cutting. E. C. Head. 1,626,821; Geometrical instrument. L. P. Kolodge. 1.623.623: May 3. Gears, Machine for cutting. F. Woltzendorff, 1,639,624; Gears, Machine for cutting. F. Woltzendorff. 1,639,624; Aug. 16.
Gears, Machine for generating. N. Trbojevich. 1,628,864; Gears, Machine for producing. E. W. Bullock. 1,647,430; Nov. 1.
Gears, Making and structure of. J. W. Fulper. 1,641,967; Sept. 13.
Gears, Making segmental laminated. J. C. and R. D. Shaw. 1,638,670; July 19.
W. White. 1,619,997; Mar. 8.
Gears, Manuacture of machining spiral-tooth. A. J. Rath. 1,614,591; Jan. 11.
Gears, Method of and machine for cutting. J. E. Gleason. 1,616,257; Feb. 1.
Gears, Method of and machine for hobbing. H. E. Taylor. 1,618,240; Feb. 22.
Gears, Method of and machine for producing. A. H. Gears, Method of and machine for producing. A. H. Gears, Milling cutter for helical or spiral and straight bevel. W. H. Wheatey. 1,649,631; Nov. 15.
Gears, Molding. W. B. Jaspert. 1,622,116; Mar. 22.
Gears, Mounting for brake. F. Mathews. 1,620,271; Mar. 8.
Gears, Fir of. E. C. Head. 1,628,829; May 3.
Gears, Fair of. E. C. Head. 1,628,829; May 3.
Gears, Fair of. E. C. Head. 1,628,829; May 3. Aug. 16. ars, Machine for generating. N. Trbojevich. 1,628,864; Gears, Mounting for brake. F. Mathews. 1,620,271; Mnr. 8.
Gears, Pair of. E. C. Head. 1,626,820; May 8.
Gears, Preventing backlash in. J. M. White. 1,629,564; May 24.
May 24.
May 24.
Gears, Producing. B. Wildaber. 1,622,014; Mar. 22.
Gears, Producing. E. Wildaber. 1,622,014; Mar. 22.
Gears, Producing. E. Wildaber. 1,622,014; Mar. 29.
Gears, Producing. E. Wildaber. 1,624,199; Dec. 27.
Gears, Producing. E. Wildaber. 1,654,199; Dec. 27.
Gears, Producing. E. Wildaber. 1,654,199; Dec. 27.
Gears, Stafts, and other articles, Machine for hobbing.
C. H. Schurr. 1,621,223; Mar. 15.
Gelatin powder and making the same, Cake of compressed.
S. E. Sheppard and L. W. Eberlin. 1,613,362; Jan. 4.
Gelatine Collow W. Woother. 1,614,638; Apa. 25.
Gelatinous substances, Method and mechanism for testing.
T. Hall and R. L. Houtz. 1,651,596; Dec. 6.
Gels, Preparing a base exchange material from. F. K.
Lindsay, 1,646,297; Oct. 18.
Gem. E. Freund. Des. 71,910; Jan. 25.
Gem. E. L. Weed. Des. 71,858; Jan. 11.
Gem and setting, Combination. I. Stern. Des. 71,935;
Jan. 25. Glare shield, Eyeglass. C. P. Hopson. 1,647,620; Nov. 1. Glass; Sec.
Boiler gauge glass.
Crookes glass.
Drawing sheet glass.
Drinking glass.
Eye-protective glass.
Eye-protective glass.
Shock-resisting glass.
Shock-resisting glass.
Shock-resisting glass.
All Locke.
Shock-resisting glass.
Shock-resisting glass.
Shock-resisting glass.
All Locke.
Shock-resisting glass.
Shock-resisting glass.
All Locke.
Shock-resisting glass.
All Locke.
All Locke.
Blass-abrading means, Sheet.
A. W. Platt. 1,652,410;
Dec. 13. Glass-adrading means, Sheet- A. W. Piatt. 1,002,410; Dec. 13.
Dec. 13.
E. B. Waldron. 1,621,296; Mar. 15.
Glass and apparatus therefor, Folishing. F. B. Waldron. 1,621,297; Mar. 15.
Glass and apparatus therefor, Polishing. F. B. Waldron. 1,622,297; Mar. 15.
Glass and like transparent substances, Ornamenting. M. M. A. do Guedalia. 1,639,716; Aug. 23.
Glass and Making the same. B. Long. 1,633,534; Gem and setting, Combination. I. Stern. Des. 71,495; Jan. 25.

Gem and setting, Combination. I. Stern. Des. 73,109-10; July 19.

Graph 19.

Graph 26.

Gem setting. A. L. Lindroth. 1,654,335; Dec. 27.

Generating plant. L. I. Kelly. 1,639,737; Aug. 23.

Generating plant. L. I. Kelly. 1,639,737; Aug. 23.

Generating plant, Automatic. T. S. Watson. 1,627,942; May 10.

Latour. 1,640,002; Aug. 23.

Generating steam, Apparatus for. H. L. Doherty. 1,619,244; Mar. 1.

Generating system. Electrical. J. T. Fitzsimmons. Generator. Security. Glass and making the same. B. Long.
June 21.
Glass and metal bodies, Combination of. R. F. Mayer.
1,649,907; Nov. 22.
Glass, Apparatus for cutting. H. F. Hitner.
1,648,907; Nov. 22.
Glass, Apparatus for drawing. A. A. Debrocq.
1,643,152; Sept. 20.
Glass, Apparatus for drawing shect. J. S. Gregorius.
1,631,319; June 7.
Glass, Apparatus for feeding. W. J. Miller.
1,651,036; Glass, Apparatus for feeding molten. J. H. O. Bunge.
1,641,133; Aug. 30.
Glass, Apparatus for feeding molten. K. E. Peiler
1,622,666; Mar. 29.
Glass, Apparatus for forming. L. D. Soubler.
1,626,702; May 3.
Glass, Apparatus for making laminated. E. S. Bock. Glass, Apparatus for forming. L. D. Soubier. 1,626,702; May 3.
Glass. Apparatus for making laminated. E. S. Bock. 1,645,580; Oct. 3c. making transparent sheet. G. A. Shields. 1,624,283; Apr. 12.
Glass. Apparatus for producing a silver coating on. L. Offenbacher. 1,648,504; Nov. 8.
Glass. Apparatus for producing mold charges of molten. W. J. Miller. 1,621,426; Mar. 15.
Glass. Apparatus for producing mold charges of molten. W. J. Miller. 1,621,426; Mar. 16.
Glass articles. Apparatus for transferring. A. N. Cramer. 1,638,920; Aug. 16.
Glass articles. Apparatus for transferring. L. D. Soubier. 1,626,707; May 3.
Glass articles. Machine for feforming. H. D. Madden. 1,626,653; May 3.
Glass articles. Machine for forming. R. La France. 1,636,672; July 19.
Glass articles. Machine for forming. R. La France. 1,638,672; July 19.
Glass articles. Machine for forming. R. La France. 1,638,672; July 19.
Glass articles. Making blown. E. E. Bartlett. 1,618,747; Sept. 6.
Glass articles. Making blown. E. E. Bartlett. 1,618,747; Grob. 22.
Glass articles. Making blown. E. E. Bartlett. 1,618,747; Grob. 22.
Glass articles. Making blown. E. E. Bartlett. 1,618,747; Grob. 22.
Glass articles. Making blown. E. E. Bartlett. 1,618,747; Grob. 22.
Glass articles. Making blown. E. E. Bartlett. 1,618,747; Grob. 22.
Glass articles. Making blown. E. E. Bartlett. 1,618,747; Grob. 22.
Glass articles. Making blown. E. C. Grob. 20.
Glass articles. Making blown. E. C. Grob. 20. centator and burner using radiants, Kerosene-gas. S. Joseph. 1,630,184; May 24. Generator, Electrical apparatus comprising a slow-wave. J. E. Clapp. 1,623,829; Apr. 5. Generator having rotary usualization of the comparison of th Mar. 22.
Generator regulation. B. M. Leece. 1,633.671; June 28.
Generator regulation, Apparatus for. G. E. Hulse.
1,622.282; Mar. 29.
Generators, Deenergizing, R. Rüdenberg, 1,650.910;
Nov. 29. Generators, Fire box for steam. G. A. Bryan. 1,640,346;

Aug. 30.
Generators of automobiles, Brush-adjusting means for.
H. L. Arnest. 1.840,917; Aug. 30.
Generators. Operating water-gas. F. A. Howard.
1.634,833; July 5.
Geological specimens in hore holes, Apparatus for orienting. A. F. Dixon. 1.630,694; May 31.
Geometrical device. G. B. Stewart. 1,615,180; Jan. 18.

Feb. 22.
Glass articles, Manufacture of. W. Westbury and P. W.
Collins, 1,620,308; Mar. 8.
Glass articles, Method and apparatus for fire-finishing,
J. M. Lents and F. R. Miller. 1,622,6739; May 3.
Glass battery box. J. K. Robinsot, Jr. 1,622,999;
May 24.
Glass-bending apparatus. Sheet. L. D. Blackshere and
J. L. Drake. L. Gl4,098; Jan. 11.
Glass-bending apparatus. Granting, K. G. Kutchka.
1,617,055; Feb. 13.
Glass-blowing machine. C. S. Budd. 1,629,653; May 24.

Glass-blowing machine. E. H. Lorenz. 1,647,532; Nov. 1. Glass bowl or globe, Illuminating. N. Kopp. Des. 73,437; Sept. 13. Glass by suction, Collecting. E. Roirant. 1,615,886; Feb. 1. sec. 1. Bardach. 1,621,489; lar. 22. Mar. 22. Glass-cleaning applicator. R. H. Van Sant. 1,625,174; Glass-cleaning applicator. H. I. van Sant. 1,020,48; May 24, Apr. 19, 2019 Stine W. F. Bleecker. 1,629,648; May 24, Glass composition. W. C. Taylor. 1,615,247; Jan. 25, Glass composition. W. C. Taylor. 1,652,259; Dec. 13, Glass, Composition for cleaning and polishing. G. A. McBride. 1,643,251; Sept. 20. Glass cutter. A. T. Fletcher. 1,634,323; July 5, Glass-cutting apparatus. J. B. Greer. 1,650,345; Glass-cutting. Glass-cutting holder, C. J. Bishop, 1,649,282; Nov. 15.
Glass-cutting machine, T. H. Chadwick, 1,642,839;
Sept. 20.
Glass-cutting machine, J. B. Greer, 1,615,978; Feb. 1,
Glass-cutting machine, J. A. Milliken, Rel6,550; Glass-cutting machine. J. A. Milliken. Re16,550; Feb. 15.
Glass-cutting machine. J. A. Milliken. 1,650,375; Nov. 22.
Glass decorating. O. Hommel. 1,642,441; Sept. 13.
Glass, Delivery apparatus for molten. E. G. Nelson, Jr. 1,637,467; Aug. 2.
H. 1637,467; Mar. 29.
Glass-drawing apparatus. R. D. Hurley and B. H. Patton. 1,631,097; May 31.
Glass-drawing apparatus. R. D. Hurley and B. H. Patton. 1,631,097; May 31.
Glass-drawing apparatus. A. E. Spinasse. 1,643,184; Glass-drawing apparatus. Sheet. J. L. Drake. 1,626,396; Apr. 26.
Glass, Drawing sheet. J. P. Crowley. 1,626,395; Apr. 26. Drawing sheet. E. T. Ferngren. 1,631,805; Glass, Drawing sheet, J. B. Small and F. J. Kincaid. 1,634,802; July 5. Glass-fabricating apparatus. W. J. Miller. 1,629,455; May 17. Glass-fastening device. C. G. Nelson. 1.649,916; Glass-Fasteling
Nov. 22.
Glass feeder. L. D. Soubier. 1,614,936; Jan. 18.
Glass feeder. L. D. Soubier. 1,618,313; Feb. 22.
Glass feeder. L. D. Soubier. 1,626,705-6; May 3.
Glass feeder. L. D. Soubier. 1,626,705-6; May 2.
Glass feeder. L. D. Soubier. 1,635,476-9; Dec. 20.
Glass feeder. L. D. Soubier. 1,653,478-9; Dec. 20.
Glass feeder, Multiple. K. E. Peller. 1,647,746; Nov. 1.
Glass feeders, Regulating. G. E. Howard. 1,635,564; July 19. Glass feeders, Regulation of. G. E. Howard. 1,619,729; Mar. 1. Glass-feeding mechanism. A. N. Cramer. 1,618,271; Feb. 22.
Glass-feeding mechanism, Molten. E. T. Ferngren.
1.628,238; May 10.
K. E. Peiler. 1,644,893; Oct. 11.
Glass, Feeding molten.
K. E. Peiler. 1,644,893; Oct. 11.
Glass, Forming and delivering charges of molten. J. F.
Rule. 1,623,362; Apr. 5.
Glass-forming apparatus. O. A. Hanford. 1,631,633;
June 7.
Hanford. 1,632,963; June 7. Glass-forming apparatus, O. A. Hanford. 1.632.963; Glass-forming apparatus, U. A. Hai June 21. Glass. Forming charges of molten. 1,626,737; May 3. Glass-forming machine. R. La Fr R. La France. R. La France. 1.650.368; Nov. 22.
Glass-forming machine. J. F. Rule. 1,642,828; Sept. 2:
Glass-forming machine. T. H. Sloan. 1,614,632; Jan. 1:
Glass-forming machine. L. D. Soubier. 1,626,703-4 Glass-forming machine. L. D. Soubler. 1,626,703-4; May 3. Glass-forming machine. L. D. Soubler. 1,626,703-4; May 3. Glass-forming machine. G. E. Zeiler. 1,649,641; Nov. 15. Glass-forming machine and process. O. A. Hanford. 1,623,634; June 28. Glass. Forming sheet. J. C. Blair. 1,626,832; Apr. 26. Glass. Forming sheet. T. C. McKinley. 1,646,488; Oct. 25. Glass from blowpipes. Apparatus for removing waste. J. L. Dunnock and C. R. Nixon. 1,622,831; Apr. 5. Glass furnace. G. D. Mantle. 1,639,651; Aug. 25. Glass-grinding machines, Grading and delivering sand to. J. W. Cruifshank. 1,640,029; Aug. 23. Glass-grinding process and apparatus. F. Gelstharp and J. C. Parkinson. 1,615,838; Feb. 1. Glass. Guiding device for molten. V. Mullholland. 1,619,432; M. H. J. Johnston. 1,616,759; Feb. 8. Glass into mold charges. Apparatus therefor, Drawing of. E. Rowart. 1,637,691; Aug. 29. Glass-jar. F. J. de S. Coty. Des. 71,935; Feb. 8. Glass jar. F. J. de S. Coty. Des. 71,935; Feb. 8. Glass jar. W. V. Johnston. Des. 72,771; May 31. Glass Jar. W. V. Johnston. Des. 72,771; May 31. Glass Jar. W. V. Johnston. Des. 72,771; May 31. Glass Jar. W. V. Johnston. Des. 72,771; May 31. Glass Jar. W. V. Johnston. Des. 72,771; May 31. Glass Jar. W. V. Johnston. Des. 72,771; May 31.

Glass joint, Art. J. G. Susman. 1,620,300; Mar. 8. Glass-knob mounting. W. R. Schlage. 1,655,514; Dec. 20. Glass, Mackine and method for drawing. C. W. Avery. 1,616,405; Feb. 1.
Glass, Mackine for making bottles or other articles for. A. McNish. 1,626,548; Apr. 26.
Glass machines, Flow feed for. S. E. Winder and H. C. Daubenspeck. 1,648,435; Nov. 8.
Glass machines, Flow feed for. S. E. Winder and H. C. Daubenspeck. 1,648,435; Nov. 8.
Glass, Making sheet. L. Showers. Rei6,755; Oct. 4.
Glass, Mandracture of sheet. H. R. Schutz. 1,646,680; Sept. 27.
Glass-manufacturing machine and method. P. Schoonen-Glass-manufacturing machine and method. Sept. 2.. Glass-manufacturing machine and method. P. Schoonenberg. 1,642,312; Sept. 13. Glass manufacture, Plate. F. S. Whitlock. 1,654,198; Dec. 27.
Glass-melting furnaces, Pot for. G. Stein. 1,625,435;
Apr. 19.
Glass-melting tank. F. Gelstharp. 1,615,832; Feb. 1.
Glass-melting tank. K. G. Kutchka. 1,638,737; Aug. 9.
Glass, Method and apparatus for drawing sheet. E. T.
Glass, Method and apparatus for feeding molten. W. T.
Barker, fr. 1,645,221; Oct, 11.
Glass, Method and apparatus for grinding. J. W. Cruikshank. 1,622,931; Mar. 22.
Glass, Method and apparatus for producing a continuous strip of. F. B. Waldron. 1,622,317; Mar. 29.
Glass, Method and apparatus for producing charges of Glass, Method and apparatus for producing sheet. E. T.
Ferngren. 1,631,804; Jun. 7.
Glass, Method and apparatus for producing sheet. E. T.
Ferngren. 1,631,804; Jun. 7.
Glass, Method and apparatus for shaping articles of. V.
O. Cornwell and A. Moeller. 1,638,820; Aug. 9.
Glass, Method and apparatus for surfacing sheet. J. W.
Cruikshank. 1,643,869; Oct. 4.
Glass, Method of and apparatus for forming sheet. G. E.
Howard. 1,645,053-4; Oct. 11.
Glass mouth of the producing sheet. G. E.
Glass Method of and apparatus for Lister. 1,646,308; Feb. 1
Glass mouth of the producing sheet. G. E.
Glass Method of and apparatus for Lister. 1,647,898; Aug. 2.
Glass objects and protecting the decorated surfaces. Dec. Glass-melting furnaces, Pot for. G. Stein. 1,625,435; Howard. 1,645,053-4; Oct. 11.
Glass-moiding machine. V. Durand. ir. 1,616,308; Feb. 1.
Glass mounts, Machine for making. C. Eisler. 1,637,989;
1018.
Glass mounts, Machine for making. C. Eisler. 1,637,989;
1018.
Glass or glass-like objects, Manufacture of. E. Hope.
1,644,131; Oct. 4.
Glass-plate fastener. W. La Hodny and F. X. Kibitz.
1,631,038; May 31.
Glass-polishing apparatus. H. K. Hitchcock. 1,644,379;
Oct. 4.
Glass-polishing apparatus. H. K. Hitchcock. 1,644,379;
Oct. 4.
Glass-polishing machine. C. W. Dake and R. S. Levis.
1,620,025-6; Apr. 26.
Glass pressure and blowing machine. F. O'reill.
Glass-process and apparatus for drawing sheet. E. T.
Ferngren. 1,641,883; Sept. 6.
Glass, Process and apparatus for making sheet. E. T.
Ferngren. 1,641,883; Sept. 6.
Glass, Process and apparatus for making sheet. L.
Glass, Process and apparatus for making sheet. R. O.
Stilwell and C. H. Christie. 1,637,881; Aug. 2.
Glass, Process of and apparatus for making sheet. R. O.
Stilwell and C. H. Christie. 1,637,881; Aug. 2.
Glass, Process of and apparatus for rolling. E. B. Le
Mare. 1,622,040; Mar. 22.
Glass, Process of and apparatus for forming. E. A.
Glillinder. 1,652,779; Dec. 13.
Glass sheets, Apparatus for handing, H. K. Hitchcock.
1,622,880; Mar. 29.
Glass skimming. W. A. Rhoades and T. C. McKinley.
1,631,759; June 7.
Glass structure. H. B. Hawes. 1,632,330; June 14.
Glass-structure. H. B. Hawes. 1,632,330; June 14.
Glass-structure Aug. 9. ass-surfacing apparatus, Plate-. W. Owen. 1,651,224; Roy. 29. Glass-tank furnace. C. L. Clark. 1,652,608; Dec. 13. Glass through a discharge aperture, Apparatus for con-trolling the flow of molten. C. H. Rankin. 1,631,061; May 31. May 31. Glass tile. Apparatus for making reenforced. W. Owen. 1.644.849; Oct. 4. Glass to molds, Conveying molten. L. D. Soubier. 1.653.477; Dec. 20. ss-transfer apparatus. H. K. Hitchcock. 1,651,206; Glass-transfer apparatus. H. K. Hitchcock. 1,651,206; Nov. 29.
Glass tray or similar article. W. C. McCartney. Des. 72,026; Feb. 15.
Glass tube or rod, continuous manufacture of. P. Schoonenberg. 1,637,458; Aug. 2.
Glass tubes, Machhe for shaping ends of. R. H. Koenig. 1,643,215; Sept. 20.
Glass tubes or rods, Device for cutting. E. Abelt. 1,624,197; Apr. 12.
Glass tubing, McHold and apparatus for making. S. S. Grotta. 1,635,848; Dec. 27.
Glass vesses, Manufacturing double-walled. W. Hodecker. 1,623,311; Apr. 5. Glassware and process, Decorated. R. S. Hughes. 1,647,362; Nov. 1 for and method of annealing. O. Shackefford. 1,642,796; Sept. 20. Glassware, Apparatus for annealing. O. C. Kuhrt. 1,638,401; Aug. 9. Glassware, Apparatus for annealing. V. Mulholland. 1,622,663; Mar. 28 for guiding and conveying hot. M. J. Ovens. 1,622,6747. May. Glassware, Apparatus for handling. G. E. Howard. 1,618,666; Feb. 22. Glassware, Apparatus for handling. W. S. Mayers. 1,650,607; You 29. 1,654,001; Dec. 27. Glassware, Apparatus for shaping. R. W. Canfield. 1,625,590; Apr. 19. Glassware, Apparatus for shaping. R. W. Canfield. 1,625,590; Apr. 19. Glassware, Apparatus for the manufacture of. D. L. Glassware, Coloring. M. L. Burgess. 1,615,973; Feb. 1,618sware in suction-fed moids, Fabricating, K. E. Peller. 1,622,575; Apr. 26. Glassware, Making hollow. R. W. Canfield. 1,635,704; July 12. May 5. Glassware, Method and apparatus for forming. E. Danner. 1,627,428; May 8.
Glassware, Method and apparatus for manufacturing.
W. E. Bock. 1,645,684; Oct. 18.
Glassware-shaping machine. J. Davis. 1,642,722; Glassware-shaping machine. J. Davis. 1,642,722; Sept. 20. Glassware-transferring device. E. H. Lorenx and J. Davis. 1,637,490; Aug. 2. Glass washer, Drinking. J. L. Harper. 1,653,627; Dec. 27. Glass wiper. J. H. Lehman. 1,636,916; July 26. Glassworking apparatus. T. C. Steimer. 1,642,430; Class-working apparatus, Gathering means for A. Kadow. 1,645,755; Oct. 18 Glass-working machine. J. T. Fagan and J. J. Malloy. 1,621,359; Mar. 15. Glassworking machine. M. K. Holmes. 1,642,658; Glassworking machine. M. K. Holmes. 1,642,608; Sept. 18; Glassworking machine. A. Samuelson. 1,620,292; Mar. 8. Glassworking machine. A. Samuelson. 1,620,292; Mar. 8. T. 2,794; June 7. Glasses and like vessels, Apparatus for washing. J. H. Hardie. 1,633,662; June 28. Glasses and spectacles, Lens-clamping bracket for use with pince-nez. J. Lefèvre. 1,632,906; June 21. Glasses, Holder for. S. W. Farber. Des. 72,705-9; May 24. d. d. design. strip. S. B. Zimmer. 1,632,705; May 24.
Glazing and glazing strip. S. B. Zimmer. 1,628,705;
May 17.
Glazing composition. C. S. Hudson. 1,646,731; Oct. 25.
Glazing machine. D. E. Harding. 1,633,546; June 21.
Glazing machine, Chain-drive. D. B. Harding. 1,633,081;
July 5.
Glazing machine, Leather. E. C. and J. E. Morgan, and
G. F. Pinzka. 1,654,428; Dec. 27.
G. P. Pinzka. 1,654,428; Dec. 27.
Glazing sprig. B. Bunzel. 1,614,277; Jan. 11.
Glide caster. J. L. Chesnutt. 1,638,725; Aug. 9. Nov 15.

Nov 15.

Nov 15.

Clozing sprig. E. Buzzel. 1,614.277; Jan. 11.

Glide caster. J. L. Chesnutt. 1,638.725; Aug. 9.

Glider. J. M. Albn. 1,644.623; Oct. 4.

Globe, Glass lighting. S. H. Barnes. Des. 74,089; Dec. 20.

Gloss globe. H. J. Cummings. Des. 71,780-1; Jan. 4.

Glove. B. Burden. 1,620.434; Mar. 8.

Glove. B. Burden. 1,620.434; Mar. 15.

Glove. H. Gillian. 1,620.434; Mar. 15.

Glove. C. L. Ampros. 1,628.46; May. 3.

Glove. C. L. McFride, jr. 1,623.019; Mar. 29.

Glove. J. McGunger. 1,643.39; Sept. 27.

L. Glove. F. X. Sturm. Rei 6,609; May. 3.

Glove and making the same, Knitted. G. P. Bosworth. 1,641,570; Sept. 6.

Glove and manufacturing same. G. Spivak. 1,641,701; Glove and manufacturing same. G. Spivak. 1,641,701; Sept. 6. ove and stocking form. L. E. Roach. 1,616.510; Glové and stocking form. L. E. Ronch. 1,616.510; Feb. S.
Glove, Automobilist's, E. R. Palmer. 1,624.429; Apr. 12.
Glove, Baseball. B. J. Craig. 1,633.926; June 28.
Glove, Baseball. P. and B. Kennedy. 1,631.735; June 7.
Glove, Baseball. A. J. Turner. 1,622.5936; Apr. 12.
Glove, Baseball. A. J. Turner. 1,622.5936; Apr. 12.
Glove, Boxlag. J. Kennedy. 1,622.504 (4), Agr. 23.
Glove, Work. B. C. Palick. 1,642.128; Sept. 13.
Glove, Work. R. C. Palick. 1,642.128; Sept. 13.
Glove, Work. R. C. Palick. 1,642.128; Sept. 13.
Glove, Work. R. C. Palick. 1,649.074; Nov. 15.
Glow-discharge apparatus and operating the same. P.
Thomas. 1,626.647; May 3.
Glove-discharge tube. J. Massoile, J. Engl, and H. Vogt. 16.83,201; June 28.
Glow-discharge tube. J. Massoile, J. Engl, and H. Vogt. 1,634.201; June 28.
Glow-discharge tube. J. Massoile, J. Engl, and H. Vogt. 1,634.201; June 28.
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Glow-discharge tube. J. Massoile, J. Engl, and H. Vogt. 1,634.201; June 28.

Glue, Casein. A. C. Marwin. 1,625,483; Apr. 19.
Gluing machine. C. H. Ohisson. 1,640,467; Aug. 30.
Gluing machine for applying paper to wood, Automatic,
J. H. Reynolds. 1,620,570; Mar. 8.
Glyceria from fermented moiasses mash and apparatus
therefor, Recovering. J. W. Lawrie. 1,627,040; May 3.
Glycerin from fermented moiasses mash, Recovering,
S. K. Varnes. 1,626,986; May 3.
S. K. Varnes. 1,626,986; May 3.
Glycatel-dant-braquin-dant-bracker, B. Green, and W. Trautner, 1,646,782; Oct. 25.
Goal and goal indicator. E. W. Hiett. 1,628,364; May 10.
Goal-keeper's guard. E. O. Knischewsky. 1,647,452;
Nov. I. Goal and goal indicator. E. W. Hiett. 1,628,364; May 10. Goal-keeper's guard. E. O. Knischewsky. 1,647,402; Nov. 1

E. M. Boftome. Des. 72,817; June 14. Goblet. F. D. Greenan. Des. 72,827; June 14. Goblet. V. V. Loomis. Des. 72,162; Mar. 8. Goblet. V. V. Loomis. Des. 72,162; Mar. 8. Goblet. V. V. Loomis. Des. 72,162; Mar. 8. Goblet. V. V. Loomis. Des. 73,751; Nov. 1. Goblet. R. I. Ratner. Des. 72,189; Mar. 8. Goblet. R. I. Ratner. Des. 72,635; May 10. Goblet. G. S. Goblet. G. C. Northwood. Des. 72,631; May 10. Goblet or similar article. D. A. Ripley. Des. 72,032; Feb. 15. Goblet or similar article. E. C. Schrader. Des. 72,088; June 28. Goblet or similar article. E. C. Schrader. Des. 72,088; June 28. Goblet or similar article. J. H. Venon. Des. 72,506–7; Goblet or similar article. J. H. Venon. Des. 72,506–7; Goblet or similar article. J. H. Venon. Des. 72,506–7; Goblet or similar article. J. H. Venon. Des. 72,506–7; Goblet or Similar Onling Correlet. F. Frisk. 1,622,771; May 17.
Golf-bug carrier. F. Frisk. 1,642,043; Sept. 13.
Golf-bug top. H. V. Rau. 1,642,043; Sept. 13.
Golf bugs, Score-card-holder attachment for J. P. and
M. F. Hansman. 1,650,070; Nov. 22.
Golf bull. G. W. Beldam. Des. 72,692-3; May 24.
Golf bull. A. E. Penfold. Des. 73,046; July 12.
Golf-bull. A. E. Penfold. Des. 73,046; July 12.
Golf-bull and making the same. W. C. Geer.
1,624,659; Apr. 26.
Golf-bull and making the same. T. W. Miller. 1,622,601; Mar. 29.
Golf-bull cleaner. J. C. Boeckh. 1,644,594; Jan. 18.
Golf-bull marker. J. E. Mctinness. 1,643,568; Nov. 8.
Golf-bull packing. G. Martinez. 1,630,223; Nov. 22.
Golf-bull packing. G. Martinez. 1,630,223; Nov. 22.
Golf-bull tee. P. D. Merrill. 1,615,309; Jan. 21.
Golf-bull tee. P. D. Merrill. 1,615,309; Jan. 25. Golf club. J. C. S. Bubrice. 1.63,034; Aug. 2.

Golf balls, Apparatus for renewing surfaces of, W. P. Hammond. 1,630,244; May 24.

Golf balls, Tee for. G. Kearney. 1,623,119; Apr. 5

Golf balls, Tee for. D. M. Stirton. 1,614,499; Jan. 18.

Golf club. L. C. Boucke. 1,623,523; Nov. 22.

Golf club. J. D. Brocks. 1,623,523; Nov. 22.

Golf club. A. E. Buhrke. 1,644,510; Oct. 4.

Golf club. J. C. Buckes. 1,630,516; Aug. 16.

Golf club. W. D. Brocks. 1,630,516; Aug. 16.

Golf club. W. S. Butchert. 1,618,633; Feb. 22.

Golf club. S. W. Dewson. 1,618,640; Feb. 22.

Golf club. J. Gravenre. 1,652,404; Dec. 13.

Golf club. J. Gravenre. 1,652,404; Dec. 13.

Golf club. J. Gravenre. 1,652,404; Dec. 13.

Golf club. B. L. Hubbard. 1,627,548; May 10.

Golf club. E. L. Hubbard. 1,627,548; May 10.

Golf club. C. J. Jahant. 1,636,614; July 19.

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Golf club.
Golf club.
Golf club.
Golf club.
                                                                                                                                  E. F. Lied. 1,648,354; Nov. 8.
G. W. Mattern, 1,620,118; Mnr. 8.
b. V. Myers. 1,644,392; Oct. 4.
W. B. Pedersen. 1,616,920; Feb. 8.
F. R. Perkins. 1,621,897; Mar. 22.
R. D. Pryde and W. M. Day. 1,615,232;
         Jan. 25.
Golf club.
Mar. 22
Golf club.
                                                                                                                                     W. L. Questel and H. M. Rhind. 1,621,750;
   Golf club. W. L. Questel and H. M. Rhind. 1,621,750; Mar. 22.
Golf club. C. H. Redman. 1,621,624; Spot. 13.
Golf club. C. H. Redman. 1,631,504; June 18.
Golf club. C. H. Redman. 1,631,504; June 28.
Golf club. C. Rigby. 1,631,360; Jun. 4.
Golf club. C. Rigby. 1,634,362; June 28.
Golf club. C. Rigby. 1,634,682; June 28.
Golf club. W. L. Smith. 1,633,684; Aug. 23.
Golf club. W. L. Smith. 1,633,864; Aug. 23.
Golf club. J. Vermon. 1,647,247; Nov. 27.
Golf club. J. Vermon. 1,647,247; Nov. C. 3.
Golf club, Adjustable. W. R. Collins. 1,644,177; Oct. 4.
Golf club, Adjustable. W. R. Collins. 1,644,177; Oct. 4.
Golf club, Adjustable. R. O. Wilson. 1,620,588; Mar. 8.
Golf club and making the same. S. E. Collinson. 1,637,535; Aug. 2.
Golf-club-carrying case and bag. H. A. Sampson. 1,637,538; Aug. 2.
Golf-club head. Hillerich. 1,654,257; Dec. 27.
Golf-club head. G. C. Worthington. 1,647,961; Feb. 1.
Golf-club head. G. C. Worthington. 1,647,961; Feb. 1.
Golf-club head. G. C. Worthington. 1,647,961; Feb. 1.
Golf-club head. G. C. Worthington. 1,647,961; Feb. 8.
Sept. 20. Feb. 15. Robbitt. 1,638,249.
         Golf-club nead, Adjustante. K. N. Löngsworth. 1,0xe,eou, Sept. 20.
Golf-club shaft. J. F. Babbitt. 1,680,249; May 31.
Golf-club shaft. R. E. Dickinson, jr. 1,631,926; June 7.
Golf-club shaft. W. F. Reach. 1,626,407; May 2.
Golf-club shaft. W. F. Reach. 1,626,607; May 2.
Golf-club shaft. W. F. Reach. 1,644,083; Oct. 4.
Golf-club shaft or the like. R. H. Cowdery. Des. 73,777;
         Nov. 8.

Golf clubs and the like, Attaching heads and shafts of.
W. B. Sime. 1,651,843; Dec. 6.

Golf clubs, Attachment for. F. O. Fish. 1,651,264:
Golf ciubs and the Rec. Attaching needs and sinkle of W. B. Sime. 1,651,243; Dec. 6.
Golf clubs, Grip for. R. S. Wallace. 1,617,972; Feb. 15.
Golf clubs, Grip for. R. S. Wallace. 1,617,972; Feb. 15.
Golf clubs, Grip for. R. S. Wallace. 1,617,972; Feb. 15.
Golf clubs, Bolder and carrier for. W. C. Ranney. 1,627,450; May 2.
Golf clubs by the like, Sbaft for. D. F. Boyden. 1,642,294; Sept. 13.
Golf clubs by Foresteet for. C. W. and L. J. Hamel. Golf clubs. Store-sheet holder for. J. F. Egglestone. 1,049,293; Nov. 15.
Golf-course maintainer. F. H. Smith and C. L. Sheely. 1,647,386; Nov. 1.
Golf court. W. W. Malloy. 1,625,265; Apr. 19.
Golf game. G. B. Allen. 1,623,518; Apr. 5.
Golf game. G. B. Allen. 1,623,518; Apr. 5.
Golf green. W. Gaston. 1,640,609; Aug. 30.
Golf green. W. Gaston. 1,640,609; Aug. 30.
Golf green. Swaparatus. W. Gaston. 1,640,609; Aug. 30.
Golf green. G. St. Green and game. W. M. Chase. 1,623,526;
Golf practicing and training device. W. J. Goldsworthy. 1,640,655; Aug. 30.
Golf practicing and training device. W. J. Goldsworthy. 1,620,655; Aug. 30.
Golf putter guide. B. Knight. 1,616,377; Feb. 1.
Golf-soring device. B. Knight. 1,616,377; Feb. 1.
Golf-soring device. T. F. O'Shea. 1,614,850; Jan. 18.
Golf soring device. T. F. O'Shea. 1,614,850; Jan. 18.
Golf soring device. T. F. O'Shea. 1,614,850; Jan. 18.
Golf storing device. T. F. O'Shea. 1,614,850; Jan. 18.
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Golf storing device. T. F. O'Shea. 1,614,850; Jan. 18.
Golf storing device. T. F. O'Shea. 1,614,850; Jan. 18.
Golf storing device. R. Wolfe. 1,636,086;
         Golf shaft or the like. D. F. Boyden, '1,643,573; Sept. 27.
Golf stance-steadying device. R. Wolfe. 1,636,686; July 19.
Golf stick carrier. A. W. Malone. 1,621,328; Mar. 15.
Golf stock registering device. G. I. Thomson. Golf stockes, Instructing, M. J. Glennon and H. G. Higham. 1,637,339; Aug. 2.
Golf tee. G. N. Bolinger. 1,630,288; May 31.
Golf tee. W. J. Butler and R. L. Fitzgerald. 1,617,232; Teb. 8.
   Golf tee.
W. J. Butler and R. L. Fitzgeraid.
Feb. 8.
C. E. Byington. 1,617,233; Feb. 8.
Golf tee. J. Clark. 1,643,113; Sept. 20.
Golf tee. J. Clark. 1,643,113; Sept. 20.
Golf tee. G. Clausing. 1,638,7551; Aug. 2.
Golf tee. G. Clausing. 1,638,755; Aug. 9.
Golf tee. G. Clausing. 1,638,755; Aug. 9.
Golf tee. G. Clausing. 1,644,105; Sept. 6.
Golf tee. G. Clausing. 1,644,7012; May 3.
Golf tee. E. M. E. Dent, A. Mackenzie, and J. White.
1,623,782; App. 5.
Golf tee. E. M. E. Dent, A. Mackenzie, and J. White.
1,623,782; App. 5.
Golf tee. E. N. Folges. 1,644,001; Oct. 11.
Golf tee. E. N. Folges. 1,644,001; Oct. 11.
Golf tee. E. H. Jones. 1,631,240; June 7.
Golf tee. C. A. McIlvaine. 1,638,376; July 12.
Golf tee. H. L. Richards. 1,625,911; Apr. 26.
Golf tee. H. L. Richards. 1,625,911; Apr. 26.
Golf tee. A. J. Stone. 1,633,686; June 28.
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Golf tee. E. P. Webster. 1,629,981; May 24.
Golf tee. P. E. Young. 1,636,655; July 19
Golf-tee anchor. J. E. Pryor. 1,632,801; June 21.
Golf tee and score card, Combined. E. S. Whitcomb.
1,644,804; Oct. 11.
Mulyebill. 1,616,050; Feb. 1.
Golf-tee holder. R. S. Breed. 1,627,145; May 3.
Golf-tee-molding device. H. W. Kulp. 1,618,908; Feb. 8.
Golf-tee-molding device. H. W. Kulp. 1,618,908; Feb. 8.
Golfing tee. W. Lowell. 1,650,141; Nov. 22.
Goods, merchandise, or the like, Displaying. F. J. Shelton.
1,648,224; Sept. 20.
Goods, Facking of. D. George. 1,626,525; Apr. 26.
Governor. H. S. Loomis. 1,623,193; Apr. 5.
Governor. A. F. Meyer. 1,648,419; Nov. 8.
Governor. J. H. Van Ausdal and J. T. Blackburn.
1,638,500; June 21.
Governor and governor stop. I. F. Burton. 1,648,109;
Nov. 8.
Governor. Auto-step. D. C. Davis. 1,624,093; Apr. 19. ROV. 8. Governor, Auto-stop. D. C. Davis. 1,624,093; Apr. 19. Governor, Auto-stop. J. P. Rigsby. 1,621,084; Mar. 15. Governor, Bolt-type emergency. F. C. Linn. 1,637,909; Aug. 2. Governor, Centrifugal. C. H. Smoot. 1,616,512; Feb. 8 Governor, Change-speed. C. S. Ricker. 1,624,008; Governor, Apr. 12. Governor Apr. 12.
Governor control. J. B. Fisher. 1,624.227; Apr. 12.
Governor, Emergency. J. Wilkinson. 1,623,822; Apr. 5.
Governor for rotating mechanisms. W. S. Bowen.
1,645,038; Oct. 11.
Governor mechanism. F. E. Best. 1,644,167; Oct. 4.
Governor mechanism. J. A. Friesen. 1,644,982; Jan. 18.
Governor, Motor. W. J. Rathhun. 1,622,275; Dec. 18.
Governor witch, Electric. C. C. Farmer. 1,615,365;
Jan. 25. Governor, Motor. W. Husman. 1,652,278; Dec. 13.
Governor regulator. E. Rathbun. 1,632,349; June 14.
Governor switch, Electric. C. C. Farmer. 1,615,365;
June 14.
Governor switch, Electric. C. C. Farmer. 1,615,365;
June 21.
Grab. Governor W. Stimson. 1,620,140; Mar. 8.
Gown, Night. B. G. Spilsbury. 1,623,072; Apr. 5.
Grab. D. J. Barnard. 1,633,355; June 21.
Grab. W. G. Wehr. 1,630,355; May 31.
Grab and the like, Lifting. G. W. Steiger. 1,646,938;
Grade crossing. H. Nottke. 1,641,761; Jan. 18.
Grade-crossing protecting system. P. A. Bowen. 1,645,512; Oct. 18.
Grade indicator. C. W. Cutter. 1,623,234; Apr. 5.
Grade-marking apparatus. L. J. Grugman and B. A.
Grader. W. F. Christel. 1,631,517; June 7.
Grader. W. F. Christel. 1,631,517; June 7.
Grader. E. C. Gledhill. Rel6,624; May 17.
Grader, Fruit. F. L. Glaize and O. C. Cooper. 1,650,441; Nov. 22.
Grader, Boad. R. T. Mowbray. 1,617,638; Feb. 15.
Grading and scraping machine, Road. J. W. Lehmkuhler. 1,346,156; Oct. 18.
Grading machine. W. T. B. Roberts. 1,640,372; Aug. 30.
Grading machine. W. T. B. Roberts. 1,640,372; Aug. 30.
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Grading machine. W. T. B. Roberts. 1,640,372; Aug. 30.
Grading machine. W. T. B. Roberts. 1,640,372; Aug. 30.
Grading machine. W. T. May 24.

Grain binders, Shocking attachment for. G. W. Vetter.
1,637,668; Aug. 2.

Grain cleaner. J. Volz. 1,617,187; Feb. 8.

Grain cleaning and grading machine. P. D. Blackden.
1,620,865; Mar. 16.

Grain conditioner. J. L. Guinan. 1,619,417; Mar. 1.

Grain-conditioner. J. E. Guinan. 1,619,417; Mar. 1.

Grain-door. C. A. Johnson. 1,618,745; Feb. 22.

Grain-door table. L. Smith. 1,652,802; Dec. 1,617,967;

Grain-door table. D. Short and chaff, callector, for. W. Gratu-elevator heade, Dust and chaff collector for. W. A. Petters, 1.624,800; Apr. 12.
Grain-elevator garners, Dust-collecting system for. T. D. Budd and W. R. Sinks, 1,630,765 (May 31.
Grain elevators and the like, Bin-floor dust-collecting system for. T. D. Budd and W. R. Sinks, 1,629,991; tem for. May 24. Grain, etc., Method and machine for thrashing. J. J. Trueb. 1.643,827; Sept. 27. Grain feeder, Automatic. S. P. Spain. 1,645,460; Oct. 11. Grain-feeding device. A. J. Hartley. 1,626,608; May 3. Grain loader. G. E. Thomas, Jr., W. P. Wade, and F. B. Ruwwe. 1,618,155; Feb. 15.

Grain mixer. E. L. Benzel. 1,621,307; Mar. 15.
Grain mixing and chemical-treating machine. O. Burgett. 1,622,521; Apr. 19.
Grain or the like, Apparatus for drying, curing, ventilating, or otherwise treating. A. J. S. and L. J. D. Pazzi and A. P. Ordoñez. 1,630,308; May 31.
Grain pitcher, One-man hay or headed. L. E. Danlel. Grain-reducing machine. O. P. Smith. 1,000. Grain-scouling apparatus. R. H. Barker. 1,639,364; Grain-scouling apparatus. R. H. Barker. 1,639,364; Grain-scouling and grading. R. V. Judson. Re16,600; Apr. 19. Grain sparator. F. Bunse. 1,642,331; Sept. 18. Grain separator. A. Casey. 1,613,083; Jan. 4. Grain separator. A. Casey. 1,613,083; Jan. 4. Grain separator. A. Casey. 1,613,083; Jan. 4. Grain separator. A. D. Freeman. 1,617,246; J. 19. Grain separator. N. B. Sandvig. 1,626,585; Apr. 29. Grain separator. N. B. Sandvig. 1,626,585; Apr. 29. Grain shocker. H. S. Dickinson. 1,614,778; Jan. 18. Grain shocker. G. And R. Esping. 1,614,782; Jan. 18. Grain shocker. G. Innes. Re10,532; Feb. 15. Grain shocker. C. R. Raney. 1,626,122; May 3. 1,652,286; Dec. 13. Grain shocker. C. R. Raney. 1,622,148; June 14. Grain shocker. C. R. Raney. 1,643,173; Sept. 20. Grain shocker. C. R. Barty. 1,643,173; Sept. 20. Grain shocker. S. L. L. Ladd. 1,622,386; Mar. 29. Grain sprouter. E. J. Baskerville. 1,643,536; Sept. 27. Grain sprouter. E. J. Baskerville. 1,643,536; Sept. 27. Grain sprouter. E. J. Baskerville. 1,643,536; Mar. 29. Grain sprouter. E. J. Baskerville. 1,643,536; Sept. 27. Grain sprouter. E. J. Baskerville. 1,649,020; Nov. 15. Grain shocker. C. R. Grain sprouter. E. J. Baskerville. 1,649,020; Nov. 15. 1,652,586; Mar. 29. Grain washing and drying machine. D. Geddes. 1,624,531; Apr. 12. Grain washing and drying machine. D. Geddes. 1,624,531; Apr. 12. Grain washing and drying machine. D. Geddes. 1,624,531; Apr. 12. Grain washing and drying machine. D. Geddes. Grain washing and drying machine. D. Geddes. 1,624,531; Apr. 12. Grain washing and drying machine. D. Geddes. Grain washing and drying machine. L. J. C. Widman, Apparatus for treating. L. J. L. J. Tulis. 1,629,050; May. 29. Grain washing and drying machine. D. Geddes. Grain washing and drying machine. L. J. C. Widman, Apparatus for treating. L. J. Tulis. 1,629,050; May. Grain-scouring apparatus. R. H. Barker. 1,639,364; May 17.

Gramophone E. L. Rankin. 1,646,316; Oct. 18.

Gramophone record. H. A. Rogers. 1,632,313; June 14.

Gramophone stand or similar article. H. W. S. Hoy.

Des. 73,081; July 13.

Gramophones and similar instruments, Sound box for.

Granochones and similar instruments, Sound box for.

Granular material, Apparatus for compacting.

Granular material, Apparatus for compacting. G. Goebel.

1,627,601; May 10.

Granular material, Method of and apparatus for screen
Granular material, Method of and apparatus for screen
Granular material, Method of and sparatus for screen
Granulating dry materials. F. L. Bryant. 1,621,869;

Mar. 22. Granulating ory materials, F. L. Bryant. 4,024,000; Mar, 22.
Grapfruit corer. J. Kovats. 1,622,874; Mar. 29.
Graphic instrument. P. M. Biondo. 1,614,341; Jan. 11.
Graphite, Purifying, earliching, or refining crude. E. J. E.
Graphophono stedie. E. R. Haase. 1,618,863; Mar. 8.
Grass and wood destroyer. J. H. Clipperton. 1,624,474;
Apr. 19 Grass and wood destroyer. J. H. Clipperton. 1,024,474, 8, Grass cutter. R. E. L. Sparks. 1,633,138; June 21. Grass cutter. R. E. L. Sparks. 1,633,138; June 21. Grass digger, Quack. W. Drefke. 1,636,048; July 19. Grass digger; Quack. E. Pitcher. 1,632,451; June 14. Grass-root rake, Quack. B. L. Morgenroth and C. R. Morgenroth. 1,626,046; Apr. 28. July 12. Grate. W. A. Hannum. 1,640,0771; Aug. 30. Grate. S. S. S. Kennedy. 1,639,343; Aug. 16. Grate. O. W. Petersen. 1,614,317; Jan. 11. Grate. C. C. Ransdell. 1,627,856; May 10. Grate. D. T. W. Hollen, 1,649,062; Avv. 15. Grate bar. J. D. McDontal, 623,629; May 2. Grate bar. J. D. McDontal, 623,629; May 2. Grate bar. A. C. Mott., fr. 1,637,957; Aug. 2. Grate bar and support. A. E. Binder. 1,645,735; Oct. 18. Grate bar for fine fiel. H. A. Ellis, 1,633,631; June 28. Grate bar for fine fiel. H. A. Ellis, 1,633,631; June 28. Grate bar for fine fiel. H. A. Ellis, 1,633,631; June 28. Grate, Fire. A. S. Lombshadel. 1,625,556; Apr. 19. Grate, Fire. A. S. Lombshadel. 1,625,556; Apr. 19. Grate, Fire. A. S. Lombshadel. 1,625,556; Apr. 19. Grate, Furnace. J. H. Fryer. 1,643,991; July 5. Grate, Furnace. W. L. Harrison and C. W. Harrison. 1,642,512; Sept. 20. Grate, Furnace. B. B. Friebe and D. P. Miner. 1,633,418; Grate Furnace. J. H. Files. 1,621,133; Dec. 20. Grate, Furnace. J. B. Pirebe and D. P. Miner. 1,633,418; Grate Furnace. J. T. Willard. 1,621,390; Mar. 15. Grate, Furnace. J. B. Pirebe and D. P. Miner. 1,633,418; Grate Furnace. J. T. Willard. 1,621,390; Mar. 15. Grate, Furnace. J. T. Willard. 1,621,390; Mar. 15. Grate, Furnace. J. T. Willard. 1,621,390; Mar. 15. Grate furnace. Apr. 12. Grass cutter. June 21. Grate, Furnace, J. T. Willard. 1.621,390; Mar. 1 Grate housing. L. B. Zilar. 1.629,193; May 17 Grate link. A. P. Strong. 1,648,514; Nov. 8. Grate, Oven. F. E. Heath. 1,637,303; July 26.

Grate, Revolving. E. R. Moore. 1,631,427; June 7. Grate section. W. Wyand. 1,621,502; Mar. 15. Grate section. W. Wyand. 1,621,502; Mar. 15. Grate stoker, Traveling. A. E. M. Shafer and A. A. Norrman. 1,630,220; May. 24. Grate structure. D. S. Van Wagenen. 1,617,186; Feb. 8. Grate water-cooled. J. Braundella, 1,61,171; Feb. 8. Grate, Water-cooled. U. H. Cunninganm and J. T. Rowan. 1,637,216; July 26. Grater. C. B. Hawkins. 1,638,700; June 28. Grater. C. B. Hawkins. 1,638,700; June 28. Grating. A. E. Wells. 1,620,446; Mar. 16. Grating and manufacturing same, Forged. H. G. Grating structure, Continuous. W. A. Van Hoffen. 1,643,134; May 17 timelment for fire. L. S. Tenenbaum. 1,646,941; Oct. 25. Grave cover. J. M. D. ddridge. 1,622,995; Mar. 29. Grave marker. D. F. Forwood. 1,638,193; Aug. 9. Sept. 6. Grave marker. D. E. Frorwood. 1,638,193; Aug. 9. Grave marker. D. E. Frorwood. 1,651,780; Dec. 6. Grave marker. M. G. Slawson. 1,651,780; Dec. 6. Grave-marker mold. E. H. Pinkerton. 1,647,015; Grave-marker mold. E. H. Pinkerton. 1,647,015; Oct. 25.
Gravity balance. W. A. C. Schincter. 1,643,744; Nov. 15.
Gravity belance. P. Swanson. 1,647,644; Nov. 15.
Gravity tener. W. C. Wright. 1,643,814; Jan. 11.
Gravity separator and separation. E. O. Marty. 1,639,046; Aug. 16.
Gravity table. F. J. Manrock. 1,623,427; Apr. 5.
Gravity table. L. Nagy. 1,634,267; July 5.
Gravity coupling, High-pressure. W. F. Hundemer. Mar, 22.283; Mar, 22.283; Mar, 22.283; Mar, 22.24; Aug. 21; Aug. 22.24; Aug. 22.24; Aug. 23.24; Aug. 24.24; Oct. 4. Grease Cup. W. C. Brinton, jr. 1,644,234; Oct. 4. Grease Cup. W. C. Brinton, jr. 1,634,112; June 28. Grease Cup. J. W. Rondes. 1,631,158; June 7. Grease Cup. J. V. Rondes. 1,631,158; June 7. Grease Cup. N. W. Trauther. 1,632,2834; June 21. Grease Cup. N. W. Trauther. 1,632,2834; June 21. Grease Cup. Automatic. Cul. Berry, 3,632,872; June 21. Grease Cup. Lubricating. G. V. Heidt. 1,643,228; Nov. 8. Grease dispenser, Pressure-operated. E. E. Lynch. 1,630,899; May 31. Grease Cup. 24.25; Mar. 25. Grease Cup. 34.25; Mar. 25. Grease Cup. 34.25; Mar. 35. Grease Gup. J. A. Appleby. 1,643,761; Sept. 27. Grease Gup. J. A. Appleby. 1,643,761; Sept. 27. Grease Gup. M. C. Bersted. 1,621,398; Mar. 15. Grease Gup. C. G. Cooper and A. J. Dinkel. 1,621,657; J. A. Appleby. 1,643,761; Sept. 27.
M. C. Bersted. 1,621,308; Mar. 15.
C. G. Cooper and A. J. Dinkel. 1,621,657; Grease gun. Mar. 22. Grease gun. F. E. Liverance, ir. 1,628,624; May. Grease gun. P. MacKenzie. 1,621,172; Mar. 16 Grease gun. F. W. McNeely. 1,625,819; Apr. 26. Grease gun. N. Story, 3d. 1,647,941; Nov. 1,621,162 Grease gun. R. W. Sanford. 1,63 Grease gun. M. Grease gun. M. Story, 3d. 1,647,941; Nov. 1,63 Grease gun. M. Sanford. 1,63 Grease gun. M. Sanford. 1,63 Grease gun. M. Sanford. 1,65 Grease gun. 1,632,149: Grease gun, High-pressure vacuum. M. A. Frank. 1,628,834; May 17. Grease guns, Cartridge for. J. F. Brommer. 1,636,407; July 19. July 19.

Grease guns, Quick-recharging top for. W. A. Thomas.
1,553,594; Dec. 20.

Grease, Making. J. McKee. 1,619,352; Mar. 1.

Grease, Making. J. McKee. 1,637,793; Aug. 2.

Grease or oil gun or the like. W. M. Mayer. 1,644,687;

Oct. 1.

Costan Dockson. J. W. Stangar. 1,242,024, dec. 10. Oct. 11.
Grease package. L. W. Stevens. 1,646,264; Oct. 18.
Grease retainer. N. W. Trautner. 1624,352; Apr. 12.
Grease retainer. R. Without I. 1,623,063; May 17.
Grease trap. E. A. Bell. 1,651,246; Nov. 29.
Grease trap. E. A. Bell. 1,651,246; Nov. 29.
Grease tube for facial make-up. P. (called) G. Baquey. 1,646,005; Oct. 18.
Greenbouse-bar painter. R. S. Thompson. 1,645,976; Oct. 18. Greenhouse bench. Greenhouse bench. C. W. Roberts. 1,618,999; Mar. 1. Greenhouse or conservatory bench. R. Mettetal. 1,621,850; Mar. 22. Mar. 22.

Greenhouses, Promoting health, growth, and development of plants in. W. S. Burke. 1,648,257; Nov. 8.

Grenade, Hand. R. B. Lawrence. 1,020,475 Mar. 8.

Grenades, Firing socket or cup for. E. Mattlet. 1,622,160; Mar. 2.

Grid to: Mar. 22.

Grid to: Milling stop motion, Movable. E. J. Dacey and W. W. Robettson. 1,651,116; Nov. 29.

Grid leak. J. Conners. 1,621,832; Mar. 22.

Grid leak. Variable. J. J. Ghersan. 1,618,003; Feb. 15.

Grid leak. Variable. J. J. Ghersan. 1,618,003; Feb. 15.

Grid leak. J. Grasser. A. M. Jensen. 1,612,206; Jan. 4. June 14.
Gridde graver. A. M. Jensen. 1,612,926; Jan. 4.
Gridde grave similar article. A. and M. Bersied. Des.
73,773; Nov. 8.
Grille. G. W. Ackerman. Des, 73,769; Nov. 8.
Grille. J. A. Wulftange. 1,022,363; Mar. 29.
Grille of Sunsical instrument. R. T. Davis. Des. 71,863; Jan. 18. Grille frame. A. L. Bell. 1,641.523; Sept. 6. Grinder. H. E. S. Chayes. 1,634,708; July 5. Grinder and making same, Ring wheel. G. E. Vance. 1,642,096; Sept. 13.

Grinder, Clinker. F. Hodgkinson. 1,620,659; Mar. 15. Grinder, Cocoa and chocolate. O. Thurmann. 1,620,702; Grinder, Cutter. J. B. Sinderson. 1,618,680; Feb. 22. Grinder, Demountable drill bit. J. Maickel. 1,627,983; May 10. Grinder, Demountable drill bit. J. Maicker. 1,000,000 May 10. Grinder, Drill. T. A. Jackson. 1,652,672; Dec. 13. Grinder, Gear. M. Mang. 1,626,944-5; May 3. Grinder, Gear. H. G. Shafer. 1,639,471; Aug. 16. Grinder, Gear-tooth. H. Tanner. 1,626,890; May 3. Grinder, Gear-tooth. A. L. Wilder. 1,622,693; Mar. 29. Grinder, Harrow. H. F. Hanson. 1,642,583; Sept. 13. Grinder head, Meat. T. J. Marquis and J. S. Perrault. 1,654,425; Dec. 27. Grinder head, Meat. T. J. Marquis and J. S. Perrault. 1,654,425; Dec. 27. Grinder head, Meat. J. S. Perrault and J. T. Marquis. 1,616,622; Mar. 1. O. D. Kinsey. 1,636,137; July 19. Grinder, Jacket-crown. C. F. Montag. 1,614,144; Jan. 11. Grinder, Magazine. O. Audresen. 1,647,682; Nov. 1. Grinder, Micrain. C. D. Andresen. 1,614,144; Grinder, Magazine. O. Audresen. 1,847,682; Nov. 1. Grinder, Magazine. O. Audresen. 1,823,414; Apr. 5. Grinder, Portable. M. Castillo. 1,623,885; June 28. Grinder, Portable. M. Castillo. 1,623,885; June 28. Grinder, Pulp. J. D. Ullgren. 1,626,015; Apr. 26. Grinder, Saw-tooth. E. C. Orr. 1,620,165; Mar. 8. Grinder, Valve. P. Tommel, jr. 1,616,309; Feb. 1. Grinder, Valve. P. Tommel, jr. 1,616,309; Feb. 1. Grinders, Apparatus for feeding continuous wood-working. P. Priem. 1,644,148; Oct. 4. Grinders, Driving mechanism for clinker. D. K. Beach. 1,642,053; Sept. 13. Grinding. L. R. Heim. 1,647,129–31; Nov. 1. Grinding and drying apparatus. J. E. Bell. 1,632,109; Grinding and drying apparatus. J. E. Bell. 1,641,409; and drying apparatus. J. E. Bell. 1,641,409; Grinding and other machines, Indexing mechanism for. J. W. Snarry. 1,626,564; Apr. 26. Grinding and polishing device, Roll. G. Bell. 1,614,097; Jan. 11. Grinding and polishing device, Roll. G. Bell. 1,614,097; Inn. 11. Grinding and polishing machine, Marble. J. Giometti. 1,653,166; Dec. 20. Grinding and separating apparatus. P. L. Crowe. 1,639,214; Aug. 16.

D. Fritz, and B. F. Cahill. 1,628,486; Apr. 26. Grinding and thinning machine, Twist-drill-point. H. W. and P. Hunt. 1,648,180; Nov. 8.

Grinding apparatus. Dry-pan. W. L. Hanley, jr. Grinding apparatus. Dry-pan. W. L. Hanley, jr. Grinding the state of Grinding machine. W. J. Baumberger. 1,633,060; June 21. June 21.

Grinding machine. P. Brühl. 1,638,082; Ang. 9.

Grinding machine. E. B. Gardner, J. Nielsen, and R. D.

Gardner. 1,651,882; Dec. 6.

Grinding machine. F. E. Gardner. 1,638,028; Ang. 9.

Grinding machine. F. E. Gardner. 1,638,028; Ang. 9.

Grinding machine. H. Grinding machine. J. Grinding machine. J. Holland-Letz. Rel6,713; Aug. 23.

Grinding machine. H. Lutz. 1,623,79; June 14.

Grinding machine. H. Lutz. 1,623,79; June 14.

Grinding machine. R. McClenathen. 1,644,076; Jan. 11.

Grinding machine. J. F. Morgal. 1,622,585; Mar. 22.

Grinding machine. J. F. Morgal. 1,622,585; June 21.

Grinding machine. G. A. Guiver. 1,625,565; June 21.

Grinding machine. G. C. Colwer. 1,633,585; June 21.

Grinding machine. G. S. Chramm. 1,617,167; Feb. 8.

Grinding machine. G. S. Chramm. 1,617,167; Feb. 8.

Grinding machine. F. D. Van Norman and G. W. Fleming. 1,648,6801; Oct. 25. Grinding machine. C. Schramm. 1617,280; Jan. 4. Grinding machine. C. Schramm. 1617,167; Feb. Schramm. 167,1767; Feb. Schramm. 1627,1767; Feb. Schramm. 1627,1767; Feb. Schramm. 1627,1767; Feb. Schramm. 1624,642; Apr. 12. Grinding machine. Cam. H. H. Asbridge. 1,622,755; Mar. 29. Grinding machine, Centerless, W. A. Addis, 1.616.296; Grinding machine, Centerless. C. H. Norton. 1,639,958; Aug. 23.
Grinding machine, Centerless. W. J. Peets. 1,635,339;
July 12.
Grinding machine, Cutlery-. A. Hirst. 1,654,000;
Dec. 27. Grinding machine, Cylinder-. C. F. Dausmann. 1,652,769; Dec. 13. Grinding machine, Face-. A. W. Morton. 1,640,715: Aug. 30. Grinding machine, Glass-. G. Glaudel. 1,617,106; Feb. 8.

Grinding machine, Glass-. J. A. Milliken. 1,635,491; July 12. July 12.

Grinding machine, Gyratory. C. M. Conradson. 1,631,247;
June 7.

June 7.

Kuowles. 1,617,159; Feb. 8. June 7 machine, 40b. C. Knowless 1,617,159; Feb. 8. Grinding machine, Hob. C. Knowless 1,617,159; Feb. 8. Grinding machine, Hob. C. G. Olson and F. W. England. Rel.6,509; Apr. 12. Grinding machine, Internal. F. O. Hoagland. 1,632,600; June 14. June 14.
Grinding machine, Lens-edge-, H. T. Daniels. 1,616,178;
Footing machine, Multiple-joint. A. W. and J. N. Martin. 1,648,991; Nov. 15.
Grinding machine, Multispindle internal-, W. L. Bryant. 1,624,211; Apr. 12.
Grinding machine, Roll-, G. W. Binns. 1,654,236;
Dec. 27. tim., 1,648,991; Nov. 15.
Grinding machine, Multispindle internal. W. L. Bryant. 1,624,211; Apr. 12.
Grinding machine, Rullspindle internal. W. L. Bryant. 1,624,211; Apr. 12.
Grinding machine, Runner bar for plate glass. J. Didion. 1,111,112,112,112.
Grinding machine, Runner bar for plate glass. J. Didion. 1,111,112,112.
Grinding machine, Steady-rest mechanism for. S. Einstein and L. F. Nenninger. 1,642,4213; Dec. 27.
Grinding machine, Tool. S. Langlais. 1,624,259; Grinding machine, Tool. S. Langlais. 1,624,259; Grinding machine, Tool. S. Langlais. 1,624,259; Grinding machines and the like, Induction motor for. A. W. Forbes. 1,614,292; Jan. 11.
Grinding machines and the like, Induction motor for. A. W. Forbes. 1,614,292; Jan. 11.
Grinding machines for strinding clars, shales, and other dry and semidry materials. Grinding pan for. T. A. Hibbins. 1,640,772; Aug. 30.
Grinding machines for strinding clars, shales, and other dry and semidry materials. Grinding pan for. T. A. Hibbins. 1,640,772; Aug. 30.
Grinding machines for producing wood pulp, Apparatus for feeding mechanical. G. Nenzel. 1,652,044; Dec. 6.
Grinding machines Rulling attachment for ment-Grinding machines, Relieving mechanism for. J. Bath and E. A. Walker. 1,651,432; Dec. 6.
Grinding mechanism. C. B. Keller. 1,635,792; July 12.
Grinding mechanism. C. B. Keller. 1,635,792; July 12.
Grinding mill Cane. F. Farrel, F. 1,635,263; July 12.
Grinding mill, Cane. F. Farrel, F. 1,635,263; July 12.
Grinding mill, Cane. F. Farrel, F. 1,635,263; July 12.
Grinding mill, Cane. F. Farrel, F. 1,635,263; July 12.
Grinding mills, Release clutch for. J. S. Buckwalter. 1,639,377; May. 1.
Grinding mills, Release clutch for. J. S. Buckwalter. 1,639,377; May. 1.
Grinding mills, Release clutch for. J. S. Buckwalter. 1,639,341; June 28.
Grinding straces. Method and apparatus for. J. L. Grinding tool. P. L. Starr. 1,624,634; Apr. 12.
Grinding wheel and method of grinding. G. Wirrer. 1,633,341; June 2.
Grinding wheel B. M. W. Hanson. 1,640,991; Aug. 30.
Grinding wheel B. M. W. Sept. 27.
Ground machine, Ring. G. H. Higgins. 1.651,598;
Dec. 6.
Ground brake. C. E. Atwood. 1.631,115; June 7.
Ground clamp. A. E. Felge. 1.616,847; Feb. 8.
Ground clamp. A. E. Felge. 1.616,847; Feb. 8.
Ground-special relations in 1.631,422; Dec. 6.
Ground-special indicator. R. Kauch and C. L. Paulus. 1.643,461; Sept. 27.
Grounding arrangement. E. G. Merrick. 1.648.694;
Nov. 8.
Grouser. R. C. Hawkins. 1.622,111; Mar. 22.
Grouser. F. Wecks. 1.622,768; May 24.

824 Grouting A. E. Troiel. 1,628,933; May 17.
Growths Support for parasitic. P. W. Leffland.
Grubber, Dandelion. R. B. Statsny. 1,624,442; Apr. 12.
Grubber or cultivator. G. K. Spitzenberg. 1,640,811;
Aug. 30. Guard-rail structure. C. D. Young. 1,623,713; Apr. 5. Guard-rails, Foot guard for. E. C. Zimmerman. 1,644,048; Guard-rails, Foot guard for. E. C. Zimmerman. 1,644,048; Guard-rails, Foot guard for. E. C. Zimmerman. 1,644,048; July 12.

Guide, Combination. C. D. Frey. 1,630,120; May 24.

Guide for side trackers. E. F. Raymond. 1,615,037; Jan. 18.

Guide for straightedges. R. C. Williams. 1,635,352; Guide-rail lubricator. E. Weigele. 1,643,038; Sept. 20.

Guideway, Adjustable. E. W. Zeh. 1,653,038; Sept. 20.

Guideway, Adjustable. E. W. Zeh. 1,653,036; Dec. 20.

Guitar. F. Monaco. 1,617,454; Feb. 15.

Guideway, Adjustable. E. W. Zeh. 1,653,030; Dec. 20.

Guitar. F. Monaco. 1,617,454; Feb. 15.

Guideway, Adjustable. E. W. Zeh. 1,653,030; Dec. 20.

Guitar. F. Monaco. 1,617,454; Feb. 15.

Guitars. Bar for. F. C. Meyer. 1,630,763; May 31.

Guitars. Bar for. F. C. Meyer. 1,630,763; May 31.

Guitars. Bar for. F. C. Meyer. 1,630,763; May 31.

Guitars. Bassel. Nav. S.

Gummericator. Guitars. Guitar Oct. 4. opening screen. M. E. Layne. 1,635,368; Gun. Cartriages, Grease. R. L. Drake. 1,642,770; Sept. 20.

Gun, Concrete. R. C. Hackley. 1,619,207; Mar. 1,610; Gun. filler, Grease. E. Brown. 1,616,780; Feb. 8.

Gun. filler, Grease. E. Brown. 1,616,780; Feb. 8.

Gun. Grease. E. Brown. 1,616,780; Feb. 8.

Gun. Fer. Greater of and apparatus for. E. M. Hewlett and W. W. Willard. 1,626,824; May 3.

Gun. firing mechanism. A. S. Halsey. 1,651,690; Dec. 6.

Gun. Leocating. T. Taylor. 1,616,997; Feb. 8.

Gun. Leocating. R. T. Taylor. 1,636,907; Aug. 16.

Gun. Lubricating. C. L. Conklin. 1,646,681; Oct. 18.

Gun. Lubricating. H. Kreidel. 1,614,134; Jan. 11.

Gun. Machine. M. T. Gorton. 1,625,903–4; Apr. 26.

Gun. Machine. R. A. Hagen. 1,653,171; Dec. 20.

Gun. Machine. R. A. Hagen. 1,653,171; Dec. 20.

Gun. Mar. J. Elsberger. 1,629,133, Mar. 26.

Gun. Mar. J. J. Elsberger. 1,629,133, Mar. 26.

Mar. 15. J. Elsberger. 1,629,133, Mar. 26. Gun, Machine. B. A. Hagen and J. S. Hatcher. 1,621,500; Gun mount. S. G. Green and J. S. Hatcher. 1,621,500; Mar. 15. Gun sight. J. Fischer. 1,622,193; Mar. 22. Gun sight. J. H. R. Incils. 1,650 628; Nov. 29. Gun sight. C. H. Latourell. 1,620,364; Mar. 8. Gun sight. J. H. Redided. 1,618,225; Feb. 22. Gun sight. J. D. Woods 1,641,019; Aug. 20. Gun sight. J. D. Woods 1,641,019; Aug. 20. Gun sight. J. D. Woods 1,641,019; Aug. 20. Gun sight and C. L. Paulus. 1,635,059; July 5. Guns.; bring device. C. Otto. 1,635 763; July 12. Gun, Slifer-brick. W. A. Miller. 1,617,959; Feb. 15. Gun, Sporting. von Frommer. 1,618,247; Feb. 22.

Gun, Spray. H. D. Binks, 1,850,886; Nov. 29.
Gun, Spring. W. F. Schmidt, 1,633,795; June 28.
Gunstock, Adjustable. R. V. Stansel. 1,651,299; Nov. 29.
Gun unit, Machine- T. M. Jervey, 1,630,522; May 31.
Gun valve, Rivet-cutting-, J. M. Crowe. 1,615,934;
Feb. 1, Gun unit, Machine. T. M. Jervey. 1,630,532; May 31. Gun valve, Rivel-cutting. J. M. Crowe. 1,615,934; Feb. 1. Guns and rifles, Locking mechanism of hammerless shot. J. Larsen. 1,615,001; Feb. 8. He sighting of. R. W. Anderson. 1,624,623; Apr. 12. Guns, Apparatus for indirectly laying antiaircraft. W. F. Grotendorst. 1,615,509; Jan. 25. Guns, Automatic single-trigger mechanism for double-barrel. J. Kautsky, fr. 1,625,246; Apr. 19. Guns, Barrel-locking device for breakdown. L. P. Smith. Guns, Enrel-locking mechanism for breakdown. L. P. Smith. 1,624,877; Apr. 12. Guns. Counting or registering apparatus for machine. R. C. Coupland. 1,653,698; Dec. 27. Guns. Crunting or registering apparatus for machine. R. C. Coupland. 1,653,698; Dec. 27. Guns, Defection vernier for machine. C. T. Schwab, jr. 1,652,499; Dec. 13. Guns, Firing control system for. J. C. Karnes. 1,653,655; Guns, Firing control system for. J. C. Karnes. 1,653,655; Guns, Firing control system for. J. C. Karnes. 1,653,665; Guns, Firing mechanism for multiple-barrel. P. W. Byrnes. 1,643,888; Nov. 22. Guns for antiaircraft firing, Sight for machine. Y. P. G. Guns, Loader for. T. A. Conlon. 1,631,913; Mar. 1. Guns, Mount for S. G. Green. 1,634,491; Sept. 27. Guns, Mount for machine. W. T. Gorton. 1,619,113; Mar. 1. Guns, Mount for machine. T. M. Jervey and S. G. Green. 1,625,124; Apr. 19. Green. 1,625,124; Apr. 19. Guns, Forteding attachment for repeating. A. R. Neef. 1,614,755; Jan. 18. Guns, Regulating automatically sweeping fire in machine. Sept. 27. Guns, Regulating automatically sweeping fire in machine. J. Scheluto and F. J. J. Furnemont. 1,625,775. Guns, Regulating automatically sweeping fire in machine. J. Scheluto and F. J. J. Furnemont. 1,625,775; J. Scheluto and F. J. J. Furnemont. 1,625,775; Apr. 19.

Guns, Sear mechanism for. W. T. Gorton. 1,618,280; Feb. 22.

Guns. Semiautomatic rammer for. A. Dabrasky. 1,629,683; May 24.

Guns, Single-trigger mechanism for multiple-barreled. D. W. Franchot. 1,634,416; July 5.

Guns, Traversing gear for. H. C. Zimmerman. 1,620,851; Mar. 15.

Guns, Vehicle mount for. T. A. Conlon. 1,614,655; Jan. 18. Jan. 18.
Gut, Treatment of. P. J. Wohl, 1,623,858; Apr. 5.
Gutter hanger. C. Meunier. Rel6,622; May 10.
Gutter hanger. C. A. Meunier. 1,630,961; May 31.
Gutter hanger. W. Peirez. 1,640,369; Aug. 30.
Gutter hanger. E. Rachlin. 1,622,361; June 14.
Gutter hanger. M. Rachlin. 1,622,361; June 14.
Gutter-hanger drele, G. B. Geiser. 1,630,935; May 31.
Gutter-hanger dreles, Support for. G. B. Geiser.
Gutter-Sum M. P. WacArdle. 1,685,762; July 12.
Guy and guard, Combination. G. W. Perks. 1,630,356;
May 31. Guy and May 31 Guys and the like, Guard for. F. N. Bierce. 1,627,423; May 3.

Gymnastic apparatus. J. Pllates. 1,621,477; Mar. 15.
Gymnastic implement. A. Weschke. 1,631,388; June 7.
Gypsum product and producing same. L. M. Parkburst.
1,620,916; Mar. 15.
1,632,001; Mar. 15.
1,633,001; Aug. 2.
Gyral wheel. A. Moore. 1,625,327; Apr. 19.
Gyrocompass. J. B. Henderson. 1,625,361; Apr. 19.
Gyrocompass. The defendence of the company o Gyroscope-recting systems, Control of. F. G. Henry. 1.627.178: May 3. Gyroscope, Stabilizing. A. E. Schein. 1,617,309; Feb. 8. Gyroscopic apparatus. C. M. Paxton. 1,639,233; Aug. 16. Gyroscopic device. T. Umetsu. 1,613,801; Jan. 4. Gyroscopic instrument and apparatus. J. B. Henderson. 1,644,921; Oct. 11. Gyroscopic stabilizer. A. S. Chessin. 1,618,570; Feb. 22. Gyroscopic stabilizer. C. E. Schueller. 1,621,816; Gyroscopic stabilizer. C. E. Schueller. 1,621,815; Mar. 22. Gyroscopic stabilizer system. B. G. Lamme. 1,640,549; Aug. 30.

Hacking machine. G. E. Luce. 1,276.656; May 10.

Hacmacytometers. Marking for. C. A. Hausser.

1.647.865; Nov. 1.

Hafnium and zirconlum, Dissolving a mixture of hafnium and zirconlum phosphares and for separating. A. E.

Hafnium and zirconium phosphates and separating hafnium and zirconium, Dissoiving a mixture of. A. E. Van Arkel and J. H. De Boer. 1,618,494; Feb. 22. Hafnium and zirconium phosphates, Converting. J. H. de Boer. 1,624,162; Apr. 12.

Hair and scalp, Apparatus for treating the, J. C. Casey. 1,637,635; July 26.

Hair, Apparatus for permanently waving or curling, J. E. Mactregor. 1,617,260; Feb. 8.

Hair, Apparatus for waving. F. R. Marcel. 1,643,783; Hair, Apparatus for waving. C. G. Nessler. 1,614,756; Jan. 18. Hair, Apparatus for waving human. C. Posternock. 1,612,942; Jan. 4.

Hair, Apparatus for waving human. C. Posternock. 1,617,134; Feb. 8.

Hair, Apparatus for waving human. C. Posternock. 1,617,134; Feb. 8.

Hair-bobing device. F. Lewis. 1,629,804; Aug. 23.

Hair-brush. G. B. Aufsesser. 1,628,299; May 10.

Hair-brush. F. R. Weber. 1,628,299; May 10.

Hair-brush. F. R. Weber. 1,628,299; May 10.

Hair-clasp. J. Philipp. 1,618,670; Feb. 22.

Hair clasp. J. Philipp. 1,618,670; Feb. 22.

Hair clipper. A. H. Hicks. 1,648,559; Sept. 27.

Hair clippers. Attachment for. H. F. Patenade. 1,628,421; May 10.

Hair clippers, Attachment for. M. L. Ruff. 1,625,747; Hair clippers, Gauging attachment for. W. O. and V. L.

Hair clippers, Gauging attachment for. W. O. and V. L.

Hair clippers, Gauging attachment for. W. O. and V. L.

Hair clippers, Gauging attachment for. W. O. and V. L. Hair cuppers, Attachment for. M. L. Kuli. 1,625,44; Apr. 19.

Apr. 19.

Xancey. 1,648,998; Nov. 22.

Hair cluppers, Guarin attachment for. W. O. and V. L. Mart. 22.

Hair cluppers, Guard for. C. H. Redman. 1,621,641; Mar. 22.

Hair comb. H. Lister. 1,632,238; June 14.

Hair comb. J. W. Meek. 1,621,425; Mar. 15.

Hair comb. J. S. Pickford. 1,621,269; Mar. 15.

Hair comb. H. Sendheck. 1,614,631; Jan. 15.

Hair comb. and cutter, Combined. E. Scavey. 1,639,617; Aug. 16. Hair comb, Fountain, J. W. Burgewitz, 1,638,523; Hair comp, Fountain. J. W. Burgewitz. 1,038,525; Aug. 9.

Hair curler. M. C. Conant and C. Seely. 1,620,722; Mar. 15.

Hair curler, S. Goldberg. 1,620,543; Mar. 8. Mar. 15.

Hair curier, S. Goldberg, 1,620,543; Mar. 8.

Hair curier, K. McClaire, 1,619,743; Mar. 1.

Hair curier, M. D. Meserole, 1,622,660; Mar. 29.

Hair curier, L. J. Schumacker, 1,649,869; Nov. 15.

Hair curier and Waver, G. W. Anderson, 1,631,781;

June 7.

Hair curier and waver, H. Brinkschneider, 1,636,457;

July 19.

Hair curier, Electrical, A. B. Gordon, 1,638,302; Aug. 9.

Hair curier, Spitless spit-curl, N. Fulton, 1,615,692;

Jan. 25. Hair turier, Spitless span-Hair curier, Spitless span-Bair curing and waving device. A. Hair-curing apparatus. P. Santurello. Aur. B. Santurello. P. M. Beard. 1,630, 1,641. A. H. Sexton. 1,623,758; Apr. 5.

Hair-curling device. P. M. Beard. 1,630,560; May 31.

Hair curling device. W. G. Shelton. 1,641,205; Sept. 6.

Hair-curling jron. J. C. Mead. 1,650,952; Nov. 29.

Hair-curling material and preparing the same. A. E.

Ciarlante. 1,647,958; Nov. 1.

Hair cutter. F. Fewins. 1,615,328; Jan. 25.

Hair-cutting comb. A. M. Widdows. 1,623,292; Apr. 5.

Hair-cutting device. N. McGlashan. 1,623,4788; July 5.

Hair-cutting machine. L. Bernardduct. 1,635,063;

Jing 21, Jing 21, Jing 22, Jing 23, Jing 25, Jing 25, Jing 25, Jing 25, Jing 26, Jing 27, J Hair-cutting machine. L. bernandisch.
June 21.
Hairdress on natural hair, Fixing artificial. E. Syptroth.
1,627,469; May 3.
Hairdressing appliance. T. J. and J. M. Martin.
1,623,630; Apr. 5.
Hairdressing article. R. B. Stephens.
1,652,462; Dec. 13.
Hairdressing implement. H. Durlacher. 1,654,117;
Dac. 273 Hairdressing implement. H. Durlacher. 1,654,117; Dec. 27.
Hair drier, Electric. W. G. Shelton. 1,654,273; Dec. 27.
Hair dye. M. A. M. Wheeler. 1,638,341; July 19.
Hair guard and template. M. Schick. 1,629,741; May 24.
Hair net. L. C. Hogan. 1,616,809; Feb. 8.
Hair net. A. Knoll. 1,633,182; June 21.
Hair ornament. E. R. Person. 1,649,040; Nov. 15.
Hair, Permanent waving of. S. and H. Bonat. 1,640,345;
Aug. 30. Hair, Permanent waving or.
Aug. 30.

Hair-piece attachment. J. Oppenheim. 1,638,016; Aug. 9.

Hairpin. G. E. Almquist. 1,617,980; Feb. 15.

Hairpin. W. F. Bleck. 1,651,802; Dec. 6.

Hairpin. W. H. H. Davis. 1,621,924; Mar. 22.

Hairpin. W. H. H. Davis and F. Celemtano. 1,637,766; Aug. 2.

Hairpin. A. J. Greenwich. 1,647,797; Nov. 1.

Hairpin. L. J. Pearson. 1,618,385; Feb. 22.

Hairpin. E. G. Sylvester. 1,614,809; Jan. 18.

Hairpin box. V. A. Joy. 1,623,684; Apr. 5.

Hair protector. A. Reihold. 1,618,297; Feb. 22.

Hair receiver. Barber's vacuum. W. Ellerhorst. 1,635,613; July 12.

Hair-retaining comb. P. Eagle. 1,642,364; Sept. 13.

Hair shield. W. Graham-Barnett. 1,613,095; Jan. 4.

Hair shield. W. Graham-Barnett. 1,613,095; Jan. 4.

Hair shield. W. Graham-Barnett. 1,613,095; Jan. 4.

Hair shield. P. Perry. 1,642,888. Hair-straightening device. M. L. Perry. 1,642,888;

Hair structure. W. Hepner. 1,634,190 June 28.
Hair-tinting device. F. J. Matheson. 1,637,781; Aug. 2.
Hair-treating method and composition. J. C. Brown.
1,637,469; Aug. 2.
Hair treatment, Heating device for. A. E. Reimers and
W. K. Tavender. 1,647,748; Nov. 1.
Hair-trimming appliance. C. W. Jackson. 1,622,647; Hair-trimming appliance. C. W. Jackson. 1,622,647; Mar. 29.
Hair waver. B. E. Haynes. 1,623,838; Apr. 5.
Hair waver. R. F. Minty. 1,646,162; Oct. 18.
Hair waver. W. C. and E. D. Scherer. 1,653,229; Dec. 20.
Hair waver. W. C. and E. D. Scherer. 1,653,229; Dec. 20.
Hair waver. I. Strabelle. 1,643,226; Sept. 20.
Hair waver. I. Strabelle. 1,643,226; Sept. 20.
Hair waver. M. D. Worley. 1,629,567; May 24.
Hair waver. Electrical. W. M. Nevotti. 1,643,168; May 24.
Hair waver. B. M. Beskow. 1,637,893; Apr. 2. Aug. Z.
Hair waving. S. Fisher. 1,641,751; Sept. 6.
Hair waving and curling device. S. B. Hammerly.
1,652,365; Dec. 13.
Hair waving and curling device, Electrical. R. L. Opper and J. M. Opper. 1,641,353; Sept. 6.
Hair-waving apparatus. H. B. Baird. 1,631,571; June 7.
Hair-waving apparatus. E. G. Unger. 1,653,792; Dec. 27. Hair-waving appliance and method. J. Mayer. 1,622,957; Mar. 29.

Hair waving, Appliance for permanent. A. H. Bongers.

Re16.558; Feb. 22.

Hair-waving appliance, Permanent. J. Mayer. 1,619,794;

Mar. 1. Mar. 1.

Hait-waving comb. G. B. O'Connor. 1,624,757; Apr. 12.

Hait-waving comb. S. M. Wright. 1,642,636; Sept. 13.

1,635,436; July 12.

Hait-waving device. K. Eklund and M. A. Lock.

1,621,527; Mar. 22.

Hait-waving device. H. Jacobs. 1,652,279; Dec. 13.

Hait-waving device. I. Jayne and E. R. Kinker. 1,638,442; Aug. 3.

Hair-waving device. V. J. Mougin. 1,622,736; Apr. 5.

Hair-waving device. V. J. Mougin. 1,622,798; Mar. 29.

Hair-waving device. C. G. Nessler. 1,648,239; Nov. 8.

Hair-waving device. C. G. Nessler. 1,648,239; Nov. 8.

Hair-waving device. E. C. A. Sponcet. 1,618,487; Hair-waving device, O. S. Wright. 1,632,753; June 14. Hair-waving device, Permanent. B. Bognar. 1,644,321; Oct. 4. Hair-waving device, Permanent-. W. A. Groff. 1,624,336; Apr. 12.

Apr. 12.

Hair, Waving of. W. and H. McDonald. 1,630,396;

May 31. May 31.

Hair waving or curling device. L. H. G. Van Dijk.

1.638.896; Aug. 16.

W. Carlough. 1.635.841; Dec. 27.

Hair-waving tube. F. R. Marcel. 1.6453.425; July 12.

Hair warper. N. M. Adams. 1.633.507; June 21.

Halogen-albumin compounds, Producing. R. Wolffenstein.

1.649.051; Nov. 15.

Halogen-Busstituting. K. Schöllkopf. 1.645.974; Halogen, Oct. 18. Hologenated hydrocarbons, Reduction of. A. F. S. Bellones. 1,627,881; May 10.
Halogensulphonamides, Stable mixture yielding saits of. H. Gunzler and G. Wesenberg, 1,650,124; Nov 22.
Halter, P. D. Nelson and B. C. Lammers, 1,633,268; Halter. P. June 21. June 21.

Ham boller, D. M. Otte, 1,642,168; Sept. 13.

Ham boller, O. M. Otte, 1,642,168; Sept. 13.

Ham presser G. W. Scholten, 1,624,968; Apr. 12.

1,643,157; June 2 for reshaping, J. H. Appleton, Hamburger press, D. A. Wallace, 1,648,834; Nov. 8, Hame for draft horses or mules. A. Pillet. 1,624,624; Apr. 1,2. Hamer for draft horses or mules. A. Pillet. 1,624,624; Apr. 12.

Hamen hook. F. R. Warren. 1,616,013; Feb. 1.

Hammer. T. Abraitis. 1,614,055; Jan. 11.

Hammer. A. Colins. 1,846,935; Oct. 25.

Hammer. Alr-cooled pneumatic. C. H.

1,634,780; July 5.

Hammer and drill, Electric. N. Piscionere.

July 26.

Hammer Automatic chisel. M. W. Gaillard. 1,641,031;

Hammer-hlow steam trap. C. H. Thompson. 1,625,107;

Apr. 19. Hammer, blow steam trap. C. H. Thompson. 1,625,107; Apr. 19.

Hammer, Bricklayer's. J. Martin. 1,648,616; Nov. 8.

Hammer, Bush. J. J. Padbury. 1,634,298; July 5.

Hammer, Centrifugal. G. P. Lucas. 1,630,021; May 24.

Hammer cruster. G. W. Borton and W. A. Battey. 1,649,565; Nov. 15.

L. Gold, S. G. W. Borton and W. A. Battey. 1,649,565; Nov. 15.

Hammer, Drop. M. W. Cole. 1,649,380; Nov. 15.

Hammer, Drop. W. Merrill. 1,636,426; July 19.

Hammer, Drop. W. Merrill. 1,634,875; Sept. 27.

Hammer, Drop. M. C. Talcott. 1,651,483; Dec. 6.

Hammer, Fluid-pressure. E. W. Stevens. 1,617,969; Feb. 15.

Hammer, Fluid-pressure-operated. E. W. Stevens. 1,637,929; July 5.

Hammer, Fluid-pressure-operated. E. W. Stevens. 1,621,792; July 5.

Hammer, Pageler, Power-driven. H. P. Brumell. 1,621,103; Mar. 165.

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Hammer or the like. R. W. Mills. 1,628,897; May 17, Hammer, Pneumatic. E. Burton. 1,639,076; Aug. 16. Hammer, Pneumatic. F. L. Price. 1,628,374; Dec. 13. Hammer-position indicator. L. P. Smith. 1,624,878; Apr. 12.
Hammer, Power. F. H. Derby, 1,624,878; Apr. 12.

Hammer, Power. G. E. Hieber, 1,620,525; Mar. 8, 14 manner, Power. G. E. Hieber, 1,640,579; Mar. 8, 14 manner, Power. H. H. Heber, 1,640,579; Mar. 80, 14 manner, Power. H. H. Miller, 1,633,996; June 28, 14 manner, Power. H. H. Miller, 1,633,996; June 28, 14 manner, Power. H. Schellerer, 1,644,569; Sept. 19, 14 manner, Power. F. Schellerer, 1,642,560; Sept. 19, 14 manner, Power. F. Schellerer, 1,642,560; Sept. 11, 14 manner, Power. W. Trapnell, 1,647,564; Nov. 1, 14 manner, Power, T. A. Young, 1,641,393; Nov. 1, 14 manner, Power, T. Knöchl, 1,639,459; Aug. 18, 14 manners, Spring, L. Knöchl, 1,639,459; Aug. 18, 14 manners, Nall-driving attachment for pneumatic. C. O. Dick. 1,618,367; Feb. 22.

Hammers, Nall-driving attachment for pneumatic. A. D. Will-Manners, Stock absorb, 1,642,559; Sept. 20, 14 manners, Tool attachment for, L. W. Shaver, 1,620,923; Mar. 15.

Hammers, Tool retainer for pneumatic. M. Strunack, 1,646,120; Oct. 18, 140,000; S. Hoyman, 1,650,714.
       Hammock back, Automatic. S. Heyman.
Nov. 29.
                                                                                                                                                                                                                                                                                                                                                                                                                        1,650,714;
     Nov. 29.
Hammock, Glide, C. Klein, 1,618,593; Feb. 22.
Hamper, G. S. Fnber, 1,653,556; Dec. 20.
1,632,269; June 14.
Hampers, Adjustable bottom for, H. T. Bradley and F. Jacobi. 1,632,276; June 14.
Hampers, Adjustable bottom for, H. T. Bradley and F. Jacobi. 1,632,276; June 14.
Hand and finger protector. G. G. Condon, 1,625,191;
Apr. 19.
     Apr. 19.

Hand and forearm, Mechanical detachable. J. Smith. 1,680,277; May 31.

F. Gelse. 1,649,400; Nov. 15.

Hand, Artificial. * H. E. Hodgsson. 1,825,317; Apr. 19.

Hand bag. M. Baldwin. 1,643,440; Sept. 27.

Hand bag. E. Elias. 1,627,496; May 3.

Hand bag. R. Fishbein. 1,639,454; Aug. 16.

Hand bag. J. Kirsch and A. Gileberman. Des. 73,614;
       Hand bag.
Hand bag.
Oct. 11.
Hand bag.
          Hand bag. O. J. Malinsky. Des. 72,403; Apr. 12.
Hand bag. H. Margolin. Des. 72,326; Mar. 29.
Hand bag. C. J. McCabe and I. Schoenholz. 1,624,611-12;
          Hand bag.
Apr. 12.
       Hand bag, E. L. Weber, Des. 73.419; Sept. 6.
Hand-bag accessory, F. J. Quigan and S. Carolin,
1.627,663; May 3.
Hand bag, Collapsible, M. F. Roser, 1,636.838; July 26,
Hand-bag frame, W. T. Goldsmith, Des. 73,564-5;
                           Oct. 4.
       Oct. 4.
Hand-bag frame. E. Poeter. Des. 72,386-8; Apr. 5.
Hand-bag frame. E. Poeter. Des. 73,146; July 26.
Hand bug, Lady's. M. Borfuss. 1,622,306; Mar. 29.
Hand bug, Lady's. M. White. Des. 72,744; May 24.
Hand bag, Lady's. M. White. Des. 72,744; May 24.
Hand bag or similar article. S. Haskell. Des. 72,478;
Apr. 10.
     Apr. 19.

Hand bag or similar article, Lady's. A. Sokol and S. Montag. Des. 71,814; Jan. 4.

Hand bag, Smail. J. A. Methot. Des. 72,178; Mar. 8.

Hand bags sand other articles, Interchangeable initial or ornamental decoration for. N. Greenbaum and A. Hosenbaum. 1636,130 mt. 194.

Hosenbaum. 1636,130 mt. 194.

Hosenbaum. 1646,523 mt. 194.

Hand calemp. S. N. Coleman. 1.640,883; Aug. 30.

Hand covering. F. A. Kurz 1,625,308; Apr. 19.

Hand doverling. G. A. Kurz 1,625,308; Apr. 19.

Hond drill. C. Bodmer, 1644,44 mt. 195.

Sept. 20.

Hand guard. C. G. Hinze. 1,631,128; June 7.
          Hand guard. C. G. Hinze. 1,631,128; June 7.
Hand gun, High-pressure. W. H. Opitz. 1,646,418;
Oct. 25.
       Oct 25.

Handkerchief, M. P. Bee. Des. 72,347; Apr. 5.

Handkerchief, E. Journet, Des. 72,065; Feb. 22.

Handkerchief, Enry, G. H. Myers, 1,650,030; Nov. 22.

Handkerchief, L. Robert, C. H. Hyers, 1,650,030; Nov. 22.

Handkerchief or similar article. C. Fenwick. Des. 74,051; Dec. 13.

Handkerchief vanity and powder-puff holder. E. B. P. Crump. 1,652,611; Dec. 13.

Hand planing machine. G. Jehle. 1,036,863; July 26.

Hand planing machine. G. Jehle. 1,036,863; July 26.

Hand planing machine. G. Jehle. 1,036,863; July 26.

Hand street and Jehle. 1,634,322; Jan. 4,034,332; Jan. 4,034,334; Jan. 4,034,334
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Handle: Sce—
Automatic handle,
Basket handle,
Car-seat handle,
Curtain handle,
Detachable handle,
Door-closing handle,
Door handle,
Flattron handle,
Catfolyh handle Mop handle. Shovel handle. Spring handle. Switch handle. Tool handle.
Umbrella handle.
Utensil handle.
Vault handle. Golf-club handle. Golf-club handle.

Inandle. H. C. Binkele. 1,644,630; Oct. 4.

Handle. J. K. Kinnear. 1,641,226; Sept. 6.

Ilaudle and making same. A. J. Weatherhead, fr.

1,617,557; Feb. 15.

Handle and the like, Molded. F. E. Layman. 1,625,322;

Apr. 19.

Lapter and the like, Molded. F. E. Layman. 1,625,322;

Apr. 19.

Handle attachment. F. D. Bowen. 1,638,301; July 19.

Handle attachment. F. D. Bowen. 1,638,301; Aug. 9.

Handle attachment. F. D. Bowen. 1,638,309; Aug. 9.

Handle strachment. F. D. Bowen. 1,638,309; Aug. 9. Aug. 30. Handle-bending machine. Aug. 30.

Iandie-bending machine. W. S. Elliot. 1,626,190;
Apr. 26.

Apr. 27.

Iandie-bending machine. W. S. Elliot. 1,626,190;
Apr. 28.

Iandie-fistening device, Tool. R. Gabriel. 1,644,576;
Oct. 1. Gabriel. 1,644,576;
Oct. 1. Gabriel. 1,644,576;
Oct. 1. Gabriel. 1,644,576;
Oct. 1,638,644;
Iandie-Inserting machine. H. W. Lormor. 1,636,642;
Iandie-Inserting machine. H. W. Lormor. 1,636,642;
Iandie knobs, Fastening. R. K. Winning. 1,648,524;
Nov. 8.

Handie support. C. March. 1,613,667;
Iandies to C. M. Keener.
Iandies to cleat plates, Apparatus for attaching. H. Miller. 1,642,458;
Iandier. 1,642,458;
Isept. 13.

Handing and display system, Web. C. T. Bartlam. 1,615,298;
Jan. 25.

Handing and severing articles, Apparatus for J. W. Fay.
Ianding and severing articles, Apparatus for J. W. Fay.
Ianding and severing articles, Apparatus for J. W. Fay.
Ianding articles. H. K. Spencer. 1,620,618;
Ianding articles. H. R. J. Romine. 1,615,813;
Iand press. Sanitary noodle. F. De Fazi. 1,653,154;
Idand press. S W. S. Elliot. Handling butterns. W. R. Johnson and A. C. C. Dec. 20.

Band press, Sanitary noodle. F. De Fazi. 1,653,154;

Dec. 20.

Hand protector. I. C. Lairy. 1,654,331; Dec. 27.

Hand protector. B. McGill. 1,653,057; Dec. 20.

Langari. Sec.—

Mold-form banger. anger: See— Adjustable hanger. Beam hanger. Book hanger. Brake-beam safety hanger. Mold-form hanger. Necktie hanger. Picture hanger. Pipe hanger. Pulley-block hanger. Radiator hanger. Brake-beam sarety hange. Brake hanger. Bracket hanger. Broom and mop hanger. Chicken-roost hanger. Clothes hanger. Sausage hanger. Sausage hänger.
Screen hanger.
Seed-corn hanger.
Seed-corn hanger.
Shade and curtain hanger.
Spring-lip hanger.
Spring-lip hanger.
Sucker-rod hanger.
Trank hanger.
Trousers hanger.
Trousers hanger.
Vehicle spring hanger.
Window-screen hanger.
Window-screen hanger.
Wire and cord hanger. Cottes hanger.
Coat and trouser hanger.
Curtain hanger.
Cutter hanger.
Door hanger.
Eaves-trough hanger.
Electrical-fixture hanger. Electrical-fixture hanger.
Fixture hanger.
Garment hanger.
Gatter hanger.
John Charles hanger.
Lamp hanger.
Meat hanger.
Hanger. M. Bernhard.
Hanger. C. J. Gibson. 1,647.794; Nov. 1.
Hanger. T. W. Kendall.
Jilly 5. A. Montan and H. W. Frishtrom. 1,634.377;
July 5. A. Montan and H. W. Frishtrom. Hanger, A. Montan and H. W. Faistron.

July 5.

Hanger and support. F. Obiols. 1.635.900; July 12.

Hanger box. R. F. Runge. 1.638.747; Aug. 9.

Hanger box. M. S. Vile. 1.645.503; Oct. 11.

Hanger clamp. C. C. Parrish. 1.654.383; Dec. 27.

Hanger clamp. Adjustable. F. C. Harris. 1.613.31

Jan. 4.

Hanger for wall closets. K. A. Wernic. 1.650.0

Nov. 22. Dec. 27. 1,613,394; Hanger or support, Adjustable. C. E. Jewell. 1,631,209; June 7. Hangers, Attachment for garment. F. Stutz. 1,638,375; Aug. 9. Hanks or skeins, Machine for stretching. W. Gerber. 1,638,843; Aug. 16. Haythics-steeling machine. R. B. Lewis. 1,622,455; Mar. 29. Hardness-testing machine and method of testing hardness. H. M. German. 1,646,195; Oct. 18. Hardware, Mody. J. H. Bourgon. 1,613,077; Jan. 4. Hardware, Weatherproofing. C. J. Parsons. 1,022,046; Mar. 22. Harmonic frequency producer. W. A. Marrison. 1,639,045; Aug. 16.

ALPHABETICAL LIS

Harmonic generator. H. A. Affel. 1,646,438-9; Oct. 25.
Harmonica. W. B. Yates. 1,637,289; July 26.
Harness. A. W., and A. F. Pocan. 1,618,673; Feb. 22.
Harness and coupling for window cleaners. Safety. B.
Harness, Baby. M. Breslin. 1,639,424; Aug. 16.
Harness, Baby. M. Breslin. 1,639,424; Aug. 16.
Harness, Child's. R. E. Storey. 1,651,661; Dec. 6.
Harness, Terme. E. Weibel. 1,653,726; July 26.
Harness rack. C. Olson. 1,613,477; Jan. 4.
Harness frame. E. Weibel. 1,653,6726; July 26.
Harness rack. C. Olson. 1,613,477; Jan. 4.
Harness frame. E. Weibel. 1,636,8726; July 26.
Harnow. R. Eckardt. 1,651,086; Nov. 29.
Harrow. R. Eckardt. 1,651,086; Nov. 29.
Harrow. R. Eckardt. 1,651,086; Nov. 29.
Harrow. A. E. Erickson. 1,617,997; Feb. 15.
Harrow. A. E. Haughand. 1,623,114; Apr. 5.
Harrow. B. H. Kesler. 1,616,261; Feb. 15.
Harrow. T. Madden. 1,646,549; Oct. 25.
Harrow. A. Weiler and W. Kuttruf. 1,624,621; Apr. 12.
Harrow. A. Weiler and W. Kuttruf. 1,624,621; Apr. 12.
Harrow. J. Nordstog. 1,628,799; May 17.
Harrow. Julk. L. Brenneis. 1,620,066; Mar. 8.
Harrow, Disk. L. Brenneis. 1,620,066; Mar. 8.
Harrow, Disk. L. Brenneis. 1,620,066; Mar. 8.
Harrow, Disk. L. Brenneis. 1,621,623,718; Apr. 19.
Harrow, Disk. L. Brenneis. 1,620,066; Mar. 8.
Harrow, Disk. L. Brenneis. 1,620,066; Mar. 8.
Harrow, Disk. W. D. Dewend. 1,619,867; Mar. 8.
Harrow, Disk. L. Brenneis. 1,620,066; Mar. 8.
Harrow onlisk. H. F. Towner. 1,623,336; Nov. 15.
Harrow onlisk. H. F. Towner. 1,622,337; Apr. 19.
Harrow onlisk. H. F. Towner. 1,623,367; Apr. 19.
Harrow onlisk Aug. 16.

Harvester, Corn. C. F. Kruse. 1,641,682; Sept. 6.

Harvester, Corn. O. W. Powell. 1,642,892; Sept. 20.

Harvester, Cotton. P. Carlson. 1,624,313; Apr. 12.

Harvester, Cotton. W. E. Riza. 1,652,459; Dec. 13.

Harvester, Ensilage. A. M. Boxrud. 1,630,603; May 31.

Harvester, Onion. J. C. Larsen. 1,627,289; May 3.

Harvester, Dacker support. R. C. Livesay. 1,650,369; Nov. 22.

Harvester, Potato. L. Willis. 1,650,652; Nov. 22.

Harvester, Sugar-cane. G. D. Luce. 1,648,313; Nov. 8.

Harvester, Sugar-cane. G. D. Luce. 1,648,313; Nov. 24.

Harvester, Sugar-cane. Combination. W. F. MacGregor.

May 24. May 24.

Harvester thrasher. Combination. W. F. MacGregor. 1.615.334; Jan. 25.

Harvester thrasher. Combination. W. F. MacGregor. 1.622,743 June 24.

1.622,743 June 14. J. C. Trulove. 1.629,422; May 17.

Harvester. Tractor. B. R. Benjamin and W. Webber. 1.643.149; Sept. 20.

Harvesters, Tractor. B. R. Benjamin and W. Webber. 1.650,350; Nov. 22.

Harvesters, Feeder mechanism for. G. H. Harris. 1.451.149.

Harvesters, Fenting elevator for. G. W. Witte. Harvesters, Gathering mechanism for onlon. R. C. Zuckernn. 1.642.287; Sept. 13.

Harvesters, Knotter-cam oiler for. W. Webber. 1,629,190; May 17.

Harvesters, Leyer system for nowe-drawn W. J.

Harvesters, Leyer system for nowe-drawn W. J.

Harvesters, Leyer system for nowe-drawn W. J. Harvesters, Lever system for power-drawn. W. J. Coultas. 1,648,113; Nov. 8.

Harvesters, Motor mounting for corn. J. C. Erickson. 1,639,402; Aug. 16
Harvesters, Power drive for. A. L. Johnson and R. M. Mitchell. 1,646,455; Oct. 25.
Harvesters, Sackling apparatus for potato. R. C. Zuckerman. 1,638,832; Aug. 23.
Harvesters, Separator attachment for bean. G. E. Pritch-ard. 1,643,629; Sept. 27.
Harvesters, Snapplage and Learners. C. O. Little. Harvesters, Snapping roll for corn. G. C. Jett. 1,641,436; Harvesting machine. L. J. Cameron. 1,652,763; Aug. 2. Harvesting machine. L. J. Cameron. 1,657,763; Aug. 2. Harvesting machine. A. Apel. 1,652,806; Dec. 13. Harvesting machine. L. J. Cameron. 1,657,730; Aug. 2. Harvesting machine. F. W. Meacham. 1,644,557; Aug. 2. Oct. 4.

Oct. 4.

Harvesting machine, Broom-corn. S. Udstad and W. T.

Owens. 1,648,749; Nov. 8.

Harvesting machine, Cane. R. S. Falkiner. 1,651,920; at and neck protector. L. Farkas. 1,646,193; Oct. 18. at and parcel carrier. H. C. Sloane. 1,632,568; June 14. June 14.

Bat and shee drawer, Combined. F. W. Meyer.

1.636,702; July 26.

Hatband. N. L. Bootson. 1.643.335; Sept. 27.

Hatband. O. Hills. 1.640.895; Aug. 30.

Hatband. M. Kreh. 1.646,153; Oct. 18.

Hatband fastener and method of affixing hatbands. F.

R. Koberts. 1.653.732; Dec. 27.

Hatband, Telescopic. A. Walsh. 1.637.126; Yuly 26.

Hat bloder, R. A. Eredow. 1.644.746; Oct. 11.

Hat block, Adjustable. A. and A. C. Ryder. 1.630.803; May 31. Hat block, Adjustable. A. and A. C. Ryder. 1,630,803; May 31. Hat-block clamp, H. Dimmond. 1,639,331; Aug. 16. Hatbox. A. Berkowitz. 1,628,715; Apr. 5. Hatbox. J. Dreytos. 1,638,568; Aug. 9. Hatbox. J. Dreytos. 1,638,568; Aug. 9. Hatbox. J. A. Holtzman. 1,637,223; July 26. Hatbox. O. J. Walinsky. 1,636,675; July 19. Hatbox. O. J. Walinsky. 1,638,184; June 21. Hat cover and carrier therefor. B. M. Williams. 1,635,916; July 12. Hat-crown block. J. Paley. 1,650,571; Nov. 22. Hat-crown block. J. Paley. 1,650,571; Nov. 22. Hat-crown shaper. A. Brodin. 1,649,338; Nov. 15. Hat-lelting machine. F. Schaeffer. 1,622,295; Mar. 29. Hat-forming machine. K. F. Kraney. 1,652,441; Dec. 13. Hat, Fisherman's. J. I. Williams. 1,623,768; Apr. 5. Hat holder. J. H. Gibson. 1,645,478; Oct. 11. Hat, Harvest. E. Wittooff. 1,636,889; July 26. Hat, Lady's. G. H. Simon. Des. 13,763; Nov. 1. Hat, Harvest. E. Wittooff. 1,636,889; July 29. Hat lining and size reducer, Combined. L. Cohen. 1,651,015; Nov. 29. Hat lining, Vanity. J. M. Peedle. 1,613,675; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or cap. W. T. Coscrove. 1,614,231; Jan. 11. Hat or c May 31. Hat, Self-C May 17. May 17.

Hat-size reducer. L. Cohen. 1,643,004; Sept. 20.

Hat-size reducer. L. Cohen. 1,643,004; Sept. 20.

Hat-sizing machine. G. S. Boesch. 1,645,581; Oct. 18.

Hay sling. R. E. Sturman. 1,651,978; Dec. 6.

Hat stand. P. M. Twigg. Des. 73,452; Sept. 13.

Hat, Straw. F. S. Bates. 1,633,368; June 21.

Hat, Straw. C. Steinberg. 1,643,138; Sept. 20.

Hat stretcher. M. J. Parsch. 1,634,651; June 28.

Hat-tree. A. F. Allen. Des. 72,974; July 5.

Hat, Ventlated. V. Zümerman. 1,647,030; Oct. 25.

Hats, Gover for military. M. E. Wesala. 1,615,780;

Hats, Momoranda holder for. T. Johnson. 1,641,812;

Sept. 6. Sept. 6.

Hats, Sweatband for. E. M. Poons. 1,646,787; Oct. 25

Hatchet, Folding. C. A. Finley. 1,614,949; Jan. 18.

Hatchways. Weather, guard for. J. F. Grunbock.
1,640,138; Aug. 23.

Hay and the like, Device for bandling. J. W. Callahan
and G. B. Dusinberre. 1,836,498; July 19.

Hay-bunching rake. E. F. Halliday. 1,628,971; May 17.

Hay carriers, Trip head and rope attachment for. S. L. Hanson. 1.613.455; Jan. 4. Hayfork. H. S. Coleman. 1.634.137 June 28. Hay-handling apparatus. M. H. Madsen. 1,643,078; Hay loader, J. G. Taylor and H. Stoker, 1,623,447; Apr. 5.

Apr. 5.

Hay presses, Hay remover and weigher for. 1, 6. Owens. 1,621,807; Mar. 22.

Hayrake, W. F. Mottler, 1,623,062; Apr. 5.

Hayrake, Sweep, G. R. Elmore. 1,640,031; Aug. 23.

Hay stncker, E. Bryant. 1,647,495; Nov. 14.

Hay stncker, E. Bryant. 1,647,355; Nov. 14.

Hay-stacking device. G. W. Voelkel. 1,629,664; May 24.

Hay-sweep N. Duggan. 1,652,350; Dec. 13.

Hay-sweep load remover. B. G. Heywood. 1,627,703;

May 10.

Hay track hanger. E. M. Johnson. 1,653,769; Dec. 27.

Headband. R. K. Siner. 1,626,433; Apr. 26.

Headband. R. K. Siner. 1,626,433; Apr. 26.

Dec. 6.

Dec. 6. | Headdand, Receiver. H. F. Obergfell. 1,651,623; Dec. 6. |
| Dec. 6. |
| Head covering. M. R. Artau. 1,629,062; May 17. |
| Headdress. H. Wallman. 1,638,756; Aug. 9. |
| Head gate. W. Murdock. 1,621,748; Mar. 22. |
| Head gate. J. A. Smitham. 1,624,152; Apr. 12. |
| Headdamp. J. H. Laird. 1,625,946; Apr. 26. |
| Headdamp. shield. S. F. Arbuckle. 1,635,879; July 12. |
| Headdamp. shield. S. F. Arbuckle. 1,635,879; July 12. |
| Headdamp. shield. S. F. Arbuckle. 1,635,879; Headdamp. Shield. S. H. Arbuckle. 1,635,879; Bernard. 1,648,463; Nov. 8. |
| Headdight. C. H. Allen and G. S. Soseman. 1,651,984; Dec. 6. | C. H. Alfel and G. S. Soseman. I. Jo.
W. D' A. Ayan, 1,647,149-59; Nov. 1,
W. P. Carstarphen. 1,614,656; Jan. 1,
C. R. B. Claffin. 1,627,688; May 1,0
G. W. Draper. 1,625,246; Apr. 19
W. R. Du Breull. 1,625,246; Apr. 19
E. J. Giese. 1,618,425; Feb. 22
L. K. Hoss. 1,618,016; Feb. 15
W. B. Johnson. 1,619,617; Mar. 1,
F. M. Kinkend. 1,623,545; May 1,0.
C. L. Lawton. 1,242,160; Seep. 13.
C. A. Michel. 1,643,466; Sept. 27.
S. Moore and F. O. Sheets. 1,63 Headlight. Headlight. Headlight. Headlight. Headlight. Headlight. Headlight.
Headlight.
Headlight.
Headlight.
Headlight.
Headlight.
Headlight.
Headlight. 27. 1,638,450; Aug. 9.

Readlight. G. Rawak. 1.626.626: May 3.

Headlight. W. E. Richard. 1.622.235. Mar. 29.

Headlight. W. E. Richard. 1.622.235. Mar. 29.

Headlight. W. D. Ryan. 1.648.193. Nov. 8.

Headlight. W. D. Ryan. 1.648.193. Nov. 8.

Headlight. W. D. Ryan. 1.648.997; Nov. 15.

Headlight. W. D. Ryan. 1.648.997; Nov. 15.

Headlight. R. H. Shippey and H. D. Van Leunen.

1.633.387; June 21.

Headlight. E. W. Halen. 1.641.714; Sept. 6.

Headlight. W. G. Wood. 1.644.938 Jan. 18.

Headlight. W. G. Wood. 1.644.938 Jan. 18.

Medlimis and C. W. Dake. 1.650.719; Nov. 29.

McGlinnis and C. W. Dake. 1.650.719; Nov. 29.

Headlight attachment. S. Cordes. 1.618,365; Feb. 22.

Headlight attachment. C. B. Frierson. 1,639,600; Aug. 16. Aug. 9, Headlight, Headlight, 16. Headlight, Automobile. F. W. Bedard. 1,614,821;
Jun. 18. Headlight, Automobile. J. P. Carson. 1,653,493; Dec. 20. Headlight, Automobile. L. J. Jory. 1,620,336; Mar. 8, Headlight, Automobile. L. N. Kenward. 1,624,491; Apr. 12. Headlight, Automobile. Headlight, automobile. M. H. Kern. 1,628,153; May 10 Heddlight, Automobile. B. Morgan. 1,647,011; Oct. 25. Headlight, Automobile. O. Nelson. 1,630,860; May 31. Headlight, Automobile. P. Ring. 1,661,070; Nov. 29. Headlight, Automobile. G. Rodrigues. 1,651,042; Nov. 29. Hegallight, Automobile. R. A. Russell, jr. 1,618,108; Feb. 15. Headlight Automobile R. P. Tyler, 1,635,517; July 12 Headlight Auxiliary, H. G. Snith. 1,634,694; July 5 Headlight, Controlled. R. H. Cloughley. 1,642,919 Sept. 20, Headlight construction. C. E. Godley. 1,625,648; Apr. 19. 1.642.919: 1.625.648: Apr. 19.
Headlight construction.
May 10. C. E. Godley. 1.628.460: Nov. E Headlight construction O. R. Sell. 1847,890; Nov. 1.
Headlight construction for automobiles, Dirigible. S. F.
Headlight construction for automobiles, Dirigible. S. F.
Headlight construction for automobiles, Dirigible. F.
Headlight control. T. J. Moan. 1,620,675; Mar. 15.
Headlight control. T. J. Moan. 1,620,675; Mar. 15.
Dec. 27. Headlight-control switch. J. Gizewski. Apr. Headlight-control switch. E. and H. Lewis. 1,629,397; Headinght-control switch. E. and H. Lewis. 1,529,397; May 17. Headinght-deflecting attachment. R. L. Anderson. 1,633,509; June 21. Headinght dimmer, Automobile. C. Zimmerman and W. T. Hanner. 1,652,682; Dec. 6. Headinght dimmer, Variable. W. Laventure. 1,630,621; May 31.

Headlight dimming and spotlight controlling means, Combination. G. H. Hemphill. 1,627,045; May 10. Headlight-dimming mechanism. G. F. Phillips and T. H. Torian. 1,631,657; May 31. Headlight-dimming, Vehicle. P. Doherty. 1,628,036; Headlight-dipping mechanism. G. Pierce. 1,634,044; | Aug. | Headlight, Dirigible. W. M. Sweet. 1,533,500 aug. k. Headlight, Dirigible. W. V. Van Etten. 1,639,119; Aug. 16. Headlight, Dirigible engine. S. N. Brach. 1,647,559; Headlight-door remover and replacer. J. W. Heller. 1,638,528; June 21. Headlight-door mover and replacer. J. W. Heller. 1,638,528; June 21. Headlight-focusing attachment and pilot light therefor, Locomotive- C. P. McGlunis. 1,648,555; Nov. 15. Headlight for automobiles and the like, Dirigible. G. S. Keck. 1,651,133; Nov. 25. Headlight for automobiles, Dirigible. A. H. Johnson. 1,633,032; June 21. Headlight for automobiles, Dirigible. A. T. Nyblom. 1,627,060; May 3. Headlight for motor vehicles, Dirigible. H. Goodman. 1,632,026; June 14. Headlight for motor vehicles, Dirigible. E. G. Wentworth. 1,629,752; May 24. Headlight for motor vehicles, Dirigible. E. G. Wentworth. 1,624,946; Cott. H. J. G. Ames. 1,613,370; Jan. 4. Headlight for spring bumper. A. W. Pattison. 1,644,945; C. Glareless. C. A. Middleton. 1,615,336; Jan. 25. Headlight Glareless. C. A. Middleton. 1,615,336; Jan. 25. Headlight glareshield. T. L. Day. 1,623,831; Apr. 5. Headlight lamps, Nonglare attachment for R. P. McHeadlight lamps, Nonglare attachment for R. P. McHeadlight lens. A. R. Gibson and H. E. Schorr. 1,927,498; May 3. Readlight lens. A. R. Gibson and H. E. Schorr. 1,927,498; May 3. Reddlight mechanism. Dirigible. J. S. Rowley. J. W. Physics and H. E. McCully. 1,634,630; July 5. Headdight, Locomotive, J. R. Townsend, 1,622,802; May 17. Headlight mechanism, Dirigible, J. S. Rowley, J. W. Riggles, and H. E. McCully, 1,634,630; July 5. Headlight, Mine locomotive, J. R. Townsend, 1,635.564; July 12. Headlight, Mine locomotive. J. R. Townsend. 1,635,304; July 12.

Headlight, Movable. C. E. Beaulac. 1,632,691; June 14.

Headlight, Movable. C. E. Beaulac. 1,632,691; June 14.

Headlight, Nonglare. J. B. Sugg. 1,046,329; Oct. B.

Headlight, Nonglare. J. E. and C. S. Nicholson. 1,640,288; Aug. 23.

Headlight, Nonglare road and car Illuminating. W. D.

Baker. 1,642,190; Sept. 13.

Headlight of automobiles, Swiveling. E. O. Rutter. 1,620,291; Mar. 8.

Headlight of automobiles, Swiveling. E. O. Rutter. 1,613,690; Jan. 11.

Headlight reflector. J. E. Reisinger and W. H. Reisinger. 1,613,690; Jan. 11.

Headlight reflector. L. J. Richards. 1,631,175; Mar. 22.

Headlight reflector. L. J. Richards. 1,631,175; June 27.

Headlight reflector. L. J. Richards. 1,631,175; June 27.

Headlight shield. F. W. Gerken. 1,651,763, Dec. 6; D.

Headlight shield. F. J. Topping. 1,621,181; Mar. 15.

Headlight shutters. Operating device for automobile. G. N. Press. 1,643,030; Sept. 20.

Headlight, Webicle. W. E. Adair. 1,652,340; Dec. 18.

Headlight, Webicle. W. E. Adair. 1,652,340; Dec. 18.

Headlight, Vebicle. W. E. Adair. 1,652,340; Dec. 18. Hendlight, Vehicle. W. E. Adair. 1,652,340; Dec. 13. Hendlight, Vehicle. G. Pierce. 1,634,043; June 28. 1,643,056; Sept. 20. J. Fike and W. J. Gibson. Hendlight wrench, Automobile. J. R. Rhonds. 1,640,296; Aug. 23. Headilghis, Antiglare attachment for. H. L. Gordon. 1.619.723. Anr. attachment for. O. A. King. 1.652.015. Dec. 6.
Hendilghis, Antiglare device for vehicle. F. Rabbit. 1.615.199 Jan. 18.
Headilghis, Auxiliary Endertor for automobile. E. Enderton. 1.624.166; Apr. 12.

Headlights, Controlling mechanism for. A. B. Wilson. 1,630,154; May 24. Headlights. Deflecting shade for. E. D. Smith. 1,638,967; Aug. 16. Headlights, Dimmer control for. L. P. Rogers. 1,618,355; Feb. 22.
Headlights, Dirigible, J. H. Gillies. 1,619,068; Mar. 1.
Headlights, etc., Treating reflectors for. J. W. Trimmer.
Headlights for vehicles, Reflector for. W. H. Zorger.
1,633,142; Dec. 20.
Headlights, Glare deflector for. N. R. Homyer and W. M.
Homyer. 1,625,660; Apr. 19.
Headlights, Glare shelfed for. M. P. Cullinan. 1,637,895; Aug. 2. Headlights, Light shade for. G. W. Wilkin. 1,646,436; Headilights, Light shade for, G. W. Wilkin. 1,646,436; Oct. 25.
Headilights of motor vehicles, Light-deflecting attachment for. W. H. Ratnour. 1,638,408; Aug. 9.
Headilights, Operating mechanism for dirighte, T. P. Salley. 1,645,097; July 5.
Headilights, Positioning apparatus for. J. D. Guiss, 1,649,777; Nov. 15.
Headilights, Roberts, Statechment for vehicle. E. J. Headilights, Shield for auto. G. Pratt. 1,650,298; Nov. 22.
Headilights, Shield for automobile. C. P. Hoefler. Headlights, Shield for automobile, C. P. Hoefler, 1.681,130; June 7. Head protector, D. Oppenheim, 1,614,018; Jan. 11. Head protector, Adjustable, M. E. Harold, 1,627,847; May 10. Head protector, Adjustable. M. E. Harold. 1,627,847; May 10.
Hendrest. F. E. Masters and W. A. Hussey. 1,625,267; Apr. 19.
Hendrest. H. Rosswinkle. 1,644,402; Oct. 4.
Hendrest, Disappearing. C. Lane. 1,632,737; June 14.
Hendrest, Disappearing. C. Lane. 1,632,737; June 14.
Hendrest, Disappearing. C. A. S. Wanson. 1,621,648; May 1,642,747; June 14.
Hendrest, Disappearing. C. A. S. Wanson. 1,621,648; May 1,642,648; May 1,644,648; May 1,644, Heading machine, Sungar-strav.
Feb. 22.
Hearing shell. K. A. Schucker. 1,640,908; Aug. 30.
Hearises, Casket-retaining device for. W. B. Parsels.
1,637,239; July 26.
Hearises, Inner receptacle for. W. and A. E. Livingston.
1,628,893; May 17.
Heat and cold, Apparatus for the transmission of. C. V.
Pereda. 1,614,387; Jan. 11.
Heat, Apparatus for the recovery of waste. J. Y. Propst.
1,646,836; Oct. 25.
Heat applicator and electrode. K. Fukuyawa. 1,618,526;
Heat-inruding machine. A. Van Veen and G. F. Matte-Feb. 22 Heat-branding machine. A. Van Veen and G. F. Matte-son. 1,630,282; May 31. Heat collector. L. T. Wilcox. 1,649,007; Nov. 15. Heat-conducting apparatus. R. S. Blair. 1,632,784; Heat-conducting apparatus. R. S. Biair, 1,632,768; June 21.
Heat control device, Oven. E. L. and W. E. Claus. 1,623,576; Apr. 5.
Heat-control in castings. H. S. Lee. 1,652,445; Dec. 13.
Heat-controlling device. W. F. Clark. 1,643,575; Sept. 27. Heat deflector, Basket-grate. A. C. Axford. 1,617,473; Feb. 15. Heat distributor. N. E. Rice. 1,613,534; Jan. 4. Heat engine. R. W. Davenport. 1,619,195; Mar. 1, Heat engine. R. W. Davenport. 1,619,137; Mar. 1, Heat-exchange apparatus. F. S. Bennett. 1,618,797; Ph. 29. deflector, Basket-grate. A. C. Axford. 1,617,473; Feb. 22. Heat-exchange apparatus. R. L. Munday. 1,639,051; Feb. 22.

Hent-exchange apparatus. R. L. Munday. 1,639,051;
Hent-exchange apparatus. A. R. Vila. 1,630,148;
May 24.

Heat-exchange device. G. Pagel. 1,651,900; Dec. 6.

Heat-exchange device, Regenerative. F. Ljungström.
1,652,022; Dec. 6.

1,612,867; Feb. 15.

Heat-exchanger device, Regenerative. H. B. Rudd.
1,617,867; Feb. 15.

Heat-exchanger. C. F. Braun. 1,640,746; Aug. 30.

Heat exchanger. C. F. Braun. 1,640,746; Aug. 30.

Heat exchanger. B. Haber. Rel6,807; Dec. 6.

Heat exchanger. J. File. 1,617,683; Feb. 8.

Heat exchanger. J. E. Kobernik. 1,648,648; Nov. 8.

Heat exchanger. J. Price. 1,617,083; Feb. 8.

Heat exchanger. L. C. Whiton. 1,638,107; Aug. 8.

Heat exchanger. Relf-draining tube surface. R. C.

Lones, 1,641,975; Self-draining tube surface. R. C.

Lones, 1,641,975; Self-draining tube surface. R. C.

Heat-exchanging apparatus. J. Forgan-Potts. 1,637,276; July 26.

Mor. 1.

Heat-exchanging apparatus. W. and S. Yates. 1,619,776; Mer. 1.

Heat-exchanging apparatus. W. and S. Yates. 1,619,776; Mer. 1.

Heat-exchanging element. E. Haber, 1,635,838; July 12.

Heat-exchanging element. E. Haber, 1,635,838; July 12.

Mar. 1. Heat-exchanging element. E. Haber. 1,635,838; July 12.

Heat-exchanging mechanism. L. R. Stowe. 1,650,242; Heat-generating apparatus. W. J. Maddrell. 1,616,271; Feb. 1. Feb. 1.

licat in a projector upon the backing of the images to be projected, obviating the action of. F. Counde. 1,632,817; Dec. 13.

Heat-indicating instrument, Motor. G. H. Townsend. Des. 73,392; Aug. 30.

Heat indicator. H. H. Bovce. Des. 73,023; July 12.

Heat indicator. H. E. Rider. 1,452,238; Dec. 13.

Heat indicator for heated tools. R. Awodio. 1,625,014; Apr. 19. Heat indicator for heated tools. R. Amodio. 1,625,014; Apr. 18; Heat-in-sulfing construction material. A. Elmendorf, Heat-in-sulfing material and method of making it. W. H. Seigle. 1,613,137; Jan. 4. Heat-in-sulfing unit. H. W. O'Dowd. 1,637,497; Aug. 2, Heat-in-terchange apparatus. G. A. Foisy. 1,624,487; Apr. 12. ifeat-interchange apparatus, R. Seligman, 1,622,006; Apr. 12.

Ifeat-interchange apparatus, R. Seligman, 1,622,006; Mar, 22.

Heat-interchanger W. E. Cronn, 1,645,801; Oct. 18.

1,634,714; July 5.

Heat interchanger, W. E. Cronn, 1,645,801; Oct. 18.

1,634,714; July 5.

Heat insulator, M. L. Bullard, 1,646,388; Oct. 25.

Heat, Method and apparatus for generating and controlling, W. S. Hadaway, 1,627,735; May 10.

Heat, Method and apparatus for utilizing. D. S. Jacobus and A. D. Pratt. 1,624,602; Apr. 12.

Heat or vulcanizing device, R. W. Brown, 1,447,339; Nov. 1. Nov. 1.

| Heat-producing composition. H. D. O'Neal and J. La
| Praim. 1,613,120; Jan. 4.
| Heat protector, especially for electric machines and ap| paratus, Automatic excess- W. Hickel and O. Plet| scher. 1,642,953; Sept. 20.
| Heat rays, Indicator for, R. Mechau. 1,639,412;
| Aug. 16.
| Heat regulator, J. W. Houch. 1,638,822; Aug. 9.
| Heat regulator, Automatic. A. Wild. 1,617,866; Feb. 15.
| Heat regulator, Thermostatic oven. B. F. Maccham. FCO. 15. Heat regulator, Thermostatic oven- B. E. Meacham. 1,640,245; Aug. 23. Heat-resisting glass. R. F. Brenner. 1,623,301; Apr. 5. Heat-resisting plate. F. A. Fahrenwald. 1,643,766; Heat retainer. P. A. Hasselblatt. 1.624.211; Apr. 12. (test retaining and distributing element. J. B. Laughlin. 1.639,739; Aur. 22. Heat to waste-heat boiler plants, Method and apparatus for supplying additional. F. Falla. 1.614.109; Jan. 11. Heat-transfer apparatus. J. M. Seymour. 1.027.713; May 10.

May 10.

Heat-transfer apparatus. Control system for. H. H. Buckman, 1.648.672; Nov. 8.

Heat transfer, Apparatus for effecting. H. F. Smith. Buckman in 1.648.672; Nov. 8.

Heat transfer apparatus. Tube disposal in. J. E. Ercanbrack. 1.616.179; Feb. 1.

Heat-transfer at high temperatures, Apparatus for. C. Field. 1.619.661; Mar. 1.

Heat-transfer device. Harter. 1.641.999; Sept. 13.

Heat-transfer system for aircraft. H. F. Parker. Re-16.644; May 31.

Heat, Transforming. R. W. Davenport. 1.619.96; Mar. 1.

Heat-transfer system for aircraft. H. F. Parker. Re-16.644; May 31.

Heat, Transforming. R. W. Davenport. 1.619.96; Mar. 1.

Heat-transfer system for aircraft. H. F. Parker. Re-16.644; May 31.

Heat-transfer system. Liquid. D. M. Luehrs. 1.630.956; May 31.

Heat-transfer furnace. A. D. Keene. 1.617.396; Feb. 15.

Heat-treating furnace. S. Westberg. 1,617.359; Feb. 15. Heater: Sco-Air heater.
Automotic heater.
Automobile heater.
Car heater. Hot-water heater.
Induction heater.
Intake-manifold heater.
Liquid heater.
Manifold heater,
Oil-burning air heater.
Oil-burning heater.
Oil heater. Car heater.
Carburetor-manifoldheater.
Condenser-type heater.
Convection heater.
Crank-case heater.
Electric heater.
Electric heater.
Electric heater.
Electric heater.
Emergency heater.
Embanger heater.
Erhaust-gas heater.
Fireplace heater.
Fresh-air heater.
Gas heater.
Gas-log heater. Oil heater.
Oil-well heater.
Orchard heater.
Radlant and convection
heater.
Radfator heater.
Rivet heater.
Roll heater. Room and iron heater. Tank heater. Thermoelectric heater. Vehicle heater. Vertical-type water heater. Water heater. Gas-log heater. Hot-air and hot-water Water-tube heater. Windshield heater, Hot-water and steam heater. Hot-water and steam neater. Wildished neater. Heater. W. F. Allen, Rel6.677; July 12. Heater. T. P. Castle. Des. 72.144; Mar. 8. Heater. H. V. Deemar. 1,627.235; May 3. Heater. H. L. Glibert. 1,649.218; Nov. 15. Heater. M. F. Glibert. 1,649.218; Nov. 15. Heater. M. F. Glibert. 1,7375; Aug. 2,

Heater. S. Heitler. 1,621,668; Mar. 22.
Heater. H. L. Horning, J. B. Fisher, and A. W. Pope, jr. 1,655,561
Heater. H. L. Horning, J. B. Fisher, and A. W. Pope, jr. 1,655,561
Heater. A. H. Ges. Des. 72,768; May 31.
Heater. A. T. Johanson. 1,616,900; Feb. 8.
Heater. B. B. Kahn. Re16,707; Aug. 16.
Heater. H. B. Kahn. Des. 72,264; Mar. 22.
Heater. T. H. Kennedy. 1,623,415; Apr. 5.
Heater. J. W. Kennedy. 1,646,026; Oct. 18.
Heater. L. W. Kennedy. 1,646,026; Oct. 18.
Heater. J. L. Lewenge and J. Lessard. 1,619,425; Mar. 1.
Heater. J. E. McMinn. Des. 72,177; Mar. 8.
Heater. L. W. Millis. 1,643,265; July 5.
Heater. E. C. Molby. 1,643,025; Sept. 20.
Heater. P. Neussen. 1,640,287; Aug. 23.
Heater. P. Neussen. 1,640,287; Aug. 23.
Heater. F. Rayman. 1,635,636; July 12.
Heater. Heater. W. G. Scherer. 1,647,315; Nov. 1.
Heater. W. Ridgely. 1,648,622; Nov. 8.
Heater. W. G. Scherer. 1,647,315; Nov. 1.
Heater. W. Ridgely. 1,648,622; Nov. 8.
Heater. W. Ridgely. 1,648,622; Nov. 8.
Heater. W. Ridgely. 1,648,622; Nov. 8.
Heater. J. F. Rayman. 1,635,636; July 12.
Heater. W. Ridgely. 1,648,622; Nov. 8.
Heater. L. Spoke. Des. 72,632; Apr. 26.
Heater. L. P. Webert. 1,688,974; Aug. 16. Heater. W. G. Scherer. 1,647,315, Nov. 1.
Heater. R. W. Spake. Des. 72,532; Apr. 26.
Heater. J. C. Thomas, J. F. Halliday, and A. Hill, jr.
1,632,067; Dec. 6.
Heater. A. F. Zverina. 1,648,600; Nov. 8.
Heater and drier. O. A. Knopp. 1,637,488; Aug. 2.
Heater and drier. O. A. Knopp. 1,637,488; Aug. 2.
Heater and maintenance apparatus, Combination. H. P.
Andresen. 1,613,736; Jan. 11.
Heater and operating same, Air. B. and B. A. Ljungström. 1,649,605; Nov. 15.
Heater and purifier. J. Gruber. 1,623,242; Apr. 5.
Heater and purifier, Water. H. E. Molfat. 1,624,557;
Heater and retarder, Air. E. H. Swift. 1,618,238;
Feb. 22.
Heating and steaming instrument, Therapeutical. L. J.
Haessly. 1,653,901; Dec. 27.
Heater and stove, Electric. J. J. Libi. 1,621,171;
Mar. 15.
Heater casing, Parlor. A. M. Mertzanoff. Des. 73,532-3;
Sept. 27.
Heater cusing, Parlor. C. B. Waters. Des. 74,668 Hospital Caising, Water. C. B. Waters. Des. 74,086; Dec. 13.

Dec. 13.

Heater control, Fluid. F. M. Poole. 1,615,478; Jan. 25.
Heater control, Multiple. H. A. Hands. 1,619,510; Mar. 1.
Heater cover, Automobile. E. P. Gray. 1,640,187; Aug. 23.
Heater for automobiles. H. Hanson. 1,621,199; Mar. 15.
Heater for automobiles. J. W. Keleh and J. J. Sunday. 1,628,691; May 17.
Heater for curling irons and the like. W. Meyer. 1,625,487; Apr. 19.
Heater for fluids, Electric. J. H. Vallquette. 1,635,591; July 12.
Heater for hair waving. B. F. Jancke. 1,618,592; casing, Water-. C. B. Waters. Des. 74,086; Heater Heater for hair waving. Feb. 22. B. F. Jancke. 1.618,592; W. S. Lewis. 1,647,965; for hair waving. Nov. 1.
Heater for rolls. R. L. McIntosh. 1.644.069; Oct. 4.
Heater for transformer oil. D. G. McArn. 1,634,719; July 5. enter lighter, Orchard-. Heater lighter, Orchard. H. G. Graf. 1,64 Nov. 15. Heater or boiler, Water. L. J. Mitchell. 1,64: Aug. 25. Heater or fumer. I. E. Aske. 1,643 438-9; Sept. Heater or vaporizer, Electric. L. E. Aske. 1,61 Feb. 1. 1.649,222; 1,640,284; Sept. 27. 1,616,247, Feb. 1.

Heater-supporting shield. W. S. Lewis. 1,647,961;
Nov. 1.

Heating. C. L. Bryant. 1,649,097; Nov. 15.

Heating and cooling at high temperatures. C. Field.
1,619,662; Mar. 1.

Heating and cooling device, Electrical. W. J. Noonan.
1,622,803; Mar. 29.

Heating and for controlling reactions at high temperatures, Apparatus for. C. Field. 1,619,663; Mar. 1.

Hally and drying device. F. J. Cook. 1,634,649;
Electring and humidifying device. G. E. Ryan. 1,619,092; Heating and drying device. F. J. Cook. 1,001,019; July 5.

Heating and humidifying device. G. E. Ryan. 1,619,092; Realing and ventilating apparatus. A. R. Teare. Re16,761; Sept. 27.

Heating and ventilating apparatus. J. A. Wolfe. 1,026,172; Apr. 26.

Heating and ventilating device. S. R. Lewis. 1,640,331; Aug. 23.

Heating and ventilating systems, Unit for. J. M. Frank. 1,626,400; Apr. 26.

Heating apparatus. H. P. Hanson. 1,639,041; Aug. 23.

Heating apparatus. W. W. Miller. 1,633,070; Nov. 29.

Heating apparatus. W. W. Miller. 1,633,370; July 12.

Heating apparatus. H. F. Smith. 1,639,114; Aug. 16.

Heating apparatus. Automaile_clectric connection plug for Hamiltonia and the description of the description o

Heating apparatus, Burner unit for gas-. H. W. O'Dowd. 1.647,712; Nov. 1. Heating apparatus, Combination. W. Mooney. 1,621,640; Mar. 22. Mar. 22.
Heating apparatus, Control device for E. P. Bogan.
1,637,369; Aug. 2.
Heating apparatus, Electric. C. E. Johnson.
1,633.747;
June 28. Heating apparatus, Electric. J. P. Sun-June 28.
Heating apparatus, Electrical. G. H. and H. F. Collins.
Heating apparatus, Electrical. F. F. Forshee. 1,624,402;
Apr. 12.
Seating Apparatus for central. H. Moreau. 1,629,043; Heating Dec. 13. Heating apparatus, Steam-. F. J. Douglass. 1,645,522; Oct. 18. Heating apparatus, Water-. R. L. Geaslen. 1,651,692; Heating May 17 apparatus, Water-. O. C. Grutter. 1,628,664; Heating appliance, Electrical. M. S. Williams. •1,633,801;
_June 28. Aug. 16.
Heating element, Electrical. E. L. Wiegand. 1,614,330;
Jan. 11.
Heating element, Electrical. E. L. Wiegand. 1,614,331;
Jan. 11. Heating furnace, Pressure still. J. E. Bell. 1.617,297; Feb. 8. Feb. 8.
Heating furnace. Rotary. J. Weintz. 1,639,243; Aug. 16.
Heating installation, Central. D. van der Woude.
1,640,629; Aug. 30.
Heating installation, Hot-water. M. J. G. A. Lemaistra.
1,650,874; Nov. 29.
Heating means for injectors. M. Hard. 1,651,701;
Dec. 6. Heating means, Tunnel-kiln-, P. d'H. Dressler. 1.615.217; Jan. 25. Heating method, High-temperature, C. Field. 1,619.660; Mar. 1. Mar. 1.

Heating or ventilating register. C. Englert. 1,640,566: Aug. 30.

Aug. 30.

Aug. 30.

Heating pad, Chemical. M. A. Smith. 1,620,581; Mar. 8.

1,645,643; Dec.

Heating pad, Chemical. M. A. Smith. 1,620,581; Mar. 8.

1,651,643; Dec.

Heating purposes, Electrically-operated water heater or boiler for. S. D. Nesmith. 1,640,049; Aug. 23.

Heating proller, Massaging. E. Becher. 1,634,316; July 5.

Heating stove. H. H. Heidbreder. Dec. 71,709; Jan. July 5. Heating stove. H. H. Heidbreder. Des. 71.792; Jan. 4. Heating stove using liquid vaporizing fuel. H. C. Hanson, Rel 66.25; May 17. Heating structure, Electric. T. C. Russell. 1,637,891; Aug. 2. Heating system. W. R. Abbott. 1,654.396; Dec. 27. Heating system. C. B. Eatinger. 1,646,786; Oct. 25.

Heating system. L. M. Ellis. 1,618,177; Feb. 22.
Heating system. R. R. Emerson. 1,639,084; Aug. 16.
Heating system. L. Graillin. 1,640,706; Aug. 30, 16.
Heating system. J. Holan. 1,637,341; Aug. 2.
Heating system. Dier. A. MacKay. 1,623,425; Apr. 5.
Heating system. Dier. A. MacKay. 1,623,425; Apr. 5.
Apr. 26. Apr. 26.

Heating System, Electric. W. E. Hudson. 1,631,485;
June 7.

Heating system, Electric, W. E. Hudson. 1,631,485; June 7.

Heating system for power plants, Water-. R. N. Ehrhardt, 1,620,607; Mar. 15.

Heating system, Steam. L. J. Fisher. 1,617,328; Feb. 15.

Heating system, Steam are for use with hot-air. R. A. High systems, 1,640,140; oct. 11.

Heating systems, Control mechanism for water-. W. J. Griffiths, 1,630,741; May 31.

Heating systems, Humidilder for hot air. C. J. Hilty, 1,641,687; Sept. 6.

Heating systems or similar purposes, Boiler for M. Treschow. 1,051,049; Nov. 29.

Heating systems, Regulator for. J. M. Larson. 1,650,093; Heating systems, Regulator for. J. K. Bezzenberger

Nov. 28.

Heating systems, Thermostat for. F. K. Bezzenberger and W. R. Zimmerman. 1.615.825; Feb. 1.

Heating unit. K. Ehrgott. 1.628.875; May 17.

Heating unit. M. M. Kohn. 1.636.372; July 19.

Heating unit and heating system for kilns. M. L.

Mueller. 1.621.333; Mar. 15.

Mueller. 1.621.333; Mar. 15.

Mueller. 1.628.876; May 17.

Heating unit, Electric. K. Ehrgott. 1.628.876; May 17.

Got 18.

Louthan. 1.645.867; Heating Oct. 18

Heating unit, Electric. F. C. Simms. 1.632,318; June 14. Heating unit, Electric. J. C. Woodson. 1,628,868; May 17.

May 17.

Heating unit, Electric-furnace. J. C. Woodson. 1,626,656;
May 3.

Heating unit, Removable furnace. E. J. Branningan.
1,638,826; Aug. 16.

Heating unit terminal. A. D. Keene. 1,624,345; Apr. 12.

Heating units, Terminal for electric. E. E. Sutherland.
1,615,661; Jan. 25.

Heaters Attachment for electrical. A. H. Thompson.

Heaters Manuel for het-water. P. S. Shelsir. 1,633,716;

1.647.553, Nov. 1.
Heatters, Burner for hot-water, P. S. Sinclair, 1,633,716;
June 28.
Heatters, Burner for hot-water, P. S. Sinclair, 1,633,716;
Mar. 8.
Heatters, Control of engine-oil, J. H. Hunt. 1,619,978;
Mar. 8.
Heatters, Foot rest for oil. A. Lochhead, 1,649,170;
Nov. 15.
Heatters, Juard for electric, F. D. Pitt and A. Osterloo.
Heatters, Suard for electric, F. D. Pitt and A. Osterloo.
J. L. Breese, jr. 1,634,448; July 5.
Heatters, Overload relay for electric, L. P. Hynes, 1,635,674; July 12.
Heatters, Radiant for gas. W. L. Sharp, Des. 73,762;
Nov. 1.

Henters, Overload velay for electric. L. P. Hynes. 1.635,674; July 12.

Heaters, Radiant for gas. W. L. Sharp. Des. 73,762; Heaters, Thermostatic control for domestic and hotwater. J. L. Breese, jr. 1,633,759; June 28.

Heaters used in connection with blast furnaces, Working blast. H. Rappold. 1,631,950; June 7.

Henters, Valve-controlling mechanism for water. T. J. Radke. 1,639,065; Aus. 123.

Radke. 1,639,065; Aus. 123.

Heel. J. B. Hadaway. 1,647,444; Nov. 1.

Heel and making the same. A. L. Clapp. 1,643,374; Sept. 27.

Heel and making the same. A. L. Clapp. 1,643,374; Sept. 27.

Heel and making the same. Shoe. S. Gubitosi. Heel-attaching apparatus, Shoe. S. Gubitosi. Heel-attaching device. J. N. Fowler. 1,642,991; Sept. 20.

Heel attaching device. J. N. Fowler. 1,642,991; Sept. 20.

Heel-attaching device. J. N. Fowler. 1,642,991; Sept. 20.

Heel-bases, Making. O. T. Crafts. 1,652,610; Dec. 13.

Heel-bases, Making. O. T. Crafts. 1,652,63; Dec. 27.

Heel-beveling machine. E. Erickson. 1,653,623; Dec. 27.

-building machine. E. E. Winkley. 1.645.567: Oct.

Heel-building machine and method. W. Hubbard. 1.643,498; Sept. 27. Heel-building machine. Lift magazine for. L. A. Hol-man. 1.645,531; Oct. 18. Heel construction, Detachable. M. Mayorowitz. 1,633,449;

Heel Cushion, J. B. Hadaway, 1.613.096; Jan. 4.
Heel, Cushioned, M. W. Hirshfield, 1.629.016; May 24.
Heel, Detachable, E. Tranides, 1.631.710; June 7.
Heel, Detachable eushion, L. F. Hartung, 1.633.224; June 21.
Heel Actives, Elading for shoe, J. N. Craslineck, Heel-finishing machine, A. B. Fowler, 1,630.564; May 31.
Heel for boots and shoes, J. E. Grosjean, 1.630.564; Nov. 22.

May 31.

Heel for boots and shoes. J. E. Grosjean. 1.650.511;
Nov. 22.

Heel for footwear and attaching the same. W. J. De
Witt. 1.649.291; Nov. 15.

Heel holder. E. R. Pope. 1.616.467; Feb. 8.

Heel, Interchangeable rubber. A. H. Cowlin. 1.643.294;

Sant. 97

Heel machine. A. B. Fowler. 1,630,561; May 31.

Heel machine. A. B. Fowler. 1,630,565; May 31.
Heel marker, Wood. N. W. Kinney. 1,640,359; Aug. 30.
1,618,881; Feb. 22.
Heel pice for footwear. Petachable. A. E. C. Chamber-lain. 1,647,856; Nov. 1.
Heel protector, Automobile driver's. E. M. Smock. 1,620,401; Mar. 8.
Heel protector, Automobile driver's. E. M. Smock. 1,620,401; Mar. 8.
Heel, Reversible. G. A. Volz. 1,636,494; July 19.
Heel, Reversible. G. Bloser. 1,637,7075; Aug. 2.
Heel, Rubber. E. G. Bloser. 1,637,7075; Aug. 2.
Heel, Rubber. J. B. Falvo. 1,815,007; Jan. 18.
Heel, Rubber. J. B. Falvo. 1,815,007; Jan. 18.
Heel, Rubber. J. B. Falvo. 1,815,007; Jan. 18.
Heel, Rubber. L. J. Harrison. 1,642,2561; Sept. 20.
Heel, Rubber. L. J. Harrison. 1,641,826; Sept. 20.
Heel, Rubber. A. Pentifallo. 1,641,826; Sept. 20.
Heel, Rubber. M. Pentifallo. 1,641,826; Sept. 20.

Aug. 9. Heel-seat-cutting machine. B. M. Pericaud. 1,623.551; Apr. 5. Heel-seat-fitting machine. D. W. Bowie. 1,617,475; Feb. 15.

Heel-seat-fitting machine. J. T. Haworth. 1,615,838;

Heel-seat-fitting machine, J. A. Kelly, 1,642,033; Sept. 13. Heel-seat-fitting machine. C. S. Norden, 1,613,407; Heel-seat-fitting

| Heel-seat-fitting machine. C. S. Norden. 1,615,401, Jan. 4. Heel, Shoe. H. N. Atwood. 1,640,686; Aug. 30. Heel, Shoe. A. F. Ducheneau. 1,645,187; Oct. 11. Heel, Spring. J. R. Nock. 1,625,048; Apr. 19. Heel sweep and making the same. H. A. Dean. 1,639,593; Aug. 16. Heel-treating-tool support. A. B. Fowler. 1,630,563; May 31. House machine, Wood. D. O. Marshall. 1,642,205; Oct. 18. Heel-turning machine, Wood. D. O. Marshall. 1,647,573; Nov. 1, Spring May 31. Heel-turning machine, Wood. D. O. Marshall. 1,647,573; Nov. 1, Spring May 31. Heel-turning machine, Wood. D. O. Marshall. 1,647,573; Nov. 1, Spring Machine, Wood. D. O. Marshall. 1,647,573; Nov. 1, Spring Machine, Wood. D. O. Marshall. 1,647,573; Nov. 1, Spring Machine, Wood. D. O. Marshall. 1,647,574; Nov. 1, Spring Machine, W

Heel-turning machine, Wood-. N. A. Monfils. 1,647.574;

Nov. 1: Nov. 1

Heels, Apparatus for making. A. C. Hayden. 1,651,952; Dec. 6.

Heels, Attaching rubber. J. B. Hadaway. 1,617,049; Heels for boots and shoes, Machine for use in the manufacture of. E. E. Winkley. 1,620,149; Mar. 8.

Heels for shoes, Machine for forming. C. I. Pollard. 1,619,154; Mar. 1.

1,642,733; Sept. 20.

Heels, Manufacture of. T. Lund. 1,643,387; Sept. 27.

Heels, Manufacture of rubber. J. J. Batterman. 1,615,156; Jan. 18.

Heels, Manufacture of rubber. J. J. Batterman. 1,618,4387; July 5.

Heels, Mold for combination. L. B. Conant. 1,637,441; Aug. 2.

Heels, Resilient lift for boot and shoe. C. Emanuelc. 1,634,637; July 5.

Hels to shoes, Attaching. M. V. Bresnahan. 1,615,258; Jan. 25.

Heels to shoes, Attaching. M. V. Bresnahan. 1,615,258; Jan. 25.

Jan. 25.

Helicopter. G. W. Calvert. 1.652.090; Dec. 6.

Helicopter. A. P. Filippi. 1, 1622,191; Mar. 22.

Itelicopter wing. A. J. Erlekson. 1, 615.938; Feb. 1.

Helicopter wing. A. J. Erlekson. 1, 615.938; Feb. 1.

Helicopter wing. A. J. Erlekson. 1, 615.938; Feb. 1.

Helicopter wing. A. J. Erlekson. 1, 615.938; Feb. 1.

Helicopter wing. 1, 616.187; Feb. 1.

Helicopter w

18.

18.

Hemacytometer and similar apparatus, Case for, W. L. Patterson. 1.639.436; Aug. 16.
Hemmer. A. H. DeVec. 1.631,956; June 14.
Hemming machine and forming bag tubing.
Hemating machine and forming bag tubing.
Hematiching mechanism, Multiple-needle, H. A. Jacobs and C. E. Jacobs. 1.638,338; Aug. 9.
Hexagonal cosmetic box. H. J. Titus. Des. 72.642; May 10.
Hexamethylenetetramine and ammonium chloride, Process and apparatus for producing. C. B. Carter. 1.630.782;

May 31.

Hexamethylenetetramine, Manufacture of. C. B. Carter, 1.535,707; July 12.

Hexyl resortion. A. R. L. Dohme. 1.649,670: Nov. 15.

Heysl resortion. A. R. L. Dohme. 1.649,671: Nov. 15.

Heysly resortion. A. R. L. Dohme. 1.649,671: Nov. 15.

Heysly resortion. A. R. L. Dohme. 1.649,678: Nov. 15.

Hide material and obtaining same. C. A. Widmer. 1.618,031; Feb. 15.

Hides and leather, Holdfast for stretching. E. G. Lowe. 1,638,046; Aug. 9.

Hides and skins preparatory to tanning, Treatment of. R. Botson. 1,647,953; Nov. 1. Hides, skins, and leather, Machine for treating. J. J. Brophy and W. E. Broughton. 1,625,981; Apr. 26. Hides. Tanning animal. J. Schäfer. 1,650,541; Nov. 22. Highboy. O. B. Bach. Des. 72,343; Apr. 5. High-frequency current generator, Polyphase. R. D. Duncan, fr. 1,643,495; Sept. 27. High-frequency energy, Transferring. R. S. Ohl. 1,618,622; energy. Transferring. R. S. Ohl. 0,618,622; energy. Transferring. R. S. Ohl. 1,624,008; Apr. 12. High-potential conductor. A. O. Austin. 1,626,777; May 3. High-pressure joint. W. H. Kniskern. 1,617,451; Feb. 15. May 3.

High-pressure lubricator. R. M. Ferrell. 1,630,705; High-pressure lubricator. R. M. Ferrell. 1,630,735; High-pressure lubricator. R. M. Ferrell. 1,630,735; High-gradual and making the same, Variable. B. Morer. 1,626,4241; Apr. 26.

High-speed safety cutter head. L. T. Medholdt. 1,626,427; Apr. 26.

High teusion construction work. C. G. Koppitz. 1,614,889; Jan. 18.

High-tension switch. F. P. Lawler. 1,640,455-7; Aug. 30. Nov. 8. Hinge. G. W. Zabel. 1.626.372; Apr. 26. Hinge. F. Zoufal. 1.633.916; June 28. Hinge and descrebeck. Combined. J. H. Harrison. 1.644.249; Oct. 4. Hinge. Hinge, Automobile door, A. W. Way. 1,652,965; Dec. 13. Dec. 13. Hinge, Bag frame. W. C. Hiering. 1,632,334; June 14. Hinge, Bag-frame. H. Tueckmantel. 1,636,971; July 26. Hinge, Ball-bearing. H. H. Raymond. 1,639,433-4; Aug. 16. Hinge, Ball bearing, H. H. Raymond, 1,639,633—4; Aug. 16.
Hinge, Bracket. D. D. Swem. 1,629,183; May 17.
Hinge, Casement, F. W. Young, 1,621,047; Mar. 15.
Hinge, Cellar-door, H. Blum. 1,635,107; July 6.
Hinge, Collar-door, H. Blum. 1,635,107; July 6.
Hinge, Concealed, M. Fox. 1,619,502; Mar. 1.
Hinge, Conscription, F. E. Elmer and R. W. Roberts. 1,652,102; Dec. 6.
Hinge construction. W. Marshall. 1,636,007; July 19.
Hinge, Detachable suspension. W. C. Candeld. 1,620,189; Hinge, Deventurelional. T. J. and C. D. Ryan. 1,634,052; June 28.
Hinge, Door. A. Boucher. 1,633,432; June 21.
Hinge, Door. A. E. Titus. 1,645,977; Oct. 18.
Hinge, Door. E. L. Wilson. 1,617,830; Feb. 1,145,114; Minge, Fature, Stop-door. W. H. Facker. 1,645,114; Oct. 100. Oct. 11.
Hinge, Folding chair. O. H. Cole. 1,639,723; Aug. 23.
Hinge for automobile seats. F. L. Buckner. 1,642,226;
Sept. 13.

Hinge for storm sashes. F. Jachimstal. 1,641,036; Aug. 30. Hinge, for suitcases or the like, Adjustable. F. C. Gadsby. 1,046,236; Oct. 18. Hinge for swinging doors. T. P. Enright. 1,653,160; Dec. 20. Dec. 20.

Hinge, Friction. T. H. Costello. 1,627,275; May 3, 411nge, Friction. T. P. Enright. 1,619,107; Mar. 1, 41nge, Friction. R. C. Hilton. 1,637,642; Aug. 2.

Hinge, Gate. A. L. Panoch. 1,634,337; July 5.

Hinge, Jewlery-box. R. I. Rhodes. 1,628,301; Apr. 26, 41nge, Locking. A. T. Lindeken. 1,613,888; Jan. 11.

Hinge-making machine. W. G. Aldeen. 1,630,881

Hay 30 June 21.

Hinge, Olive-knuckle. S. W. Parsons. 1,632,411

June 21.

Hinge, Olive-knuckle. S. W. Parsons. 1,632,411

June 21. 1 633 281 . Hinge mounting, Toilet-seat. E. J. Nielsen. 1,633,281; June 21.
Hinge, Olive-knuckle. S. W. Parsons. 1,632,415; June 14.
Hinger of astening, Extensible. W. J. Hill. 1,650,793; Minge, Pivot. E. Bommer. 1,653,448; Drc. 20.
Hinge, Pivot spring. E. Bommer. 1,624,6319; Apr. 19.
Hinge, Pivot spring. E. Bommer. 1,624,6319; Apr. 19.
Hinge, Separable. G. F. Dyer. 1,614,884; Jan. 18.
Hinge, Stell Stop. L. A. Kroschel. 1,622,451; Mar. 29.
Hinge structure. S. F. Kenyon. 1,645,622, Oct. 11.
Hinge, Telle Leaf. W. A. Nonck. 1,624,449; Oct. 4.
Hinge, Temple. J. Fielding and J. P. Whitaker. 1,610,965; Feb. 8.
Hinge, Transom. L. S. Simon. 1,638,065; Aug. 9.
Hinge with automatic lifting and locking means. J. L. C.
Hinged and J. C. Bogle. 1,647,602; Nov. 1.
Hinged last. E. W. Gerrish. 1,612,807; Jan. 4.
Hinges, Device, for facilitating the marking of door jambs Halps bevice for facilitating the marking of door jambs for. G. Hobbiseften. 1,639,429; May 31. Hinges, Forming. C. A. Munson. 1,620,663; Mar. 8. Hinges, Making. C. Habart. 1,649,583; Nov. 15. Hinges, Making. C. Habart. 1,649,583; Nov. 15. Hinges, Julie pod, Combined. L. W. Hardage. 1,614,125; Hitch. D. W. Koehn. 1,621,418; Mar. 15. Hitch. D. W. Koehn. 1,621,418; Mar. 15. Hitch. Quarter of the combined of the c Hitch for semitrailers. C. W. Shipley and R. B. Jones. 1.622,470; Mar. 29. 70; Mar. 29. Simplified. W. F. Zimmermann. 1,634,130; Hobber, Simplified. W. F. Zimmerumann.

June 28.

June 28.

Grant State Control of the Control o Hobbyborse, F. L. Sheldon, 1.617.725; Feb. 15.
Hobbyborse, F. L. Sheldon, 1.617.725; Feb. 15.
Hobs, Grinding, J. Edgar., 1.617.798; Feb. 15.
Hobs, Grinding apparatus for. H. Mensforth and F. A.
Cowell., 1.616.056; Feb. 1.
Hockey steke, Z. A. Hall., 1.631.960; June 14.
Hod. V. Laili, 1.643.103; Sept. 20.
Hod. J. Britter, 1.643.103; Sept. 20.
Hoe. J. R. Faller, 1.643.103; June 24.
Hog. J. Faller, 1.618.144; Jun. 24.
Hog. conditioner, E. E. McCarty, C. C. Dicus, and T. F.
Langkop, 1.634.155; June 28.
Hog greener, H. B. Palm and B. L. Palm., 1.625.677; Apr. 10.
Langkop, 1.634.155; June 28.
Hog. Sept. Sanitary heated. C. V. Short., 1.638.712; Apr. 10.
Hog. Leader, and crafte Combined J. Pallas, 15. Aug. 9.

Hog leader and crate, Combined, J. Pallas, jr. 1.644.201; Oct. 4.

Hog ringer, C. E. Schweser, 1.637.878; Aug. 2.

Hoist, F. W. Borkes, 1.644.770; Oct. 11.

Hoist, J. Christonsen, sr. 1.615.194; Feb. 22.

Hoist, O. E. Clark, 1.633.162; June 21.

Hoist, O. E. Clark, 1.633.162; Juny 5.

Hoist, R. P. Jovce, 1.635.162; July 5.

Hoist, R. P. Jovce, 1.635.162; July 5.

Hoist, H. G. Kitchell, 1.613.895; Jan. 11.

Hoist, A. S. Watson, 1.632.571; June 14.

Hoist, Air, W. E. Simpson, 1.645.665; Oct. 18.

Hat and Hilling frame, Oll-drum, H. A. Nichols, 1.645.665; Aug. 21.

Hoist, Aug. W. E. C. K. Ernst, 1.635.709; July 12.

Hoist, Automatic self-loading, W. E. Howlett, 1,622.589; Mar. 29. Holki, Boly, A. P. Peterson, 1,649,364; Nov. 15. Holst, Boly, A. P. Peterson, 1,649,364; Nov. 15. Holst centrel, W. J. Lilly and H. H. Logan, 1,624,260; Apr. 12. Hoist device for dumping bodies. L. T. Wood, 1,641,365; Sept. 6. Sept. 6.

Holst drums, Lubricating system for, R, G, Barzen, 1,636,892; July 26.

Holst, Elevator, M, B, McLauthlin and J, W, Dodd, 1,650,396; Nov. 29.

Holst, Gas-engine-driven, S, S, McIntyre, 1,649,908; Nov. 22.

Holst, Hay, H, J, Jensen, 1,614,617; Jan. 18.

Mar. 8.

Hoist, Overwind control for. D. F. Lepley. 1,614,372; Holst, Overwlad control for. B. F. Lege.
Jan. I.I.
Holst, Herr R. A. Fontaine. 1,627,338; Aug. 2.
1,653,345; Dec. 20.
Holst, Scaffold. W. C. Ferris. 1,622,247; Mar. 22.
Holst system, Skip. W. E. Hale. 1,628,344; May 10.
Holst, Timber. A. W. Bell, sr., and H. L. Jennings.
1,650,316; Nov. 22.
Holst, Vehicle. W. L. Gass. 1,650,438; Nov. 22.
Holst, Vehicle. W. L. Gass. 1,650,438; Nov. 22.
Holst, Vehicle. W. L. Gass. 1,650,438; Nov. 22.
Holsting apparatus. C. E. Allison. 1,634,529; July 5.
Holsting apparatus. C. T. Siebs. 1,614,575; Jan. 18.
Holsting apparatus. C. T. Siebs. 1,614,575; Jan. 18.
Holsting apparatus. C. T. Siebs. 1,614,575; Jan. 18.
Holsting apparatus. C. T. Flymans. 1,625,644;
Apr. 19. Hoisting apparatus, Roping for. F. Hymans. 1,020,004, Hoisting device. J. Owen. 1,642,383; Sept. 13. Hoisting device. J. F. Lucas. 1,616,380. Feb. 1. Hoisting device. J. F. Lucas. 1,616,380. Feb. 1. Hoisting drum, Air-cooled. B. Boykin, jr. 1,613,925; Jan. 11. Hoisting drum mechanism. J. E. Funk. 1,651,760; Hoisting drum, Reversing mechanism for. W. Sommer. 1,639,151; Aug. 16. Hoisting machine. A. H. Wilson. 1,621,700; Mar. 22. Hoisting machine. A. H. Wilson. 1,621,400; Dec. 6. Hoisting machine. A. H. Wilson. 1,651,669; Dec. 6. R. M. Lovejoy. 1,626,141; Apr. 26. Hoisting mechanism. G. T. Ronk. 1,628,919; May 17. Hoisting rechanism. G. T. Ronk. 1,628,919; May 17. Hoisting rech. Air-cooled. B. Boykin, jr. 1,636,040; July 19. Hoisting tackle. W. W. Wilson. 1,648,158; Nov. 8. Hoisting tackle. Locking. E. E. Knudson. 1,650,281; Nov. 2. ackle, Locking. E. E. Knudson. 1,650,281; Holsting tackle, W. W. Wilson. 1,648,158; Nov. 8. Holsting tackle, Locking. E. R. Knudson. 1,650,281; Nov. 22. Holsts and the like, Safety means for. C. F. Bledsoe, 1,641,357; Sept. 13. Holsts, Sale-winding mechanism fon. L. J. Westwood. Hold down device. H. S. Sternbergh. 1,623,762; Apr. 5. Hold over. T. C. Whithead. 1,637,843; Aug. 2. Hold-up alarm. G. R. Dobbins. 1,645,185; Oct. 11. Hold-up alarm. G. R. Dobbins. 1,645,185; Oct. 11. Hold-up alarm. S. Steinhardt. 1,645,185; Oct. 11. Hold-up alarm. 1,653,383; Oct. 20. Hold-up alarm. 1,653,383; Oct. 20. Hold-up alarm. 1,653,383; Oct. 20. Hold-up alarm. 1,653,6871; July 26. Holder for balls of thread. A. Selbold. 1,636,871; July 26. Holder for glasses. S. W. Farber. Des. 74,006–8; Holder for the soft tooth paste, shaving cream, and the like. F. Wolf. 1,626,771; May 3. Holder for yarn packages, Collapsible. J. Brandwood. Holder for yarn yard. Later for yarn yard. Holder for yarn yard. Holder for yarn yard. Holder for yarn yard. Holder for yarn y

Holding and shipping insert. G. S. Murphy. 1,635,430; July 12.

July 12.
Holding device. W. H. Dunne. 1,629,488; May 24.
Holding device. T. P. Little. 1,646,967; Oct. 25.
Holding device for wild animals. 1,623,774; Apr. 5.
Hole-cleansing mechanism. E. G. Gartin. 1,614,026;
Jan. 11.

Jan. 11.

Hollow annular article, Making. J. J. Callahan and F. C. Rogers. 1,628,821; May 17.

Hollow arm signal. K. Keenigsberg. 1,628,157; May 10.

Hollow articles and making the same, Flexible. A. E. Anderson. 1,625,525; Abr. 19.

Hollow articles, Method and apparatus for the manufacture of. W. P. Darwin. 1,648,475; Nov. 8.

Hollow articles, Method of and apparatus for making. C. W. Steele and R. T. Griffiths. 1,624,349; Apr. 12.

Hollow articles of robber, Manufacture of. C. H. Cray.

Hollow articles, Septratus for indicating internal relieves of. T. Mariotti. 1,649,966; Nov. 22.

Hollow-paranible elements, Method of and apparatus for charging. H. T. Patton. 1,629,174; May 17.

Hollow rounds, Rolling. A. W. Heinle. 1,624,340; Apr. 12.

Hollow structure and making the same. T. E. and T. E.

Apr. 12.

Hollow structure and making the same. T. E. and T. E.

Murray, jr. 1,622,664; Mar. 29.

Hollow structure of plastic material and producing the
same centrifugally. C. W. Watson. 1,641,793; Sept. 6.

Hollow ware, Contrivance for rolling sine and other sheetHollow ware, Method and apparatus for forming. H.

Lundgren. 1,631,496; June T.

Holster. C. F. Harter. 1,629,700; May 24.

Holster, Revolver. K. Corriston. 1,635,984; July 19.

Holster, Revolver. K. Corriston. 1,635,984; July 19.

Holster, Revolver. K. Lee. 1,621,213; Mar. 15.

Home trainer R. E. Lee. 1,621,20; Mar. 21.

Home trainer R. E. Lee. 1,621,213; Mar. 15.

Home trainer R. E. Lee. 1,621,213; Mar. 15.

Home trainer R. E. Lee. 1,621,216; Mar. 18.

Home trainer R. E. Lee. 1,621,20; Mar. 19.

However, Free mirture. C. Jesdale. 1,643,072; Sept. 20.

72535-P-K3

Homogenizing procedure and apparatus therefor. O. Nielsen. 1,654,268; Dec. 27. House and strop, Razor. W. M. Tlerz. 1,629,980; May 24. Honing or lapping machine, Portable. H. Strand. 1,624,636; Apr. 12. Honey food product. C. J. O'Connell. 1,646,657; Oct. 25. Honey from the comb, Apparatus for extracting. A. Berrguist. 1,615,185; Jan. 18. Honey, Refining bee. W. W. Somerford. 1,636,719; Hood, Appon. L. Brown. 1,636,122; July 10. Hood, Appon. L. Brown. 1,636,122; July 10. Hood, Appon. L. Brown. 1,636,122; July 10.

July 26.

Hood, Apron. I. Brown. 1,636,122; July 19.

Hood catch. W. R. Wiley. 1,647,422; Nov. 1.

Hood clamp, Automobile. L. C. Vanderlip. 1,645,492; Oct. 11.

Hood, Distributing. H. H. Payzant. 1,627,926; May 10.

Hood, Dust. H. W. Peters. 1,620,390; Mar. 8.

Hood fastener. S. De Oriow. 1,647,509; Nov. 1.

Hood for tank-car outlets, Heating. E. A. Fall. 1,620,452; Mar. 8.

Hook: See—
Bill hook,
Bracelet hook,
Butt hook,
Cable hook, Log-loading hook. Logging hook. Pintle hook. Cable hook,
Cargo hook,
Chain hook,
Choker hook,
Clevis hook,
Coat-hook,
Display hook,
End hook,
Fishhook, Rod hook. Safety hook. Sickle hook. Skulling hook. Slug hook Snap hook Snap nook.
Spoon hook.
Stagging hook.
Strap hook.
Supporting hook.
Swing hook.
Swinging hook.
Swivel hook.
Torpedo hook. Fishing hook.
Fiv hook.
Folding hook.
Freight hook.
Ham hook.

Ham hook. Torpico nook. Hook J. Bergsten, 1,636,209; July 19.
Hook. F. W. Jones. 1,635,277; July 12.
Hook. F. W. Nittel. 1,637,315; July 26.
Hook and eye tape. A. Bebel. 1,622,498; Mar. 29.
Hook and eye tape. D. Silberman. 1,622,743; Mar. 29.
Hook-and-eye tape. D. Silberman. 1,645,548; Oct. 18.
Hook-and-eye tape, Concealed. B. H. Marcus. 1,648,736;

Holes and S. J. Lester. 1,618,838; Feb. 22, Holes bracket. J. J. Rhodes. 1,625,745; Apr. 19. Hook device. C. W. Duke. 1,629,438; May 17, Hook dog, Power-operated. E. H. Percy. 1,648,659;

Nov. 8.

Hook for derricks, Safety connection. R. King. 1,617,763; Feb. 15.

Hook for derricks, Safety connection. R. King. 1,617,763; Feb. 15.

Hook forming and clamping device. J. J. Higgins. 1.

Hook forming and inserting machine. H. de Jong and W. Konlng. 1,620,523; Mar. 8.

Hook-forming machine. J. B. Whitmore and J. E. Ferguson. 1,626,652; May 3.

Hook for bracket, Adjustable. H. B. Schutten. 1,642,428; Sept. 13.

Hook or bracket, Adjustable, H. B. Schutten. 1,642,428; Sept. 13.

Hoop: See—
Adjustable hoop.
Hoop and holder therefor, Order-carrying. R. W. Curran. 1,652,425; Dec. 13.

Hoop for bales and packages. E. Barnes and G. V. M. Hoop for bales and packages. E. Barnes and G. V. M. Hoop for bales and packages. E. Barnes and G. V. M. Hoop for bales and packages. E. Barnes and G. V. M. Hoop for bales and packages. E. Barnes and G. V. M. Hoop for bales and packages. E. Barnes and G. V. M. Hoop for bales and packages. E. Craig. 1,643,487. Sept. 27.

Hoopper-car end and ladder construction. D. Hindahl. 1,617,609; Feb. 15.

Hopper, Coal feeding. F. Dornbrook. 1,639,931; Aug. 23.

Hopper construction. F. N. Hoos. 1,631,160; June 7.

Hopper construction. F. N. Hoos. 1,631,160; June 7.

Hopper construction. F. N. Hoos. 1,631,160; June 7.

Hopper, Loading. E. J. Smith. 1,626,122; Apr. 26.

Hopper, Fastening seed distributors to metal. H. D. Jones. 1,630,550; May 31.

Hopper, Flow-facilitating means for gravity. R. H. Beaumont. 1,622,565; Mar. 29.

Hopper, G. Gar for gravity-discharge. W. J. Burnett. 1,633,620; June 21.

Horn. E. Duttlinger and H. Speyer. 1,645,044; Oct. 11.

Horn. S. Goidberg. 1,623,106; Apr. 5.

Horn. A. Goidberg. 1,623,106; Apr. 5.

Horn. A. Goidberg. 1,623,106; Apr. 5.

Horn. Acoustic. M. Abrahams. Des. 73,217–18; Aug. 9.

Horn batton. L. Blackmere. 1,644,675; Aug. 30.

Horn, Amplifying. F. Cirelli. 1,637,438; Aug. 2. Horn button. L. Blackmore. 1,640,876; Aug. 30. Horn, Concert. J. Heald. 1,634,355; July 26. Horn or the like, Treatment of. F. Homberg. 1,636,818; July 26.

Horn, Pneumatic. G. V. Sparlin. 1,627,467; May 3. Horn, Pneumatically-operated. L. Chollet. 1,654,454; Dec. 27.

Horn push button. E. N. Jacobi. 1,638,037; Aug. 9. Horn, Sound-amplifying. G. W. Bulley. 1,617,513; Feb. 15.

Horn, Sound amplifying or concentrating. C. P. Alexander. 1,652,655; Dec. 13.
Horn, Stuffer. W. F. Henderson. 1,617,848; Feb. 15.
Horn-supporting means. P. H. Lange. 1,639,514; Aug. Horn, trumpet, or like acoustic amplifier. E. A. Graham. 1,613,511; Jan. 4.

Horn, trumpet, or like acoustic amplifier. E. A. Graham. 1,613,511; Jan. 4.

Horns, Amplifying tone chamber for. J. Berg. 1,650,976; Nov. 29.

Horns for sound-reproducing apparatus, Making. C. H. Biggs. 1,654,208; Dec. 27.

Horse collar. H. Kurtz. 1,617,602; Feb. 15.

Horse collar. J. F. Schoellkoff. 1,647,151; Nov. 1.

Horse collar. J. M. Walsh. 1,615,858; Feb. 1.

Horse collar. Adjustable pneumatic. H. H. Ruedebusch. Horse collar. Cubin. A. H. Stahl. 1,623,210; Apr. 5.

Horse-collar cubin. A. H. Stahl. 1,623,210; Apr. 5.

Horse-collar cubin. A. H. Stahl. 1,623,210; Ch. 167,051; Oct. 18. 18.
Horse collars, Fastener for, H. H. Ruedebusch.
1,614,995; Jan. 18.
Horse nose guard. C. G. Christiansen. 1,654,363;
Dec. 27.
Horseshoe, P. F. Meade. 1,629,083; May 17.
Horseshoe, O. P. Mossman and F. R. Niven. 1,646,627;
Oct. 25. Hose attachment. E. S. Roe. 1,651,550; Dec. 6 Hose band. W. V. Thompson. 1,641,559; Sept. 6. Hose, Brush attachment for. O. E. Loomis. 1,6 June 28. 1.633.643: Hose, Frush attachment for. U. E. Loomis. 1,603,643; June 28.

H. W. Goodall. 1,635,783; July 12.

Hose clamp. N. Schwartz. 1,615,142; Jan. 18.

Hose-clamp. C. S. Witter. 1,619,841; Mar. 8.

Hose-clamp applier. F. W. Gunn. 1,643,160; Sept. 20.

Hose-clamping tool. J. P. P. Riordan and W. Murray. 1,619,766; Mar. 1.

Hose connection. W. T. Skillern. 1,619,439; Mar. 1.

Hose construction. W. H. Fulton. 1,651,022; Nov. 29.

Hose coupling. A. H. Handlan, ir. 1,626,729; May 3.

Hose coupling. W. K. Herbst. 1,630,895; May 31.

Hose coupling. B. O. Conner. 1,615,683; Jan. 25.

Hose coupling. B. W. K. Herbst. 1,630,895; May 32.

Hose coupling. B. W. K. Herbst. 1,630,895; May 32.

Hose coupling. B. W. K. Herbst. 1,630,895; May 32.

Hose coupling. C. B. Waggoner. 1,647,324; Nov. 1,

Hose coupling. L. B. Waggoner. 1,647,324; Nov. 1,

Hose coupling. H. Weber. 1,686,679; July 26.

Hose coupling. M. Louplead. 1,620,114; Mar. 8.

Hose, Fitxible ventilating. W. H. Evans. Re16,719;

Aug. 23. B. Wadging. M. Evens. Re16,719;

Aug. 23. B. Wadging. M. G. Evens. Re16,719;

Aug. 23. B. Wadging. M. G. Evens. Re16,719; Hose fittings. M. Loughead. 1,620,114; Mar. 8. Hose, Fiezhile ventilating. W. H. Evans. Re16,719; Aug. 23.

Aug. 23.

Aug. 24.

By State S June 7.

Hosiery, A. J. Beucus. 1,623,024; Mar. 29.
Hosiery, J. E. Dakin, 1,651,677; Dec. 6.
Hosiery, J. Zaki. 1,654,064; Dec. 27.
Hosiery and making same, Seamless. J. C. Williams.
1,621,634; Mar. 15.
Hosiery, Drying form for. D. Rabinovitch. 1,614,888;
Jan. 11.
Jan. 12.
Jan. 12.
Jan. 13.
Jan. 14.
Jan. 14. Jan. Jering machine. W. W. Sibson. 1,634,288; Jan. Jering machine. W. W. Sibson. 1,634,237; June 28. Hosiery, Full-fashioned. H. Evans and H. E. Hellboronner. 1,619,199; Mar. I. Hosiery, Gartered. P. A. Fischer. 1,644,185; Oct. 4. Hosiery, Knitting. A. J. Beucns. 1,622,837; Mar. 29. 1,628,044 Apr. 26. Murphy and W. A. Simond. 1,628,044 Apr. 26. Murphy and W. A. Simond. 1,628,044 Apr. 27. Hosiery, Lady's. R. E. Schletter. 1,651,1732; Dec. 6. Hosiery, Lady's. W. E. Zander. 1,650,104; Nov. 22. Hosiery machine for making right and left toe pockets. F. E. Jones 1,641,659; Sept. and left toe pockets. H. Garneux. 1,645,439; Oct. 11. Hosiery-machine varn-tension device. C. L. Landis. 1,648,815; Nov. 8.

Hoslery, Manufacture of. E. A. Hitner. 4,000,11.
July 12,
Hot-air and hot-water heater, Combined. B. B. Choinski.
1,642,539; Sept. 13.
Hot-air bath, Moist. P. R. Wilde. 1,636,581; July 19.
Hot-air ath, Moist. P. R. Wilde. 1,636,581; July 19.
Hot-air cevice. W. L. and L. K. Ratbjen. 1,639,897;
Aug. 23. 1.642,539; Sept. 13.

Hot-air bath, Moist. P. R. Wilde, 1,636,581; July 19.

Hot-air bath, Moist. P. R. Wilde, 1,636,581; July 19.

Hot-air cevice. W. L. and L. K. Rathjen. 1,639,897;

Hot-air engine. J. Koenlg. 1,641,3038; Jan. 4.

Hot-air engine. J. Koenlg. 1,614,062; Jan. 18.

Hot-air furnace. W. S. Martin. 1,630,024; May 24.

Hot-air furnace. W. S. Martin. 1,630,024; May 24.

Hot-air more. D. Wildden. 1,618,498; Feb. 22.

Hot-air mortor. J. Koenlg. 1,614,961; Jan. 18.

Hot-air imotor. J. Koenlg. 1,614,961; Jan. 18.

Hot-air motor. J. Koenlg. 1,614,961; Jan. 19.

Hot-air motor. J. Koenlg. 1,614,961; Jan. 19.

Hot-plate foot feed. W. V. Penlmigton and P. C. Isom. 1,618,945; Feb. 22.

Hot-plate foot feed. W. V. Penlmigton and P. C. Isom. 1,618,945; Feb. 22.

Hot-top mold, Permanent. J. E. Perry. 1,636,013; Hot-plate and bot-air furnace, Combination. A. Gabriel. 1,628,459; May 10.

Hot-water and steam heater. W. F. Goodnow and G. H. Vickers. 1,635,404; July 12.

Hot-water bottle. H. A. Bauman. Des. 72,925; June 28.

Hot-water bottles, Making. W. E. Roberts. 1,625,396; Apr. 19.

Hot-water bottles, Making. W. E. Roberts. 1,625,396; Apr. 19.

Hot-water heater. U. R. Denniston. 1,644,229; Oct. 4.

Hot-water heater. U. R. Denniston. 1,644,229; Oct. 4.

Hot-water heater. U. R. Denniston. 1,644,229; Oct. 4.

Hot-water heater. V. Valer. 1,636,616; July 19.

Hot-water heater. O. A. Busong. 1,618,907; Sept. 18.

Hot-water heater. O. Hot-water systems, Composition for, G. I. Ray. 1,648,867; Nov. 8.

Hot-water systems, Composition for repairing leaks in G. I. Ray. 1,648,868; Nov. 8.

E. Ray. 1,648,868; Nov. 8.

Hot-water tanks, Clothes-drier attachment for. D. H. Noyes. 1,630,965; May 31.

Hot-water vest. J. Jirasek 1,629,626; May 24.

Hotel lock. A. K. Morton and J. A. Helloran. 1,628,264; May May 24. May 10.

House: See—
Amusement house,
Bird house.
Farrowing house.
Farrowing house.

House construction.
House construction of tubes or tubular members.

Librah, Jr., 1,622,071; Mar. 22.
House for sows, Farrowing.
C. F. Walsh. 1,644,212;
Oct. 4. Household article. J. H. Camper. 1,626,507; Apr. 26. Household article. A. Olsen. 1,613,476; Jan. 4. Household article, Combination. E. P. French. 1,616,315; Household articles, Making. R. Wittlinger. 1,638,902; Aug. 16.

Aug. 16.

House number and porch light. J. C. Clemons. 1,642,644; Sept. 13.

Housing. A. M. Alcázar. 1,646,739; Oct. 25.

Housing. Controller. J. Teipel and W. F. Exner. 1,616,161; feb. 1.

1,625,200; Apr. 6.

Housing, Rolling-mill. H. W. Wilson. 1,616,161; feb. 1.

Housing, Rotatable block. L. E. Hansen. 1,628,702; May 17.

Housing Rotatable block. L. E. Hansen. 1,628,702; May 17.

Housing structure. J. M. Fitzgerald. 1,617,626; Feb. 15.

Howing. 1,654,120; Dec. 27.

Houses, Steel interior for. D. Bruhn. 1,644,869; Oct. 11.

Hub and brake mechanism. C. H. Pearce: 1,617,648; Feb. 15.

Hub and journal box. H. W. Sanford and H. W. Jones.

Hub cup. J. J. May 24.

Hub cup. J. J. Mitrick and J. L. Silverstine. 1,621,756; Mar. 22.

Hub cup. Pulley-attaching. C. H. Fredrick. 1,647,789; Nov. 1. Household articles, Making, R. Wittlinger, 1.638.902: Nov. 1.

Hub construction. C. Sauzedde. 1,635,504; July 12.

Hubs and spindles. Light attachment for. J. E. Prince
and J. E. Schooley. 1,650,153; Nov. 22.

Hull and cotton separator and cleaner. J. A. Streun.
1,630,638; May 31.

Hull construction. J. H. Crary. 1,613,645; Jan. 11.

Huller: See— Huller: See Cons. S. H. Ceary, Int. Space, Sen. 11.

Oat huller F. H. Moening. 1.631,426; June 7.

Huller, W. H. Worthington. 1,631,446; June 7.

Huller and opener. W. L. Hancock. 1,623,181; Apr. 6.

Huller and scarifier. J. L. Owens. 1,627,248; May 3.

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Hullers, Separating apron for green-pea-vine. F. Hamachek. 1,645,324; Oct. 11.
Hulling green peas. J. Goffin. 1,620,644; Mar. 15.
Human remains and article made thereby, Perpetuating.
A. Vanderlaan. 1,640,680; Aug. 30.
Humidiner. F. F. Bahnson. 1,622,482; Mar. 29.
Humidiner. H. B. Blakeslee. 1,649,035; Nov. 15.
Humidiner. E. Buehrer. 1,652,209; Dec. 27.
Humidiner. E. Carlstedt. 1,627,686; May 10.
Humidiner. J. B. and T. E. Clark. 1,652,392; Dec. 13.
Humidiner. J. B. and T. E. Hodge. 1,626,666-8;
                             May 3.

May 3.
                                    May 3.
Humidifier.
Humidifier.
                             Humidines, Aug. 30.

Aug. 30.

Humidine attachment for water pans, Automatic. W. W. Humidine 1.646.565; Oct. 25.

Humidine, Automatic. J. S. Makin. 1,620,373; Mar. S. Humidine; for heating units. E. Buehrer. 1,648,537;
                                 Nov. 8.
Humidifier pan. J. M. Fackler, 1,615,689; Jan. 25.
Humidifier pan. J. M. Fackler, 1,621,430; Mar. 15,
Humidity-control system. A. J. Nelson. 1,650,149;
                      Humidity control system. A. J. Nelson. 1,650,149; Nov. 22.

Rumidity-controlling units, attachment for. J. Whitting. 1,617,685; Feb. 15.

Rumidity regulator. A. E. Krick. 1,629,107; May 17.

Rumidor. R. S. Blair. 1,627,883; May 10.

Rumidor, Cold-towel. D. W. Leppert. 1,615,879; Feb. 1.

Rusker, Gorn. E. E. McNeely. 1,636,389; July 19.

Rusking unit. J. Powell. 1,622,207; Mar. 22.

Rydrant. P. P. Garbarino. 1,636,599; July 19.

Rydrant. R. W. Penny. 1,627,251; May 3.

Rydrant, Irrigation. C. E. Crownover. 1,624,317; Apr. 12.
Hydraulic Trigation. C. E. Crownover. 1,624,317;
Appl. M. H. Miscampbell. 1,641,347; Sept. 6.
Hydraulic apparatus, Alleviator for. F. McFarland.
1,640,046; Aug. 23.
Hydraulic brake. F. Dotsch. 1,631,300; June 7.
Hydraulic brake. E. L. Larson. 1,626,542; Apr. 26.
Hydraulic brake. E. L. Larson. 1,626,542; Apr. 26.
Hydraulic brake. E. M. Hetting. 1,630,038; Jul. 12.
Hydraulic brake. P. F. Richards. 1,630,038; Jul. 12.
Hydraulic cassifer and separating process. F. W. Schmidt and W. M. Green. 1,650,238; Nov. 22.
Hydraulic core drill. E. Whinnen. 1,647,639; Feb. 13.
Hydraulic drive. O. N. Bratvold. 1,616,252; Feb. 1.
Hydraulic selew. W. S. Lee, R. Pfachler, and D. Nabow.
Hydraulic bead, Creating a. H. Till. 1,623,369; Apr. 5.
Hydraulic back. The Schemeyer. 1,621,369; Mar. 22.
Hydraulic lack. W. Schemeyer. 1,621,361; Apr. 20.
Hydraulic machines, Wearing plate for W. M. White.
1,641,362 Sept. 6.
Hydraulic motor. M. F. Perkins. 1,627,396; May 10.
Hydraulic motor. M. F. Perkins. 1,627,396; May 10.
Hydraulic procs. R. Craig. 1,621,606; May 10.
Hydraulic procs. E. M. Smith. 1,642,591; Sept. 27.
                             Hydraulic press
Hydraulic press
Dec. 20.
                                                                                                                                                                  press. E. M. Smith. 1,643.591; Sept. 27. press, High-speed. W. Ernst. 1,653,350;
                         Dec. 20.

Bydraulic ram. J. L. Boland. 1,641,878; Sept. 6.

Bydraulic regulating apparatus. H. F. Schmidt.

1,617,460; Feb. 15.

Hydraulic testing apparatus. V. I. Zelov. 1,650,736;
              Hydragher Land State Control of the 
                         Hydrocarbon burner. C. A. Kosier. 1,014,0
Hydrocarbon burner. F. H. Schulenberg.
Apr. 19.
Hydrocarbon burner. H. A. Sekowsky.
May 24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1,630,139;
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Hydrocarbon burner. C. R. Smith. 1,613,060; Jan. 4. Hydrocarbon, Catalytic exidation of aromatic. A. E. Craver. 1,636,554; July 26. Hydrocarbon distillation products, Treating cracked. H. Blumenberg, Jr. 1,649,384; Nov. 15. Hydrocarbon fractions, Separating. D. Pyzel. 1,622,737; Hydrocarbon fractions, Separating. D. Pyzel. Hydrocarbon fractions, Separating. D. Pyzel. 1,622,737; Mar. 29.

Hydrocarbon fuel, Apparatus for vaporizing. G. Wirrer. 1,631,767; June 7.

Hydrocarbon liquids, Manufacturing light. W. S. Yard and E. N. Percy. 1,643,401; Sept. 27.

Hydrocarbon liquids, Producing light. E. C. Herthel. 1,632,967; June 21;

Hydrocarbon material, Distilling. E. M. Clark. 1947,000; Mar. 1.

Hydrocarbon mixtures, Apparatus for vaporizing. G. Wirrer. 1,619,050; Mar. 1.

Hydrocarbon motor. C. F. Johnson. 1,613,766; Jan. 11.

Hydrocarbon motor. M. Tibbetts. 1,627,753; May 10.

Hydrocarbon motor. L. M. Woolson. 1,631,768; Jan. 4.

Hydrocarbon motor. L. M. Woolson. 1,631,77; June 7.

Hydrocarbon motor. L. M. Woolson. 1,631,77; June 7. Hydrocarbon motor. L. M. Woolson. 1,631,258; Jan. 4. Hydrocarbon of Conversion. L. C. Huff. 1,638,735; Hydrocarbon olls, Reactivating desuphurizing agents for J. B. Rather and F. S. Shepard. 1,622,671; Mar. 29. Hydrocarbon olls, Reactivating desuphurizing agents for J. B. Rather and F. S. Shepard. 1,622,671; Mar. 29. Hydrocarbon, Process and apparatus for treating. W. R. Howard. 1,627,436; May 3. Hydrocarbon-waporizing device for starting motors. T. J. Lifte, Jr. 1,640,902; Aug. 30. Hydrocarbons and making the same, Reagent for condensing, the property of the same Hydrocarbons, Cracking, E. W. Isom. 1,650,519; Nov. 22.

Hydrocarbons, Cracking liquid, H. O. Swoboda and E. M. Richards. 1,616,515; Feb. 8.

Hydrocarbons, Cracking of, E. C. Herthel and H. L. Felzer. 1,634,666; July 5.

Hydrocarbons, Cracking of, E. C. Herthel and H. L. Felzer. 1,634,666; July 5.

Hydrocarbons, Classing apparatus for liquid. J. H. Allen. 1,632,815; June 21.

Hydrocarbons from gas, Extracting. A. P. Bjerregaard, 1,624,206; Apr. 12.

Hydrocarbons from gas, Extracting. A. P. Bjerregaard, 1,624,206; Apr. 12.

Hydrocarbons, Heating. W. M. Cross. 1,624,889; Apr, 12.

Hydrocarbons, Heating. W. M. Cross. 1,624,889; Apr, 12.

Hydrocarbons, Hallidon Desires, 1,624,889; Apr, 12.

Hydrocarbons, Material for the treatment of. A. B. Way. 1,638,022; Aug. 9.

Hydrocarbons, Method of and apparatus for treating. C. S. Corning. 1,652,394; Dec. 13.

Hydrocarbons, Purifying. L. W. Parsons and S. P. Coleman. 1,640,720; Aug. 50.

Hydrocarbons, Refining. O. D. Lucas and E. L. Lomax. 1,615,286; Jan. 25.

Hydrocarbons, Treating. C. P. Dubbs. 1,638,112; Aug. Aug. 9.

Hydrocarbons, Treating. C. P. Dubbs. 1,638,112; Aug. Aug. 9.

Hydrocarbons, Treating. W. S. Hadaway, jr. 1,628,143; May 10. Nov. Hydrocarbons, Treating. W. S. Hadaway, jr. 1,628,143; Hydrocarbons, Treating. O. G. Messenger. 1,623,061; Apr. 5.

Hydrocarbons, Treating. R. de M. Taveau. 1,645,553;
Oct. 18. Oct. 18.

Hydrocarbons, Treating, A. B. Way. 1,638,021; Aug. 9.

Hydrocarbons, Treating heavy. A. D. Smith and J. Ferl.

1,640,225; Aug. 23.

Essure and a catalyzing agent, Apparatus for distilling. F. M. Hess. 1,623,467; Apr. 19.

Hydrocraft A. Ludasy. 1,639,623; May 31.

Hydrocyanic acid, Apparatus for spraying liquid, K. A.

Kilbourne. 1,642,773; Sept. 20.

Hydrodynamic power machine. L. L. Osborn. 1,624,115;

Apr. 12.

Apr. 12. Apr. 12.

Hydrogen from gases, Removing sulphureted. W. Gluud.

Rel6,631; May 24.

Manufacture of, J. Rochet, 1.617.965: Hydrogen. Manufacture of. J. Rochet. 1,617,965; Feb. 15.
Hydrogen-ion concentration, Method and apparatus for determining. E. D. Stirlen. 1,636,092; Feb. 1.
Hydrogen peroxide, Making a stable. A. L. Halvorsen. 1,627,325; May 3.
Hydrogen sulphide from coal or water gases, Removing. W. E. Leuchtenberg. 1,629,396; May 17.
Hydrogen sulphide, Preparation of. A. Henwood. Hydrometer. W. Ripplen. 1,620,393; Mar. 8.
Hydrometer bulb. L. Edelmann. 1,637,219; July 26.
Hydrometer suction bulb or the like. L. Edelmann. Des. 73,401; Sept. 6. Hydrogen.

Hydrometer suction bulb or the like. L. Edemann. Des. 73,401; Sept. 6.
Hydrometer units. Attachment for. L. S. Brach. 1,629,4364; May 17.
Hydroxy-benzanthrones and making same. K. Schirmacher K. Zhhn, K. Wilke, and P. Ochwat. Hydroxy-lavyl-p-diamino-enthrarufin compounds and making same. R. E. Schmidt. 1,652,584; Dec. 13.
Hydroxyl-axyl-p-diamino-enthrarufin compounds and making same. R. E. Schmidt. 1,652,584; Dec. 13.
Hygrometre, humidity regulator, and the like. A. J. Loepsinger. 1,636,374; July 19.
Hygrometric apparatus. S. S. Amdursky. 1,635,697; July 12.
Hygrometric apparatus. E. B. Poote and F. W. Steller

July 12. hypardus. S. S. Amdursky. 1,635,697;
Hygrometic apparatus. E. B. Foote and F. W. Stalker.
Hygroscopic substances, Apparatus for testing. F. T.
Carson. 1,642,577; Sept. 13.
Hyperchromatic objective. A. Folack. 1,629,361; May 17.
Hypoternic ess. Manufacture of. R. B. MacMullin. 1,632,729; June 14.
Hypodermic case. K. Campbell. 1,650,980; Nov. 29.
Hypodermic-solution container. H. K. Mulford. 1,616,274; Feb. 1.

Feb. 1.

Hypoglycemia-producing substance and product, Making
a. H. E. Dubin and H. B. Corbitt. 1,653,452;
Dec. 20.

Ice-box construction, R. G. Marsh. 1,637,494; Aug. 2. Ice-can carrier. G. B. Bright and R. N. Cole. 1,626,222; Apr. 26.

Apr. 27.

Apr. 2

Jan. 25. Ice-cream-cone holder. O. Asselin. 1,615,209; Jan. 25. Ice-cream-cone holder. E. Baker. 1,643,735; Sept. 27. Ice-cream-cone-making machine. W. M. and P. D. Roberts. 1,615,345; Jan. 25.

Ice-cream-cone server. G. W. Traver. June 21. June 21.

Ice-cream-cone storing and dispensing device. A. Leon and J. Lattimer. 1,641,040; Aug. 30.

Lec-cream-cone wrapper and carrier. C. E. Fritzsche. 1,628,718; May 17.

Ice-cream-cones, Coutainer for. A. J. Pukt. 1,619,883; May 3.

Ice-cream-container, Brick. C. Binder. 1,627,424; May 3.

May 3.

Loc-cream cutter. G. Marandino, 1,636,142; July 19.

Loc-corn cutting and coating machine, Automatic. W. Cornell Control of the Contr

Aug. 2.
Ice-cream freezer. C. A. Ballreich. 1,653,978; Dec. 27
Ice-cream freezer. W. B. Wright. 1,627,302; May 3.
Ice-cream freezers, Operating mechanism for F. G.
Scott. 1,645,458; Oct. 11.
Ice-cream-handling apparatus. S. B. Whiteside.
1,638,134; Aug. 9.
Ice cream; Ices, or the like Container or receptacle for
the dispensing of. M. Feybusch. 1,633,480; Aug. B.
Ice-cream machine. R. A. Feybusch. 1,633,480; Aug. B.
Ice-cream model. S. B. Long and J. C. Plmox. 1,615,641;
Jan. 25.

Jan 25. Tee cream or other material, Method of and apparatus for charging containers with. F. X. Kuhn. 1,627,853; May 10. Ice-cream package and method of and apparatus for making the same. F. X. Kuhn. 1,627,854; May 10. Ice-cream packer, Iceless. H. A. Lidenberg. 1,643.816; Sept. 27.

Ice-cream sucker. H. B. Burt. 1,618,324; Feb. 22.
Icc creeper. L. Chenoweth. 1,647,957; Nov. 1.
Ice creeper. E. Ferad. 1,637,691; Aug. 2.
Ice creeper. D. W. Fish. 1,616,799; Feb. 3.
Ice-cutting machine. F. E. Hussey. 1,648,181; Nov. 8.
Ice-cutting machine. F. E. Hussey. 1,648,181; Nov. 8.
Ice bolder. A. L. Karnes. 1,651,457; D. 26.
Ice machine. R. Artus. 1,638,179; Aug. 9.
Ice machine. R. Artus. 1,638,179; Aug. 9.
Ice machine, Al-ragitating means for. C. L. Whitaker and N. E. Middleton. 1,648,836; Nov. 8.
Ice-making apparatus. R. L. Shipman and E. D. Sprague. Ice-making machine. M. Ribi. 1,633,712; June 28.
Ice-making systems, Basket for. N. M. Small. 1,648,830; Nov. 8.

Nov. 8. e. Manufacturing. F. M. Gutlerrez y Lado. 1,616,492;

fee, Ashunatettens, Feb. 8. H. C. Asmus. 1,623,375; Apr. 5. Lee picks, Can-opening attachment for. C. W. Halsey. 1,618,530; Feb. 22. Ice-scoring machine. C. Jobst. 1,610,128; Mar. 1. Ice-scoring machine. R. H. Roart. 1,644,396; Oct. 4. Ice shaver, Sanitary. A. R. Romero. 1,643,356; Sept. 27. Ice shaving machine. R. R. Smith. 1,641,999; Sept. 6. Ice shaving machine. R. R. Smith. 1,641,999; Sept. 6. Ice shaving machine. R. R. Smith. 1,644,999; Sept. 6. Ice shaving machine. R. R. Smith. 1,644,999; Sept. 6. Ice. 1,644,408; Oct. 3. Ice. 1,644,408; Oct. 4. Ice. 1,644,448; Oct. 4. I

lee snar Refrigerator.
Oct. 4.
Ice tray, J. H. P. Haneklaus, 1,616,043; Feb. 1.
Identification-card case, A. Schiekerling, 1,613,414; July 5.

Lan. 4.
L. Griesinger, 1,634,419; July 5.

Identification-card case. A. Schickerling, 1,613,414; Jan, 4. Identification device. J. Griesinger, 1,634,419; July 5. Identification device, J. E. Guay, 1,632,117; Dec. 6. Identification device, Automobile. S. K. Wood. 1,620,791; Mar, 15.

Adar. 10.

Identification mechanism. J. H. Horsburgh. 1,644,132; Oct. 4. Identifying tag. C. M. Rice. 1,621,810; Mar. 22. Igniter, Fish. A. J. Leins. 1,613,040; Jan. 4. Identifying tag. C. M. Rice. 1,623,640; Jan. 4. Igniting devices and the like. Tip for. O. J. Leins. 1,653,645; Apr. 5. S. Alsop. 1,628,648; Mar. 15. Ignition and lighting system, Motor-vehicle. K. Wolff. 1,628,648; Apr. 5. S. Alsop. 1,629,861; Mar. 15. Ignition apparatus. P. Brown. 1,634,135; June 28. Ignition apparatus. P. Brown. 1,634,135; June 28. Ignition apparatus. F. C. Kroeger. 1,641,442; Sept. 6. Ignition apparatus. F. C. Kroeger. 1,641,442; Sept. 6. Ignition apparatus. R. P. Lansing. 1,633,704; June 28. Ignition apparatus. C. Kroeger. 1,641,442; Sept. 6. Ignition apparatus. C. Ringwald. 1,614,428; Feb. 1. Ignition circuit and the supply of gas to the carbureter, Device for controlling both. C. D. Harding. 1,632,133; Tune 1,630,639; May 31. Ignition-controlling apparatus. A. Howard. 1,644,591; Oct. 4. Ignificance out-offs, Controlling means for. G. W. Thomp. 26. Ignition eut-offs, Controlling means for. G. W. Thomp. 28. Ignition eut-offs, Controlling means for. G. W. Thomp. 28. Ignition eut-offs, Controlling means for. G. W. Thomp. 28. Ignition eut-offs, Controlling means for. G. W. Thomp. 28. Ignition eut-offs, Controlling means for. G. W. Thomp. 28. Ignition eut-offs, Controlling means for. G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for. G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for. G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for. G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for. G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for. G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for G. W. Thomp. 20. Ignition entered and cut-offs, Controlling means for G. W. Thomp. 20. Ignition entere

Ignition-controlling means. F. S. Denison. 1,625,796; Apr. 26. Ignition cut-offs, Controlling means for. G. W. Thompson. 1,629,554; May 24. Ignition device. L. O. French. 1,641,421; Sept. 6. Ignition device. W. Hermann. 1,644,190; Oct. 4. Ignition device. W. Hermann. 1,644,190; Oct. 4. Ignition device. W. Bellon and J. Bohli. 1,620,660; Ignition machine. F. Billon and J. Bohli. 1,620,660; Ignition magneto. W. W. Hawkins. 1,629,575; May 24.

Mar. 8.
Ignition magneto. W. W. Hawkins. 1,629,575;
Ignition magneto. W. W. Hawkins. 1,629,575;
July 5. 575; May 24. 1,634,574-5;

July 5.
Lantiton magneto. W. W. Hawkins. 1,640,936; Aug. 80.
Lantiton switch. W. Kaisling. 1,641,169; Sept. 6.
Lantiton switch. J. S. Rychlewski. 1,650,469; Nov. 22.
Lantiton switch and safety device. L. J. MacGlashan.
1,614,376; Jan. 11.
Lantiton system. S. Coyne. 1,652,094; Dec. 6.
Lantiton system. J. T. Fitzsimmons and H. Wallace.
1,641,678; Sept. C. H. Kindl. 1,638,266; Aug. 9.
Lantiton system and switch therefor. W. Hemingway, jr.
1,641,140; Aug. 30.
Lantiton systems and the like, Commutating mechanism
for. T. P. Nickell and W. H. Rodefeld. 1,628,902; May 17.
May 17.

May 17.

Ignition systems and the like, Timer for. R. H. Reece, 1,624,975; ppr. 19.

Ignition systems and the like, Timer for. R. H. Reece, 1,624,975; ppr. 19.

Ignition systems, Current converter for. E. von Lepel. 1614,906; Jan. 18.

Ignition systems, Distributor for. A. C. Schroeder, Ignition systems, Inductance coll for. M. Mallory, 1,623,426; Apr. 5.

Ignition systems, Remotely-controlled interlocking means for. A. W. Farrell, 1,616,956; Feb. 8.

Ignition systems, Remotely-controlled interlocking means for. A. W. Farrell, 1,616,956; Feb. 8.

Ignition timer. B. G. Barry, 1,615,255-6; Jan. 25.

Ignition timer. Z. C. Bradford, 1,632,167; June 14.

Ignition timer. H. L. Joyce, 1,621,115; Mar. 15.

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Ignition timer. G. Schadee. 1,640,725; Aug. 30.
Illuminated cross. H. L. Wolfers. 1,614,703; Jan. 18.
Illuminated level. G. F. Boucher, G. H. Price, and F.
Foster. 1,617,337; Feb. 15.
Illuminating and heating device. J. J. Rekar.
    Foster. 1,617,937;
Illuminating and
1,631,645; June 7.
Illuminating appara
                                                                                                                          apparatus.
                                                                                                                                                                                                                                     L. A. Jones.
                                                                                                                                                                                                                                                                                                                                                                                                            1.631.488:
       Illuminating apparatus. C. H. Kelsea.
                                                                                                                                                                                                                                                                                                                                                                                                         1,614,068;
       Illuminating appliance. W. W. Thompson. 1,654,150;
    Illuminating device. J. W. Bunker. 1,615,070; Jan. 18. Illuminating device. K. Edison. 1,619,198; Mar. 1. Illuminating device. C. A. B. Halvorson, jr. 1,616,042;
    Feb. 1.
Illuminating device. E. M. Mabee. 1,629,284; May 17.
Illuminating device. J. A. O'Neil. 1,640,423; Aug. 30.
Illuminating device. L. R. Spencer. 1,644,287; Oct. 4.
Illuminating device L. J. Voorhees. 1,613,030; Jan. 4.
Illuminating device for medical purposes. G. Wolf.
  Illuminating device for medical purposes. G. Woit. 1,680,568; Nov. 22. The projection purposes. R. M. Hill. 1,631,529; June 7. Illuminating means. G. T. Kirby and H. I. Day, 1,626,615; May 3. Illuminating unit. C. A. B. Halvorson, jr. 1,614,121;
  Hluminating unit. C. J. Jan. 11. Illuminating, np. period for artificial. L. X. Champeau. Illuminating, pp. 15. Illuminating, pp. 15. Illuminating, pp. 15. Illuminating, pp. 16. Illuminating, pp. 16
Dec. 13.

Dec. 13.

Impact device. N. Georgevitch. 1.645.477; Oct. 11.

Impact device. N. Georgevitch. 1.645.477; Oct. 11.

Impact device. N. Georgevitch. 1.645.477; Oct. 11.

Impact device. Dec. 1.655.890; July 12.

Impaling animal trap. H. Dorn. 1.616,786; Feb. 8.

Impaling trap. J. D. Jefferson. 1.635.890; July 12.

Impeller. F. W. Caldwell. 1.622.222; Mar. 22.

Impeller balaucing and scaling device. H. F. Benson. 1.634,371; July 8.

1.634,371; July 8.

1.646.373; Oct. 18.

Impervious material. Producing. W. F. Bleecker. 1.620,940; Mar. 15.

Implement, Combination. E. R. Shearwood. 1.613,729; Jan. 11.

Implement draft device. G. F. College. 1.
  Implement, Combination. E. R. Shearwood. 1,613.729; Jan. 11. Implement draft device. G. E. Collins. 1,646,784; Oct. 25. Driven. E. H. W. Foot. 1,614,356; Jan. 11. Implement for cutting and opening pasteboard boxes. A. D. Forry 1,623,636; May 3.

Implement for effecting the relative movement of two elements. W. V. Gibert. 1,631,110; May 31. Implement for marking objects. H. W. Hacker. 1,630,659; May 31.

Implement for testing cones. M. Bartholdy. 1,643,570; Implement handles. Resilient grip for. C. W. Halsey.
    Sept. 27. Implement handles, Resillent grip for. C. W. Halsey. 1,632,227; June 14. Implement hitch. S. K. Dennis. 1,629,153; May 17. Implement tongue. C. H. Rand. 1,622,231; Mar. 22. Implement, Power-driven. C. J. Travers. 1,550,667;
  Implement, Power-driven, C. J. Travers. 1,650,667; Nov. 29.
Implements, Unitary frame for farm. A. R. Coon. 1,634,650; July 5. 100,103,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100,103,100
  Inclinerator, B. F. Shaughnessy, 1,651,636; Dec. U. Incinerator, B. F. Shaughnessy, 1,651,636; Dec. U. Incinerator, Air-cooled. J. Felgenbaum, 1,622,431; Mar. 23.

Built in chimney. T. Treganowan. Chimney. T. Treganowan. Incinerator, Collapsible. W. R. Gorrell. 1,651,818; Dage 6.
    Incincrator, Collapsible. W. R. Gorrell. 1,651,818; Dec. 6, Dec. 6, Decline, I. F. Fisher. 1,628,537; May 10. Incincrator, Dwelling. H. F. Fisher. 1,628,537; May 10. Incincrator, Garbage. and the like. W. C. Epstein. 1,643,206; Sept. 20. Incincrator, Garbage. M. H. Hallett. 1,648,119; Nov. 8. Incincrator, Portable. A. Engle. 1,644,879; Oct. 11. Incising machine. D. W. Edwards and J. H. Mausfield. 1,646,555; Oct. 25.
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Inclination indicator. L. G. Shinn. 1,623,759; Apr. 5. Inclination indicator. G. J. Yakesh. 1,622,752; Mar. 29. Inclination indicator. G. J. Yakesh. 1,622,752; Mar. 29. Inclinometer. E. P. Arnold. 1,627,136; May 24. Inclinometer. C. W. Collins. 1,623,463; Apr. 5. Inclinometer. C. W. Custer. 1,630,172; May 24. Inclinometer. J. S. Donaldson. 1,834,934; July 5. Inclosed switch. C. D. Platt. 1,652,795; Dec. 18. Inclosure, Concealed. C. B. Ricken. 1,630,906; May 31. Incubator. C. Carles. 1,645,638, 134, 24. Incubator. C. Carles. 1,645,638, 134, 24. Incubator. A. H. Denault. 1,639,025; Aug. 16. Incubator. A. E. Grimes. 1,654,372; Dec. 6. Incubator. D. M. Holbrook. 1,652,120; Dec. 6. Incubator. F. C. Hare. 1,618,055; Feb. 15. Incubator. E. Hawkins. 1,630,445; Nov. 22. Incubator. E. W. Lord. 1,645,951; S. Nov. 28. Incubator. A. Montour. 1,613,049; Jan. 4. Incubator. A. Oller. 1,655,901; July 12. Incubator. A. Oller. 1,655,901; July 12. Incubator. A. A. Scott. 1,624,629; Apr. 12. Incubator. A. A. Scott. 1,624,629; Apr. 12. Incubator and hover, Combined. L. E. Gobbe. 1,614,727; Jan. 18. Incubator egg tray. F. Becker. Jr. 1,624,2323; Sopt. 13. Incubator egg tray. F. Becker. Jr. 1,624,2323; Sopt. 13. Incubator egg tray. F. Becker. Jr. 1,624,2323; Sopt. 13.
   Jan. 18.
Incubator egg tray. F. Becker, Jr. 1,642,323; Sopt. 18.
Incubator-heating system. E. Haney. 1,646,336; Öct. 11.
Incubator thermometer, C. D. Bolin. 1,618,050; Feb. 15.
Incubator, Thermostatically-regulated. J. V. (Giesler. 1,628,138; May 10. E. Oatstworth. 1,626,394; Apr. 26.
Incubator-ventilating means. D. M. Holbrook. 1,636,634; July 19.
Incubators, Egg receptacle for. H. C. Gregg. 1,638,303; Aug. 9.
Incubators, Egg tray for. J. F. MacKay. 1,632,239; Incubators, Egg tray for. J. F. MacKay. 1,632,239; Incubators, Egg tray for. J. F. MacKay. 1,648,1984.
      Incubators, Egg tray for. J. F. MacKay. 1,648,186;
Nov. 8.
Incubators, Egg tray for. J. F. MacKay. 1,548,186; Nov. 8.
Incubators, Egg turner for. J. L. Davis. 1,647,786; Lucubators, Egg-turning device for. R. G. Miller. 1,611,920; Feb. 15.
Incubators Moisture guide for. C. T. Patterson. 1,625,420; Apr. 19.
Incubators, Temperature regulator for. J. L. Davis. 1,634,401; July 5.
Incubators, Temperature regulator for. J. E. Davis. 1,618,307; Feb. 1.
Incubators, Thermostatic switch for. A. M. Goldberg. 1,618,307; Feb. 1.
Incubators, Thermostatic switch for. A. M. Goldberg. 1,639,374; Aug. 16.
Index. F. P. Gorin. 1,614,338; Jan. 18.
Index. J. H. Rand. 1,634,032; Dec. 27.
Index. J. H. Rand. 1,634,032; Dec. 27.
Index. C. T. Raschick. 1,619,089; Mar. 1,1042,341; Nov. 15.
Index and system of Indexing. E. A. Hemphill. 1,638,161; Nov. 26.
   Sept. 20.
Index, Card. D. C. Daniels, 1,626,027; Apr. 26.
Index, Card. R. C. Davis, 1,637,806; Aug. 2.
Index eard. S. C. Radford, 1,648,822; Nov. 8.
Index eard. S. C. Radford, 1,648,822; Nov. 8.
Index device, J. H. Rand, 1,637,536; Aug. 2.
Index device, J. H. Rand, 1,637,536; Aug. 2.
Index device, J. H. Rand, 1,636,4053; Dec. 27.
Index device, J. H. Rand, 1,646,403; Dec. 27.
Index device, Card. A. G. Wuest, 1,630,322; May 31.
Index device, Card. A. G. Wuest, 1,630,322; May 31.
Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
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Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
Index deviced, Card. A. G. Wuest, 1,630,302; May 31.
   Index-file unit, Protected. F. M. Shotwell. 1,613,5709; Jan. 4. Index-glass inclosure. K. C. Tomlinson. 1,637,093; Index-locking device and card attachment. R. M. Smith. 1,626,885; May 3. Index. Index. momerandum, and reference equipment. G. P. Butler. 1,646,008; Oct. 18. Index. member 1,646,008; Oct. 18. Index. of the W. H. Day and C. R. Thomas. 1,628,124;
Butler, 1,646,008; Oct. 18.

Index or file, W. H. Day and C. R. Thomas. 1,628,124; May 10.

Index or file, R. D. Hayes, 1,616,897; Feb. 8.

Index or file, R. D. Hayes, 1,616,897; Feb. 8.

Index or record device, Card. J. H. Rand, jr., and Index plate F. Index 1,643,644; Nov. 8.

Index rack. W. P. De Saussure, jr. 1,643,547; Sept. 27.

Index rack. W. P. De Saussure, jr. 1,659,090; Nov. 29.

Index system for cards and the like, W. Hoge. 1,641,648; Sept. 6.

Index system, Protected card. R. J. Wood. 1,639,016; Aug. 16.

Aug. 16.
   Aug. 16.
Index tab. H. E. Hubbard. 1,629033; May 17.
Index tab. J. H. Rand. 1,625,154; Apr. 19.
Index, Telephone. G. D. and W. V. Pogue. 1,633,952;
Index, Telephone. G. D. and W. V. Pogue. 1,633,962; June 28.
Index, Thumb. F. P. Gorin. 1,617,446; Feb. 15.
Index, Thumb. F. P. Gorin. 1,622,641; Mar. 29.
Index, Visible. W. C. Clark. 1,631,473; June 7.
Index, Visible. W. A. Ringler. 1,641,429; Sept. 8.
Index, Visible. W. A. Ringler. 1,641,293; Sept. 8.
Index, Visible. W. A. Ringler. 1,641,293; Sept. 8.
Index. Visible. W. A. Warchaw. 1,644,162; Oct. 4.
Indexing device. N. Warchaw. 1,644,162; Oct. 4.
Indexing mechanism. A. J. Ott and C. L. Ott. 1.
Indicating apparatus. W. C. White. 1,629,444; May 10.
Indicating device. T. Daly, 1,646,687; Oct. 25.
Indicating device. T. R. Gurney, 1,622,472, 29.
Indicating device. P. G. MacGregor. 1,635,555; July 12.
Indicating device. S. Q. Moses, G. E. Terwilliger, and W. P. Hammond. 1,621,995; Mar. 22.
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Indicating device. H. R. Sargent. 1,623,950; Apr. 5. Indicating device. E. G. Thomas. 1,647,320; Nov. 1. Indicating device. Riuminated. E. T. R. and L. E. R. Murray. 1,646,763; Oct. 25.
Indicating instrument. L. F. Blume. 1,613,800; Feb. 22. Indicating instrument. L. A. Mapel. 1,633,921; May 31. Indicating instrument. L. A. Mapel. 1,633,921; June 28. Indicating instrument. Electrically-controlled. H. L. Decker. 1,633,947; Dec. 27. Indicating means and the like. C. K. Woodbridge. 1,633,947; Dec. 27. Indicating position of planos on floors or other surfaces, Device for, B. H. Jefferson. 1,622,445; Mar. 29. Indicating speed, Device for. G. Mombur. 1,647,115; Indicating the amount of liquid in a supply tank. Method Oct. 25.

Indicating the amount of liquid in a supply tank, Method of and apparatus for. J. McElwain. 1,620,606; Mar. 8. Indicating time, Device for. F. C. Meacham. 1,620.980; Mar. 15. Indicating ratiations of Immersion depth of ships and the least of the Call indicator.
Current-theft indicator.
Date indicator.
Depth indicator. cator. Position indicator. Position indicator.
Precision indicator.
Pressure indicator.
Price indicator.
Reflecting indicator.
Right-of-way indicator.
Service indicator. Date indicator.
Depth Indicator.
Dial Indicator.
Distriction indicator.
Disversion indicator.
Down indicator.
Down indicator.
Down indicator.
Down indicator.
Elevator-position indicator.
Elevator-position indicator.
Fluid-flow indicator.
Fluid-flow indicator.
Fluid-flow indicator.
Fluid-flow indicator.
Fluid-flow indicator.
Fluid-flow indicator.
Grade indicator.
Ground speed indicator.
Ground speed indicator.
Heat indicator.
Level indicator.
Level indicator.
Liquid-level indicator.
Liquid-level indicator.
Load indicator.
Maneuver indicator.
Maneuver indicator.
Modulation indicator.
Office indicator.
E. E. Chritis. 1. Service Indicator.
Speed and direction indicator.
Speed indicator.
Speeding indicator.
Station indicator.
Stop indicator.
Street and station indicator.
Street are trindicator. Street aud station indicator.
Surface test indicator.
Temperature indicator.
Time-lock indicator.
Time-recording indicator.
Trie-defiating indicator.
Trie-defiating indicator.
Vehicle direction indicator.
Vehicle direction indicator.
Volume indicator.
Water-level indicator.
Water-level indicator.
Water-level indicator.
Winding pachanism indi-Winding-mechanism indi-Modulation indicator.

Modulation indicator.

Office indicator.

Indicator. W. Cunliffe. 1,634,176; June 28.

Indicator. R. E. Curtis. 1,643,238; Sept. 20.

Indicator. W. F. Dittman. 1,645,513; Oct. 18.

Indicator. J. S. Gulbors. 1,645,699; Oct. 18.

Indicator. J. S. Gulbors. 1,645,699; Oct. 18.

Indicator. J. S. Gulbors. 1,647,110; May 3.

Indicator. O. C. Reeves. 1,647,306; Nov. 1.

Indicator. O. C. Reeves. 1,647,306; Nov. 1.

Indicator. C. E. Summers. 1,635,232; July 12.

Indicator. C. E. Summers. 1,635,232; July 12.

Indicator. F. R. Wasserkampf. 1,647,594; Nov. 1.

Indicator. F. R. Wasserkampf. 1,647,594; Nov. 1.

Indicator and recorder, Water-level. G. W. Lind.

1,641,229; Sept. 6.

Indicator and recorder, Water-level. G. W. Lind.

1,641,229; Sept. 6.

Indicator and regulator, Pressure. C. E. Rogers.

1,652,051; Dec. 6.

Indicator average for instruments. G. Hutchinson.

Indicator device for instruments. G. Hutchinson.

1,640,819; Oct. 25.

Indicator for automobiles, Direction. H. H. Soper.

1,620,402; Mar. 8.

Indicator for measuring machines, Yard. A. Vanderveld.

1,647,681; Peb. 15.

Indicator of resultator for oil stills and the like, Level.

E. C. Herthel and E. W. Isom. 1,650,988; Nov. 29.

Inductance-coil frame. G. A. Turner. 1,624,447; Apr. 12. Inductance coils, Insulated support for. L. Steinberger and G. Hill. 1,654,562; Oct. 11. Inductance device. A. J. Christopher. 1,624,536; Apr. 12. Inductance device. F. Conrad. 1,635,541; July 12. Inductance device. F. O. Hartman. 1,651,703; Dec. 6. Inductance device and manufacturing the same. W. J. Shakeleton. 1,624,560; Apr. 12. Shakeleton. 1,624,560; Apr. 12. Shakeleton. 1,624,560; Apr. 12. Nov. 1. Inductance unit. C. A. Birch-Field. 1.645.511; Oct. Inductance unit, Variable. M. M. Eells. 1,628,237; May 10. Inductance, Aug. 16. Inductance, Variable, G. F. Browner, Aug. 16.
Induction apparatus, Stationary, S. E. Johannesen, 1.644,729; Oct. 11.
Induction coll. W. A. Chyst. 1.641,374; Sept. 6.
Induction coll. S. Z. Chylinski, 1.641,473; Sept. 6.
Induction formace, W. Hoskins, 1.646,862; Oct. 25.
Induction furnace, W. Hoskins, 1.646,862; Oct. 25.
Induction furnace, M. Unger, 1.626,487; Apr. 26.
Induction furnace, M. Unger, 1.626,487; Apr. 26.
Induction furnace, M. Unger, 1.626,487; Nov. 8.
Induction furnace, Combination, A. E. Greene, 1.000, Aug. 16. Variable, G. F. Mansbridge, 1.639,044: induction furnace. M. Unger. 1,626,468; Apr. 26.
Induction furnace, J. M. Weed. 1,648,707, Nov. 8.
Induction furnace, Combination. J. E. Greene.
1,639,340; Aug. 16.
Induction heater. E. E. Kittredge, J. A. Forster, and
R. D. Johansen. 1,655,014; Dec. 20,22,464; May 10.
Induction machine. H. M. Hobart. 1,620,505; Mar. 10.
Induction motor. H. M. Hobart. 1,620,505; Mar. 14.
Induction motor. H. M. Hobart. 1,620,505; Mar. 14.
Induction motor. H. M. Hobart. 1,620,625; May 10.
Induction motor. H. M. Hobart. 1,622,621; May 3.
Induction motor. R. Ridenberg. 1,645,296; Oct. 11.
Induction motor. R. Ridenberg. 1,645,296; Oct. 11.
Induction motor, Self-excited. J. I. Hull. 1,637,040;
July 26.
Induction motor, Fire-excited. J. I. Hull. 1,637,040;
July 27.
Induction synchronous motor. T. Yamamoto and M. Kawwada. 1,617,092; Feb. 8.
Inductive interference, Neutralization of. R. A. Shetz-line. 1,643,350; Sept. 27.
Inductor-cold. Alr-cooled. E. F. Northrup. 1,640,799;
Aug. 30.
Inductor-type frequency changer. A. Nyman. 1,642,041;
Sept. 13.
Sept. 13.
J. J. Keesler. 1,613,894; Jan. 11.
Inertia stripper. R. P. M. Davis. 1,639,840; Aug. 23.
Infant's conveyance. S. Nistler. 1,631,546; June 7.
Initatable articles, Machine for testing porosity of. W. Stephens. 1,623,932; Apr. 5.
Initating and injecting device. L. H. Crook. 1,643,945;
Oct. 4.
Infoster. E. Willner. 1,636,777; July 26.
Ingot mold, G. A. Dornin. 1,520,0101, Mar. 8. Inflatable ball A. J. Turner. 1,621,043; Mar. 15.
Inflating and injecting device. L. H. Crook. 1,643,945;
Oct. 4.

Oct. 4.

Oct. 4.

E. Willner. 1,636,727; July 26.
Inguer. 1,626,727; July 26.
Inguer. 1,627,727; July 26.
Inhaler. 1,638,747; July 19.
Inhaler. 1,638,634; July 19.
Inhaler. 1,638,634; July 19.
Inhaler. 1,638,634; July 19.
Inhaler. 1,638,143; Feb. 15.
Infallon. 1,638,144; July 19.
Infallon. 1,638,144; July 19 Ingots, Box for pouring steel. B. J. Madden. 1,633,992; June 28.
Inhalation device. J. H. Williams. 1,636,344; July 19.
Inhaler. T. B. Aldrich. 1,618,143; Feb. 15.
Initial. motif, and the like. A. Parsons. 1,654,187; Dect. 27.
Injection device. F. S. Woodrow. 1,651,499; Dec. G. Injection device. F. S. Woodrow. 1,651,499; Dec. G. Injector. S. L. Kneass. 1,629,712; May 24.
Injector, Oil. J. S. and A. Johnson. 1,639,409; Aug. 16.
Ink. H. Schladebach and H. Hähle. 1,645,137; Nov. 8.
Ink agitator. E. F. Marceau. 1,645,137; Nov. 8.
Ink agitator. E. F. Marceau. 1,645,137; Nov. 8.
Ink bottles. Combined stopper and pen-filling attachment for. A. D. Platt. 1,627,804; May 10.
Ink dispenser. W. R. Greenland. 1,632,473; June 14.
Ink distributing roller. A. J. Daane. 1,637,807; Aug. 2.
Ink craser, Steel-wool. F. Evans. 1,617,478; Feb. 11.
Ink craser, Steel-wool. F. Evans. 1,617,478; Feb. 13.
Ing. 1,542; Mar. 22.
Ink, Printing. M. S. Hopkins and N. Underwood. 1,621,543; Mar. 22.
Ink ribbon, Renewing. S. A. Neidleh. 1,639,746; Aug. 22.
Ink ribbon, Renewing. S. A. Neidleh. 1,639,746; Aug. 23.
Ink instand. Embedded. W. T. Guth. 1,616,577; July 19.
Inkstand. Embedded. W. T. Guth. 1,616,577; July 19.
Inkstand. Embedded. W. T. Guth. 1,616,577; July 2. Inkstand. J. C. Pearson. Des. 73,265; Aug. 16.
Inkstand. Embedded. W. T. Guth. 1,615.377; Jan. 25.

Ink-vending device. O. Amos and C. A. Deal. 1,615,354; Aug. 23.
Innersole-forming machine. H. A. Ballard. 1,645,515;
Oct. 18.
Inner tube. W. J. Bowman. 1,628,642; May 17.
Inner tube. H. Ellinwood. 1,613,089; Jan. 4.
Inner-tube boot. B. V. Glimore. 1,646,469; Aug. 30.
Inner tubes. Apparatus for unwrapping and stripping.
Inner tubes. Apparatus for vulcanizing. O. J. Kuhlke.
1,644,678; Oct. 11.
Inner tubes. Beveling the ends of. C. E. Maynard. Inner tubes, Apparatus for vulcanizing. O. J. Kuhlke. 1,644,678; Oct. 11.
Inner tubes, Beveling the ends of. C. E. Maynard.
Inner tubes, Composition for treating. A. I. Gibbs and J. A. Gill. 1,620,342; Mar. 8.
Inner tubes, Cumposition for treating. C. W. Blerman. 1,637,467; Aug. 2.
Inner tubes, Cumposition ferror, Treating cured. F. Fenner tubes for pneumatic tires, Treating cured. F. Fenner tubes, Manufacture of. H. H. Hastings. 1,619,119; Mar. 1s., Manufacture of. H. H. Hastings. 1,619,119; June 28.
Inner tubes, Manufacturing. C. H. Semple. 1,634,160; June 28.
Inner tubes or the like Testing case for. W. E. Mc-Insertibus and recording machine, Commercial. R. Leysieffer. 1,640,003; Aug. 28.
Insect destroyer. A. L. Dunnagan. 1,624,321; Apr. 12.
Insect destroyer. F. Eckl. 1,631,121; June 2.
Insect destroyer. F. Eckl. 1,631,121; June 2.
Insect destroyer. Electrical. V. D. Coglon. 1,651,999; Dec. 6.
Insect destroyer, Electrical. V. D. Coglon. 1,648,723; June 28.
Insect destroyer, Electrical. V. D. Coglon. 1,648,723; June 28.
Insect destroyer, Electrical. V. D. Coglon. 1,648,723; June 28.
Insect destroyer, Electrical. V. D. Coglon. 1,648,723; June 28.
Insect destroyer, Electrical. V. D. Coglon. 1,648,723; June 28.
Insect destroyer, Electrical. V. D. Coglon. 1,648,723; June 28.
Insect destroyer, May 20. Insect destroyer, Electrical. V. D. Coglon. 1,648,722; Nov. 8. Insect-destroying device. M. Ray. 1,633,753; June 28. Insect-exterminating machine, V. N. Delgado. 1,637,477; Aug. 2. Aug. 2.

Insect trap. A. D. Cardinet. 1,642,306; Sept. 18.

Insect trap. A. D. Cardinet. 1,634,648; July 5.

Insect trap. R. J. Harris. 1,626,6531; Apr. 26.

Insect trap. W. Pierpoint. 1,614,153; Jan. 11.

Insecticide. W. A. Drushel. 1,630,836; May 31.

Insecticide. M. J. Forsell. 1,618,702; Feb. 22.

Insecticide. H. Howard. 1,620,268; Mar. 8.

Insecticide. F. Zernik. 1,652,369; Dec. 18.

Insecticide. C. A. and S. D. Wilkins. 1,630,66; May 31.

Insecticide. C. A. and S. D. Wilkins. 1,630,66; May 31.

Insecticide and applying same. W. L. Tanner.

1,652,291; Dec. 13.

Insecticide and fungicide. K. S. Boynton. 1,621,825;

Mar. 22. Insecticide and fungicide. K. S. Boynton. 1,621,825; Mar. 22. Insecticide and making the same. H. P. Corson. 1,648,577; Nov. 8. Insecticide and preparing the same. D. T. Day. 1,647,214; Nov. 1. NOV. 1.
Insecticide composition. O. F. Hedenburg and D. S.
Pratt. 1,627,839; May 3.
Insecticide duster. L. Cheeseman. 1,641,735; Sept. 6.
Insecticide emulsion. P. R. Jones. 1,646,149; Oct. 18.
Insecticide, Making an. W. C. Piver. 1,626,872; May 3.
Insecticides, Manufacture of arsenate. H. W. Walker. 1,629,557; May 24.
Insectfloge. S. L. Hoover. 1,619,258; Mar. 1.
Insectfloge. L. E. Jackson and H. E. Wassell. 1,615,843; Feb. 1.

Inserting and welding machine, Combination. J. J. Higgins. 1,626,678; May 3.

Insole. C. A. Roberts. 1,630,135; May 24.

Insole. C. A. Roberts. 1,630,135; May 24.

Insole. Molded finage. A. H. Prenzel. 1,638,508; Nept. 13.

Insole. Waterproofed. C. A. Morin. 1,638,504; Aug. 9.

Insoles. Machine for making cork. J. Nueske, jr. 1,642,690; Sept. 20.

Inspection and weighing apparatus. G. S. Jaxon.

Inspection light. J. Boerman. 1,615,667; Jan. 18.

Instrument inght. J. Boerman. 1,615,667; Jan. 18.

Instrument attachment. A. Halpin. 1,627,695; May 3.

Instrument. B. Rospense 1,632,816.

Aug. 23.
Instrument for graphic control. E. Szepesi. 1,623,216;
Apr. 5.

Instrument for indicating tensile strain. H. L. Doolittle. 1,630,789; Nov. 20.
Instrument for measuring reentrant angles. G. S. Sirokman. 1,638,887; Aug. 16.
Instrument for the inspection of pipes, canals, and cavities of the human or animal body. P. Heymer. 1,632,290; June 14.
Instrument for treating urethritis. O. Hayes. 1,644,919; Instrument for treating urethritis. O. Hayes. 1,644,919; Oct. 11.
Instrument panel. T. C. Dingman. 1,620,328; Mar. 8.
Instrument panel. T. C. Dingman. 1,620,328; Mar. 8.
Instrument support. A. F. Pleper. 1,645,660; Oct. 18.
Instrument support. A. F. Alpest. 1,645,660; Oct. 18.
Instrument support. A. F. Alpest. 1,638,387; Alpest. 1,652,797; Dec. 13.
Instruments of the lute type, Chord-controlling means for. P. F. Richter. 1,652,797; Dec. 13.
Instrument-supporting apparatus. F. Koenigkramer. 1,638,939; Aug. 16.
Insulated conductors, Making. E. B. Wheeler. 1,638,556; Nached conductors, Making. E. B. Wheeler. 1,638,556; Insulated conductor terminal. E. A. Mau. 1,645,539; Insulated conductor terminal. Insulated conductor terminal. E. A. Mau. 1,645,539; Oct. 18.
Insulated electric apparatus, Control of liquid- M. Buchholz. 1,642,401; Sept. 18.
Insulated electric apparatus, Protecting liquid- M. Buchholz. 1,642,406; Sept. 13.
Bucholz. 1,642,406; Sept. 13.
Bucholz. 1,642,406; Sept. 13.
Insulated electric apparatus, Protective system for liquid- M. Buchholz. 1,642,404; Sept. 13.
Insulated electric apparatus, System of protection of liquid- M. Buchholz. 1,642,404; Sept. 13.
Insulated electric apparatus, System of protection of liquid- M. Buchholz. 1,642,407; Sept. 13.
Insulated structure, Compound. L. L. Chox. 1,650,279; Nov. 22.
Insulated structure, Compound. L. L. Knox. 1,650,279; Nov. 22. insulated structure, Compound. L. L. Knox. 1,000,219, Nov. 22.
Insulating and plaster board from corn stalks, Manufacturing. J. J. Hinde. 1,623,184; Apr. 5.
Insulating and plaster holding wall and ceiling covering.
W. B. Nelson and T. B. Hennessey. Rei6,703; Oct. 4.
W. B. Nelson and T. B. Hennessey. Rei6,703; Oct. 4.
Insulating disks in metal caps, Apparatus for inserting.
L. G. Lange. 1,629,513; May 24.
Insulating element. J. J. Weldon. 1,640,432; Aug. 30.
Insulating liquid. C. J. Redman. 1,622,809; Mar. 29.
Insulating liquid. C. J. Redman. 1,622,809; Mar. 29.
Insulating material, F. M. Olson. 1,623,986; May 17.
Insulating material, F. M. Olson. 1,625,986; May 17.
Montgomery. 1,631,729; June 7.
Montgomery. 1,631,729; June 7.
Insulating means, Motor shocks. J. Rilse. 1,642,697;
Insulating paper containing phenol resins, Production of. Sept. 20.
Insulating paper containing phenol resins, Production of.
C. A. Haanen. 1,630,424; May 31.
Insulating smoke pipes. L. E. Linhart. 1,625,734;
Apr. 19. The state of the s May 3.
Insulation, Attachment to electric. A. Haddock.
1,624,595; Apr. 12.
Insulation board, Electric. D. M. Sutherland, jr.
1,636,491; July 19.
Insulation composition. F. H. Ford. 1,620,091; Mar. 8.
Insulation construction. L. B. McMillan. 1,654,137; Dec. 27. Dec. 27. Insulation Dec. 27.
Insulation construction for containers. J. S. Carroll. 1,629,255; May 17.
Insulation lining for cold-storage chambers, Heat. E. A. Thomson. 1,614,411; Jun. 11.
Insulation of finely-divided magnetic material. H. H. Lowyr, 1,651,947-8; Dec. 6.
Insulation of magnetic material. V. E. Legg. 1,647,738; Indiction of magnetic material. V. E. Legg. 1,647,738;
Nov. 1.
Nov. 1.
Insulation-severing device. E. H. Slopel and N. J.
Wright. 1,823,230; Jun. 143, 739; Aug. 2.
Insulator. C. Anlborg. 1,632,339; Aug. 2.
Insulator. G. Anlborg. 1,632,645; Apr. 19.
Insulator. S. C. Cutter. 1,620,645; Mar. 15.
Insulator. L. Fort. 1,625,645; Apr. 19.
Insulator. C. L. Fortescene. 1,627,374; Aug. 2.
Insulator. W. T. Goddard. 1,625,601; Apr. 19.
Insulator. W. T. Goddard. 1,625,601; Apr. 19.
Insulator. M. F. H. Gouverneur. 1,617,154; Feb. 8.
Insulator. M. F. H. Gouverneur. 1,617,154; Feb. 8.
Insulator. W. F. Grimes. 1,649,111; Nov. 29.
Insulator. W. F. Grimes. 1,649,111; Nov. 29.
Insulator. D. H. Osborne. 1,620,632; Mar. 8.
Insulator. H. E. Rider. 1,620,362; Mar. 2.
Insulator. H. E. Rider. 1,620,362; Mar. 2.
Insulator. H. E. Rider. 1,620,362; Mar. 2.
Insulator caps, Making. H. L. Barnes. 1,636,586; Insulator July 19. July 19, Insulator changer. J. G. Simmons. 1,616,764; Feb. 8, Insulator connecter. N. A. Wahlberg. 1,645,266; Oct. 11, Insulator, Cut-out. T. Bailey. 1,625,963; Dec. 18, Insulator, Electrical. A. M. Trogner. 1,651,783; Insulator, fitting. G. E. Eckert. 1,633,399; June 21, Insulator for antennæ. A. F. Curtright. 1,617,989; Feb. 15.

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Insulator for high-tension electric current. W. Deutsch. 1,654.212; Dec. 27.
Insulator, High-tension. A. Simon. 1,643,565; Sept. 27.
Insulator, Line. L. B. Hendee. 1,651,704; Dec. 6.
Insulator, Link-type. N. A. Wahlberg. 1,652,506;
Dec. 13.
Insulator manufacture. H. P. Liversidge. 1,653,487;
Dec. 20.
Insulator Molding strain. F. H. Tupper. 1,621,042;
Insulator or cut-out switch, Sectional. R. A. Suppes. 1,622,833; May 24.
Insulator pins, Making. C. L. Peirce, jr. 1,652,835;
Dec. 13.
Dec. 13.
Insulator, Reenforced, W. D. Kyle, 1,613,464; Jan. 4.
Insulator, Sectional, J. M. Peck, 1,649,853; Nov. 22.
Insulator, Shock, J. Rilse, 1,650,045; Nov. 22.
Insulator, Strain, J. S. Lepp, 1,654,947; Dec. 22.
Insulator, Support, C. Christensen, 1,643,943; Oct. 4.
Insulator, Suspension, J. M. Peck, 1,643,447; Oct. 11.
Insulator, Suspension, J. M. Peck, 1,653,117; Dec. 20.
Insulator, Terminal, H. W. I. Royal, 1,622,093; Mar 1,524,266;
Insulator, Terminal, H. W. I. Royal, 1,622,093; Mar 1,654,286;
 Insulators, Apparatus for testing. F. C. Doble. 1,644,422;
                   4.
                                Assembling.
                                                                      K. A. Hawley.
 Insulators,
                                                                                                                               1.647.695:
 Nov. 1.
Insulators having live wires, Device for testing. L. P.
Delsasso, B. F. Dengler, and E. R. Stauffacher.
1,647,905; Nov. 1.
Insulators having live wires, Device for testing, L. Delsasso, B. F. Dengler, and E. R. Stauffacher, 1,647,905; Nov. 1.
Insulators, Manufacturing electric. E. R. C. Boelcke, 1,686,282; July 19.
Insulators, Method and apparatus for finishing. A. E. Insulators, Method of and apparatus for forming. K. C. Randall, 1,630,762; May 31.
Insulators, Method of and apparatus for making. G. M. Eaton, 1,615,800; Jan. 25.
Insurance cash register. F. L. Pruett, 1,616,867; Feb. 8.
       Feb. 8.
 Insurance-policy form,
June 28.
                                                                       E. B. Wilford.
                                                                                                                               1,634,240;
 Intake. G. M. French. 1,641,670; Sept. 6.
Intake-manifold heater. G. M. Holley.
                                                                                                                              1.613.796:
Intake-manifold and circuit for some, Heating system J. Jan. 11. Interest H. S. Mattison, 1,632,139; June 14. Intake silencer, A. V. Saharoff, 1,644,794; Oct. 11. Intake ventilator, N. A. Lichty and C. L. Ostrander, 1,613,897; Jan. 11. Intelligence, Distribution of, H. A. Affel, 1,632,777; June 21.
June 21.

Intelligence, Distribution of. L. Expenschied. 1,633,082;
June 21.

Intensifiers and oscillators, Device for starting. S. Loewe.
1,634,295; Dec. 27.

Intercommunication system. T. R. Coggeshall. 1,647,606;
Nov. 1.

Interdental spaces, Cleaning. H. Munro. 1,627,525;
Interfolding machine. P. J. Christman, jr. 1,637,550;
Apr. 2
       Aug. 2.
 Interior-collar can. M. E. Widell. 1,621,389; Mar. 15.
Interleaving device. F. H. Shinn. 1,627,417; May 3.
Interliner. D. Baker. 1,620,054; Mar. 8.
Interlock mechanism. H. F. Woernley. 1,615,429;
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25.
                                                                                                                                1,615,429;
 Interlocking control for multistage compressors, Central-
izer. S. B. Redfield. 1,623,494; Apr. 5.
Interlocking mechanism, Electric. D. L. Galusha.
1,654,611, Dec. 27.
Interment mat. J. M. Stern and E. M. Elder. 1,637,839;
 Intermittent feeler in transferrer. H. L. Blanchard. 1,627,826; May 10.
Internal-combustion engine. D. E. Anderson. 1,644,702;
  Internal-combustion engine.
                                                                                  H. Andresen.
                                                                                                                                1,654,156;
 Dec. 27.
Internal-combustion engine.
                                                                              W. D. Armitage.
                                                                                                                               1,645,471;
 Oct. 11.
Internal-combustion engine.
                                                                                E. E. Aseltine.
                                                                                                                                1.619 965:
 Mar. 8.
Internal-combustion engine.
May 10.
Internal-combustion engine.
Mar. 15.
                                                                                  B. R. Bacon.
                                                                                                                               1,628,100;
                                                                                    A. J. Baker.
                                                                                                                               1,620,936;
  Internal-combustion engine,
                                                                                   D. B. Baker.
                                                                                                                                1,639,449;
 Aug. 16.
Internal combustion engine.
Dec. 13.
                                                                                     J.
                                                                                               Barletta.
                                                                                                                                1,652,266;
 Internal - combustion engine.
Nov. 15.
                                                                                       H.
                                                                                                   Becker.
                                                                                                                                1.649.440:
                       -combustion engine.
                                                                                  E. H. Belden.
                                                                                                                                1.623,462:
 Apr. 5.
Internal-combustion engine. J. E. Blanding.
June 7.
                                                                                                                                1,631,615;
Internal-combustion Feb. 15.
Internal-combustion engine. M. H. Blank.
Apr. 19.
Internal-combustion engine. P. P. Bourne and O. Non-
nenbruch. 1,642,298; Sept. 13.
  Internal-combustion engine.
                                                                                 M. H. Blank.
                                                                                                                                1.617.986:
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Internal-combustion engine. J. W. Boyd. Feb. 15. Internal-combustion engine. L. K. Braren. 1 633 541 : June 21. Internal-combustion engine. W. B. Bronander. 1,649,806; Internal-combustion engine. H. L. Brownback. 1,643,603; Sept. 27. Internal-combustion engine. H. L. Brownback. 1,651,250; Nov. 29. Internal-combustion engine. H. A. Bullard. 1,618,806; Internal-combustion engine. W. Burke. 1,648,719; Nov. 8. Internal-combustion engine. G. E. Burson. 1,628,027; May 10. Internal-combustion engine. E. R. Burtnett. 1,614,229; Jan. 11. Internal-combustion engine. E. R. Burtnett. 1,623,384-7; Apr. 5 Internal-combustion engine. E. R. Burtnett. 1,623,389-91; Apr. 5. Internal-combustion engine. E. R. Burtnett. 1.624.581-4; Haterial-combustion engine. E. R. Burtnett. 1,626,387-8; Apr. 26. Haterial-combustion engine. E. R. Burtnett. 1,532,879; June 21, June 21. Internal-combustion engine. E. R. Burtnett. 1,633,931; June 28.
Internal - combustion engine. E. R. Burtnett.
1,635,538-36; July 12.
Internal combustion engine. E. R. Burtnett.
1,638,287-8; Aug. 9.
Internal-combustion engine, E. R. Burtnett. 1.638.291: Aug. 9.
Internal-combustion engine. E. R. Burtnett. 1,639,164-5; Internal-combustion engine. E. R. Burtnett. 1,645,795-7; Oct. 18.
Internal-combustion engine. E. R. Burtnett and H. A. Brunell. 1,638,290; Aug. 9.
Internal-combustion engine. J. A. Charter. 1,649,509; Internal-combustion engine. J. A. Charter. 1,649,509; Internal-combustion engine. A. E. L. Chorlton. 1,647,434; Nov. 1. Internal-combustion engine. Feb. 22. C. S. Clark. 1.618.859: A. Craigon. 1,635,742; Internal-combustion engine. A. Craigon. 1,635,742; July 12. Internal-combustion engine. J. H. Crary. 1,652,930; Internal-combustion engine. E. B. Cushman. 1,630,527; May 31. Internal-combustion engine. G. R. Davenport. 1,621,155; Mar. 15. July 12. Internal-combustion engine. H. E. Dickinson, 1,620,446; Mar. 8. Internal-combustion engine. Feb. 1. H. 1,616,029; Dock. Internal-combustion engine. F. W. Dufwa. 1,639,217; Aug. 16. Internal-combustion engine. F. Dürr. 1,633.851; June 28. Internal-combustion engine. L. Dyck. 1,627,160; May 3. Internal-combustion engine. L. H. Dyer. 1,631,120; Internal-combustion engine. O. J. Eckland. 1,640,696; Aug. 30 Internal-combustion engine. J. Edman. Internal combustion engine. Oct. 4. K. Eiermann. 1,644,517: Internal-combustion engine, Internal-combustion engine, S. Eliot. 1,644,329; 29 ; Oct. 4. 1,639,762 ; Internal-combustion engine. C. S. Fliedner. 1,644,719; Oct. 11. Internal-combustion engine. F. W. Frese. 1,624,404; Apr. 12. Internal-combustion engine. W. J. Gannet. 1,634,901; Internal-combustion engine. M. Gatti. 1.646.789: Oct. 25. Internal-combustion engine. G. B. Gerau. 1,613,990; Internal-combustion engine. J. Gerstmayr. 1,640,445; Aug. 30. Internal-combustion engine. S. B. Gold. 1,627,532; Internal-combustion engine. J. D. Granath. 1 623 589 : Apr. 5. Internal-combustion engine. J. J. Grégoire. 1,637,746; Aug. 2. Internal-combustion engine. F. M. Grimes. 1,612,917; Internal-combustion engine. W. F. Grumme. Apr. 19.
Internal-combustion engine. T. W. Hainline.
June 21. 1.633.323: Internal-combustion engine. J. Haltenberger. 1,630,245; May 24.

Internal-combustion engine. W. L. Hartzell. 1.642.494: Sept. 13. Internal-combustion engine. A. S. Hawks. 1.624.101: Apr. 12. Internal-combustion engine. N. L. Heinz, 1,633,251; June 21. Internal-combustion engine. W. H. Henderson. 1,619,071; Mar. 1. Internal-combustion engine. E. Herkt. 1.645.595 : Oct. Internal-combustion engine. K. L. Herrmann. 1,613,610: Jan. 11. Internal-combustion engine. K. L. Herrmann. 1.618.194: Feb. 22.
Internal-combustion engine. A. W. Hubbell.
June 14. 1.632.478: June 14. Internal-combustion engine. T. A. Hutsell, 1.645,647: Internal-combustion engine, R. 1.629.664: K. Jack. May 24. Internal-combustion engine, T. G. Jackson. 1,624.952; Apr. 19. Internal-combustion engine. B. Jerome. 1,631,208; June 7.
Internal-combustion engine.
May 24.
Internal-combustion engine. F. M. Jobes. 1.629.795: F. M. Johes. 1,649,700; Internal-combustion engine. H. R. Jones. 1.621.634: Mar. 22.
Internal-combustion engine. O. E. Jorgensen. 1,615,282; Jan. 25. Internal-combustion engine. O. E. Jorgensen. 1.615.458; Jan. 25. Internal-combustion engine. R. Junge. 1.624.489: Apr. 12. Internal-combustion engine. TO. Junge. 1,643,581; Sept. 27. Internal-combustion engine, J. Kelster, 1.616.320; Internal-combustion engine. C. F. Kettering. 1.644.732: Internal-combustion engine. C. F. Kettering Oct. 11. Internal-combustion engine. Short. 1,644.731; Oct. 11. Internal-combustion engine. E. Krettingen. Nov. 8. Internal-combustion engine. E. T. Larkin. Sept. 20. C. F. Kettering and C. R. 1.648.647: 1.642.735: Sept. 20.
Internal-combustion engine. C. L. Lawrance.
Mar. 15.
Internal-combustion engine. V. Link. 1,625,26
Internal-combustion engine. C. E. Lucke. 1.621.326: 1,625,261; Apr. 19. Lucke. 1,619,825; Mar. 8. Internal-combustion engine. C. E. Lucke. 1,626,202; Apr. 26.
Internal combustion engine.
May 17.
Internal-combustion engine. C. 10 Lucke. 1,629,111; C. E. Lucke. 1,633,384; Internal-combustion engine. C. E. 1,640,950; Lucke. Aug. 30.
Internal-combustion engine
1,645,959; Oct. 18.
Internal-combustion engine. V. Marquette. engine. C. C. Martin. 1,648,141 Nov. 8.
Internal-combustion engine. E. H. Maupin.
May 17.
Internal-combustion engine. H. E. McCray.
Apr. 19.
Internal-combustion engine, H. E. McCray. E. H. Maupin. 1.628.894: 1,625,043; 1,648,737; Nov. 8.
Internal-combustion engine.
berg. 1,618,602; Feb. 22.
Internal-combustion engine.
July 12. R. J. Meyers and M. Schlos-Moorhouse. 1.635.855: ernal-combustion engine. A. Moorhouse. 1.689.892: Aug. 28.
Internal-combustion engine. J. J. Morris and L. N. Gulick
1,651,147; Nov. 29.
Internal-combustion engine.
Nov. 15. 1,649,246; Internal-combustion engine, V. A. Nelson. 1,640,552; Aug. 30.
Internal-combustion engine.
1,640,958; Aug. 30.
Internal-combustion engine. O. Nelson and P. Lignell. F. M. Newson. 1.637.958: Aug. 2. Internal-combustion engine. G. P. Nielson. 1,620,124; Mar. 8. Internal-combustion engine. L. H. Noah. 1,636,612; Internal-combustion engine. H. A. Nordwick. Re16,630; May 24. Internal-combustion engine. H. Marchetti. 1,624,277; Apr. 12 Internal-combustion engine. A. Nordwick and P. J. Nuesell. 1,648,780; Nov. 8. Internal-combustion engine. F. J. Oakes. 1,634.681; July 5 Internal combustion engine. H. J. Outcelt. 1,627,403;
May 3.
Internal-combustion engine. R. V. Palmer. 1,616,137;
Feb. 1.
Internal-combustion engine. C. A. Parsons, S. S. Cook, and H. G. Kimber. 1,616,332; Feb. 1. 72535-P-54

Internal-combustion engine. A. J. Patch. 1 645 549 . Oct. 18. Internal-combustion engine. C. W. Pendock. 1.620.917: Mar. 15.
Internal-combustion engine. E. W. Petter and J. Hutton. 1,653,925; Dec. 27.
Internal-combustion engine. V. U. D. Pierce. 1,624,432; Apr. 12.
Internal - combustion engine.
Nov. 15.
Internal-combustion engine.
Feb. 22. M. Plass. 1.649.544: F. R. Porter. 1.618.473: Feb. 22. Internal-combustion engine. F. R. Porter. 1.618.603: Internal-combustion engine. F. R. Porter. 1.620.832: Internal-combustion engine. F. R. Porter. 1.649 486: Nov. 15. Internal-combustion engine. ю. Prouty. 1.616.391 : Internal-combustion engine. A. R. Purdy. 1.616.064: Internal-combustion engine. P. H. Reid. 1.639.898: Aug. 23. Internal-combustion engine. Reineke. 1.630.311: May 31 Internal-combustion engine. Mar. 29. H. R. Ricardo. 1.622.885: Internal-combustion engine. C. G. A. Rosén. 1.640.518: Aug. 30.
Internal-combustion engine.
May 3.
Internal-combustion engine. D. E. Ross. 1,626,877: engine. Saives 1.653.825: Dec. 27. Internal-combustion engine. R. Schlatter. 1.622.398: Mar. 29. Internal-combustion engine. I. W. Seward. 1.648.597: Nov. 8. Internal-combustion engine. W. E. Shore. 1.633.909: June 28. Internal-combustion engine. B. C. Smith. 1.623 501 • Internal-combustion engine.
Aug. 30.
Internal-combustion engine.
June 7. W. F. Smith. 1.640.622: 160 Sokal. 1.631.702-6: June 7. Internal-combustion engine. I. H. Spencer. 1.649.370: Nov. 15. Internal-combustion engine. E. O. Spillman. 1.624.992: Apr. 19.
Internal-combustion engine.
Oct. 11.
Internal-combustion engine. D. A. Stewart. 1.645 309 : B. C. Stickney. 1.628.442: May 10.
Internal-combustion engine. B. C. Stickney.
June 14.
Internal-combustion engine. B. C. Stickney.
B. C. Stickney.
B. C. Stickney. 1.632.517: 1.641.787: Sept. 6 Internal-combustion р engine. Stone. 1.649.869: Internal-combustion engine. A. Strand. 1.643.645: Sept. 27. Internal-combustion engine. Summer. 1.622.010: Mar. 22, Internal-combustion engine. Kendall. 1,625,835; Apr. Internal-combustion engine. Nov. 15. O. D. Sutton and C. E. J. Sweet. 1.649.554: Nov. 15. Internal-combustion engine. O. E. Szekely. 1.622.687 Mar. 29.
Internal-combustion engine. W. M. Tompkins, 1,618,692; Feb. 22. Internal-combustion engine. H. A. Trussell. 1.643.396: Sept. 27. Internal-combustion engine. C. Tuckfield. 1.632.684: 14 June 14.
Internal-combustion engine.
Dec. 13.
Internal-combustion engine.
May 17.
Internal-combustion eugine
1,618.360; Feb. 22.
Internal-combustion engine. J. G. Vincent. 1,652,333; G. W. Waldo. 1.629.327: engine. H. w. Wellman, ir. 16 Wercely. 1,615,895: Feb. 1. Internal-combustion engine. 0 Werner. 1,616,157; Feb. 1. Internal - combustion engine. W. B. S. Whalev. 1.645,170; Oct. 11. Internal-combustion engine. J. E. Whitfield. 1,649,004; Nov. 15. Internal-combustion engine. W. P. Wiens. 1,622,300; Harral-combustion engine, J. M. Williams, 1,622,015; Mar. 22.
Internal-combustion engine, J. H. Wilson, Apr. 12.
Internal-combustion engine, K. M. Wise, Aug. 30.
Internal-combustion engine, L. M. Woolson, Feb. 8. Mar. 29. M. Williams. 1.624.454: 1.616.938: Feb. 8.
Internal-combustion engine. L. M. Woolson, 1.616,940-2: Feb. 8. Internal-combustion engine. L. M. Woolson. 1,626,061; Apr. 26.

Internal-combustion engine. L. M. Woolson. 1,627,761; May 10.
Internal-combustion engine. L. M. Woolson. 1,638,903;
Aug. 16:
Internal-combustion engine. L. M. Woolson. 1,639,874; Internal-combustion engine. L. M. Woolson. 1,647,848-9; Nov. 1. Internal-combustion engine. L. M. Woolson. 1,652,336; Dec. 13. Internal-combustion engine. V. F. Zahodiakin. 1,644,907; nternal combustion engine. W. M. Zaikowsky.
1.648.929; Nov. 15.
Internal combustion engine attachment. J. M. Mader.
1.623.940; Apr. 5.
Internal-combustion engine, Constant-compression. A. L.
Riker. Re16.711; Aug. 23.
Internal-combustion engine, Constant-pressure. P. A.
Internal-combustion engine, Constant-pressure. P. A.
Lawrence. 1,621,936; Mar. 22.
Internal-combustion engine, Double-acting two-stroke. P.
Kuyken. 1,618,346; Feb. 2.
W. Elebm. 1,632,984; June 21.
Internal-combustion engine, Forced-feed. G. Fornaca.
1,625,597; Apr. 19.
Internal-combustion engine, Forced-feed. G. Fornaca.
1,625,597; Apr. 19.
Internal-combustion engine, Heavy-oil. L. Corsi.
1,621,525; Mar. 22. Oct. 11. 1.621.525; Mar. 22.
Internal-combustion engine, High-compression two-cycle. S. Olson. 1,646,554; Oct. 25.
Internal-combustion engine, Liquid-fuel. E. H. Tartrais. 1,615,293; Jan. 25.
Internal-combustion engine, Multicylinder. C. Reineke. 1,629,530; May 24.
Internal-combustion engine, Multiple-cylinder. F. Müller. 1,613,618; Jan. 11.
Internal-combustion engine, Progressive-impulse. A. Moore. 1,633,385; June 21.
Internal-combustion engine, Reversible. F. T. Cable. 1,627,316; May 3.
Internal-combustion engine, Rotary. A. B. Craig. Internal-combustion engine, Rotary. A. J. La Gasa. 1,618,448; Feb. 22.
Internal-combustion engine, Rotary. A. J. La Gasa. 1,618,448; Feb. 22. 1.618.448; Feb. 22.

Internal-combustion engine, Rotary. U. Hutchinson.

1.614.476; Jan. 18.

Internal-combustion engine, Rotary. C. H. Kain.

1.623.875; Apr. 5.

Internal-combustion engine, Rotary. R. L. Pannell.

Internal-combustion engine, Rotary. V. Z. Post.

Internal-combustion engine, Rotary. W. L. Zimmer.

Sleeve-valve. L. A. Gaw.

1.650.120: Nov. 22.

Internal-combustion engine, Sleeve-valve. L. A. Gaw.

1.613.226; Jan. 4. 1,613,226; Jan. 4. Internal-combustion engine, Two-cycle, L and D. Davison, 1,633,585; June 28. Internal-combustion engine, Two-cycle, 1,645,199; Oct. 11. L. V. Hosford F. 1.645,199; Oct. 11.
Internal-combustion engine, Two-stroke. W. Riehm.
1,629,535; May 24.
Internal-combustion engine, Two-stroke-cycle. C. S. H.
Snow. 1,628,520; May 10.
Internal-combustion engine,
piston. W. B. Bronander.
Internal-combustion engine, Uniform compression. T. R.
Wilson. 1,639,477; Aug. 18.
Internal-combustion motor. Z. W. Davis. 1,639,287; Aug. 16 Internal-combustion motor. A. A. Gloss. 1.614.608; Internal-combustion motor. S. Schieffelin. 1,613,136; Internal-combustion rotary motor. G. E. Bragg. 1,619,237; Mar. 1. Internal-explosion engine. W. F. Crouch. 1,636,289; Interrupter mechanism, W. W. Hawkins. 1,624,100; Apr. 12. Inulin and inulin derivatives, Production of. W. C. Arsem. 1.616.164; Feb. 1.
Inulin, Extraction and purification of. W. C. Arsem. 1,616.167; Feb. 1. 1.616,107; Feb. 1.
Inulin, Hydrolysis of. W. C. Arsem. 1,616,169; Feb. 1.
Inulin, Hydrolysis of. W. C. Arsem. 1,616,171; Feb. 1.
Invalid lifter and carrier. S. S. Jenkins. 1,641,388;
Sept. 6. Invalid support. M. Cathrine. 1,628,949; May 17. Inverter. W. W. Wallace. 1,644,407; Oct. 4. Investment composition. C. L. Corfman. 1,631 4. 1,631,249;

Iron: See— Carry iron. Climbing iron. Curling iron. Puff iron. Reefing iron. Solder iron. Electric fron. Hair-curling fron. Soldering iron. Steam-heated iron. Half-curling fron. Steam-heated fron. Marceling iron. Waffile fron. Pressing fron. Iron and steel and product, Producing corrosion-resisting coatings on. C. H. Humphries. 1,615,585; Jan. 25. Iron and steel and products, Producing corrosion-resisting coating on. C. H. Humphries. 1,651,278; Nov. 29. sisting coating oh. C. H. Humphries. Light, 1897, 20;
Nov. 29;
Nov. 29;
Nov. 29;
Nov. 29;
Nov. 29;
Nov. 29;
Nov. 20;
Nov Iron, I Iron, Manufacture of sponge. P. W. Nevill. 1,635,950; July 12. Iron ore, Apparatus for utilizing low-grade. H. H. Hindshaw. 1,633,839; June 28. Iron oxide, Manufacturing. H. C. Stewart. 1,642,975; Sept. 20. Iron plug, Electric. B. G. C. Stephens. 1,618,686; Feb. 22. Iron pressing support, sarety, J. Jan. 4.
Jan. 4.
Iron, Refining of. G. S. Evans. 1,646,728; Oct. 25.
Iron roll, Chilled. H. E. Walters. 1,627,626; May 10,
Iron scale, Purifying. A. Lucas. 1,631,423; June 7.
Iron slat of 2-phenylquinoline-4-carboxylic acid and making same. M. L. Crossiey and M. L. Dolt. 1,638,334;
Iron, steel, and other metals in open-hearth furnaces,
Smelting and refining of. P. Kühn. 1,618,934;
Feb. 22.
Iron switch, Electric. F. H. Hanley. 1,646,911; Oct. 25. Iron pressing support, Safety. J. A. Soffa. 1,613,297; Feb. 22

Iron switch, Electric. F. H. Hanley. 1,646,941; Oct. 25.

Iron Treating. I. R. Valentine. 1,648,750; Nov. 8.

Ironer, Flat-work. J. H. Taylor. 1,631,347; June 7.

Ironer, Power-press. W. J. Lewis. 1,639,440; Aug. 16.

Ironer, Power-press. W. J. Lewis. 1,639,440; Aug. 16.

Ironing and pressing machines, Pad for. G. C. Houck. 1,628,147; May 10.

Ironing board. E. W. Cummings. 1,622,495; Mar. 29.

Ironing board. J. P. Doman. 1,612,509; Jan. 4.

Ironing board. L. Faust. 1,618,574; Feb. 22.

Ironing board. D. W. Ergmon. 1,618,619,409; Mar. 1,

Ironing board. D. W. Ergmon. 1,619,409; Mar. 1,

Ironing board. M. and A. B. Fernandez. 1,615,119;

Jan. 18. M. and A. B. Fernandez. 1,615,119;

Jan. 18. Ironing board. L. Faust. 1,631,255: June 7. Ironing board. D. W. Ferguson. 1,619,409; Mar. 1. Ironing board. M. and A. B. Fernandez. 1,615,119; Ironing board. M. and A. B. Fernandez. 1,615,119; Ironing board. J. E. Kalgren. 1,636,232; July 19. Ironing board. J. E. Kalgren. 1,636,232; July 19. Ironing board. S. F. Kohn. 1,616,905; Feb. S. Ironing board. S. F. Kohn. 1,616,905; Feb. S. Ironing board. A. J. Kufahl. 1,616,907; Feb. S. Ironing board. A. J. Kufahl. 1,616,907; Feb. S. Ironing board. R. J. McGowan. 1,624,294; July 5. Ironing board. R. A. Morrison and F. L. Oswald. 1,626,624; May S. Ironing board. R. A. Morrison and F. L. Oswald. 1,626,624; May S. Ironing board. R. Wegh. 1,651,427; Dec. 6. Ironing board and adder, Combined. M. Carlon. Ironing board and step ladder, Combined. M. Carlon. Ironing board and step ladder, Combined. C. D. Wolf. 1,632,721; June 14. Ironing board and step ladder, Combined. C. D. Wolf. 1,632,721; June 14. Ironing board and step ladder, Combined. C. D. Wolf. 1,632,721; June 14. Ironing board and capture of the property of th Though board, Cabinet. J. Dearwoun.
June 21.
Jun 1,622,403-4; Ironing board, Folding. C. E. Tonguette and R. A. McBean. 1,613,857; Jan. 11. Ironing-board installment. L. E. Watts. 1,619,774; Ironing board installment. L. E. Watts. 1,046,112, Mar. 1, 1roning boards, Garment tray for. J. R. Clover. 1,630,925; May 31. Ironing boards, Pad for. H. Kobrin. 1,636,913; July 26. Ironing boards, Reeptacle for. A. Sondack. 1,621,090; Mir. 15. Ironing horse for sleeves. A. Rehfeldt. 1,614,048; Ironing machine. T. N. Brown. 1,641,315; Sept. 6. Ironing machine. T. D. Chapman. Rel.6,647; June 7. Ironing machine. A. O. Dady. 1,652,561; Dec. 13. Ironing machine. F. H. Ehnts. 1,630,617; Nov. 28. Ironing machine. F. H. Ehnts. 1,630,617; Nov. 28. Nov. 15. June 7.

n concentration. Apparatus for measuring. E. Mislowitzer. 1.648.739; Nov. 8. Ironing machine. W. A. Frantz. 1,634,353; July 5. Ironing machine. P. E. Geldbof. 1,650,828; Nov. 29.

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Ironing machine. R. Hoe. 1,651,599-601; Dec. 6.
Ironing machine. H. Louth. 1,642,038; Sept. 13.
Ironing machine. G. E. Mathiasen. 1,649,337; Nov. 15.
Ironing machine. A. S. Newsham, P. A. Viersen, and
G. Misch. 1,632,094; June 14.
Ironing machine. A. M. Rasmussen. 1,627,747; May 10.
Ironing machine. C. E. Reddig. 1,628,996; May 17.
Ironing machine. W. H. Sumbling. 1,634,523; July 5.
Ironing machine. E. L. Tork. 1,618,400; Feb. 22.
Ironing machine. Fortable. M. Hedgion. 1,636,472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jar-closing machine. T. L. Taliaferro. 1,644,209;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oct. 4.

Jar closure.

Jar closure.

Jar closure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oct. 4. B. A. Dewald. 1613,883; Jan. 4. Jar closure. S. A. Hoge. 1,640,122; Aug. 23. Jar closure. S. C. Hoge. 1,640,122; Aug. 23. Jar closure. T. L. Taliaferro. 1,616,516; Feb. 8. Jar closure. T. L. Taliaferro. 1,616,518; Feb. 8. Jar closure or the like, Apparatus for forming sealing rings on. T. L. Taliaferro. 1,028,008; May 10. Jardinière or similar article. R. B. Lindsey. Des. 74,064;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dec. 13.

Dec. 13.

Jar handle and producing same. A. S. Huntington. Jar handle and producing same. A. S. Huntington. Jar holder. C. J. May. 1,620,272; Mar. 8.

Jar holder. C. J. May. 1,620,272; Mar. 8.

Jar holder. J. B. Richard. 1,646,661; Oct 25.

Jar holder. F. J. Trout. 1,652,221; Dec. 13.

Jar holder, Candy. E. Messer. 1,620,205; Apr. 26.

Jar lifter. J. F. Left. Sr. 1,631,588; June 7.

Jar inter. J. F. Left. Sr. 1,631,588; June 14.

Jar mechanism. Rotary hydraulic. W. B. Wigle. 1,637,505; Aug. 2.

Jar-molding machine. W. Lewis. 1,642,074; Sept. 13.

Jar opener. G. E. Grant. 1,624,833; Apr. 12.

Jar opener. G. E. Grant. 1,624,833; Apr. 12.

Jar or similar container. E. Haslett. Des. 73,430; Sept. 13.

Jar wire-tying mechanism. Glass. C. C. Kinker.
                  July 18.

Ironing machine, Shirt-, A. J. Dreher and D. H. Benja-
min 1,634,634; July 5.

India 1,634,634; July 5.

India 1,634,634; July 5.

India 1,634,637; Aug. 30.

Ironing machine, Universal. J. Huebsch. 1,623,187;
Apr. 5.
              Ironing machine, Universal.

Apr. 5.

Ironing machines, Doffer for. R. J. Watts. 1,624,698;
Apr. 12.

Ironing machines, Guard and stop for. H. Tucker.

1,622,214; Mar. 22.

Ironing and C. E. Hamilton. 1,630,894; May 31.

Ironing press. A. B. Clisson. 1,613,818; Jan. 11.

Ironing press burnguard. J. C. Ledbetter. 1,618,986;
Mar. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Jar opener. A. Lilia. 1,615,106; Jan. 18.
Jar-opening device. T. E. Welsh. 1,620,706; Mar. 15.
Jar or similar container. E. Haslett. Des. 73,430; Sept. 13.
Jar vire-tring mechanism, Glass. C. C. Kinker. 1,626,264; Dec. Webrock. 1,647,832; Nov. 2.
Jars and other containers, Vacuum sealing machine for. H. Ingram. 1,624,869; Apr. 12.
Jars and other containers, Vacuum sealing machine for. H. Ingram. 1,624,868; Apr. 12.
Jars and the like, Cover for. G. J. Speicher. 1,624,440; Apr. 122.
Jars and the like, Cover for. G. J. Speicher. 1,624,440; Apr. 122.
Jars and the like, Cover for. G. J. Speicher. 1,624,440; Apr. 122.
Jars and the like, Cover for. G. J. Speicher. 1,624,440; Apr. 122.
Jars and the like, Cover for. G. J. Speicher. 1,624,440; Apr. 122.
Jars and the like, Closing of. E. Maingonnat. 1,613,472; Jan. 4.
Jars, Cans, etc., Cap for covering the opening ends of. S. N. Tevander. 1,618,393; Feb. 22.
Jars, Colsing. T. L. Tallaferro. 1,616,611; Feb. S. Jars, Closing. T. L. Tallaferro. 1,616,611; Feb. S. Jars, Closing. T. L. Tallaferro. 1,616,611; Feb. S. Jars, Gasket for fruit. S. E. Larson. 1,629,346; May 17.
Jars, Method and apparatus for sealing fruit. F. Rein-Jars, Gasket for fruit. S. E. Larson. 1,629,346; May 16.
Jars, Scaling device for. R. Edwardson. 1,616,614; Feb. S. Jelly base containing pectin and sugar and making same, Dry-powdered. H. T. Leo. 1,646,157; Oct. 18.
Jetty and unit therefor. C. L. Nohlen. 1,635,899; Jetty and unit therefor. C. L. Nohlen. 1,635,899; Jetty and unit therefor. C. L. Nohlen. 1,635,899; Jewelry, Malley Lings, Making concentric bushings for. H. Co-Jound. 1,640,348; Aug. 50.
Jewelry. S. Kebener. 1,628,278; May 10.
Jewelry. S. Kebener. 1,628,600; Apr. 12.
Jewelry. Jarding, K. Williams. 1,616,727; Feb. 8.
Jig. Tariding, K. Williams. 1,616,727; Feb. 8.
Jig. Laying-out faxure and drilling. I. A. P. Anderson. 1,626,144; Apr. 26.
                  Mar. 1.
Ironing-press burn guard. J. C. Ledbetter. 1,644,930;
Oct. 11.
           Ironing table. C. A. Forney. 1,633,347; July 19.
Ironing table. C. A. Forney. 1,633,355; Dec. 20.
Ironing table. C. A. Forney. 1,633,355; Dec. 20.
Ironing table. C. A. Forney. 1,633,355; Dec. 20.
Ironing table. J. E. Kaigren. 1,633,535; Dec. 20.
Ironing table. J. E. Kaigren. 1,637,526; Aug. 2.
Ironing table. J. E. Kaigren. 1,637,526; Aug. 2.
Ironing table. G. W. Lewis. 1,638,347; Aug. 9.
Ironing table. G. W. Creb. 1,637,526; Aug. 2.
Ironing table. G. W. Creb. 1,637,526; Aug. 2.
Ironing table. G. W. Creb. 1,636,347; Aug. 9.
Ironing table. G. W. Creb. 1,631,576; July 5.
Ironis. Wickless toreh for soldering. P. E. King. 1,613,764; Jan. 25.
Irrigation system, Automatic hydraulic. E. A. Klepast. 1,624,744; Apr. 12.
Iso-alkyl resorcinol. A. R. L. Dohme. 1,649,668; Nov. 15.
              Nov. 19. Insolbenzanthrones, Manufacture of. P. Nawiasky, O. Braunsdorf, and E. Holzapfel. 1,644,849; Oct. 11. Isodibenzanthrones, Manufacture of. H. Neresheimer, 1,644,850; Oct. 11.
Braunsdorf, and E. Holzapfel. 1,644,849; Oct. 11. 1sodiberzanthrones, Manufacture of. H. Neresheimer. 1,644,850; Oct. 11. 1sodiberzanthrones, Manufacture of. H. Neresheimer. 1,644,850; Oct. 11. 1sodiberzanthrones, Manufacture of. H. Neresheimer. 1,644,850; Oct. 12. 1sodiens, Manufacture of. H. Neresheimer. 1,644,850; Oct. 12. 1sodiens, Manufacture of. H. Neresheimer. 1,644,850; Oct. 12. 1sodiens, Manufacture of. H. Neresheimer. 1,624,850; Oct. 12. 1sodiens, Manufacture of. H. Neresheimer. 1,626,861; Oct. 12. 1sodiens, Manufacture of. H. Neresheimer. 1,626,861; Oct. 12. 1sodiens, Manufacture of. H. Neresheimer. 1,626,861; May 3, Jack. H. J. Carter. 1,620,755; Mar. 15. 1sod. H. Neresheimer. 1,626,861; May 3, Jack. H. J. Neaver. 1,626,861; May 3, Jack. H. A. Weaver. 1,620,810; Nov. 29. Jack and puller, Combination. H. Carlson. 1,621,829; Jack and puller, Combination. H. Carlson. 1,621,829; Jack plug. H. O. Engstrom. 1,642,064; Sept. 13. Jack. postern, Hydraulic. H. G. Eisler. 1,613,268; Jacks, Operating mechanism for lifting. F. L. Gormley. 1,623,033; Apr. 5. Jacks, Trip mechanism for lifting. F. L. Gormley. 1,623,037; May 17. Jan. 4,648,036; Nov. 8. Squirer. 1,648,036; Nov. 8. Squirer. 1,6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                plaining meanning. P. Colquing materials. E. O. Pet in the control of the control
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pipe joint.
Pivot joint.
Rail joint.
Railway or tramway rail
joint.
Railway-rail joint.
   device for.

Jar: See—
Candy jar.
Preserver jar.
Preserver jar.
Preserver jar.
Jar and closing mechanism. Fruit. L. O. Culver.
1,636,684; July 26.
Jar clamp and wrench. P. Cole. 1,643,876; Sept. 27.
Jar-closing machine. T. L. Taliaferro. 1,628,007;
May 10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Railway-rail joint.
Railway-track joint.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rallway-track Johnson Rod Joint.
Rod Joint.
Slip joint.
Steam joint.
Tool joint.
Universal joint.
Wall and floor joint.
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Joint. H. C. Lord. 1,652,175; Dec. 13. Joint. G. Tasman. 1,619,836; Mar. 8. Joint and connection, Flexible. G. H. Louck. 1,648,930; Nov. 15. Joint and dowel bar holder, Center. L. F. Savles. John and dowel bar holder, Center. L. F. Sayles. 1,614,495; Jan. 18. John assembly, Universal-. C. E. Swenson. 1,651,850; Dec. 6. John Letween end and side walls of structures, Sealed. John Letween end and side walls of structures, Sealed. Joint Jonath President apparatus. J. G. Grattan. 1,615,695; Joint Josains, Saif-Sail-Archive. Jan. 20.
Joint casing, Self-adjustable universal. A. W. Meier.
1,643,723; Sept. 27.
Joint composition. B. C. Reed. 1,651,104; Nov. 29.
Joint drain, Expansion. D. B. Luten. 1,634,549; John J. B. Luces. 1,553,5729, Joint for casing sections and making the joint. O. W. Kilham, 1,637,750; Aug. 2. Joint for concrete plpe, Self-calking. F. H. Sherrerd, 1,632,418; Dec. 13. Joint for kneckdown structures. J. Melkle. 1,616,915; Feb. 8.

Joint for rotary drill pipes, Cushion. A. C. Hopkins. 1,619,728; Mar. 1.

Joint for wires and wire ropes. A. Stecke. 1,642,314; Sept. 13.

Joint form. J. McInerney. 1,634,263; July 5.

Joint strip, amenine. O. P. Nystrom and J. Knoli.

Joint strip, Antirattle. H. G. Jorgensen. 1,632,903;

Joint strip, Antirattle. H. G. Jorgensen. 1,632,903;

Joint strip. Antirattle. H. G. Jorgensen. 1,632,903;

Joint strip. Antirattle. H. G. Jorgensen. 1,632,903; June 21.

June 21.

Joint strip, Antirattle. H. G. Jorgensen. 1,652,903;

Dec. 20.

Joint Strips, Reenforcing and the like band for expansion.

Jointer. F. S. Lash. 1,653,916; Dec. 27.

Jointer head. V. P. Whisler. 1,620,847; Mar. 15.

Jointers, Feed device for. E. D. Church. 1,637,175;

July 26.

Jointers, Table for. L. B. Whipple. 1,636,538; July 19.

Jointing machine, Stave. R. Mills. 1,645,920; Oct. 18.

Jointers, Table for building. D. M. Simons. 1,620,740;

Jointers, Torget for making ring. W. L. Evans.

1,617,621-2; Feb. 15.

Joints, Forming universal. A. Welland. 1,652,651; 1,617,021 points, Forming universal. A. The Land of the Joints, Forming universal. A. The Land of the Joint L. M. Glen. 1,642,728; Sept. 20. Joints, Shim for universal. R. J. Loock. 1,645,247; Oct. 11. Oct. 11.

Joints of drier cylinders and the like, Packing device for steam. A. Birch. 1.634.821; July 5.

Joints of pipe and the like, Apparatus for screwing together and unscrewing. H. C. Thrift. 1,617.509;

Joist and beam coupling, Building. E. S. Daniels. 1.652.612; Dec. 13.

Joist, Fabricated. W. C. Coryell. 1,649.577; Nov. 15.

Joist floor forms, Concrete. J. H. Duncan and S. Rogow. 1.616.846; Feb. 8.

Joint form. W. H. Hedberg. 1,626.823; May 3.

Joint Joist hanger, C. S. Boardman, 1,639,484; Aug. 16.
Joist hanger, C. S. Boardman, 1,639,484; Aug. 16.
Joist, Metali, J. D. Cover, 1,629,479; May 24.
Joist, Metaliic, W. F. Zabriskie, 1,622,539; Mar. 29.
Joist, Structural-steel, N. Wagner, 1,634,127, June 28.
Joit-roll-over mechanism. F. A. Seeman, 1,627,348; Jolt-roll-over mechanism. F. A. Seeman. 1,627,348; May 3.
Journal bearing. A. G. M. Michell. 1,617,719; Feb. 15.
Journal box. D. S. Barrows. 1,624,708; Apr. 12.
Journal box. R. A. Bates. 1,649,439; Nov. 15.
Journal box. A. O. Buckius, Jr. 1,615,614; Jan. 25.
Journal box. C. Gibson. 1,629,863; May 24.
Journal box. A. T. Kuehner. 1,628,2552; June 14.
Journal box. G. B. McCoy and B. Hawker. 1,638,124;
Aug. 9. Aug. 9.
Journal box. N. C. Naylor 1,651,619; Dec. 6.
Journal box. T. Ogden. 1,653,870; Dec. 27.
Journal box. J. H. Reedy. 1,630,026; May June
Journal box G. A. Woodman. 1,631,353; June
Journal box and axie. H. W. Sanford. 1,61 Journal box and axie. H. W. Sanford. 1,618,890; Feb. 22.

Journal-box lid. J. W. Bettendorf. 1,648,253-5; Nov. 8.

Journal-box lid. H. S. Brautigam. 1,650,688; Nov. 29.

Journal-box lid. C. J. Lucas and A. G. Ponce. 1,650,761;

Journal-box lid. G. Woodman. 1,631,352-8; June 7.

July 26.

July 26.

July 26.

Structure P. J. McCullough. 1,646,035. July 26.
Journal-box structure. P. J. McCullough. 1,646.036; Journal-box structure. P. J. accturough. A. Oxforder. Oct. 18.
Journal boxes, Lateral-motion bearing for. A. F. Hoegg.
1,635,124; July 5.
Journal boxes, Lubricating paddle for. G. Eveno.
1,617,605; Feb. S. J. Posselt. 1,646,109; Oct. 18.
Journal wedge, Adjustable. G. L. Webb. 1,643,326;
Sept. 27.
Jug. J. S. Boswell. Des. 72,141; Mar. 8.

Jug. W. D. Edwards. Des. 73,601; Oct. 11.
Jug cover. W. H. Wright. 1,625,405; Apr. 19.
Jug. Glass. E. R. Worcester. Des. 73,518; Sept. 20.
Juice extractor. G. F. Marshall and C. W. Vogt.
Juice extractor, Fruit. J. K. Curry. 1,646,527; Oct. 25.
Juice from cane stalks, Apparatus for and method of
extracting. W. H. Morgan, sr. 1,646,762; Oct. 26.
Jumping fack. I. Belmer. 1,622,562; Mar. 29.
Junction box for portable lights. H. 6. Moore. 1,647,187;
Nov. 1. NOV. 1.

Kafir corn, maize, and the like, Heading and loading.

C. T. Barker. 1,635,106; July 5.

Kassette. 6. E. Gelse. 1,622,371; Mar. 29.

Keg-closing device, Lead. W. F. Butler. 1,634,488;

July 5.

Keg. Metal. G. E. Mittinger. 1,648,859; Nov. 8.

Keg. Metallic. E. D. and J. 1. Mahan. 1,634,035; Jan. 2. See-Jan. 25.

Key: See—

Master key.

Key. H. R. McKellar. 1,653,551; Dec. 20.

Key action and key mechanism. O. U. Desha. 1,643,208;

Sept. 20.

Key action and key mechanism. O. U. Desha. 1,643,208;

Keyt. M. M. Knight. 1,617,627; Peb. 15.

Key-bitting machine. L. K. Loehr and E. J. Kind, jr. 1,613,020; Jan. 18.

Keyboard. B. Burns. 1,616,025; Feb. 1.

Keyboard. J. M. Lobit. 1,641,643; Sept. 6.

Keyboard. J. Whitaker. 1,653,633; Dec. 27.

Keyboard cleaner. I. Krisner. 1,653,127; July 5.

Keyboard cleaner. I. Krisner. 1,653,127; July 5.

Keyboard for musical instruments. E. Moor. 1,618,546;

Keyboard for musical instruments. E. Moor. 1,618,546; Keyboard for musical instruments. E. Moor. 1,618,547; Feb. 22. Keyboard for musical instruments. E. Moor. 1,618,547; Feb. 22.

Keyboard indicating derice and registering performance. Keyboard indicating derice and registering performance. In the control of the con H. F. McDonald. 1.621.637; Mar. 22. N. Bailey. 1.634,390; Nov. 1. J. Brewer. 1,616.302; Feb. 1. C. J. Gildemeister. 1.649,402; Nov. 15. W. D. Gladstone. 1.621,777; Mar. 22. E. M. Long. 1.619.582; Mar. 1. C. Lorber. 1,621,796; Mar. 22. I. Newman. 1.634,116; June 28. Quick-roleasing. F. W. Morsc. 1.622,532; Key guide. Key holder. Key holder Mar. 29. Mar. 29.

Key holder, Safety, R. E. Deacon, 1.618.408; Feb. 22.

Key-holding device, C. E. Yale, 1.623.224; Apr. 5.

Key-identification device, J. A. Katz, 1.629.343; May 17.

Keyless lock, A. G. Hatch, Reid.833; Dec. 27.

Keyless lock, J. McMenamin, 1.618.441; Feb. 22.

Keyless lock, M. Wildrick, 1.613.550; Jan. 4.

Key lock, E. O. Bennett, 1.644.365; Oct. 4.

Key lock, E. O. Bennett, 1.644.365; Oct. 4.

Key lock, J. P. Venegas, 1.629.897; May 3.

Key machine, H. Belsser, 1.634.133; June 28.

Key machine, H. Belsser, 1.634.133; June 28.

Key protector, U. L. Rife, 1.643.904; Sept. 27.

Key retainer, Octube, 1.663.715; Dec. 27.

Key retainer, R. W. Baldwin, jr. 1.616.407; Feb. 1.

Key retainer, Draft-rigging- J. Harris, 1,640.075;

Aug. 23.

Key-ring holder. C. E. Gillette, 1,613,390; Jan. 4. Key-ring holder. A. Johnson and J. A. Sidle. 1,640,278; Aug. 23. Aug. 23.
Key-ring holder. L. H. Kerns. 1,618,831; Feb. 22.
Key-Rey Water. S. McDaniel. 1,620,161; Mar. 8.
Key. Water. S. McDaniel. 1,620,161; Mar. 8.
Kilin. J. N. Silva. 1,617,550; Feb. 16.
Kilin and cooler, Rotary. J. S. Fasting. 1,652,168; Dec. 13.
Kilin and cooler, Rotary. P. T. Lindhard. 1,653,050; Dec. 20.
Dec. 20.
Combined brick. N. U. Ludwig. Dec. 20.

Kiln and drier, Combined brick. N. U. Ludwig.
1,027,079; May 10.

May 10.

Kiln and other heat-treatment furnace. C. W. Speirs.
1,630,587; May 31.

Kiln bottom. C. E Fuller. 1,654,481; Dec. 27.

Kiln bottom. C. E Fuller. 1,654,481; Dec. 27.

May 31.

May 31.

May 32. Kim obtom: A shaft. S. W. Jameson. 1,630,489; M. G. S. W. Jameson. 1,630,489; M. G. M. G. S. W. Jameson. 1,630,489; M. Kim, Cylindrical. G. McCrae. 1,649,600; Nov. 15. Kim, Dry. J. B. Welch. 1,648,089; Nov. 8. Kim, Electric tunnel. J. Kelleher. 1,647,624 Nov. 1. Kim, Electric tunnel. J. Kelleher. 1,647,624 Nov. 1. Rotary. H. Stehmann. 1,617,137; Feb. and the like, Rotary. H. Stehmann. 1,617,137; Feb. and the like, Kim for glass melting and like purposes. G. E. Crawford. 1,623,779; Apr. 5. Kim, G. S. M. G. S. W. Morse. 1,632,143; June 14. Kim, Oli-fired. A. W. Morse. 1,632,143; June 14. Kim, Oli-fired. A. W. Morse. 1,632,143; June 14. Kim, Oli-fired. A. W. Morse. 1,632,143; June 14. Kim, Reciprocating car. P. D. Dressler. 1,633,988; Aug. 16. Kim, Reversible-flow dry. R. A. Simmons. 1,636,490; July 10. Aug. 16, Kiln, Reversible-flow dry. R. A. Simmons. 1,636,48, July 19, E. C. Drexsler. 1,646,279; Oct. 18, Killin, Tunnel. W. L. Hanley, Jr. 1,614,470; Jan. 18, Kiln, Tunnel. W. L. Hanley, Jr. 1,652,570; Dec. 18, Kiln, Tunnel. W. L. Hanley, Jr. 1,653,174; Dec. 20, Kiln, Tunnel. W. L. Hanley, Jr. 1,653,174; Dec. 20, Kiln, Tunnel. P. A. Meehan. 1,646,268; Oct. 18, Kiln, Tunnel. P. A. Meehan. 1,646,264; Oct. 18, Kiln, Tunnel. P. A. Meehan. 1,646,264; Oct. 18, Kiln, Tunnel. T. C. and W. O. Prouty. 1,613,01 Jan. 4; Dec. 20, March 20, Ma 1,613,054; Kijn, Tunnel. T. C. and Jan. 4. Kiln, Tunnel. H. R. Straight. 1,633,829; June 28. Kilns, Mechanism for progressing cars in. G. W. Denison. 1,646,901; Oct. 25. Kindling device. J. W. Thomas. 1,651,165; Nov. 29. Kit, Actor's make-up. C. McKash. 1,633,356; Aug. 9. Kit, Carrying and dispensing. W. G. McAdoo. 1,648,982; Nov. 15.

Knife, Diathermy. S. H. Groff. 1,639,996; Aug. 23. Knife, Farrier's. V. Kyfes. 1,619,619; Mar. 1. Knife fastening, Mower. F. Crawford. 1,652,238; Knife fastening, Mower. F. Crawford. 1,652,238; Dec. 13, Knife for cutting the points of wire tacks and nails. J. Wikschtröm. 1,648,795; Nov. 8. Knife for opening oranges, Combination. H. C. Kelly. Knife for use in flaying cattle and like purposes. R. H. Tasker. 1,630,871; May 31. Knife, Fruit. A. H. and A. S. Pinchbeck. 1,638,956; Aug. 16. Knife, Fur. K. Relich. 1,629,412; May 17. Knife, Fur. Clamp. B. C. Rockwell. 1,619,989; Mar. 8. Knife and A. Bambini and C. Naschvera. 1,614,772; Jan. 18. Knife guard. A. Bambini and C. Nascivera. Special Jan. 18.

Knife head and manufacture of the same. F. H. Dickson. 1,618,920; Feb. 22.

Knife, Paring. W. Clawson. 1,636,287; July 19.

Knife, Paring and slicing. J. Battaini. 1,638,468; Aug. 9.

Knife, Pencil. J. Schick. 1,620,236; Mar. 8.

Knife, Piuggig. R. Garland. 1,630,420; May 31.

Knife, Piuggig. R. Garland. 1,630,420; May 31.

Knife, Tiler, Piuggig. T. R. Garland. 1,638,883; Aug. 1,6.

Knife, Tailor's cutting. C. Ilig. 1,614,243; Jan. 11.

Knife, Tiler-epair. J. M. Newton. 1,646,166; Oct. 18.

Knife, Topping and pruning. O. M. Randolph. 1,620,133;

Mar. 8.

Knife with detachable blade. W. E. Nickerson. Mar. 8.
Knife with detachable blade. W. E. Nickerson.
1,625,778; Apr. 19.
Knives of razors, Manufacturing. E. Gerling.
1,635,614;
July 12. Knives of razors, Manufacturing. E. Gerling. 1,635,614; July 12. Knit fabric. R. Rothman. 1,636,943; July 26. Knited articles, Method of and apparatus for finishing. E. J. Ziock. 1,623,080; Apr. 5. Knitted fabric. R. Drown. Des. 73,366; Aug. 30. Knitted fabric. R. Hinchiff. 1,616,630; Feb. 8. Knitted fabrics, Run-stop course for. J. G. Council. 1,632,999; June 21. Knitting fabrics. Which is the first fabric fabrics of the fabric fabrics of the fabrics fabrics fabrics. Runting machine. G. Bell and J. Boardman. 1,651,316; Knitting machine. G. Bell and J. Boardman. 1,651,316; Knitting machine. G. Dennis. 1,615,187; Jen. 18 Nov. 20.

Nov. 20.

Rnitting machine. G. Bell and J. Boardman. 1,651,316;

Nov. 20.

Rnitting machine. G. Dennis. 1,615,167; Jan. 18.

Knitting machine. J. Howie. 1,634,874; July 5.

Rnitting machine. J. Imbrianl. 1,628,407; May 10.

Knitting machine. P. Lieberknecht. 1,643,249; Sept. 20.

Knitting machine. P. Lieberknecht. 1,643,249; Sept. 20.

Knitting machine. M. Ratignier. 1,649,126; Nov. 15.

Knitting machine. M. Ratignier. 1,629,126; Mar. 29.

Knitting machine. P. G. Stroud and W. A. Simond. 1,623,473; Apr. 12.

Knitting machine, Automatic. R. W. Scott. 1,641,101; Mariting machine, Circular. E. H. M. E. Durand. 1,624,482; Apr. 12.

Knitting machine, Circular. F. L. Fay. 1,616,744; Feb. 8.

Knitting machine, Circular. H. E. Houseman. Feb. 8. machine, Circular. H. E. Houseman. Knitting machine, Circular. J. W. Mettler and H. L. Davis. 1,654,266; Dec. 27. Knitting machine, Circular. A. E. Page. 1,627,337; May 8. Knitting machine, Circular. O. H. Welton. 1,652,547; Dec. 13. Knitting machine, Dogless. W. Larkin. 1,613,465; Dec. 13.
Knitting machines, Auxiliary take-up for. N. J. Perry. 1,621,559; Mar. 22.
Knitting machines, Axleless loop wheel for circular. B. Saupe. 1,621,136; Mar. 15.
Knitting machines, Came-silde adjustment for. W. S. Parker. 1,638,164; Aug. 9.
Knitting machines, Cont-split work circular. A. Gagné. 1,623,027; Mar. 20.
Knitting machines, Course-controlling attachment for. A. Wagner. 1,626,017; Apr. 26.
Knitting machines, Driving mechanism for. M. C. Miller. Knitting anchines, Driving mechanism for M. C. Miller. Knitting anachines, Pred-controlling mechanism for Knitting anachines, Pred-controlling mechanism for circulars. C. Walton and O. H. Walton. 1,648,083; Nov. 8.
Knitting machines, Feed-mechanism for. M. C. Miller. Nov. 8. Kultting machines, Feed mechanism for, M. C. Miller, 1,032,249; Mar. 22. Feeding means for, F. E. Jones, L. 1,611,609; Sept. 6. Feeding means for, F. E. Jones, Kultting machines, Knotting mechanism for, E. W. Clarke, 1,623,233; Apr. 5. Knitting machines, Needles cam for flat. J. Muller, 1,613,609; Jan. 4.

Knitting machines, Pattern cylinder for. W. S. Parker. 1,633,676; June 28.
Knitting machines, Pattern-plaiting attachment for cir-Knitting machines, Pattern-producing means for. H. T. Ballard. 1,613,304; Jan. 4.
Knitting machines, Pattern-producing means for. H. T. Ballard. 1,613,304; Jan. 4.
Knitting machines, Safety device for. C. Madarls. 1,639,522; Aug. 16.
Knitting machines, Safety device for. C. Madarls. Robert W. Scott. 1,628,517; May 10.
La Roche. 1,653,915; Dec. 27.
Knitting machines, Stop mechanism for circular- O. La Roche. 1,653,915; Dec. 27.
Knitting machines, Stop motion for. F. Crawford, sr. 1,621,622; Aug. 2.
Knitting machines, Stop motion for. W. L. Smith, jr. 1,637,662; Aug. 2.
Knitting machines, Stop motion for. W. L. Smith, jr. Shitting machines, Stop motion for. W. L. Smith, jr. Knitting machines, Stop motion for. W. L. Smith, jr. Knitting machines, Striping attachment for. W. Larkin. 1,624,792; Apr. 12.
Knitting machines, Striping attachment for circular. E. T. Floyd. 1,646,905; Oct. 25.
Knitting machines, Threud-feeding attachment for. E. Aug. 16.
Knitting machines, Threud-feeding attachment for. E. Knitting machines, trake-up tor. K. at., 1643, Aug. 16.
Aug. 16.
I to tunan. 1.627.534; May 3.
Knitting machines, Xran-feeding mechanism for. A.
Landry. 1.643,341; Sept. 27.
Knitting needle, Latch. H. E. Katzenmoyer. 1,629,454;
May 17.
Knob. A. F. Bossung. 1,629,773; May 24.
Knob. A. F. Kipper. Des. 72,772; May 31.
Knob for bag fasteners, etc. W. C. Hiering. 1,613,751;
Jan. 11. Malb of the magnetic states of the Malb of Aug. Aug. 2.
Knob or the like. H. J. Kasch. Des. 73,183; Aug. 2.
Knockdown box, Diagonal-bottom-section. J. R. Van
Wormer. 1,652,844; Dec. 13.
Knockdown stand. C. A. Duke. 1,624,721-2; Apr. 12.
Knockdown table. A. Wexelman. 1,643,478; Sept. 27.
Knot-bjcking machine. F. Nilsson. 1,641,686; Sept. 6.
Knurled roll. T. D. Campbell. 1,647,825; Nov. 1.
Knurling rool. G. W. Dover. 1,623,662; Apr. 5.
Label-utlaching device. A. S. Fartridge. 1,636,432; Aug. 2. Van July 19.
Label. Attaching seam. J. S. Finch. 1,643,406; Sept. 27.
Label. Combination. L. Reiss. 1,620,833; Mar. 15.
Label folding and packing machine. A. Rosenthal.
1,618,138; Feb. 15.
Label for livestock. M. W. Miller. 1,635,853; July 12.
Label holder. W. King. 1,615,332; Jan. 25.
Label-sewing machine. P. W. Hatfield. 1,621,837;
Mar. 22. Operating upon J. W. Reis. 1,642,837; Label-sewing machine.

Mar. 22.

Label tipe, Operating upon. J. M. Reis. 1,642,887;

Labeling machine. W. F. Boettger. 1,652,697; Dec. 13.

Labeling machine. A. P. Ekvall. 1,630,235; May 24.

Labeling machine. C. Holm and A. H. Johnson. 1,622,881;

Mar. 29.

Mar. 29.

1,653,910; Luce, Embroidered, J. Walder, Des. 74,157; Dec. 27. Lace fabric and producing same, S. Pepper, 1,631,886; June 7.

Lace insertion and making the same, Machine-braided.
E. Türck. 1,637,716; Aug. 2.
Lace machines, Pattern mechanism for twist. S. T. Hall.
1,647,798; Nov. 1.
Lace Machines, Pattern C. W. and H. L. Birkin and A. Coxon.
2,622,212,222
Lace medallion, Embroidered. M. Savitzky. Des.
72,389-1; Apr. 5.
Lace medallion, Embroidered. H. Schwarber. Des.
72,448; Apr. 12.
Lace-threading machine. H. Lundquist. 1,627,610-11;
Lace-threading machine. C. A. Matson. 1,612,715; Jan. 14.
Lace-tipping machine. C. A. Matson. 1,612,715; Jan. 14. Laceter and general actions. H. Lundquist. 1,624,610-11; Lace tray cover or the like. S. N. Mallouk. Des. 72,268; Mar. 22.
Lacework, Pattern for producing. J. H. Wachter. 1,630,681; May 31.
Lacing cutter. G. A. Dostal. 1,646,141; Oct. 18.
Lacing device. L. C. Deal. 1,615,073; Jan. 18.
Lacing device. L. C. Deal. 1,615,073; Jan. 18.
Lacing tripping machine. F. E. Burlingame. 1,625,522;
Lacings. Tipping. C. A. Matson. 1,618,840; Jan. 11.
Lacquer and film produced therefrom, Low-viscosity. E.
M. Flaherty. 1,625,999; May 29.
Lacquer and film couler charmel. S. D. Shipley and G. C.
Lacquer and film produced therefrom, Low-viscosity. E.
Lacquer and film produced therefrom, Low-viscosity. E.
Lacquer composition, Nitrocellulose. C. Bogin. 1,651,578; Dec. C.
Lacquer composition, Nitrocellulose. C. Bogin. 1,651,578; Dec. 20.
Lacquer. Nitrocellulose. I. W. Humphrey. 1,653,010; Dec. 20.
Lacquering or varnishing apparatus. W. Mäueler. Lacquering or varnishing apparatus. W. Mäueler. 1,613,285; Jan. 4. Lacquers, Wood filler for W. F. Graul. 1,652,353; Lacquers, Wood filler for W. F. Graul. 1,652,353; Dec. 13. Lactonitrile fumigant. L. J. Christmann. 1,620,074; Lactonitriis lumgant. B. J. L. Mar. S. L. Mar. S. L. Mar. S. Lactose, Manufacturing. S. C. Meredith and N. N. T. Nyborg. 1,626,857; May 2. Meredith and N. N. T. Nyborg. 1,624,857; May 1,651,914; Dec. 6. Ladder. T. H. Curtis. 1,631,922; June 7. Ladder. G. K. Hoffman. 1,647,915; Nov. 1. Ladder. T. Thompson. 1,643,649; Sept. 27. Ladder and board, Combined. C. R. Miller. 1,615,715; Jul. 25. Jul. 25. Ladder and platform support. H. E. Skeels. 1,645,879; Jan. 25.
Ladder and platform support. H. E. Skeels. 1,845,879;
Oct. 18.
Ladder and preparing rungs and rails thereof. A. V.
Rowe. 1,644,964; Oct. 11.
Ladder and seat, Combination. W. A. Thomas. 1,618,357;
Feb. 22.
Ladder-climbing device. G. E. Fritts. 1,630,484; May 31.
Ladder-construction. J. Ingersoli. 1,616,899; Feb. 8.
Ladder-Climbing device. G. C. McCracken. 1,644,739;
Oct. 11. Ladder Construction, J. Ingerson, 16,16,589; Feb. 8, 20 Ct. M. Carcacken, 1,644,739; Oct. 11. Ladder, Extension, H. E. Skeels, 1,651,478; Dec. 6. Ladder, Folding, J. Hausle, 1,615,759; Jan. 25. Ladder, Hayrack, F. F. Mess, 1,616,461; Feb. 8. Ladder Jack, M. J. Baur, 1,651,863; Dec. 6. Ladder, Mechanical, H. Mattes, 1,637,197; July 26. Ladder, Orchard, F. J. P. Kuhimann, 1,613,836; Jan. 14. State, 1,5 Sat. Ladder-pulley-block support. P. G. Gauss. 1,620,254; Mar. 8. Ladder, Orchard. C. L. Smith. 1,641,906; Sept. 6.
Ladder-pulley-block support. P. G. Gauss. 1,620,254;
Mar. 8.
Mar. 8.
Mar. 8.
Mar. 8.
Mar. 8.
Mar. 9.
Mar. 19.
Mar. inp. A. Cavalinus.

mp. A. J. Carmichael and H. F. Tung
74.047; Dec. 13.

mp. H. Christensen. Des. 72.592; May 10.

mp. H. B. Donley. 1,648.167; Nov. 8.

mp. V. R. Gersmehl. Des. 72.969; July 5.

mp. C. E. Godley. 1,621,685; Mar. 22.

mp. I. Gonyk. 1,622.737; Mar. 29.

mp. R. Graf. Des. 73,830; Nov. 15. Lamp. Lamp.

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R. Graf. 1,614,027; Jan. 11.
F. A. Hart. 1,651,090; Nov. 29.
J. T. Jaret. Des. 72,950; June 28.
J. T. Jaret. Des. 72,214; Mar. 15.
W. McCoy. Des. 73,094; July 19.
C. W. Mechan. 1,638,701; Aug. 23.
F. W. McCoy. Des. 73,044; July 19.
C. W. Mechan. 1,638,701; Aug. 23.
F. W. McCoy. 1,652,456; Dec. 13.
T. E. Powers. Des. 72,634; May 10.
F. W. Roettges. Des. 71,987; Feb. 22.
V. K. Samuelson. Des. 72,674; Feb. 22.
J. W. H. Wood. 1,631,610; June 7.
H. H. Wolter. Des. 73,653; July 26.
H. H. Wolter. Des. 73,163; July 26.
H. H. Wolter. Des. 73,163; July 26.
W. H. Wood. 1,631,610; June 7.
W. H. Wood. 1,631,631; Dec. 6.
Acetyjene. A. L. Hansen. 1,644,780; Oct. 11.
and bracket therefor. J. Galamb. 1,637,375;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lamp bulb, Theftproof. L. Schmidt, jr. 1,648,916;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nov. 15.
Lamp, Candle. C. W. Davis. 1,653,256; Dec. 20.
Lamp canopy. A. R. Solomon. Des. 73,675; Oct. 18.
Lamp casing, Automobile signal. T. Lonet. Des. 72,774;
May 31.
                    Lamp.
Lamp.
Lamp.
                 Lamp.
Lamp.
Lamp.
Lamp.
Lamp.
Lamp.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lamp casing, Combined signal-. R. W. Norris. 1,640,008; Aug. 23.

Lamp casing or article of similar nature, Vehicle. W. T. Pittman. Des. 73,415; Sept. 6.

Lamp casing, Vehicle signal-. E. H. Bessette. Des. 72,434; S. F. L. Bamford. 1,626,593; May 3.

Lamp classification. S. C. Holland. 1,649,229; Nov. 15.

Lamp clip for miners' caps. W. J. Brown. 1,615,900; Feb. 1.

Lamp. Colied-filament incandescent. J. Bercmans.
                    Lamp.
                 Lamp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lamp. Colled-filament incandescent. J. Bergmans. Listing of the process of the college of the co
      Lamp' and bracket therefor. J. Galamb. 1,637,375; Aug. 2.

Lamp and clock case, Combination. J. D. Newland. Lamp and electric fan, Combined reading. D. Heenan. Des. 74,011; Dec. 6.

Lamp and getter therefor, Gas-filled incandescent. D. S. Gustin. 1,643,810; Sept. 27.

Lamp and globe, Combination. R. F. Mathews. Des. 73,665; Det. 15-plate holder or similar article, Combined. O. C. Ritz Woller. 72,033-5; Feb. 15.

Lamp and loud-speaker, Combination. F. C. Caswell. 1,623,935; Apr. 5.

Lamp and speaker, Combination. T. Doyle. Des. 73,447; Sept. 13.

Lamp and moker's set, Combination. E. F. McCarthy. Des. 72,488; Apr. 10.

Lamp and smoker's set, Combination standard and tray for a combined floor. E. Schultz. Des. 73,446; Sept. 13.
   for a combined floor. E. Schultz. Des. 73,446; Sepf. 13.

Lamp and smoking stand, Combined floor. E. Schultz. Des. 72,285; Mar. 22.

Lamb and Sepf. 22.

Lamb and Sepf. 22.

Lamb and Sepf. 23.

Lamb and Sepf. 23.

Lamb and supporting bracket, Combined floor. T. T. Tanne-lamb and supporting bracket, Combined. E. M. Garey. Des. 73,126; July 26.

Lamp, Arc. P. R. Bassett. 1,632,161; June 14.

Lamp, Arc. E. J. Murphy. 1,623,848; Apr. 5.

Lamp, Arc. M. L. Fatterock. 1,650,881; Nov. 29.

Lamp, Arc in Candescent. C. F. Lorenz. 1,651,398; Dec. 6.

Lamp arm J. B. Salterini. Des. 73,552-4; Oct. 4.

Lamp arm or a similar article, Bridge. J. A. Boehringer. Des. 73,121; July 26.

Lamp arm or similar article, Bridge. J. A. Boehringer. Des. 73,127; Jany 31.

Lamp arm or similar article, Bridge. J. A. Boehringer. Des. 73,999; Dec. 6.

Lamp, Auto. C. W. Crowe. 1,650,822; Nov. 29.

Lamp, Automobile, W. U. Stonebill. 1,644,666; Oct. 11.

Lamp, Automobile dash. I. Sorgius. 1,633,418; Dec. 20.

Lamp, Automobile dash. I. Sorgius. 1,633,418; Dec. 20.

Lamp, Automobile head. H. B. Donley, 1,650,509; Nov. 22.

Lamp, Automobile head. P. J. Kent. Des. 74,013; Dec. 6.
Nov. 22.

Lamp, Automobile head. P. J. Kent. Des. 74,013; Dec. 6.

Lamp, Auxillary. J. J. Gough. 1,614,732; Jan. 18.

Lamp base. W. Block. Des. 72,081-2; Jan. 18.

Lamp base. S. W. Farber. Des. 72,081-2; Jan. 19.

Lamp base. M. Rothbart. Des. 73,098-102; July 19.

Lamp base. L. Vivirito. Des. 71,303-42; Aug. 23.

Lamp base. L. Vivirito. Des. 71,891; Jan. 18.

Lamp base. L. Vivirito. Des. 71,891; Jan. 18.

Lamp base. L. Vivirito. Des. 73,335-42; Aug. 23.

Lamp base. L. Vivirito. Des. 74,391; Jan. 18.

Lamp base for a. O. B. Bach. Des. 73,473; Sept. 20.

Lamp, Base for a. O. B. Bach. Des. 72,579; May 3.

Lamp base or similar article. J. Hecht. Des. 74,110;

Lamp base or similar article. F. M. Poritz. Des. 72,568-9; May 3.

Lamp base or similar article. F. M. Poritz. Des. 72,568-9; May 3.

Lamp base, Portable. A. J. Carmichael. 1,636,735;
July 26.

Lamp Base, Portable. A. J. Carmichael. 1,636,735;
July 26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jan. 11.

Lamp for photographing, Electric arc.
1,649.913; Aug. 30.

Lamp for radios, Electric. C. Bramming.
1,638,211;
July 19.

Lamp for vehicles, Dirigible. H. C. Seitz.
1,652,788;
Dec. 13.

Lamp for vehicles, Signal. F. J. J. Servais.
1,650,471;
Nov. 22.
      July 26.

Lamp, Beacon. A. V. Conover. 1.637.072; July 26.

Lamp, Bed. G. F. Smith. 1.654.148; Dec. 27.

Lamp, Bleyele. W. P. Wood. 1.649.637; Nov. 15.

Lamp, Boudoir. C. Fischer. 1.639.493; Aug. 16.

Lamp bracket. W. Biock. Des. 72.080; Mar. 1.

Lamp bracket. M. Rothbart. Des. 72.3914; June 21.

Lamp bracket. M. Rothbart. Des. 72.3914; June 21.

Lamp bracket. M. Rothbart. Des. 72.3914; June 21.

Lamp bracket. M. Rothbart. Des. 72.3914; June 27.

Lamp bracket. M. Rothbart. Des. 72.3914; June 27.

Lamp bracket. M. Rothbart. Des. 72.3914; June 27.

Lamp Brägge. Openman. Des. 71.925; Jun. 25.

Lamp, Bräge. J. B. Salrerinl. Des. 73.581; Cot. 4.

Lamp bulb, Colored-incandescent-. F. Skaupy. 1,638,369; Aug. 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lamp for vehicles, Signal. F. J. J. Servals. 1,650,471; Nov. 22.

Lamp, Gascous-discharge. C. C. Van Voorbis. 1,647,591; Nov. 1.

Lamp, Glareless. A. V. Cassels. 1,622,764; Mar. 29.

Lamp, Glareless. J. M. Stewart. 1,637,429; Aug. 2.

Lamp grip. M. N. Russell. 1,644,038; Oct. 4.

Lamp grip. M. N. Russell. 1,644,038; Oct. 4.

Lamp grip. M. N. Russell. 1,644,038; Oct. 4.

Lamp grip. M. O. Russell. 1,643,439; July 5.

Lamp, Hair drier and therapeutic. W. G. Shelton. 1,639,763; Aug. 23.

Lamp, Hand arc. S. M. Meyer. 1,640,793; Aug. 30.

Lamp hanger. C. L. Bundy. 1,620,516; Mar. 8.

Lamp, High-frequency. H. C. Rentschler. 1,616,001;

The Defect of the compliance of the complex properties of
      Lamp bulb or similar article, Incandescent. A. Weber.
Des. 74.040; Dec. 6.
Lamp-bulb socket. E. H. Rollinson. 1,629,970; May 24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lamp holder, Electric-miniature-. R. Eckstein. 1,625,248;
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Lamp, Illuminating and signal. D. Anglada. 1,617,432;
Feb. 15.
           Lamp, Incandescent. R. N. Falge. 1,621,360; Mar. 15.
Lamp, Incandescent. G. R. Fonda. 1,632,647; June 14.
Lamp, Incandescent. G. R. Fonda. 1,646,679; Nov. 8.
Lamp, Incandescent. electric. F. Czech. 1,641,068; Aug. 30.
           Lamp, Incandescent electric. J. H. de Boer. 1,648,677;
Nov. 8.
Lamp, Incandescent electric. J. A. Heany. 1,635,320;
July 12.
                                                      , Incandescent electric. J. A. Heany. 1,640,829;
                               Ang
           Lamp,
Dec.
                                                                   Incandescent electric. C. F. Lorenz. 1.653.365:
           Lamp, Incandescent electric, D. MacRae.
                                                                                                                                                                                                                                                                                                                                                                             1,624,109;
             Lamp, Incandescent electric. J. B. McGinley. 1,650,289;
           Lamp, Incandescent electric. W. C. Sproesser. 1,624,077;
         Apr. 12.
Lamp, Inclosed arc. A. Ruttenauer. 1,629,313; May 17.
Lamp, Intermittent glow. C. F. Lorenz. 1,617,065;
Feb. 8.
         Feb. 8.
Lamp lens, Fluted. C. E. Godley. 1,626,406; Apr. 26.
Lamp, Luminous electrode discharge. C. F. Lorenz.
1,643,126; Sept. 20.
Lamp made of glass tubing, Electric incandescent. H.
Mayer. 1,651,287; Nov. 29.
Lamp, Magneto-electric pocket. I. Häggi. 1,645,624;
           Lamp, Magneto-electric pocket.
Jan. 25.
      Lamp, Magneto-electric potect. I. Aaggi. 1,613,622, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,613,624, 1,6
         Lamp or analogous article. L. Zweig. Des. 73,423;
Sept. 6.
    Lamp or analogous article. L. Zweig. Des. 73,423; Sept. 6.

Lamp or similar article, Vehicle. G. Graff. Des. 73,078; July 19.

Lamp outfit, Electric. R. D. Mailey, 1,630,090; May 24.

Lamp, Pectestal. R. Faffie, 1,637,031; Oct. 27. Nov. 15.

Lamp, Portable electric. E. Pavel. Des. 73,941; Nov. 22.

Lamp, Portable electric. E. Pavel. Des. 73,941; Nov. 22.

Lamp, Portable electric. W. R. Winsell. 1,648,709; Nov. 8.

Lamp, Portable ergulatable. W. A. Harvey, 1,639,774; Aug. 23.

Lamp, Cortable therapeutic. N. E. Goodrich. 1,651,385; Lamp post. H. M. Lloyd. Des. 71,842; Jan. 11.

Lamp Dest. H. M. Lloyd. Des. 71,842; Jan. 11.

Lamp post. H. M. Lloyd. Des. 72,160; Mar. 8.

Lamp post. H. M. Lloyd. Des. 72,160; Mar. 8.

Lamp post of wimilar article. H. Barkschat. Des. 72,468-7; Apr. 19.

Lamp post of visimilar article. H. Barkschat. Des. 72,468-7; Apr. 19.

Lamp, Projection. H. Workman. 1,631,905; June 7.

Lamp, Rediector. A. Rüttenauer and G. Galdies. 1,624,762; Apr. 12.

Lamp, Rediector. A. Rüttenauer and G. Galdies. 1,624,762; Apr. 12.

Lamp, Road-light. F. Nermostatic. G. M. Trollinger 1,624,624; Apr. 19.

Lamp, Road-light. F. O. Farwell. 1,634,657; July 5.

Lamp, Road-light. F. O. Farwell. 1,634,657; July 5.

Lamp, Road-light. F. O. Farwell. 1,624,603; Apr. 26.

Lamp, Road-light. F. O. Farwell. 1,624,603; Apr. 26.

Lamp, Sanctuary B. Muller-Trym. 1,626,003; Apr. 26.

Lamp, Sanctuary B. Muller-Trym. 1,626,003; Apr. 26.
      Apř. 5.

Lamp, Sanctuary. B. Muller-Thym. 1,626,008; Apr. 26.

Lamp shade. R. Beardsley. Des. 73,889; Nov. 22.

Lamp shade. I. Demblitz. 1,618,978; Mar. 1.

Lamp shade. L. Gold. Des. 73,171-2; Aug. 2.

Lamp shade. A. J. Hammond. Des. 73,976; Nov. 29.

Lamp shade. C. A. Herman. 1,654,482; Dec. 27.

Lamp shade. T. Huck and T. Menney. Re10,560; Feb. 22.

Lamp shade. J. Jacoby and B. Wleezorkiewicz. Des.

72,678; May 17.
Lamp shade. A. Herman. Amer. Rel6,660; Feb. Lamp shade. T. Huck and T. Meaney. Rel6,660; Feb. Lamp shade. J. Jacoby and B. Wieczorkiewicz. Des. 72,673; May 17. Meaney. Rel6,660; Feb. Lamp shade. R. Levy. 1,634,545; July 5. Lamp shade. F. K. Maerz. Des. 72,903-5; June 21. Lamp shade. F. K. Maerz. Des. 73,438; Sept 13. Lamp shade. S. Sato. Des. 74,124; Dec. Quantification of the state of the shade. M. H. Tombs. Des. 74,982; Dec. 13. Lamp-shade bolder. E. H. Baare. 1,616,735; Feb. S. Lamp-shade holder. T. Dahl. 1,637,736; Apr. 2, Lamp-shade holder. E. Dahl. 1,637,736; Apr. 2, Lamp shade, Multiple-wall. L. Larson. 1,614,004; Lamp shade, Multiple-wall. L. Larson. 2,614,004; Lamp shade, S. Sato S. Sa
         Lamp shade, Multiple-wall. L. Larson. 1,614,004.
Jan. 11.
Jann shade or analogous article of manufacture. A. R.
Krause and F. W. Mathieu. Des. 72,856-9; June 14.
Lamp, Signal. H. L. Piper. 1,618,778; Feb. 22.
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Lamp socket. E. A. Everett. 1,652,398; Dec. 13.
Lamp socket. D. E. Hamlet. 1,641,159; Sept. 6.
Lamp socket. D. E. Hamlet. 1,640,189; Aug. 28.
Lamp socket and current tap. Combined. W. He.
1,635,899; July 12.
Lamp-socket casings, Cap and shell fastening for. W. He.
1,635,232; July 12.
Lamp-socket construction. L. A. Hofstetter. 1,638,691;
Lamp-socket, Double. W. He. 1,638,3935; Aug. 16.
Lamp-socket, Double. W. He. 1,638,3935; Aug. 16.
Lamp-socket, Double. W. He. 1,638,3935; Aug. 16.
Lamp-socket, Double. W. He. 1,614,922; Jan.
18.
            Lamp socket, Electric-
N. B. Parsons. 1,6
Lamp socket, Electric-
Nov. 22.
Lamp socket, Electric-
Lamp socket, Electric-
Nov. 22.
Lamp socket, Electric-
Lamp soc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ot. 18.
1.635.686:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.643.641:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.649.927:
                                                                                                                                                                                                                                                                                                                                                                                                                                1,643,790; Sept. 27.
Lamp socket, Electric. H. E. Slade. 1,643,790; Sept. 27. Lamp socket, Electric. D. N. Thompson. 1,630,679; May 31. Lamp socket, Flural. J. S. Cuming. 1,616,528; Feb. 8. Lamp-socket switch. D. D. Gordon. 1,634,418; July 5. Lamp socket, Plural. J. S. Cuming. 1,634,418; July 5. Lamp socket, Lock attachment for electric. C. F. McCann and R. A. Berrenberg. 1,623,740; Apr. 5. Lamp scackets, Lock attachment for electric. W. A. Martin. 1,624,794; Apr. 12. Lamp scackets, Shade holder for electric. W. A. Martin. 1,624,794; Apr. 12. Lamp stand. C. V. Daiger, jr. Des. 74,140; Dec. 27. Lamp stand. C. V. Daiger, jr. Des. 74,140; Dec. 27. Lamp stand. O. Slebenbrodt. 1,619,639; Mar. 1. Lamp stand. S. V. Jordan. Des. 74,113; Dec. 20. Lamp stand. S. V. Jordan. Des. 74,113; Dec. 20. Lamp stand. S. V. Jordan. Des. 74,113; Dec. 20. Lamp stand and ash tray (combined. C. B. Namiot. Des. 73,668; Oct. 18. Lamp standards, Base for. G. F. Ebel. 1,627,640; May 10, Lamp stem. A. Goldberg. Des. 73,655; Oct. 18. Lamp standards, Base for. G. F. Ebel. 1,627,640; May 10, Lamp stem. A. Goldberg. Des. 73,655; Oct. 18. Lamp support. K. Mensing. 1,633,538; June 21. Lamp support. K. Mensing. 1,633,538; June 21. Lamp support. J. R. Townsend. Des. 74,461; Sept. 13. Lamp support. J. R. Townsend. Des. 73,466; Oct. 18. Lamp support. J. R. Townsend. Des. 73,505; Nov. 22. Lamp-supporting collar. J. N. Gossett. 1,623,002; Mar. 24. Lamp, Table. L. W. Young. Des. 73,538; Aug. 23. Lamp, Therapeutic. L. J. Buttolph. 1,630,057; May 24. Lamp, Therapeutic. R. K. Tuttle. 1,633,430; Sept. 27. Lamp, Universe and C. Lamp, Therapeutic. R. K. Tuttle. 1,630,057; May 24. Lamp, Therapeutic. L. W. Zebrowski. 1,617,799; Pos. Lamp, Vehicle. J. H. MacPherson. 1,641,041; Aug. 30. Lamp, Vehicle. G. H. Stiles. 1,643,603; Oct. 4. Lamp, Vehicle. G. H. Stiles. 1,643,603; Oct. 4. Lamp, Vehicle. G. H. Stiles. 1,643,603; Oct. 4. Lamp, Vehicle. E. G. H. Stiles. 1,643,603; Oct. 4. Lamp, Vehicle. E. G. H. Stiles. 1,643,603; Oct. 4. Lamp, Vehicle. E. G. H. Stiles. 1,643,603; Oct. 4. Lamp, 
         Lamp, Vehicle signal. C. A. Shoemaker. 1,641,056;
Feb. 8.
Lamp, Vehicle signal. C. A. Shoemaker. 1,641,056;
      Feb. 8.

Lamp, Vehicle signal. C. A. Savetan.

Aug. 30.

Lamp, Vehicle head. H. B. Donley. 1,650,501; Nov. 22.

Lamp, Vehicle head. W. C. Thomas. 1,650,550; Nov. 22.

Lamp, Vehicle tell. A. W. Gerro.

Lamp, Vehicle tell. A. W. W. Gerro.

Lamp, Water-cooled. L. J. Buttolph. 1,630,052; May 24.

Lamp, Water-cooled. L. J. Buttolph. 1,630,052; May 24.

Lamp with filament having increased strength, Gas-filled incandescent electric. D. S. Gustin. 1,622,282; increased strength, Gas-filled incandescent electric.
      incandescent electric. D. S. Gustin. 1,622,826; Mar, 29, Lamp with uclosed arc, Flame arc. T. L. Carbone. 1,629,234; May 17. Lamp wrapper. W. H. Fairchild. 1,619,608; Mar. 1. Lamps and its manufacture, Metal cap for electric incandescent. L. P. Graner. 1,623,836; Apr. 5. Lamps and method of making, Stem for incandescent. Lamps and similar articles, Apparatus for making incandescent. H. D. Blake and W. J. Gelger. 1,661,865; Thec. 6. Chembs and similar articles, Apparatus for making incandescent. H. C. Blake and W. J. Gelger. 1,661,865; Thec. 6. Chembs and similar articles, Apparatus for making incandescent. H. C. Blake and F. G. Gustin. 1, The C. Lamps and similar articles. Apparatus for making incandescent.
      Dec. 6.
Lamps and similar articles, Apparatus for making incan-
descent. J. F. Donovan. 1,620,447; Mar. 8.
Lamps and the like, Application of getters to cleetri-
incandescent. W. C. Sproesser. 1,620,639; May 3.
Lamps and the like, Cap or socket for incandescent elec-
tric. A. J. B. Marsat. 1,630,129; May 24.
Lamps, Arm for bridge. W. T. Rebun. Des. 74,072;
Dec. 13.
         Lamps, Attachment for bridge arm. G. W. Cassidy. Des.
73,367; Aug. 30.
            73,367; Aug. 30.
Lamps, Automatic control for arc. C. M. Fox. 1,622,505;
Mar. 29.
         Lamps, Automatic regulation of arc. K. Vesely and K. Lustig. 1,614,415; Jan. 11.
Lustig. 1,614,415; Jan. 11.
Lamps, Base for thettproof. F. W. Walton. 1,647,593; Nov. 1.
Lamps, Bracket for electric. J. Grien. 73,498; Sept. 20.
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Lamps, Carbon feeding and adjusting mechanism for arc.

W. G. Freddey. 1,650,849; Nov. 29.

Lamps, Cheult connector for compartmental. C. E. God
Lamps, Electric accumulator for hand. C. R. Fowler and

E. M. Roberts. 1,640,119; Aug. 23.

Lamps, Explosion-proof fitting for electric glow. J.

Beckmann. 1,629,039; May 10.

Lamps, Feeding means for arc. T. Hall. 1,626,932;

Lamps, Eliament support for series. A. L. Powell.

1,620,487; Mar. 8.

Lamps, Glare shield for electric. G. L. Baker.

1,643,937; Oct. 4.

Lamps, Glare shield for electric. G. L. Baker.

1,643,937; Oct. 4.

Lamps, Light indicator for reflector. A. St. Clair.

1,620,70; Cct. 4.

Lamps, Light indicator for reflector. A. St. Clair.

1,642,658; May 3.

Lamps, Locking attachment for incandescent. T. E.

Vost. 1,621,541; Mar. 15.

Lamps, Manufacture of incandescent electric. J. J. Hig
gins. 1,617,112; Feb. 8.

Lamps, Manufacture of incandescent. C. F. Lorenz.

1,643,138; Nov. 1.

Lamps, Manufacture of incandescent. G. F. Webb.

1,653,752; Dec. 27.

Lamps or similar article. Pedestal for table. A. H. Rim
berg, Des. 3,3,148; July 28.

Lamps, Grander article. Pedestal for table. A. H. Rim
berg, Des. 3,3,148; July 28.

Lamps or similar article. Flament for incandescent.

Lamps, Dartable drills and the like, Extension reel for electric. O. Miller. 1,642,936; Sept. 20.

Lamps, Reflector for quartz. F. Girard. 1,633,525;

Lamps, Reflector for Quartz. F. F. Girard. 1,633,525;

Lamps, Reflector for Quartz. F. F. Girard. 1,633,525; Lamps, Reflector for quartz.

Lamps, Reflector seal for. C. E. Godley. 1,614,731;

Lam, R.

Lamps, Replacing broken or molten holding wires inspection of incandescent electric. F. Vogihut. 1,543,7016;

Luty 96. of incancescent electric W. S. Lamps, Scaling-in head for incandescent electric. W. S. Rotherham. 1,626,628; May 3. Lamps, Series-operated studio arc. T. Hall. 1,617,314; Feb. 8. Rotherham. 1,026,025; May 3.

Lamps, Series-operated studio are. T. Hall. 1,617,314; Feb. 8.

Lamps, Shock-absorbing socket for electric filament, P. Van Bommel. 1,026,108; Apr. 26.

Lamps, Shock-absorbing socket for electric. S. Sokolow. Lamps, Shock-absorbing support for electric. S. Sokolow. Lamps, Smoker's stands, and the like, Stand for floor. I. M. Clarke. 1,613,382; Jan. 4.

Lamps, Switch for automobile signal. C. H. Culver. 1,621,873; Mar. 22.

Lamps, Switch for automobile signal. L. H. Peck. 1,640,411; Oct. 21.

Lamps to vases, Device for attaching. W. F. Winterling. 1,626,319; Apr. 26.

Lamps to vases, Device for attaching to aircraft. H. E. S. Holt. 1,624,411; Apr. 12.

Handing light or flare for attaching to aircraft. H. E. S. Holt. 1,624,411; Apr. 12.

Hand to rolling machine. A. B. Bell. 1,613,564; Feb. 22.

Land roller. J. D. Hunt. 1,615,905; Feb. 1.

Land-roller frame. J. F. Wagner. 1,621,295; Mar. 15.

Land-sand forming bulkheads, Reclaiming. A. C. Chenoweth. 1,688,665; Aug. 9.

Landscape, Representing cascades in. J. A. Burnham. Lantern. G. M. Anderson. 1,632,577; June 14.

Lantern. G. M. Anderson. 1,632,577; June 14.

Lantern. G. M. Anderson. 1,632,577; June 14.

Lantern. G. M. Hiller, J. J. Hongs, J. J. J. J. Lantern. G. H. Hickock. 1,640,923; Oct. 25.

Lantern. G. F. Hitchock. 1,640,923; Oct. 25.

Lantern. H. Rosenfeld. Des. 73,444; Sept. 13.

Lantern. L. B. Lindsay. Des. 73,393; Aug. 30.

Lantern. H. Rosenfeld. Des. 73,783; Oct. 25.

Lantern. H. Rosenfeld. Des. 73,783; Oct. 25.

Lantern. H. Wilson and A. K. Spencer. Des. 73,885; Nov. 15.

Lantern. H. H. Wolter. Des. 73,393; Aug. 30.

Lantern. H. H. Wilson and A. K. Spencer. Des. 73,885; Nov. 15.

Lantern. Electric hand. J. Van Rensselaer, jr. 1,620,640; Mar. 15.

Lantern. Electric hand. J. Van Rensselaer, jr. 1,620,640; Mar. 15. May 3.
Lantern, Collapsible. K. K. Friedrich. 1,620,640;
Mar. 15.
Lantern, Electric hand. J. Van Rensselaer, fr.
1,020,841; Mar. 15.
1,020,842; Mar. 15.
1,020,842; Mar. 15.
1,020,842; Mar. 15.
1,020,842; Mar. 16.
1,020,842; Mar. 16.
1,020,842; Mar. 16.
1,020,842; Mar. 1,020,842; Mar. 1,020,842;
Lantern, Frame. E. B. Wilson. Des. 73,761; Oct. 25.
Lantern, Hand. G. Cohen. 1,641,880; Sept. 6.
Lantern, Handing. L. A. Crumley. Des. 72,511; Apr. 26.
Lantern panel. L. A. Crumley. Des. 73,069; July 19.
Lantern, Projecting. F. W. Schmidt. 1,637,788; Aug. 2.
Lantern, Frojecting. F. W. Schmidt. 1,637,788; June 28.
Lantern, Frojecting. T. Gradwelt. Des. 73,156; Aug. 2.

Lantern, Signal. P. Koroknay. 1,625,474; Apr. 19. Lantern slide. J. R. Freeman. 1,633,376; June 21. Lantern, Switchman's. H. C. Sylvester. 1,646,328; Oct. 18. Lantern wheel for clocks and other purposes, Method and apparatus for making. H. Kienzle. 1,684,906; July 5. July 5. Lanterns and the like, Bail fastening or attaching means for. R. A. Currie. 1,648,446; Nov. 8. Lanterns, Attachment for. C. C. Walch. 1,650,809; Nov. 29. Nov. 29.
Lanterns called personal-character readers. A. L. Romero. 1,624,149; Apr. 12.
Lanterns or article of similar nature, Body for. I. Lanterns or article 33; Ang. 23.
Lap link. B. Keldy, 1,619,519; Mar. 1.
Lap link. B. F. Rodgers. 1,651,909; Dec. 6.
Lap machine. L. Schorsch. 1,642,178; Sept. 13.
Lap volt. J. Skoler. 1,640,908; Aug. 23.
Lap winding machine. F. D. Langevin. 1,618,716;
Lateping machine. A. Ericsson. 1,635,469; July 12. Lap robe J. Skoler. 1,642,085, Aug. 23.
Lap robe J. Skoler. 1,640,085, Aug. 23.
Lapping machine. A. Ericsson. 1,635,469; July 12.
Lapping machine. W. A. Oubridge. 1,633,697; Apr. 5.
Lapping machine. W. A. Oubridge. 1,633,697; Apr. 5.
Lapping machine. W. A. Oubridge. 1,633,697; Apr. 5.
Lapping machine. W. A. Oubridge. 1,635,698; Apr. 19.
Lapping machine. M. 1,643,610; Apr. 19.
Last. U. P. Becker. 1,625,588; Apr. 19.
Last. U. P. Becker. 1,625,588; Apr. 19.
Last. J. Benda. 1,636,677; July 25.
Last. J. Benda. 1,636,677; July 25.
Last. G. Clausing. 1,641,164; Sept. 6.
Last. W. A. Krentler. 1,621,588-9; Mar. 22.
Last. G. Clausing. 1,641,164; Sept. 6.
Last. J. W. May. 1,653,365; Dec. 27.
Last. J. W. May. 1,653,365; Dec. 27.
Last. J. C. Schelter. 1,643,829-2, Nov. 8.
Last. H. A. Toulmin, Jr. 1,631,709; June 7
Last. J. C. Schelter. 1,643,829-2, Nov. 8.
Last. H. A. Toulmin, Jr. 1,631,709; June 7
Last-Dec fastener S. D. Layman 1,649,700; Nov. 15.
Last-late. C. P. Morton. 1,630,304; May. 31.
Last-removing device. G. P. S. Cross. 1,636,288; July 19.
Last-scouring wheel. C. L. Pearson. 1,632,244; June 14.
Last-genenker's. L. P. Taylor. 1,552,384; Dec. 13.
July 5 machine. W. F. Filckinger. 1,640,697; Aug. 30.
July 5 machine. C. F. Pym. 1,627,999; May 10.
Lasting machine. C. F. Pym. 1,627,909; May 11.
Latch. H. Bourgon. 1,616,106; Feb. 1.
Latch. B. H. Morrey. 1,630,608; July 19.
Latch. B. J. Petry. 1,630,608; July 19.
Latch. B. J. Petry. 1,630,608; July 19.
Latch. B. M. Yadneryoort. 1,634,430-7; July 5. itch. C. S. Summa,
Aug. 23.
tch. R. R. Studler. 1,653,319; Dec. 20.
tch. F. M. Vandervoort. 1,634,636-7; July 5.
tch. C. Vogt. 1,619,789; Mar. 1.
tch. A. F. Winters and B. R. Crampton. 1,648,289;
tch. A. F. Winters and B. R. Crampton. 1,648,289; Latch. Latch. Latch. Latch. A. F. Winters and D. ... Nov. 8. Latch and draft plate, Window. G. Helge. 1,639,849; Latch and draft plate, Window. A. Pavola, 1,621,740; Aug. 28. Latch and guard, Window. A. Pavola. 1,621,740; Mar. 22. Latch and bolder, Door. R. L. Neubert. 1,653,406; Dec. 20. Latch and keeper means. C. L. Crooks and F. M. Vander-voort. 1,634,635; July 5. Latch and keeper means. F. M. Vandervoort. 1,634,634; July 5. Latch and lock, Door. W. F. Wread. 1,617,001; Feb. 8. Latch and lock mechanism. J. Knell. 1,642,501; Sept. Latch and lock mechanism, Door. A. J. Kopp. 1,618,344; Latch and lock mechanism, Door. A. J. Kopp. 1,618,344; Feb. 22.
Latch and lock, Reversible door. A. J. Thomas. 1,627,420; May 3.
Latch and switch mechanism, Combined door. A. W. Jones. 1,649,475; Nov. 15.
Latch. Automatic doff. C. W. Young and J. H. Diggett. 1,645,083; Oct. 11.
Latch. Automatic safety window. H. S. Wheaton 1,625,283; Apr. 19.
Latch. Automobile door. J. A. Drouin. 1,652,616; Latch. Automobile door. J. A. Drouin. 1,652,616; Latch. Automobile door. J. A. Drouin. 1,652,616; Latch. Automobile door. B. Waener. 1,631,508; June 7. Dec. 13.
Latch, Automobile hood. R. Wagner. 1,631,508; June 7.
Latch-bolt keeper and mounting the same. J. Ledwinka.
1.645,332; Oct. 11.
Latch, Choker-rod. H. Drews. 1,651,874; Dec. 6.

Latch construction. J. Ledwinka. 1,635,757; July 12. Latch-controlled-operating mechanism. J. H. Sayres. 1,628,474; May 10. Marquardt. 1,622,387; Mar. 29. Latch, Dogrig means for vehicle door. F. N. Delavan. 1,615,829; Feb. 1. Latch, Door. D. Bell. 1,645,549; Oct. 18. Latch, Door. W. C. Devereaux. 1,621,497; Mar. 22. Latch, Door. W. C. Devereaux. 1,621,497; Mar. 22. Latch, Door. W. C. Devereaux. 1,621,497; May 24. Latch, Door. W. C. Devereaux. 1,642,240; Oct. 4. Latch, Door. W. C. Devereaux. 1,644,240; Oct. 4. Latch, Door. M. M. Dudas. 1,629,379; May 17. Latch, Door. W. C. Perris. 1,633,288; June 28. Latch, Door. W. D. Ferris. 1,638,249; Aug. 9. Latch, Door. E. Frantz. 1,630,379; May 31. Latch, Door. E. Halpern. 1,641,637; Sept. 6. Latch, Door. W. Kirn. 1,617,641; Feb. 15. Latch, Door. W. W. D. Ferris. 1,638,388; June 28. Latch, Door. W. Kirn. 1,617,641; Feb. 15. Latch, Door. W. Kirn. 1,617,641; Feb. 15. Latch, Door. A. W. Parsons. 1,619,032; Mar. 1,52,140; Door. E. J. Waring. 1,654,197; Dec. 27. Latch, Door. E. J. Waring. 1,654,197; Dec. 27. Latch, Door. C. A. Westfield. 1,637,366; Aug. 2. Latch, Door. C. A. Westfield. 1,648,529; Nov. 8. Latch, Elevator-door. W. A. Williams. 1,621,391; Latch, Door. C. A. Westfield. 1,641,303,414; May 24. Latex and products obtained thereby, Treating. S. M. Cadwell. 1.641,573; Sept. 6.
Latex, Manufacture of molded articles from. C. C. Latex, Lat Lath, Coated metal. W. C. Coryell. 1,637,410; Aug. 2. Lath, Composite wire. R. J. Southwell. 1,641,872; Lath, Coated metal, W. C. Coryell, 1.637,410; Auß. 2.
Lath, Composite wire. R. J. Southwell, 1.641,822;
Sept. 6.
Lath-expanded-metal, J. Manofsky, 1,614,362; Jan. 11.
Lath, Expanded-metal, J. Manofsky, 1,614,363; Jan. 11.
Lath, Expanded metal, J. Manofsky, 1,618,636; Feb. 22.
Lath-expanding machine, Continuous. L. E. Cartis.
Lath-expanding machine, Continuous. L. E. Cartis.
Lath-expanding machine, Continuous. L. E. Cartis.
Lath-expanding machine, 1,624,347; Apr. 12.
Lath-expanding Machine, 1,643,435; Nov. 8.
Lathing, Metallie. L. P. Hazen. 1,648,345; Nov. 8.
Lathing sheet. R. N. Jensen. 1,646,483; Oct. 25.
Lathing, Sheet. J. D. O'Brien. 1,614,081; Jan. 11.
Lathing structures for plaster wall, Mounting. J. F.
Makowski, 1,019,947, Mather. 1,628,598; May 10.
Lathe. G. W. Duchemin. 1,630,333; May 31.
Lathe. G. W. Duchemin. 1,630,333; May 31.
Lathe. W. F. Groene. 1,637,902; Feb. 15.
Lathe. H. W. Melling. 1,634,559; July 5.
Lathe. L. Reno. 1,522,292; Max. 29.
Lathe. L. Reno. 1,522,292; Max. 29.
Lathe. M. D. Sundstructure, 1,111
Lathe. W. E. Whipp. 1,636,028; July 19.
Lathe and drill, Combined. A. S. Thompson. 1,618,358; Feb. 22.
Latha Lathachent. P. L. Starr. 1,619,832; Mar. 8. Latch, Exevator doct. 1. A. Mar. 15.
Latch, Exit. J. O. Soemer. 1,630,141; May 24.
Latch for air brakes, Push-rod. H. F. Bickel. 1,649,801; Later for all traces, the Nov. 22. Lateh for automobile doors and the like. L. J. Morgan. 1,633,434; Aug. 16. Latch for automobile doors and the like. L. J. Morgan. 1,651,724; Dec. 6. Latch for boxes. C. H. Bissell. 1,615,784; Jan. 25. Latch for doors, Handle. H. A. Ziola. 1,653,489; Dec. 20. Lattle and delli, Combined. A. S. Thompson. Lattle, and call a charter and delli, Combined. A. S. Thompson. Lattle, and the attachment, P. L. Starr. 1,619,532; Mar. 8.
Lattle attachment, Te trouving in regular profiles. J. L. Matthews. 1,646,758; Oct. 25.
Lattle attachment, Teeth-cutting. S. Helfgott. 1,617,807; Feb. 15.
Lattle Attomatic. J. J. Thacher. 1,661,513; Feb. 1.
Lattle, Atomatic. J. J. Thacher. 1,637,792; Aug. 2.
Lattle, Copying. H. A. Schultz. 1,623,633; Apr. 5.
Lattle, Copying. H. A. Schultz. 1,638,511; Aug. 9.
Lattle, Crankshaft. W. F. Greene. 1,633,633; June 28.
Lattle, delling and milling machine, Combined. H. Dal-Lattle, Milling and milling machine, Combined. Lattle, Metal. E. W. Thompson. 1,642,909; Sept. 20.
Lattle, Milling. J. A. Doane. 1,618,275; Feb. 22.
Lattle, Milling. J. A. Doane. 1,618,275; Feb. 22.
Lattle, Multiple-carriage. J. C. White. 1,619,281;
Mar. 1. Latch for windows. G. I. Barclay. 1,615,864; Feb. 1. Latch, Gate. E. Crowley. 1,640,394; Aug. 30. Latch, Grain-car-door. C. J. Fischer. 1,615,120; Jan. Latch handles, Mounting for. L. Ottinger. 1,641,988; Lather, Counterbalance for. L. C. Cole. 1,634,385; July 5.
Lather, Spoke-turning. H. Filek. 1,629,691; May 24.
Lather, Spoke-turning. H. Filek. 1,629,691; May 24.
Lather, Spoke-turning. H. Filek. 1,629,691; May 24.
Lather, Turret. G. E. Cuttat. 1,644,566; Oct. 4.
Lather, Wood-turning. W. H. Moore. 1,636,1223; Dec. 20.
Lather, Wood-turning. W. H. Moore. 1,636,1223; Dec. 20.
Lather, Wood-turning. W. H. Moore. 1,636,1223; Dec. 20.
Lather, Charles, Mar. 1.
Lather, Spoke May 1.
Lather, Leas, 1,648,733; Oct. 11.
Lather, Back squaring attachment for. N. King and R. A.
Ashton. 1,644,733; Oct. 11.
Lather, Eushing-turning attachment for automatic. J. J.
Lather, Chip and blank separator for. J. J. Thacher.
1,616,151; Feb. 1.
Lather, Counterbalance for. L. C. Cole. 1,634,396; July 5.
Lather, Follow rest for. A. G. Whitehead and E. J.
Sullivan. 1,648,091; Nov. 8.
Lather, Hendstock for. W. E. Whipp. 1,642,863; Sept. 20.
Lather, Tool carrier for E. F. Heard and M. M. Fitz
Lather, Tool carrier for. J. M. Palmer. 1,638,874; Aug. 16.
Lather, Tool turret for axle. L. C. Cole. 1,638,2426; Aug. 16.
Lather, Tool turret for axle. L. C. Cole. 1,638,2426; Aug. 16.
Lather, Tool turret for axle. L. C. Cole. 1,638,2426; Aug. 16.
Lather, Tool turret for axle. L. C. Cole. 1,638,2426; Aug. 16.
Lather, Tool turret for axle. L. C. Cole. 1,638,2426; Aug. 16.
Lather, Tool turret for axle. L. C. Cole. 1,638,2426; Aug. 16. Laday 3. L. W. S. Hamm. 1,627,646; May 10. Lott. Scoop-board. J. Schnabel J. 1,617,769; Feb. 15. Latch. Telephone. J. Krive. 1,644,194; Oct. 1,651,134; Nov. 29. Latch. Walch-bracelet. R. Kinz. 1,651,134; Nov. 29. Latch. Window. A. G. Hjert. 1,616,189; Feb. 1, Latch. Window. F. F. Kozak and G. Lutz. 1,653,295; Dec. 20.
Latch, Window. O. Millauro. 1,636,782; July 26.
Latch, Window. A. Zur. 1,658,143; Dec. 20.
Latch, Window safety. J. Goldworm. 1,615,754; Jan. 25
Latich, Window-sash. J. D. Shipman. 1,622,742 Lathes, Tool carrier for. E. F. Heard and M. M. Fitz Hugh. J. 548,300; Nov. 15.
Lathes, Tool turet for axie. L. C. Cole. 1,638,874; Lathes, Tool turet for axie. L. C. Cole. 1,652,426; Dec. 13.
Lathes, Torret tool post for car-wheel. J. O. Macdonald. 1,650,718; Nov. 29.
Lathes, Torret tool post for car-wheel. J. O. Macdonald. 1,650,718; Nov. 29.
Lathes, Torret tool post for car-wheel. J. O. Macdonald. 1,650,718; Nov. 29.
Lathes, Torret tool post for car-wheel. J. O. Macdonald. 1,650,718; Nov. 29.
Lathes, Torret tool post for car-wheel. J. O. Macdonald. 1,650,718; Nov. 29.
Laundry and other machines, Fad for. W. A. Zeidler. 1,630,459; May 31.
Laundry apparatus. E. J. Perry and F. S. Boltz. Laundry apparatus. E. J. Perry and F. S. Boltz. Laundry appliance. C. R. Asmus. 1,627,948; May 10.
Laundry assorter, A. Armbruster. 1,618,260, Feb. 22.
Laundry assorter, A. Armbruster. 1,618,260, Feb. 22.
Laundry assorter, A. Armbruster. 1,618,260, Feb. 22.
Laundry check in Laune. 1,620,158; Mar. 8.
Laundry checking device. J. H. Lynch. 1,642,963; Sept. 20. Latch, W Mar. 29. Latches, Locking means for door, L. Ottinger. 1,839,103; Aug. 16. Aug. 16.

Latches or the like, Handle for door. G. Graff. Des. 75,809; Nov. 22.

Latches of the like, Handle for door. G. Graff. Des. 75,809; Nov. 22.

Latches of the late of late of

Lating and product. Preserving. A. E. Jury and O. H. Salth I. 1619 088; Mar. S. Salth I. 1619 088; Mar. S. Latex and product thereof, Treating. W. B. Wescott. I. 630,411; May 31. Latex and product. Thickening and stabilizing. M. C. Teague. I. 634,124; June 28.

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Laundry clothes-handling apparatus. E. R. Knudson. 1,380,189; May 24. Laundry collar-finishing machine. J. Chant and Ed. P. Ryan. 1,617,896; Feb. 15. Laundry-handling device. E. Lane. 1,625,551; Apr. 19. Laundry machine. L. W. Mammen. 1,632,797; June 21. Laundry machine, W. W. Winger. 1,643,008; Nov. 15. Laundry machine, Rotary. J. N. White. 1,648,000; Nov. 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Leak-stopping composition. G. I. Ray. 1,648,865;
    Laundry machine, Rotary. 3. At House Nov. 8.

Laundry machines, Safety device for. R. H. Palm and W. F. Pohlmann. 1,647,657; Nov. 1.

Laundry machines, Safety device for. R. H. Palm and W. F. Pohlmann. 1,651,625; Dec. 6.

L. Editory of the Company of the Compan
G. M. Bacon. 1.645,036; Oct. 11.
Laundry marking machine. M. W. Griesbaum. 1,650,068;
Nov. 22.
Laundry marking-tag-attachment machine. A. L. Faust.
1019,251; Ma.
1.102,251; May 3.
1.102,
         Lawn sprinkler, Traveling, W. C. Todd and J. W. Pomeroy, 1,620,583; Mar. 8.

Lawn trimmer. A. Felton, 1,651,759; Dec. 6.

Lawn trimmer. A. Huberty, 1,632,479; June 14.

Lawf gure. G. Jalbert, 1,632,160; Dec. 20.

Dec. 6.

Leaching, filtering, and absorbing gases and the like, Apparatus and process for. H. M. Stark. 1,625,831; Apr. 26.

Leaching method and anosaratus. A. R. Kennedy.
    Apr. 26.

Lenching method and apparatus. A. B. Kennedy. 1,623,787; May 17.

Leaching solutions. Recovering and regenerating. H. E. Wetherbee. 1,615,970; Feb. 1.

Lead-alkali metal containing bearing-metal alloys. G. Welter. 1,652,078; Dec. 6.

Lead and making the same, Red. J. A. Schaeffer, J. H. Calbeck, and J. R. Crenshaw. 1,652,217; Dec. 13.

Lead chloride, Recovering. W. Witter and P. Nebring. 1,647,426; Nov. 1.

Lead chloride, Recovering. W. Witter and P. Nebring. 1,647,426; Nov. 1.

Lead compounds. Making organic. T. Midgley, jr. 1,622,228; Mar. 22.

Lead compounds. Manufacture of. R. Wilhelm. 1,614,267; Feb. 15.

Lead-copper particles, Making. H. M. Williams. 1,635,653; July 12.

Lead dross, Treating. O. P. Chisholm. 1,642,358; Sept. 13.
Lend dross, Treating. O. P. Chisholm. 1,622,308; sept. 13.
Lead-in connection. E. N. Maupin. 1,642,618; Sept. 13.
Lend. Making tetra-alkyl. K. P. Monroe. 1,645,390; Oct. 14.
Lend. Manufacture of tetra-ethyl. H. W. Daudf, A. E. Frimelee, and W. S. Calcott. 1,645,373; Oct. 11.
Lend. Manufacturing tetra-ethyl. W. S. Calcott and F. L. English. 1,652,312; Dec. 13.
Lend oxide, Apparatus for the manufacture of. H. Warlng. 1,649,428; Nov. 15.
Lend product and producing the same. J. O. Handy. 1,631,880; Dec. 6.
1,645,389; Dec. 6. a tetra-alkyl. K. P. Monroe. 1,645,389; Oct. 11.
Lend, Refning. P. W. Davis. 1,640,488-7; Aug. 30.
Leaders, gears, or racks, Cutting. M. E. Fernald. 1,632,269; June 14.
Lenf springs for districting same, Atfächment to. L.
Lenf springs for districting same, Atfächment to. L.
Leaf springs, Snubber-acting auxiliary leaf for. T.
Kevnan. 1,615,710; Jan. 25.
Lenf support. V. C. Luppert. 1,651,825; Dec. 6.
Lenf turner. L. Boyd. 1,630,290; May 31.
Lenkage-controlling construction. T. Wachs. 1,613,256; Jan. 4.
Lenk detector. D. W. Ohaver. 1,646,928; Oct. 25.
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Nov. 8.

Leaks, Composition for stopping, W. L. Campbell.

1,630,528; May 31.

Leaks, Mixture for stopping, J. D. Campano. 1,641,666;

Aug. 30. Mar. 22.
Leather-working machine. W. E. Broughton. 1,624,921;
Leather-working machines, Work support for. O. H.
Brown. 1,624,309; Apr. 12.
Ledger, Loose-leaf. C. Stockmans. 1,624,020; Apr. 12.
Ledger ack. O. L. Hermann. 1,649,471; Nov. 15.
Leer. G. B. Howard. 1,618,639; Feb. 22.
Letter, G. B. Howard. 1,618,639; Feb. 22.
Letter, G. B. Howard. 1,618,639; Feb. 22.
Letter-charging apparatus, Conveyer for. F. H. Johnson and S. R.
Letter, 1,624,226; Apr. 12.
Leter-charging apparatus, Conveyer for. F. H. Johnson and S. R. Lathrop. 1,623,247; Apr. 5.
Leter construction. H. K. Hitchcock. 1,688,769; Aug. 9.
Leter-charging apparatus, Conveyer for. F. H. Johnson and S. R. Lathrop. 1,623,247; Apr. 5.
Leter Construction. H. K. Hitchcock. 1,658,769; Aug. 9.
Leter-heating means. D. T. Ferngren. 1,653,042; Dec. 20.
Leer-pan structure. P. Q. Williams. 1,641,615; Sept. 6.
Leers, Carrying-in device for. E. R. Odom. 1,620,778;
Mar. 15.
Mar. 15.
Mar. 15.
Leg and ankle support. A. A. Brooks. 1,638,285;
Aug. 9.
Leg and ankle support. A. A. Brooks. 1,638,285; Aug. 7.

Leg construction. C. H. Busch and 11.

Leg construction. C. H. Busch and 11.

Leg toldine and 12.

Leg toldine and 12.

Leg guard for achietes. W. Barrett. 1,624,129; Apr. 12.

Leg rund for achietes. W. Barrett. 1,624,129; July 26.

Leg structure. D. S. Johnson. 1,636,912; July 26.

Legging. J. R. Bingaman and W. R. Nagle. 1,613,784;

Jan. 11.

Legging. H. F. Chester. 1,633,924; June 28.

Legging. H. F. Chester. 1,633,924; June 28.

Legging. H. F. Chester. 1,633,924; June 28. Jan. 11. Legging. H. F. Chester. 1,633,924; June 28. Legging. F. S. Dilger. 1,643,629; Sept. 22. Legging. F. S. Dilger. 1,643,629; Sept. 20. Legging. E. A. Gray. 1,613,885; Jan. 11. Legging. C. B. Hockmeyer. 1,641,487; Sept. 6. Legging. C. R. Holcomb. 1,619,472; Mar. 1. Legging. T. Kelly. 1,638,206; Aug. 9. Legging. F. Norden and W. G. Loan. 1, Legging. Aug. 23. 1,639,783; Aug. 23.

Legume, Apparatus and method for curing. H. F. Galbergume, Apparatus and method for curing. H. F. Galbergth and Length record and automatic machine for making same. F. B. Voegell. 1,630,039; May 24.

Lengths for variable articles, Indicating the. O. Vogl. 1,613,858; Jan. 11.

Lengths of variable articles, Indicating the. O. Vogl. 1,613,858; Jan. 11.

Lens. C. W. Frederfett. 1,627,892; May 10.

Lens. C. W. Frederfett. 1,627,892; May 10.

Lens. C. W. Frederfett. 1,635,225; July 12.

Lens. F. B. Watson and B. Culver. 1,632,208; June 14.

Lens. Automobile direction-Indicating. A. J. Matter.

Des. 71,945; Feb. 1.

Lens. 25.

Lens. C. A. Michel. 1,615,548;

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Des. 71,945; Feb. 1.

Lens. Jan. 25.
Lens block. L. W. Bugbee, jr. 1,643,978; Oct. 4.
Lens cemented objective, Spherically, chromatically, and
astigmatically corrected three. F. Urban. 1,641,402; Sept. 6. Less-cuting C. W. Dake 1616,500; Feb. 1.
Lens cutier. A. E. Maynard, 1514,078; Jan. 11.
Lens cutier. A. E. Maynard, 1621,531; Mar. 15.
Lens-cuting machine. W. Schilter, 1,638,063; Aug. 9.
Lens, Detachable antiglare. A. N. Quick. 1,620,509;
Mar. 8. Lens disk analyzer, Plural. C. F. Jenkins. 1,644,383; Lens-edging machine. A. E. Maynard. 1,651,532; Dec. 6.

Lens for eyeglasses, Auxiliary. J. A. Coats. 1,614,827; Jan. 18.

Lens for identification, Marking fused bifocal. G. A. Clement. 1,627,148; May 3.

Lens for vehicle headlights. W. A. Williams. 1,618,035; Feb. 15.

Lens-frame measuring and expanding device. J. R. Van Tassel. 1,615,601; Jan. 25.

Lens frame, Ophthalmic test. C. M. Stevenson. 1,631,509; June 7.

Lens frame, Spearable vault-light. E. J. Alfleres. 1,631,509; June 7.

Lens frame, Pro Spectacles. E. E. Emons. Des. 73,074-6; July 19.

Lens-grinding machine. L. W. Bugbee. 1,651,182; Nov. 29.

Lens-grinding machine. E. P. Devine. 1,624,658; Lens for eyeglasses, Auxiliary. J. A. Coats. 1,614,827; Lens-grinding machine. E. P. Devine. 1.624.658: Lens-grinding machine. E. P. Devine. 1,624,658; Apr. 12.
Lens holder, Binocular-magnifying-. G. L. Tully. 1,635,062; July 5.
Lens measure. A. E. Maynard. 1,637,024; July 26.
Lens meunting for oculists and opticians, Trial-. G. S. Crampton. 1,626,660; May 3.
Lens, Multitocal. E. D. Tillyer. 1,641,790; Sept. 6.
Lens, Ophthalmic. L. L. Gagnon. 1,619,341; Mar. 1, Lens, Ophthalmic. E. D. Tillyer and H. R. Moulton. 1,644,798; Oct. 11.
Lens, Shading: M. La Rocco. 1,640,661; Aug. 30.
Lens, Shading: M. La Rocco. 1,640,661; Aug. 30.
Lens, Shading: M. Greiner and L. R. R. Freund. 1,622,477; Mar. 20.
Lens. Testing instrument. L. H. Fisher. 1,622,776; Lens. Testing instrument. 1,022,437; Mar. 29.

Lens, Teeting instrument. L. H. Fisher. 1,622,776;
Mar. 29.

Lens, Vehle light. O. Stenzel. 1,636,928; July 26.

Lense and making the same, Tool for treating ophthalmov. 29.

Lenses. Annaratus. and Lenses, Anchine for grinding. L. W. Bugbee. 1,630,724; May 31.

Lenses, Machine for grinding. L. W. Bugbee. 1,630,253;
May 31. Lenses, July 26 Making multifocal. F. Fraser. 1.637.021: July 26.
Lenses, Method of and apparatus for producing bifocal.
M. R. McDanal. 1,633,117; June 21.
Lenses, Producing monocentric fused bifocal. M. A.
Laabs. Re16,830; Dec. 27.
Lenses, Producing monocentric fused bifocal. M. A.
Laabs. 1,630,706; May 31.
Lenses, Taylor ophthalmic test. E. Linder. 1,647,922; Lenses, Producing monocentric fused bifocal. M. A. Laabs, 1,630,766; May 31.

Lenses, Tray for ophthalmic test. E. Linder. 1,647,922; Nov. 1.

Lettor device. T. J. Garsio. 1,620,641; Mar. 15.

Lettor device. T. J. Garsio. 1,620,641; Mar. 15.

Beck Des. 73,476; Sept. 20.

Letter box and milk-bottle holder, Combined. D. Bolzonetti. 1,632,020; June 14.

Letter-box construction. C. C. Colby. 1,629,679; May 24.

Letter-box construction. C. C. Colby. 1,623,688; Oct. 11.

Letter-box construction. C. C. Colby. 1,623,688; Oct. 11.

Letter-box construction. C. C. Colby. 1,623,688; Oct. 11.

Letter-box construction. C. C. Mahloy. 1,641,596; Sept. 6.

Lettering device. P. Helize. 1,632,966; June 21.

Lettering press, Case. W. A. Gunning and M. J. Sheda. 1,644,674; An. 11.

Sheda. 1,644,674; An. 1,644,596; Sept. 6.

Lettering device. P. Helize. 1,632,968; June 21.

Letter-box construction. C. C. Colby. 1,642,634; July 26.

Letter-box construction. C. C. Colby. 1,642,634; July 5.

Level. D. Hangood. 1,623,339; Apr. 12.

Level. D. Hangood. 1,623,339; Apr. 12.

Level. O. Hangood. 1,623,339; Apr. 12.

Level. O. Hangood. 1,623,339; Apr. 12.

Level. 1,625,683; Apr. 19.

Level and plumb. Combined. E. J. Elsas. 1,630,174; May 24.

Level and plumb. Combined. E. J. Elsas. 1,630,174; May 24.

Level and controlling means for liquid dispensers. J. J. Catron. 1,613,985; Jan. 11.

Level Indicating and controlling means for liquid dispensers. J. J. Catron. 1,613,985; Jan. 11.

Level indicator. F. P. Lewis and W. V. Thempson. 1,652,023; Dec. 6.

Level School S. Jan. 18.

Level Indicator. S. P. Level. 1,613,655; Jan. 18.

Level indicator. S. P Lever-actuating mechanism. J. M. Waddell. 1.644,763; Oct. 11. Lever lock. A Meer. 1.628,781; May 17. Oct. 11.
Lever lock. A Meer. 1,628,731; May 17.
Lever lock. Gear-shift. E. R. Evans. 1,615,539; Jan. 25.
Lever lock, Gear-shift. J. Witte. 1,646,077; Oct. 18.
Lever switches. Operating handle for. F. B. Hamblit. 1,653,043; Dec. 20.
Lever-top can. R. O. Geary. 1,629,441; May 17.
Lever, Uncoupling. C. M. Goldinger. 1,626,829; May 8.

Lever, Uncoupling. C. W. Nicholas. 1,626,956; May 3. Levulose, Production of. W. C. Arsem. 1,616,166; Feb. 1. Levulose, Production of. W. C. Arsem. 1,616,166; Feb. 1.
Library-stack construction, Mop mold for. H. W. Lombard. 1,628,043; Apr. 26.
License-card holder. Automobile. R. E. Williams. License holder. H. B. Butler. 1,620,798; Mar. 15.
License holder. H. D. Wiemann. Rel6,583; Apr. 5.
License indicator. H. O. Wiemann. Rel6,583; Apr. 5.
License-plate and identification-card holder, Combined. A. G. Lorenz. 1,633,414; June 21.
License-plate and identification-card holder, Combined. A. G. Lorenz. 1,633,414; June 21.
License-plate holder. J. J. Davis. 1,630,655; May 31.
License-plate holder. H. Dube and R. X. Dupuls. 1,633,497; Dec. 20.
License-plate holder. E. L. Etheridge. 1,643,580; Spt. 27.
License-plate holder. F. J. Fearson. 1,644,423; Oct. 4.
License-plate holder. F. J. Fearson. 1,644,423; Oct. 4.
License-plate holder. F. Halpt. 1,614,955; Jan. 16.
License-plate holder. W. B. Langan. 1,650,454; Nov. 22.
License-plate holder. M. B. Frasier. 1,650,454; Nov. 22.
License-plate holder. W. B. Langan. 1,650,454; Nov. 22.
License-plate holder. W. B. Langan. 1,650,454; Nov. 22.
License-plate holder. M. B. Frasier. 1,650,454; Nov. 22. License plate, Illuminated. E. Peters. 1,615,771; Jan. 25. Jan. 25.
License-plate unit. A. H. Humphrey. 1,621,411; Mar. 15.
License-plates, Frame for automobile. K. W. Collamore.
1,621,632; Mar. 22.
License plates, Securing device for automobile. J. J.
Brock. 1,616,437; Feb. 8.
Lid and lifting device, Combination. M. Chovanec.
1,624,926; Apr. 19.
Lid, Leakless cream-can. M. E. Ricker. 1,618,730;
Lid, Safaty F. Obial. 1,600,771; Feb. 22.
Lid, Safety. F. Obiol. 1,636,531; July 19.
Lid support. A. Biair. 1,614,644; Jan. 18.
Lideboat bolding and launching mechanism.
Overman. 1,635,860; July 12.
Lifeboat securing and releasing mechanism.
Overman. 1,631,053; May 31.
Lifeboats, Drain device for. H. B. Hills. 1,623,727; Lifeboats, Drain device for. 11. D. Ann. Apr. 5.
Life in living organisms in sealed containers and device therefor, Supporting, R. H. Wallace, 1,621,318;
Mar. 22.
Mar. 22.
Mar. 22.
Life preserver. W. Wilson. 1,620,421; Mar. 8.
Life-saving apparatus. M. C. Steese. 1,630,501; May 31.
Life-saving apparatus, Mast or support for. P. Mayer. 1,615,128; Jan. 18.
Life-saving device. E. Karikas, 1,630,248; Jan. 18.
Life-saving device. E. Karikas, 1,630,248; Jan. 18.
Life-saving device or children. E. Karikas, 1,637,574;
Aug. 2.
Life-saving device to children. E. Karikas, 1,637,574;
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Life-saving device to children. E. Karikas, 1,637,574;
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Aug. 2.
Life-saving device for children. E. Karikas, 1,637,574;
Aug. 2.
Life-saving device for children. Aug. 2. Life-saving devices, Inflating apparatus for. R. H. Campbell. 1,621,458; Mar. 15. Lift; Jack. Double. J. W. Bate. 1,629,140; May 17. Lifter: &ee mer: see—
Battery-terminal lifter.
Cream-can lifter.
Face lifter.
Hot-dish lifter.
Jar lifter.
Load lifter.
Pan lifter. Sash lifter. Type-frame lifter. Utensil lifter. Valve lifter. Valve-spring lifter. Vine lifter. Wheel lifter. Pan lifter.

Vine lifter.

Lifter, S. H. Williamson, 1,615,732; Jan., 25.

Lifter and remover, Pan. W. Glies. 1,651,384; Dec. 6.

Liften and dumping body apparatus. E. R. Barrett.

1,659,318; Nov. 29.

Lifting and holsting device, Lineman's. S. P. Grant.

1,625,118; Apr. 19. A. F. Case. 1,642,337; Sept. 18.

Lifting car dumper. A. F. Case. 1,642,337; Sept. 18.

Lifting device. G. W. Griffith, 1,618,293; Feb. C.

Lifting device, J. S. Walch. 1,628,084; May 10.

Lifting device of the covers. D. H. Chason. 1,622,307;

Mar. 29.

Lifting fork. W. W. Wallace. Lifting fork. W. W. Wallace. 1,651,791; Dec. 6. Lifting jack. I. E. Dearsley. 1,621,314; Mar. 15. Lifting jack. A. B. and A. H. Fee Hern. 1,652,821; Lifting jack. Lifting jack. Dec. 13. Dec. 13.
Lifting Jack. F. L. Gormley. 1,615,268; Jan. 25.
Lifting Jack. C. G. Harris. 1,653,276; Dec. 20.
Lifting Jack. A. C. Hopkins. 1,663,276; Dec. 20.
Lifting Jack. I. V. K. Hott. 1,653,179; Dec. 20.
Lifting Jack. I. V. K. Hott. 1,653,179; Dec. 20.
Lifting Jack. I. V. K. Hott. 1,653,179; Dec. 20.
Lifting Jack. J. D. Hoson. 1,624,106; Apr. 12.
Lifting Jack. A. S. Loreno. 1,624,106; Apr. 12.
Lifting Jack. L. D. Nilson. 1,613,304; Mar. 1.
Lifting Jack. L. D. Nilson. 1,613,304; Mar. 1.
Lifting Jack. L. D. Nilson. 1,627,526; May 3.
Lifting Jack. L. D. Nilson. 1,627,526; May 3.
Lifting Jack. A. Reeves. Rei6,806; Dec. 6.
Lifting Jack. W. G. Ritchie. 1,616,550; Feb. 8.
Lifting Jack. W. G. Ritchie. 1,616,550; Feb. 8.
Lifting Jack. B. W. G. Ritchie. 1,616,4579; Jan. 18.
Lifting Jack. B. W. G. Rivyman. 1,614,679; Jan. 18.
Lifting Jack. B. W. G. Rivyman. 1,614,679; Jan. 18.
Lifting Jack. B. W. G. Rivyman. 1,614,679; Jan. 18.
Lifting Jack. B. W. G. Rivyman. 1,627,7656; May 10.
Lifting mechanism. B. M. Cole. 1,627,7656; May 10.
Lifting mechanism. W. J. Couway. 1,649,574; Nov. 15.

Lifting mechanism, Organized. R. L. Ramsey. 1,625,743;
Apr. 19.
Lifting or hoisting, Grab for. E. P. Jones and J. H.
Middleton. 1,652,013; Dec. 6.
Ligature-dispensing cap. A. D. Siewert. 1,614,260;
Jan. 11.
Light: See.
Light: See.
Automobile light.
Automobile light.
Automobile side light.
Battery light.
Combination light.
Combination light.
Dentil light.
Dome light.
Dome light.
Light: Vehicle light.
Electric light.
Light: Vehicle light.
Light: Vehicle light.
Light: Vehicle light.
Light: Vehicle light.
Light: Light: Vehicle light.
Light: Light: Vehicle light.
Light: Ligh

Electric light.

Light. F. L. Bamford. 1,652,192; Dec. 13.

Light. F. P. Drohan. 1,652,187; Mar. 22.

Light accelerator or switch. A. M. Kelso. 1,636,567;

July 19.

Light and cigar lighter, Combined trouble. H. C.

Light and control therefor. E. P. Hannig. 1,641,167;

Light and music, Associating. M. H. Greenewalt, Light and music, Associating. M. H. Greenewalt, Light aperture and making the same, Narrow. J. T. Tschopp, 1,618,117; Feb. 16. Light aperture, Narrow. C. A. Hoxie, 1,646,249; Oct. 18. Light attachment, Kromayer. F. G. Vernon, 1,616,722; Light beach, Dome. A. L. Knapp. Des. 72,200.

Feb. 8. Light bezel, Dome-. A. L. Knapp. Des. 73,383; Aug. 30. Light bracket fixture, Single electric. C. B. Rogers. Des. 72,529; Apr. 26. Light bracket fixture, Twin electric. C. B. Rogers. Des. 72,529; Apr. 26. Light control. W. H. Williams. 1,628,567; May 10. Light control switch. H. R. Davies. 1,618,816; Feb. 22. Light-control system. E. W. Archer. 1,627,474; May 12. Light-control system. E. W. Archer. 1,627,474; May 12. Light-control system. E. W. Archer. 1,627,474; May 13. Light deflector, Automobile. M. H. Kern. 1,628,152;

Light deflector, Automobile. M. H. Scholler, Mar. S. Light deflector, Automobile. M. H. Scholler, Mar. S. Airo, Des. 72,125; Mar. S. Light facture, Electric. W. P. Crockett. 1,629,613; May 24. Light facture, Electric. C. W. Logan, Des. 71,983; Light facture, Electric. C. W. Logan, Des. 71,983;

Feb. 8.

Light farture, Electric. J. Markel. 1,655,810; Dec. 27.

Light fartures, Arm for electric. C. W. Logan. Des. 73,410; Sept. 6.

Light fartures, Wall plate for electric. C. W. Logan. Des. 736,529; Sept. 27.

Light fartures, Wall plate for electric. F. Yokel. Des. 73,418; Sept. 6.

Light globe, Electric. J. C. Smith. Des. 71,933; Jan. 25.

Light-globe protector. L. Bennett. 1,636,980; July 26.

Light-holding means, Addustable. D. D. Gordon and W. Lindsay. 1,045,027 of Sept. 1.

Light-modulating device. H. Vogt, J. Engl, and J. Masselle. 1,650,166; Nov. 22.

Light-operated controlling apparatus. G. V. Karlson. 1,641,170; Sept. 6.

Light play, Automobile. F. D. Sbaffer. 1,641,870; Sept. 6.

Light play, Automobile. F. D. Sbaffer. 1,641,870; Sept. 6.

Light play, Automobile. F. D. Sbaffer. 1,641,870; Sept. 6.

Sept. 6. Light plug, Marker. A. E. Volgt. 1,651,489; Dec. 6. Light-projecting apparatus. W. A. Pennow and R. S. Haynes. 1,615,552; Jan. 25. Light-projecting apparatus. A. F. Pieper. 1,646,557; Oct. 25. Light-projecting device, H. R. Zimmerman. 1,633,838; June 28.

Apr. 19.
Light-reflecting means. C. B. Roebken.
Mar. 15.

Mar. 15.
Light reflector. A. S. Crandall. 1,621,312; Mar, 15.
Light reflector. Hithopone, Producing. J. E. Booge.
1,617,311; Feb. S.
Light shade or similar article. F. W. Stewart. Des.
72,457; Apr. 12.
Light shade or similar article. S. D. Wilson. Des.
72,252; June 21. Field. 1,638,825; Aug. 9.
Light signal. O. S. Hobson. 1,644,834; Oct. 11.
Light support. H. J. Bosworth. 1,644,231; Oct. 4.
Light support. E. J. Jakubiak. 1,643,455; Sept. 27.
Light swife, Stair-controlled electric. H. E. Billerbeck.
1,613,075; Jan. 4.
Light system. Reserve. G. W. Ziska. 1,648,371; Nov. 8.

Light system, Reserve. G. W. Ziska. 1,648,571; Nov. 8. Light treatment of tubes and cavities in the body, Device for. G. Loeck. 1,648,719; Sept. 27.

Light variations into electrical currents, Device for conversion of. A. Poulsen and A. C. G. Peterson. 1,650,092; Nov. 22.
Lighter. C. E. McManaman. 1,621,373; Mar. 15.
Lighter, Electric cigar. J. R. O'Nell. 1,617,344; Feb. 15.
Lighter, Electric cigarette. S. Wagner. 1,653,751; Dec. 27.

Dec. 27. Lighter for cigars and the like. R. O. Hammond. 1,620,548; Mar. 8. Lighter, Heater. F. A. Gauger and R. W. Johnson. 1,652,524; Dec. 13. Lighting and ignition apparatus. J. H. Hunt and J. T. Fitzsimmons. 1,641,434; Sept. 6. Hunt 1,622,207. Lighter, Portable. W. A. Guhman. 1,621,534; Mar. 22, Lighting and ignition apparatus. J. H. Hunt and J. T. Fitzsimmons. 1,641,434; Sept. 6. Lighting and ignition magneto. J. H. Hunt. 1,638,307; Aug. 9.

Lighting and ignition system. J. H. Hunt. 1,641,433; Lighting and ignition switch. E. A. Bohlman. 1,618,802; Feb. 22.

Reb. 22. Lighting and ignition switch, Combined. H. A. Douglas. 1,622,706-7; Mar. 29. Lighting apparatus. S. F. Arbuckle. 1,622,938; Mar. 29. Lighting apparatus. L. X. Champeau. 1,652,347; ting

Lighting apparatus. F. K. Champeau. 1,652,347; Sept. 13. Lebc. 3. Lebc. 13. Lebc. 13.

Apr. 12.
Lighting fixture.
Lighting fixture.
Lighting fixture. H. Aglow. Des. 72,055; Feb. 22.
F. A. Bakula. Des. 73,887-8; Nov. 22.
J. M. Barthoviak. 164,591; Jan. 18.
L. C. Doane. 1,654,182; Dec. 27.
A. Dyorak. 1,619,061; Mar. 1.
A. Dyorak. 1,619,061; Mar. 1.
A. Dyorak. 1,629,489; May 24.
S. Edelman. Des. 7,1828; Jan. 11.
H. A. Framburg. 1,647,288; Nov. 1.
19. M. Graves and E. R. DOllve. Lighting fixture, Lighting fixture. Lighting fixture. Lighting fixture. Lighting fixture. Lighting fixture. Lighting fixture. Lighting fixture.

Lighting fixture.

1,636,414; July
Lighting fixture.
Lighting fixture.
Lighting fixture.

E. F. Guth. Des. 73.518; Sept E. F. Guth. Des. 73.975; Nov. 2 E. F. Guth. 1,620,963; Mar. 15. H. E. Kaden. Des. 72,155; Mar. W. R. Kahns and K. Keller. 1,639 Sept. 27. Lighting fixture. Lighting fixture. Aug. 16.

M. Klein. Des. 72.839: June 14. M. Klein. Des. 72.843: June 14. M. Klein. Des. 72.854-5; June 14. N. Lipsky. Des. 73.002: July 5. J. S. Moore. Des. 72.009: June 21. T. J. Nelson. Des. 73.235; Aug. 9. A. J. D. Ohm. Des. 73,235; Aug. 9. Lighting fixture. Lighting fixture. Lighting fixture. Lighting fixture. Lighting fixture. Lighting fixture.

Lighting fixture, Lighting fixture, 1,627,461; May Lighting fixture. Lighting fixture. J. K. Riddle. 1,625,626; Apr. 19. G. P. Robinson and W. T. Blackwell.

Jegoting fixture. G. P. Robinson and W. T. Blackwell.

1,627,601; May B. Sampelson. 1,615,943; Jan. 18. Lichting fixture. B. T. Samuelson. 1,645,943; Jan. 18. Lichting fixture. R. W. Schweiker. 1,642,429; Sept. 18. Lichting fixture. R. W. Schweiker. 1,642,429; Nov. 15. Lichting fixture. E. O. Schweiter. 1,643,22; Nov. 15. Lichting fixture. E. O. Schweiter. 1,633,561; July 5. Lichting fixture. T. Shapiro. 1,633,561; July 5. Lichting fixture. T. Shapiro. Des. 73,270; July 5. Lichting fixture. T. Shapiro. Des. 73,270; July 5. Lichting fixture. H. Shardlow. Des. 73,270; July 5. Lichting fixture. H. Shardlow. Des. 73,272; Nov. 15. Lichting fixture. H. Shardlow. Des. 73,872; Nov. 15. Lichting fixture. F. Wagner. Des. 74,129; Dec. 20. Lichting fixture. F. Wagner. Des. 74,129; Dec. 20. Lichting fixture. F. Wagner. Des. 74,129; Dec. 20. Lichting fixture. J. Williamson. 1,647,946–7; Nov. 1. Lichting fixture. J. Williamson. 1,647,946–7; Nov. 1. Lichting fixture. J. Williamson. 1,647,946–7; Nov. 1. Lichting fixture. H. Wolter. Des. 73,512; Sept. 20. Lichting fixture. H. H. Wolter. Des. 73,512; Sept. 20. Lichting fixture. H. H. Wolter. Des. 72,535; Aug. 30. Lichting fixture. H. H. Wolter. Des. 72,535; Aug. 30. Lichting fixture. H. H. Wolter. Des. 72,535; Aug. 30. Lichting fixture. J. Zweig. Des. 72,535; Aug. 30. P. Lichting-fixture backplate. H. Aglow. Des. 72,654; Apr. 12. Lichting-fixture backplate. H. Aglow. Des. 72,654; Apr. 12. Lichting-fixture backplate. H. Aglow. Des. 72,654; Apr. 120. Lichting-fixture backplate. H. Aglow. Des. 72,653; Apr. 30. Lichting-fixture backplate. H. Aglow. Des. 72,654; Apr. 10. Lichting-fixture backplate. H. Aglow. Des. 72,654; Apr. 10

Lighting-fixture backplate. H. Aglow. Des. 72,078; Jan. 11. Jan, 11.
Lighting-fixture backplate. L. A. Crumley. Des. 72,354;
Apr. 5.

Apr. 5. Lighting-fixture backplate. G. Rabinowitz. Des. 72,238; Mar. 15. Lighting-fixture backplate. A. P. Seidell. Des. 72,727-8; May 24.

Lighting-fixture backplate or analogous article. J. Horo-witz. Des. 73,569; Oct. 4.
Lighting-fixture backplate or analogous article. I. Levy.
Lighting-fixture banding, Gothic-effect. H. R. Holdeman.
Des. 73,913; Nov. 2.
Lighting-fixture body. M. Schlepp. Des. 74,027; Dec. 6.
Lighting-fixture bracket. P. 1. Ansorage. Des. 71,819;
Mar. 1.
Lighting-fixture bracket. R. S. Bardwell. Des. 73,156; Lighting-fixture bracket. H. Bohl. Des. 72,057; Feb. 22. Lighting-fixture bracket. H. Bohl. Des. 72,057; Feb. 22. Lighting-fixture bracket. H. Bohl. Des. 72,084; Mar. 1. Lighting-fixture bracket. P. Cricchio. Des. 71,056; Feb. 8. Lighting-fixture bracket. L. A. Crumley. Des. 72,350; Apr. 5. Lighting-fixture bracket. L. A. Crumley. Des. 72,352; Apr. 5. Lighting-fixture bracket. H. Finch. Des. 72.824: Lighting-fixture bracket. H. Shardlow. Des. 72.456: Lighting fixture bracket. H. Shardlow. Des. 73,674; Lighting-fixture bracket. H. Shardlow. Des. 74 156 : Dec. 27.

Lighting-fature bracket or article of similar nature.
T. J. Petersen. Des. 72,110; Mar. 1.

Lighting-fature bracket or article of similar nature.

Lighting-fature bracket or article of similar nature.

Lighting-fature bracket or article of similar nature.

B. Villartc. Des. 72,741; May 24.

Lighting-fature canopy. J. Knierlem. Des. 72,018; Feb. 10.

Lighting-fature canopy M. Schlepp. Des. 73,390; Lighting-fature canopy or analogous article. J. F. Hurd. Aug. 30.
Lighting-faxture canopy or analogous article.
Des. 73,037; July 12.
Lighting faxture, Ceiling. A. Krause. I
Dec. 13.
Lighting faxture. Christmas decorative. H.
Des. 72,937-30; June 25.
Lighting faxture, Electric. J. F. Hurd. Des. 74,058; H. M. R. Dam. T. F. Bennett. 1,643,940: Oct. 4. Lighting f June 21 fixture, Electric -. G. A. Boomer. 1,633,309; Lighting fixture, Electric-. A. Cooper. Des. 72,510; Apr. 26. Lighting fixture, Electric-, H. Friedman, Des. 71,867-9; Jan. 18. Lighting fixture, Electric-. M. Levitan. Lighting i fixture, Electric-. E. C. White. Lighting fixture, Electric. b. C. Handler, Mar. 29.
Lighting fixture for ceilings, Electric. M. Levitan. Des. 71,805; Jun. 4.
Lighting-fixture hust or similar article. A. P. Seidell.
Lighting-fixture foop or analogous article. J. F. Hurd.
Des. 73,034; July 12.
Lighting fixture or article of similar nature. G. E. Villaret. Des. 73,723; Oct. 25.
Lighting fixture or similar article, Decorative metal panel for an electric. G. E. McFadden. Des. 73,857;
Nav. 15. latet. Des. 73,725; UCt. 20.
Lighting fixture or similar article, Decorative metal Nov. 15.
Lighting fixture or similar article, Fixture body for. G. B. Villaret. Des. 72,646; May 10.
Lighting fixture or similar article, Fixture body for. G. B. Villaret. Des. 72,646; May 10.
Lighting fixture or similar article, Wall bracket back for an electric. G. E. McFadden. Des. 73,858; Nov. 15.
Lighting fixture or the like, Arm for. M. Peinlich. Des. 72,501; June 71.
Lighting fixture or the like, Arm for a. M. Peinlich. Des. 72,501; June 72.
Lighting fixture or the like, Arm for a. M. Peinlich. Des. 73,312; June 12.
Lighting fixture or the like, Arm for a. M. Peinlich. Des. 73,434; Sept. 13.
Lighting fixture or the like acceptance of the lighting fixture or the lighting fixture or the like acceptance of the lighting fixture panel, Italian-effect. H. R. Holdeman. Des. 73,82; Jan. 12.
Lighting fixture panel, Italian-effect. H. R. Holdeman. Des. 71,832; Jan. 12.
Lighting fixture panel, Spanish-effect. H. R. Holdeman. Lighting fixture panel, Spanish-effect. H. R. Holdeman. Lighting fixture part. J. Knieriem. Des. 71,981; Feb. 8.
Lighting fixture part. J. Knieriem. Des. 72,308; Mar. 29.
Lighting fixture part. J. Knieriem. Des. 73,981; Feb. 8.
Lighting fixture part or analogous article. J. Novin. Lighting fixture part or analogous article. J. Novin. July 12.
Lighting fixture part or analogous article. J. Novin. July 12.
Lighting fixture part or analogous article. J. Novin. July 12.
Lighting fixture part or analogous article. J. Novin. July 12.
Lighting fixture part or analogous article. J. R. R. July 12.
Lighting fixture part or analogous article. J. Novin. July 12. Lighting-fixture plate. J. Knieriem. Des. 73,040-2; Lighting-fixture plate. A. P. Seidell. Des. 72,454; Apr. 12. Lighting-fixture plate. Feb. 15. F. H. Trimble. Des. 72,042;

Lighting-fixture plate, Italian effect. H. R. Holdeman.
Des. 73,436; Sept. 13.
Lighting-fixture ring. G. E. Villaret. Des. 71,888;
Jan. 18.
Lighting-fixture ring and support, Combined. H. H.
Wolter. Des. 73,632; Oct. 1.
Lighting-fixture ring, Italian-effect. H. R. Holdeman.
Lighting-fixture rosette. M. Schlepp. Des. 73,343;
Aug. 23. Aug. 23.
Lighting-faxture shield, Italian-effect. H. R. Holdeman.
73.520-1; Sept. 27.
Lighting faxture, Show-case. R. B. Benjamin. 1,639,127;
Aug. 16. Lighting fixture, Side-wall. R. W. Schweiker. Des. 12,684; May 17.
Lighting fixture, Side-wall. R. W. Schweiker. Des. 72,684; May 17.
Lighting fixture, Spreader for a, J. A. Boehringer, Des. 72,755; May 31.
Lighting-fixture strap. M. Brown, Des. 72,471; Apr. 19.
Lighting-fixture strap. L. A. Crumley, Des. 72,353; Apr. 5. Lighting-fixture strap. L. A. Crumley. Ligating-ixture strap. L. A. Crumiey. Des. 72,368; Apr. 5.
Lighting-fixture strap. M. Jonick. Des. 72,318; Mar. 29.
Lighting-fixture strap or analogous article. M. Prinitch.
Des. 73,508; Sept. 20.
Lighting-fixture support. E. Larson. Des. 73,262;
Aug. 16. Lighting-fixture tassel or analogous article.
Des. 73,035; July 12.
Lighting fixture, Wall. A. Krause. De Des. Lighting Des. 74.062-3: Lighting fixture, Wall. Jan. 18. E. J. Mayberg. Lighting fixture, Wall-bracket. M. Baum. Des. 73,819-20; Nov. 15. Nov. 15.
Lighting-fixture wall bracket.
Dec. 20.
Lighting-fixture wall bracket. T. Dahl. Des. 74,100; fixture wall bracket. M. Jonick. Des. 72,711; May 24 May 24. Lighting-fixture wall bracket back. R. S. Aspinwall. Des. 71,820; Jan. 11. Lighting fixture. Wall bracket for a. S. Airo. Des. Lighting fixtures. Wall bracket for a. S. Airo. Des. Lighting fixtures. H. D'Oller, Jr. 1,613,025; Jan. 4. Lighting fixtures, Adapter for. G. E. Villaret. Des. 73,589; Oct. 4. Lighting fixtures, Anchoring means for. W. A. Harvey. 1,613,169; Jan. 4. Lighting fixtures, Arm for. L. A. Crumley. Des. Lighting fixtures, Arm for. M. Klein. Des. 72,833; June 14. 12:701; May 31. Lighting fixtures, Arm for. M. Klein. Des. 72,833; Lighting fixtures, Arm for. M. Klein. Des. 72,844; June 14. Lighting fixtures, Arm for. D. E. Lindsay. Des. 73,934; Nov. 22. Lighting fixtures, Attaching bracket for. R. W. Schwel-ker. 1,632,510; June 14. Lighting fixtures, Backplate for, J. F. Hurd. Des. Lighting fixtures, Ati ker. 1,632,510; Jt Lighting fixtures: B 10,036; July 12. Lighting fixtures, B 72,463; Apr. 12. Lighting fixtures, B 72,461; Apr. 12. Lighting fixtures, B 73,732; Oct. 25. Lighting fixtures, B 73,732; Oct. 25. Lighting fixtures, B 73,034–5; July 19. Lighting fixtures, B Backplate for. A. P. Seidell. Des. Backplate for. H. H. Wolter. Des. Backplate for. H. H. Wolter. Des. Banding for. W. W. Kantack. Des 13,084-5; July 1 Lighting fixtures, 73,454; Sept. 13. Lighting fixtures, Guth. 1,630,004; Bobeche for. G. E. Villaret. Des. Bowl-supporting means for. Guth. 1,630,004; Lighting fixtures, B 73,831; Nov. 15. Lighting fixtures, I Des. 72,014; Feb. Lighting fixtures, I 72,836; June 14. Lighting fixtures, I 72,838; June 14. Bracket back for. E. F. Guth. Bracket back for. L. J. Horowitz. Lightling fixtures, Bracket back for, M. Klein, 72,836; June 14.
Liebtling fixtures, Bracket back for, M. Klein, 72,835; June 14.
Lightling fixtures, Bracket back for, M. Klein, 72,841-2; June 14.
Lightling fixtures, Bracket back for, M. Klein, 72,847; June 14.
Lightling fixtures, Bracket back for, M. Klein, 72,849; June 18.
Lightling fixtures, Bracket for, D. E. Lindsay, 72,849; June 18.
Lightling fixtures, Bracket back for, G. E. Villaret, 73,935-6; Nov. 22.
Lightling fixtures, Bracket back for, G. E. Villaret, 73,935-6; Nov. 22.
Lightling fixtures, Bracket back for, G. E. Villaret, 73,935-6; June 21.
Lightling fixtures, Bracket back for, G. E. Villaret, 73,935-6; Life fixed fixed fixed for, G. E. Villaret, Lightling fixtures, Bracket back for, L. R. Wel Des, 73,545; Sept. 27.
Lightling fixtures, Bracket back for, H. Abrams, 73,633; Oct. 18. Bracket back for. M. Klein. Des. Deg Des. Des. Des. Des. G. E. Villaret. L. R. Wellman.

Lighting fixtures, Canopy for. M. Klein. Des. 72,834; June 14. Lighting fixtures, Canopy for. G. E. Villaret. Des. 12,804; Lighting fixtures, Canopy for electric. J. A. Boehringer. Des. 72,463; Sept. 13.
Lighting fixtures, Canopy for electric. J. A. Boehringer. Des. 72,783; June 7.
Lighting fixtures, Celling plate for. J. A. Boehringer. Lighting fixtures, Column for. H. Abrams. Des. 73,018-21; July 12.
Lighting fixtures, Finial for. J. A. Boehringer. Des. 72,976-7; July 5.
Lighting fixtures, Globe for. J. L. Jaffe. Des. 73,918; Lighting fixtures, Globe for. W. Klehr. Des. 71,802; Lighting fixtures, Globe for. W. Klehr. Des. 71,802; Jan. 4. Lighting fixtures, Globe for. R. V. Owen. Des. 73,538; Sept. 27.
Lighting fixtures, Globe for. R. V. Owen. Des. 73,862-4;
Nov. 15.
Lighting fixtures, Loop for. J. A. Boehringer. Des.
Lighting fixtures, Loop for. J. Knieriem. Des. 71,982;
Feb. 8.
Lighting fixtures or similar articles, Adapter for. G. E.
Villaret. Des. 72,645; May 10,101clss, Arm for. G. E.
Lighting fixtures or similar articles, Arm for. G. E.
Lighting fixtures or similar articles, Arm for. C. G.
Lighting fixtures or similar articles, Backplate for bracket.
G. E. Villaret. Des. 72,535; Apr. 26.
Lighting fixtures or similar articles, Backplate for bracket.
G. E. Villaret. Des. 72,534; Apr. 26.
J. A. Boehringer. Des. 72,573; July 5.
Lighting fixtures or similar articles, Canopy ring for.
G. E. Villaret. Des. 72,647; May 10.
Lighting fixtures or similar articles, Loop for. L. E.
Lighting fixtures or similar articles, Loop for. L. E.
Lighting fixtures or similar articles, Shield for.
Lighting fixtures or similar articles, Shield for. J. A.
Boehringer. Des. 73,526-9; Nov. 22.
Lighting fixtures or similar articles, Strap for. J. A.
Boehringer. Des. 73,480; Sept. 20.
Lighting fixtures or similar articles, Strap for. J. A.
Boehringer. Des. 73,480; Sept. 20.
Lighting fixtures or similar articles, Des. Des. 73,992;
Dichelling fixtures, Pedestal for. O. B. Bach. Des. 73,992;
Lighting fixtures, Pedestal for. J. A. Boehringer. Des. 73,992;
Lighting fixtures, Pedestal for. J. A. Boehringer. Des. Lighting fixtures, Globe for. R. V. Owen. Des. 73,862-4; Nov. 15. Dec. 6. Lighting fixtures, Pendant for, J. A. Boehringer, Des. 72,758; May 31. Lighting fixtures, Plate for, N. I. Berger, Des. 73,823; Nov. 15. Lighting fixtures, Plate for. N. I. Berger. Des. 73,823; Nov. 15.
Lighting fixtures, Plate for. F. S. Crowell. Des. 72,002; Feb. 15.
Lighting fixtures, Plate for. W. W. Kantack. Des. 71,979; Feb. 8.
Lighting fixtures, Plate for. M. Klein. Des. 72,845; June 14. June 14.
Lighting fixtures, Plate for, L. R. Wellman. Des. Lighting fixtures, Scroll arm for electric. M. Levitan. Des. 71.304; Jan. 4.
Lighting fixtures, Spindle for. W. Block. Des. 72,079; Mar. 1. Des. 11,607. L. Lighting fixtures, Spindle for. W. W. W. Kantack. Des. Lighting fixtures, Spindle for. L. Vivirito. Des. 71,890; Jan. 18. Mathing fixtures, Spindle for. L. Vivirito. Des. 71,800;
Jan. 18.
Lighting fixtures, Spindle for. L. Vivirito. Des. 71,802;
Jan. 18.
Lighting fixtures, Strap for. M. Baum. Des. 73,822;
Lighting fixtures, Suspending device for. P. M. Hotchkin. 1,303,0745; May 31.
Lighting fixtures, Wall bracket for. H. H. Wolter. Des.
72,460; Apr. 12.
Lighting fixtures, Wall bracket for. H. H. Wolter. Des.
Lighting fixtures, Wall bracket for. W. W. Kantack. Des.
71,978; Feb. 8.
Lighting means, G. H. Hamilton. 1,613,709; Jan. 11.
Lighting outfit, Decorative. V. M. Montsinger. 1,637,046;
July 26.
Lighting post. W. Underwood. Des. 73,982; Nov. 22.
W. Underwood. Des. 73,962; Nov. 22.
W. Underwood. Des. 73,962; Nov. 22. July 26. Lighting post. W. Underwood. Des. 73,348; Aug. 23. Lighting post. W. Underwood. Des. 73,952; Nov. 22. Lighting post, Street. W. Underwood. Des. 71,856; Jan. 1. Lighting tost, Street. W Underwood. Des. 71,856; 3an. 11.
Lighting posts, Capital for. W. Underwood. Des. 73,719; Oct. 25.
Lighting, Process and apparatus for. N. Sulzberger. 1,836,970; July 26.
Lighting standard. W. Underwood. Des. 71,855; Jan. 11.
Lighting standard apital. H. Barkschat. Des. 72,588; May 10.
Lighting switch, Time-controlled. B. A. Taromino. 1,638,604; Aug. 9.
Lighting system and apparatus therefor, Highway. R. de la Lama. 1,635,611; July 12.
Lighting system and switch mechanism therefor, Automobile. B. Lurkhart and W. L. Bayne. 1,620,187; Mar. 8.
Lighting system. Exit. R. T. Williams. 1,650,676;

Lighting system, Exit. R. T. Williams. 1,650,676; Nov. 29.

Lighting system, Miniature-stage-. G. L. Hall. 1.621,248; Mar. 15. Lighting system, Street-. W. Van Alen. 1,646,045; Oct. 18. Oct. 18.

Lighting-system switch. W. W. Woodroof. 1,636,347;
July 19.

Lighting the landing place from aerial craft, Apparatus
for, M. Künzer. 1,621,421; Mar. 15.

Lighting unit. L. C. Donne. 1,612,366; Jan. 4.

Lighting unit. L. C. A. B. Halvorson, fr. 1,643,632; June 7.

Lighting unit. C. A. B. Halvorson, fr. 1,640,448; Lighting Aug. 30 Lighting unit, Flood. C. A. B. Halvorson, jr. 1,614,122; Jan. 11. Jan. 11. Lighting unit, Highway. R. B. Benjamin. 1,622,272; Mar. 29. Lighting wall fixture, Electric. M. Levitan. Des. 72,375; Apr. 5. Lighting wall fixture or similar article, Electric. G. E. McFadden. Des. 78,859; Nov. 15.
Lights, System of guide. J. H. Hammond, jr. 1,621,878; Mar. 22. Lights, System of guide. J. H. Hammond, fr. 1,621,878; Mar. 22.
Lightning arrester. A. L. Atherton. 1,651,360; Dec. 6.
Lightning arrester. L. W. Evans. 1,651,876; Dec. 6.
Lightning arrester. L. R. Golladay and I. R. Smith. 1,642,249; Sept. 13.
Lightning arrester connection. A. L. Atherton. 1,633,544;
Lightning arrester connection. A. L. Atherton. 1,633,544; Lightning-arrester connection. A. L. Atherton. 1,636,544; July 19.
Lightning-arrester system. H. Heese. 1,633,098; June 21.
Lightning arresters, Casing for. L. R. Golladay. 1,632,990; Dec. 18.
Lightning arresters, Indicating device for. L. R. Golladay. 1,642,239; Sept. 13.
Lightning protection, System of. E. C. van Diest and F. Gilpin. 1,617,691; Feb. 15.
Lightning rod. A. G. Hoovens. 1,616,801; Feb. 8.
Lightning-rod connecter. B. C. Burkett. 1,626,180; Apr. 28. Lightning rod. A. G. Hoovens. 1,618,801; Feb. S. Lightning rod connecter. B. C. Burkett. 1,622,180; Lightning-rod conpecter. B. C. Burkett. 1,622,180; Lightning-rod support. A. G. Hoovens. 1,649,647; Nov. 15. Limb. Artificial. G. H. Shrodes. 1,617,925-6; Feb. 15. Limb. Artificial. H. M. Wiltmeyr. 1,649,773; Nov. 15. Schmidt. 1,622,890; Mar. 29. Limbs, Joint for cibows and knees of artificial. C. G. Hoare. 1,644,833; Jot. 11. Lime and making the same, insect. A. Biddle. 1,624,089; Apr. 22. Limbs. 2 (1,642,432); Jot. 11. Lime and making the same, insect. A. Biddle. 1,624,089; Limbs. 1,644,831; Jot. 11. Lime and making the same, insect. A. Biddle. 1,624,089; Lime. Hydration of. H. Dittlinger. 1,640,602; Aug. 30. Limekiln and method of burning lime. A. E. Truesdell. 1,627,215; May. 3. Lime. 1,627,215; May. 3. Lime. 1,627,215; May. 3. Lime. 1,627,215; May. 3. Lime. 1,627,215; Jan. 4. Lime. Producing hydrated. W. E. Carson. 1,613,341; Jan. 4. Lime. Stording product and making the same. C. J. Herrly. Limity 3, m. gauce, Adjustable-, E. H. Aldeborgh, Limits, 643; July 19, Limits switch, C. H. Beckwith, 1,646,080; Oct. 18, Limit switch, W. D. Smith, 1,641,647; Sept. 6. Limiting device, Voltage-, G. T. Lorance, 1,654,085; Dec. 27. Limentary (evice, voltage, G. T. Lorance, 1,654,055). There measuring device, M. King, jr., 1,616,499; Feb., 8. Line, Artificial. W. Deutschmann. 1,647,985; Nov. 8. Line attachment. F. B. Carland. 1,637,174; July 26. Line-casting machine. W. Buswell. 1,651,993; Dec. 6. Line-casting machine. L. T. Remas. 1,632,350; June 14. Line-casting machines. Assembler-silde adjustment for. T. S. Homans. 1,648,847; Nov. 8. Line-chalking device. W. S. Myers. 1,632,711; June 14. Line clamp. V. De Moc. 1,632,235; May 10. 70; Mar. 22. Line cutter. A. W. Posey T. 1,649,184; Nov. 15. Line cutter. B. A. Wheaton. 1,614,644; Feb. 1. Line drive and clutch control. II. Els. 1,643,240; Sept. 20. Sept. 20. Line guide, Automatic. F. E. Comstock. 1,614,104; Jan. 11. Line holder. W. F. Polson. 1,634,436; July 5. Line reel and pin. W. G. Elder. 1,630,475; May 31. Line-spacing mechanism. H. A. Foothorap. 1,638,191; Aug. 9. Line-splicing device. P. H. Lettré. 1,622,324; Mar. 29. Line-spooler. A. J. Graham and L. O. Tekell. 1,624,232; Apr. 12.
Line tightener, M. A. Alfano and S. Bohenek. 1,646.336; Oct. 18.
Line trip or slug gulde. H. H. Coghill. 1,816.888; Feb. 8. Feb. 8. Lined pipe. B. Talbot. 1.644.861; Oct. 4. Liner. A. E. Scheetz. 1.630.138; May 24. Liner. D. Thatcher. 1.614.326; Jan. 11. Liner for metal caps. T. L. Taliaferro. 1.618.490; Feb. 22. Liner puller. R. W. Donowho and H. M. Ballweber. 1,640.489; Aug. 30. Liner puller. R. F. Maxwell. 1,650,023; Nov. 22.
Liner safety, Automatic. B. A. Mills. 1,642,500;
Sept. 13.
Liner, Track. C. A. Disbrow. 1,642,334; Sept. 13.
Liner, Track. C. A. Disbrow. 1,642,334; Sept. 13.
Liners for metal caps for containers, Forming. T. L. Tanalierro. 16,284 for containers, Forming. T. L. Tanalierro. 16,284 for containers, Forming. T. L. Lining. S. B. Waxman. 1,647,611; Nov. 1.
Lining. S. B. Waxman. 1,647,611; Nov. 1.
Lining and forming same, Friction. T. L. Gatke. 1,622,638; Apr. 26.
Lining brakes and clutches, Machine for. J. B. Hird. 1,632,638; June 21.
Lining brakes and clutches, Machine for. J. B. Hird. 1,635,638; June 21.
Lining material to covers, Apparatus for applying. B. Dewey and T. T. Miller. 1,623,529; Apr. 5.
Lining-trimming machine. C. C. Webster. 1,629,560; May 24.
Lining water courses and lining therefor. H. H. Fisher Lingerle rastening. Gevice. M. E. Micklebrough. 1,635,333; July 12.
Lingerle rastening. Gevice. M. E. Micklebrough. 1,635,333; July 12.
Lingerle clasp. E. M. and M. Pollock. 1,620,228; Mar. 8.
Lingerle clasp. E. M. Fletcher. 1,623,862; May 17.
Lingual bar. J. F. Hoover. 1,615,191; Jan. 18.
Lingual bar. E. H. Pfell. 1,654,469; Dec. 27.
Link bracelet, Expansibe. W. C. Boots. 1,631,946; Thik coupler. G. W. Graser. 1,630,486; May 31.
Link, Detachable. A. H. Beck and E. S. Mix. 1,642,322; Sept. 13.
Link, Detachable. T. C. Black. 1,646,135; Oct. 18.
Link, Detachable. A. H. Beck and E. S. Mix. 1,642,323; Sept. 13.
Link, Detachable. A. G. Constantinesco. 1,642,602; Sept. 13.
Link, Detachab Liner puller. R. F. Maxwell. 1,650,023; Nov. 22. Liner safety, Automatic. B. A. Mills. 1,642,590; Sept. 13. Link, Repair. S. F. Swoope. 1,631,346; June 7. Link, Safety connecting. O. C. Staples. 1,616,766; Link, Safety connecting, U. C. Grapes, Feb. 8.
Link, Tire-chain, C. S. Barrell, 1,644,627; Oct. 4.
Linking device, A. Mirra, 1,642,969; Sept. 20.
Links, Making intermeshing, C. A. Whiting, 1,646,842;
Oct. 25.
Links or similar articles, Machine for making, J. H.
Appleton and F. H. Kriz, 1,641,951; Sept. 13.
Linoleum disintegrator, Sheet-, J. Tamberlin, 1,619,276; Mar. I. Linoleum floor covering and manufacture. C. F. Humphreys and J. C. McCarthy. 1,630,085; May 24.
LDC. Manufacture of A. A. Godfrey. 1,653,270; LDC. 20.
Linoleum or similar hard-surfaced covering. F. Cartwight. Des. 71,824-5; Jan. 11.
Linoleum or similar hard-surfaced floor covering. E. H. Chadwick. Des. 71,902-5; Jan. 25.
Linoleum or similar hard-surfaced floor covering. O. W. Fauser. Des. 73,902-6; Nov. 22.
Linoleum or similar hard-surfaced floor covering. O. W. Houser. Des. 73,902-6; Nov. 22.
Linoleum or similar hard-surfaced floor covering. C. F. Humphreys. Des. 71,795-6; Jan. 4.
Linoxinlike substances, Manufacture of. W. O. Herrmann and H. Deutsch. 1,625,852; Apr. 26.
Lint condenser. F. W. Provost and G. B. Haywood. 1,623,065; May 10.
Lip stick. E. B. Morgan and W. H. Day. 1,631,283; June 7. Lip stick. June 7. June 7.
Lip-stick container. G. H. Wayne. 1,640,386; Aug Lip-stick holder. C. L. Marcus. Des. 72,864; June Lip-stick holder. A. H. Noble. 1,682,764; June 2 Lip-stick holder. A. H. Noble. 1,682,765; June 14. Lip-stick holder. A. H. Noble. 1,648,367-8; Oct. J. Liquid-agitating mechanism. O. W. Greene. 1,613, Jun. 4.
Jun. 4. 1,640,386; Aug. 30. es. 72,864; June 14. 632,764; June 14. Jan. 4.

Liquid and gas mixer. A. W. Morse. 1,629,288; May 17.

Liquid, Apparatus for indicating the level of. O. T. Nelson. 1,613,245; Jan. 4.

Liquid by another, Process of and apparatus for treating one. S. J. Dickey, 1,625,195; Apr. 19.

Liquid conting composition V. M. Wade, A. C. Zimmer-Liquid conditioning and supply system. E. M. Scoville, 1,628,201; May 10.

Liquid containers, Draw-off appliance for. W. M. Moore, 1,618,720; Feb. 22.

Liquid containers, Gasket seal for. E. E. Brainard, 1,622,625; Mar. 29.

1,622,625; Mar. 29.

Liquid-cooling green. L. W. Beebe, 1,619,234; Mar. 1.

Liquid-cooling device. C. E. Olmstead. 1,637,008; July 26.

Liquid-delivery control. J. J. Hawxhurst. 1,647,043; Oct. 25. Liquid-delivery system. J. J. Hawxhurst. 1,618,006; Feb. 15. Liquid delivery system. J. J. Hawknurst. 1,618,008; Feb. 13.
Feb. 13.
Feb. 13.
Feb. 14.
Feb. Liquid-dispensing apparatus. L. E. Baker. 1,622,561; Liquid-dispensing apparatus. L. E. Baker. 1,622,561; Liquid-dispensing apparatus. J. L. E. Baker. 1,622,561; Liquid-dispensing apparatus. L. Corley. 1,641,577; Sept. 6. Liquid-dispensing apparatus. E. Crouse. 1,650,192; Liquid-dispensing apparatus. C. P. Crowell. 1,633,519; June 21. Liquid-dispensing apparatus. Peb. 1. Liquid-dispensing apparatus. J. R. Foster and F. Woodrudt Corporation of the Liquid-dispensing apparatus. M. J. Furlong. 1,651,690;
Liquid-dispensing apparatus. W. T. Hatmaker and E. E.
Elickmeyer. 1,627,898; May 10.
Liquid-dispensing apparatus. W. T. Hatmaker and E. E.
Elickmeyer. 1,637,146; July 26.
Liquid-dispensing apparatus. A. H. Heuermann. 1,628,404;
May 10.
Liquid-dispensing apparatus. J. A. La Rue. 1,654,377;
Liquid-dispensing apparatus. J. A. La Rue. 1,654,377;
Liquid-dispensing apparatus. Liquid-dispensing apparatus. M. J. Furlong. 1,651,690; Liquid-dispensing apparatus. J. A. La Rue. 1,654,377; Dec. 27.
Liquid-dispensing apparatus. C. R. McDonald and A. E. Levens. 1,654,374; Julya. Levens. 1,651,612; Dec. 6.
Liquid-dispensing apparatus. G. W. MacKenzie. 1,613,711; Jan. 11.
Liquid-dispensing apparatus. G. W. MacKenzie. 1,013,714; Feb. 15.
Liquid-dispensing apparatus. G. W. MacKenzie. 1,613,719; July 12.
Liquid-dispensing apparatus. J. L. Patterson. 1,650,151; Nov. 22.
Liquid-dispensing apparatus. L. H. Pietzsch. 1,627,115; Liquid-dispensing apparatus. C. A. Scharffe. 1,622,810; Mar. 28.
Liquid-dispensing apparatus. O. Seklnger. 1,645,546; Liquid-dispensing apparatus. O. Seklnger. 1,645,546; Mar. 29.
Liquid-dispensing apparatus. O. Sekinger. 1,645,545;
Oct. 18.
Liquid-dispensing apparatus. F. Woodruff and G. W.
MacKeinzie. 1,618,621; Feb. 22.
MacKeinzie. 1,618,621; Feb. 22.
Liquid-dispensing device. G. A. Bjorkholtz. 1,629,905;
May 24.
Liquid-dispensing device. G. A. Bjorkholtz. 1,629,905;
May 24.
Liquid-dispensing device. J. E. Freeberg. 1,636,530;
Liquid-dispensing device. A. D. Hutton. 1,634,579;
July 5. July 5.
Liquid-dispensing device. E. H. Mickelson and B. K.
Skonberg, 1,632,614; June 14.
Liquid-dispensing device. C. Niederhauser. 1,622,163; Mar. 22.
Liquid-dispensing machine. H. M. Henderson. 1,653,460; Liquid-dispensing machine. Liquid-dispensing machine. E. J. Lind. 1,654,004; Liquid-dispensing machine, Coin-actuated. A. Middleton. 1,630,203; May 24.
Liquid-dispensing tank. L. S. Henwood. 1,632,289; Liquid-dispensing tank. L. S. Henwood. 1,632,289; June 14. Liquid-displacing apparatus, Suction operated. H. J. Engbrecht. 1,626,435; Apr. 26. Liquid-distributing apparatus. F. Gouvlon. 1,642,302; Sept. 13. Liquid-distributing eystem. Plural. D. S. Morrow. 1,635,381; July 12. Liquid-deed tank, Pulsator-operated. L. H. Wheeler. 1,617,624; Feb. 15. Liquid-feeding apparatus. J. E. Bolling. 1,651,945; Dec. 6. Dec. 6.
Liquid-feeding apparatus. E. A. Rockwell. 1,649,190;
Nov. 15.
Liquid-feeding apparatus for preparing a moist cementitious mixture of mass.
E. Bornhauser and J. E.
Liquid-feeding device. G. W. Leiman. 1,630,751; May 31.
Liquid-feeding device. V. A. Searles. 1,946,069; Oct. 18.
Liquid-feed workers. N. H. Jacovatos. 1,629,821;
May 24.
May 25.
May 26.
May 27.
May 28.
May 28.
May 28.
May 29.
May 21.
May 29.
May 29 Liquid.flow time system.

Aug. 9.

Liquid foods, Feeder for. C. P. Bettenga. 1,640,139;

Aug. 22.

Liquid foods, Feeder for. C. P. Bettenga. 1,640,139;

Liquid forcing apparatus. C. L. Burdick and J. D. Whiteman. 1,624,827; Apr. 12.

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Liquid-level indicator. E. V. Rippingille. 1,630,029; May 24.
Liquid-level indicator. F. E. Ude and G. D. Webster. 1,613,548; Jan. 4.
Liquid-level indicator. F. E. Welman. 1,613,538; Mar. 1.
Liquid-level indicator. F. E. Welman. 1,613,535; Mar. 1.
Liquid-level indicator. F. E. Welman. 1,613,535; Mar. 1.
Liquid-level regulating and controlling apparatus. H. D. Pownall. 1,623,511; Apr. 5.
Liquid levels, Indicator for low. F. G. Folberth and W. M. Folberth. 1,642,548; Sept. 20.
Liquid measuring and dispensing apparatus. L. E. Baker. Liquid-measuring and dispensing apparatus. L. J. Hawkhurst. 1,622,715; Mar. 29.
Liquid-measuring apparatus. T. J. Sturtevant. 1,617,873; Feb. 15.
Liquid-measuring tank. G. W. MacKenzle. 1,631,541; Liquid-measuring tank. G. W. MacKenzle. 1,631,541; Liquid medicaments under pressure action, Applying. L. K. Mobley. 1,614,532; Jan. 18.
Liquid meter. R. S. Bassett. 1,620,151; Mar. 8.
Liquid meter. R. N. Brodle and A. J. Granberg. 1,644,868; Oct. 11. Kent. 1,633,532; June 21.
Liquid meter. A. Monard. 1,623,5489; Apr. 19.
Liquid meter. A. Monard. 1,623,5489; Apr. 19.
Liquid purifier. R. D. Fagan. 1,642,343; Sept. 13.
Liquid-refreshment holder. H. Wanerman. Des. 72,582; May 3.
Liquid-separating device. J. Coleman. 1,624,992; Apr. 12.
Liquid-separating device. J. Coleman. 1,624,992; Apr. 12.
Liquids and gases, Apparatus for separating. K. W. Bartlett. 1,620,750; Mar. 15.
Liquids, Apparatus for aerating. W. Hucks. 1,650,516; Nov. 22.
Liquids, Apparatus for aerating. M. Hucks. 1,650,516; Nov. 22.
Liquids, Apparatus for crystallizing. G. T. Walker. 1,640,513; Jan. 18.
Liquids, Apparatus for measuring and distributing. M. Bouffart. 1,630,539; Apr. 3.
Liquids, Apparatus for measuring and purifying. C. H. Perry. 1,640,249; Aug. 23.
Liquids, Apparatus for measuring and purifying. C. H. Perry. 1,640,249; Aug. 23.
Liquids, Apparatus for mining and delivering. M. Bouffart. 1,630,539; Aug. 21.
Liquids, Apparatus for mining and delivering. R. L. Perry. 1,640,649; Aug. 23.
Liquids, Concentrating. W. B. Sens
                      Liquid from cinematographic films, Removal of superficial.

L. T. Troland and J. M. Andrews. 1,616,642; Feb. 8. Idquid fuel. L. N. Bownan. 1,625,236-7; Apr. 19. Idquid fuel. H. Plauson and P. Schröder. 1,647,471; Nov. 1.

Liquid fuel, Apparatus and burning. E. H. Peabody. 1,628,424; May 10.

Liquid-fuel burner. W. H. Boehm and H. S. Corey. 1,625,133; Dec. 13.

Liquid-fuel burner. J. M. Dial. 1,650,055; Nov. 22.

Liquid-fuel burner. J. L. Donabou. 1,643,062; Sept. 20. 1,640,140; Liquid-fuel burner. R. L. Foster. 1,633,190; Aug. 2.

Liquid-fuel burner. R. L. Foster. 1,633,900; Aug. 2.

Liquid-fuel burner. W. C. Homan. Rel. 6,794; Nov. 22.

Liquid-fuel burner. W. C. Homan. Rel. 6,794; Nov. 22.

Liquid-fuel burner. W. C. Homan. Rel. 6,794; Nov. 22.

Liquid-fuel burner. V. J. Kirchen. 1,640,240; Aug. 2.
                                                                                                                                                                                               i; Dec. 13.
burner. J. M. Dial. 1,650,065; Nov. 22.
burner. J. L. Donahoo. 1,643,062; Sept. 20.
burner. E. S. Drew. 1,633,642; July 19.
burner. B. L. Foster. 1,637,900; Aug. 2.
burner. M. Gaston. 1,613,359; Jan. 11.
burner. W. C. Homan. Rel. 794; Nov. 22.
burner. H. C. Little. 1,633,549; June 21.
burner. W. W. Logan. 1,633,649; June 21.
burner. W. M. Logan. 1,633,649; June 21.
burner. C. W. Mumnery. 1,633,618; Dec. 20.
burner. J. J. H. Pohl. 1,635,634; July 12.
burner. J. J. H. Pohl. 1,635,634; July 22.
burner. E. J. Y. Rutherford. 1,650,391;
Liquid-fuel burner. O. J. Rircue.
Liquid-fuel burner. H. C. Little. 1.683a-2.60; oun-
Liquid-fuel burner. H. C. Little. 1.683a-2.60; oun-
Liquid-fuel burner. J. W. Logan. 1.633.680; oun-
Liquid-fuel burner. C. W. Mulholland. 1.646,703; Oct. 25.
Liquid-fuel burner. C. W. Mummery. 1.653.018; Dec. 20.
Liquid-fuel burner. E. J. Y. Rutherford. 1.650,631; Nov. 22.
Liquid-fuel burner. E. J. Y. Rutherford. 1.650,631; Nov. 22.
Liquid-fuel burner. O. White. 1.624,631; Jan. 11.
Liquid-fuel burner. L. T. Wilcox. 1.614,227; Jan. 11.
Liquid-fuel burner, L. T. Wilcox. 1.614,227; Jan. 11.
Liquid-fuel burner, Electrically-Ignited. J. Good.
1.650,343; Nov. 22.
Liquid-fuel burner, Inclosed. J. Good. 1,650,342;
Liquid-fuel burner, Inclosed. J. Good. 1,650,342;
Liquid-fuel burner, Safety control mechanism for. W.
                      1.650.343; Nov. 22. Inclosed. J. Good. 1,650,342; Nov. 22. Inclosed. J. Good. J. Goo
             1,629,032; May 17.
14quid-fuel-burning apparatus. H. H. Williams.
1,650,560; Nov. 22.
1,650,560; Nov. 22.
1,650,560; Nov. 22.
1,620,560; Nov. 22.
1,620,660; Nov. 23.
1,620,660; Nov. 24.

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Liquids, Concentrator for. W. Vogelbusch. 1,637,431;
Aug. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aug. 2.
Liquids, Container, especially canister, for automobile driving. P. G. F. Schubert. 1,654,144; Dec. 27.
Liquids containing oil or fatty substances and the like, Treatment of. J. Avery. 1,638,977; Aug. 16.
Liquids, Controlling the 1,1438,993 Oct. 4.
Liquids, Controlling the 1,1438,993 Oct. 4.
Liquids, Conversion of hydrocarbon. A. J. Paris, jr. 1,614,993; Jan. 18.
Liquids, Device for distributing. E. L. Larison. 1,638,042; Aug. 9.
Liquids, Device for retailing and measuring. R. Sutter. 1,612,895; Jan. 4.
Liquids, Device or separating and straining. J. Sediva. Liquids, Device or spraying. G. F. Courtois. 1,651,808; Dec. Liquids, Device for spraying. G. F. Courtois. 1,651,808; Dec. Liquids, Device for the atomization and infection of.
                      Mar. 22. Laquid-level gauge. G. F. Palk. 1.630,611; May 31. Liquid-level gauge. J. Fentress. 1,622,503; Mar. 29. Liquid-level gauge. J. Fentress. 1,622,503; Mar. 29. Liquid-level gauge. W. W. Harley L. Liquid-level gauge. Liquid-level gauge. Liquid-level gauge. Liquid-level gauge. Liquid-level gauge. L. A. Mapel. 1,633,673; June 28. Liquid-level gauge. L. A. Mapel. 1,633,673; June 28. Liquid-level gauge. L. A. Mapel. 1,633,673; June 28. Liquid-level gauge. D. H. Reeves. 1,643,469; Sept. 27. Liquid-level gauge. E. Kyder. 1,633,666 Dess' Apr. 12. Liquid-level gauge. A. K. Schanp. Jr. 1,623,855; Apr. 5. Liquid-level gauge. A. K. Schanp. Jr. 1,623,855; Apr. 5. Liquid-level indicator. R. E. Badin. 1,631,909; June 7. Liquid-level indicator. E. Caretta. 1,653,759; Dec. 27. Liquid-level indicator. C. Carson. 1,641,1161 Aug. 30.
                                                              Mar. 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dec. 6.

Liquids. Device for the atomization and injection of. C. J. Ake. 1,622,268; Mar. 29.

Liquids. Distillation or evaporation of. J. L. Major and B. Taylor. 1,614,483; Jan. 18.

Liquids. Feed-regulating apparatus for. W. S. Bowen. 1,651,992; Dec. 6.

Liquids from containers at predetermined conditions of temperature, Automatic means for running off. G. G. Rover. 1,630,307; May 31.

Liquids from metal containers, Decanting. S. W. Lush. 1,401,467 from solids, Process and apparatus for separating. H. C. Behr. 1,650,685; Nov. 29.

Liquids in bottles or containers, Apparatus for heating, cooling, or otherwise treating. A. G. Enock. 1,649,393; Nov. 15.
                                                                                                                                                                                                                                                                                                                                                                                      R. E. Badin. 1,631,909; June 7.
E. Caretta. 1,658,759; Dec. 27.
C. Carson. 1,641,116; Aug. 30.
V. P. Clenr. 1,614,776; Jan. 18.
T. M. Eynon. 1,624,689; Apr. 12.
T. M. Eynon. 1,646,957; Oct. 25.
H. D. Geyer. 1,641,809; Sept. 6.
F. A. Hawlicek. 1,617,110;
                               Liquid-level indicator.
Feb 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nov. 15.
Liquids, Manufacturing of condensed. J. M. McClatchle, 1,680,373; Nov. 22.
Liquids, Method and apparatus for. W. F. Downs, 1,616,079; Feb. 1; and apparatus for spraying. A. Hillord A. Lidvids, Method of and apparatus for spraying. A. Liquids, Method of and apparatus for spraying. N. Hubbard, 1,650,128; Nov. 22.
Liquids noncorrosive, System for rendering. J. F. Musselman and P. West, 1,614,148; Jan. 11.
Liquids, Obtaining solidified granules or pearls for. W. Wachtel. 1,638,669; Aug. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.617,110;
                                                                                                                                                                                                                                        indicator.
                                   Feb. 8.
Liquid-level indicator.
Liquid-level indicator.
Liquid-level indicator.
                                   Feb. 8. Liquid-level Indicator. A. A. Kramer. 1, 623, 122; Apr. 5. Liquid-level Indicator. C. A. Lake. 1, 1633, 113; June 215. Liquid-level Indicator. P. S. Mable. 1, 620, 823; Mar. 15. Liquid-level Indicator. P. S. Mable. 1, 620, 823; Mar. 15. Liquid-level Indicator. L. A. Mapel. 1, 625, 5374; July 12. Liquid-level Indicator. W. M. McRae. 1, 626, 636; May 3. Liquid-level Indicator. W. M. Phelps. 1, 622, 732; May 24.
```

Liquids of different specific gravity, Apparatus for separat-ing. T. Fisher. 1,618,151; Feb. 15. Iquids of different specific gravity, Apparatus for sepa-rating. T. Fisher. 1,641,454; Sept. 6. Liquids. Zank for dispensing. A. A. Kramer. 1,633,642; rating.
Liquids, Tank for dispensing.
June 28.
Liquids, Treating. W. Bvans. 1,620,332-3; Mar. 8.
Liquids, Treating. C. Lourens. 1,634,154; June 28.
Liquids, Washing and mixing. K. Pristerer. 1,613,531;
Jan. 4.
Jan. 4.
Liquids, Washing and mixing. K. Pristerer. 1,613,531;
Jan. 4.
Liquids, Washing and mixing. K. Pristerer. 1,613,631;
Jan. 4.
Liquids, Washing and Liquids, 1,613,642;
Liquids, 1,613,642;
Liquids, 1,614,642;
Liquids, 1,614,642;
Liquids, 1,614,642;
Liquids, 1,620,632,642;
Liquids, 1,620,642;
Liquids, 1,620,642; Liquids, the sing and the single specific properties of the single specific properties and specific properties as the single specific properti Sept. 13.
Lister and planter. W. H. Silver. 1,633,388; June 21.
Literary savings device. R. C. Requa. 1,625,053;
Apr. 19. Lithium carbonate, Preparation of. H. Weidmann. 1,623,518; Apr. 5.
Lithium containing bearing metals. G. Welter. 1,652,077; Lithium containing bearing metals, G. Welter. 1,652,077; Dec. 6.

Lithographic printing surfaces, Washing. B. J. J. Goulding. 1,627,774; May 10.

Lithographic printing surfaces, Washing. B. J. J. Goulding. 1,627,774; May 10.

Lithographic printing surfaces, Washing. B. J. J. Goulding. 1,620,235; Aug. 23.

Lithographic printing surfaces, Washing. B. J. J. Goulding. 1,630,235; Aug. 23.

Lithopone, Drying and calcining. W. G. Graves. 1,630,613; May 31.

Lithopone, Method and apparatus for quenching. A. S. Krebs. 1,630,627; May 31.

Lithographic printing and calcining. W. G. Graves. 1,618,505; Feb. 22.

Livestock, Treating. C. O. Nelson. 1,621,131; Mar. 15.

Load-brake device. C. C. Farmer and T. H. Thomas. 1,644,567; Oct. 4.

Lithographic printing and calcining. W. L. Merrill. 1,653,69; Jan. 25.

Load brake device. C. C. Farmer. 1,615,369; Jan. 25.

Load brake, Variable. U. A. Whitaker. 1,650,309; Nov. 22.

Load equalization, Automatic. W. L. Merrill. 1,631,752; Load brake, Variable-. U. A. Whitaker. 1,050,305; Nov. 22. Load equalization, Automatic. W. L. Merrill. 1,631,752; Load-handling apparatus. J. E. Heffernan. 1,613,458; Jan. 4.

Load-indicating mechanism. W. J. Cobb. 1,620,442;
Mar. 8.

Load indicator. F. L. Scott. 1,641,298; Sept. 6.

Load inter. F. J. Winterer. 1,628,212; May 10.

Load-lifting device. B. F. Fitch. 1,650,118; Nov. 22.

Load-lifting devices, Attaching means for. A. E. Small.

1,638,019; Ang. D. Handler and Lowering means. D. M.

Stevenson. 1,646,119; Octv 18.

Load supporting and carrying device. J. Judelson.

1,632,904; June 21.

Loader. H. H. Barber. 1,630,598; May 31.

Loader, Extension side. E. H. Mortag. 1,617,820;

Feb. 15. Londer, H. H. Dates, L. H. Mortus, Feb. 15.
Londer, Extension side. E. H. Mortus, Feb. 15.
Londer, Nicchanical. G. F. Binns. 1.654.402; Dec. 27.
Londing and unloading materials, Apparatus for, C. R.
Londing apparatus, W. K. Liggett. 1,639.346; Aug. 16.
Londing apparatus, Skip. D. F. Lepley, 1,614.373;
Jan. 11. Louding apparatus, Skip. D. F. Lepley, 1,614,373; Jan. 11.
Loading apparatus, Spring-cushion. S. Suekoff. 1,646,885; Oct. 25.
Loading boom. G. Knox. 1,617,490; Feb. 15.
Loading boom. G. Knox. 1,617,490; Feb. 15.
Loading device. D. Briggle. 1,621,151; Mar. 1.
Loading device. D. Briggle. 1,621,151; Mar. 15.
Loading device. L. F. Dains. 1,639,649; Aug. 23.
Loading device. E. F. L. Fritz. 1,619,610; Mar. 1.
Loading device. W. Jordan. 1,649,829; Nov. 22.
Loading device. W. Jordan. 1,649,829; Nov. 22.
Loading device. W. J. Robertson. 1,620,039; Mar. 8.
Loading jack. M. A. West. 1,644,904; Oct. 11.
Loading machine. W. F. Bixby. 1,613,522; Jack. 11.
Loading machine. J. B. Gorrell. 1,637,910; Nov. 1.
Loading machine. J. B. Gorrell. 1,647,910; Nov. 1.
Loading machine. J. B. Gorrell. 1,642,670; Sept. 20.
Loading machine. L. Johnson. 1,634,148; June 28.
Loading machine. J. F. Joy. 1,619,260; Mar. 1.
Loading machine. J. F. Joy. 1,628,985; May 17.
Loading machine. J. M. London. 1,613,610; Jan. 25.
Loading machine. N. A. Newdick. 1,627,747; May 3.
Aug. 25.
Loading mechanism, Overhead. J. B. Webb. 1,639,768;
Aug. 25.
Loading system. W. Forellier. 1,646,197; Gr. 12. Loading system. W. Fondiller. 1,654.074; Dec. 27. Loading system. R. P. Greenleaf. 1,646.197; Oct. 18. Loaf creasing and cutting apparatus. E. T. Parsons. 1,641.781; Sept. 6.

Lobelia, Obtaining the active principle of. H. Wieland. Re16,772; Oct. 18. Lock: See-Air lock, Auto lock Auto lock.
Automobile lock.
Bag lock.
Beam-bearing lock.
Bedpost lock. Loom lock.

Manually-controlled lock.

Milk-lock. Beam-nearing lock.
Bedpost lock.
Bedstead corner lock.
Binder lock.
Brake lock.
Bung-plug lock.
Car-top lock.
Carburetor, lock.
Car-door lock. car check lock. Nut lock Oar lock. Orthodontic band lock. Pedal lock. Permutation lock. Rail lock. Rail lock. Refrigerator-door lock. Rim lock. Check-controlled lock. Chute lock. Closure-cap lock. Closure lock. Rotary bolt lock. Safety lock. Showcase lock. Sliding lock. Clothesline Clutch lock Sliding-shackle lock. Spare-wheel lock. Clothe lock.
Cloth lock.
Coin lock.
Coin lock.
Coin lock.
Complexition lock.
Complexition lock.
Complexition lock.
Cord lock.
Cylinder lock.
Dor lock.
Drawbar reverse lock.
Electric safety lock.
Engine-ignition lock.
Grate lock.
Gear-lock.
Gear-shift lock.
Gear-shift lock.
Gear-shift lock.
Gear-lock.
Hotel lock.
Hotel lock.
Hotel lock.
Jimmyproof automatic lo. Spring lock. Steering-wheel lock. Stove lock. Stovepipe lock. Switch lock Tank lock. Telephone lock.
Tile lock.
Tire lock. Transmission lock. Transmission
Truck lock.
Trunk lock.
Trunk lock.
Type lock.
Valve lock.
Vault lock.
Vehicle lock.
Watch lock.
Wheel lock.
Window lock Hotel Jock.

Hotel Jock.

Vehicle Jock.

Vehicle Jock.

Vehicle Jock.

Key Jock.

Keyless Jock.

Keyless Jock.

Kendess Jock.

Kendess Jock.

Vehidow Jock. J. B. Bleco. 1,642,325-6; Sept. 13.
C. T. Chadwick and J. W. Boone. 1,622,490;
29.
C. T. Chadwick and J. W. Boone. 1,622,490;
29.
C. T. Chadwick and J. W. Boone. 1,622,490;
C. Dietrich. 1,634,825; July 5.
H. A. Douglas. 1,646,255; Feb. 1.
H. English. 1,648,726; Nov. 8.
C. N. Fairchild and F. J. Hull. 1,622,500; Mar. 20.
W. C. Ferris. 1,620,767; Mar. 16.
H. J. Ferris. 1,620,767; Mar. 16.
J. J. Helmuth. 1,647,354; Nov. 1.
G. S. Hill and A. C. Saxton. 1,632,073; June 14.
N. Lappas. 1,621,422; Mar. 16.
S. Lappas. 1,621,422; Mar. 16.
A. Levine. Des. 72,023; Feb. 15.
A. L. Levy. 1,653,187; Dec. 20.
J. G. Majout. 1,644,022; Oct. 4.
A. Maszczyk. 1,645,517; Oct. 1,66,381; July 12.
J. Meglis and F. V. Fupper. 1,166,381; July 19.
A. W. Morris. 1,635,724; July 12.
M. A. O'Branovich. 1,619,881; Mar. 8.
J. Olinger. 1,649,724; Nov. 15.
E. G. Prov. 1,634,754; July 5.
M. A. O'Branovich. 1,619,881; Mar. 8.
J. Olinger. 1,649,724; Nov. 15.
E. G. Prov. 1,634,754; July 5.
M. A. O'Branovich. 1,619,881; Mar. 8.
J. Olinger. 1,649,724; Nov. 15.
E. G. Prov. 1,634,754; July 5.
M. A. O'Branovich. 1,619,881; Mar. 8.
J. Olinger. 1,649,724; Nov. 15.
E. G. Prov. 1,634,754; July 5.
M. A. O'Branovich. 1,619,881; Mar. 8.
J. Olinger. 1,649,724; Nov. 15.
E. G. Prov. 1,634,755; Suly 5.
R. Rosenhahn. 1,643,752; Sept. 27. Lock. Mar. Lock Lock. Oct. Lock. B. D. Raines and O. Billingsley. Oct. 18.
Lock. C. Rosenhahn. 1.648.752; Sept. 27.
Lock. A. Russo. 1,639,535; Aug. 16.
Lock. J. H. Schlafly. 1,629,641; May 24.
Lock. W. R. Schlage. 1,658,511; Dec. 20.
Lock. J. H. Schw. 1,645,298; Oct. 11.
Lock. L. B. Shinn. 1,644,092; Oct. 4.
Lock. L. B. Shinn. 1,644,092; Oct. 4.
Lock. L. B. Shinn. 1,644,092; Oct. 4.
Lock. C. Zygmunt. 1,648,251; Nov. 8.
Locks. C. Zygmunt. 1,648,251; Nov. 8.
Locks. C. Zygmunt. 1,648,251; Nov. 8.
Locks. C. Locksectuafed switch. J. R. McLeilan.
Apr. 19.
Lock and drawboit. Trunk. A. J. Komensk 1 625 371 : Lock and drawbolt, Trunk. A. J. Komenak. 1,652,676; Dec. 13. Lock and latch. O. A. Eastlack. 1.625.595; Apr. 19. Lock and latch, Combined. G. Cawthron. 1,628,354; May 10, ock and manufacture. A. L. Hansen. 1,624,051; Apr. 12. Lock Lock and margin release, Line. J. H. Barr. 1,650,180; Lock and permutation wheel for the same, Keyless. M. Lock and permutation wheel for the same, Keyless. M. Wildrick. Re16,822; Dec. 20. Lock-attaching means. S. Hammer. 1,629,270; May 17. Lock bolt. M. Pelkey. 1,619,757; Mar. 1.

Lock cap. Spring. G. Ramsey. 1.646,765; Ort. 25.
Lock clump for cords. A. H. Sorell. 1.653,235; Dec. 20.
Lock construction. W. C. Devrenux. 1.662,660; Dec. 13.
Lock control means, Recording. E. S. Phelps.
1.615,722; Jan. 25.
Lock-controlled switch. H. Schwarze and F. M. Holden.
1.653,222; July 12.
Lock for all-brake release rods. B. H. Ferguson.
Lock for all controlled switch.
1.631,436; June 7.
Lock for box-car doors, Crank. A. E. Ashleman and T. E.
Haney. 1,621,966; Mar. 22.
Lock for doors, Emergency. M. Weiss. 1,618,738;
Lock for clectric switches of motor vehicles, Coin-controlled. L. L. Custer. 1,651,273; Dec. 20.
Lock for letertical connecters. R. F. Landrum.
1,651,283; Nov. 29.
Lock for loom weft detectors. W. H. King. 1,653,183;
Dec. 20. March Tolders. Differential. Locking device, Safety-deposit-. H. Marshall. 1,618,460; Feb. 22.
Locking means for locking cutting tools into tool holders,
Adjustable. A. L. Geitner, 1,642,852; Sept. 20.
Locking mechanism. A. Campbell and A. E. Zimmer,
1,635,398; July 12.
Locking mechanism. G. L. Cragg. 1,618,752; Feb. 22.
Locking mechanism. G. L. Cragg. 1,618,752; Feb. 22.
Locking mechanism. J. W. Witton. 1,629,197; Apr. 26.
Locking mechanism. J. A. Müzzlo. 1,639,144; Aug. 16.
Locking mechanism. J. W. White. 1,637,248; July 26.
Locking mechanism. J. W. White. 1,637,248; July 26.
Locking mechanism. J. W. White. 1,637,248; July 26.
Mar. 1.
Locking mechanism, Door- F. G. Chapin. 1,619,596;
Mar. 1.
Locking mechanism, Door- A. N. Rhodes. 1,623,855; Locking mechanism, Door-. A. N. Rhodes. 1,623,853; Locking nut, Self. H. G. L. Kolthoff. 1,623,686; Apr. 5. Locking printing strips in place. C. Chisholm. 1,651,185; Nov. 29. Locking nut, Self. H. G. L. Kolthoff. 1,623,686; Apr. 5. Locking printing strips in place. C. Chisholm. 1,651,185; Xiv. 22 intiming strips in place. C. Chisholm. 1,651,185; Xiv. 22 intiming strips in place. C. Chisholm. 1,651,185; Xiv. 22 intiming the control system for. J. A. Hicks. 1,647,227; Nov. 1.
Locks, Automatic control system for. J. A. Hicks. 1,627,189; May 3.
Locks, Casing for. S. Segal. 1,642,047; Sept. 13.
Locks, Casing for. S. Segal. 1,642,047; Sept. 13.
Locks, Casing for. S. Segal. 1,642,047; Sept. 13.
Locks, Light for transmission. W. L. McEvoy and A. Hubbard. 1,651,997; Dec. 6.
Locks, Light for transmission. W. L. McEvoy and A. Hubbard. 1,651,997; Dec. 6.
Locks, Locksmith's instrument to open all standard makes of cylinder. G. J. Baron. 1,639,191; Aug. 23.
Locks to doors, etc., Device for use in applying. G. Hobbislefken. 1,634,667; July 5.
Locomotive. S. W. Farnham. Rel6,700; Aug. 9.
Locomotive. W. J. McCarroll. 1,622,917; Mar. 1.
Locomotive. W. J. McCarroll. 1,622,917; Mar. 29.
Locomotive. G. B. Warren 1,631,661; July 56.
Locomotive. G. B. Warren 1,631,661; Jun 7.
Locomotive. G. B. Warren 1,631,661; Jun 7.
Locomotive. G. B. Warren 1,631,661; Jun 7.
Locomotive. W. J. Woodard. 1,623,095; May 10.
Locomotive. W. B. Woodard. 1,628,095; May 10.
Locomotive and other boiler or steam generator. A. S. Davidson. 1,618,064; Feb. 15.
Locomotive. W. B. Woodard. 1,623,095; May 10.
Locomotive and other boiler or steam generator. A. S. Davidson. 1,618,064; Feb. 15.
Locomotive. Auxiliary. H. C. Miller. 1,647,460; Nov. 1.
Locomotive, Auxiliary. H. C. Miller. 1,647,460; Nov. 1.
Locomotive, Auxiliary. H. C. Miller. 1,647,460; Nov. 1.
Locomotive, Auxiliary. H. C. Miller. 1,647,460; Nov. 1. 1.651,283; Nov. 29.
Lock for loom weft detectors. W. H. King. 1,653,183;
Dec. 20.
Lock for motor vehicles, Differential. F. J. Katz.
1,622,449; Mar. 29.
Lock for pocket seals. M. M. Corey. 1,646,612; Oct. 25.
Lock for pocket seals. M. M. Corey. 1,646,612; Oct. 25.
Lock for savings banks, Permutation. W. E. Tait.
1,649,372; Nov. 15.
Lock for vault doors, Combined electrical and mechanical safety. W. C. Dillon. 1,635,075; July 5.
Lock of window regulators, Clutch. H. A. Myers.
Lock guard. W. Ripoien. 1,618,846; Feb. 22.
Lock holder. L. F. Burke. 1,629,859; May 24.
Lock joint for containers and producing same. M. C.
Romer. 1,617,274; Feb. S.
Lock knob. Combination. C. E. and A. E. Dress.
1,652,013; Nov. 29.
Lock mechanism. M. C. Fullenlove. 1,633,087; June 21.
Lock mechanism. M. C. Fullenlove. 1,633,087; June 21.
Lock mechanism. G. W. Heene. 1,615,171; Jan. 18.
Lock mechanism. G. Tibbetts. 1,526,106; Apr. 26.
Lock mechanism. Combination. E. E. Watson. 1,617,038;
Lock mechanism, Combination. E. E. Watson. 1,617,038;
Lock mechanism, Combination. E. E. Watson. 1,617,038;
Lock mechanism, Transmission. W. T. Hunt. 1,644,519;
Deck mechanism, Transmission. W. T. Hunt. 1,644,519;
Lock mechanism, Transmission. W. T. Hunt. 1,644,519;
Lock mechanism. Transmission. W. T. Hunt. 1,644,519;
Lock mechanism. Transmission. W. T. Hunt. 1,644,519;
Lock mechanism. Transmission. W. T. Hunt. 1,644,519; Lock mechanism, Combination. B. E. Watson. 1,617,038; Feb. 8.
Lock mechanism, Transmission-. W. T. Hunt. 1.645.192; Lock nut. A. Bell. 1,646,805; Oct. 25.
Lock nut. F. Hoffman. 1,629,503; May 24.
Lock nut. J. Madden. 1,627,745; May 10.
Lock nut. E. Morse. 1,629,726; May 24.
Lock nut. E. Morse. 1,629,726; May 24.
Lock nut. and making the same. W. B. Sharp. 1,627,207; Locomotive boilers. Washout Pulses. 1,624,635,239;
Locomotive and steam passage. W. M. Sheehan. 1,625,236;
Locomotive and steam passage. W. M. Sheehan. 1,629,316; May 24.
Locomotive boiler. A. W. Bruce. 1,624,655; Apr. 12.
Locomotive boiler. A. W. Bruce. 1,624,655; Apr. 12.
Locomotive boiler. A. W. Bruce. 1,624,655; Apr. 12.
Locomotive boiler. O. H. Hartmann. 1,612,866; Jan. 4.
Locomotive boiler. O. H. Hartmann. 1,612,866; Jan. 4.
Locomotive boiler. G. M. Alboney. 1,629,720; May 24.
Locomotive boiler. K. Rushton. 1,624,366; Jan. 11.
Locomotive boiler. K. Rushton. 1,614,396; Jan. 11.
Locomotive-boiler construction. H. S. Jarnagin. 1,622,012; Mar. 29.
Locomotive-boiler construction. H. S. Jarnagin. 1,622,012; Mar. 29.
Locomotive-boiler support. A. W. Bruce. 1,650,423; Nov. 22.
Locomotive-boilers. Washout plug for. P. F. Gallagher. May 3.
Lock nut and nut tightener, Combined. H. Brownlee.
1,625,982; Apr. 26.
Lock-nut-fastening installation. F. S. Carr. 1,646,368; Oct. 18. Cock. operating key, Combination. S. de Castro é Iznaga. 1,653,992; Dec. 27. Lock or locking device. W. Hemingway, jr. 1,647,567; Lock or locking device. W. Hemingway, jr. 1,647,567; Nov. 1.
Lock pin. J. P. Ratigan. 1,643,586; Sept. 27.
Lock-roofing-forming machine. J. and H. Fylenwider, Lock-roofing-forming machine. J. and H. Fylenwider, Lock spine. R. Promini. 1,646,630; Oct. 28.
Lock spine. E. Promini. 1,646,630; Oct. 29.
Lock valve for gasoline motor-supply tanks. J. R. Bingaman. 1,621,465; Mar. 22.
Lock washer. R. T. Hosking. 1,631,415; June 7.
Lock washer, Cylindrical. R. T. Hosking. 1,648,347; Locomotive boilers, Washout plug for. P. F. Gallagher. 1.645.046; Oct. 11. Locomotive booster apparatus. F. W. Martin. 1.643.308; Sept. 27. Locomotive booster apparatus. M. H. Roberts. 1.647.146; Nov. 1. Cocomotive booster motors, Driving apparatus for. F. R. Locomotive Drake equipment. U. A. Whitaker. 1,650.310; Nav 2.2 Locker, Service door, G. W. Brooks, 1,650,698; Nov. 29. Locket, J. E. Kislinger, Des. 73,362; Aug. 23. Locking apparatus, Reversible concealed, M. C. Bright, 1,658,034; Pec. 20. Locking clamp, Automatic, B. G. Unger, 1,653,793; Dec. 27. Locking device. R. O. Allen. 1,648,886; Nov. 15.
Locking device. M. Bishop. 1,617,985; Feb. 15.
Locking device. M. Bishop. 1,617,985; Feb. 15.
Locking device. M. H. Carman and V. K. Davison.
1,653,339; Dec. 20.
Locking device. S. R. Fraim. 1,652,823; Dec. 13.
Locking device. S. R. Fraim. 1,652,823; Dec. 13.
Locking device. S. R. Gagnon. 1,638,300; Aug. 9.
Locking device. A. E. Kintner. 1,621,934; Mar. 22.
Locking device. J. Zito. 1,620,621; Mar. 8.
Locking device. J. Zito. 1,620,621; Mar. 8.
Locking device. J. Zito. 1,620,621; Mar. 8.
Locking device. T. Zito. 1,620,621; Mar. 8.
Locking device. T. Zito. 1,620,621; Mar. 8.
Locking device. T. Zito. 1,620,621; Mar. 8.
Locking device. Drawer. J. Ritter, fr., and M. J. Wisby. 1,649,188; Nov. 15.
Locking device End-gate. J. S. Bower. 1,642,059; Sept. 13.
Locking device for lifting forks. C. E. Fuller. 1,649,343; Locomotive cabs, Ventilator for. J. W. Stack. 1,647,671; Nov. 1. Locomotive-cellar-box puller. E. Nobles. 1,629,632; May 24. Locomotive, Compressed-air. E. O. Baum. 1,628,217; Locomotive-control apparatus, Run-down and reset. M. E. Miller. 1.635.584; July 12. Locomotive cranes, Stabilizer for. G. B. Yerkes. 1,651,656; Lecomotive cranes, Steering mechanism for. E. J. Kane. 1,649,596; Nov. 15. Lecomotive-crosshead guide. L. L. Neebe. 1,635,054;

Locking device, Drawer. J. Ritter, fr., and M. J. Wisby. L649,596; Nov. 15.
Locking device, End-gate. J. S. Bower. 1,642,059; Commotive-crosshead guide. L. L. Neebe. 1,635,054; July 5.
Locking device for lifting forks. C. E. Fuller. 1,649,343; Sept. 6.
Locking device for semitrailers. F. M. Reid. 1,641,354; Sept. 6.
Locking device, Repeater. E. J. Butler. 1,613,018; Jun. 4.
Locking device, Safety. P. Hoffman and J. B. Strong. 1,639,697. Aug. 23.

INDEX OF PATENTS, 1927 860 Locomotive driving mechanism. L. L. Neebe. 1,646,210; Oct. 18.

Locomotive-driving-wheel truing and fiange-reducing device, T. J. Talevich, I. [617,036; Feb. 8.

Locomotive, Electric, N. D. Levin, I. [613,710; Jan. 11.

Locomotive, Electric, N. Burner, I. [613,710; Jan. 11.

Locomotive fice-box arch, P. Bubells, I. [653,084; Dec. 20.

Locomotive fire door, P. J. Weirleh, I. [640,886; Aug. 30.

Locomotive frame, J. E. Mullfeld, I. [630,001; May 31.

Locomotive frame, J. E. Mullfeld, I. [630,001; May 31.

Locomotive frame, J. R. W. Bruce, I. [641,652], Locomotive, Gasoline, W. A. Beimling, I. [614,452]. Locomotive, Gasoline. W. A. Beimling. 1,614,452; Jan. 18.
Locomotive, Geared. A. Claypoole. 1,622,765; Mar Locomotive grates. Shaker bar for. V. T. B Locomotive having combined internal-combustion electric propulsion system. E. Zbinden. 1,632 June 14. 1,622,765; Mar. 29. or. V. T. Bjork. Locomotive having condenser. I. Broberg. Jan. 4. 1.613.080: Jan. 4. Locomotive, Heavy-duty. D. R. McGinnis. 1,628,262; May 10. Locomotive, Internal-combustion. S. M. Bäckström. 1,627,226; May 3. Locomotive, Internal-combustion-engine. A. E. L. Chorlton. 1,619,704-5; Mar. 1. V. F. Mitchell. 1,640,512; Locomotive lubricator sight. W. F. Mitchell. 1,640,512; Locomotive indricator signt. W. F. Mitchell. 1,640,512; Aug. 30. Locomotive main-drive-axie journal. J. A. Magausson. 1,647,237; Nov. 1. Locomotive main rod. J. Kindervater. 1,634,784; July 5. Locomotive, Mallet. E. M. Shannon, 1,621,339; Mar. 15. Locomotive or car. A. F. Batchelder. 1,624,709; Apr. 12. Locomotive or car body. B. A. Garrett. 1,635,677; June 7.

Locomotive or hauling apparatus for railways and tramways. A. E. Davis. 1,615,918; Feb. 22.

Locomotive provided with mechanical power transmission,
Turbine-driven. F. Ljungström and I. Broberg.
1,642,987; Sept. 20.

Locomotive, Pulverized-fuel-burning. G. W. Clendon,
1,650,661; Nov. 28. June Locomotive-rear-end support. W. E. Woodard. 1,620,423; Mar. 8. Mar. 8.
Locomotive rear frame. A. W. Bruce. 1,641,151; Scot. 6.
Locomotive red cups, Filler neck for. G. A. Pettit.
Locomotive smoke-box and saddle construction. W. L.
Bean. 1,625,784; Apr. 26.
Locomotive-smoke-box arrangement. C. R. Hardy.
1,615,625; Jan. 25.
Locomotive-smoke-box structure. W. L. Bean. 1,647,335; Locomotive-smoke-box structure. W. L. Bean. 1,647,355; Nov. 11. Locomotive. Steam. J. E. Muhlfeld and A. G. Sandman. Locomotive. Steam. E. C. Poultney, A. H. Gilling, and H. A. Akroyd. 1,618,751; Feb. 22. Locomotive, Steam. R. H. Whitelegg. 1,620,586; Mar. 8. Locomotive, Steam. R. H. Whitelegg. 1,620,586; Mar. 8. Locomotive, Steam. R. H. Whitelegg. 1,620,586; May 10. Locomotive steam pipes. W. L. Reid. 1,621,600; Mar. Locomotive, Steam-turbine. G. Belluzzo. 1,638,079; Locomotive, Steam-turnine, Aug. 9, Steam-turnine, Aug. 9, Locomotive stoker. C. H. Jeffers. 1,613,110; Jan. 4. Locomotive stoker. N. M. Lower. 1,632,028; Dec. 6. Locomotive stoker. B. A. Turner. 1,647,158; Nov. 1, Locomotive structure, H. M. Pflager. 1,633,963; Aug. 23. Locomotive tender. W. F. Kiesel, Ir. 1,651,289; Nov. 29. Locomotive tender. W. M. Sheehan. 1,615,918; Peb. 1, Locomotive-tender tank. E. E. Hicken. 1,643,426; Oct. 11. Oct. 11.

Locomotive tender with oil separator. G. E. Ryder.
1.638.787; July 26.

Locomotive tenders, Surplus-water-discharge system for.
G. A. Johnson. 1,640,037; Aug. 23.

Locomotive, Tractor. A. E. Fellers. 1.630,830; May 31.

Locomotive, Triple-expansion Mallet. S. M. Vauclain.
1,622,369-70; May 17.

Locomotive-type boiler. J. B. Brown and J. P. Kane.
1,644,463; Oct. 4.

Locomotive undertrame. W. M. Sheehan. 1,614,695;

Locomotive uning crude fuel all. J. Decomotive. Locomotive using crude fuel oil. V. Brazzola. 1,653,798; Locomotive-valve chambers, Temporary end closure for. O. Kuhner. 1.615,906; Feb. 1. Locomotive-whistle amplifier. D. Lindsay. 1,650,526; Nov. 22.
Locomotives and the like, Exhaust-steam injector for, E. Blauhorn, 1,630,688; Aug. 30.
Locomotives, Attachment for, C. Stern and R. W. Braden, 1,622,478; May 10.
Li622,478; May 10.
Li642,409-10; Sept. 13.
Locomotives, Classification signal for, A. M. Poe, 1,648,240; Nov. 8.
Locomotives, Condenser for, L. Broberg, E. O. Eriksson, and B. Sjolin, 1,650,250; Nov. 22.
Locomotives, Condenser for, E. O. Eriksson, 1,624,782; Apr. 12.

Locomotives, Condenser plant for. C. Rogivue. 1,632,624; June 14. Locomotives, Condenser plant for. F. Ljungström, B. O. Eriksson, and I. Broberg. 1,646,650; Oct. 25. Locomotives, Danger-signal attachment for. O. Roesler. 1,637,335; Aug. 2. Locomotives, Draft control for. A. Johnson. 1,623,054; Locomotives, Draft control for. A. Johnson. 1,623,054; Apr. 5.
Locomotives, Drive mechanism for electric. F. L. Alben, 1,645,272; Oct. 11.
Locomotives, Electrical system for. S. W. Farnham. Rel 6,721; Aug. 30.
Locomotives, etc., Driving wheel for. H. Glaenzer, Locomotives, etc., Driving wheel for. S. M. Vauclain. 1,637,287; July 26.
Locomotives, etc., Driving wheel for. S. M. Vauclain. 1,637,287; July 26.
Locomotives, Exhaust and separator system for. G. H. Zouck. 1,632,107; June 14.
Locomotives, Feed-water purifier for. L. S. Emery and J. J. Maginn. 1,652,103; Dec. 6.
Locomotives, Feed-water purifier for. W. J. Everett. 6,632,669; Dec. 6.
Locomotives, Feed-water purifier for. W. J. Everett. 6,636; Dec. 6.
Locomotives, Feed-water purifier for. W. J. Harwick. 1,625,669; Apr. 19.
Locomotives, Former for electric. H. V. Wille, R. M. Campbell, and W. J. Etherington. 1,622,674; Mar. 22.
Locomotives, Motor-driving connection for electric. A. Lipetz. 1,653,664; Dec. 20.
Lipetz. 2,653,664; Dec. 20.
Lipetz. 3,653,664; Dec. 20.
Lipetz. 4,563,664; Dec. 20.
Lipetz. 4,563,664; Dec. 20.
Lipetz. 5,653,664; Dec. 20.
Lipetz. 5,653,664; Dec. 20.
Lipetz. 653,664; Dec. 20.
Lipetz. 1,653,664; Dec. 20.
Lipetz Apr. 5. Locomotives, Sand valve for. S. F. MacDougald. 1,622,657; Mar. 29. Locomotives, Smoke box for. C. D. Barrett. 1,653,537; Dec. 20.
Locomotives, Steam-pipe support for articulated. J. C. Maris and H. K. Harwick. 1,621,330; Mar. 15.
Locomotives, Steam superheater for. I. A. Selders. 1,629,005; May 17.
Locomotives, Superheater header for. W. B. Whitsitt and W. R. Hedeman. 1,631,653; Dec. 6.
Locomotives, Water-purifying system for. F. Wagner. Re16,786; Nov. Water-purifying system for. F. Wagner. Legisland, 1988, 1989 Log-unloading machine. M. F. Crawford. 1,618,917; Feb. 22, | Logardina | Loga Log-unloading machine. M. F. Crawford. 1,636,591; July 19. Nov. 1. NOV. 1. Loom dobbles, Finger separating and leveling device for. K. J. Unwin. 1,653,193; Dec. 20. Loom dobbles, Multiple-weave motion for. W. H. Wakefield. 1,621,945; Mar. 15. Loom dobby. H. Bardisley. 1,619.394; Mar. 1. Loom dobby. J. F. Blackmon. 1,041,111; Aug. 30. Loom dobby. G. E. Buckley. 1,649,443; Sept. 27. Loom for carpets, Fower. 1,652,124; Rept. 20. Loom for carpets, Fower. P. and F. Renard. 1,622,128; Mar. 22. Loom for weaving. J. Gabler. 1,620,723; Mar. 15. Loom for weaving. J. B. Jabouley. 1,626,411; Apr. 26. Loom for weaving. E. Kilner. 1,639,776; Aug. 23.

Loom for weaving chenille, Axminster, and like carpets, blankets, and other fabrics. E. Hollingworth. Loom for weaving openwork fabrics. F. K. Brown. 1,651,338; Nov. 29.

Loom for weaving pole or plush fabrics. D. and T. H. Crabtree. 1,651,676; Dec. 6.

Loom for weaving pile or plush fabrics. D. and T. H. Crabtree. 1,651,676; Dec. 6.

Loom for weaving with pile wires. J. Keppeler. 1,642,112; Sept. 13.

Loom for weaving with pile wires. J. Keppeler. 1,642,112; Sept. 13.

Loom for weaving with pile wires. J. Keppeler. 1,642,112; Sept. 13.

Loom barness. J. Andrews. 1,645,571-2: Oct. 18.

Loom harness. J. Andrews. 1,637,736: Aug. 2.

Loom, Knotting and weaving. G. Friedrich and E. Reich; 1,651,812; Dec. 6.

Loom let-off, Let-back mechanism for. K. J. Unwin. 1,000 let-off, Let-back mechanism for. K. J. Unwin. 1,652,585; Dec. 13.

Loom let-off, Let-back mechanism for. W. H. Wakefield. 1,620,173; Mar. 18.

Loom let-off, Let-back mechanism for. W. H. Wakefield. 1,651,573; Mar. 18.

Loom let-off, Let-back mechanism for. W. H. Wakefield. 1,651,566; Dec. 6.

Loom measures, Silde cradle for. A. J. Chevrette. 1,654,131; Dec. 27.

Loom magazines, Vielding bobbin support for multicolor. 1,651,131; Dec. 27.

Loom medele motion. Check for Axminster. W. W. Robertson. 1,651,649; Dec. 6.

Loom pattern mechanism, Chain for. A. A. Gordon. 1,651,110; Nov. 29.

Loom shuttle. H. A. Davis. 1,631,91; Nov. 29.

Loom shuttle. H. A. Davis. 1,631,11; Nov. 29.

Loom shuttle. H. A. Davis. 1,631,11; Nov. 29.

Loom shuttle. G. H. Willard. 1,630,817; May 31.

Loom pindles, Mounting for. K. J. Unwin. 1,654,226; Dec. 26.

Aug. 9. Loom spindles, Mounting for, K. J. Unwin, 1,654,226; Dec. 27.

Loom shuttles, Tension device for. J. Lucas. 1,638,496; Aug. 9.
Loom spindles, Mounting for. K. J. Unwin. 1,654,226; Loom spindles, Mounting for. K. J. Unwin. 1,654,226; Loom spindles, Mounting for. K. J. Unwin. 1,654,226; Loom spindles, P. K. Sparling. 1,632,351; June 14.
Loom temple roll. W. I. Stimpson. 1,621,177; Mar. 15.
Loom transferrer arms, Weft detector on. J. E. Hume. Loom transferrer arms, Weft detector on. J. E. Hume. Loom transferrer arms, Weft detector on. J. E. Hume. Loom transferrer, Weft detector in. A. Coderlund and R. G. Turner. 1,647,724; Nov. 1.
Loom transferrer, Weft detector in. A. Coderlund and R. G. Turner. 1,647,724; Nov. 1.
Loom transferrer, Weft detector in. A. Coderlund and R. G. Turner. 1,641,44; Mar. 15.
Loom tube frames, Hanger for Axminster. A. P. Paine. 1,653,190; Dec. 20.
Loom, Weft-replenishing. C. H. Draper. 1,613,650; Loom, Weft-replenishing. C. H. Draper. 1,621,242; Mar. 15.
Loom with edge trimmer. E. C. Bunnell and L. H. Messinger, H. 1,639,651; July 19.
Looms, Automatic knock-off and hook stop for. J. Harri-Looms, Automatic knock-off and hook stop for. J. Harri-Looms, Automatic stop for double-pile-fabric. C. A. Boods, M. Looms, Automatic stop for double-pile-fabric. C. A. Boods, Automatically-threading shuttle for. J. W. Glies. Looms, Automatically-threading shuttle for. J. W. Glies. Looms, E. Looms, Automatically-threading shuttle for. J. F. Shaw. 1,649,618; Nov. 15.
Looms, Balanced let-off for. W. H. Wakefield. 1,628,815; May 10.
Looms, Balanced let-off for. W. H. Wakefield. 1,628,815; May 10.
Looms, Balanced let-off for. W. H. Wakefield. 1,628,815; May 10.
Looms, Lattery feed for. A. E. Rhoades. 1,614,209; Looms, May 10.
Looms, Lattery feed for. A. E. Rhoades. 1,614,209; Looms, Looms,

Looms, Balanced let-off for. W. H. Wakefield. 1,628,815:

May 17.
Looms, Battery feed for. A. E. Rhoades. 1,614,209;
Jan. 11.
Looms, Bobbin battery for automatic weft-replenishing.
D. M. Hollins. 1,625,942; Apr. 26.
Looms, Bobbin-cleaner attachment for replenishing. W.
1. Stimpson. 1,654,472; Dec. 27.
Looms. Bobbin-feeding mechanism for, J. Lucas.

I. Stimpson. 1,654,472; Ltd.
Looms. Bobbin-feeding mechanism for. J. Lucas.
1,631,828; June.
Looms. Bobbin for. J. Lucas. 1,642,503; Sept. 13.
Looms. Bobbin for. J. Lucas. 1,642,503; Sept. 13.
Looms. Bobbin guide for filling-replenishing. H. A. Davis.
1,638,901; July 26.
Looms. Bobbin support for filling-replenishing. E. C.

Bobbin support for filling-replenishing. E. C. lam. 1,644,544; Oct. 4. Looms, Burnham.

Looms, Box-operating mechanism for. W. Crutchlow. 1,626,723; May 3.
Looms, Brake mechanism for. A. S. Johnson, 1,646,539; Oct. 25.

Oct. 28.
Looms, Chain control for Axminster. W. H. Wakefield.
1,633,654; June 28.
Looms, Cheek attachment for. H. G. McLemore.
1,633,452; June 21.
Looms, Cheek for, W. F. Clayton. 1,649,446; Nov. 15.
Looms, Cloth-guiding means for. E. S. Moore and A. L.
Looms, Cloth-roll mounting for. W. H. Baker. 1,635,024;
July 5.
Looms, Clutch mechanism for. J. Northrop. 1,633,702.

July 5.

Looms, Clutch mechanism for, J. Northrop. 1,636,703;
July 26.

Looms, Crank-shaft gear for, W. H. Bahan. 1,613,920;
Looms, Cutting attachment for, R. Marx. 1,642,423;
Sept. 13.

Looms, Davice to shock and

Sept. 13.
Looms, Device to check needle motion of Axminster,
K. J. Unwin and W. H. Wakedeld. 1,643,431; Sept. 27.
Looms, Device to prevent rotation of bobbins in. H. N.
Arthur. 1,655,588; Dec. 13.
Looms, Dobby finger for. W. H. Wakefield. 1,620,176;
Mar. 1,000 Dobby for. P. J. Dannak. 1,007,000

Mar. 8.

Looms, Dobby for. P. J. Banzet. 1,627,950; May 10.

Looms, Dobby for. J. Northrop. 1,645,203; Oct. 11.

Looms, Drag roll and clearing plate for. H. A. Davis.

1.481,088; May 31.

Looms, Driving end for. H. D. Hathaway. 1,644,374;

Oct. 4.

Oct. 4.

Oct. 4.

Oct. 4.

Comp. bectric stop motion for. J. Donnelly. 1,621,358;

Looms, Electric stop motion for. J. Donnelly. 1,621,358; Mar. 15.
Looms, Electrical feeler for. R. O. and J. M. Canedy. 1,649,948; Nov. 22.
Looms, Electrical stop mechanism for. F. F. Schmiger, 1,620,836; Mar. 15.
Looms, Feeler mechanism for. E. A. Cunniff. 1,636,899; July 26.
Looms, Feeler mechanism for. E. A. Cunniff. 1,649,776; Nov. 15.
Looms, Beeler mechanism for. E. A. Cunniff. 1,654,478; Looms, Ellips attachment for. G. H. McPap. 1,630,650.

Dec. 27.
Looms, Filling attachment for. G. H. McRae. 1,639,659;
Aug. 23.
Filling clamning and parting mechanism for

Looms, Filling clamping and parting mechanism for shifting shuttle-box. E. A. Cunniff. 1,628,307-8;

shitting smittle use.

May 10.

Looms, Filling-control mechanism for filling-replenishing.

E. C. Burnham and H. A. Davis, 1,626,505; Apr. 26,

Looms, Filling-feeler mechanism for, J. Northrop,

1,635,585; July 12.

Loons, Filling stop motion for, S. Came, 1,651,584;

1.638,585; July 12.

Looms, Filling stop motion for. S. Came: 1,001,001, Dec. 6.

Looms, Filling stop motion for. D. E. Skrdgell.

1.643,931; Sept. 27.

Looms, Filling stop motion for. W. H. Wakefield.

1.638,653; June 28.

Looms, Finchie connection for. W. B. Harris. 1,614,066; Dan. 11.

Looms for weaving, Take-up motion for. J. H. Hindle and T. Hindle. 1,630,428; May 31.

Looms, Friction roll for. T. S. Ross. 1,649,080; Nov. 15.

Looms, Harness for. P. L. Spencer. 1,623,515; Apr. 12.

Looms, Harness mechanism for. C. H. Draper. 1,613,651; Jan. 11.

Looms, Janness S. Motion for. R. J Bartholomew.

Looms, H Mar. 8 Harness motion for. W. Simmchen, 1,619,990;

Looms, Harness stop motion for. G. Rheault. 1,636,927;

July 26.
Looms. Head motion for. L. H. Beytes. 1,615,736;
Jan 25.
Looms. Intermittent feeler mechanism for. A. Ouellette.
1,623,481; Apr. 5.
Emple-thread cutter for automatic filling-replenishing. E. A. Cunniff. 1,615,441; Jan. 25.
Looms. Intermittently-operable take-up mechanism for.
H. H. Burdett. 1,628,489; May 10.
Looms. Jacquard indicator for box. E. R. Holmes.
1,651,125; Nov. 29.
Looms. Jacquard mechanism for. E. J. Dacey. 1,631,523;
June 7.

Looms, Knife grinder for. G. P. Findlay and W. W. Johnston, I,616,410; Mar. I. Johnston, Lothy actuating mechanism for. H. A. Davis. Looms, Lay assembly for. H. A. Davis. 1,616,890;

Looms, Feb. 8.

Looms, Lay rock-shaft bearing for. A. E. Dean and L. Grundy. 1,617,286; Feb. 8.

Looms, Lay structure for power. C. Senn. 1,636,717; July 26.

July 26.

Looms, Let back mechanism for. A. J. La Chapelle, 1.647,234; Nov. 1. August 1. August

Looms, Let-off mechanism for. W. J. Lutton. 1,638,497; Aug. 9. Looms, Let-off mechanism for. W. F. Mintel. 1,651,334; Looms, Let-off mechanism for. O. V. Payne. 1,643,417; Sept. 27.
Looms, Lock for harness jacks of Knowles. W. H. Wakefield. 1,652,592; Dec. 13.
Looms, Magazine for box. J. Taranto. 1,622,066; Mar. 22. Looms, Multiple-needle detector for, K. J. Unwin. 1,633,650; June 28. Looms, Multiple-needle weft detector for, E. R. Holmes. 1,651,124; Nov. 29. L. F. Hoffman and W. H. Osoms, Needle feeler for L. F. Hoffman and W. H. Wardelle, J. 639,850; Mrg. 23. Warkefield. 1,639,850; Mrg. 23. Warkefield. 1,639,850; Mrg. 23. Warkefield. 1,639,850; Mrg. 23. Warkefield. 1,639,850; Mrg. 24. Warkefield. 1,632,861; Apr. 5. Looms of more than one shuttle, Weft-replenishing mechanism for. E. A. Blackston. 1,622,7310; May 3. Looms, Pattern-chain guide for. C. R. Howard. 1,653,209; Dec. 20. Looms, Picker for. E. Rawson. 1,652,730; Dec. 13. Sept. 13, there for weaving, F. Fennartz. 1,642,262; Sept. 13. Looms, Picking shoe for. G. F. Hutchins. 1,651,603; Dec. 63. Sept. 13.

Looms, Picking shoe for. G. F. Hutchins. 1,651,603;

Looms, Pile-cutting mechanism for. J. Toon. 1,614,504;

Jan. 18.

Looms, Pile wire for. I. Pfeiffer. 1,645,255; Oct. 11.

Looms, Protunatic west detector for. E. R. Holmes.

1,651,123; Nov. 29.

Looms, Protector mechanism for. C. Dunaway.

1,648,261; Nov. 8.

Looms, Protector mechanism for. E. L. Lane. 1,643,412;

Looms, Shedding and shuttle-actuating mechanism for.

J. E. Grosvenor and W. T. Picking. 1,617,388; Feb. 18.

Looms, Shuttle actuating mechanism for. J. E. Grosvenor and w. T. Picking. 1,648,897; Nov. 15.

Looms, Shuttle actuating mechanism for. J. E. Grosvenor and W. T. Picking. 1,648,897; Nov. 15.

Looms, Shuttle-box motion of. A. Barbier. 1,617,143; Feb. 8. and V.
Looms, Shuttle-box motion of A.
Looms, Shuttle-box tension-controlling mechanism for,
C. H. Draper. 1,639,595; Aug. 16.
Looms, Shuttle-changing apparatus for automatic. K.
Toyoda. 1,633,962; June 28.
Looms, Shuttle-changing device for, F. Aninger.
Looms, Shuttle-changing device for, F. Aninger.
Looms, Shuttle-changing device for, F. Aninger. 1.630,918; May 31.

Looms, Shuttle check for. H. A. Davis. 1,615,189; Jan. 18.

Looms, Shuttle-checking device for. W. H. Baker and J. Dewhurst. 1,619,847; Mar. 8.

Looms, Shuttle-checking mechanism for. A. E. Dean.

Looms, Shuttle guard for. J. Macchiarella. 1,636,377; July 19.

Looms, Shuttle guard for. J. Lucas. 1,624,108; Apr. 12.

Looms, Shuttle placer for weft-replenishing. E. H. Ryon.

Looms, Shuttle placer for weft-replenishing. E. H. Ryon.

Looms, Shuttle placer for weft-replenishing. E. H. Ryon.

Looms, Stating and stopping mechanism for. W. Seville.

1,631,067; May 31.

Looms, Stationary yarn guide for weaving. F. Phlly. Looms, Stationary yarn guide for weaving. F. Phily. 1,617,347; Feb. 15.
Looms, Stop mechanism for. H. A. Davis. 1,620,194; Mar. 8. Mar. 8.

Looms, Stop metion for. A. R. Jones. 1,644,647; Oct. 4.

Looms, Take-up motion for. E. E. Taibot. 1,633,142;

June 21.

Looms, Tension device for. J. Lucas. 1,625,039; Apr. 19.

Looms, Tension device for the harness of. J. Giardino.

Looms, Thread cutter and stop motion for weft-replenishing. D. Dackmine and H. Monler. 1,637,217; July 26.

Looms, Thread cutter for. V. H. Jennings. 1,647,702;

Nov. I.

Looms, Thread cutter for. V. H. Jennings and H. H.

Looms, Thread cutter for. V. H. Jennings and H. H.

Looms, Thread cutter for. V. J. Unwin. 1,654,104;

Dec. 27.

Looms, Thread cutter for. W. J. Unwin. 1,654,104;

Dec. 27.

Looms, Thread cutter for. Weft-replenishing. E. R. Dec. 27.

Looms. Thread cutter for weft-replenishing. E. R.

Holmes. 1.647.731; Nov. 1.

Looms. Thread-cutting mechanism for. E. H. Ryon.

Looms. Thread-cutting temple for. W. C. Hudson.

1.612.922-4; Jan. 4.

Looms. Thread cutting temple for. J. Northrop. 1,654.345;

Dec. 27. Dec. 27.
Looms, Thread-feeding device for tufted-fabric. F. Boyer.
1.628,387; May 10.
Looms, Tool for Knowles, T. H. Donnelly. 1,639,842;
Aug. 23.
Looms, Transfer mechanism for weft-replenishing, H. L.
Looms, Transfer mechanism for weft-replenishing, H. L.
Looms, Transfer mechanism for C. Crossland. 1,651,947; Dec. 6.

Looms, Tube frame for. G. Crossiana.

Dec. 6.

Looms, Tube frame for Axminster, K. J. Unwin and W.

H. Wakefield. 1,639,868; Aug. 23.

Looms, Warp beam for. A. A. Gordon. 1,644,721; Oct. Looms, Warp beam for. A. A. Gordon. 1,654,216; Dec. 27. Looms, Warp beam for. O. V. Payne. 1,647,716; Nov. 1, Looms, Warp-let-off mechanism for. J. Bernini. 1,622,757; Mar. 29.

Looms, Warp stop mechanism for. H. H. Burton. 1,626,506; Apr. 26. Looms, Warp-tension equalizer for. T. C. Demers. 1,641,024; Aug. 30. Looms, Warp-tensioning device for. F. Volech. 1,618,246; Feb. 22. Looms, Weft-detecting mechanism for drop-box. A. A. Gordon. 1,635,632; June 2,000; A. A. Gordon. 1,647,729; Nov. A. A. Gordon. 1,647,729; Nov. A. A. Gordon. 1,647,729; Nov. A. J. Chevrette. 1,628,824; May 17. Looms, Wett detector for. A. J. Chevrette. 1,628,824; May 17.
Looms, Weft detector for. G. Frechett and H. W. Owen. 1,653,205; Dec. 20.
Looms, Weft detector for. E. R. Holmes. 1,633,636; June 28. Looms, Wett detector for. E. R. Holmes. 1,633,636; June 23.
Looms, Weft detector for. A. P. Paine. 1,651,098; Nov. 29.
Looms, Weft detector for box. W. H. Wakefield. 1,643,432; Sept. 27.
Looms, Weft detector in shuttle for. E. R. Holmes. 1,643,432; Sept. 27.
Looms, Weft detector in shuttle for. E. R. Holmes. 1,644,648; Oct. 4.
Looms, Weft-detector-withdrawing means for. H. L. Blanchard and W. H. Wakefield. 1,652,602; Dec. 13.
Looms, Weft-detector-withdrawing means for. H. L. Choms. Weft-detector-withdrawing means for. H. L. Choms. Weft-red clearer for weft-replenishing. P. Keegan. 1,644,648; Oct. 4.
Looms, Weft-replenishing device for weaving. A. Mullor and L. Carriol. 1,632,912; June 21.
Looms, Weft-replenishing mechanism for multishuttle. A. A. Gordon. 1,654,121; Dec. 27.
Looms, Weft-replenishing mechanism for multishuttle. A. A. Gordon. 1,654,121; Dec. 27.
Looms, Weight-controlled detector for. K. J. Unwin. 1,633,661; June 28.
Loop-aerial frame. A. E. Hansen. Des. 74,147; Dec. 27.
Payne. 1,653,646; June 28.
Loop-aerial frame. A. E. Hansen. Des. 74,147; Dec. 28.
May 31.
Loose-leaf holder. R. M. Ven Valkenburgh. 1,632,459; June 14.
Loose-sheet holder. J. Elfel. 1,652,521; Dec. 13.
Loost-motion coupling. R. M. Galloway. 1,627,964; May 31.
Loop-aerial frame. A. Elfelmond. 1,631,334; June 7.
Looff, B. Richmond. 1,631,334; June 7.
Looff, B. Richmond. 1,631,334; June 7.
Loud speaker. C. C. Davis. 1,638,245; Aug. 9.
Loud speaker. C. L. Farrand and E. Ross. 1,630,734; May 31. Sept. 0. C. C. Davis. 1,638,245; Aug. 9. Loud speaker. C. L. Farrand and E. Ross. 1,630,734; May 31. Loud speaker. C. L. Farrand and E. Ross. 1,651,758; Dec. 6. Loud speaker. C. L. Farrand and E. Ross. 1,661,708; Dec. 6.
Loud speaker. C. L. Farrand, E. Ross, and E. F. Godley.
Loud speaker. C. L. Farrand, E. Ross, and E. F. Godley.
Loud speaker. J. W. Gostlag. Des. 73,030; July 12.
Loud speaker. M. C. Hopkins. Des. 72,263-6; Mar. 22.
Loud speaker. M. C. Hopkins. 10es. 72,428; Apr. 12.
Loud speaker. M. C. Hopkins. 1,630,011; May 24.
Loud speaker. M. A. Kurman. Des. 72,769; June 7.
Loud speaker. J. W. MacDow. Des. 72,559; May 3.
Loud speaker. J. W. MacDow. Des. 72,559; May 3.
Loud speaker. E. A. Shankweller. 1,641,605; Sept. 6.
Loud speaker. J. Sieplan. 1,643,791; Sept. 20.
Loud speaker. J. Sieplan. 1,643,791; Sept. 20.
Loud speaker. J. W. Widmann. Des. 72,109-200; Mar. 8.
Loud speaker and other sound-receiving, sound-reproduclag, or sound-transmitting apparatus. A. H. Midgley.
1,615,644; Jan. 25.
Loud speaker, Base for a. R. T. Davis. Des. 72,146;
Mar. 8.
Loud-speaker cabinet. F. J. Reichmann. Des. 71,849; Mar. 8.

Loud-speaker cabinet. F. J. Reichmann. Des. 71,849;
Jan. 11.

Loud-speaker, Capacitatively actuated. J. Depew.

Loud-speaker casing. A. Jones. Des. 71,915; Jan. 25.

Loud-speaker casing. H. Munsch. Des. 73,938; Nov. 22.

Loud speaker, Casing for a. J. I. Pobin. Des. 73,758;

Nov. 1. Nov. 1. Nov. 1. Jud speaker, Cone-type. W. H. Gerns. Des. 72,368; Apr. 5. Apr. 0. Loud speaker, Cone-type. M. C. Hopkins. 1,630,008; May 24 Loud-speaker connecter for ear phones. W. F. Schacht. 1,615,141; Jan. 18. Loud-speaker diaphragm, Cone. W. H. Martin. 1,626,743; May 3. Loud-speaker horn. H. B. Troxell. Des. 78,951; Nov. 22. Loud-speaker, Tone-developing. C. F. Stehlin. 1616,474; Feb. 8. Loud-speaker unit. L. H. Fronk. 1.646.451; Oct. 25. Loud-speaker unit. C. R. Hanna. 1.630.380; May 31. Loud-speaker unit. G. F. C. Houghton. 1,633,179; Loud-sp June 21.

June 24.

June 24.

June 24.

June 24.

June 24.

June 25.

June 26.

June 2 Sept. 6 Louver ventilator. R. C. and G. L. Yager. 1.640.588; Aug. 30. Loving cup. E. Magnussen. Des. 72.863; June 14. Low-fuel alarm. D B. Williams. 1.642.318; Sept. 13. Low-metal alarm. V. A. Boker. 1,650,005; Nov. 22.

Low-water alarm. R. L. Badger. 1,615,061; Jan. 18. Low-water alarm. N. M. Barker. 1,636,118; July 19. Low-water alarm. F. M. Roby. 1,629,929; May 24. Low-water alarm. H. B. Thurston. 1,617,928; Feb. 15. Low-water alarm. H. B. Thurston. 1,619,229; Mar. 1. Low-water alarm. H. B. Thurston. 1,619,229; Mar. 1. Low-water alarm. H. B. Thurston. 1,619,299; Apr. 19. Lubricant. S. Fowler and E. Edser. 1,624,939; Apr. 19. Lubricant. C. Hoar. 1,618,708; Feb. 22. Lubricant. E. A. Nill and F. C. Acker. 1,617,077; Feb. 8. Libricant. B. A. H. H. Willock, S. J. Caplan, and J. E. Babb.
Lubricant. H. H. Willock, S. J. Caplan, and J. E. Babb.
1,625,969; Apr. 26.
1,628,646; Mny 27.
Lubricant compressor. E. W. Davis. 1,645,898; Oct. 18.
Lubricant compressor. D. F. Feeler. 1,649,159; Nov. 15.
Lubricant compressor. O. U. Zerk. 1,645,899; Cet. 18.
Lubricant compressor. O. U. Zerk. 1,645,899; Cet. 18.
Lubricant cup. P. J. and C. H. Jorgensen. 1,620,537;
Mar. R. Lubricant-dispensing apparatus. O. Zerk. 1,645,888; Oct. 18.
Lubricant-dispensing device. E. W. Davis and F. D.
Reynolds. 1,646,477; Oct. 25.
Lubricant-dispensing device. E. J. Holst. 1,630,846; Lubricant-expelling cup. P. H. Fuller. 1,645,902; Oct. 18. hericant-filling device. C. L. Magee, 1,650,021; Lubricant-filling device. C. L. Magee. 1,650,021; Nov. 22.
Lubricant from axle boxes, Device for the recovery of. G. Eveno. 1,655,950; Dec. 27.
Lubricant-receipting nipple. O. Zerk. 1,619,454; Mar. I. Lubricant receiptacle. D. F. Fesler. 1,645,901; Oct. 18.
Lubricant rectainer. R. P. Black. 1,616,105; Feb. 1.
Lubricant retainer. R. P. Black. 1,616,105; Feb. 1.
Lubricant supply installations, Element of. J. Bijur. 1,632,774; June 14.
Lubricant-transporting receptacle. M. D. Corley. 1,637,635; Aug. 2.
Lubricants, Making. H. A. Montgomery. 1,617,455;
Lubricanting and internal-pressure spring, Self. C. Thide. 1,620,301; Mar. 8.
Lubricanting apparatus. P. S. Barks. 1,633,304; June 21.
Lubricating apparatus. P. S. Barks. 1,633,304; June 21.
Lubricating apparatus. P. S. Carr. 1,644,173; Oct. 4. Lubricating apparatus.

F. S. Barks. 1,633,504 June 21.

Lubricating apparatus.

F. S. Carr. 1,644,173; Oct. 4.

Lubricating apparatus.

Lubricating apparatus.

Lubricating apparatus.

C. Lea. 1,637,908; Aug. 2.

Lubricating apparatus.

G. L. N. Mayer. 1,653,017;

Dec. 20. Lubricating apparatus. H. J. Murphy. 1,647,538; Nov. 1. Lubricating apparatus. W. R. E. Nohse. 1,626,478; Apr. 26. Labricating apparatus. W. R. E. Nouse. 1,020,716, Apr. 26.
Lubricating apparatus. C. Rosine. 1,616,199; Feb. 1.
Lubricating apparatus. S. K. Wellman and A. A. Gould. Lubricating apparatus. O. U. Zerk. 1,632,985-7; June 21.
1,044,253; Oct. 4.
Lubricating apparatus, Dust cap for. G. Johnson. 1,642,253; July 26.
Lubricating apparatus, Connecter for. R. P. Jacques. 1,637,325; July 26.
Lubricating apparatus, Connecter for. A. E. Kellogg. 1,633,458; Aug. 9.
Lubricating apparatus, Connecter for. M. R. Chipman. 1,620,268; Apr. 26.
Lubricating apparatus for. H. N. Ransom. 1,651,545; Dec. 6.
Lubricating, Apparatus for. H. N. Ransom. 1,651,545; Dec. 6. Dec. 6.
Lubricating apparatus.
1.633,356-57: June 21
Lubricating attachment. C. W. Manzel. H. Albertine. 1,648,140: Nov. 8.
Lubricating bearing surfaces. H. Blount 1,632,874; Libercating bearing surfaces.

June 21.

Lubricating composition and making the same. S. R.

Adler. 1,636,976; July 26.

Lubricating cup. J. G. Mueller and C. A. and H. M.

Granzow. 1,621,129; Mar. 15.

Lubricating cup, Automatic. G. F. Herbst. 1,640,407; Lubricating cup, Automatic. G. F. Herbst. 1,640,407; Aug. 30.
Lubricating device. F. C. Blanchard. 1,623,775; Apr. 5.0.
Lubricating device. C. E. Bonner. 1,648,440; Nov. 8.
Lubricating device. F. B. Fink. 1,612,425; Feb. I.
Lubricating device. F. B. Fink. 1,612,425; Feb. I.
Lubricating device. F. B. Fink. 1,614,125; Feb. I.
Lubricating device. A. V. Gullborg. 1,648,223; Nov. 8.
Lubricating device. A. V. Gullborg. 1,648,223; Nov. 16.
Lubricating device. W. A. Hunt. 1,649,348; Nov. 15.
Lubricating device. H. B. May. 1,647,924; Nov. 1.
Lubricating device. H. B. May. 1,647,924; Nov. 1.
Lubricating device. A. Banford. 1,655,563; Jubr. 18.
Lubricating device. C. Sutter and G. A. Fettit. 1,640,012; A. Lubricating device. C. Sutter and G. A. Fettit. 1,640,012; A. Lubricating device. C. Sutter and G. A. Fettit. 1,480,012; A. Lubricating device. A. Hornbrugh, 1,621,644; Mar. 22. Lubricating device. A. Thornbrugh. 1.621,644; Mar. 22. Lubricating device. O. Zerk. 1,652.264; Dec. 13. Lubricating device, Automatic. L. M. Clark. 1,625,074; Lubricating device, Force-feed-. I. Cowles. 1,652,765; Lubricating device, Leaf-spring-. P. Upham. 1,635,696; July 12.

Lubricating devices, Coupling member for. A. Levenson. 1,635,371; July 12. Lubricating installation. J. Bijur. 1,632,771; June 14. 1.635.371; July 12.
Lubricating installation, T. Bijur. 1.632,771; June 14.
Lubricating installations, Terminal construction for central. E. J. Bloom. 1.632,724; June 14.
Lubricating insulation. J. Bijur. 1.632,776; Nev. 15.
Lubricating mechanism. J. L. Force. 1.946,018; Oct. 18.
Lubricating mechanism. J. L. Force. 1.946,018; Oct. 18.
Lubricating nipple o. U. Zerk. 1.619,455; Mar. 1.
Lubricating nipple and cap therefor. M. F. Carr. 1.644,236; Oct. 4.
Lubricating sheave, Self. G. E. Turner. 1.654,276; Lubricating spaces. Self. G. E. Turner. 1,634,276; Dec. 27.
Lubricating spring, Self. J. B. Leighton. 1,628,740;
Lubricating spring, Self. J. B. Leighton. 1,628,740;
Lubricating system. E. H. Belden. 1,634,820; July 5.
Lubricating system. E. H. Belden. 1,643,820; July 5.
Lubricating system. E. H. Belden. 1,641,125; Aug. 30.
Lubricating system. E. Bawson. 1,641,125; Aug. 30.
Lubricating system. E. H. Fairbanks. 1,626,456; Apr. 26.
Lubricating system. C. G. Goodrich. 1,623,240; Apr. 5.
Lubricating system. C. G. Goodrich. 1,623,240; Apr. 5.
Lubricating system. C. E. Hooser. 1,652,121; Dec. 6.
Lubricating system. C. E. Hooser. 1,652,121; Dec. 6.
Lubricating system. A. F. Masury and C. Froesch.
Lubricating system. A. F. F. Liddell. 1,613,467; Jan. 4.
Lubricating system. B. E. F. Pierce. 1,644,202; Oct. 4.
Lubricating system. B. E. F. Pierce. 1,644,202; Oct. 4.
Lubricating system. B. E. F. Pierce. 1,644,202; Oct. 4.
Lubricating system. B. W. Shley. 1,642,175; June 14.
Lubricating system. B. H. Sweet. 1,622,807; June 21.
Lubricating system. D. H. Sweet. 1,622,807; June 21.
Lubricating system. C. H. Williams. 1,643,174; Nov. 8.
Lubricating system. C. H. Williams. 1,643,174; Nov. 8.
Lubricating system. and apparatus. H. J. Murphy. 1,649,177; Nov. 15.
Lubricating system. Self-feeding rotating. C. W. Lubricating system. etc., Force-feed. I. Cowles.
Lubricating system. Self-feeding rotating. C. W. Lubrication indicator. E. V. Myers. 1,644,848; Oct. 11.
Lubrication sparatus, Driving device for forced. C. H. Clausen. J. Bijur. 1,632,773; June 1 Dec. 27. Lubricating spring bolts. O. Zerk. 1,648,099; Nov. 8. Lubricating spring, Self. J. B. Leighton. 1,626,740; Oct. 18.
Lubricator: See—
Automatic lubricator.
Cone-pulley lubricator.
Conveyer lubricator.
Elevator-guide lubricator.
Guide-rail lubricator.
Lubricator.
Lubricator.
Lubricator.
Lubricator.
Lubricator.
C. A. Campbell. 1.633.736; June 28.
Lubricator.
C. A. Campbell. 1.633.736; June 28.
Lubricator.
C. G. Childs. 1.648.163.780; Nov. 8.
Lubricator.
C. G. Childs. 1.648.163.780; Nov. 8.
Lubricator.
C. G. Childs. 1.648.163.780; July 12.
Lubricator.
C. A. Couchman and W. L. Phillips. 1.622 Oct. 18. Lubricator: High-pressure lubricator. Journal lubricator. Magazine lubricator. Pressure lubricator. Spring lubricator. Mar. 22.
Lubricator. E. I. Dodds, jr. 1.652,093; Dec. 6.
Lubricator. P. W. Gates. 1.652,093; Dec. 6.
Lubricator. J. J. Hennessy. 1.652,278-9; Dec. 6.
Lubricator. J. J. Hennessy. 1.652,278-9; Dec. 20.
Lubricator. J. J. Hennessy. 1.652,278-9; Dec. 20.
Lubricator. C. Lea. 1.631,742; June 7.
Lubricator. C. Lea. 1.633,941; Aug. 16.
Lubricator. H. M. Ludwick. 1.638,775; Aug. 9.
Lubricator. J. F. MacIndoe. 1.634,109; June 28.
Lubricator. F. W. Martin. 1.620,479; Mar. 8.
Lubricator. A. H. Oolers, 1.631,214,758, 8.
Lubricator. J. F. Schylander. 1.653,230; Dec. 20.
Lubricator. Valved coupling for. H. H. Houghton.
Lug. Front draft. C. M. Hannaford. 1,613,167-8;
Lug. Martin. 1.620,479, Mar. 1.629,240; Dec. 20.
Lug. Front draft. C. M. Hannaford. 1,613,167-8;
Lug. Martin. 1.620,479, Mar. 1.629,240; Dec. 20.
Lug. Front draft. C. M. Hannaford. 1,613,167-8;
Lug. Martin. 1.629,240; Mar. 1.629,240; Dec. 20. 1.622.026: Jan. 4. Lug-making press. J. J. Senglar. 1,628,616; May 10. Lug-strap support T. A. Tahan. 1,641.873; Sept. 6. Lugs to rehicle wheels, Device for attaching. A. Lugs to rehicle wheels, Device for attaching. A. Lugsage. O. J. Walinsky. 1,643.397; Sept. 27. Lugsage. O. J. Walinsky. 1,650.572; Nov. 29. Lugsage. O. J. Walinsky. 1,650.5439; Apr. 10. Lugsage carrier. L. L. Bishop. 1,625.439; Apr. 10. Lugsage carrier. M. C. Clehand. 1,622.309; Mar. 25. Lugsage carrier. J. Hyde. 1,625.693; Apr. 26. Lugsage carrier. J. Hyde. 1,625.693; Apr. 26. Lugsage carrier. J. Hyde. 1,625.693; Apr. 26. Lugsage carrier. J. W. E. Kelly and C. Z. Hubbell. 1,630.461; Nov. 29. Luggage carrier. H. Glasspein, 1,651,901; Dec. 6. Luggage carrier, 1946. 1,652,808; Apr. 2. Hubb. Luggage carrier, W. R. Malm. 1,624,493; Apr. 12. Luggage carrier. W. R. Malm. 1,624,493; Apr. 12. Luggage carrier. J. F. Martin. 1,634,650(; July Euggage carrier. S. Mastrontonio, 1,616,682; Feb. 8.

864 Luggage carrier. J. L. McGaugh. 1,623,484; Apr. 5. Luggage carrier. E. McPhail. 1,620,218; Mar. 8. Luggage carrier. F. A. Ruff. 1,617,768; Feb. 15. Luggage carrier. F. H. Schoelerman. 1,633,497; June 21. June 21.

Luggage carrier, B. H. Smith, 1,626,978; May 3,

Luggage carrier, O. J. Walinsky, 1,624,897; Apr. 12.

Luggage carrier, C. F. Wensinger, 1,662,897; Dec. 13.

Luggage carrier and bumper, Combined automobile. F. J.

Laher, 1,637,752; Aug. 2.

Luggage carrier, Auto bumper-clamp. J. H. Bart, 1,648,211; Nov. 8.

Luggage carrier, Automobile. F. J. Laher. 1,637,751;

Aug. 2. Luggage carrier for automobiles. G. C. Ballou. 1,647,120; Nov. 1. Luggage carrier, Motor-vehicle. T. W. Moore. 1,646,163; Oct. 18. Luggage carrier, motor-ventice. T. W. Moore. 1,030,103; Oct. 18.
O July 12.

July 12.

Luminaire. W. A. Dorey. 1,644,877; Oct. 11.

Luminaire. W. A. Dorey. 1,644,915; Oct. 11.

Luminaire. W. A. Dorey. 1,644,945; Oct. 11.

Luminary. W. A. Dorey. 1,642,945; Jan. 4.

Luminescent product. A. A. Guntz. 1,622,379; Mar. 29.

Luminous bodacon. A. Coram. 1,630,171; May. 24.

H. Cook. 1,629,680; May. 24.

Lunch box and table, Combination. A. S. Tinkess. 1,615,560; Jan. 25.

Lustrous variegated plastic product and making same.

H. A. Cook. 1,638,529; Aug. 9.

H. A. Cook. 1,638,529; Aug. 9.

Macaroni machine. G. Merlonetti. 1,638,000; Aug. 2.

Macaroni, Machine for making. C. Surico. 1,627,297;

May 3. May 3. Machine May 3.

Machine adapted to catch and destroy bugs and similar noxious vermin on plants and bushes. C. Hellmann.

Machine and making box-toe blanks. W. H. Albee. 1,645,545; Oct. 18.

Machine and process for separating threads from fabric. L. I. Thompson. 1,628,373; May 10.

Machine-control apparatus. L. Robell. 1,632,417; Machine-control apparatus. L. Roebel. 1,032,411′, 40 mt. 41′, 40 m Dec. 27.

Machine for applying stamps, labels and the like. W. E. Mollins, 1,652,040; Dec. 6.

Machine for assembling and stitching signatures. E. R. Machine for assembling and stitching signatures. E. R. Machine for automatically rolling articles from blanks of plastic material. L. G. Sabbag, 1,652,375; Dec. 13.

Machine for cleaning, opening, and combing cotton, cotton waste, and like materials. J. Forkin. 1,465,745; Oct. 18.

1,632,767; June 28.

Machine for collecting bugs. R. Martin. 1,627,796; May 10. May 10. Machine for compacting and solidifying concrete and other plastics. R. C. Stubbs. 1,650,574; Nov. 22.

1,631,854; June 7.

Machine for cutting green corn from the cob. F. M. Foster. 1,651,591; Dec. 6.

Machine for cutting loss. E. P. Englesbe. 1,653,622; Dec. 27. Machine for detecting and sorting articles. S. Boutin. 1.652.390; Dec. 13. Machine for detecting flaws. F. Firestone. 1,640,567; Aug. 30.
Machine for digging tunnels. B. A. Chubbuck. 1,651,672;
Dec. 6.

Respective articles. S. Sambor. 1,634,916; Machine July 5. for dispensing articles. S. Sambor. 1,634,916; July 5.

Machine for disnersing various solids and liquids. M. C.
Teigne. 1.624.567; Apr. 12.

Machine for drilling drawing fies. S. Loewenherz and
M. T. H. Halls. 1.636.747; July 26.

Machine for expanding metal sheets. M. S. Groh and
J. H. Halls. 1.636.747; July 26.

Machine for expanding metal sheets, Rotary. J. A. Halls.
1.651.058; Nov. 29.

Machine for feeding and driving lacing books and the
like. E. Stimpson. 1.635.674; Dec. 27.

Machine for folding packing and the like. W. Crooks. 1,644,416; Oct. 4. Machine for forming and papering plastic material. J. B. De Lucia and W. A. Pellegrini. 1,651,378; Dec. 6. Machine for forming augus bits. C. P. Lamb. 1,658,868; Machine for forming augur bits. C. P. Lamb. 1,653,808; Dec. 27.

Machine for forming bodies by pressure. C. Claus. 1,648,721; Nov. 8.

Machine for forming constrictions in exhaust tubes. J. B. Whitmore and J. E. Ferguson. 1,653,381; Dec. 20.

Machine for forming hamburger steaks. W. Relly. 1,651,640; Nov. 29.

Machine for forming counding corners upon rectangular Machine for forming counding corners upon rectangular Machine for frying peanuts and the like. A. G. Deschenes. 1,625,787; Apr. 26.

Machine for gathering turnips. H. Krause. 1,640,041; Aug. 23.

Machine for gathering turnips. H. Krause. 1,662,181; Machine for gouging heel blanks. D. Parks. 1,652,181; 1,653,808; Machine for gouging heel blanks. D. Parks. 1,652,181; Dec. 13. Machine for grading and measuring lumber. E. A. God-Dec. 13.

Machine for grading and measuring lumber. E. A. God-ley and L. J. Grubman. 1,652,198; Dec. 13.

Machine for grooving wood heels. W. J. Shaw. 1,653,382; Dec. 27.

Machine for gum stripping beads. J. A. Shively. 1,651,735; Dec. 6.

Methics for handling articles. W. F. Hendry. 1,647,356; Machine for handling articles. W. F. Hendry. 1,647,856;
Nov. 1. Machine for handling cooling, and drying materials.
H. J. Smith. 1,648,330; Nov. 8.
Machine for handling materials. W. R. Glasgow. 1,613,992; Jan. 11.
Machine for husking almonds and other kernels and the like, R. F. Macfariane. 1,623,729; Apr. 5.
Machine for icing cakes. F. Westerman. 1,653,486;
Machine for Issuing paper and printed matter in booklet, card, ticket, or other form. J. S. Bernstein and L. Hulbert. 1,635,171; July 12.
Machine for lamp bases, Automatic soldering. H. D. Madden. 1,651,399; Dec. 6.
Machine for lamp bases, Automatic soldering. H. D. Madden. 1,651,399; Dec. 6.
Machine for lamp bases, Automatic soldering. H. D. Madden. 1,651,399; Dec. 6. Machine for labeling cylindrical articles. H. Gates 1,651,691, Dec. 6.

Machine for lamp bases, Automatic soldering. H. D. Madden 1,651,399; Dec. 6.

Machine for making card matches. J. E. Zomnir. 1,649,642; Nov. 15.

Machine for making card matches. J. E. Zomnir. 1,649,642; Nov. 15.

Machine for making card matches. J. E. Zomnir. 1,649,642; Nov. 15.

Machine for making cup pastry, Automatic. J. Denaro. Machine for making up pastry, Automatic. J. Denaro. Machine for making envelopes. F. J. Parks. 1,651,627; Dec. 6.

Machine for making envelopes. F. J. Parks. 1,651,627; Dec. 6.

Machine for making fee-cream containers. L. S. Baler. 1,652,446; June 21.

Machine for making fee-cream containers. L. S. Baler. 1,678; Parks. 1,633,416; June 21.

Machine for making notate stitches. W. F. Laurenschlager. 1,652,946; Dec. 13.

Machine for making nornamental crushed linings. H. A. Silter. 1,639,972; Aug. 28.

Machine for making plastic confections. G. S. Baker. 1,651,422; Nov. 29.

Machine for modding plastic confections. G. S. Baker. 1,651,422; Nov. 29.

Machine for modding soap and other material. M. L. Grouch. 1,650,981; Nov. 22.

Machine for overcasting the edges of fabrics. C. Thero. 1,650,981; Nov. 22.

Machine for overcasting the edges of fabrics. C. Thero. 1,650,976; Nov. 22.

Machine for printing pressing and drying end caps on Machine for pressing inductors into place on the core of dynamo-electric-machine elements and bending them simultaneously. V. G. Apple. Re16,823; Dec. 20.

Machine for printing various denominations of postage on mail matter, etc., and registering amount thereof. Machine for pulling and raiding thisties. O. Halvorson. 1,618,656; Feb. 22.

Machine for pulling and raiding thisties. O. Halvorson. 1,618,655; Feb. 22.

Machine for separating and feeding blanks. W. W. Davidson. 1,627,015; May 3.

Machine for shelling and polishing grain and the like. M. Hoff. 1,647,621; Nov. 18.

Machine for shelling and polishing grain and the like. M. Hoff. 1,647,621; Nov. 16.

Machine for the treatment of coco

Machine for trimming flash from rubber articles. W. J. Kent, E. Martin, and F. Kochan. 1,654,173; Dec. 27.

Machine for trimming wall paper. E. C. F. Ernst. 1,652,522; Dec. 13.

Machine for use in the manufacture of biscuits. 1,652,622; Dec. 13.

Machine for use in the manufacture of biscuits and the like. G. S. Baker. 1,618,906; Feb. 22.

Machine for washing dishes and other articles. E. L. Couch. 1,640,653; Aug. 30.

Machine for washing table utensils. A. Dimatos and G. D. Michal. 1,640,114; Aug. 23.

Machine for washing table utensils. A. Dimatos and G. D. Michal. 1,640,114; Aug. 23.

Machine for washing table utensils. A. Dimatos and G. D. Michal. 1,640,114; Aug. 23.

Machine for washing table utensils. A. Dimatos and G. Machine for washing table utensils. A. Monkhouse. 1,645,289; Machine for wasping bodies. A. Monkhouse. 1,645,289; Machine foundation. H. N. Atwood. 1,647,428; Nov. 1.

Machine frame. H. A. Wood. 1,647,387; Nov. 1.

Machine part. C. H. Wills. 1,647,387; Nov. 1.

Machine press. R. Jongedyk. 1,614,557; Jan. 18.

Machine tool. S. A. Cogesion. 1,634,212; Jun. 28.

Machine tool. S. A. Cogsdill. 1,630,526: May 31.

Machine tool. A. L. De Leeuw. 1,628,234; May 10.

Machine tool. A. L. Occsdill. 1,630,526: May 31.

Machine tool. A. L. De Leeuw. 1,628,234; May 10.

Machine tool. H. C. Pierle. 1,617,606; Feb. 1.

Machine tool. Well supporting and driving mechanism. A. G. Belden. 1,631,458; June 7.

Machine tool work supporting and driving mechanism. A. G. Belden. 1,631,458; June 7.

Machine tools, Cross-feed mechanism for. J. R. Johnson. 1,623,434; Apr. 5.

Machinery, Agricultural. F. A. Krieger. 1,634,696; Oct. 4.

Machinery, Agricultural. F. A. Krieger. 1,634,696; Oct. 4.

Machinery, Agricultural. F. A. Krieger. 1,634,696; Oct. 4.

Machinery, Agricultural. F. A. Krieger. 1,634,696; Dec. 27. Machinery, Coating. J. T. Lancaster. Dec. 27. 1.654.130: Machinery foundations. R. B. Grey. 1,633,940; June 28. Machinery of high-speed suspension, Arrangement for changing the F. Kruckenberg and F. Gentzcke. 1367,776; Aug. 2. Machinery, Refrigerating. F. B. MacLaren. 1,651,826; Machinery, Refrigerating. F. B. MacLarch.
Dec. 6.
Machinery, Rubber working and analogous. W. D. Barnet.
1,649,774; Nov. 15.
Machining double conical work pieces. K. Gottmanns.
1,623,650; Apr. 19.
Machines, Controlling means for. M. H. Ballard.
1,629,001; Max. 8.
Machines, Cover-supplying mechanism for box-filling. C.
F. Wright. 1,649,639; Nov. 15.
Machines, Cover-supplying mechanism for box-filling. C.
1,640,400; Aug. 10.
Machines for casting lines of type, Cam stop strip for keyboard assemblies of. G. L. Curle. 1,638,799;
Aug. 9.
Machines for container closures, Applying and securing Aug. 9.

Machines for container closures, Applying and securing C. E. Martin. 1.652,903; Dec. 13.

Machines for material treatment, Feeding and discharging apparatus for. J. Prokop. 1.623,701; Apr. 5.

Machines for material treatment, Feeding and discharging apparatus for. J. Prokop. 1.623,701; Apr. 5.

Machines for material treatment, Feedings are confection coatment of the confection of the coatment of the confection of the coatment of the Magazine Cip. W. Halket and W. L. Van Valkenburg. Magazine, Cut-fiim. C. Boniforti. 1,613,378; Jan. 4. Magazine-lubricating means. C. T. Myers. 1,620,277-8; Mar. 8. Magnatine-inoricating means. C. T. Myers. 1,020,271-8; Mar. 8.

Mar. 8.

Mar. 8. Inbricator. J. H. Wonser. 1,625,180; Apr. 10.

Magacits from blueberries, Removal of. B. J. Howard and C. H. Stephenson. 1,615,700; Jan. 25.

Magnesia and calcium pentasulphide, Making, V. Drewsen. 1,628,311; May 10.

Magnesia experiments of the same. A. Marks. Magnesium and fixed nitrogen, Production of metallic. C. G. Miner. 1,631,544; June 7.

Magnesium chromates, Preparation of. G. Kränzlein and A. Voss. 1,632,299; June 14.

Magnesium from dolomite, Production of. W. Kochler. Magnesium from magnesia compounds, Production of. W. Kochler. 1,650,893; Nov. 29.

Magnet. P. MacGahan. 1,626,681; May 3.

Magnet, Show. N. E. Norstrom. 1,635,005; July 5.

Lossy. 1,636,941; July 26.

Magnete har pole chack. F. L. Simmons. 1,624,076; Apr. 12.

Magnetic coil. W. L. Casper and F. E. Field. 1,628,398; May 10.
Magnetic core, V. E. Legg, 1,647,737; Nov. 1.
Magnetic frequency changer. J. Slepian. 1,645,303; Oct. 11.
Magnetic material and producing it. L. Zickrick.
1,632,105; June 14.
Magnetic material from nonmagnetic material, Apparatus for separating. L. J. Ingolfsrud adn W. H. Soule.
1,625,237; Apr. 19.
Magnetic material, Treating. W. E. Ruder. 1,648,697;
Nov. 8. tus for separating, L. J. Ingolfsrud adn W. H. Soule. 1,625,257, Apr. 19.

Magnetic material, Treating. W. E. Ruder. 1,648,697; Nov. 8.

Nov. 8.

Nov. 8.

Magnetic separator. B. H. Brune. 1,624,528; Apr. 12.

Magnetic separator. G. Ullrich. 1,617,971; Peb. 15.

Magnetic separator. G. Ullrich. 1,617,971; Peb. 15.

Magnetic starter. O. Brisbois. 1,652,617; Dec. 27.

Magnetic nionder. B. S. Aikman. 1,629,517; Dec. 27.

Magnetic nionder. B. S. Aikman. 1,629,517; Dec. 27.

Magnetic ally-operated signal. W. S. Smith. 1,645,628; Magnetically-operated signal. W. S. Smith. 1,645,628; Magnetic ally-operated signal. W. S. Smith. 1,645,628; Magnetic ally-operated signal. W. S. Smith. 1,645,628; Magnetic H. W. Henry. 1,641,384; Sept. 6.

Magneto. H. W. Henry. 1,641,384; Sept. 6.

Magneto. J. E. Périsset. 1,640,290; Apr. 50.

Magneto. B. F. Remy. 1,623,671; Apr. 50.

Magneto. R. Varley. 1,630,645; May 31.

Magneto. R. Varley. 1,630,645; May 31.

Magneto-actuating mechanism. P. Brown. 1,643,636; Sept. 27.

Magneto-electric ignition machine. A. G. L. Neighbour. 1,613,052; Jan. 4.

Magneto-electric ignition machine. A. G. L. Neighbour. 1,613,052; Jan. 4.

Magneto-electric ignition machine. A. G. L. Neighbour. 1,613,052; Jan. 4.

Magneto-electric ignition machine. A. G. C. Kleckner. A. G. L. Neighbour. 1,613,052; Jan. 4.

Magneto-generator. O. Thompson. 1,626,367; Apr. 26.

Magneto-generator. O. Thompson. May 24
Mail box, Gang. H. Krick. 1,620,474; Mar. 8.
Mail-box indicator or flag, Rurai-. I. D. Alderman.
1,620,314; Mar. 8.
Mail-box mounting. O. M. Aarseth. 1,616,432; Feb. 8.
Mail-box sost. G. J. Obermeyer, jr. 1,646,064; Oct. 18.
Mail-box signal. J. B. Maserang. 1,650,876; Nov. 29.
Mail-box signal. J. Norfin. 1,627,617; May 10.
Mail-box support. J. Morten, jr. 1,645,768; Oct. 18.
Mail-box support. J. Morten, jr. 1,645,768; Oct. 18.
Mail-box support. J. Warmack. 1,631,904; June 7.
Mail boxes, Attachment for. J. R. De Mier. 1,628,034;
May 10. Mail catching and delivering device. W. Page. 1.615.720: Mail cancer, Adjustable. N. Cohan. 1,640,981; Aug. 30.
Mail crane. C. A. Mohnkern. 1,625,272; Apr. 19.
Mail crane. C. A. Mohnkern. 1,625,274; Apr. 19.
Mail cranes, Pouch-holding clamp for. C. A. Mohnkern.
1,625,273; Apr. 19.
Mail-delivery apparatus. R. Severino. 1,617,170; Feb. 8.
Mail-delivery system. I. E. L. Kempt. 1,652,245;
The. 12. Dec. 13.

Mail, Device for use in sorting and delivering. G. F.
Ladd. 1,640,083; Aug. 23.

Mail-bandling machine. W. H. Alden, jr. 1,641,406; Mail-landling machine. W. H. Alden, jr. 1,641,406; Sept. 6.
Mail-marking machines, Automatic inker for. J. A. Mitchell and L. J. Zahn. 1,612,936; jan. 4.
Mail-receiving apparatus, Rural-. F. J. Clark. 1,639,722; Aug. 23.
Mail-stamping machines. Adjustable track for. G. E. Sheldrick. 1,638,762; Aug. 9.
Mail-stamping machines. Adjustable track for. G. E. Sheldrick. 1,638,762; Aug. 9.
Mail-stamping machine. R. J. Mitchell, Z. B. Babbitt, and Z. W. Alderman. 1,618,303; Feb. 22.
Mailing distributing machine. R. J. Mitchell, Z. B. Babbitt, and Z. W. Alderman. 1,618,303; Feb. 22.
Mailing machine. G. E. Northrop. 1,639,052-3; Aug. 18.

866 Mailing machines, Moistening device for. L. J. Zahn. 1,629,136; May 17.
Mailing matter, Descriptive. C. L. Stokes. 1,613,968; Jan. 11. Mailing matter, Descriptive. C. B. 1882.

Jan. 11.

Mailing package. H. L. Greve. 1,636,773; July 26.

Mains of gas plants, Dip-pipe construction for the hydraulic. W. Seymour. 1,628,334; May 10.

Mains of gas plants, Dip-pipe construction for the hydraulic. W. Seymour. 2,628,334; May 10.

Zeninger. 1,624,303; Apr. 12.

Maintenance record. C. Burris. 1,633,724; June 28.

Make-and-break contactor, Automatic. H. W. Protzeller. 1,630,580; May 31.

Make-and-break device. D. J. Dolan. 1,622,424; Mar. 29.

Make-up box, Theatrical. D. F. Stenholm. 1,650,241; Nav. 29. Nov. 22.

Make-up post. W. C. Trout. 1,644,862; Oct. 11.

Mandrel. F. Auty. 1,639,019; Aug. 16.

Mandrel, Cone-winding. H. A. Edwards. Re16,553; Mandrel. F. Auty. 1,639,019; Aug. 16.
Mandrel. Cone-winding. H. A. Edwards. Re16,553;
Feb. 22.
Feb. 22.
Feb. 22.
Feb. 22.
Feb. 23.
Feb. 24.
Feb. 24.
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Feb. 25.
Feb. 25.
Feb. 26.
Feb. 26 Mandrel, Riveting F. Stapp. 1,634,621; July 5, Mandrel, Tubesplicing. R. J. Milligan. 1,616,981; Feb. 8.

Mandrel, Welding. W. H. Pearce. 1,642,825; Sept. 20.

Mandrels, Method and apparatus for preventing silpage of coll-wound. F. W. Schule and C. W. Hunt. 1,651,413; Dec. 6.

Maneuver indicator. F. Ruspoll. 1,699,227; May 17.

Man. 1,635,217; July 12.

Mangle. C. A. Brewer. 1,649,337; Nov. 15.

Mangle. J. W. Menefee. 1,652,315; Dec. 13.

Manhole W. S. Frame. 1,639,935; Aug. 16.

Manhole trame and cover. J. Root. 1,615,673; Feb. 22.

M. Manhole switch. O. T. Nelson. 1,652,043; Dec. 6.

Manhole switch. P. W. Koch. 1,639,509; Aug. 16.

Manholes, valve box, and the like. L. Gschwind. 1,635,625; Dec. 27.

Manholes, water-meter boles, and the like, Closure for. C. Ehret. 1,614,781; Jan. 18.

Manicure implement. C. Ellis. 1,615,262; Jan. 25.

Manicure rest. D. W. Kent and M. C. Gale. 1,621,789; Manicure rest. D. W. Kent and M. C. Gale. 1,621,789; Manicure rest. D. W. Kent and M. C. Gale. 1,621,789; Manicure rest. D. W. Kent and M. C. Gale. 1,621,789; Manicure rest. D. W. Kent and M. C. Gale. 1,621,789; Manicuring appliance. M. Rüttger-Pelli. 1,653,871; Mar. 22. Manicuring appliance. M. Rüttger-Pelli, 1,653,871; Manifold and muffler, Exhaust. W. F. Smith. 1,634,000; 27.

Manifold accessory or supercharger. A. A. Bull. 1,644,870; Oct. 11.

Manifold accessory or supercharger. A. A. Bull. 1,644,870; Oct. 11.

Manifold and muffler, Exhaust. W. F. Smith. 1,634,000; June 28. June 28.
Manifold construction. H. L. Horning. Re16,781; Nov. 1.
Manifold, Fuel. R. W. A. Brewer. 1,641,527; Sept. 6.
Manifold game apparatus. A. Moore. 1,646,973; Oct. Manifold, Gaseous-fuel-mixing. J. H. Holloway. 1,652,010; Dec. 6. Manifold heat retainer. C. W. Dimond. 1,637,768;

Manifold heat retainer. C. W. Dimond. 1,637,768; Apg. 2.

Manifold heater. J. B. Forshay. 1,629,657; May 24.

Manifold heater. O. Wauhob. 1,627,759; May 10.

Manifold heater. D. A. Winden. 1,621,759; May 10.

Manifold heater. D. A. Winden. 1,614,722; Sept. 6.

Manifolding device. C. Castan. 1,646,676; Oct. 25.

Manifolding device. C. H. James. 1,648,482; Nov. 8.

Manifolding device. C. H. James. 1,648,482; Nov. 8.

Manifolding machine. J. Q. Sherman and A. W. Metzner. 1,644,956; Oct. 11.

Manifolding paper spindle. J. Q. Sherman. 1,648,998; Nov. 15.

Manifolding paper spindle. J. Q. Sherman. 1,648,998; Nov. 15.

Manifolding register. J. Q. Sherman. 1,644,957; Oct. 11.

Manifolding paper spindle. J. Q. Sherman. 1,642,917; Oct. 11.

Manifolding paper spindle. J. Q. Sherman. 1,644,957; Oct. 11.

Manifolding paper spindle. J. Q. Sherman. 1,644,957; Oct. 11.

Manifolding mechine. M. Rochanical. C. B. Hardy. 1,917,593; Feb. 15.

Manipulative appliance. H. P. Dahlstrand. 1,641,415; Sept. 6.

Manometer. W. Lommel. 1,642,615; Sept. 13. Scott ii. Manometer. W. Lommel. 1,642,615; Sept. 13. Mantle. R. M. Nastasia. 1,651,219; Nov. 29 Mantel, Ornamental. E. C. Weissinger. May 31. 1,630,910; Manual to automatic system. R. Mercer and F. Tench. 1.651.401; Dec. 6. Manually-controlled lock. C. N. Fairchild. 1,622.502; Mar. 29. A for making and applying. F. S. Mar. 1. Mark. 1. Mark. E. I. McKesson. 1,032,449; June 14. Mark. E. I. McKesson. 1,032,449; June 14. Mask. Face. A. K. Morris. 1,627,523; May 3. Mask plate. H. S. Jandus and C. E. Rasnussen. Des. 73,843; Nov. 15. H. S. Olerad. 1,639,209; May 24. Mask. Respirator. N. P. O'Neal. 1,619,030; Mar. 1. Massage and shampooing apparatus. H. C. Laufe. 1,023,124; Apr. 5. Massage apparatus. J. H. Ahlgren. 1,612,639; Jan. 4. Massage applratus. 'W. Wahrt. 1,630,149; May 24. Massage applrance. C. W. Cheney. 1,624,138; Apr. 12. Mar. 29, Manufacturing, hardening, storing, and dispensing plant for ice cream and other frozen food products. R. W. Genrhart .1619.717; Mar. 1. Manure conveyer, Barn. B. W. Flintrop. 1,640,825; Aug. 23. Aug. 23.
Aug. 24.
Aug. 25.
Annure, Machine for spreading artificial. II. Schnath.
I. 632.193; June 14.
Annure spreader. L. B. Neighbour. 1.636.829; July 26.
Manure spreader. L. B. Neighbour. 1.637,232; July 26.

Manure spreader. E. C. F. Schaefer, 1,646,878; Oct. Marble, Artitum,
Marble, Making imitation,
Marble, Making imitation,
Aug. 2.
Aug. 2.
Aug. 2.
Aug. 2.
Marble, Producing imitation, J. A. Moross, 1,623,907.
Apr. 12.
Marble, tiles, slabs, and similar material especially for use for decorative purposes in buildings and other places. Imitation.

A. Barnes-Thomas, 1,638,109.

Bargati, 1,613,393; Jan. 4.

Aug. 699; May 10 1,619,961; Mar. 8. loross, 1,623,967; places, Imitation. A. Barnes-Thomas. 1,638,109; Aug. 9,
Aug. 9,
Marble, Treating. F. Harget. 1,613,393; Jan. 4,
Marcel hair waver. E. E., Baldwin. 1,627,590; May 10.
Marcel hair waver. H. Browne. 1,635,631; July 19.
Marcel haver. A. J. Janda. 1,615,702; Jan. 25.
Marcel-waving device. T. O'Malley. 1,648,740; Nov. 8.
Marcel-waving device. T. O'Malley. 1,648,740; Nov. 8.
Marcellag device, Hair. F. M. McMaster. 1,635,683;
July 12.
Marine-compass bracket. P. C. Kauffman. Des. 72,829;
June 14.
Marine engine. M. G. Barker. 1,640,974; Aug. 30.
Marine-water-closet. U. G. Lee. 1,625,802; Apr. 26.
Marine-water-closet. U. G. Lee. 1,625,802; Apr. 26.
Marker. L. P. Lewis and W. Morgenthaler. 1,635,683;
July 5.
Marker. L. P. Lewis and W. Morgenthaler. 1,635,685;
July 5.
Marker. A. Wilhite. Marker and pin tray, Self skirt. H. A. Wilhite. 1,645,410; Oct. 11. Marker and sign, Highway. U. B. Newman. 1,649,249; Nov. 15. Marker and sign, Highway. U. B. Newman. 1,649,249; Nov. 15.

Marker and spacer, Multiple. O. J. Pectal and E. J. Palmer. 1,624,622; Apr. 12.

Marker block. C. C. Schrader. 1,629,053; May 17.

Marker for pavements. F. M. Balstey. 1,623,297;

Marker gauge, Combination. W. R. Schlage. 1,644,403; Oct. 4.

Marker, Sod-line. A. Hedrick. 1,634,421; July 5.

Marker, Tennis-court. W. H. Honn. 1,651,271; Nov. 29.

Marker, Traffic guide. W. Morris and C. Wyrostok. 1,617,207; Peb. 15.

Marker, Traffic guide. W. Morris and C. Wyrostok. 1,613,976; Jan. 11.

Marking articles, Method and apparatus for. J. A. Hall, Jr., and O. M. Tishlarich. 1,631,680; June 7.

Marking articles, Method and apparatus for. J. Roche. 1,619,487; Mar. R. F. Becht. 1,642,983; Sept. 20.

Marking device. R. Wasserman. 1,626,440; Apr. 26.

Marking device. T. West. 1,623,291; Apr. 6.

Marking device. A. Lossmann. 1,646,413; Oct. 25.

Marking exhibitor. E. F. Stanton. 1,622,565; Apr. 26.

Marking audic, Adjustable. C. H. Moline. 1,633,122; June 21.

June 21.

June 21.

Marking mechine. D. E. Hordine. 1,613,324; Dec. 20.

Marking mechine. D. E. Hordine. 1,613,324; Dec. 20. June 21.

Marking machine. W. J. Beattie. 1,653,334; Dec. 20.

Marking machine. D. E. Harding. 1,641,082; Aug. 30.

Marking machine. P. R. Glass. 1,652,274; Dec. 13.

Marking machine. E. L. and G. H. Lang. 1,615,017;

Jan. 18. Jan. 18.

Marking machine. F. A. Putnam. 1,631,060; May 31.

Marking machine. R. V. Woodworth. 1,639,360; Aug. 16.

Marking machine. Linen. H. J. F. Richter and J. J.

Burckhauser. 1,642,172; Sept. 18.

Marking machines, Type-wheel-sligning device for R.

Osborne and C. F. Miller. 1,644,144; Oct. 4.

Marking materials, Method and mechanism for. H. B.

Marking of, Frevention of, C. S. Hollander. 1,650,567;

Nov. 29.

Marking out lawn tangle accepts a control of the property Nov. 22.

Nov. 22.

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Nov. 24.

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Nov. 25.

Nov. 26.

Nov. 2

Massage appliance. S. Cocroft. 1,618,059; Feb. 15.

Massage device. T. A. Buckley, 1,635,924; July 12.

Massage device. K. W. Mesterton. 1,636,528; Nov. 22.

Massage device. F. M. Wright. 1,635,931; July 12.

Massage device, Fa.dl. W. Duncan. 1,635,744; July 12.

Massage implement and medicine applicator, Hand. O. T.

Wayne. 1,629,127; Apr. 26.

Massage machine. J. L. Wentz. 1,643,039-40; Sept. 20.

Massage machine. J. L. Wentz. 1,643,039-40; Sept. 20.

May 31.

Massage machine. J. L. Duncar. 1,630,435; Apr. 31.

Massage machine. J. L. J. Duncar. 1,630,436; Apr. 31.

Massage May 31.

Massage vibrator. L. J. Duprey. 1,630,115; May 24.

Massaging and cleansing device, Gum. T. A. Buckley.

1,631,791; June 7.

Massaging and lubricating the human system, Device for.

S. E. Pelphrey. 1,644,606; Oct. 4.

Massaging apparatus. M. Rüttger-Pelli. 1,635,497;
July 12. July 12.

Massaging device. W. B. Burnley. 1,631,159; July 19.
Massaging machine. A. Mraula. 1,612,981; June 7.
Massaging machine. O. P. Spilman. 1,616,831; Feb. 8.
Masses, Separation of the elements of foliated or laminated. O. Legg. 1,614,871; Jan. 11.
Mast, Collapsble. H. Price. 1,634,995; July 5.
Mat, Mooring. I. F. Fravel. 1,634,998; July 5.
Mat; See— Antimet Bathtub mat.

Bathtub mat.

Bathtub mat.

Bathtub mat.

Floor mat.

Mat. M. Feldman. 1,654.416; Dec. 27.

Mat. E. Gaudet. 1,641,020; Aug. 30.

Mat and making the same. W. M. Wattle. 1,635,731;

July 12.

Mat and the like, Bath. F. C. Brewer. 1,613,158;

Mat for hot plates, Decorate luncheon. M. Tannenholz.

Des. 72,876; June 14.

Mat for hot plates, Luncheon. M. Tannenholz. Des. 73,271; Aug. 16.

Mat for reverment work and making same. S. S. Scott. 1,628,315; May 17.

Mat. 363-65; July 19.

Mat or the like, Lace. S. N. Mallouk. Des. 72,129-75;

Mar. 15.

Mat of the like, Lace. S. N. Mallouk. Des. 72,222-3;

Mar. 15.

Mat of the like, Lace. S. N. Mallouk. Des. 72,222-3;

Mar. 15.

Mat or the like, Lace. S. N. Mallouk. Des. 72,222-3;

Mar. 15.

Match book. L. Greeenbaum and E. Van Hopstadt. 1,628,661; May 17.

Match book and method of making. J. M. Alter. 1,648,229; Oct. 18.

Match box. U. Rankin 1,642,629; Sept. 13.

Match box. U. Rankin 1,642,629; Sept. 13.

Match box U. Rankin 1,642,629; Sept. 13.

Match box U. Rankin 1,642,629; Sept. 13.

Match box box of the like. W. H. White. 1,628,208;

Match box holder or the like. W. H. White. 1,628,208;

Match box support. W. E. Keene. 1,649,167; Nov. 15. Bath mat. Bathtub mat. Interment mat. Sleeping mat. May 10.

Match-box support. W. E. Keene. 1,649,167; Nov. 15.

Match cards, Machine for making. B. Bogoslowsky.
1,616,175; Feb. 1.

Match container. H. D. Finch. 1,639,843; Aug. 23.

Match folder. M. A. Hammond. 1,641,850; Sept. 6.

Match folder. M. A. Hammond. 1,641,850; Sept. 6.

Match holder and cigarette container, Combined. W. G.

Wolford. Des. 72,745; May 24.

Match machine. C. F. Wright. 1,641,216; Sept. 6.

Match machines, Block-feeding mechanism for. B. Sny
Match machines, Composition-applying mechanism for.

B. C. Ross and J. E. Zomnir. 1,649,737; Nov. 15.

Match machines, Slide feeder for. L. E. Parker,

Match packages, Cover casing for. C. H. Stewart. Des.

72,581; May 3.

Match packet. W. Friedman. 1,650,703; Nov. 29. May 10. Table 1 May 3.

Match packet. W. Friedman. 1,650,703; Nov. 29.

Match packet. W. Friedman. 1,650,703; Nov. 29.

Match packet and pad, Combination. W. Friedman.
1,636,876; July 26.

Match-packeting machine. A. W. Christianson and J. F.
Milligan. 1,639,639; Aug. 16.

Match receptacle. M. T. Spring. 1,638,222; Aug. 9.

Match safes and the like, Mechanism for filling. J. C.

Match safes and the like, Mechanism for filling. J. C.

Match safes and the like, Mechanism for dipping. M. Parddon
1,641,193; Sept. 6.

Match sticks for their transfer to finishing stages, Device
for magazining. F. Mange. 1,615,907; Feb. 1.

Match sticks for their transfer to finishing stages, Device
for magazining. F. Mange. 1,615,907; Feb. 1.

Match sticks for their transfer to finishing stages, Device
for delivering. G. J.

Match sticks for their transfer to finishing stages, Device
for magazining. F. Mange. 1,615,907; Feb. 1.

Match Sticks for their transfer to finishing stages, Device
for magazining. F. Mange. 1,615,907; Feb. 1.

Match Storm, M Material-conveying apparatus. L. A. Stinson. 1,649,867; Nov. 22. Material-dividing machine. J. Hohl and O. J. Maurer. 1,629,917; May 24.

Material-gathering machine. T. E. Pray. 1,644,204; Oct. 4. Material-handling apparatus. E. L. Bradt. 1,613,308; Jan. Material-handling apparatus. E. E. Brosius. 1,622,902; Mar. 29. Material-handling apparatus. G. H. Gilman. 1,614,787; Jan. 18. Jan. 18. Material-handling apparatus. C. J. Klein. 1,637,420; Aug. 2. Material-handling device. H. H. Kurtz. 1,651,607; Dec. 6. Material-handling device. W. S. Russell. 1,625,913; Apr. 26.

Material-handling device. W. S. Russell. 1,625,960;
Material-handling equipment. M. R. Butler. 1,626,389;
Apr. 26. Apr. 26.

Material-handling equipment. M. R. Butler. 1,630,605;
May 31.

Material. Mechanism for handling. M. E. First. 1,633,677; June 28.

1,633,677; June 28.

1,633,677; June 28.

1,633,677; June 28.

1,630,767; June 28.

Material. Mechanism for handling. R. T. Homeles. 1,650,460; Nov. 22.

Material-working mechanism. C. G. Holmberg, Jr., and J. S. Stull. 1,629,705; May 24.

Material-working mechanism. P. D. Parcells. 1,614,569;
Material-working mechanism of photographic surfaces comprising refracting elements. Manufacture of cut. M. Devigny. 1,626,134; Apr. 26.

Matrix conduction of photographic surfaces comprising refracting elements. Manufacture of cut. M. Devigny. 1,626,134; Apr. 26.

Matrix composing and line-casting machine. Transferring the matrix composing and line-casting machines. Sug-ejecting mechanism for. C. Muchleisen. 1,645,615–16; Oct. 18.

Matrix composing and line-casting machines. Sug-ejecting mechanism for. C. Muchleisen. 1,645,615–16; Oct. 18.

Matrix composing and line-casting machines. Sug-ejecting mechanism for. C. Muchleisen. 1,645,615–16; Oct. 18.

Matrix composing and line-casting machines. Sug-ejecting mechanism for. C. Muchleisen. 1,645,615–16; Oct. 18.

Matrix socroter. J. W. Fitzstmoms. 1,632,6786; Adrix socroter. J. W. Fitzstmoms. 1,632,648; Nov. 22. Apr. 26. Material-handling equipment. M. R. Butler. 1,630,605; Matrix holder, A. Leinweber. 1,614,479; Jan. 18.
Matrix making machine. B. C. Blackmon. 1,625,786;
Apr. 26.
Matrix scorcher. J. W. Fitzsimmons. 1,632,646;
Matrix scorcher. J. W. Fitzsimmons. 1,632,646;
Matrix-setting and line-casting machine. D. Petri-Palmedo. 1,623,971; Apr. 12.
Matrey. Composition of. G. E. Messinger. 1,632,555;
June 14.
Matter Composition of. G. E. Messinger. 1,632,555;
June 14.
Matter of different specific gravities, Method and apparation of separating. H. Velten. 1,640,500; Oct. 25.
Mattress. L. M. Gillette. 1,647,222; Nov. 1.
Mattress. J. I. Morgan. 1,644,600; Oct. 4.
Mattress. J. I. Morgan. 1,644,600; Oct. 4.
Mattress. Adjustable wire. E. E. Barna. 1,639,422;
Aug. 16.
Mattress and dedpan, Combined. H. Sweeney. 1,631,656;
June 7.
Mattress and bed protector. W. R. Blissttt. 1,621,149;
Mattress and making the same. W. H. Kalsey.
Relegals, 1,648,373;
Mattress and making the same. W. H. Kalsey.
Mattress and making the same. W. H. Kalsey.
Mattress and sleeping bag. P. M. Vilas. 1,648,373;
Move & Mo Mattress and sleeping bag. P. M. Vilas. 1,648,373; Nov. 8. Mattress- and seep-onNov. 8.
Mattress-beating machine. D. Micon. 1,622,287; Mar. 29.
Mattress button, Tufted. P. P. Bebry. 1,627,723;
May 10.
Mattress- case. R. M. Nellson. 1,641,231; Sept. 6.
Mattress-filling machine. H. C. Smith. 1,626,434;
Apr. 26. Arress-filing machine. H. C. Smith. 1,626,434;
Arr. Salling machanism. H. G. Brandwein. 1,618,506;
Feb. 22.
Mattress-filing mechanism. H. G. Brandwein. 1,618,506;
Feb. 22.
Mattress, Nonstretchable. D. L. Reynolds. 1,642,557;
Sept. 13.
Mattress retainer. M. C. Barber. 1,630,462; May 31.
Mattress-side-stitching machine. F. W. H. Collett. ReMattress-side-stitching machine. F. W. H. Collett. ReMattress-wrapping machine. J. L. Rosenthal and J. J.
Crowley. 1,642,041; Sept. 20.
Mattress-wrapping machine. U. I. Rosenthal and J. J.
Crowley. 1,643,041; Sept. 20.
Mattresses, Harness for handling. J. F. Gail. 1,622,712;
Mar. 29.
Maul. F. C. Ehinger. 1,633,007; June 21.
Mar. 20.
Mattresses, Harness for handling. J. F. Cullinan.
1,641,123; Aug. 30.
Mausoleums. Ventilating system for. T. F. Cullinan.
1,641,124; Aug. 30.
Maximum-demand meter. F. C. Holtz. 1,619,473; Mar. 1.
Messure. A. M. English. 1,654,494; Dec. 27.
Messure. A. M. English. 1,654,5494; Dec. 27.
Messure. A. M. English. 1,654,5494; Dec. 27.
Messure. A. M. English. 1,654,5494; Dec. 27.
Messure. A. M. English. 1,654,6494; Dec. 27.
Messure. A. M. English. 1,654,5494; Dec. 27.
Messure. A. M. English. 1,654,6494; Dec. 27.
Messu

Measurement, Resistance. C. E. Perry. 1,616,387; Feb. 1, Measuring and computing machine. F. J. Tillman. 1,622,360; Mar. 29. Measuring and computing machine, Detachable counter bracket for supporting fabric. F. J. Tillman. 1,640,160; bracket for supporting fabric. F. J. Tillman. 1,640,160; Aug. 23.

Measuring and computing machines, Pointing device for. D. Turner. 1,616,184; Jan. 18.

Measuring and controlling instrument. E. H. Bristol. Measuring and controlling instrument. E. H. Bristol. Measuring and controlling instrument. C. S. Dumm. 1,647,689; Nov. 1.

Measuring and dispensing apparatus, Liquid. D. Cohen. 1,645,475; Oct. 11.

Measuring and dispensing device. C. T. Hollenback. 1,648,481; Nov. 8.

Measuring and dispensing machine. T. B. Lundin and Feb. 1,648,554; Nov. 8.

Measuring and dispensing machine. T. B. Lundin and Measuring and dispensing machine. T. B. Lundin and Measuring and dispensing machine. T. B. Lundin and Measuring and dispensing means, Liquid. J. J. Catron. 1,613,936; Jan. 11.

Measuring and indicating the flow of gases, Apparatus for. H. Y. Norwood and K. L. Tate. 1,630,307; May 31.

Measuring and recing device. E. D. Spoert. 1,624,633; Apr. 12.

Measuring and weighing device. V. Slezak. 1,624,019; Apr. 12.
Measuring and weighing device. V. Slezak. 1,624,019;
Apr. 12.
Measuring angles, Instrument for. T. J. Tresidder.
Measuring si, Nov. 22.
Measuring angles, Sighting instrument for. F. C. Armstrong. 1,640,485; Aug. 30.
Measuring apparatus, Electric. T. Umezawa. 1,652,917;
Dec. 13. Measuring apparatus for liquids, Volume. F. Woodruff and J. R. Foster. 1,648,669; Nov. 8. Measuring apparatus for ships, etc., Distance. G. Walker. 1,638,973; Aug. 16. Wagsuring apparatus, Juquid. A. W. Rybeck. 1,648,151; Messuring bucket or vessel. A. Davis, jr. 1,620,610; Messuring by auxiliary energy, System of. E. Roučka. 1,638,101; Aug. 9.

Messuring by impulses of auxiliary energy, System of. E. Roučka. 1,641,200; Sept. 6.

Messuring, cost-computing, and winding machine, Rib-Messuring, cost-computing, and winding machine, Rib-Messuring device. D. Bang. 1,647,656; Nov. 1.

Messuring device. O. D. Bang. 1,647,656; Nov. 1.

Messuring device. D. W. O. Bardlett. 1,630,636; July 19.

Messuring device. L. K. De Bus. 1,648,936; Nov. 15.

Messuring device. L. K. De Bus. 1,648,936; Nov. 15.

Messuring device. D. J. Cronk. 1,652,889; Dec. 18.

Messuring device. D. J. Cronk. 1,652,889; Dec. 18.

Messuring device. B. J. Egert. 1,614,605, Jan. 18.

Messuring device. B. J. Egert. 1,614,605, Jan. 18.

Messuring device. D. Livingston. 1,623,192; Apr. 5.

Messuring device. C. C. McGowen. 1,614,139; Jan. 11.

Messuring device. F. Weber. 1,646,567; Oct. 25.

Messuring device. Auxiliary of the Messuring device. Auxiliary of the Messuring device. Auxiliary of the Messuring device. Our value. L. W. Bugbee, jr. 1,623,406; Aug. 2.

Messuring device for textile machinery incorporating a swift. B. Schweiter. 1,622,124; Mar. 22.

Messuring device, Grade. G. C. Frantz.

Messuring device, Handy. C. J. Johnson. 1,629,106; May 17.

Messuring device, Liquid. R. P. Heron. 1,644,589; Measuring bucket or vessel. A. Davis, jr. 1,620,610; Apr. 5. Measuring device, Liquid. R. P. Heron. 1.644.589: Measuring device, Shrinkage-, C. E. Fuller. 1,651,813; Measuring device, Tension-. C. L. Floyd. 1,647,287; Nov. 1.
Mensuring faucet for cream. T. M. Costakos. 1,647,686;
Nov. 1.
Mensuring fluids for turbidity. color, and other characteristics, Apparatus for. W. G. Exton. 1.644,330-1; teristics, Apparatus 100. U. 1620 689; Mar. 15. Measuring gauge L. H. Steining, 1,620 689; Mar. 15. Measuring gauge L. H. Steining, 1,619,834; Mar. 8. L. H. Steining, 1,619,810; Mar. 8. Measuring heat quantities, Apparatus for, V. S. K. Petersen, 1,640,801; Aug. 30. Measuring linstrument, B. P. Currier, 1,621,352; Measuring Instrument, B. P. Currier, 1,621,352; Fetorsen.
Measuring instrument,
Mar. 15.
Measuring instrument,
D. Dunning, 1,653,3
Mensuring instrument,
H. W. Eddridge,
Diec, 27.
Testaument,
H. Gates, 1,639,
H. Gates, 1,639,
441. 1,653,892; Dec. 27. dridge. 1,654,164; Mensuring Instrument.

Dec. 27 instrument.

G. E. Foster. 1,623,915; Apr. 5.

Measuring Instrument.

E. H. Gates. 1,642,936; Aug. 23.

Measuring instrument.

E. Hart and G. B. Gallasch. Measuring instrument.
Measuring instrument.
Measuring instrument.
Measuring instrument.
1,648,643; Nov. 8. 1.648.643; Nov. 8. Measuring instrument. June 28. H. C. McCommon. 1,634,156;

Measuring instrument. P. K. McGall. 1,641,447; Sept. 6.

Measuring instrument. M. Moeller. 1,627,106; May 3. Measuring instrument. H. S. Percival. 1,640,425; suring 30. Measuring instrument. H. S. Fetcher Aug. 30. Measuring instrument. S. Putra. 1,643,087; Sept. 20. Measuring instrument. S. Putra. 1,643,087; Sept. 20. Measuring instrument, Direction and distance. A. P. Brush. 1,633,614; Aug. 16. Measuring instrument, Electric. T. A. Rich. 1,632,623; Measuring instrument, Electrical. R. T. Pierce 1,637,390; Aug. 2. Measuring instrument, Electrical. R. Simpson. 1,642,516. Sept. 13. Measuring instrument, Electrical. W. M. Scott and R. E. Measuring instrument, Electrical. W. M. Scott and R. E. 1.637.399; Aug. 2.

Measuring instrument, Electrical. R. Simpson. 1,642,516; Measuring instrument, Electrical. W. M. Scott and R. E. Tresise. 1,630,908; May 31.

Measuring instrument, Electrical. W. F. Sutherland. 1,646,634; Oct. 25

Measuring instrument, Electrical. W. F. Sutherland. 1,646,634; Oct. 25

Measuring instrument of the type employing a control motor in the second of the second o Measuring machine, Fabric. F. E. Fitch. 1,647,127; Nov. 1.

Measuring machine, Linear. H. E. Bryant. 1,626,265; Apr. 26.

Measuring machine, Torque. C. F. Cowdrey. 1,643,151; Sept. 20.

Meas. D. Machines, Automatically-controlled shutter for Measuring maximum current. I. Ikeda. 1,632,136; June 14.

Measuring maximum current. I. Ikeda. 1,632,136; June 14.

Measuring miscropically small distances, Device for. H. Gerdlen. 1,648,595; Nov. 15.

Measuring respired air in testing the lungs. H. Brown. 1,633,393; June 21.

Measuring speeds, Apparatus for. A. Seguin. 1,652,378; Dec. 13.

Measuring speeds, Apparatus for. A. Seguin. 1,652,378; Dec. 18.

Measuring system. C. L. Fortescue and R. D. Evans. 1,615,691; Jan. 25.

Measuring system. E. Roučka. 1,638,102; Aug. 9.

Measuring system. Floweck. 1,638,102; Aug. 9.

Measuring system. E. Roučka. 1,638,102; Aug. 9.

Measuring system. Floweck. 1,638,102; Aug. 9.

Measuring system. E. Roučka. 1,638,102; Aug. 9. Measuring system. E. Roucka. 1.641.195-6; Sept. 6. Measuring system, Flow. E. Roucka. 1.646.224; Oct. 18. Measuring tape. L. C. and A. J. De Camp. 1.624.779; Measuring tape. A. Langsner. 1.646.226; Oct. 25. Measuring the flow of gases, Apparatus for. K. L. Tate. 1.630.318; May 31. Measuring the forces arising during turning on lathes and the like, Device for. O. von Bohuszewicz and W. Wilk. 1.637.676; Aug. 2. Measuring the rate of flow of liquid. C. M. Allen. Measuring the viscosity of fluids. C. I. Hall. 1.641.673; Measuring the viscosity of fluids. C. I. Hall. 1,641,673; Measuring the viscosity of norms. C. I. Ham. Additions, Sept. 6.

Measuring transmitted light, Apparatus and method for. D. E. Branson. 1.653.694; Dec. 27.

Measuring volt amperes. J. Yuyama. 1.641.654; Sept. 6.

Meat-block and table cleaner. R. E. De Zonia. 1.650.698; Mest-block of the first state of July 19.

Meet platter or similar article. F. Schmidt. Des.

72.278: Mar. 22.

72.278: Mar. 22.

Meat-slicing machines and the like. Grinding apparatus
for. V. H. M. Brunskog and J. A. Nordin. 1,619,056;
Mar. 1. Mar. 1.

Ment-slicing machines. Riner attachment for. J. W. Neasham. 1.626,093; ADT. 26.

Meat tenderer. W. F. Jurey. 1.631,869; June 7.

Meat tenderer. W. F. Jurey. 1.631,869; June 7.

Meat tenderer. W. Werse. 1.633,851; Aug. 23.

Meat tenderer. J. P. Spang. 1.614,047; Jan. 11.

Meat tenderer. J. P. Spang. 1.646,071; Oct. 22.

Meat-tenderer. J. P. Spang. 1.646,711; Oct. 22.

Meat-tenderer. J. P. Spang. 1.646,711; Oct. 25.

Meats, Canning. C. A. Sahlberg. 1,632,454; June 14. Meats, Curing. J. Aisberg. 1,635,301; July 12. Mechanical apparatus. S. Hinds. 1,621,202; Mar. 15. Mechanical apparatus. S. Hinds. 1,621,202; Mar. 15. Mechanical converter. L. C. Sturbelle. 1,613,543; Jan. 4. Mechanical element and making same. J. M. Taylor. 1,623,894; Apr. 5. Mechanical face with movable features. M. J. Munson. 1,617,661; Mechanical face with movable features. M. J. Munson. 1,617,601; Mechanical face with movable features. M. J. Munson. J. M. Bertin. 1,621,894; Mar. 15. Mechanical movement. E. T. Black. 1,643,993; Sept. 27. Mechanical movement. E. T. Black. 1,643,993; Sept. 27. Mechanical movement. F. R. Belluche. 1,646,441; Oct. 25.

Mechanical movement. E. Bryant. 1,630,164; May 24. Mechanical movement. J. E. Carroll. 1,634.453; July 5. Mechanical movement, G. P. S. Cross. 1,648,114;

Nov. 8. Mechanical Weicher. Mechanical movement. C. C. Hartman and 1,640.655; Aug. 30. movement. H. A. Holmes. 1,6 1,623,872;

Mechanical movement. H. A. Holmes. 1,623,872; Mechanical movement. A. D. Hudson and E. L. Smith. 1,635,182; July 12. Mechanical movement. R. D. Jacobs. 1,623,732; Apr. 5. Mechanical movement. J. Krystofiak. 1,639,191; A. Mechanical movement. F. J. Lass. 1,641,498; Sept. 6. Mechanical movement. A. E. Norris. 1,632,038; June 14. Mechanical movement. J. Wegner. 1,623,038; June 14. Mechanical movement of the planetary gear type. A. L. Powell. 1,622,842; Mar. 29. Mechanical movement, Reciprocating. C. H. Au. 1,645,273; Oct. 11. Mechanical shovel. A. E. Bannister. 1,650,255; Nov. 22. July 26. Mechanical shovel. A. E. Bannister. 1,650,255; Nov. 22. July 26. Mechanically-packed packer. J. C. Bell. Re16,670;

Mechanically-packed packer. I. C. Bell. Re16,670; July 12.

May 1,627,236; May 2.

May 1,627,236; May 2.

Mcdall G. A. Fitzgibbons. Des. 73,402; Sept. 6.

Medallion. J. D. Karle. 1,620,259; Mar. 8.

Medallion or similar article. B. Chafetz. Des. 71,826; Jun. 13.

Tan. 11.

Medical apparatus for the treatment of the intestines.

A. Klaiber. 1,628,849; May 17.

Medical apparatus for the treatment of the intestines.

A. Klaiber. 1,628,849; May 17.

Medical preparation containing arseoic and making the same. I. Ostromislensky. 1,644,345; Oct. 4.

Medicament carrier. J. A. Lawton. 1,637,155; July 26.

Medicament carrier. J. A. Lawton. 1,637,155; July 26.

Medicament from receptacles or containers and applying them to the body, Withdrawing small quantities of.

R. M. Withycombe. 1,632,685; June 14.

Medicanton of the oral carlity Soluble strip for local.

Medicantal agent adapted for glandular therapy. G. P.

Metz. 1,640,709; Aug. 30.

Medicant pencil and inhaler, Combined. W. C. Belmonte.

1,840,687; Aug. 30.

1.634.0687; Aug. 30.

Medicinal powders, Apparatus to render possible the inhalation of. N. R. Di Cristina. 1,643.983; Oct. 4.

Medicinal portouct. H. C. Fuller. 1,627.968; May 10.

Medicinal purposes, Powder-applying device for. D. T.

Medicina. C. E. Carter. 1,631.244; June 7.

Medicine. C. E. Carter. 1,631.244; June 7.

Medicine cartridge and applicator therefor. O. Smiley.

Medicine-dropper holder. E. Pearson. 1,618.724; Feb. 15.

Medicinedropper holder. E. Pearson. 1,618.724; Feb. 15.

Medicines, Cover for curative. V. Pellegrino. 1,629,297;

May 17. J. W. Wilhelm. 1613.001. Jun. 4.

May 17.

Metaphone. J. W. Wilhelm. 1,613,001; Jan. 4.

Metling furnace. W. H. Chenowith and G. C. Schimpf.

Metling furnace. W. P. Runyan. 1,614,085; Jan. 11.

Metling pot. J. O. Luthy. 1,629,380; Aug. 16.

Metling pot. Blectric. F. Schuster. 1,628,209; Apr. 5.

Memorandum appliance. W. L. Jenkins. 1,629,459;

May 17.

May 17.

Memorandum books and shollar devices, Loose-leaf binder for, W. A. Ringler, 1,644,034; Oct. 4.

Memorandum device. E. B. Angell, 1,637,672; Aug. 2.

Memorial tablet, J. J. Haggenjos, 1,624,048; Apr. 12.

Memorization device, J. E. McDade, 1,641,982; Sept. 18.

Menthol, Manufacture of, K. Schollkopf, 1,625,771; Apr. 19.

Menthol, Manufacturing. K. Schöllkopf. 1,629,002;

Menthol, Manutacturing, K. Scholikopi, 1,629,002; May 17,66. W. J. Bird, 1,623,783; June 21, Mercanto-Gonzo-thiazole, Manufacturing, W. J. Kelly, 1,631,871; June 7. Mercerizing machine. F. S. Wilcox. 1,620,419; Mar. 8. Merchandise, Article of, R. Paulus and P. Tiirik, 1,632,673; June 14. Merchandise carrier. H. Arnold. 1,630,047; May 24.

Merchandise, Storage and display apparatus for. W. P. Rynnder. 1,633,907; June 28.

Mylander. 1,633,907; June 28.

Mercury-are rectifier. C. Kriimer. 1,652,899; Dec. 13.

Mercury derivatives of hydroxy-sulpho-benzoic acids, Production of solutions of. E. Sagi. 1,613,569; Jan. 4.

Mercury gauges, Regulator for. A. A. Gibson. 1,620,540; Mar. 8.

Mar. 8.

Mercury meter. F. P. Church. 1,640,438-9; Aug. 30.

Mercury, Producing. W. Glaeser. 1,637,481; Aug. 20.

Mercury rectifier. J. Alexander. 1,643,146; Sept. 20.

Mercury salt of 2-phenylquinoline-4-carboxylic acid and
producing the same. M. L. Crossley and M. L. Dolt.
1,638,833; Aug. 16.

Mercury switch. Rotating cylindrical glass. W. R.

Mercury switch. Rotating cylindrical glass. W. R.

Mercury-tube switch. I. E. McCabe. 1,642,621; Jun. 18.

Mercury-tube switch. H. E. Warren. 1,631,713; Jun. 7.

Mercury-tube switch. H. E. Warren. 1,631,713; Jun. 7.

Mercury-tube switch. H. E. Warren. 1,642,345; Sept. 20.

Mercury-tube switch. H. E. Warren. 1,642,345; Manufac
Mercury-tube switch. H. E. Warren. 1,642,345; Sept. 20.

Sept. 20.

Mercuri-mononitro-ortho-cresol and its salts, Manufacture of. G. W. Raiziss. 1,630,072; May 24.

Merry-go-round. G. A. Bluthardt. 1,635,108; July 5.

Merry-go-round. J. P. Mef. 1,652,993; Dec. 18.

Merry-go-round. J. P. Mef. 1,652,993; Dec. 18.

Merry-go-round. J. P. Mef. 1,652,993; Dec. 18.

Merry-go-round. J. R. Pullen and W. L. Flene. 1,635,387; May 10.

Message carrier. J. G. Maclaren. 1,635,047; Aug. 9.

Message carrier. J. G. Maclaren. 1,635,047; Aug. 9.

Message carrier. C. L. Paulus and R. Kauch. 1,641,549; Sept. 6.

Messages through submarine and other like cables, Means and apparatus for transmitting. W. Estaugh. 1,631,254; June 7.

and apparatus for transmitting. W. Estaugh. 1,631,254; June 7.

Metal alloy of high density and high melting point and making the same, Refractory. C. A. Laise. 1,633,258; June 21.

Metal and briquettes used therefor, Desulphurizing molMetal and briquettes used therefor, Desulphurizing molMetal and glate. 1,651,492; Dec. 6.

Metal and Walter. 1,651,492; Dec. 6.

Metal and porcelain article and manufacturing the same. F. S. McCullough. 1,615,023; Jan. 18.

Metal and the rare-earth metals, Clean-up and activation by misch. J. W. Marden and H. C. Rentschler. Metal, Apparatus for beating. R. T. Romine. 1,615,512; Jan. 25.

Metal, Apparatus for regenerating bulky waste. R.

Metal, Apparatus for regenerating bulky waste. R.

Metal, Apparatus for regenerating bulky waste. R.

Metal. Apparatus for regenerating bulky waste. R. Philipp. 1,647,371; Nov. 1. Metal. Apparatus for regenerating bulky waste. R. Philipp. 1,647,371; Nov. 1. Metal. Apparatus for rolling. J. F. Halpin. 1,634,258; July 5. Metal. Apparatus for the production of pure. S. L. Madorsky. 1,642,683; Sept. 20. Metal article and producing the same, Hollow. A. B. Metal article and producing the same, Hollow. A. B. Metal article and producing Apparatus for making composite. G. R. Rich. 1,651,547; Duc. 9. Metal articles by arre welding. Apparatus for making composite. G. R. Rich. 1,651,547; Duc. 9. Metal articles, Making. W. T. Abel. 1,613,595; Jan. 11. Metal articles, Making. W. T. Abel. 1,613,595; Jan. 11. Metal articles, Making. W. T. Abel. 1,613,595; Jan. 11. Metal articles, Markon. W. H. Metal articles, Markon. M. Bentley. 1,647,851; Nov. 1. Metal bar, Cross-jointed. S. J. Gary. 1,637,220; July 26. Metal bar, Cross-jointed. S. J. Guarneri. 1,622,235; Mar. 22. Metal bars, Apparatus for cooling and annealing. J. R. Metal bars, Apparatus for cooling and annealing. J. R.

Metal bar, Cross-Jointed, S. J. Carry, knowlesser, where an Metal bar, Cross-Jointed, S. J. Garneri, 1,622,235; Mar. 22.

Metal bars, Apparatus for cooling and annealing, J. R. George, 1,642,437; Sept. 13.

Metal bars, Apparatus for cooling and annealing, J. R. George, 1,642,437; Sept. 13.

Metal bars, Apparatus for cooling and annealing, J. R. J. George, 1,642,437; Sept. 13.

Metal bars, Repairing for treating, F. M. Becket, 1,622,078; Mar. 22.

Metal beams, Repairing, W. A. Fritz and C. C. Cooke, 1,648,691; Nov. 8.

Metal-bending machine, T. Rolley, 1,636,786; July 26.

Metal bending machine, T. Rolley, 1,636,786; July 26.

Metal bending machine, T. Rolley, 1,636,786; July 26.

Metal bodies, Method of and apparatus for centrifugally casting, W. D. Moore and W. Morgan, 1,620,829–80; Mar. 15.

Metal 2,048; July 26.

Metal cap, Resealable, C. Hammer, 1,618,657; Feb. 22.

Metal cap, Resealable, C. Hammer, 1,618,657; Feb. 22.

Metal cap, Resealable, C. Hammer, 1,618,657; Feb. 22.

Metal carting apparatus, A. Forrest and G. M. Smith, 1,632,468; June 14.

Metal catnings, Making, H. Klouman, 1,643,777; Sept. 27.

Metal castings, Making. H. Klouman. 1,643,7777; Sept. 27.

Metal catalysts contaminated by sulpbur. Regeneration of. E. A. Prudhomme. 1,640,668; Aug. 30.

Metal chlorides, Desiceation of molten-. W. Moschel and P. Stedler. 1,650,531; Nov. 22.

Metal container. F. C. Thornton. 1,615,054; Jan. 18.

Metal container. F. C. Thornton. 1,615,054; Jan. 18.

Horkbinson. 1,630,012; grubber seal rings in. E. C. Hurkbinson. 1,630,012; G. E. Jones and M. Δ. Atuesta. 1,615,707; Jan. 25.

Metal cutter. A. Breton. 1,622,487; Mar. 29.

Metal cutter. D. Turtle and M. Klitenick. 1,625,341; Apr. 19.
Metal-cutting machine.
Dec. 27.
machine. W. G. Ritchie. 1,653,662; Dec. 27.
Metal-cutting machine. A. G. Thompson and L. K.
Sprague. 1,623,449; Apr. 5.
Metal-cutting mechanism. H. V. Ludwick. 1,647,835; Nov. 1. Metal cutting or working device. A. J. Lewis. 1,650,841; Nov. 23.

Metal-cutting stick, Revoluble. C. Frick. 1,617,801;
Feb. 15.

Feb. 15.

Feb. 16.

Feb. 16.

Feb. 17.

Feb. 18.

Revoluting tool. J. D. Knlpple. 1,629,667; May 24.

Metal dusing tool. J. D. Knlpple. 1,629,667; May 24.

Metal Expanded. H. M. Gersman. 1,615,578; Jan. 25.

Metal, Expanded. H. M. Gersman. 1,615,578; Jan. 25.

J. 628,976; May 17.

Metal facing for window openings. C. W. Hawthorne.

J. 618,728; Feb. 22.

Metal finament. T. E. Foulke. 1,628,456; May 10.

Metal finament. T. E. Foulke. 1,628,456; May 10.

Metal funament. T. E. Foulke. 1,628,456; May 10.

Metal funament. T. E. Foulke. 1,628,456; May 10.

Metal funament. T. E. Foulke. 1,628,456; Mar. 1.9.

Metal funament. T. E. Foulke. 1,628,457; Mar. 1.9.

Metal funame. W. Alderice. 1,642,351; Sept. 13.

Metal in open-hearth and like furnaces, Agitating and stirring moiten. J. Edwards. 1,635,937; July 5.

Metal-loid-alkali-lodide compounds suitable for use in therapeutics and manufacturing them. H. Truttwin.

Metal-lath-attaching clip. J. H. Schlany. 1,624,187;

App. 12. Metal-cutting stick, Revoluble. C. Frick. 1,617,801; Apr. 12. Metal-lath corner strip. W. E. Campbell. 1.619.401: Mar. I.

Metal, Machine for bending. J. Karpouich. 1,617,913;
Feb. 13.

Metal, Machine for bending. J. Karpouich. 1,617,913;
Feb. 36.

Metal, Manufacture of expanded. J. H. Dean. 1,635,662;
July 12. July 12.

Metal mercapto sulphonic compounds, Heavy, A. Feldt, W. Schoeller, and E. Borgwardt. 1,633,626; June 28.

Metal parts, Apparatus for cleaning. L. Rosenberg, 1,632,099; June 21.

Metal parts, Buding and cleaning of. S. R. Mason. 1,632,099; June 21.

Metal phosphates, Making. H. Blumenberg, jr. 1,617,098; Feb. 8.

Metal pickling. J. H. Gravell. 1,632,833; June 21.

Metal-planing machine. C. G. Johannesmeyer. 1,631,132; June 7. Cook. 1,020,012, Apr. 0. G. Johannesmeyer. 1,631,132; Metal plantes and sheets. Apparatus for annealing. W. L. Jenkins, sr. 1,615,627; Jan. 25. Metal plates, Apparatus for flanging and bending. G. Hughes, 1,633,744; June 28. Metal plates, Mechanism for producing. W. J. Stoop. 1,022,060; Mar. 22. Metal plates, Mechanism for producing. W. J. Stoop. 1,022,060; Mar. 22. Metal plates, Mechanism for producing. W. J. Stoop. 1,022,060; Mar. 22. Metal plates, Mechanism for producing. S. R. Mason. 1,625,464; Apr. 19. Metal, Producing welding. A. Lucas. 1,637,619; Aug. 2. Metal, Producing deposit, scale, or incrustations from. G. Ritische. 1,645,664; Oct. 18. Metal, Rolling. N. W. Elliott. 1,625,643; Apr. 19. Metal, Removing deposit, scale, or incrustations from. G. Ritische. 1,645,664; Oct. 18. Metal, Rolling. N. W. Elliott. 1,625,643; Apr. 19. Metal scarce. D. D. Pinkham. 1,630,450; May 31. Metal scarce. D. D. Makanis, P. W. Shaw. 1,617,224; Feb. 8. Metal scarce. Machine for expanding preslitted. J. A. Halls. 1,634,460; Dec. 67. Geding and coating. H. Halls. 1,654,460; Dec. 67. Geding and coating. H. Metal scheets, Machine for expanding preslitted. J. A. Halls. 1,654,460; Dec. 67. Geding and coating. H. Hernalle. 1,634,517; July 5. Metal scheets, Machine for expanding preslitted. J. A. Halls. 1,654,60; Dec. 67. Geding and coating. H. Metal scheets or plates, Rolling mill for the production of. H. L. Davies and S. R. Cound. 1,624,931; Apr. 19. Metal scheets or plates, Rolling mill for the production of. H. L. Davies and S. R. Cound. 1,624,931; Apr. 19. Apr. 19.
Metal sheets, preventing the development of stretcher strains in. G. L. Kelley. 1,649,705; Nov. 15.
Metal spokes, Welding. A. L. Putnam. 1,639,109;
Aug. 18.
Metal stock, Electrical. Apr. 19. Metal stockes, Weiding, A. L. Putnam, 1,639,109; Metal stock, Electrical heating of. E. S. Jefferles. 1,647,296; Nov. 1. Metal strips, Machine for preparing. J. M. Fedders and F. H. Stolp. 1,640,147; Aug. 23. Metal surfaces, Composition for and coating. R. R. Metal surfaces, Preventing the formation of crystals and the deposition of incrustations on. L. Blass. 1,613,430; Jan. 4. Metal, Thermostatic. C. E. Fry. 1,643,809; Sept. 27. Metal transom cushion-block container. S. E. Turner. 1,632,632; June 14. Metal, Thermostatic unit for calking. E. Shores. 1,630,334; Nov. 22.

Metal, Treating ferrous. W. F. Hodges. 1,651891; Dec. 6.

Metal tubes, Method of and machine for manufacturing spiral. J. Fentress and A. W. Junkunc. 1,617,583; Feb. 15.

Metal-turning machine, Multiple-spindle. C. M. Peter-Metal Lurning machine, Multiple-spindle. C. M. Peter-Metal Lurning machine, Multiple-spindle. C. M. Peter-Metal Lurning machine, May 10, 1637,853; Aug. 2.

Metal Lurning machine, Multiple-spindle, L. A. Brown. 1,651,197; Nov. 29.

Metal wheel. J. A. Charter. 1,618,813; Feb. 22.

Metal wheel. J. A. L. Putnam. 1,618,837; Feb. 22.

Metal wheel. J. A. Charter. 1,618,815; Feb. 22.

Metal working. W. C. Coryell. 1,618,515; Feb. 22.

Metal working. W. C. Coryell. 1,618,515; Feb. 22.

Metal-working apparatus. J. T. Cook, jr. J. W. Murphy, T. J. Brusnicki, and H. C. Goldsmith. 1,645,372; Oct. 11. Metal-working implement. C. Johanson.
July 26.
Metal-working machine. A. E. Drissner. 1.618.583: Feb. 22.
Mctal-working machine,
Apr. 12.
Mctal-working machine,
B. M. W. Hanson. 1,624,868;
Apr. 12.
Mctal-working machine,
Aug. 30.
Mctal-working machine,
L,649,704; Nov. 15.
Mctal-working machine,
Real-working machine,
A. J. Neihengen, 1,647,655. Nov. 22.

Nov. 22.

Metal-working machine. A. J. Neuhengen. 1,647,653;
Nov. 1.

Metal-working machine and method. C. P. Topping.

Metal-working machine and method. C. P. Topping.

Metal-working machine and method. C. P. Topping.

Metal-working machines, dearing for. F. S. Jones.

1,645,196; Aug. 2.

Metal-working machines, Gearing for. F. S. Jones.

1,645,194; Oct. 11.

Metal-working machines, Work feeding and clamping means for. F. M. Davis. 1,637,176; July 26.

Metals and alloys, Furifying and refining. D. R. Tullis.

Metals and alloys thereof, Production of rare. J. W. Marden. 1,648,595; Nov. 15.

Metals and alloys thereof, Production of rare. J. W. Marden. 1,648,595; Nov. 16.

Metals, Apparatus for heat-treating. F. S. Kochendorfer.

1,624,668; Apr. 12. heat freating. F. S. Kochendorfer.

1,624,668; Apr. 12. heat freating. F. S. Kochendorfer.

Metals, Apparatus for reclaiming. T. D. Stay and C. O. Tessler. 1,630,361; May 31.

Metals, Apparatus for refining. M. Unger. 1,628,375; May 10.

Metals, Apparatus for uniting. J. B. Austin. 1,651,344; Nov. 28.

Metals, Apparatus for uniting. J. B. Austin. 1,651,344; Nov. 28.

Metals, Bonding dissimilar. H. C. Mougey. 1,651,403; Nov. 22. Metal-working machine. A. J. Neuhengen. 1,647,653; Nov. Metals, Bonding dissumment of the L. I. Recommendation of L. Recommendation of L. Recommendation of L. Recommendation of L. I. Recommendation of L. Recommendation Metals from liquids and compositions thereof, Recovering. A. L. Feild. 1,617,206; Feb. 8. Mctals from slag, Recovering. F. Rosenzweig. 1,643,610; Sept. 27. Sept. 27.

Metals from solutions, Recovering. G. J. Levy. 1,624,172;

Apr. 12. Apr. 12.

Metals in a liquid condition and at a predetermined temperature, Maintaining, W. H. Winslow. 1,651,937

Dec. 6. perature, Maintaining, W. H. Winslow. 1,651,937
Dec. 6.
Metals, Leod plating of. W. R. Dickens. 1,634,662;
Jan. 18.
Metals, Mold for casting. C. E. Magill. 1,640,843;
Metals, Mold for casting. C. E. Magill. 1,640,843;
Metals, Mold for casting. The Magill. 1,640,843;
Metals, Mold for casting. C. E. Magill. 1,640,843;
Metals, Moldzing nonferrous. G. E. Robmer. 1,616,253;
Fcb. 1.
Preparing. F. Koref and Hans Hoffmann.
Metals, Treating. F. Koref and Hans Hoffmann.
Metals, Sintering refractory. E. E. Schumacher. 1,616,957; Feb. 1.
Metals, Treating. M. W. Arrowood. 1,617,510; Feb. 15.
Metals, Treating. M. W. Arrowood. 1,617,510; Feb. 15.
Metals, Treating, M. W. Arrowood. 1,617,510; Feb. 15.
Metals, Winting dissimilar. H. C. Mougey. 1,644,741;
Aug. 9.
Metals with gases, Reacting. H. R. Carveth. 1,638,471;
Aug. 9.
Metals with high temperature fusing points such as tungsten and preparing wire therefrom. F. Koref and H. Alterthum. 1,650,631; Nov. 29.
Metalls working for the Computer of the Metals and Proparatus for use in uniting. 1,631,343; Nov. 29.
Metallic articles. A page. 1,614,684; Jan. 18.
Metallic articles. Apparatus for use in uniting. J. P. Copland. 1,651,343; Nov. 29.
Metallic articles. A page. 1,636,763; July 26.
Metallic composition. H. Boving. 1,636,763; July 26.

Metallic corner. G. A. Gallowitz. 1,636,412; July 19. Metallic drums, Fastening for the covers of. W. M. Bell. 1,642,481; Sept. 18. Metallic dust, Apparatus for the production of. R. B. Finn. 1,622,434; Mar. 29. Metallic dements, Connecting. R. Mattice. 1,634,674; Metallic elements, Connecting. R. Mattice. 1,634,674; Finn. 1,622,434; Mar. 29.

Metallic elements, Connecting. R. Mattice. 1,634,674;
July 5.

Metallic delements, Connecting. R. Mattice. 1,620,530;
Mattice of Mattice. 1,622,683;
Metallic layer for upper dentures. W. M. Stanbrough. 1,622,683; Mar. 29.

Metallic mesh fabric. S. G. Mandalian. Des. 72,325;
Metallic mesh fabric. S. G. Mandalian. Des. 74,115;
Metallic oscillation and constructiog same. H. S. Coyer. 1,652,164; Dec. 13.

Metallic oscillation and constructiog same. H. S. Coyer. 1,652,164; Dec. 13.

Metallic packing, Machine for manufacturing. H. P. Rhodes and R. F. Kreiter. 1,634,556; July 5.

Metallic sheets and the like, Leveling apparatus for. G. A. Wise. 1,645,637; Oct. 13.

Metallic solutions, Oxidizing. L. P. Clark. 1,649,152;
Nov. 15.

Metallic structure. D. H. Bellamore. 1,623,155; Apr. 5.

Metallic structure. Repairing broken. R. Mattice. 1616,580; Apr. 15.

Metallic structure. Repairing broken. R. Mattice. Nov. 15.

Metallic structure, D. H. Bellamore. 1,623,155; Apr. 5.

Metallic structures, Repairing broken, R. Mattice,
Metaldehyde, Manufacture of stabilized, E. Lüscher.
1,631,875; June 7.

Metallo-viganic compounds, Making. C. A. Kraus and
C. C. Callis, 1,635,947; Aug. 23.

Metallurgical furnace. F. A. Fahrenwald. 1,623,469; Apr. 5. Antenwa Apr. 5. L. Talbot. 1,6 Metallurgical furnace. B. Talbot. 1,6 Metallurgical-furnace-feeding mechanism. 1,629,968; May 24. Metallurgical method. J. W. Marden. 1,648,247; Nov. 8. sm. A. H. Richards. J. W. Marden. 1,646,734; Oct. 25.
Metallurgical process.
Feb. 22.
Metallurgical process.
June 21. W. E. Greenawalt. 1,618,187; W. E. Greenawalt. 1,633,091; June 21.

Metallurgical process,
July 5.

Meter: See—
Bite meter.
Current meter.
Density meter.
Density meter.
Electric mater.
Electric mater.
Exposure meter.
Exposure meter.
Flow meter.
Flow meter.
Fluid meter.
Frequency meter.
Gas meter. illurgical process. W. E. Greenawalt. 1,634,497; Mercury meter.
Mileage meter.
Moisture meter.
Optical tension meter. Optical tension meter.
Oscillation meter.
Parking meter.
Power-factor meter.
Pressure meter.
Production meter.
Pulsation-compensated me-Frequency meter,
Gas meter,
Gas meter,
Gravity meter,
Induction meter,
Liquid meter,
Maximum-demand meter,
Meter, E. R. Benedict, 1,649,653; Nov. 15.
Meter, J. W. G. Fries, 1,624,095; Apr. 12.
Meter, W. L. Marden, 1,617,407; Feb. 15.
Meter, M. Smithey, 1,623,562; Apr. 5.
Meter and indeating means therefor, R. L. Dezendorf.
Meter and meter-reading device, R. D. Work and A.
High, 1,617,982; Feb. 15.
Meter and motor, Fluid, W. H. Richards, 1,625,428;
Apr. 19. Pump-discharge meter. Apr. 19.

Meter-box lid and lock therefor. C. C. Arnett. 1,616.298; Meter connection, Oridee-. H. M. Haldeman. 1,631,264;

Meter casing. P. MacGahan. 1,624,417; Apr. 12.

Meter connection. W. H. Kaiser. 1,621,986; Mar. 22.

Meter connection, Oridee-. H. M. Haldeman. 1,631,264;

Lune 7. June 7.

Meter for measuring the vertical gradient of the gravity of the barth, Gravitation. W. Schweydar. 1,652,255; Meter lock cock. L. C. Swacker. 1,615,181; Jan. 18.

Meter lock cock. L. C. Swacker. 1,615,181; Jan. 18.

Meter seal. C. E. Holmes. 1,648,686; Nov. 8.

Meter stand, Horsepower. R. B. Wasson. 1,652,225; Dec. 13.

Methods and index box. E. A. Clark. 1,631,472; Meterwindow structure. J. Schmidt. 1,414,55. Meter-window structure. L. Schmidt. 1,614,156; Jan. 11. Metering panel board. G. W. Berthold. 1,616,174; Feb. 1. Metering panel board. A. C. McWilliams. Sept. 27. Metering panel board. A. C. McWilliams. 1,643,784; Sept. 27.

Metering system. R. D. Evans. 1,615,688; Jan. 25.

Metering system. B. H. Smith. 1,614,212; Jan. 11.

Metering system. T. U. White and J. E. Gardner. 1,614,222; Jan. 11.

Metering system, Remote. P. A. Borden. 1,633,973; June 28.

Metering system, Summation. B. W. Jones. 1,641,762; Sept. 6.

Meters, Alarm register for. W. L. Marden. 1,617,408; Feb. 15.

Meters and the like Integrating and registering mechanism for flow. C. F. Bullock. 1,618,807; Feb. 22.

Meters, Attachment for electric-current demand. W. H. Sommer. 1,631,987; June 14.

Meters, Automatic governing device for fulld-displacement. T. J. Loftus. 1,630,020; May 24.

Meters, Attomatic governing device for fulld-displacement. T. J. Loftus. 1,647,705; Nov. 1.

1,626,142; Apr. 26.

Meters, Connecter and support for. E. P. Bartholomay. 1,630,323; May 31.

Meters, Differential-pressure gauge for orifice. H. P. Westcott. 1,616,525; Feb. 8.

Meters, Guard for electric. C. J. Gillen. 1,647,566; Nov. 1. Meters, Discounting of the Meters, Guard for electric. C. J. Gillen. 1,647,566; Meters, Guard for electric. C. J. Gillen. 1,647,566; Meters, Guard for electric. C. J. Gillen. 1,647,566; Meters, Pressure temperature compensator and slip integrator for. C. R. Houghton. 1,621,203; Mar. 15. Metane, Production of. F. Klatte and J. Söll. 1,643,633; Sept. 2. Gatalyst for synthetic. J. C. Woodruff of Electrical Catalyst for Electrical Catalyst for J. Mar. 1. Methyl formate, Preparation of. M. Mugdan and J. Wimmer. 1,642,689; Sept. 20. Metrical optic and acoust for Electrical Catalyst for Synthesis (Mescacoting machines, Suction device for. R. Sprenger and H. Conradt. 1,631,652; June 7. Mica-coafing machines, Suction device for. R. Sprenger and H. Conradt. 1,631,652; June 7. Mica confenser, Variable. A. W. Franklin. 1,637,445; Aug. 2. Mica condenser, Variable, A. H. A. Mica condenser, Variable, A. M. A. Mica onto a fibrous web, Apparatus for transferring. J. Borer. 1,638,622; June 28.

J. Borer. 1,638,622; June 28.

J. Borer. 1,645,415; Oct. 41.

Mica plates, Apparatus for the manufacture of. J. Borer. 1,644,631; Oct. 4.

Mica sheets, Apparatus for forming composite. L. McCarthy, 1,622,795; Mar. 29.

Mica sheets, Forming composite. L. McCarthy, 1,622,796; Mar. 29. Mica sheets, Forming composite, L. McCarthy. 1,622,796; Mar. 29. Micrometer. E. A. Erickson and Z. E. Neal. 1,617,448; Feb. 15. Micrometer. J. A. Hoge, 1,653,854; Dec. 27. Micrometer. J. A. Hoge. 1,653,854; Dec. 2 Micrometer. M. F. Moore and J. M. Smith. Nov. 8. 27. 1,648,497; Nov. 8.

Micrometer. H. Sandoz. 1.638,386; Aug. 9.

Micrometer. F. Volgt. 1.625,175; Apr. 19.

Micrometer Electric. A. V. Mershon. 1.640,464; Aug. 80.

Micrometer gauge. W. L. Bryant. 1.623,674; Apr. 5.

Micrometer gauge. R. G. De La Mater. 1.646,393; Oct. 25. Mcrophone, Control for a. L. Bower. 1,652,342:
Microphone, Control for a. L. Bower. 1,652,342:
Microphone, Control for a. L. Bower. 1,652,342:
Microphone, Control for a. A. L. Bower. 1,652,342:
Microphone June 28.
Microphone, Glow-discharge. P. Thomas. 1,626,648;
May 3.
Microphone, Glow-discharge. P. Thomas. 1,638,893;
Alg. 16.
Microphone mounting. H. G. Krietemeyer. 1,653,109;
Dic. 20.
Microphones, Constant-current device for glow-discharge.
J. Slepian. 1,642,091; Sept. 13.
Microphonic relay. H. Sell. 1,624,511; Apr. 12. Microphones, Constant-current device for glow-discharge, J. Steplan. 1,642,091; Sept. 13.
Microphonic relay. H. Sell. 1,624,511; Apr. 12.
Microscope. A. Kühler. 1,649,068; Nov. 15.
Microscope attachment. H. W. George. 1,654,869; 1,654,369; Microscope attachment. H. W. George. 1,654,3669; Dec. 27.

Dec. 27.

Dec. 27.

Licroscope Binocular. C. L. Gary, 1,637,563; Aug. 2.

Microscope, Binocular. H. N. Ott. 1,630,646; Nov. 29.

Microscopes Binocular. J. C. Sabel, 1,622,350; Mar. 29.

Microscopes and the like, Light for. L. J. Buttolph. 1,630,233; May 24.

Microscopes, Study 24.

Microscopes, Study attachment for. H. R. Posch. 1,617,722; Feb. 15.

Microscopes, Illuminator for. M. Berek. 1,613,583;

Microscopes, Wertical illuminator for. H. G. Ott. Jan. 4.

Microscopes, Hummaror for, M. Berek, 1,613,583;

Microscopes, Vertical illuminator for, H. G. Ott.
1,637,348; Aug. 2.

Microscopes H. S. Octobettive, Additional device for binMicroscopic-stille stating and drying apparatus. F.

Hullo and J. Schultz, 1,620,351; Mar. 8.

Midewproofing of fibrous material. T. H. Fairbrother
and A. Renshaw, 1,618,416; Feb. 22.

Mika and cream can cover, Aerating, R. D. Sykes,
1,631,879; Dec. 6.

M. October Schultz, 1,620,326;

Nov. 22.

872 Milk and cream separators, Carrier for. O. B. Randall. 1,652,837; Dec. 13.
Milk and for indicating the boiling of the milk, Device for preventing boiling over of. A. Eckstein. 1,846,017; Oct. 18.
Milk and making same, Condensed. J. R. Hatmaker. 1,626,818; May 3.
Milk, Apparatus for condensing. R. M. Garrett. 1,640,271; Aug. 23. Aug k, Apparatus for straining. J. F. Horne. 1,650,214; lov. 22. k bottle and cap, Sanitary. C. J. Chase. 1,620,997; Milk Milk Bottle and cap, Samary, 16.3. d. 18.2. Aug. 9. Milk-bottle cap. B. Kuhne. 1,638,489-90; Aug. 9. Milk-bottle cover. A. Strand. 1,634,806; July 5. Milk box. C. Callison. 1,623,827, Apr. 5. Milk can. M. Isaacs, 1,635,419; July 12. Milk can. J. O'Brien and E. H. Knudson. 1,639,101; Milk can. J. O'Brien and E. H. Knudson. 1,639,101; Aug. 16. O'Brien and E. Ii. Knudson. 1,639,101; Aug. 16. Milk-can cover. A. J. Deslauriers. 1,655,261; Dec. 20. Milk-can holder and contents dispenser. E. Allen. 1,639,249; Aug. 16. Milk-can rack. D. T. Fellenbaum. 1,627,080; May 3. Milk-can-steaming and water-heating system. H. F. Berg. 1,623,165. Apr. Apr. 1,627,080; May 3. Milk-can-steaming and properties of the system. H. F. Berg. 1,623,165. Apr. 1,627,080; May 3. Milk-can-steaming and locking arrangement for. E. Menefee. 1,617,860; Feb. 15. Milk, Congulating or curding. H. A. Kohman, R. Irvin, and E. S. Stateler. 1,654,176; Dec. 27. Milk cooler. G. W. Millar. 1,652,494; June 14. Milk, Cream, and other milk products, Removal of undestrable foreign davors and odors from. M. B. Mac-Milk, Device for sanitary handling of. W. Lavallee. 1,636,474; July 19. Milk dispenser, Malted. L. E. Morrison. 1,617,922; Feb. 15. Milk from milk powder, Apparatus for preparing liquid. Fig. 16.

Michael St. 16.

Ref. 16. Milk products, Treating. U. G. Todd. 1,618,789; Feb. 22. Milk separator, Centrifugal. P. M. Sharples. 1,634,759; July 5. Milk stool, Sanitary adjustable. F. Anderson. 1,613,779; Jan. 11. Milk strainer. F. J. Ziegler. 1,628,021; J. Milk strainer. F. J. Ziegler. 1,628,021; J. Milk-transfer system. R. Horton. 1,623,3 Milking apparatus, Cow-. G. A. Brodie. Oct. 4. 1,628,021; May 10. rton. 1,623,313; Apr. 5. A. Brodie. 1,644,413; Oct. 4.

Milking cup. O. Bruun. 1,641,316; Sept. 6.

Milking harness, Sanitary. T. B. Leman. 1,613,177;
Jan. 4.

Milking machine. S. H. Knapp. 1,644,435; Oct. 4.

Milking machine. R. C. Pessell. 1,620,916; Mar. 15.

Milking machine withs, Cleansing. A. M. Mitchell. 1,613,185; Jan. 4.

Liner stretcher for teat cups of.

Milking machines, Milk appliance for use with. R. Preston. 1,633,958; June 28.

Milking machines, Milk appliance for use with. R. Preston. 1,633,958; June 28.

Milking machines, Milk appliance for use with. R. Preston. 1,633,958; June 28.

Milking machines, Vacuum pump and compressor for. J. P. Devine. 1,643,296; Sept. 27.

Milking machines. Vacuum pump and compressor for. J. P. Devine. 1,643,296; Sept. 27.

Milking machines. Vacuum pump and compressor for. J. P. Devine. 1,643,296; Sept. 27.

Mill Ball mill.

Ball or tune mill.

Boring mill.

Comminuting mill.

Comminuting mill.

Comminuting mill.

Comminuting mill.

Commonuting mill.

Reel mill.

Roller mill.

Mill. W. W. Gibson. 1,621,775; Mar. 22.

Mill with a particularly-arranced feed roller, Three-roller sugar-cane. A. M. Jan Meexters. 1,621,007; Mar. 15.

Milling cutter. C. W. Westger. 1,650,290; Nov. 22.

Milling machine. J. Coffey. 1,640,988; oct. 25.

Milling machine. F. C. Allen. 1,626,599; May 3.

Milling machine. H. W. Melling. 1,023,850; Apr. 5. Oct. 4.

Oct. 4.

Oct. 4.

It is a constant of the constant of

Milling machine. S. Webb. 1,646,891; Oct. 25 Milling-machine attachment. E. J. Janac. 1, Jan. 11. 1,614,245: Jan. 11.
Milling-machine collet and end mill. J. M. Redinger.
1.618,998; Mar. 1.
Milling-machine construction. F. A. Parsons. 1,636,755;
July 26. July 20, Milling machine for deseaming billets. F. J. Malone. 1.625,127; Apr. 19. Milling machines, Overarm for. B. P. Graves. 1,653,846; Dec. 27. Milling machines, Overarm for. B. P. Graves. 1,653,846; Dec. 27.
Milling polygonal holes, Device for. P. Demmel. 1,631,582; June 7.
Milling products, Improving. H. C. J. H. Gelissen. 1,622,053; Mar. Lenhardt. 1,623,927; Apr. 5.
Mills, Device for use with routing. E. G. Deve and H. F. Haverbusch. 1,627,153; May 3.
Mills, Device for use with routing. E. G. Deve and H. F. Haverbusch. 1,627,153; May 3.
Mills, Intermediate bagasse carrier for cane-sugar. J. A. Perez. 1,644,607; Oct. 4.
Mills, Intermediate bagasse chute for cane-sugar. J. A. Perez. 1,644,608; Oct. 4.
Mills, Manipulator for rolling. J. A. Hellstrom. Mills, Plate-lifting mechanism for rolling. T. McCabe. 1,620,032; Mar. 8.
Mills, Plugbar mechanism for piercing. J. J. Harkins. 1,647,603; Nov. 1.
Mills, Supporting and driving construction for gyratory grinding. J. G. Burke. 1,616,844; Feb. 8.
Millo-maize header. Short-stem. W. B. Johnson.
Minching machine. G. J. Metters and K. W. Nolan. 1,618,909; Mar. 1.
Mine cages, Car-chocking means for. S. J. Reap. 1,635,956; July 12.
Mine door. T. E. Littlejohn. 1,620,669; Mar. 15.
Mine explosions, Preventing. W. E. Trent. 1,642,912; Sept. 20.
Mine cory tack. F. H. Schweri. 1,653,526; Dec. 20. Mine post or jack. F. H. Schwerin. 1,652,312; Sept. 20.
Mine, Hydrostatic. W. Dieter. 1,617,674; Feb. 15.
Mine post or jack. F. H. Schwerin. 1,653,126; Dec. 20.
Mine prop, Reenforced. M. J. Conway. 1,642,603; Sept. 18. Sept. 13.

Mine roof-supporting mechanism and operating same, Coal- E. C. Morgan. 1,646,417; Oct. 25.

Mine tie, R. H. Worrell. 1,653,330; Dec. 20.

Mine-track tie. E. G. Holst. 1,631,034; May 31.

Mining and conveying machine. R. Peale. 1,628,329; May 10.

Mining and loading machine. E. C. Morgan. 1,637,783; Mining and loading machine. E. C. Morgan. 1,650,027; Nov. 22.

Mining and loading machine. E. C. Morgan. 1,650,027; Nov. 22. Nov. 22.

Mining and loading machine. E. O'Toole. 1,638,507;
Aug. 9.

Mining apparatus. J. H. Crawford. 1,617,941; Feb. 15.

Mining apparatus. M. P. Holmes. 1,643,625; July 12.

Mining apparatus. M. P. Holmes. 1,636,527; July 12.

Mining apparatus. M. P. Holmes. 1,645,003; Oct. 11.

Mining apparatus. M. P. Holmes. 1,648,279; Nov. 8.

Mining apparatus. E. C. Morgan. 1,642,218; Dec. 27.

Mining apparatus. E. E. Simmons. 1,642,218; Dec. 27.

Mining apparatus. E. E. Simmons. 1,642,218; Sept. 13.

Mining machine. H. M. Thurston. 1,642,183; Sept. 13.

Mining machine. F. Cartilidee. 1,644,287; Oct. 4.

Mining machine. F. Cartilidee. 1,644,287; Nov. 8.

Mining machine. F. Cartilidee. 1,644,287; Ann. 11.

Mining machine. F. Cartilidee. 1,644,287; July 12.

Mining machine. M. P. Holmes. 1,643,878; Nov. 8.

Mining machine. M. P. Holmes. 1,643,878; Nov. 8.

Mining machine. M. P. Holmes. 1,643,878; Nov. 8.

Mining machine. M. P. Holmes. 1,643,487; Nov. 8.

Mining machine. C. Oscasan. 1,644,943; Oct. 4.

Mining machine. C. Oscasan. 1,644,943; Oct. 4.

Mining machine. R. C. Wysman. 1,630,578; May 10.

Mining machine. R. C. Wysman. 1,630,577; Feb. 8.

Mining machine. C. W. Wysman. 1,650,578; May 10.

Mining machine. R. J. Wood. 1,644,216; Oct. 4.

Mining machine. Col. C. V. Shanaberger. 1,654,055; May 10.

Mining machine. Stid. E. J. Doberstein. 1,630,472;

Mining machine. Stid. E. J. Doberstein. 1,630,472; Mining and loading machine. E. O'Toole. 1,638,507; Aug. 9. Mining machine, tour, C. V. Sundanderger, Dec. 27.
Mining machine skid. E. J. Doberstein. 1.630.472;
May 31.
Mining machines, Cutting apparatus for. J. Cameron. 1.630.255; May 31.
Mining mechanism. F. T. Lobbey. 1.653.111; Dec. 20.
Mining of minerals. Supporting roof strata during the.
W. P. Taber. 1.630.589; May 31.
Mining, System of. J. W. Pearce. 1.622.837; Mar. 29.
Mining, System of. J. W. Pearce. 1.632.800; June 21.

Mines, Hoisting system for. K. Küppers. 1,642.585; Sept. 13. Mineral aggregates consisting of trap rock, lime stones, sandstones, and types of shale rocks, Hardening and toughening broken. J. H. Amies. 1,645,891; Oct. 18. Mineral-concentrating plant. A. France. 1,616,791; Americal aggregates Consist of the Tay and the consist of Consis Mar. 29.

Mirror bracket, Adjustable.

May 3.

Mirror bracket, Adjustable.

May 3.

Mirror Flexing. C. F. Jenkins. Rel6,767; Oct. 11.

Mirror for automobiles, Rear-view. E. Forter. 1,643,420; Sept. 27.

Mirror frame or similar article. A. G. Kintz. Des. 73,748; Nov. 1.

Mirror frame or similar article, Hand. A. G. Kintz. Des. 73,749; Nov. 1.

Mirror mounting. W. Eustls. 1,631,193; June 7.

Mirror mounting. C. M. Lee. 1,627,395; May 3.

Mirror Nonglare. G. F. and W. H. Colbert. 1,647,857; Nov. 1.

Mirror Monglare. G. F. and W. H. Colbert. 1,647,857; Nov. 1.

Nov. 1. More, 1.

Mirror, Novelty, H. Rangel, 1,651,836; Dec. 6.

Mirror or picture and loud speaker frame, Combined.

H. L. Hahn. Des. 73,742; Nov. 1.

Mirror or similar article. W. S. Bechtold. Des. 72,469; H. L. Hahn. Des. 73/42; Nov. 1.

Mirror or similar article. W. S. Bechtold. Des. 72,469;

Mirror or similar article, Back of a. W. M. Langsdorf.

Des. 72,100; Mar. 1.

Mirror or similar article, Brane for a hand. A. G.

Kintz, Des. 73,747; Nov. 1.

Mirror or similar article, Frame for a hand. A. G.

Kintz, Des. 73,747; Nov. 1.

Mirror or similar article, Hand. P. B. Ball. Des.

72,056; Feb. 22;

Mirror, Grehend signal. S. S. Law. 1,622,157; Mar. 22.

Mirror, Shaving. J. J. Donovan. 1,615,936; Feb. 21.

Mirror Shaving. J. J. Donovan. 1,615,936; Feb. 21.

Mirror Stand. L. M. Andrews. Des. 72,748; May 31.

Mirror support. Adjustable. A. Wallace. 1,622,554;

Mar. 29.

Mirror support, Adjustable. A. Wallace. 1,622,554;

Mirror support, Adjustable. A. Wallace. 1,622,563;

Mirror support, Adjustable. S. Kelly. 1,626,938; Mir. 20.

Mirror support, Rear-view. B. F. Kelly. 1,626,938;
May 3.

Mirror, Two-way oscillating. C. F. Jenkins. Re16,790;
Nov. 22.

Miter box. A. S. Boyland. 1,633,386; Dec. 20.

Miter box. M. S. Dearhom. 1,640,612; Aug. 23.

Miter box. G. Grubbs. 1,638,611; Aug. 9.

Miter box. E. A. Hoover and W. C. Kirchner. 1,633,409;
June 21.

Miter box. D. Pelletier. 1,625,424; Apr. 19.

Miter jox. D. Pelletier. 1,625,424; Apr. 19.

Miter jox. Miter box. D. Pelletier. 1,625,000; Jan. 4.

Mitt. Utensl. K. L. Drummond. Des. 72,561; May 3.

Mixer: Sec.— Wetzsieln. 1,633,300; June 21.

Mixer: Sec.— Wetzsieln. 1,633,300; June 21. Mixer: See—
Color mixer.
Concrete mixer.
Concrete, mortar, and plas-

Mixer: See-Fuel mixer. Gas mixer. Grain mixer. Paint mixer. MIXET: SEGFuel mixer.
Gas mixer.
Grain mixer.
Planter mixer.
Plaster mixer.
Plaster mixer.
Mixer. B. E. Earle.
Mixer. J. H. Gunnison.
1,623,502; Oct. 11.
Mixer. Appropriations E. F. Hallburton.
1,646,582; Oct. 12.

Mixer. Appropriations E. F. Hallburton.
1,646,582; Oct. 12. Mixer and proportioner E. P. Hallburton. 1,646,582; Oct. 25.

M. Jicobovits, and I. Roth. 1,654,556; Dec. 27.

Mixer concrete-paving machine, Twin. P. A. Koehring. 1,623,622; Apr. 5.

Mixer for soda-dispensing faucets, Automatic. F. I. Gunnell and R. Miller. 1,641,164; Sept. 6.

Mixers, Automatic device for operating and closing discharge doors on. H. S. Simpson. 1,615,520; Jan. 25.

L619,620; Mar. I. 1.

Mixers, Fixible seal for. F. E. Bager. 1,640,174; Aug. 23.

Mixers, Water-measuring controller for. E. H. Lichtenberg. 1,049,603; Nov. 15.

Mixing and distributing mechanism. O. W. Valler. 1,615,730; Jan. 25.

Mixing and distributing mechanism. O. W. Valler. 1,615,730; Jan. 25.

Mixing and distributing mechanism. O. W. Valler. 1,615,730; Jan. 25.

Mixing and straining machine. S. B. Lindley. 1,618,988; Mar. 1. Mar. 1.

Mixing apparatus. F. B. Leopold. 1,613,663; Jan. 11.

Mixing apparatus. H. Prillwitz. 1,630,406; May 31.

Mixing apparatus. Liquid. E. T. Conant and L. S.

McLane. 1,625,692; Apr. 19.

Mixing apparatus, Small batch. H. Levy. 1,645,912;

Oct. 18.

Mixing apparatus, Small batch. Small batch. Wixing chacolate and similar substances. Vessel for Mixing apparatus, H. Prillwitz, 1,630,406; May 31. Mixing apparatus, Equid.— E. T. Conant and L. S. McLane. 1,625,592; Apr. 19. Mixing chocolate and similar substances, Vessel for H. W. Hickley. 1,645,990; Oct. 18. Mixing device. R. Bowen, 1,646,388; Oct. 25. Mixing device. R. Bowen, 1,646,388; Oct. 25. Mixing device. G. Fickley, 1,645,990; Oct. 18. Mixing device. M. P. Lloyd. 1,620,741; May 3. Mixing, grading, and sorting granular and pulverulent material, Method and apparatus for. E. Sprenger. 1,636,981; July 19. Mixing machine. N. M. Anderson. 1,621,645; Mar. 29. Mixing machine. R. Mixing machine. N. M. Anderson. 1,621,645; May 1. Mixing machine. N. M. Anderson. 1,621,645; Mixing machine. Mixing machine. 1,630,143; Mar. 29. Mixing, Method and apparatus for. N. C. Johnson. 1,646,540; Oct. 25. Mixtures, Thickening. A. Leenter. 1,631,184; June 7. Mobile machinery. Traction equipment for. R. I. Alexander and A. H. Exton. 1,631,183; June 7. Mobile machinery. Traction equipment for. R. I. Alexander and A. H. Exton. 1,631,182; June 7. Modeling machine. Opposite-replica. K. Evertz. Modeling machine. Opposite-replica. K. Evertz. Modeling system. C. L. G. Fortescue. 1,654,285; Dec. 27. Modulation system. R. V. L. Hartley. 1,638,993; Modulating system. F. Mohr. 1,624,498; Apr. 12. Modulation system. R. V. L. Hartley. 1,638,993; Modulating system. F. Mohr. 1,624,498; Apr. 12. Modulation system. R. L. Davis. 1,654,281; Dec. 27. Modulation system. R. W. Chubb. 1,660,334; Nov. 29. Mixing. 1,621,678; Mar. 15. Mixing modulation system. R. L. Davis. 1,654,281; Dec. 27. Modulation system. R. W. Chubb. 1,660,334; Nov. 29. Mixing. 1,646,516; Oct. 25. Moisture-ran deseater

Mold : Sce-Ice-cream mold. Sand mold Ingot mold, Multicellular mold, Sash-weight mold. Scraper mold. Package mold.
Pencil mold.
Plastic-material mold.
Retread mold. Tire mold.
Tire-walcanizing mold.
Vulcanizing mold.
Wall mold. First Content moid. Will ambig moid.

Retread moid.

Moid. 1, 443,651; Sept. 27.

Moid. C. L. Fischer. 1, 642,847; Sept. 20.

Moid. C. L. Fischer. 1, 642,847; Sept. 20.

Moid. C. E. Johnson. 1, 637,613; Aug. 2.

Moid. E. Petersson. 1, 633,120; Dec. 20.

Moid. H. D. Rindsberg. 1, 648,194; Nov. 8.

Moid. T. H. Seifert. 1, 649,549; Nov. 15.

Moid. G. S. Smith. 1, 642,548; Sept. 13.

Moid. G. S. Smith. 1, 642,548; Sept. 13.

Moid. G. V. Smith. 1, 642,548; Sept. 13.

Moid. G. V. Sunth. 1, 642,548; Sept. 13.

Moid. J. H. Williams. 1, 613,214; Jan. 4.

Moid and ingot, Ingot. E. Gathmann. 1, 643,241; Sept. 20.

Moid and making same, Casting. M. S. Clawson. 1, 653,344; Dec. 20.

Moid and making the same. W. M. Sheffield. 1,621,281; Mar. 15. 1.653,344; Dec. 20.

Mold and making the same. W. M. Sheffield. 1,621,281; Mar. 15.

Mold-charge-guiding device. K. E. Peiler. 1,629,926; May 24.

Mold-charge-guiding device. K. E. Peiler. 1,629,926; May 24.

Mold-chill. E. A. Spring. 1,649,199; Nov. 15.

Mold chill. E. A. Spring. 1,650,240; Nov. 22.

Mold core. S. Flam. 1,618,647; Feb. 22.

Mold core. S. Flam. 1,618,647; Feb. 22.

Mold core. Collapsible. C. Hutchins. 1,628,299; June 21.

Mold disk for dough presses. C. Wüthrich. 1,618,256; Feb. 22.

Mold-engraving machine. A. J. Fleiter and T. A. Miller. 1,629,310; May 24.

Mold facing device. W. D. Moore. 1,634,256; July 5.

Mold for casting metals. O. Junker. 1,615,86; July 5.

Dec. 6.

Mold for casting metals. O. Junker. 1,615,086; Jan. 18.

Mold for die-casting screening buttons. W. A. Parker, 1,645,522; Oct. 25.

Mold for for cypansion-joint strips. A. C. Fisher. 1,651,878;

Mold for forming containers. W. H. Oliver and E. S. Culver. 1,637,532; Aug. 2.

Mold for forming containers. C. H. Terry. 1,631,839; June 7.

Mold form. W. E. Keller. 1,630,796; May 31. Mold or Smile Agency (1,631,832; Aug. 2.

Mold for forming hollow panels, C. H. Terry, 1,631,839; Mane 7.

Mold-form hanger, J. Downing, 1,615,862; Jan. 25.

Mold-form hanger, J. Downing, 1,615,862; Jan. 25.

Mold-iner gauge, C. E. Syler, 1,646,327; Oct. 18.

Mold or similar article, Jelly, A. Katzinger, Des.

Mold-maning machine, J. Stone, 1,623,434; May 10.

Mold-ramming machine, J. Stone, 1,623,434; May 10.

Mold-article and method of and apparatus for producing it. F. W. Temple, 1,650,307; Nov. 22.

Molded articles, Making, W. Briggs, 1,631,668;

Molded articles, Making, C. F. Peterson, 1,631,668;

Molded articles, Making, C. F. Peterson, 1,631,668;

Molded articles, Making, C. F. Peterson, 1,631,668; Molded articles, Making, C. F. Peterson. 1, Molded articles, Preparing a material suitable in the manufacture of. S. J. Hayde. R. Sept. 27. le for us Re16.750 Sept. 27.

Molded composition and making the same. N. R. Haas. 1.618,875; Feb. 22.

Molded compositions, Making. L. E. Barringer and C. F. Peterson. 1,619,692; Mar. 1.

Molded objects of contrasting colors, Producing. J. Lynch. 1,612,825; Jan. 4.

Molded panel and making same. F. H. Tupper. 1,632,362; Aug. 2.

Process for its manufacture. H. F. Molded product and Norths. 1,628,206; May 10.

Molder or sticker device. A. E. L. Von Bocklin and L. M. Larson. 1,636,400; July 19.

Molder's flask. H. D. Bickford. 1,622,623; Mar. 29.

Molder's flask, Adjustable pin and guide for. G. C. Coleman. 1,647,904; Nov. 1.

Molder's pattern. D. J. Campbell. 1,626,224; Apr. 26.

Molder's pattern. D. J. Campbell. 1,626,224; Apr. 26.

Molder's pattern. D. J. Campbell. 1,626,224; Apr. 26. Feb. 8.

Molding and vulcanizing apparatus. J. L. G. Dykes.
1.644.327; Oct. 4.

Molding and vulcanizing apparatus. J. R. Gammeter.
1.632,830; June 21.

Molding apparatus. J. M. Ahlgren and J. V. Bretaud.
1.630,157; May 24.

Molding apparatus. D. J. Campbell. 1.626,225; Apr. 26.

Molding apparatus. H. S. Lee. 1.635,365; July 12.

Molding apparatus. H. S. Lee. 1.635,065; July 12.

Molding apparatus. G. B. Sherman. 1.623,560; May 10.

Molding apparatus G. B. Sherman. 1.623,560; Apr. 5.

Molding apparatus and method. G. H. Davis. 1.641,923;

Sept. 6. Molding apparatus, Building-block. N. Ransohoff, 1.649,731; Nov. 15. Molding apparatus, Tubular. E. W. Bierman, 1,637,465; Aug. 2.

Molding articles from plastic substances, Apparatus for. D. M. Dean. 1,618,864; Feb. 22. Molding composition containing orthocresol-aldehyde resin binder and making same, Cold. C. Ellis. 1,645,693; binder and making same, Cold. C. Ellis. 1,645,693; Oct. 18.

Molding composition, Organic. S. M. Hull. 1,648,179; Nov. 8.

Molding corter. W. W. Harman. 1,631,526; una 7.

Molding cutter. W. W. Harman. 1,631,526; una 7.

Molding cutter. W. W. Harman. 1,631,526; una 7.

Molding device. J. T. Smith. 1,633,522; Dec. 20.

Molding dask. D. C. Coble. 1,616,177; Feb. 1.

Molding machine. J. C. Abel. 1,628,637; Apr. 19.

Molding machine. J. C. Abel. 1,628,637; Apr. 19.

Molding machine. W. J. Irwin. 1,631,114; Mar. 15.

Molding machine. W. Lewis. 1,638,665; Aug. 9.

Molding machine. W. Lewis. 1,638,665; Aug. 9.

Molding machine. W. Lewis. 1,634,733; July 5.

Molding machine. M. Menzel. 1,634,733; July 5.

Molding machine. W. H. Nicholls. 1,614,996; Jan. 18.

Molding machine. W. H. Nicholls. 1,614,996; Jan. 18.

Molding machine. W. H. Nicholls. 1,614,996; Jan. 18.

Molding machine. W. T. T. Stoney and K. Furwin. 1,613,856; Jan. 11.

Molding machine. Centrifugal. W. H. Beatty. 1,620,427; Molding machine, Centrifugal. W. H. Beatty. 1,620,427; Molding machine, Centrifugal. W. H. Beatty. 1,624,247; Molding machine, Jarring. M. Lewis. 1,614,527; Jan. 18.

Molding machine. Jarring. M. Lewis. 1,614,622; Sept. 6.

Molding press. Jarring. M. Lewi Molding composition, Organic. S. M. Hull. 1,648,179; Nov. 8. July 26.
Molding presses, Mechanical movement for. W. Huck.
1.648,401; Nov. 8.
Molding-rubbing apparatus. K. A. Weber. 1,617,469;
Feb. 15. Molding presses, Mechanical movement for. W. Huck 1.048,401, Nov. 8.
Molding-rubbing apparatus. K. A. Weber. 1,617,469; Feb. 15.
Molding-rubbing apparatus. K. A. Weber. 1,617,469; Feb. 15.
Molding strip. W. Marshall. 1,627,615; May 10.
Molding strip. Adjustable. G. Larsen. 1,653,731; Dec. 27.
Molding strip. Adjustable. G. Larsen. 1,653,713; Dec. 27.
Molding, Upholstery. C. P. Schlegel. 1,649,981; Nov. 22.
Molding, Upholstery. C. P. Schlegel. 1,649,981; Nov. 22.
Molding, G. Partially-cured phenolic condensation product,
Treating. F. S. Smith. 1,627,209; May 3.
Molds, Clarging device for tilting. W. D. Moore.
1,620,831; Mar. 15.
Molds, Clamping device for. C. J. E. Maxwell. 1,645,609; Oct. 18.
Molds, Cooling. T. A. Bragg. 1,622,992; June 21.
Molds, Cooling. G. A. Harford. 1,632,992; June 21.
Molds, Cooling. R. La France. 1,633,025; June 21.
Molds for molding stone pattern plates, Producing sand.
K. Werner. 1,634,743; July 5.
Molds, Hopper for. J. J. Hoffmann. 1,635,044; July 12.
Molds, Hot top for. N. F. Egler. 1,630,700; Nov. 29.
Molds, Making inger. G. A. Horling. 1,635,044; July 12.
Molds, Making inger. G. A. Deleh. 1,635,044; July 2.
Molds, Set-up and core bar for casting ingot. J. E.
Perry. 1,648,340; Sept. 27.
Molds with carbon. Apparatus and method of coating.
11. S. Lee. 1,632,37; July 5.
Molds, Werlacker, 1,648,40; July 12.
Molds with carbon. Apparatus and method of coating.
11. S. Lee. 1,632,37; July 2,629,903; May 3.
Molten glass, Delivering charges of. R. La France.
1,632,69; Feb. 25.
Molten glass, Method and apparatus for feeding. G. E.
Molten glass, Method and apparatus for feeding. G. E.
Molten glass, Method and apparatus for feeding. G. E.
Molten glass, Method and apparatus for feeding. G. E.
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Molten glass, Method and apparatus for f

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Monolithic structure and making the same. A. M. Kohler. 1,631,822; June 7. Monorall system, Electrified. F. C. Harris. 1,623,920;
   Morris-chair frame. C. C. Aussell Morris-chair frame. M. C. C. Aussell Morris-chair frame. Morris-chair frame. Morris-chair frame. H. Newton. 1,633,710; June 2, June 2, June device. A. H. Sanders. 1,626,972;
Martis and the like, Trench. H. Newton. 1,633,710; June 28.

Mortar-applying device. A. H. Sanders. 1,626,972; May 3.

Mortar-laying machine. S. Jensen. 1.613,833; Jan. 11.

Mortar, Prepared fire-proof. R. L. Taylor. 1,645,030; Oct. 11.

Mortar, Prepared fire-proof. R. L. Taylor. 1,645,030; Oct. 11.

Mortising and boring machine. C. G. Wilderson. 1,619,049; Mar. 1.

Mortising machine. J. C. Bianca, Jr. 1,637,464; Aug. 2.

Mortising machine. J. C. Bianca, Jr. 1,637,464; Aug. 2.

Mortising machine. A. V. Edwards. 1,634,097; June 28.

Mortising machine. J. Wilder. 1,635,723; Sept. 20.

Mortising machine. J. Willer. 1,635,723; July 12.

Mortuary crypts, Headblock for. J. C. Berger. 1,617,144; Feb. 8.

Mosaic work, Wooden. E. A. Noël. 1,633,497; June 24.

Motherof Mortising machine. L. Willer. 1,635,723; July 2.

Mossed frames for fioral wreaths, Machine for preparing. H. P. Hanson. 1,624,238; Apr. 12.

Mothproof bag. M. B. Kulk. 1,625,627; Apr. 19.

Mothproof bag. M. B. Kulk. 1,622,323; Mar. 29.

Mothproofed article. M. G. Minaef and A. P. Sachs. Mothproofed article. M. G. Minaef. 1,634,793; July 5.
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Mothproofing. M. G. Minaeff and A. P. Sachs. 1,634,790; July 5. Mothproofing composition. M. G. Minaeff. 1,634,791; July 5. othproofing composition. M. G. Minaeff. 1,634,792; July 5. Motion-controlling mechanism. J. W. Watson. 1,635,913; July 12. Motion-recording apparatus. A. Kirner. 1,642,114; July 12.

Motion-recording apparatus. A. Kirner. 1,642,114;
Sept. 13.

Motion-retarding mechanism (fire escape). A. J.
Coughtry. 1,647,506; Nov. 1.

1.616,369; Feb. 1.

Motion-transmission mechanism. L. C. Hartmann.
1.616,369; Feb. 1.

Motion-transmisting mechanism. J. P. Daly. 1,639,428;
Aug. 16.

Motion-transmitting mechanism. G. Goodline. 1,622,780;
Mar. 29.

Motor: See—
Pneumatic motor.
Autostart motor.
Autostart motor.
Commutator motor.
Commutator motor.
Commutator motor.
Current motor.
Current motor.
Current motor.
Electric motor.
Electric sep-by-step motor.
Fluid motor.
Fluid motor.
Gas motor.
Hydrocarbon motor.
Induction synchronous monot.
Induction synchronous monot.
Induction synchronous monot.
Induction synchronous motor.
Water motor.
Wave and tide motor.
Wave motor.
Wave and tide motor.
Wave motor.
Wave and tide motor. Solenoid motor.
Spring motor.
Squirrel-cage motor.
Squirrel-cage motor.
Synchronous motor.
Toy motor.
Traction motor.
Traction motor.
Two-cycle motor.
Two-stroke-cycle motor.
Ventilating motor.
Water motor.
Water or air motor.
Water and tide motor.
Wind and water motor.
Wind and water motor.
Wind driven motor.
Wind driven motor. Internal-combustion motor. Internal-combustion rotary motor. Internal-combustion rotary motor.
Magnetic motor.
Magnetic motor.
Mospachronous motor.
Wind driven motor.
Wind driven motor.
Wind motor.
Motor. H. P. Adie and P. Gilpin. 1,624,905; Apr. 19.
Motor. R. J. M. Gilmore. 1,613,884; Jan. 11.
Motor. C. Lecrenier. 1,627,100; May 3.
Motor. H. Lubé. 1,649,836; Nov. 22.
Motor. H. Lubé. 1,649,836; Nov. 22.
Motor. H. Lubé. 1,649,836; Apr. 4.
Motor. L. J. Wahl. 1,612,698
Motor. A. J. Wahl. 1,615,698
Motor and transmitter unit, Electric. J. M. Naul. 1,652,492; Dec. 13.
Motor and transmitter unit, Electric. J. M. Naul. 1,652,492; Dec. 13.
Motor and transmitter unit, Electric. J. M. Naul. 1,652,492; Dec. 13.
Motor brace.
Motor bracket.
Motor brac Motor bracket. E. Mross and W. Ernst. 1,628,555; May Motor brake. A. Dewandre. Rel6,723; Aux. 16. Motor brake. C. Jobst. 1,639,038; Aux. 16. Motor brake. J. Kirchensteiner. 1,637,117; July 26. Motor brake. J. Kirchensteiner. 1,637,117; July 26. Motor carriage hood. C. W. A. Hannebohn. 1,653,704; Dec. 27. Motor carriage hood. C. W. A. Hannebohn. 1,653,704; Motor carriage with Mike. Storage buildings for. K. 1,627,959; May 10. Motor consig. Vented. R. F. Page. 1,642,038; Sept. 13. Motor compressor. R. G. Sanford. 1,650,769; Nov. 29. Motor-compressor unit. R. P. Pescara. 1,629,927; May 24. Motor-compressor unit. R. P. Pescara. 1,629,927; Motor compressor unit, Internal-combustion. P. P. Pescara. 1,611,813; Jan. 18. Motor construction. J. T. Janette. 1,651,061; Nov. 29. Motor construction. J. T. Janette. 1,651,061; Nov. 29. Motor construction. Thermal gasifying. G. J. Burns. Motor control M. L. Mortensen. 1,652,831; Dec. 13. Motor-control mechanism. C. H. McCullough. 1,640,086; Aug. 23. Aug. 23.

Motor-control system. J. Eaton. 1,631.673; June 7.

Motor-control system. J. A. Hepperlen. 1,651.889; Motor-control system. J. A. Hepperlen. 1,651.889; Dec. 6. Motor-control system. W. S. H. Hamilton. 1,628,402; Motor-control system. A. L. Harvey and N. K. Andersen. 1,021,011; Mar. 15. Motor-control system. B. C. Hellwig. 1,622.122; Mar. 22. Motor-control system. B. W. Jones. 1,614,198; Jan. 11. Motor-control system. E. E. Kleinschmidt. 1,520,359; Motor-control system. E. E. Kleinschmidt. 1,520,309; Mar. 1. Motor-control, System of. N. Minorsky. 1,633,822; June 28. Motor control system, Single-phase induction. W. Weiler. 1,637,886; Aug. Motor control system, Single-phase induction. W. Weiler. 1,637,886; Aug. 16. Motor control system, Single-phase induction. W. Weiler. 1,636,612; Aug. 16. Motor controller. D. H. Chason. 1,627,593; May 10.

Motor controller.
Motor controller.
W. Driver. 1,644,829; Ct. 11.
Motor controller. C. T. Evans. 1,616,684; F91.
Motor controller. C. T. Evans. 1,616,684; F91.
Motor controller. A. T. Liebenberg. 1,616,791; Snn. 18.
Motor controller. E. W. Seeger. 1,646,171; Oct. 18.
Motor controller. E. W. Seeger. 1,646,171; Oct. 18.
Motor cycle. G. L. Wallis. 1,631,443; June 7.
Motor-cycle stand. C. W. Jeske. 1,622,838; Mar. 29.
Motor-cycle stand. C. W. Jeske. 1,622,838; Mar. 29.
Motor-cycle trailer attachment. W. J. Fox. 1,613,945; Jan. 17. Motors, Control system for electric, C. A. Kelsey, 1,628,409; May 10. Motors, Controller for electric, N. L. Mortensen, 1,643,127; Sept. 20. 1,643,127; Sept. 20.

Motors, Controller for electric. E. W. Seeger. 1,637,054;
July 26.

Motors, Controlling driving. P. Weiske. 1,615,665; motor-cycle trailer attachment. W. J. Fox. 1,613,945; Motor-cycle trailer attachment. W. J. Fox. 1,633,086; June 21. Motor cycles, Combined handle bar and actuating device for the change-speed gears of. O. Dehne. 1,651,587; Dec. 6. Dec. 6.
Motor-cycles, Foot accelerator for. D. McDougall.
1.642,376; Sept. 18.
Motor cycles, Valve-operating structure for. A. Rossi.
1.624,365; Apr. 12.
Motor-disconnecting means. O. Wittel. 1,645,887;
Oct. 18.
Motor-disconnecting means. O. Wittel. 1,645,887;
Motor-disconnecting m Motor drive, Outboard-. H. J. Hillborn. July 5. July 5.

Motor-driven apparatus. Jr. Janette. 1,613,034; Jan. 4.

Motor-driven apparatus, Controller for. R. G. Lockett.
1,638,860; Aug. 16.

Motor-driven devices, Controller for. R. G. Lockett.
1,638,861; Aug. 16.

Motor-driven fans or the like. Driving connection for.
1, G. Reibel. 1,648,996; Nov. 15.

Motor-driven machines of the multiunit type, Controller
Feb. 8.

Motor-driven shears. D. F. M.

Motor-driven shears. D. F. M.

Motor-driven shears. 1,634,942; Feb. 8. Motor-driven shears. D. F. Morse. 1,642,259; Sept. 13. Motor exciting system, Induction. W. Selz. 1,637,057; July 26. Motor fuel. H. P. Bassett. 1,641,520; Sept. 6. Motor fuel. C. E. H. North and A. H. Hudson. 1,637,007; Motor fuel, C. E. H. North and A. H. Hudson, J. S. J. William F. Motor fuel-testing composition, V. Serravallo and E. Wels. 1,615,143; Jan. 18.

Motor heat indicator, H. H. Boyce, Des. 72,981-84; July 5. July 5.

Motor meter, D. H. Pulley, Des. 73,268; Aug. 16.

Motor-meter protector, J. P. Wilson, 1,627,261; May 3.

Motor mounting. R. Albrecht, 1,617,748; Feb. 1,6

Motor mounting. E. Q. Bangs, 1,646,680; Oct. 18.

Motor mounting. E. Ernst, 1,617,837; Feb. 15.

Motor mounting. E. Mross, 1,647,743; Nov. 1

Motor or pump, Rotary air, J. Whiting, 1,648,092;

Nov. 8.

Motor radiators, Heating element for, J. E. Schell. Nov. 8.
Motor radiators, Heating element for. J. E. Schell. 1,632,857; June 21.
Motor sets, Double-range variable-speed induction. E. B. Shand. 1,637,393; Aug. 2.
Motor shears. A. S. Reichel. 1,613,126; Jan. 4.
Motor starter, Synchronous. W. C. Goodwin. 1,633,938; June 28. Motor-starting system, C. A. Johnson, Motor-starting system, R. J. Wensley, 1,633,965; Aug. 2... Moorhouse. 1,647,838-9; Nov. 1. Motor-vehicle frame. A. T. Sturt and W. F. Pfander. 1,629,234; May 17. Motor way or street, One-way. C. T. Eldredge. 1,629,782;

July 28, Motors, Controlling driving. P. Welske. 1,615,665; Jan. 25, Motors, Controlling reciprocating. C. S. Weyandt. 1,637,401; Aug. 2. Motors, Dual ignition for outboard. A. J. Caille. 1,644,709; Oct. 11. Motors, End frame ring for. J. F. Lincoln. 1,629,876; May 24. Motors, Fluid-control means for. F. Pokorny. 1,639,532; Motors, 161 Governing device for internal-combustion. P. L. Scott. 1,622,052; Apr. 26. Motors, Governor for fluid. R. F. Onsrud. 1,648,960; Nov. 15. Motors, Ignition plug for internal-combustion. C. A. Nov. 15.

Motors, Ignition plug for internal-combustion. C. A. Rudqvist. 1,632,314; June 14.

Motors in definite speed relation, Maintaining. M. C. Spencer. 1,624,880; Apr. 12.

Spencer. 1,624,880; Apr. 12.

Spencer. 1,624,880; Apr. 12.

Motors, Intermal oil. A. Franchetti. 1,633,320; June 21.

Motors, Intermanifold for internal-combustion. R. M. Pierson. 1,645,347; Oct. 11.

Motors, Liquid-directiation apparatus for internal-combustions, Liquid-directiation apparatus for internal-combustions, C. R. Motors, Oil gauge for. A. Kapitowitz 1,615,762; Jan. 25.

Motors, Oil gauge for. A. Kapitowitz 1,615,762; Jan. 25.

Motors, Oil indicator for gas. C. Forsberg. 1,636,049; July 19. Motors, Oil indicator for gas.
July 19.
Motors or auxiliary propulsion units, Controlling the
operation of booster. R. J. McCarty, jr. 1,648,023-24;
Nav. S. Nov. 8.

Motors, Overload device for alternating-current, C. H.

Rippl. 1,621,173; Mar. 15.

Motors, Protective system for. W. H. Smith. 1,637,356;

Aug. 2.

Motors, Removable stator for electric. C. L. Daun and

P. B. Keller. 1,626,628; Apr. 26.

P. B. Keller. 1,626,628; Apr. 26.

M. Brown. 1,629,989; 1.629.234; May 17.

Motor way or street, One-way. C. T. Eldredge, 1,629,782;
May 24.

May 24.

May 24.

May 25.

May 26.

May 26.

May 27.

May 28.

Motors, Adjustable support for electric. O. B. Woodrow. 1,636,937; July 26.

Motors, Adjustable support for electric. O. B. Woodrow. 1,632,261; June 14.

Motors and apparatus therefor, Starting induction. H. O. Brec. 1,637,292; July 26.

Motors, May 27.

Motors, Antifreezing water beater for internal-combustion. G. Manassero. 1,632,268; June 14.

Motors. Auxiliary air intake for. P. W. Stephens. 1,615,527; Jan. 25.

Motors, Binnetallic rotor for induction. C. E. Johnson. Motors. Bunchshifting device for alternating-current. H. Schrage. 1,648,698; Nov. 8.

Motors, Clutch for spring. V. M. Wilson. 1,645,269; Oct. 11.

Motors, Control circuits for. R. W. Davenport. 1,630,731; Motors, Control circuits for. R. W. Davenport. 1,630,731; Oct. 11.
Motors, Control circuits for. R. W. Davenport. 1,630,731;
May 31.
Motors, Control of polyphase electric. P. H. Stevens. 1,645,827; Oct. 18.

Motios, Removable stator for electric. C. L. Daun and P. E. Keller. 1,626,028; Apr. 26.

Motors, Reverse control for. M. Brown. 1,629,989; May 24.

Motors, Reversing means for internal-combustion. C. F. Sjöman and C. G. Pettersson. 1,651,296; Nov. 29.

Motors, Safety cranking device for internal-combustion. D. L. Oulton. 1,622,309; Apr. 26.

Motors, Short-circuiting device for electric. F. J. Bullivant. 1,643,111; Sept. 20.

Motors, Short-circuiting device for electric. C. L. Kendotrs, Short-circuiting device for electric. C. L. Kendotrs, Short-circuiting device for electric. C. L. Kendotrs, Speed-controlling mechanism for. C. B. Hutchison. 1,625,548; Apr. 19.

Motors, Speed-controlling mechanism for. C. B. Hutchison. 1,625,548; Apr. 19.

Motors, Speed governor for electric. R. Lee. 1,630,394; May 31.

Motors, Starting apparatus for synchronous. H. V. May 31.

Motors, Starting apparatus for synchronous, H. V. Putman, 1,638,274; Aug. 9.

Motors, Starting by for controlling the electric current to machine. H. E. Campbell. 1,629,951; May 24.

Motors, Starting beans for induction. B. Steehbart. 1,641,983; Sept. 6.

1,624,255; Apr. 12.

Motors, Starting switch for electric starting. E. Kyhl. 1,624,255; Apr. 12.

Motors, Starting synchronous. C. T. Hibbard. 1,640,322–23; Aug. 23.

Motors, Starting synchronous. C. T. Hibbard. 1,640,322–23; Aug. 23.

Motors, Supplying a combustible mixture to internal-combustion. W. A. Edward. 1,628,357; May 10.

Motors, Switching and starter apparatus of electric. H. O. Bree. 1,632,534; June 14.

Motors, Switching and starter apparatus of electric. H. O. Bree. 1,632,534; June 14.

Motors, Temperature control for internal-combustion. A. H. Allerheiligen. C. Erichsen. and L. F. Crain. 1,646,333; Oct. 18.

Motors, Temperature-regulating system for aeronautical. 1.646.338; Oct. 18.

Motors. Temperature-regulating system for aeronautical. H. C. Munmert. 1.623.128; Apr. 6.

Motors. Valve for internal-combustion. K. R. Manville. 1.614.749; Jan. 18.

Mounting, Armature. B. F. Lollis. 1.617.856; Feb. 15.

Mounting construction. E. Koeb and B. J. Goldsmith. 1.633.183; June 21.

Mounting for articulators, Anatomical. C. L. Coffin. 1.614.828; Jan. 18.

Mounting for heating units. W. F. Clark and E. Stranssky. 1.613.664; Feb. 22.

Stranssky. 1.613.664; Feb. 22.

Mounting for heating units. W. L. (168.002; Feb. 15.

Mounting. Roller-cutter. W. L. Childs. 1.652.348; Dec. 13.

Mounting. Roller-cutter. W. L. Childs. 1.652.348; Dec. 13.

Mounting. Roller-cutter. W. L. Childs. 1.652.348; Dec. 13. Dec. 18.

Mounting, Universal. B. F. Kelly, R. F. Miller, and L. G. Winkler. 1.038.855; Mar. I. Inn. 1.618.636; Feb. 22.

Mousetrap. E. C. Hardesty, 1.021.9381; Mar. 22.

Mousetrap. G. A. Jones. 1.642.151; Sept. 13.

Mousetrap. F. Kesel and G. Nichols. 1.630.123; May 24.

Mousetrap. C. F. McDonaid. 1.650.458; Nov. 22.

Mousetrap. W. S. Mountford. 1.630.241; May 24.

Mouth cleaning and massaging device. E. J. Jones.
1.631,133; June 7.
Mouthpiece J. Ferretti. 1.646,530; Oct. 25.
Mouthpiece J. Ferretti. 1.646,530; Oct. 25.
Mouthpiece adjuster. E. L. Simpson. 1.629,932; May 24.
Mouth specula, Tongue-spatula attachment for. E. D.
Hammond. 1.613,996; Jan. 11.
Movable devices, Counterbalancing means for. G. Klein.
1.639,094; Aug. 16.
Movable seat. F. T. Schreiber. 1,636,078; July 19.
Movement of sheets, Changing the direction of. A. Broadmeyer. 1,640,108; Aug. 23.
Moving blue. 41,2205; Mar.
Moving bodies, Apparatus for predicting the movements of. C. D. Stoneham. 1,649,870; Nov. 22.
Moving bodies, Apparatus for predicting the movements of. C. D. Stoneham. 1,649,870; Nov. 22.
Moving sign. M. Sachs and S. Filederbaum. 1,632,315; June 14.
Moving sign. M. Sachs and S. Filederbaum. 1,632,315; June 14.
Moving sign. M. Sachs and S. Filederbaum. 1,632,315; June 14.
Moving webs, Delivering. M. Castricum. 1,619,192; Moving sign. M. Sachs and S. Filederbaum. 1,632,315; June 14.

Mar. June 14.

Mar. Webs, Delivering. M. Castricum. 1,619,192; Mar. Webs, Delivering. M. Castricum. 1,619,192; Mower. D. Jordan. 1,616,629; Feb. 8.

Mower. A. McKellar. 1,635,050; July 5.

Mower. Lettric lawn. P. S. Haselton. 1,643,656; Sept. 21.

Mower. Cutting blade of lawn. G. O'B. Murphy and D. Wenham. 1,644,899; Oct. 11. G17,045; Peb. 8.

Mower. Lawn. N. C. Darling. 1617,045; Peb. 8.

Mower. Lawn. N. C. Darling. 1,652,125; Dec. 6.

Mower. Lawn. E. O. Hutsell. 1,617,045; Peb. 8.

Mower. Lawn. E. D. Hutsell. 1,647,867; Nov. 1.

Mower. Lawn. B. Newton. 1,623,433; Apr. 5.

Mower. Lawn. H. B. Newton. 1,623,433; Apr. 5.

Mower. Lawn. H. B. Newton. 1,623,433; Apr. 5.

Mower. Lawn. H. B. Pecbles and C. M. Stewart. 1,614,386; Jan. Apr. Eers. 1,622,735; May. 3.

Mower. Lawn. F. Pollifrone. 1,622,923; Mar. 29.

Mower-pitman connection. J. H. Schonhoff. 1,640,053; Aug. 23. Mower-pitman connection. J. H. Schomon.
Aug. 23.
Mower, Railway. W. S. Andrews. 1,629,984; May 24.
Mower, Traction gang lawn. C. C. Worthington.
1,618,502; Feb. 22.
1,618,502; Feb. 22.
1,618,303; Annual Connection of the second of the secon Thomas Mowers, Extension guard Sept. 13.

Mowers, Grass catcher for lawn. E. F. Kaisen. 1.652.363; Dec. 13.

Mowers, Ower attachment for, J. A. Cook. 1,638,680; Aug. 9.

Page attachment for lawn. E. S. Wright. Aug. 9.

Aug. 9.

Awn. 9.

Rake attachment for lawn. E. S. Wright. 1,633,802; June 28.

Mowers with partly-covering hood. Cutting mechanism for. J. Methner. 1,616,430; Feb. 1.

Mowing and reaping machine. J. Rudland. 1,630,033; May 24.

Mowing machine. C. S. Brown. 1,644,563; Oct. 4.

Mowing-machine clipt. A. D. Goodwin. 1,642,308; Sept. 20.

Mowing-machine tongue support. T. A. George. 1,630,421; Mowing machines, binders, headers, harvesters, or the like, Tractor push drive for. L. P. Draper. 1,628,038; May 10. May 10.

Mowing machines, Cutter guard for. S. E. Lyle.
1.645.606; Oct. 18.

Mowing machines, Seed-gathering reel attachment for.
J. A. Gaylord. 1.650.706; Nov. 29.

Mowing means, Hay- P. G. Light. 1.619,620; Mar. 1.

Mucliaginous composition and making the same. D.

Mucliaginous composition and making the same. D.

Mud guard. A. Delange. 1.616.115; Feb. 1.

Mud guard for motor vehicles. B. F. Dauteuil.
1.618.019; Feb. 22.

Mud gun. E. E. Brosius. 1.637,405; Aug. 2.

Mudle furnace. W. G. Bridge and W. A. Pervier.
1.644.107; Oct. 4.

Allen. 1.631.474; June 7.

Muffle furnace, Electric resistance. W. Rohn. 1,619,829;

Mar. 8. Mar. 8. Mar. 8.

Muffler. M. R. Brilliant. 1.637.516; Aug. 2.

Muffler. J. F. Goetz. 1.613.322; Jan. 4.

Muffler. E. F. Gray. 1,613.13; Mar. 1.

Muffler. 2. B. Gray. 1,613.15; Mar. 1.

Muffler. P. M. Leary. 1,618.451; Feb. 22.

Muffler. F. M. Leary. 1,618.451; Feb. 22.

Muffler. W. T. Smith. 1,614.638; Jan. 18.

Muffler. J. W. Williams. 1,631.491; June 7.

Muffler and cut-out, Combined. J. C. Beery. 1,615.564;

Jan. 28. Muffer and cut-out, Combined. R. M. Taylor. 1,615,147;
This 18.
Muffer and heater, Combined. J. W. Keenan. 1,641,086;
Aug. 30.
Muffer and heater, Combined. W. A. Kysor. 1,627,855;
May 10.

Muffler and motor vehicle frame. A. T. Sturt and W. F. Pfander. 1,629,235; May 17. Muffler and sanding device. F. H. Waite. 1,646,130; Oct. 18. Muffer Construction. T. S. Kemble. 1.638,309; Aug. 9. Muffler cut-out. F. A. Armstrong. 1, 263,808; May 8. Muffler cut-out. F. A. Butler. 1,637,761; Aug. 2. Mulling cabinet. V. Cano. 1,649,161; Nov. 15. Multicellular mold. D. M. Bernotow. 1,619,914; Mar. 8. Multigraph machines, Plate for. E. Preisler. 1,621,271; Multiple spring. J. W. Grisdale. J. 1623,271; Mar. 15.

Multiple spring. J. W. Grisdale. F. Laward. S. Multiple spring. J. W. Laward. S. Multiply spring. J. W. Laward. S. Multiple spring. J. W. Laward. J. 1614,531; Jan. 18.

Multiple receiving device. W. Laurentius. 1,617,957; Feb. 15.

Multiple receiving device. F. Toewe. 1,617,970; Feb. 15.

Multiple spring. J. W. Fry. 1,645,840; Sept. 27.

Multiple spring. J. W. Fry. 1,645,840; Sept. 27.

Multiple switch. G. W. Grisdale. 1,615,450; Jan. 25.

Multiple switch. R. Law and B. J. Sweda. 1,634,894; Sept. 27.

Multiple switch. R. Law and B. J. Sweda. 1,634,894; Sept. 27.

Multiple switch. R. Law and B. J. Sweda. 1,634,894; Sept. 27.

Multiple switch. R. Law and B. J. Sweda. 1,634,894; Sept. 27.

Multiple string. Frequency. K. Schmidt. 1,637,283; July 26.

Multiplication of two factors, Device for the mechanical. O. Eppenstein. 1,638,190; Aug. 9.

Multiplying machine. J. W. Bryce. 1,622,279; Mar. 29.

Multiplying machine. J. W. Bryce. 1,622,279; Mar. 29.

Multiplying original records and the plates used in said Multiplying. Frablan. 1,616,536; Feb. 161,530; Oct. 18.

Multiplying. Frablan. 1,616,536; Feb. 144,530; Oct. 18.

Multiplying. Frablan. 1,617,536; Feb. 146,530; Oct. 18.

Multiplying. Frablan. 1,617,536; Feb. 146,530; Oct. 18.

Multiplying. Frablan. 1,617,536; Feb. 186,530; Oct. 18. Multitheosiat. O. W. Grose and H. Fisher. 1,613,994; Jan. 11.

Multiway connection. G. Crisson and H. C. Silent. 1,623,095; Apr. 5.

Multiwheelers, Drive mechanism for. A. I. Marcum. 1,644,023; Oct. 4.

Muntin clasp, Card-holding. J. H. Ball. 1,648,103; Nov. 8.

Mural decoration. C. R. Lamb. 1,640,781; Aug. 30.

Muscle beater. H. L. Bevier. 1,625,977; Apr. 26.

Mushroom paste. A. G. Hupfel, Jr., and T. M. Rector. Music and speech, Reproduction of. H. B. Wier 1,617,428; Feb. 1.

Music and speech, Reproduction of. H. B. Wier 1,617,428; Feb. 1. Feb. 15.

Music. Apparatus for teaching. G. A. McAleavey.
1,613,400; Jan. 4.

Music-box movements, Control for. C. C. Ritz,
1,618,226; Feb. 22.

Music. Device for teaching time in. L. W. Scutt.
1,628,688; May 17.

Music. lotter, Fortable. E. L. Eshleman. 1,649,217;

Music-leaf turner. C. L. Knapp. 1,625,598; Apr. 26.

Music-leaf turner. H. Stevens. 1,617,185; Feb. 8.

Music notebooks, Page turner for. W. Knop. 1,653,634;

Dec. 27. Dec. 27.

Dec. 27.

Music rack. C. W. A. Koelkebeck. 1,618,760; Feb. 22.

Music, Reproduction of. W. L. Morris. 1,623,968; Music rack. C. W. A. Koelkebeck. 1.618,760; Feb. 22. Music, Reproduction of. W. L. Morris. 1,623,968; Apr. 12. Music rolls and the like, Container for. C. S. Burton, 1,639,166; Aug. 16. Music-scale-indicating device. C. M. Jones. 1,643,303; Sept. 27. Music-sheet turner. S. Halml. 1.633.408; June 21. Music-sheet turner. S. Halml. 1.633.408; June 21. Music-sheet turner. S. Halml. 1.633.565; Apr. 5. Music-sheet turner. S. Halml. 1.632.563; Apr. 1. Music-turner. F. M. Eurisperson. 1.619.633; Mar. 1. Musical appliance. C. Fanella, 1.623.751; June 14. Musical Jar. H. E. Winterboff. 1.632.751; June 14. Musical dynamics, Recorder for. J. Hofmann. 1,614,984; Jan. 18. Nov. 22.

Musical instrument,
Musical instrume Musical instrument.

K. P. Nosseler. 1.624.061: Apr. 12.

Musical instrument.

K. P. Perron. 1.639.106-7; Aug. 16.

Musical instrument.

R. B. Richmond. 1,632,197;

June 14.

Musical instrument.

C. F. Smith. 1,615,961; Feb. 1.

Musical instrument. C. Springhorn. 1,622,009; Mar. 22.
Musical instrument. R. Vana. 1,653,241; Dec. 20.
Musical instrument. Automatic. C. Maerten, jr.
1,633,487; June 21.
Musical instrument, Automatic. G. M. Russell. Re16,729;
Aug. 30.
Musical instrument; Combined peg head and neck for Musical instrument, Automatic. G. M. Russell. Re16,729; Aug. 30.

M. T. Aug. 30.

M. T. Aug. 30.

M. T. Aug. 30.

M. T. M. Stewart. Des. 71,936; Jan. 25.

Musical instrument, Fretted. F. W. Altpeter. 1,618,626; Feb. 22.

Musical instrument, Keyboard. S. Kucharski. 1,648,562; Sept. 27.

Musical instrument of the stringed type. R. A. Hazell. Musical instrument of the stringed type. R. A. Hazell. Sept. 25.

Musical instrument player devices, Spool mechanism for. C. H. Green. 1,647,112; Oct. 25.

Musical instrument, Pneumatically-operated. W. C. Collignon. 1,627,011; May 3.

Musical instrument, Record-controlled. T. F. Cheek. 1,613,501; Jan. 4.

Musical instrument stringe, H. Cohn. 1,617,102; Feb. 8.

Musical instrument, Stringed. A. Montfort. Des. 72,433; Apr. 12.

Musical instrument, Stringed. F. Travaglini. 1,634,730; Musical instrument, Stringed. F. Travaglini. 1,634,730; Musical instrument, Stringed. J. N. Ward. 1,638,423. Musical instrument, Stringed. F. Travagini. 1,634,730; July 5. Musical instrument, Stringed. J. N. Ward. 1,638,423; Aug. 9. Musical instrument, Tuning slide for. F. Holton. Aug. 9.

Musical instrument, Tuning slide for. F. Holton. 1,652,306; Dec. 18.

Musical instrument with electromagnetic operation, Keyboard, A. H. Maitre and V. H. G. Martin. 1,628,507; May 10.

Musical instruments, Actuating mechanism for air-lown. P. Beghetti. 1,616,737; Feb. 8.

Musical instruments and the like, Pneumatic-valve controlling mechanism for. A. P. Gustafson. 1,638,485; trolling mechanism for. A. P. Gustaison.

Aug. 9,

Musleal instruments, Bow for stringed. J. Stadniczek.
1,646,118; Oct. 18.

Musical instruments, Electrical attachment for. A. M.
Liffshitz. 1,640,601; Oct. 18.

Musical instruments, Expression mechanism for mechanical. H. E. Tower. 1,646,601; Oct. 18.

Musical instruments, Frame for sounding
bards of the control Massea 11. Peb. 22.

1.639.345; Aug. 16.

1.639.345; Aug. 16.

Musical instruments, Instruction device for. H. C. Klink.

1.640.125; Aug. 23.

Musical instruments, Key-valve pad for. P. Arthur.

1.635.775; July 12.

Musical instruments, Motor hanger for mechanical. H. Musical instruments, Teb. 8.

Musical instruments, Peb. 8.

Musical instruments, Pepumatic action for.

1.621.449; Mar. 15.

Musical instruments, Pneumatic player mechanism for.

T. P. Brown. 1.654.471; June 24.

Musical instruments, Pneumatic player mechanism for.

T. P. Brown. 1.654.471; June 24.

Musical instruments, Pneumatic player mechanism for.

T. P. Brown. 1.654.471; June 24.

Musical instruments, Wing, H. Flischer. 1,623,667; Apr. 6. Nail burrer, Fuger co. Oct. 25.
Oct. 25.
Nail, Clinching wire. G. A. Curtis. 1,623,465; Apr. 5.
Nail-driving implement. A. E. Taylor. 1,621,761;
Mar. 22.
Nail-expansion anchor. C. H. Klein. 1,637,419; Aug. 2.
Nail, Furring. J. M. Thorpe. 1,641,303; Sept. 6.

Nail magazine. T. Yamakishi. 1,633,154; June 21. Nail-making machine. M. D. Phelan. 1,627,666; May 10. Nail package. W. B. Palmer. 1,637,128; July 26. Nail, Plasterers. G. F. Voight. 1,645,674; Oct. 18. Nail-punch holder. L. Poirier. 1,644,948; Oct. 11. Nail, screw nail, and the like. E. Lytton. 1,631,044; May 31. wall and the like. E. Lytton. 1,631,044; Nation of the like E. Lytton. 1,631,044; Natl., serve nail, and the like E. Lytton. 1,648,855; Nov. 8.

Nail. sorting device. O. H. Hovda. 1,623,285; May 17.

Nail-sorting device. O. H. Hovda. 1,634,192; June 28.

Nail stripper. C. F. Smith. 1,643,982; Oct. 18.

Nail, Stucco. C. E. Bowers. 1,631,397; June 1.

Nailing machine. W. J. Miller. 1,613,473; Jan. 4.

Nailing machine. W. J. Miller. 1,613,473; Jan. 4.

Nailing machine. E. R. Pope. 1,620,782; Mar. 15.

Nailing machine. Box. R. F. Kurz. 1,632,085; June 14.

Nailing machine. Automatic releasing and braking device. The control of t June 28.

Nailing mechanism. J. B. Hadaway. 1,646,402; Oct. 25.

Nails. brads, or the like from wire, rod, or the like, Machine for manufacturing. F. Humphris. 1,632,703; June 14. chine for manufacturing. F. Humphris. 1,632,703; June 14.
Nalls or other articles from sheet or strip metal or material, Machine for manufacturing. F. Humphris. 1,622,144; Mar. 22.
Name plate. 8. G. Brooks. 1,616,438; Feb. 8.
Name plate. 8. G. Brooks. 1,616,438; Feb. 8.
Name plates and other articles, Attaching means for. A. H. Eddy. 1,634,937; July 5.
Name plates and their articles, Attaching means for. A. H. Eddy. 1,634,936; July 5.
Napkin and folding same, Folded. P. J. Christman. Napkin dispenser. F. W. Thorp. 1,646,121; Oct. 18.
Napkin dispenser, F. W. Thorp. 1,646,121; Oct. 18.
Napkin dispenser, F. Paper. A. G. Krueger and F. W. Thorpe. 1,650,945; Nov. 29.
Napkin holder J. M. Fernandes. 1,641,841; Nept. 6.
Napkin holder J. M. Fernandes. 1,641,841; Nept. 6.
Napkin holder J. M. Fernandes. 1,641,841; Nept. 6.
Napkin dispresser, P. Des. 3,133; July 26.
Nautical instrument. J. L. H. Hand. 1,644,240; Jan. 11.
Nautical instrument. G. Koffskey. 1,640,328; Aug. 23.
Nautical instrument. G. Koffskey. 1,640,328; Aug. 23.
Nautical sports, Apparatus for. A. Daydé. 1,650,497; Nov. 22. Nautical sports, Apparatus for, A. Daydé. 1,656,497; Nov. 22.
Navigation and plant for carrying it out, System of. W. A. Loth. 1,613,712; Jan. 25.
A. Loth. 1,613,712; Jan. 25.
Neckband, Automatically-adjustable. E. W. Hamilton. 1,616,268; Feb. 1.
Neckband, Stiffening reenforcement for shirt. J. A. Currea. 1,645,946; Oct. 18.
Neckhand, Stiffening reenforcement for shirt. J. A. Currea. 1,645,946; Oct. 18.
Necktie. Or similar article. J. R. Miller. Des. 72,180; Necktie. W. Coplan. 1,616,113; Feb. 1.
Necktie. W. Coplan. 1,616,113; Feb. 1.
Necktie. W. T. Romanoff. 1,621,753; Mar. 22.
Necktie. F. Strasswimer. 1,616,238; Feb. 1.
Necktie. H. F. Waters. 1,618,238; Feb. 1.
Necktie. H. F. Waters. 1,618,244; Feb. 15.
Necktie. Adjustable. S. Face and H. Dworkin. 1,634,414;
Necktie and lining. S. Rutenberg. 1,621,336; Mar. 18.
Necktie and lining therefor. H. Leonl. 1,634,602;
June 28.
Necktie dang mer. S. Goldenste. 1,613,639; Mar. 18.
Necktie dang mer. S. Goldenste. 1,613,639; Mar. 19.
Necktie dang mer. S. Goldenste. 1,613,639; Mar. 19.
Necktie dang mer. S. Goldenste. 1,613,639; Mar. 19.
Necktie dang mer. S. Goldenste. 1,613,639; Mar. 19.

Needle, Sewing. H. I. Lippard. 1,619,142; Mar. 1. Needle-straightening machine. W. Tivendale. 1,625,691; Needle, Surgieal. R. B. Fisher. 1,648,451; Nov. 8. Needle vendor in the form of a miniature phonograph. E. F. O'Nelli and E. L. Kern. 1,626,011; Apr. 26. Negative-making device. A. G. Ogden. 1,630,539; May 3. R. R. R. Machlett. 1,628,256; May 10. y 31. tube. R. R. Machlett. 1,628,256; May 10. O. W. Strawn. 1,638,374; Aug. 9. H. A. Trullinger and W. H. Reynolds. 1,641,610; Sept. 6.

Nest, Hen's. J. K. Darby and D. Lucas. 1,654,415;
Dec. 27,
Nest, Hen's. J. Stuber, 1,613,207; Jan. 4.

Nest, Multiple hens'. J. W. Myqers. 1,633,346; Aug. 2.

Nest, Poultry, M. J. Hoffman. 1,613,171; Jan. 4.

Nest, Trap. F. Keyse. 1,616,681; Feb. 8.

Net, Automobile Safety. E. Larsen. 1,649,661; Nov. 22.

Neutral brake. H. H. Water. 1,649,449; Mar. 1.

Neutralizing system. R. M. Wilse. 1,617,733; Feb. 15.

News and tabloid sections from a continuous web, Forming. E. L. Martin. 1,625,862; Apr. 26.

Newspaper-core-stripping machine. F. Murray. 1,640,090; Aug. 23. Newspaper-core-stripping machine. F. Murray. 1,620,090; Aug. 23. Newspaper-dispensing machine. M. J. Kindrat and H. Zatzerkowny. 1,622,262; Mar. 22. Newspaper-inserting apparatus. G. W. Nelson. 1,616,061; Feb. 1. Newspaper-inserting apparatus. G. W. Nelson. 1,616,661; Feb. 1.

Newspaper vender. J. D. O'Flynn. 1,840,666; Aug. 30. Niche seat and lavatory, Combined. M. J., Tracy. Des. 72,195; Mar. 8.

T. 195; Mar. 8.

matte, Converting. O. Lellep. 1,623,797; Apr. 5.

Nickel, Manufacture of malicable. N. V. Hybinette. 1,622,190; May 10.

Nickel, Producing finely divided. M. Raney. 1,628,190; May 10.

Nickel, Producing finely divided. M. Raney. 1,628,190; May 10.

Nickel, Producing finely divided. M. Raney. 1,628,190; May 10.

Nickel, Producing finely divided. M. Raney. 1,628,190; May 10.

Nickel, Producing finely divided. M. Raney. 1,628,190; May 10.

Nickel, Producing finely divided. M. Raney. 1,628,190; May 10.

Nickel, Producing finely divided. M. Raney. 1,628,190; M. Nickel, Producing finely divided. M. Raney. 1,628,190; M. S. Monroe. 1,630,576; Aug. 30.

Nipple. A. Russo. 1,621,134; Mar. 15.

Nipple, Flow. V. York. 1,617,614; Feb. 15.

Nipple, Flow. V. York. 1,617,614; Feb. 15.

Nipple, Flow. V. York. 1,617,614; Feb. 15.

Nipple, Flow. U. York. 1,617,614; Feb. 15.

Nipple, Nursing. A. E. Rogers. 1,632,2524; June 21. 1645,889; Oct. 18.
Nipple Flow. V. York. 1,617,614; Feb. 15.
Nipple for mursing bottles. G. H. Donaldson. 1,620,329; Nipple for mursing bottles. G. H. Donaldson. 1,620,329; Nipple Nursing. J. A. Smith. 1,632,874; June 21.
Nipple, Nursing. J. A. Smith. 1,632,874; June 28.
Nipples, Mar. 22.
Nipples, Mar. 22.
Nipples, Mar. 22.
Nipples, Machine for crumming the edges of P. A. Rafehe, T. B. Dowling, and T. J. Brides. 1,634,639; Oct. 18.
Nitration process and nitrating mirture therefor. G. B. Richardson. 1,641,737; Aug. O. B. Nitration process and nitrating mirture therefor. G. B. Schmidt and W. Neugebauer. 1,628,280; May 10.
Nitrobenzee, Manufacture of. J. W. Livingston and L. P. Kyrides. 1,638,045; Aug. 9.
Nitrocellulose and other cellulose esters, Reducing the Nitrocellulose and other cellulose esters, Reducing the Nitrocellulose and other cellulose esters, Reducing the Nitrocellulose and other cellulose store. T. L. Davis. 1,635,141; Dec. 27.
Nitrocellulose and complete and sales of the Nitrocellulose of the Nitrocellulose and the Nitrocellulose of Nitrocellulose Nitrocellulose of Nitrocellulose of Nitrocellulose of Nitrocellu

Note rack and pencil holder, Telephone. T. V. Breyer. 1,631,717; June 7. Novelty. D. B. Brooks. 1,623,906; Apr. 5. Novelty box. B. Friedman. Des. 72,943; June 28. Novelty device. W. Haendel. 1,639,034; Aug. 16. Novelty, device. Air-propelled. L. M. Mayo. 1,628,796; Novelty, Masquerade. E. Cureton. 1,618,517; Feb. 22. Novelty, Theater. J. A. Partington. 1,616,198; Feb. 1. Nozzie. L. R. Nelson. 1,622,733; Mar. 29. Nozzie. R. Terenu. 1,631,167; June 7. Nozzle And Justable Hjespray. W. B. Parker. 1,627,250; Nozzle and assembly, Exhaust. J. A. Secor. 1,625,102; Apr. 19. Apr. 19.

Apr. 19.

Apr. 19.

Apr. 29.

Apr. 29.

Apr. 29. Nozzle and gauge, Combined air. M. S. Platt. 1,622,341; ozzle and tip, Spray. J. D. Murray. 1,636,314; July 19.

Nozzle, Automatic hose. A. T. Carnes. 1,645,127; Oct. 11.

Nozzle, Blower. J. E. Bjorkholm and G. Blyberg. 1,653,980; Dec. 27.

Nozzle, Cement-gun. T. Hamm. Re16,539; Feb. 1.

Nozzle, Caphragm, Turbine- A. J. Devaud. 1,641,665; Sept. 6.

Nozzle, Douche. A. J. D. Cortes. 1,632,541; June 14.

Nozzle, Douche. A. J. D. Cortes. 1,632,541; June 14.

Nozzle, Douche. J. Rose. 1,636,269; July 26.

Nozzle, Douche. Strinss. 1,630,278; May 31.

Nozzle for locomotives. Exhaust. E. M. Shannon.

Nozzle for paper-making machines. M. Dezurik. 1,617,673; Feb. 15.

Nozzle, Fuel-injecting. C. F. Sjöman and C. G. Petters-Feb. 15. Nozzle, Fuel-injecting. C. F. Sjöman and C. G. Petters-son, 1,642,269; Sept. 13. Nozzle handle, F. M. Hilgerink, 1,653,907; Dec. 27. Nozzle holder. D. Lasher and A. S. Plank, 1,631,874; June 7 June 7, Varrulic F. Schmidt. 1,641,695; Sapt. 6, Nozzle, Hitke, H. E. Rhodats. 1,622,196; June 14. Nozzle, Jerkitek, H. E. Rhodats. 1,622,196; June 14. Nozzle, Jerkitek, H. C. Rossere. 1,635,012; June 21. Nozzle, Mixing. A. T. Cassiere. 1,648,216; Nov. 8. Nozzle, Mixing. A. D. Cassiere. 1,637,697; Jung. 2. Nozzle, Self-cienning. F. B. Comins and J. Armstrong. 1,622,090; Mar. 22. Nozzle, Self-closing valve. E. Payson. 1,649,726; Nozzle, Self-closing valve. E. Payson. 1,649,726; 1,622,000, Novzie, Self-closing valve, In. Novzie, Self-dushing atomizing, T. Chester and W. Mac-Michael. 1,628,523; May 17.

Novzie, Self-propelled hose, S. C. Sladden, 1,628,070; Novzie, Self-propelled hose, S. C. Sladden, Self-propelled hose, S. C. Sladden, Self-propelled hose, S. C. Sladden, Self-propelled hose, Self-propelled hose, Se Michael. 1,628,523; May 17.
Nozzle, Scift-propelled hose. S. C. Sladden. 1,628,070;
May 10.
Nozzle, Spripy. B. H. Coffey and G. S. Dauphinee.
Nozde, Spriy. C. Ihne. 1,620,209; Mar. 8.
Nozzle, Spriy. E. Schlaepfer. 1,621,594; June 7.
Nozzle, Spray. E. Schlaepfer. 1,621,594; June 7.
Nozzle, Spray. C. W. Shelor and E. G. Butts. 1,630,974;
May 31. Name Stray. O. W. Shelot and B. C. Butts. 1,550,312; Nozzle, Spraying. D. Elder. 1,632,220; Aug. 18. Nozzle, Spraying. T. W. Murphy and W. Czarnecki. 1,654,831 bec. 27. Nozzle stand. J. W. Grunt. 1,650,829; Nov. 29. Nozzle stand. J. W. Grunt. 1,650,829; Nov. 29. Nozzle, Vacuum-deaner. M. Batt. Des. 73,479; Sept. 20. Nozzles. Spray attachment for besc. R. Miller. 1,644,072; Oct. 4. Number holder. W. W. Freed. 1,622,436; Mar. 29. Number holder. W. W. Freed. 1,622,436; Mar. 29. Number holder. W. W. Freed. 1,622,436; Mar. 29. Number holder. M. R. Thibert. 1,649,875; Nov. 22. Munbering machine. M. H. Kern. 1,648,276; Nov. 8. Numbering machine. M. H. Kern. 1,648,276; Nov. 8. July 12. Nurseey chaft, Foldable, portable. H. A. Keim. 1,635,298; Nurseey chaft, Foldable, portable. H. A. Keim. 1,639,298; | July 12| | Nursery chalt, Foldable, portable. H. A. Keim. 1,639,298; Aug. 16. | Nursery chalt, Foldable, portable. H. A. Keim. 1,639,298; Aug. 16. | Nursing bottle and envelope therefor. A. Gerstner. 1,161,944; Feb. 15. | Nursing-bottle holder. V. J. Murray, jr. 1,624,355; Apr. 12. | Nursing-bottle holder. V. J. Murray, jr. 1,624,355; Apr. 12. | Nursing-bottle holder. V. J. Murray, jr. 1,624,355; Apr. 12. | Nur. N. Booth. 1,632,391; Jun. 21. | Nur. Adjustable. J. A. Burns. 1,645,276; Oct. 11. | Nut. and allied fastening means, Lock. P. J. Russell. 1,640,374; Aug. 30. | Nut. and bott cutter. P. J. Peters. 1,613,359; Jan. 4. | Nut and screw fastening. F. S. Carr. 1,646,367; Oct. 18. | Nut and screw feed. S. M. Ransome. 1,624,676; Apr. 12. | Nut apparatus, Locked. C. A. Godshaik. 1,637,995; Nut-apparatus, Locked. C. A. Godshaik. 1,637,995; Nut-apparatus, Locked. C. A. Goetting. 1,620,960; Mar. 15. | Nut-apparatus, Locked. C. A. Goetting. 1,620,960; Mar. 15. | Nut-apparatus, Locked. C. A. Goetting. 1,620,960; Mar. 15. | Nut-apparatus, Locked. C. A. Goetting. 1,620,960; Mar. 15. | Nut-apparatus, Locked. C. A. Goetting. 1,620,960; Mar. 15. | Nut-apparatus, Locked. C. A. Goetting. 1,620,960; Mar. 15. | Nut-apparatus, Locked. C. A. Goetting. 1,620,960; Mar. 15. | Nut-apparatus, Locked. C. A. Goetting. 1,620,960; Mar. 15. | Nut. 1,620; Mar. 15. | Nut. 1,620,960; Mar. 15. | Nut. 1,620; Mar. 15. | Nut. 1 Aug. 2.
Nut-applying device. A. Goetting. 1.620,960;
Nut blanks, Making. J. F. Golding. 1,6 0; Mar. 15, 1,636,955-6; Nut blanks, Making. J. F. Golding. 1,636,955-6; July 26. Nut-bowl fitting. R. K. Bailey. 1,639,627; Aug. 16. Nut-castellating machine. C. H. Shrope. 1,646,222; Oct. 18.
Nut-castellating machine. W. Umbdenstock. 1,646,840;
Oct. 25.
Nutracker. W. T. Anderson. 1,650,681; Nov. 29. Oct. 25.

Nutcracker. W. T. Anderson. 1,650,681; Nov. 29.

Nutcracker. I. H. Greene. 1,649,468; Nov. 15.

Nutcracker. W. T. Williams. 1,647,029; Oct. 25.

Nutcracker. W. T. Williams. 1,626,905; May 3.

Nut-cracking machine. L. Myers. 1,653,639; June 28.

Nut enasement. E. R. Johns. 1,633,639; June 28.

Nut gatening. F. S. Carr. 1,540,366; Oct. 18.

Nut guard. C. Law 1,625,11 Apr. 26.

Nut lock. E. C. Baynes. 1,647,317; Feb. 15.

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Nut lock.
Nut, Lock.
Nut lock.
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      Nut lock.
Nut lock
Nut lock. W. M. Turner and J. W. Brown. 1,613,493; Jan. 4.

Jan. 4. E. W. Utzler. 1,644,554; Oct. 4.

Nut lock. M. W. Webster. 1,649,947; Nov. 15.

Nut lock. M. C. White. 1,645,846; Oct. 18.

Nut lock and the like. J. L. Mauch. 1,630,958; May 31.

Nut lock or fastener washer. J. W. Ivory. 1,631,181;

June 7.

Nut-locking device. L. M. Dieterich. 1,635,313; July 12.

Nut-locking device. K. Mackenzie. 1,637,620; Aug. 2.

Nut-locking washer. G. E. Valberg. 1,612,955; Jan. 4.

Nut machine. R. L. Wilcox. 1,635,238; July 12.

Nut, Self-locking. D. W. Berlin. 1,639,631, Aug. 23.

Nut, Self-locking. D. W. Berlin. 1,639,631, Aug. 23.

Nut, Self-locking. G. E. Hultgren and J. H. E. Thorén.

Nut-tapping machine. C. E. Ross. 1,632,855; June 21.

Nut-tapping machine. C. E. Ross. 1,632,4369; Jan. 4.

Nut-tightening apparatus. R. Hofstetrer. 1,648,944;

Nov. 15.

Nut, Valive-stem rim. W. H. Fleming. 1,652,469; Dec. 13.
                                 Jan.
   Nut. Valve-stem rim. W. H. Fleming. 1,652,169; Dec. 13. Dec. 18. Sept. 1653,531; Dec. 20. Sept. 1,653,531; Dec. 20. Nuts and bolts, Treating threaded surfaces of. R. M. Evans. 1,645,749; Oct. 18. Nuts and serew heads, Lock for. A. Klafke. 1,643,884; Nept 27.
   National Color of the Assault (1995), 50-4; National Color of the Market (1995), 50-4; Nuts, cereals, and legumes, Process of and apparatus for separating, cleaning and grading all kinds of. H. M. Sutton and W. L. and E. G. Steele. 1,632, 520; June 14. Nuts, Making castle. J. F. Golding, 1,642,854; Sept. 20. Oar, Bow-facing. E. Bechle. 1,634,282; July 5. Oar, Bow-facing. W. H. Kimberlin. 1,624,443; Apr. 12. Oarlock. E. G. Brickson. 1,626,191; Apr. 26. Oarlock. E. G. Brickson. 1,626,191; Apr. 26. Oarlock. E. Travis. 1,626,191; Apr. 27. Oarlock. E. S. Travis. 1,627,128; May 3. Oarlock. E. S. Travis. 1,627,128; May 3. Oarlock. E. S. Brickson. 1,628,309; July 19. Oat sprouter. B. J. Baskerville. 1,643,537; Sept. 27. Objective. C. W. Frederick and F. E. Altman. 1,620,337; Mar. 8.
   Object.
Mar.
      Objects, Attaching. I. L. Rosenberg. 1,636,075;
July 19.
Objects, Method of and apparatus for marking. H. W.
Hacker. 1,620,343; Mar. 8.
Observation instrument. P. Rosenstein. 1,640,096;
Observation instrument.

Aug. 23.
Obstetrical device. B. Odell. 1,614,670; Jan. 18, 79. 20.
Obstetrical device. B. Odell. 1,614,670; Jan. 18, 79. 26.
Ocean compressed-air power. C. N. Hare. 1,623,341; Apr. 5.
Odorizer holder. C. A. Hawley. Des. 71,912; Jan. 25.
Office indicator. O. G. Gerner. 1,616,687; Feb. 8.
Olimmeter, Indicating. C. E. Vawter. 1,633,912; Tan. 25.
      Office indicator. O. G. Gerner. 1,616,687; Feb. 8. Ohmmeter, Indicating. C. E. Vawter. 1,638,91: June 28. June 28. June 28. June 28. June 28. June 29. June 
   tot and gas separator. D. G. Lorraine. 1,620,771; Mar. 15.
Oil and making same, Drying and polymerizing. J. J. Kessler. 1,616,321; Feb. 1.
Oil and making same, Fluorescent. L. Lilienfeld. 1,625,415; Apr. 19.
Oil and making same, Fluorescent. L. Lilienfeld. 1,625,415; Apr. 19.
Oil and other similar hydrocarbons, Cracking or treating. H. T. Darlington and R. M. Steffen. 1,614,660; Jan. 18.
Oil and residuals. Handling crude. A. E. Miller. 1,646,760; Oct. 25.
Oil and water separator. J. R. Meston and D. E. Erick. Oil and water separators. Nov. 8.
Oil. Apparatus for cracking. S. E. Meyers. 1,645,443; Oct. 11.
Oil. Apparatus for cracking. G. Egloff and H. P. Benner. 1,617,619; Feb. 15.
Oil. Apparatus for cracking. G. Egloff and H. P. Benner. 1,619,922; Mar. 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.620.771:
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l, Apparatus for cracking. G. Egloff and H. P. Benner. 1,649,105; Nov. 15.
l, Apparatus for distilling. J. W. Coast. 1,639,327; Oil. Apparatus for distilling. J. W. Coast. 1,639,327; Aug. 16.
Oil. Apparatus for purifying crude. D. P. Fleeger and F. P. Osborn. 1,616,119; Feb. 1.
Oil. Apparatus for purifying lubricating. R. L. Skinner. 1,650,774-5; Nov. 29.
Oil. Apparatus for purifying used mineral lubricating. R. E. Langston. 1,640,415; Aug. 30.
Oil. Apparatus for the distillation of. F. T. Manley. 1,640,022; Aug. 23.
Oil. Apparatus for treating. G. C. Kelley. Re16,778; Oct. 25. Oct. 25.

Oil. Apparatus for treating emulsified. G. Egloff and H. P. Benner. 1,649,103; Nov. 15.

Oil. Apparatus for treating petroleum. H. J. Halle. 1,619,929; Mar. 8.

Oil atomizer. J. J. Babka. 1,620,625; Mar. 15.

Oil brake. L. O. Beard and S. J. Bendtsen. 1,617,366; Feb. 15. T. B. Allardice. 1,643,436; Sept. 27.
A. R. Baker. 1,613,781; Jan. 11.
A. R. Baker. 1,646,637; Oct. 25.
S. W. Bates. 1,634,839; July 5.
A. Behrsin. 1,653,447; Dec. 20.
W. D. Bell. 1,618,565; Feb. 22.
W. D. Bell. 1,618,565; Feb. 22.
A. Boddeker. 1,627,287; May 3.
D. M. Boyd and W. C. Capen. 1,620,754; Oil burner. Mar. 15. Oil burner. Oil burner. A. Butcher. 1.647.956; Nov. 1.
M. Carter. 1.626.785; May 3.
D. Caswell. 1,639.426; Aug. 16.
L. S. Chadwick. 1,639.3026; Jan. 4.
L. S. Chadwick. 1,639.3026; Jan. 4.
C. M. Colvin. 1,644.873; Oct. 11.
G. H. Crowell. 1,621.313; Mar. 15.
G. B. Dahl. 1,618.220; Jan. 11.
S. T. Davidson. 1,618.174; Feb. 22.
C. F. Day. 1,638.067; Feb. 15.
W. Ugged. 1,638.077; W. W. Waln. 1,635.464; Oil burner. Oil burner. Oil burner.
Oil burner.
Oil burner.
Oil burner.
Oil burner.
Oil burner.
Oil burner. Oil burner. Oil burner.
July 12.
Oil burner.
Oil burner. J. Egan. 1,641,581; Sept. 6.
A. C. Emerson. 1,624,165; Apr. 12.
E. A. and E. A. Field, jr. 1,643,115; burner. B. A. and E. A. Fried, Jr. 1,048,11
W. E. Gibbs. 1.625,943; Apr. 19
J. J. Gleason. 1,618,185; Feb. 22
A. B. Goodspeed. 1,647,091-2; Oct. 25.
A. B. Goodspeed. 1,647,091-2; Oct. 25.
A. E. Grant. 1,632,462; June 14.
J. T. Grotenhuis. 1,635,836; July 12.
F. Hardinge. 1,621,537; Mar. 22.
F. Hardinge. 1,621,537; Mar. 22.
F. Hardinge. 1,623,137; June 7.
T. H. Kelly. 1,639,377; Aug. 16.
J. A. Kenworthy. 1,625,830; Apr. 19.
F. M. Kleib. 1,647,409; Nov. 1.
H. A. Lacerda. 1,619,738; Mar. 1.
H. A. Lacerda. 1,619,738; Mar. 1.
F. D. Longwill. 1623,330; Apr. 19.
F. D. Longwill. 1631,139; Nov. 29.
G. S. Meikle and H. D. MacKaye. 1,624,33 Sept. 20. Oil burner. Oil burner. Oil Oil Oil burner. burner. burner. burner. burner. Oil burner. Oil burner. Oil burner. Oil burner. Oil burner. burner Oil Oil Oil burner. burner. burner. burner. Oil burne 1,624,350: Apr. 12 J. C. Millar, 1,622,963; Mar. 29, A. Misch. 1,616,916; Feb. 8. A. Misch. 1,639,744; Aug. 23. H. B. Newhall and H. R. Underwood Nov. 1. G. Noreen and C. V. Newquist. 1.646,456; Oil burner, Oil burner, Oil burner. Oil burner 1.647.810; Oll burner, Oct. 25. Oil burner. E. T. Payne and G. E. Page. 1,653,468; Dec. 20.
Oil burner.
Oil burner.
Oil burner. J. S. Pecker. 1,651,628; Dec. 6. W. B. Philippe. 1,646,834; Oct. 25. L. C. Porterfield. 1,612,888; Jan. 4. F. Rix. 1,625,334; Apr. 19. T. W. Roach. 1,641,356; Sept. 6, P. H. Ryder and C. W. Moore. 1,624,806; Oil burner.
Oil burner.
Oil burner.
Apr. 12. Oil burner. Oct. 18, P. H. Ryder and C. W. Moore. 1,645,546; Oil burner.
Oil burner.
Apr. 26.
Oil burner.
Oil burner.
Oil burner.
Oil burner.
Oil burner.
Oil burner. C. W. Sievert,
E. A. Skyipal,
E. E. Spletter,
C. M. Stroud,
C. M. Stroud,
O. A. Toffreen,
H. R. Walker, Sievert. 1.644.958; Oct. 11. Skyipal. 1.632.046; June 14. Spletter. 1.635.445; July 13. Stroud. 1.618.392; Feb. 2 Stroud. 1.637.046; July 26. Toffreen. 1.637.046; July 26. Walker. 1.645.559; Oct. 18.

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Oil burner. C. F. Warrick. 1.648.923; Nov. 15. Oil burner. S. E. Weaver. 1,625.067; Apr. 19. Oil burner. J. M. Weydell. 1.631.662; June 7. Oil burner. W. Wood. Des. 16,623; May 10. Oil burner. Automatic. F. J. Evans and H. C. Hansen. 1,637,898; Aug. 2. Oil burner. Automatic. T. M. Lambeth. 1,637,576; Aug. 2. Oil burner. Automatic mechanically-operated. M. A.
        Oil burner, Automatic mechanically-operated. Williams. 1,621,447; Mar. 15. Oll-burner boiler. L. L. Scott. 1,619,889; Mar. Oil burner, Cabinet. B. F. Crisenberry. 1,6
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1,648,981;
     on outner, Cabinet. B. F. Crisenberry. 1,648,981;
Nov. 15.
Oil-burner construction. H. A. Mojé and I. E. McCabe.
1,642,937; Sept. 20.
Oil-burner-control mechanism. E. L. Wells. 1,629,191;
May 17.

        Oil-burner-control
        mechanism
        L
        L
        Cot.
        18.

        May 17.
        Oil burner, Crude-, G. L. Barnes.
        1,645.787; Oct. 18.
        Oil burner, Domestic.
        L. L. Scott.
        1,640.728; Aug. 30.
        Oil burner.
        Oil burner.
        1,619.910; Mars. 8.
        Oil surner.
        1,621.619.910; Mars. 8.
        Oil burner.
        1,623.608; Aug. 16.
        Oil-burner installation.
        L. C. Strait.
        1,639.064; Aug. 16.
        Oil-burner installation.
        L. E. Smith.
        1,635.691; July 26.
        Oil-burner installation.
        W. W. Williams.
        1,617.470; Feb. 15.
        Oil burner, Low-pressure.
        H. F. Tate.
        1,643.967; Oct. 4.
        1,242.590; Jun. 4.
        <td
     Oil burner, Robary, M. D. Sheely, 1,612,539; Jan. 4, Oil-burner system. H. Swartz and P. C. Mulligan. 1,613,699; Jan. 14. Oil-burner system and apparatus. F. Marion. 1,617,647; Feb. 15.
        Oil burners, Air control for. F. S. Egloff. 1,626,228;
Apr. 26.
Oil burners, Air preheater for. A. T. Johanson. 1,640,081;
  Aug. 23.
Oil burners,
1,630,022; May 24.
Oil burners,
Dreytus.
Dreytus.
1,614,918; Jan. 18.
Oil burners,
Fuel-teeding means for. H. L. Watson and
A. Heldrich.
1,612,997; Jan. 4.
Oburners, Gas countrol for. H. S. Blake.
1,629,251;
  Oll burners, Gas control for. H. S. Blake. 1,639,251; May 1.0°s, Oil-feed control for. A. P. Holden, P. Morgan, and S. R. Williams. 1,630,265; May 31.

Oil burners, Thermostatic control for. L. S. Chadwick, M. Resek, and J. A. Dahlstrom. 1,629,569; May 24.

Oil-burning air heater, Sheet-metal. W. B. Croan. 1,619,567; Mar. 1.

Oil-burning apparatus. E. D. Lewis. 1,620,111; Mar. 8.

Oil-burning device. H. H. Mercer. 1,631,688; June 7.

Oil-burning furnace. C. I. Hong. 1,622,828; Mar. 29.

Oil-burning furnace. C. I. Hong. 1,622,828; Mar. 29.

Oil-burning furnace. F. G. Neal. 1,637,269; July 26.

Oil-burning mechanism. F. Hardinge. 1,619,470; Mar. 1.

Oil-burning mechanism. F. Hardinge. 1,619,470; Mar. 1.

Oil-burning pressure torch. H. H. Kress. 1,617,399; Feb. 15.
Oil-burning mechanism. F. Hardinge. 1,619,470; Mar. 1. Oil-burning pressure torch. H. H. Kress. 1,617,399; Oil-burning system. L. L. Scott. 1,629,542; May 24. Oil-burning system. L. L. Scott. 1,640,729; Jan. 30. Oil-burning system. W. E. Shore. 0,448,069; Nov. 8. Oil can. H. Blatherwick. 1,623,904; Apr. 5. Oil can. P. H. Fontaine. 1,621,302; Mar. 15. Oil can. J. H. Hothersal. 1,621,302; Mar. 15. Oil can. J. H. Hothersal. 1,621,302; Mar. 15. Oil can. J. H. Hothersal. 1,621,302; Mar. 15. Oil can. J. H. Rohery. 1,641,051; Aug. 30. Oil can. J. H. Rohery. 1,641,051; Aug. 30. Oil can. J. H. Rohery. 1,641,051; Aug. 30. Oil can. J. H. C. Seglisen. 1,618,732; Feb. 22. Oil-can holder. C. W. Beck. 1,619,099; Mar. 1. Oil can. J. Hothersal. 1,621,891; Mar. 2. Oil can. J. Hothersal. 1,621,891; Mar. 2. Oil cans. Water collecting and separating attachment for. D. R. Feely. 1,613,507; Jan. 4. Oil circuit breaker. J. D. Hilliard. 1,615,687; Feb. 15. Oil cleaner and rectifier. C. Soracio. 1,641,29; Sept. 6. Oil composition. A. A. Somerville. 1,617,326; Feb. 16. Oil containing soaps, Reclaiming waste lubricating min. C. C. M. M. G. S. S. G. S. Oil, Cracking. C. Owens. 1,613,712; Jan. 4. Oil, Cracking. C. G. Edoff. 1,638,093; Aug. 9. Oil, Cracking. F. E. Wellman. 1,616,521; Feb. 8. Oil, Cracking. F. E. Wellman. 1,616,521; Feb. 8. Oil, Cracking. F. E. Wellman. 1,616,521; Feb. 8. Oil cup. F. M. Furber. 1,640,495; Aug. 30. Oil cup. F. M. Furber. 1,644,126; Sept. 6. Oil cup. H. A. Hoke. 1,641,265; Sept. 6. Oil cup. H. A. Hoke. 1,641,265; Sept. 6. Oil cup. H. A. Hoke. 1,641,266; Sept. 6. Oil cup. H. A. Hoke. 1,641,665; Sept. 6. Oil cup. F. S. Marthi, 1,641,666; Sept. 6. Oil cup. J. S. Now. vi. 1,631,672; Mor. 31
     Oil cup.
Jan. 4.
Oil cup.
Oil cup.
                                                                                                 P. Smith. 1.641.606: Sept. 6.
J. S. Snow, sr. 1.631.072; May 31.
P. Upham. 1.644.210; Oct. 4.
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Oil cup, Automatic. B. G. Gilbough. 1,638,484;
Oil cup for ceiling fans. E. W. Denman. 1,6
Sept. 27.
      Sept. 27.

Oil, Dehydrating. B. Hildebrand. 1,650,514; Nov. 22.
Oil derrick. J. D. Williams. 1,650,857; Nov. 29.
Oil, Device for measuring the lubricating value of. J. B. Annis. 1,622,481; Mar. 29.
Oil-diluent separator. S. W. Briggs. 1,638,319; Aug. 9.
Oil-dispenser. C. E. Melville and A. C. Peterson, 1,637,228; July 26.
Oil-dispensing tank. W. Hasty. 1,650,210; Nov. 22.
Oil-dispensing tank. W. Hasty. 1,650,210; Nov. 22.
Oil-dispensing tank. W. Hasty. 1,650,210; Nov. 22.
Oil-display apparatus. C. Spieth. 1,640,225; Aug. 23.
Oil distillation and cracking. S. L. Tingley. 1,627,688;
         Oil distillation and cracking, May 10, Oil-distillation apparatus. F. M. Poole. 1,615,479; Oil-distillation apparatus. F. M. Poole. 1,646,449;
      Oil-distillation apparatus. F. M. Poole. 1,615,419; Jun. 25.
Oil-distillation process. E. C. D'Yarmett. 1,646,449; Oct. 25.
Oil-distilling apparatus and method. E. C. D'Yarmett. 1,646,448; Oct. 25.
Oil drill, Collapsing. B. B. and E. R. Dudley; 1,625,247; Apr. 19.
      Oll drill, Collapsing, B, B, and E, R, Dudley; 1,625,247; Apr. 19.
Oll engine. O. A. Banner. 1,625,113; Apr. 19.
Oll engine. O. A. Banner. 1,634,132; June 28.
Oll engine. O. A. Banner. 1,644,556-7; Oct. 4.
Oll-feed construction. C. H. Wills. 1,630,554; May 17.
Oll-feed construction. F. R. Wood. 1,619,229; Mar. 1.
Oll filter or strainer. C. E. and W. Fox. 1,652,620;
Oll-feed. Oll frield of the construction of the construct
                               June 14.
I from condensation waters, Process and apparatus for
the removal of. J. B. Gail and N. Adam. 1,617,208;
Feb. 8.
the removal of. J. B. Gall and N. Adam. 1,617,208; Feb. 8.

Ol. 687,620; Aug. 1.

Ol. 687,620; Aug. 1.

Oli from mineral-oll emulsions, Recovering. H. N. Dons. 1,617,201; Feb. 8.

Oli from mineral-oll emulsions, Recovering. W. Hoskins. 1,638,530; Aug. 9.

Oli from wells, Apparatus for raising. B. Schweiger. 1,644,748; Oct. 11.

Oli gang. 1,624,748; Oct. 11.

Oli gas, Manufacturing. R. D. Pike. 1,644,146; Oct. 4.

Oli gange. S. F. Briggs and E. N. Jacobi. 1,623,333; Apr. 5.

Oli gange. J. H. Warrick. 1,649,375; Nov. 15.

Oli hatchening with nickel and copper formates. C. Ellis. 1,643,777; Oct. 11.

Oli heater. O. J. Kirchen. 1,640,241; Aug. 23.

Oli heater. L. T. Wilcox. 1,650,919; Nov. 20.

Oli heater and operating same. J. Primrose. 1,626,874; May 3.
   Oil heater and operating same.

May 3.
Oil-heater control, Tube. F. M. Poole. 1,615,482;
Jan. 25.
Oil heater, Crank-case. C. M. Corlew and G. A. Blohm.
1,645,239; Oct. 11.
Oil heater, Lubricating. R. W. Bergstrom. 1,640,176;
Aug. 23.

J. J. Schneider. 1,620,294; Mar. 8.
   Diseason, Oct. 11.

Diseason, Oct. 11.

Lineaton, Lubricating. R. W. Bergstrom. 1,640,176; Aug. 23.

Oil holder. J. L. Schneider. 1,620,294; Mar. 8.

Oil indicator. J. C. Nangano. 1,619,531; Mar. 1.

Oil-insulator transformer. W. Sarfort and F. Häberle. 1,613,412; Jan. 4.

1,632,215; Jun. 4.

Oil Bischort. W. O. Wetmore. 1,623,371; Apr. 5.

Oil Hiberator. W. O. Wetmore. 1,623,371; Apr. 5.

Oil Higherator. W. O. Wetmore. 1,623,371; Apr. 5.

Oil, Method of and apparatus for cracking. F. M. Hess.

Oil, Method of and apparatus for recovering. L. Ranney. 1,634,235-6; June 28.

Oil or gas well. E. V. Crowell. Re16,607; May 3.

Oil press with disintegrating means. H. Zander. 6,011, pressyre feeding device. C. H. Eyer. 1,641,221; Sept. 6.
   Only ressure feeding device. C. H. Eyer. 1,641,221; D. Process and apparatus for cracking petroleum. R. T. Pollock. 1,628,270; May 10.
Oil, Process of and apparatus for cracking. G. Egloff. 1,638,115; Aug. 9.
Oil, Process of and apparatus for distilling. G. W. Wallace, H. K. Hrig. 1,650,169; Nov. 22; May 10.
Oil product and making the same, Fish. D. Molofsky. 1,638,709; Dec. 20.
Oil product and making the same, Fish. D. Molofsky. 1,638,709; Jaw. 9.
Oil products, Profecting residual. E. E. Bartels. Oil purifer, apparatus. H. J. Wheeler and G. C. Engstrand. 1,632,968; Dec. 13.
Oil purifying apparatus. H. J. Wheeler and G. C. Engstrand. 1,632,968; Dec. 13.
Oil purifying apparatus. F. H. Hodge. 1,646,481; Oct. 25.
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Oil-purifying device. T. J. Litle, jr. 1,646,298; Oct. 18. Oil-purifying system. G. B. Hooton. 1,623,728; Apr. 5. Oil recovering and obturating ring. G. Eveno. 1,652,153;

Oil-purifying system G. B. Hooton 1,623,728; Apr. 5.
Oil recovering and obturating ring. G. Eveno. 1,652,153;
Dec. 6.
Oil rectifier. W. G. Wall. 1,628,085; May 10.
Oil, Refining. H. O. Parker. 1,622,879; Mar. 29.
Oil-refining apparatus. H. A. W. Howcott. 1,641,852;
Sept. 6.
Oil regulator. A. T. Garden. 1,644,918; Oct. 11.
Oil reservoirs. Drainage fitting for. L. S. Bessonett. 1,613,739; Jan. 11.
Oil, Rustproofing. R. E. Wilklm. 1,630,101; May 24.
Oil saver. J. J. Friel. 1,623,403; Apr. 5.
Oil saver and antisplasher. L. F. Davis. 1,632,889;
June 21.

Gil, Rustproofing, E. E. Wilkin, 1,630,101; May 24.

Oli saver, J. J. Friel, 1,623,463; Apr. 5.

Oli saver and antisplasher. L. F. Davis, 1,632,889; June 21.

Olisaver, G. C. C. Mims, F. L. Moutray and L. F. Miller, 1,626,494; Apr. 26.

Olisaver, G. G. C. C. Mims, F. L. Moutray and L. F. Miller, 1,626,494; Apr. 26.

Olisaparator, W. M. Little and J. L. Shermin, 1,623,601; Apr. 5.

Oli separator, D. D. Cushman, 1,647,344; Nov. 1.

Oli separator, W. M. Little and J. L. Shermin, 1,633,218; July 12.

Misplant, 1,621,707; Mar. 22.

Olisable apparatus, H. E. Marsh and C. J. Dunten, 1,619,525; Mar. 1.

Olisable apparatus, H. E. Marsh and C. J. Dunten, 1,619,525; Mar. 1.

Oli shale, Apparatus for the destructive distillation of.

L. R. Abernathy, 1,618,038; Feb. 15.

Oli Shale, Distilling, C. T. Lougher, 1,631,637; June 7.

Oli shale, Distilling, C. T. Lougher, 1,631,637; June 7.

Oli shale, Distilling, C. T. Lougher, 1,631,637; June 7.

Oli shale, Treating, G. E. Eloff, 1,627,162-3; May 8.

Oli shale, Treating, G. E. Eloff, 1,627,162-3; May 8.

Oli shale, Treating, G. E. Eloff, 1,627,162-3; May 8.

Oli shale, T. J. Frimrose, 1,651,434; Dec. 27.

Oli still, J. E. Bell, 1,613,306; Jan. 4.

Oli still, J. Frimrose, 1,651,434; Dec. 27.

Oli still, J. Frimrose, 1,651,434; Dec. 27.

Oli still, J. Frimrose, 1,651,634; Dec. 27.

Oli still, J. Frimrose, 1,651,634; Dec. 27.

Oli still, J. Frimrose, 1,653,655; Aug. 16.

Olistorage tank, J. T. Kavanaugh, 1,618,944; Mar. 1.

Oli storing and delivering systems, Pressure control for hydraulic, W. J. Peter, 1,622,881-12; Mar. 29.

Oli switch and controlling mechanism. C. Aalborg. 1,652,655; Dec. 13.

Oli tank, W. M. Nichols, 1,631,651; May 31.

Oli tank, W. M. Nichols, 1,631,652,51,2; Mar. 29.

Oli tank, W. M. Nichols, 1,631,651; May 31.

Oil tanks, vapor the Jan. 4.

Jan. 4.

Oil-testing apparatus for motor vehicles. F. B. Mason. 1,630,067; May 24.

Oil, Treating hydrocarbon. H. M. Lasher. 1,622,453; Mark. 1.

Treating impure crude. J. F. Wright. 1,627,072; May 2.

May 2.

entry. W. C. Erwin and C. H. Sweet. Dec. 13. Oll-well-tool operator. C. T. Dougherty. 1,617,303;

Feb. 8, on Special C. T. Doughetty, 1,617,308; Oil-well-tubing drainer. J. C. Taylor, 1,620,173; Mar. 8. Oil-well-tubing drainer. J. C. Taylor, 1,620,173; Mar. 8. Oil wells, Agitator for, W. G. Bisbee and B. P. Hoffman, 1,616,023; Feb. 1. Oil wells, Apparatus for pumping. A. O. Zinn and J. A. Bried. 1,648,616; Sept. 27. Oil wells. Casing head for. J. E. Snodgrass. 1,625,378; Apr. 19.

Oil wells, Casing head for. W. B. Wigle. 1,627,945; May 10. Oil wells, Controlling apparatus for. G. A. Montgomery and D. L. Driscoll. 1,651,537; Dec. 6. Oil wells, Flexible casing for. W. A. Trout. 1,644,553;

Oil wells, Controlling apparatus for. G. A. Montgomery and D. L. Driscoli. 1,651,537; Dec. 6.
Oil wells, Flexible casing for. W. A. Trout. 1,644,553; Oct. 4.
Oil wells, Flexible casing for. W. A. Trout. 1,644,553; Oct. 4.
Oil wells, Flexible casing for. W. C. Trout. 1,644,553; Oct. 4.
Oil wells, Oil and water separator for. M. C. Hammond. 1,649,524; Nov. 18.
Oil wells, Plug for. W. C. Cushing, 1,639,079; Aug. 16.
Oil wells, Plug for. B. E. Parrish. 1,631,152; June 7.
Oil wells, Safety can for. F. M. Mechling, 1,632,661; June 14.
OADT. 6.
Oil wells, Treating. B. W. Seymour, sr. 1,623,890; All wells, Tubing elevator for. W. G. Bisbee and B. P. Hoffman. 1,643,283; Sept. 20.
Oil wells, Working barrel for. A. H. Carnes and R. M. Marr. 1,642,601; Sept. 15.
Oil wells, Working barrel for. A. H. Carnes and R. M. Marr. 1,642,601; Sept. 15.
Oiler, Airline. C. C. Hansen. 1,643,069; Sept. 20.
Oiler, Airline. C. C. Hansen. 1,643,069; Sept. 20.
Oiler, Automatic. D. J. Egan. 1,621,771; Mar. 22.
Oiler, Automatic. C. B. Mathouser and F. A. Leul.
Oiler, Hand. A. R. Benton. 1,625,669; Apr. 19.
Oiler, Hand. J. J. Frawley, 1,613,821; Jan. 11.
Oiler, Hog. E. R. Clements. 1,636,624; July 19.
Oiler, Oiler, Day Day C. W. Willing, 1,613,814; July 19.
Oiler, Oiler, Day Day C. S. Wright. 1,612,889; Jan. 4.
Schwimmer and C. S. Wright. 1,612,889; Jan. 4.

June 28.
Oiling apparatus for band-wheel mechanism. F. J.
Schwimmer and C. S. Wright. 1,612,889; Jan. 4.
Oiling device. R. Bernhard. 1,651,864; Dec. 6.
Oiling device. T. Miller. 1,632,741; June 14.
Oils and apparatus therefor, Converting. J. C. Clancy.
1,620,075; Mar. 8.
Oils and fats and products made therefrom, Emulsification of. R. Douglas and H. G. Loesch. 1,625,641; Adv. 19.

tion of. Apr. 19. Apr. 19.

Oils and fats for the neutralization and removal of their fatty acid content, Treatment of. J. W. Spensley. 1,648,367; Nov. 8.

Oils and fats for the neutralization and removal of their fatty acid content, Treatment of. J. W. Spensley. 1,648,367; Nov. 8.

Oils and manufacturing cyanides, Cracking hydrocarbon. J. C. Clancy. 1,651,114; Nov. 29.

Oils and organic solvents, Removing suspended matters from. H. Hey. 1,633,941-2; June 28.

Oils, Apparatus for cocking hydrocarbon. R. E. Wilson and H. V. Atwell. 1,654,201; Dec. 27.

Oils, Apparatus for condensing. C. B. Buerger. 1,622,941; Mar. 29.

Mar. 29.

Mar. 29.

St. Tingley. 1,627,937; May 10.

Oils, Apparatus for heating. F. E. Wellman. 1,639,622; Aug. 16.

Olls, apparatus for heating. F. E. Weilman. 1,638,622; Aug. 16. Olls, Apparatus for removing water, gasoline, and the like from lubricating. P. M. Freer. 1,648,172; Nov. 8. Olls, Apparatus for sampling. E. W. Gard. 1,649,399; Nov. 15.

Nov. 15.

Olia Apparatus for the distillation of hydrocarbon. M. G. Olis, Apparatus for the distillation of hydrocarbon. M. G. Olis, Apparatus for the treatment of impure petroleum. J. D. Brady. 1,628,574; May 10.

Olis, Apparatus for treating. G. Egioff and W. R. Howard. 1,627,164; May 3.

Olis, Apparatus for treating crude. H. A. Hopkins. Olis, Apparius for treating crude. H. A. Hopkins. Olis, Atrangement for refining heavy mineral. L. Edeleanu, K. Pfeifer, K. Gress, and P. Jodeck. 1,651,328; Nov. 29.

Olis, Coking hydrocarbon. R. E. Wilson and H. V. Atwell. Olis, Continuous distillation of. F. A. Howard and N. E. Loomis. 1,614,324; Oct. 4.

Olis, Continuous process of treating. O. J. Salisbury. Olis, Converting or cracking hydrocarbon. W. E. Trent. 1,618,996; Mar. 8.

Olis, Converting or cracking hydrocarbon. W. E. Trent. 1,619,896; Mar. 8.

Olis, Converting or cracking hydrocarbon. W. E. Trent. 1,619,896; Mar. 8.

Olis, Converting or cracking hydrocarbon. J. R. Carb. Dec. 13.

Dec. 13.

Olls, Cracking, C. P. Dubbs, 1,638,113; Aug. 9.

Olls, Cracking, dyfocorbon. W. F. Faragher and W. A.

Gruse. 1,629,908; May 24.

Olls, Cracking of hydrocarbon. C. L. Parmelee,
1,613,718; Jan. 11.

Olls, Cracking or converting. O. P. Amend. 1,613,735;

Jan. 11.

Jan. 11.

Oils, Decolorizing, clarifying, and purifying petroleum. H. L. Kauffman and I. A. Chark. 1.638,938; July 26.

Oils, Debydrating, S. Born, H. E. Bonnette, and J. C. Walker. 1,633,225; Aug. 16.

Walker. 1,633,225; Aug. 16.

Distriction of the control of

olis, Method and apparatus for cracking. W. Brink. 1,652,344; Dec. 12.
Olis, Method of and apparatus for lifting. G. A. Kramer. 1,647,367; Nov. 1.
Olis, Preparing an adsorbent for. W. D. Rial and E. W. Gard. 1,634,514; July 5.
Olis, Preparing an absorbent for, W. D. Rial and E. W. Gard. 1,639,274; Aug. 16.
Olis, Prevention of E. W. Nitardy. 1,624,358; Apr. 12.
Olis, Prevention of E. W. Nitardy. 1,624,358; Apr. 12.
Olis, Process and apparatus for converting. C. P. Dubbs. 1,628,236; May 10.
Olis, Process and apparatus for cracking hydrocarbon. W. F. Faragher and W. A. Gruse. 1,640,444; Aug. 30.
Olis, Process and apparatus for treating. L. C. Huff. 1,619,977; Mar. 8.
Olis, Process and apparatus for treating. L. C. Huff. 1,619,977; Mar. 8.
Olis, Process of and apparatus for refining. C. W. Stratford. 1,611,298; Jan. 4. Olis, Producing lubricating. G. A. Kramer. 1,619,348; Mar. 1.
Olis, Purification of. F. W. Weber. 1,636,946; July 26.
Olis, Purifying hydrocarbon. J. C. Morrell and S. Comay. 1,627,055; May 3.
Olis, Pyrogenetic conversion of hydrocarbon. F. A. Howard, B. M. Clark, and J. R. Carringer. 1,615,384; July 12.
Olis, Refining. C. Leever. 1,635,718; July 12.
Olis, Refining. H. O. Parker. 1,627,338; May 3.
Olis, Refining, F. J. Resines. 1,619,486; Mar. 1, Olis, Refining, F. J. Resines. 1,619,486; Mar. 1, Olis, Refining, F. J. Resines. 1,619,486; Mar. 1, Sept. 6. pt. 6. Refining lubricating. O. C. Brewster. 1,649,095; Oils, Refining mineral, Oils, Refining mineral, Oils, Refining mineral, T. Hellthaler. 1,643,272; Sept. 20.

Sept. 20.

Glis, Refining of hydrocarbon. E. B. Phillips and J. G. Stafford. 1,639,631; Aug. 16.

Stafford. 1,639,631; Aug. 16.

May 10.

May 10. May 10, Oils. Treating hydrocarbon. C. P. Dubbs.
Dec. 13.
Oils. Treating hydrocarbon. G. Egloff and R. T. Pollock.
1.649,104; Nov. 15.
Oils. Treating hydrocarbon. R. C. Holmes. 1,623,729;
Apr. Tollock.
Apr. Tollock.
Apr. Tollock.
Oils. Treating hydrocarbon. R. C. Holmes, F. T. Manley, and O. Behimer. 1,646,380; Oct. 18.
Oils. Treating hydrocarbon. L. E. Jackson. 1,619,869;
Mar. 8.
Oils. Treatment of. W. O. Snelling. 1,624,848; Apr. 12.
Oils. Treatment of. Decolorizing. P. W. Prutzman.

June 28.

June 28.

1-aminonaphthalene-8-carboxylic acid, Manufacturing, R.

Herz and F. Schulte. 1,646,290; Oct. 18.

1-methoxymethyl-3-7-dimethylxanthine, K. Schranz and
C. Lutter. 1,616,282; Feb. 1.

Onion juice, Preparation of concentrated. C. Marx.

1,619,826; Mar. 8.

Ordinary derivatives of diphenolisatine and manufacture

Ordinary derivatives with 1,624,767; Apr. 12.

Open-nearth furnace. B. B. Gillett. 1,626,809; May 3.

Open-hearth furnace. G. L. Danforth, Jr. 1,647,213;

Nov. 1.

Nov. 1.

Open-hearth furnace. L. L. Knox. 1.621,258; Mar. 15.
Open-hearth furnace. F. B. McKune. Re16.837; Dec. 27.
Opener and cleaner. Horizontal. J. K. Whittler, F. D.
Langevin, and R. S. Curley. 1.638.649; Aug. 9.
Operating device. L. E. La Brie. 1.632,704; June 21.
and F. C. Wilharm. 1.640.558; Aug. 30.
Operating head for obstruction removers. J. Stremel.
1.618.333; Feb. 8.
Operating means. A. H. Stebbins. 1.627.673-8; May 10.
Operating mechanism. W. A. Franty. 1.633.266; Dec. 20.
Operating table. J. Conrad. 1.650.327; Nov. 22.
Operating table. C. C. Taplin. 1.635.588; July 12.
Operating table. C. C. Taplin. 1.635.588; July 12.
Operating table. C. C. Taplin. 1.635.588; July 12.
Operating table. Veterinary. B. F. Plerce. 1.651.290;

Operating table, Veterinary. B. F. Pierce. 1,65 Nov. 29. Operation indicator, Relay. J. M. Zimm 1,647,328; Nov. 1. Ophthalmic blanks, Making. F. Fraser. 1,63 Ophthalmic lens. H. W. Hill. 1,613,276; Jan. 4. 1,651,290; 1,630,262; Ophthalmic mounting. N. M. Baker and F. Fraser. 1,635,881; July 12. Ophthalmic mounting. G. H. Du Paul. 1,625,885: Apr. 26. Ophthalmic mounting. W. E. McDonell. 1.643.218:

Ophtham... Sept. 20. Ophthalmic mounting. 1,643,219; Sept. 20. Ophthalmic mounting. 1,622,668; Mar. 29. W. E. McDonell and T. Leytham. L. Poeton and F. A. Morey.

Ophthalmic mounting. F. A. Stevens. 1,625,833; Apr. 26, Ophthalmic mounting. F. A. Stevens. 1,625,833; Apr. 26, Ophthalmic mounting. F. A. Stevens. 1,638,334;

July 19. Ophthalmic mounting. F. A. Stevens. 1.636.337: July 19. Ophthalmic mounting. F. A. Stevens. 1.649.788-9: Nov. 15. Ophthalmic mounting. F. A. Stevens. 1.649.794-6:

Nov. 15.
Ophthalmic mounting. F. A. Stevens. 1,649,794-6;
Nov. 18.
Ophthalmic mounting. F. A. Stevens and J. W. Welsh. 1,630,338; July 19.
Ophthalmic mounting. L. J. Teller. 1,622,615; Mar. 29.
Ophthalmic mounting. J. W. Welsh. 1,630,639 July 19.
Ophthalmic mounting. J. W. Welsh. 1,630,639 July 19.
Ophthalmic mounting. J. W. Welsh. 1,650,639 July 19.
Ophthalmic mounting and method. D. P. Bernhelm.
Ophthalmic mounting and method. D. P. Bernhelm.
Ophthalmic mounting and method. J. W. Welsh. 1,643,792; Nov. 15.
Ophthalmic mounting and method. J. W. Welsh. 1,643,792; Nov. 15.
Ophthalmic mounting and method. J. W. Welsh. 1,643,792; Nov. 15.
Ophthalmic mountings and method. J. W. Welsh. 1,643,792; Nov. 15.
Ophthalmic mountings, Making. E. J. R. Beattey. 1,635,699; July 12.
Ophthalmic mountings, Making. A. L. McKinstry. 1,636,333; July 19.
Ophthalmic mountings, Making. A. L. McKinstry. Nov. 15.
Ophthalmic mountings, Making. F. A. Stevens. 1,649,790; Nov. 15.
Ophthalmic mountings, Making. F. A. Stevens. 1,649,790; Nov. 15.

Ophthalmic mountings, Making. F. A. Stevens. 1,649,790; Ophthalmic mountings, Tool for widening and narrowing bridges of. E. E. Beil. 1,658,073; Aug. 9.
Ophthalmic mountings. Tool for widening and narrowing bridges of. E. E. Beil. 1,658,073; Aug. 9.
Ophthalmological apparatus. H. Clement and G. S. Dey. 1,625,075; Apr. 19.
Optical apparatus. W. P. Reaves. 1,647,016–17; Oct. 25.
Optical apparatus. W. P. Reaves. 1,647,016–17; Oct. 25.
Optical apparatus. W. P. Reaves. 1,647,016–17; Oct. 25.
Optical apparatus. W. P. Heaves. 1,647,016–17; Oct. 25.
Optical attachment. H. N. Cox. 1,645,374; Oct. 11.
Optical combination, Adjustably mounting an. G. J.
Badgley. 1,649,646; Nov. 15.
Optical device for horizontal panoramic and zenithal view.
R. Parodi. 1,616,279; Feb. 1.
Optical diagnostic instrument. H. Clement. 1,626,601:
May 3.

R. Parodi. 1,616,279; Feb. 1.
Optical diagnostic instrument. H. Clement. 1,626,601:
May 3.
Optical elements, Method and apparatus for testing and misking. T. Smith and J. H. Dowell. 1,653,233;
Optical elements, Testing and finishing. T. Smith and J. H. Dowell. 1,652,234; Dec. 20.
Optical elements, Testing and finishing. T. Smith and J. H. Dowell. 1,652,234; Dec. 20.
Optical instrument. J. B. Henderson. 1,661,025; Nov. 22.
Optical instrument. Con-controlled. H. M. Johnson. 1,662,377; June 14.
Optical projecting machines, Foldable supporting stand for. H. Newman. 1,637,705; Aug. 2.
Optical rejection system. J. R. C. August. 1,645,367; Optical replection. J. T. Beechlyn. 1,651,574; Dec. 6.
Optical projections system. J. R. C. August. 1,645,367; Optical reflector. E. Lyndon. 1,653,053; Dec. 20.
Optical profections whethod and apparatus for effecting. E. H. Corlett. 1,626,787; May 3.
Optical system. H. B. Ives. 1,647,631; Nov. 1.
Optical professors for viewing tubes. M. M. Kirtane. 1,655,757; Dec. 20.
Optical itest chart. G. S. Dey. 1,622,707; Apr. 19.
Optical system for viewing tubes. M. M. Kirtane. 1,655,757; Dec. 20.
Optical test chart. G. S. Dey. 1,622,707; Apr. 19.
Optical professors for viewing tubes. M. M. Kirtane. 1,655,757; Dec. 20.
Optical test chart. G. S. Dey. 1,623,762; Jan. 4.
Orchard heater. J. C. Beckley. 1,627,93; Aug. 2.
Orchard heater. G. A. R. Lewington and G. A. Smith. 1,641,498; Oct. 4.
Orchard heater. B. V. Witt and C. O. Nelson. 1,645,677; Oct. 18.

Orchard heater. J. P. N. Wood. 1,616,562; Feb. 8.
Orchards and apparatus therefor, Heating. W. C. Scheu. 1,630,452; May 31.
Orchards. To or frost prevention for. J. Shaw. 1,618,787; Mar. 1.
Orchards. Temperature-regulating device for. E. S. Cobb. 1,639,257; Aug. 16.
Orchestral apparatus. V. Berton. 1,613,978; Jan. 11.
Ordnance breech mechanism. A. T. Dawson and G. T. Buckham. 1,622,861; Mar. 29.
Ordnance, Instrument for correcting the line of fire of. W. F. Grotendorst. 1,615,511; Jan. 25.
Ore and other materials, Machine for breaking. R. Hush. 1,624,177; Apr. 12.
Ore bodies, Apparatus for breaking down. W. S. Orr. 1,624,177; Apr. 12.
Ore bodies, Apparatus for breaking down. W. B. Clifford. 1,630,479; May 31.
Ore concentrator. K. M. and J. M. Mathe. 1,638,864; Aug. 16.
Ore Crusher. T. Freiberg. 1,632,124; June 14.
Ore-feeding apparatus. W. H. Farsons. 1,641,863; T. Freiberg. 1,632,124; June 14. apparatus. W. H. Parsons. 1 1,641,863; Ore-feeding apparatus. Sept. 6s apparatus. 1. Harman, A. W. Allen, and H. R. Newitt. 1,628,046; May 10. Ore furnate. F. M. Simonds. 1,637,163; July 26. Ore-grinding machine. G. W. Northland. 1,620,276; Mar. 8. Mar. 8.

Ore pulp and the like, Apparatus for determining the specific gravity of. H. E. E. Haultain. 1,621,535; Mar. 22.

Ore-sampling machine. O. H. Gray and C. E. Murdock. 1642 387; Sept. 13.

Ore-sampling machine. S. Mason. 1,646,032; Oct. 18.

Ore separator. D. H. Herbert. 1,648,478; Nov. 8.

Ore separators, Aerator for flotation. H. Wall. 1,642,051; Sept. 13. Ore-sampling machine. I. Auston. 1648,476; Nov. 26. 18. Ore separator. D. H. Herbert. 1,648,476; Nov. 26. 18. Ore-treating system. A. L. Blomfield. 1,621,474; Mar. 15. Ores and metallurgical products, Treatment of. F. Johannsen. 1,648,294; Feb. 22. Johannsen. 1,652,690; Dec. 6. Ores and minerals by floatation, Concentrating. W. A. Douglass. 1,652,090; Dec. 6. Ores, Concentration of. C. H. Sayre. 1,640,218; Aug. 23. Ores, Concentration of. C. H. Sayre. 1,640,218; Aug. 23. Ores, Concentration of. T. L. Stevens. 1,641,499; Jan. 11. Ores, Concentration of metalliferous. T. R. Simpson. 1,632,419; June 14. Ores, Gundentration of metalliferous. T. R. Simpson. 1,632,419; June 14. Ores for dust, the residue of roasting pyrites, small coke, and the like, Conglomerating fine. O. Kippe. 1,641,4369; Jan. 11. Ores for the extraction values, Treatment of. F. Dietzsch. 1,648,760–1; Nov. 8. Ores. Gravity separator for garnet. F. B. Burns. 1,620,761; Mar. 15. Ores for the extraction values, Treatment of. F. Dietzsch. 1,648,760–1; Nov. 8. Ores. Gravity separator for garnet. F. B. Burns. 1,620,873; Mar. 15. Ores or cher suitable materials, Apparatus for reducing. F. E. Whitham. 1,638,341; Aug. 9. Ores or pulverous ores, Sintering fine. H. G. Torulf. 1,618,116; Feb. 15. Ores or cher suitable materials, Apparatus for reducing. F. E. Whitham. 1,638,341; Aug. 9. Ores. Treating metallic. H. S. Mackay. 1,647,650; Oct. 25. Ores, Treating aluminous. R. Moldenke. 1,637,451; Ores, Treating aluminous. R. Moldenke. 1,657,451; Ores, Treating aluminous. R. Moldenke. 1,657,650; Nov. 22. Ores, Treating, aluminous. R. Moldenke. 1,657,451;

All, Control of the Moldenke. 1,657,451;

Ores, Treating mercury-bearing. R. W. Hyde. 1,650,360;

Nov. 22.

Ores, Treatment of. J. T. Terry. 1,627,582; May 10

Ores with chloride solutions, Treatment of. N. C.

Christensen. 1,621,569; Mar. 22.

Organ. Cr. C. T. Winder. 1,637,523; July 26.

Organ. Pipe. J. H. Hammond, fr. 1,621,879; Mar. 22.

Organ. Pipe. J. H. Hammond, fr. 1,621,879; Mar. 22.

Organ relay. M. H. Sampson. 1,639,991; Aug. 23.

Organ stop action. J. T. Austin. 1,640,307; Aug. 23.

Organic compounds. M. H. Sampson. 1,639,991; Aug. 23.

Organic mitrate compounds, Catalytic reduction of. M. Kahn and R. Mayer. 1,639,186; Aug. 10.

Organic soliciting the state of the Mayer. 1,639,186; Aug. 10.

Organic soliciting compound and making the same. P. I. Murrill. 1,622,534; Mar. 29.

Organs and the like. Contact block for electric. C. N. Deverall. 1,623,367; Apr. 5.

Organic and the like, Valve action for. F. W. Starkie.

Organs and the like, Valve action for. F. W. Starkie.

Organs and the like valve action for. P. W. Starkie.

Organs and the like of the starking means for. C. N. Deverall.

Organs. Flectrical controlling means for. P. Walcker. 1,650,555; Nov. 22. Aug. 2. res. Treating mercury-bearing. R. W. Hyde. 1,650,360;

Ornament, L. V. Aronson, 1.634,231; July 5.
Ornament, M. Reisert, 1.625,531; May 24.
Ornament, Animology, 1.625,531; May 24.
Outer, Animology, 1.635,937; July 12.
Ornament, Folding, S. S. Adams, 1.621,703; Mar. 22.
Ornament, Folding, S. S. Adams, 1.621,703; Mar. 22.
Ornament, for garments, Butterfly, E. Danielson, Des.
72,940; June 28.
Ornament for personal wear. J. J. Keville. 1,635,485; Ornament July 12. July 12.
Ornament for vehicles, Mechanical radiator. C. C. Funk and A. Boehm. 1,652,776: Dec. 13.
Ornament, Pendant. G. W. Peterson and B. T. Walls. 1,638,743; Aug. 9.
Ornament, Pocket. B. B. Lewis and L. M. Levy. Ornamental acide of manufacture and producing the same. F. F. LAuld. 1,643,045; Sept. 20.
Ornamental band, Elastic. E. Speidel. 1,647,060; Oct. 25. Ornamental body. E. J. Fink. 1,622,775; Mar. 29. Ornamental device, Illuminated. R. W. Bock. 1,623,086; ornamental body. E. J. Fink. 1,622,775; Mar. 29.
Ornamental device, Illuminated. M. Herskovitz.
Apr. 5.
Apr. 5.
Ornamental device, Illuminated. M. Herskovitz.
Ornamental device, Illuminated. M. Herskovitz.
Ornamental fabric structure. R. Loeb. 1,627,543; May 3.
Ornamental fountain. G. A. Kern. 1,651,714; Dec. 6.
Ornamental ilght. L. W. Mammen. 1,263,141; July 19.
Ornamental or effect materials, Manufacture of. W. A.
Dickie and J. H. Roouev. 1,641,962; Sept. 13.
Ornamentations. C. Andrews. 1,638,331; Aug. 19.
Ornamental finings, Machine for. G. A. Wendt. 1,618,562; Feb. 22.
Ornamenting linings, Machine for. G. A. Wendt. 1,626,014; Apr. 26.
Ornaments, Safety back device for ear. P. Reiter.
Orthodontic appliance. E. H. Angle. 1,622,586; Mar. 29.
Orthodontic appliance. E. Fischer. 1,646,194; Oct. 18.
Orthopedic appliance. E. Fischer. 1,647,794; Ch. 18.
Oscillation generator, J. T. L. Brown. 1,632,054;
June 14.
Oscillation generator. E. H. Copitts. 1,624,537; Apr. 19.
Oscillation generator. S. Loewe. 1,649,122; Nov. 15.
Oscillation generator. J. T. L. Scholleng. 1,022,001; May
Scillation generator with automatic frequency control. Oscillation generator with automatic frequency control.

J. W. Horton. 1.616.622; Feb. 8.
Oscillation meter. W. Regelein and A. Glaubitz.
1.614.573; Jan. 18.
Oscillation into audible oscillations, Transforming inaudible. J. E. Davis. 1.644.922; Oct. 11.
Oscillations into audible oscillations, Transforming inaudible. J. E. Davis. 1.644.922; Oct. 11.
Oscillations into audible oscillations, Transforming inaudible. J. E. Davis. 1.644.922; Oct. 11.
Oscillations, Method of an apparatus for producing.
Oscillations, Method of and apparatus for producing.
Oscillator, Therapeutic. C. E. Cook and G. S. Walker,
Oscillator, Three-phase. A. H. Taylor. 1,654.196;
Dec. 27.
Oscillator, Vacuum-tube. W. Schaffer. 1,639,671; Dec. 27. Oscillator, Aug. 23. Vacuum-tube. W. Schaffer. 1,639,671; Oscillographs, Sweep circuit for cathode-ray. W. A. Knoop. 1613.954; Jan. 11. Osteopathic operating table. J. W. Macklin. 1,626,091; Oven, Baking, C. G. B. Baking, A. E. Trolel, 1,633,236; June 21.
Oven, Baking, A. E. Trolel, 1,633,236; June 21.
Oven, Barbecue, M. S. Larche, 1,641,167; Jan. 11.
Oven, Cake, T. G. Kus, 1,635,479; July 12.
Oven, Coke, W. H. Wright, 1,643,532; Sept. 27
Oven, Coke, W. H. Wright, 1,643,532; Sept. 27
Oven, Coking retort. J. van Ackeren, 1,633,911;
June 28, Oven, Coking retort.
June 28.
June 28.
Oyen, Combination. J. Becker. 1,623,460; Apr. 5.

Oven control, Drying and enameling. A. Maehler. 1,636,140; 7 inly 19.
Oven control, Thermostatic. E. L. Fonseca. 1,625,980; Apr. 19.
Oven, Cooking. J. E. Chambers. 1,625,846; Apr. 26.
Oven. door spring control. G. A. Stackhouse. 1,616,471; Neb. 8. A. Statemodes. 1,04,747, 60 etc., 8. A. Statemodes. 1,04,747, 60 etc., 9. A. Statemodes. 1,04,747, 60 etc., 9. A. Statemodes. 1,04,745, 60 etc., 9. A. Statemodes. 1,04,80; Feb. 22. 1,63,812; Aug. 9. 1,63,812; Aug. 9. 1,63,812; Aug. 9. 1,63,812; Aug. 9. 1,64,967; Feb. 1. 1,64,967; Feb. 1,64,967; Fe Oven for baking, roasting, drying, and like purposes, Heating, W. Dredge, 1,636,504; July 19. Oven for barbecued meats. J. L. Macomber. 1,616,663; Feb. 8. Oven for barbecued meats. J. L. Macomber. 1,616,663; Feb. 8. Oven Gas-cooking and heating. A. A. E. H., P. R., Oven, Gas-range. G. A. Hoffman. 1,643,339; Sept. 27. Oven grid. C. H. Napier. 1,621,895; Mar. 22. Oven, Rectangular sole-fired coke. A. S. Khowles and C. V. Mcintire. 1,635,280; July 12. Oven, Machallar, C. Droczynski. 1,639,168; Aug. 16. Oven, Mosting. C. Dorozynski. 1,639,168; Aug. 16. Oven structures, Ventriage. 1,647,013; Oct. 25. Oven structures, Ventriage. 1,647,013; Oct. 25. Oven, Thermoelectric. S. Sacerdote. 1,637,659; Aug. 2. Oven verillator. L. Dana. 1,649,449; Nov. 15. T. 1. Oven, Wire-beating. T. W. Manker. 1,615,563; Jan. 25. Ovens and the like, Thermostatic control for electric. E. L. Fonseca. 1,627,732; May 10. Ovens, Gas control for. E. O. Engels. 1,624,935; Apr. 19. Ovens, Gas control for. S. Mayer and H. Nahrstedt. Vens, Safety fuel supply for drying and enamelling. A. Maebler. 1,614,789; Jan. 18. J. 632.492; June 14.

Veens or kilns, Vault for baking. J. Laurent. 1.616,322; Feb. 1.

Veens. Safety fuel supply for drying and enameling. A. Machier. 1.614,798; Jan. 18.

Vens. Safety fuel supply for drying and enameling. A. Machier. 1.614,798; Jan. 18.

Vens. Safety fuel supply for drying and enameling. A. Machier. 1.614,798; Jan. 18.

Vens. Thermostatic control for. F. A. Gauger. 1.627,405; May. 3.

Vens. Thermostatic control for. F. A. Gauger. 1.613,505; Mar. 1.

Overall. Sanitary. H. Wohlgemuth. 1.652,750; Dec. 13.

Overall. Sanitary. H. Wohlgemuth. 1.652,750; Lec. 13.

Overcall. Sanitary. H. Wohlgemuth. 1.652,750; Sept. 20.

Overcoat, Child's. S. Greenberg. 1.643,159; Sept. 20.

Overchee extractor. E. J. Carroll. 1.634,707; July 5.

Overshoe. J. de Noronha. 1.641,535; Sept. 6.

Overshoe. J. de Noronha. 1.641,535; Sept. 6.

Overshoe. F. H. Martin. 1.621,749; June 7.

Overshoe. F. H. Martin. 1.631,749; June 7.

Overshoe. Sept. 13.

Overshoe Sept. 13.

Overshoe Sept. 14.

Overshoe Sept. 14.

Overshoe Sept. 15.

Overshoe Sept. 15. Sept. 6. Manufacture of esters of. A. Häussler.
1.614.198; Jan. 11.
Oxychloride cement and making same. W. J. McCaughey.
1.634.506; July 5.
Oxychloride cement and making same. H. M. Olson.
1.619.534; Mar. 1.
Oxy-fuel gas tip and making. E. H. Smith. 1.646.602;
Oct. 25.
Oxygen and ammonia, Producing. C. Mott. 1,613.405;
Oxygen and ammonia, Producing. C. worth.
Oxygen and ammonia, Producing. C. von Hoff. 1,635,101;
July 5.
Oxygenator and smoke ellminator. O. A. Toffteen.
1.617.356; Feb. 15.
Package. N. E. Covel. 1,628.121; May 10.
Package. N. E. Covel.
Package. C. E. Hemminger. 1,649.692; Nov. 15.

Package. L. T. Hilborn. 1,652,025; Dec. 13.
Package. C. E. Miller. 1,631,048; May 31.
Package. H. F. Niles. 1,631,755; June 7.
Package. Advertising or sample. H. A. Fruitema.
Package and making the same. W. B. Bronander and J.
W. Leary. 1,637,302; Aug. 2.
Package, Bath-robe. L. C. Safir. 1,641,552; Sept. 6.
Package-banding machine. J. S. McChesney. 1,550,841;
Nov. 29.
Package-banding machine. C. S. Wecks. 1,550,841;
Package-binding implement. S. C. Carv. 1,550,934. Nov. 29.
Package-binding implement. S. C. Cary. 1,652,815; Dec. 13.
Package-binding implement. V. Ragona. 1,639,896; Aug. 23.
Package, Braid. H. Hebeler. 1,635,841; July 12.
Package carrier. C. Haarberg. 1,622,946; Mar. 29.
Package carrier, Tilting. R. D. Hays. 1,638,606; Aug. 16.
Package, Confection. A. Sweet. 1,630,964; May. 31.
Package, Confection. A. Butter. 1, A. Butter. 1,638,391; Aug. 9.
Package-filling machine. J. D. Conti. 1,635,543; July 12. 1.638.391; Aug. 9.
Package-filling machine. J. D. Conti. 1,635.543;
July 12.
Package for transit, Method of and apparatus for bracking and securing merchandise. L. F. Hints. 1,624.949;
Package holder and opener. C. P. Conrad. 1,614.283;
Jan. 11.
Package-holding device, Resilient. H. C. Naterman. 1,625,275; Apr. 19.
Package holder and opener. C. C. Concher. 1,646.348; Oct. 18.
Package mold. A. O. Freer. 71,653.699; Dec. 27.
Package opener. C. C. Crocker. 1,646,348; Oct. 18.
Package wasping. M. E. Draheim and C. E. Deming. 1,651,369; Nov. 19.
Package wrapping device. B. Brady. 1,623,300; Apr. 5.
Morris. 1,624,203; Apr. 12.
Package-wrapping machine. J. P. Aldrich and H. A.
Morris. 1,648,262; Nov. 8.
Packaged goods undergoing treatment, Segregating. A.
Packaged goods undergoing treatment, Segregating. A.
Packaging articles of furniture and the like and pack Packaged goods thuergong treatment of the R. Thompson. 1,612,893; Jan. 4.
R. Thompson. 1,612,893; Jan. 4.
Packaging articles, Machine for. I. Lázaga. 1,616,379;
Packaging articles of furniture and the like and pack or shell incasement therefor. R. M. Buck. 1,637,137;
July 26.
Packaging machine. S. Cooper. 1,628,130; May 10.
Packaging machine. S. Cooper. 1,628,130; May 10.
Packaging machine. J. C. Pinter. 1,628,203; May 17.
Packaging machine. J. C. Pinter. 1,628,803; May 17.
Packaging machine. J. C. Pinter. 1,628,803; May 17.
Packaging machine. J. C. Pinter. 1,628,803; May 17.
Packaging material, Method of and apparatus for. A. M.
Bates. 1,637,891; Aug. 2.
Packaging material, Method of and apparatus for. A. M.
Bates. 1,637,891; Aug. 2.
P. H. Angier. 1,640,021;
Aug. 23.
Packages for shipment of delivery, System for preparing.
A. C. Youngson. 1,626,492; Apr. 26.
Packages, Implement for binding shipping. S. C. Cary. 1,652,813; Dec. 13.
P. Gangler. 1,627,169; May 3.
P. Gangler. 1,627,169; May 3.
Packages, Sealing shipping. S. C. Cary. 1,652,813; Dec. 13.
Poct. 13.
Packages, Sealing shipping. S. C. Cary. 1,652,813; Dec. 13.
Packages, Sealing shipping. S. C. Cary. 1,652,813; Dec. 13.
Packages, Sealing shipping. S. C. Cary. 1,652,813; Dec. 13.
Packages, Fr. K. Havighorst. 1,641,693; Feb. 20.
Packer. W. W. Hartman. 1,643,119; Sept. 20.
Packer. G. Uniurges, Expansible. E. B. Miller. 1,622,043; Packer. On Jungers, Expansible. E. B. Miller. 1,622,043; Packer. On Jungers, Expansible. E. B. Miller. 1,622,043; Packer. Combination. W. Friedman. 1,641,263; Sept. 6.
Packet. Combination. W. Friedman. 1,641,263; Sept. 6.
Packet. Combination. W. Friedman. 1,641,263; Sept. 6.
Packet. G. T. A. Rading. 1,636,757; July 26.
Packages, J. L. Creevy. 1,635,259; Jung 7. Sept. Communical Sterroit. H. P. Brown. 1,641,620; Sept. 6, ratiner. E. J. Reading. 1,636,757; July 26. Packing. F. T. Agthe. 1,620,889; Mar. 15. Packing. J. L. Creevy. 1,631,520; June 7. Packing. A. Ekman. 1,625,801; Apr. 26. Packing. W. O. Farrington. 1,648,391; Nov. 8. Packing. C. R. Hubbard. 1,651,277; Nov. 29. Packing. B. P. Joye. 1,635,427; Nov. 29. Packing. B. P. Joye. 1,635,427; July 12. Packing. B. P. Joye. 1,635,439; Dec. 20. Packing. F. May. 1,627,791; May 10. Packing. F. E. Payne. 1,635,439; Dec. 20. Packing. A. G. Pickett. 1,616,596; Feb. 8. Packing and display box, Combination. W. D. Tam. 1,641,769 Sept. 6. the same, Laminated. R. H. Thorne. 1,625,508; Apr. 19. Packing and making the same. J. R. Gammeter. 1,627,698; May 10.

Packing and making the same. N. E. Johnson. 1.646,356; Oct. 18.
Packing and pucking-forming machine. M. M. Cody. 1.646,932; Oct. 26.
Packing and preserving food products and the package obtained thereby. E. Sutter. 1.640,860; Aug. 30.
Packing biscuit. G. M. Anderson and S. Hilder. 1.618,503; Feb. 22.
Packing box for siphon pipes. C. H. Atkins. 1,620,862; Mar. 15.
Packing case. H. N. Krawitze. Packing case. H. N. Knowlton, 1,640,452; Aug. 30. Packing case, Collapsible. B. B. Freeman. 1,636,223; July 19. Packing case, Compsione. B. B. Freedmin. 1,650,225, Packing container. R. Bucher. 1,647,604; Nov. 1. Packing container. R. Bucher. 1,647,604; Nov. 1. Packing cups, Apparatus for making. B. Stoltz and D. A. Lillie. 1,622,685; Mar. 29. Packing device. W. A. Breckon. 1,621,004; Mar. 29. Packing device. W. A. Breckon. 1,631,004; Mar. 29. Packing device. W. A. Trout. 1,633,891; July 7. Packing device. W. A. Trout. 1,634,891; July 7. Packing device. W. A. Trout. 1,634,891; July 7. Packing Bayansible. B. E. Miller. 1,613,355; Jan. 4. Packing, Expansible. 25. E. Miller. 1,614,547; Sept. 6. Packing, Beransible. 25. E. Miller. 1,614,547; Sept. 6. Packing leaving metallic. H. F. Ruodes. 1,624,620. Packing, Explansione Edit.

Packing, Flexible metallic. H. P. Rhodes. 1,627,620;

May 10.

Packing for inclosed axles or shafts, Oil. E. E. Noble.

Packing for M. Y.

Packing form. W. Fean. 1,641,073; Aug. 30.

Packing Forming metallic. H. P. Rhodes. 1,629,051;

May 17.

May 17.

May 17.

May 17.

May 17.

May 18.

May 17. May 17.
Packing-gland mechanism. A. Hollander. 1,649,472;
Nov. 15.

T. D. Collar. 1,638,619; Packing gland mechanism. A. Hollander. 1,649,472; Nov. 15.
Packing gland structure. L. D. Collar. 1,638,619; Aug. 9.
Packing, Joint. P. S. Sinclair. 1,638,647; May 31.
Packing joint. J. C. Straub. 1,653,884; Dec. 27.
Packing machinery. W. E. Molins. 1,652,871; Dec. 13.
Packing Manufacture of metallic. M. M. Cody. 1,642,431; Sept. 15.
Packing, McHaille. J. A. MacMurchy. 1,639,521; Aug. 16.
Packing, McHaille. J. A. MacMurchy. 1,639,521; May 10.
Packing, Piston. T. E. McFall. 1,624,618; Apr. 12.
Packing, Piston. T. E. McFall. 1,624,618; Apr. 12.
Packing, Piston. J. F. McFall. 1,624,618; Apr. 12.
Packing, Piston. J. F. McFall. 1,624,618; Apr. 12.
Packing, Piston. T. E. McFall. 1,624,618; Aug. 9.
Packing, Piston. T. S. McFall. 1,624,618; Aug. 9.
Packing, Piston. T. S. McFall. 1,624,618; Aug. 9.
Packing, Piston. To, G. McGall. 1,638,633; Aug. 9.
Packing, Piston. To, G. McGall. 1,628,668; Mar. 29.
Packing press. W. G. Price. 1,622,669; Mar. 29. Aug. 23

Packing press. W. G. Price. 1,622,669; Mar. 29.
Packing press. W. G. Price. 1,622,669; Mar. 29.
Packing prismatic articles. J. Bild. 1,635,528; July 12.
Packing, Pump. J. D. Maxwell. 1,619,211; Mar. 1.
Packing, receptacle. C. E. Manderbach. 1,627,613; May 10.
Packing ring. B. P. Joyce. Re16,725; Aug. 30.
Packing ring. V. E. Nelson. 1,624,671; Apr. 12.
Packing ring. J. B. Wenzel. 1,642,524; Sept. 13.
Packing ring. J. B. Wenzel. 1,642,524; Sept. 13.
Packing ring for pistons. A. C. Hocker. 1,640,151; Aug. 23. Packing ring. O. Stoffell. 1,631,554; June 7.
Packing ring. O. Stoffell. 1,631,554; June 7.
Packing ring. J. B. Wenzel. 1,642,524; Sept. 13.
Packing ring. J. B. Wenzel. 1,642,524; Sept. 13.
Packing ring for pistons. A. C. Hoecker. 1,640,151;
Aug. 23.
Packing, Rod. A. C. Judd. 1,617,952; Feb. 15.
Pad. Cleaning pad. Rug pad. Rug pad. Rug pad. Story pad. Shoulder pad. Shoulder pad. Shoulder pad. Hair-waving pad. Stamp pad. Stamp pad. Stirrup pa Paii, Aluminum dinner. J. C. Fritzges. 1,637,144; July 26.
Pail cover, Fruit-picking. A. Burch and R. C. Yost. 1,638,679; July 26.
Pail cover, Sanitary milk. C. M. Stemen. 1,636,199; Pail, Foruit J. L. Betts. 1,620,059; Mar. 8.
Pail holder. W. W. Haertel. 1,628,722; May 17.
Pail holder, Milk. W. J. Wiltse. 1,646,437; Oct. 25.
Pail holder, Milk. W. J. Wiltse. 1,646,437; Oct. 25.
Pail holder, Milking., E. J. Schnabl. 1,653,972; Dec. 27.
Pail, Milking. D. W. Bennett. 1,635,921; July 12.
Pails and the like, Carrier for. G. Polhamus. 1,620,919; Mar. 16.

Pails, Header for H. Schrader. 1,636,839; July 26.
Pails, Sanitary cover and strainer for milk. C. Nelson.
Pails, Strainer and cover for. E. C. Overboe and M. I.
Gresch. 1,645,818; Oct. 18.
Paint. J. R. Bristow. 1,635,119; July 5.
Paint. D. Isenberg. 1,650,071; Nov. 22.
Paint and plastic substance. S. I. Robinson. 1,635,095; July 5.
Paint and varnish, Composition for removing. A. G. Munyon. 1,614,929; Jan. 18.
Paint and varnish remover. C. Ellis. 1,613,560; yon. 1,614,929; Jan. 18.
Paint and varnish remover. C. Ellis. 1,613,560;
Jan. 4.
Paint and varnish remover. O. P. Swift. 1,620,409;
Mar. S.
Paint and varnish remover base. C. Ellis. 1,647,399;
Paint and varnish remover base. C. Ellis. 1,647,399;
Paint and varnish remover, Ethyl-alcohol. C. Ellis. 1,618,561; Jan. 4.
Paintbrush. S. Beck. 1,640,182; Oct. 18.
Paintbrush. P. A. Rossi. 1,633,374; Dec. 20.
Paintbrush. P. A. Rossi. 1,633,374; Dec. 20.
Paintbrush. P. A. Rossi. 1,633,374; Dec. 20.
Paintbrush. Magazine. R. Rogers. 1,644,356; Oct. 4.
Paint composition. J. W. Lowman. 1,625,815; Apr. 26.
Paint finish, Forming an artistic. C. H. Egelhoff.
Rel5,760; Oct. 4.
Paint formula. L. Francis. 1,639,599; Aug. 16.
Paint formula. T. Francis. 1,639,599; Aug. 16.
Paint mixer. F. Beckord. 1,618,567; Feb. 8.
Paint packages, Follower for. J. W. Hasburg. 1,619,930;
Mar. S.
Painter's scaffold. J. L. Thorne. 1,615,182; Jan. 18.
Painter's scaffold. J. L. Thorne. 1,615,182; Jan. 18.
Painting and the production of the same. F. Blau. 1,640,230; Aug. 23.
Painting apparatus. W. W. Rockwood. 1,633,588;
Lee. 20.
Painting apparatus. W. W. Rockwood. 1,633,588;
Painter apparatus. W. Painting apparat Dec. 20. Painting machine. Peter 20.

Painting machine. H. O. Kuhlhoff. 1,640,776; Aug. 30.

Painting on velvet or other cut pile fabric. R. Alexander. 1,623,771; Apr. 5.

Painting process and composition therefor. A. Rogers. 1,647,666; Nov. 1.

Paints and stains, Producing. G. W. Carver. 1,632,365; June 14. June 14.
Paints, Base for. S. J. Beebe. 1,615.673; Jan. 25.
Paints for fishing nets, Producing. S. Tomioka. 1,617,426; Feb. 15.
Paints, Manufacture of. D. Gardner. 1,617,754; Feb. 15.
Pailet. C. B. Cushwa. 1,637,411; Aug. 2.
Pallet. R. V. Proctor and H. M. Schaab. 1,619,759; Mar. 1. Palm nuts, Apparatus for shelling. R. B. Johnston. 1,648,456; Nov. 8. Pan: Sec— 1.648,456; Nov. S.

Pan: Sec—
Ash pan.

Baking pan.

Baking pan.

Baking pan.

Baking pan.

Cake pan.

Covered pan.

Covered pan.

Covered pan.

Lical pan.

Energy pan.

Energy pan.

Covered pan.

Lical pan.

Energy pan.

Ener Pan: Pane where F. O. Dutton, fr. 1,647,513; Nov. 1.
Panel. W. M. Schwartz. 1,562,055; Dec. 6.
Panel and interchanging means, Removable. A. Ashkenas.
1,651,941; Dec. 6.
Panel board. R. B. Benjamin. 1,636,277; July 19.
Panel board and panel-board construction. H. F. Starrett.
Panel charge of the Penning. 1,639,083; Aug. 16.
Panel-fastening means. J. W. Sterbenz. 1,645,120; Oct. 11. Oct. 11.

Panel frame. R. Gaudard. 1,648,584; Nov. 8.

Panel, Laminated. H. Watson. 1,649,555; Nov. 15.

Panels, Operating and locking device for oscillating.
C. T. Weymann. 1,625,923; Apr. 26.

Panels, Operating apparatus for vertically-silding. C. T.

Weymann. 1,634,861; July 5.

Panels, signs, and the like, Making ornamental. W. H.

Spencer. 1,614,263; Jan. 11.

Pants, Football. D. M. Bullock. 1,641,738; Sept. 6.

Paper and coating paper, Coated. W. W. McLaurin.

1,619,627; Mar. 1.

Paper and coating the same. G. E. Grimm. 1,614,611;
Jan. 18.
Paper and container made therefrom. Oil and grease proto. O. Kress. 1,633,787; June 28.
June 28 Paper and coating the same. G. E. Grimm. 1,614,611; Jan. 18. plec. 6.
Paper box and making the same. S. Rosenthal.
1,633,229; June 21.
Paper Box cover. A. Pistorius. Des. 72,633; May 10.
Paper box, Reenforced. A. D. Seiler. 1,643,564; Sept. 27.
Paper box, Reenforced and leak-tight. E. W. Labombarde.
1,634,073; June 28.
Paper can. R. A. Bennett and A. M. Boothby. 1,633,884;
June 28.
Paper can. W. C. Schilling. Des. 52,000. raper can. R. A. Bennett and A. M. Boothby. 1,633,884; June 28.

Paper carton. W. C. Schilling. Des. 73,209; Aug. 2.

Paper, carton, and like materials. Apparatus for working. H. Bobst. 1,619,848; Mar. 8,676; Dec. 27.

Paper Cip. G. W. Spromith. 1,622,676; Dec. 27.

Paper clips. G. W. Spromith. 1,622,676; Dec. 27.

Paper clips. G. W. Spromith. 1,622,676; Dec. 27.

Paper clips. Machine for and making. G. F. Griffiths. 1,654,077; Dec. 27.

Paper contained. W. G. Bent. 1,623,522; Apr. 5.

Paper container. A. Moore. 1,627,047-8; May 3.

Paper container. A. Moore. 1,627,047-8; May 3.

Paper containers, Making. J. E. Annen. 1,636,584; Paper converting machine. C. O. Gammell. 1,641,423; Sept. 6.

Paper-creping apparatus. K. Wandel. 1,630,320; May 31.

May 31.

Paper-crimping machine. C. E. Scott. 1,629,743; May 24.

Paper, Crinkling. E. H. Angier. 1,643,147; Sept. 20.

Paper Crinkling and receivering. W. W. Rowe.

Paper cup. C. Barbieri. 1,632,869; June 21.

Paper cup. C. Barbieri. 1,632,869; June 21.

Paper cup. Folding. C. Barbieri. 1,632,867; June 21.

Paper-cup. Folding. C. Barbieri. 1,632,867; June 21.

Paper cup. Folding. C. Barbieri. 1,632,867; June 21.

Paper cutter. B. E. E. H. 1,624,235; Apr. 12.

Paper cutter. B. B. Reynolds and W. E. Jackson.

1,632,495; Apr. 5.

Paper cutter. W. L. Valiquette and C. Seyhold.

1,612,956; Jan. 4; ther machines. Automatic clamping.

Paper-cutting. Backine. F. Lerner. 1,632,378; June 14.

Paper-cutting machine. F. Lerner. 1,632,378; June 14.

Paper-cutting machine. J. E. Mulroney. 1,653,304; Dec. 20.

Perc. 20. Machine and gauge therefor. J. E. Mul-roney 1.653.698; Dec 20. L. 1.616.138; Feb. 1. Paper, Devicte Formating Folls of. H. Libeck. 1.633.595; June 28. Paper dispenser, J. F. Leidecker. 1.653.298; Dec. 20. Paper direct. C. W. Shartle and A. E. Bridge. 1.614.694; Jun. 18.

Paper drinking cup. W. E. Benson. 1,654,318; Dec. 27.
Paper-drying machines, Driving mechanism for. B. A.
Malkin. 1,616,383; Feb. 1.
Paper, Equalizing device for rewinding web. H. Hilbert.
1,648,479; Nov. 8.

Paper exhibiting printed matter, Coated. W. L. Carter. 1.616,963; Feb. 8.
Paper fastener. J. A. Elias. Re16,610; May 3.
Paper fastener. F. J. Kline. 1,645,430; Oct. 11.
Paper fastener. P. Stellmach. 1,641,936; Sept. 6.
Paper-fastening device. S. Svenson. 1,637,357; Aug. 2.
Paper feed, Automatic. W. E. Myers and C. E. Young. 1,653,305; Dec. 20.
Paper-feed mechanism. G. G. Gwinn. 1,626,409; Apr. 26.
Paper feeder. A. Olson. 1,620,353; Apr. 26.
Paper feeding. H. Bridshaw. 1,628,224-5; May 10.
Paper-feeding apparatus. A. Brondmeyer. 1,624,112; Apr. 19.
Paper-feeding machine. T. C. Dexter. 1,628,125; May 10.
Paper-feeding machine. T. C. Dexter. 1,628,125; May 10.
Paper-feeding machine. H. Hallstram. 1,624,787; Apr. 12.

raper-teeding machine. H. Hainstream. 1,624,761; Apr. 12. Paper-feeding machines, Sheet-separating device for. E. H. Liljebladh. 1,635,626; July 12. Paper-feeding mechanism. L. J. Frohn. 1,618,182; Feb. 22.

H. Liljebladh. 1,635,626; July 12.

Paper-feeding mechanism. L. H. Morse. 1,621,678;

Mar. 22.

Paper-feeding roll. W. B. Bronander. 1,626,386; Apr. 26.

Paper-feeding roll. W. B. Bronander. 1,626,386; Apr. 26.

Paper, Figured tissue. L. Wagner. Des. 72,043-7;

Paper ale.

J. S. Small. 1,623,981; Apr. 12.

Paper-fining device. F. J. Kline. 1,652,205; Dec. 13.

Paper-fining device. F. J. Kline. 1,652,205; Dec. 13.

Paper-folding device. F. J. Kline. 1,652,205; Dec. 14.

Paper folding box. W. C. Miller.

Paper folding box. W. C. Miller. 1,614,205; Jan. 11.

Paper folding. L. W. C. Miller. 1,614,205; Jan. 11.

Paper-folding. device. T. N. Deligianes and A. A.

Paper-folding machine. J. O. Hunt. 1,618,711; Feb. 22.

Paper-folding machine. J. H. Shipley. 1,638,176;

Aug. 7.

Paper-folding machine. J. H. Shipley. 1,638,176;

Aug. 7.

Paper-folding machine. J. H. Shipley. 1,638,176;

Aug. 7.

Paper machines. Attachment for. F. B. Isnigon.

Paper-folding machine. G. A. Shaffer and F. H. Wirtz.
1.652.417; Dec. 13.
Paper-folding machine. J. H. Shipley. 1,638,176;
Aug. 9.
Paper-folding machine. J. H. Shipley. 1,638,176;
Aug. 9.
Paper-folding machines. Discharging mechanism for. T.
N. Deligianes and A. A. Bourdes. 1,647,086; Oct. 25.
Paper for preventing tarnishing of polished metals. F.
H. Osborne. 1,628,610; May 10.
Paper formation and weight Indicator. R. A. Steffen.
Paper from atom and product, Making. C. D. Wood.
1,634,603; July 5.
Paper from walls. Removing wall. L. O. Ullom.
1,634,603; July 5.
Paper-hanger's table. J. H. A. Christiansen. 1,623,167;
Paper-hanging device for wall. E. R. Burkey. 1,626,620;
Apr. 26.
Paper having the appearance of handmade paper, Method and apparatus for making. J. H. A. Armstrong.
Paper-holder, J. C. Murdock. 1,624,427; Apr. 12.
Paper holder, J. C. Murdock. 1,624,427; Apr. 12.
Paper holder and feder, Roll. D. L. Cooper. 1,615,359;
Jan. 25.
Paper machine driers, Exhaust system for. W. E. Rosebush. 1,638,183; June 7.

Sept. 13.

Paper-machine driers, Exhaust system for. W. E. Rosebush. 1,631,833; June 7.

Paper, Machine for making. A. Aldrich. 1,617,734; Feb. 15.

Paper, Machine for making corrugated. S. M. Langston. 1,642,782; Sept. 20.

Paper, Machine for making decorated. D. A. Smith and C. Striller. 1,623,281; Apr. 5.

Paper Striller. 1,623,281; Apr. 5.

Paper Striller. 1,623,281; E. M. Kratz. 1,650,585;

Nov. 22.

Paper machines and textile-goods-drying machines, Drying cylinder for. E. Littschen. 1,640,662; Aug. 30.

Milispaugh. 1,653,817; Dec. 27.

Paper machines and the like, Segregated drive for. W. H.

Milispaugh. 1,653,817; Dec. 27.

Paper machines and the like, Segregated drive for. W. L.

Merrill. 1,644,142; Jan. 11.

Paper machines, Dandy-roll support for. E. N. Daulton.

Paper machines, Dandy-roll support for. E. N. Daulton.

Paper machines, Drive of drying cylinders of. P. Priem. 1,635,676; July 12.

Paper machines, Felt conditioner for. W. P. Feeney. 1,635,317; July 12.

Paper machines, Operating apparatus for safety guards on roll winders of. E. Bourgord and A. Lettl. 1,628,488; May 10.

1,628,488; May 10.

1,628,488; May 10.

1,648,248; Ct. 4.

Paper machines, Rope paper carrier for. J. F. Thibedeau, A. Deguid. 1,646,044; Oct. 18.

Paper machines, Silce for. D. B. Davies and C. J. Thomas.

Paper machines, Slice for. D. B. Davies and C. J. Thomas. 1,623,096; Apr. 5. Paper, Making. J. A. Heany. 1.642,495; Sept. 13.

 Paper, Making.
 L. Kirschbraun.
 1,621,888;
 Mar.
 22.

 Paper making.
 W.A. Whitcomb.
 1,624,029;
 Apr.
 12.

 Paper making and the like.
 Elaborating correstlats into pulp for use in.
 0. R. Sweeney.
 1,639,152;
 Aug.
 18.

 Paper-making apparatus.
 H. G. Cram.
 1,622,681;
 Aug.
 18.

 Paper-making apparatus.
 R. E. Heisel.
 1,643,657;
 1,643,657;
 | Sept. 24. | Sept Paper-making machine. Mar. 8.

Paper-making machine. F. A. Peschl. 1,634,895; July 5.

Paper-making machine. T. T. Rogan and W. E. B.
Wright. 1,617,767; Feb. 15.

Paper-making machine. C. W. Valentine. 1,619,168;

Mar. 1.

Paper-making machines and making the same, Wire netting for. C. Kurtz-Hähnle and H. Kurtz. 1,624,649;

Apr. 12. ting for. C. Kurtz-Hähnle and H. Kurtz. 176-176-18.

Apr. 12.

Paper-making machines, Apron board for. C. W. Valentine. 1,635,772; July 12.

Paper-making machines, Drive for. B. A. Malkin. 1,616,382; Feb. 1.

Paper-making machines. Eliminating water from the pulp may be supported by Antoine. 1,638,975; Aug. 16.

Paper-making machines. Moisture-testing means for. F. A. Peschl. 1,623,436; Apr. 5.

Paper-making machines, Stock regulator for. W. J. Sherldan. 1,619,682; Mar. 1.

Paper-making machines, Water deckle for. F. W. Sears and A. Buck. 1,623,278; Apr. 5.

Paper-making machines, Web carrier for. W. E. Sheehan. 1,614,76; Dec. 6.

Fajer-making machinery. R. E. Heisel. 1,648,229; Fajer-making machinery. R. E. Heisel. 1,648,229; Faper-making machines, Web carrier for. W. E. Sheehan. 1,651,476; Dec. 6.
Paper-making machinery, R. E. Heisel. 1,648,229; Nov. 8.
Paper-making mechanism. N. J. Niks. 1,641,986; Sept. 13.
1,624,184; Apr. 12.
Paper making, Preparing stuff for. E. Mahler and H. A. Rothchild. 1,650,022; Nov. 22.
Paper making, Preparing stuff for. E. Mahler and H. A. Rothchild. 1,650,022; Nov. 22.
Paper manufacture. A. D. Little and C. E. Carpenter. 1,624,492; Apr. 12.
Paper manufacture, Apparatus for. C. W. Unkle. 1,644,620; Oct. 4.
Paper, Manufacturing, A. E. Barnard and R. G. Cas-Paper, Method and apparatus for making. A. E. Cofrin. 1,023,526; Apr. 5.
Paper, Method and machine for making. C. V. Proctor. 1,637,240; July 26.
Paper, Method of and apparatus for controlling the moisture content of. F. E. P. Klages. 1,638,317; June 28.
Paper, Method of and apparatus for creping. A. E. June 28.

Paper, Method of and apparatus for creping. A. E.
Cotrim. 1,641,739; Sept. 6.
Paper-napkin machine. J. O. Hunt. 1,653,908; Dec. 27.
Paper napkins, towels, and the like, Packages of. P. H.
Horwitt. 1,628,981; May 17.
Paper novelty article. A. G. Palmer. 1,622,606; Mar. 29.
Paper or other materials into sheets, machine for automatically cutting moving webs of. W. E. Molins. 1,631,879; June 7, and making the same, Composition. Paper or similar article, Box-cover. A. Drevenstedt.
Des. 72,512; Apr. 26.
Paper or similar article, Lining. J. Lader. Des. 72,519; Apr. 26.
Paper or similar article, Lining. W. Schmitz. Des. Paper or similar article, Lining. W. Schmitz. Des. 72,530; Apr. 26.
Paper or similar material, Apparatus for forming articles from. G. P. Mailory. 1,628,237; May 10.
Paper or the like, Cover. A. Labram. Des. 72,019-22; Feb. 15.
Paper or the like, Cover. R. I. Marwede. Des. 71,984; Paper or the like, Cover. T. L. Stone. Des. 72,291;
Mar. 22.
Paper or the like, Cover. T. L. Stone. Des. 73,807;
Nov. 8. Nov. 8.

Paper or the like, Process and apparatus for making, C. H. Allen. 1,620.860; Mar. 15.

Paper ornament, Expansible tissue. M. L. Beistle. 1,616.568; Feb. 8. Paper package and forming it. D. C. Hurlbut. 1,630,343; May 31. Paper package, Tissue. B. A. Nienhauser. 1,623,806; Apr. 5. Paper-perforating device. F. J. Kline. 1,650,019;

Paper, Process and mechanism for making crinkled. N. M. Goodlett. 1,626,527; Apr. 26.

1,631,760; June 7.

Paper pulp and other suspensions and mixtures, Effecting agglomeration in. K. Sveen. 1,622,474; Mar. 29.

Paper pulp, Apparatus and making. F. K. Fish, jr. 1,638,730; June 28. 1.633.730; June 28.
Paper pulp, Apparatus for making. W. S. Lowe.
1.613.839; Jan. 11.
Paper pulp, Bleaching. O. Kress. 1,645.061; Oct. 11.
Paper pulp, Bleaching. O. Kress. 1,651.530; Dec. 6.
Paper pulp, machines, Cylinder for. N. H. Bergstrom.
1,613,632; Mar. 1.
Paper pulp, Making. B. S. Summers. 1,643,826;
Sept. 27. Paper pulp, Method and apparatus for producing. W. H. Howell, jr. 1,645.754; Oct. 18. Fish, jr. 1,633,736; June 28. raper pulp, Treatment of. C. R. Robinson. 1,644,447:
Pacer voll carrier. K. F. Kirkman. 1,618,342; Feb. 22.
Paper-roll holder. N. S. Hillyard. 1,648,810; Nov. 8.
Paper soll, S. S. Hillyard. 1,648,810; Nov. 8.
Paper safety. J. Genose. 1,626,078; Apr. 26.
Paper, Safety. J. W. Neft. 1,652,042; Dec. 6.
Paper, Security. D. Smith. 1,622,24252; May 3.
Paper, Scentry. forming. C. B. B. and H. P. Maurer. 1,650,372; Nov. 22.
Paper-securing clip. C. Bristow. 1,615,827; Feb. 1.
Paper sheets, Apparatus for feeding. J. and H. Glessecke. 1,649,404; Machine for superimposing. P. J. Christman Jr., 1,632,433; June 14.
Paper, Shelf. E. Karfiol. Des. 74,148; Dec. 27.
Paper sting. J. A. De Cew. 1,621,399; Mar. 15.
Paper stock, Method of and apparatus for working. A. J. Haug. 1,625,676; Apr. 5.
Paper 19.
Paper strips with thinned edges, Method and apparatus for making. J. G. Jones. 1,634,997; July 5.
Paper strips with thinned edges, Method and apparatus for making. J. G. Jones. 1,634,997; July 5.
Paper structures, Making. H. B. Smith. 1,650,050; Nov. 22.
Popen 13. Paper pulp, Treatment of. C. R. Robinson. 1,644,447; Dec. 13.

Paper-tape machines, Cutter attachment for. J. Olsen. 1647.881; Nov. 1.

Paper, Tinted burnished metal-coated. G. E. Grimm. 1,617.946; Feb. 15.

Paper to boxes and the like. Applying top or bottom cover. H. B. Smith. 1.650.399; Nov. 22.

Paper, Treating. D. Finley. 1,644.489; Sept. 6.

Paper-tube-making bullen. 1,624.489; Suly 5.

Paper-tube-making machine. R. J. Jauch. 1,625.470;

Paper tubes or the sulps. 1,644.489. Paper-supporting device. W. H. Holmes. Dec. 13. Apr. 19.

Paper tubes or the like, Apparatus for feeding folded.

E. Engstrom. 1,619,711; Mar. 1.

Paper-ware manufacture. H. B. Smith: 1,620,239;

Mar. 8.

Paper, Washing. C. B. Peck. 1,631,757; June 7.

Paper web, Apparatus for feeding and registering a.

W. Rose. 1,637,658; Aug. 2.

Paper weight. R. A. Riddle. 1,629,414; May 17.

Paper weight. O. W. Sicks. Des. 72,334; Mar. 29.

Paper weiting machine. P. Aitchison. 1,653,610;

Dec. 27. Papers, Fastening device for. M. A. Miller, 1,631,632; Aug. 2.

Papers, Treating waxed and printed. P. H. Todd. 1,628,931; May 17.

Papier-mackle for the many first and making the same. R. Beards-Parachute. 263; Feb. 22.

Parachute. B. Di Guillo, 1,635,823; July 12.

Parachute. H. E. Hawes. 1,644,251; Oct. 4.

Parachute. F. Simon. 1,626,563; Apr. 26.

Parachute. A. R. Thörnbiad and G. W. Nordenswan. 1,649,934; Apr. 26.

Parachute. A. R. Thörnbiad and G. W. Nordenswan. 1,649,934; Apr. 27.

Parachute fabric. H. T. Nones. 1,660,998; Nov. 29.

Parachute harness. J. M. Russell. 1,631,768; June 7.

Parachute pack. J. M. Russell. 1,631,767; June 7.

Parachute shroud lines, Method and apparatus for providing. L. L. Irvin. 1,625,726; Apr. 19.

Pit J. Haber. 1,628,401; May 16 centing all wells of. Parafin-resisting surface for paraffin-absorbent boxes and making same. H. F. Welss. 1,648,603; Oct. 25.

Parasol. L. A. Capaldo. 1,632,2882; June 21.

Parasol and umbriell handles, Attachment for. A. Berkowitz. 1,637,434; Aug. 2. Page 1, Freezes and apparatus for making. L. Kirsch-braun. 1,016,003; Feb. 8.
Paper, Process and apparatus for molstening. W. Colditz and G. Thommel. 1,617,704; Peb. 15.

Parcel carrier for shoppers. A. M. Lapham. 1,635,423; July 12. July 12.

Parcels, Closing. P. Gangler. 1,625,720; Apr. 19.

Paring machine. J. A. Kaley. 1,618,091; Feb. 15.

Paring machine, Apple. J. W. Pease. 1,615,914; Feb. 1.

Paring machine, Vegetable. H. Robinson. 1,644,448; Paring machine, Appetable. H. Robinson, Appetable Paring machine, Vegetable. H. Robinson, Oct. 4.
Oct. 4.
Oct. 4.
Paring machines, Counting mechanism for, G. B. Fox and J. G. Christian. 1,616,081; Feb., 1900.
Howard. 1,635,716; July 12.
Parking device. C. Spiro. 1,634,803; July 5.
Parking device. C. Spiro. 1,634,803; July 5.
Parking means, Automobile. F. Palmer. 1,639,054; Aug. 10.
Purking means, Automobile. F. Palmer. 1,639,054; Aug. 10.
Purking meter. W. A. Homan and C. T. Austin. Parking meter. W. A. Homan and C. T. Austin. 1,620,098; Mar. 8.
Parquetry and flooring. J. McBride. 1,649,842; Nov. 22. Parquetry and flooring. J. McBrow. Absolute. Nov. 22.
Parter and clamp, Shuttle-feeler thread. H. A. Davis. 1,654,493; Dec. 27.
Partition, Adjustable. J. R. Clark. 1,639,795; Aug. 28.
Partition-assembling machine. V. M. Wade and C. E. Zugean. 1,643,557; Sept. 27.
Zugean. 1,643,557; Sept. 27.
Mar. 15.
Partition, Metal. R. F. Carpenter and T. F. Anderson. 1,621,069; Mar. 15.
Partition, Office. S. Lowy. 1,646,651; Oct. 25.
Partition, Office. S. Lowy. 1,646,651; Oct. 25.
Partition, Office. S. Lowy. 1,646,651; Nov. 2.
Partition, Portable. A. W. Keichline. 1,647,733; Nov. 1.
Partition, Portable. A. W. Keichline. 1,647,733; Nov. 1.
Partition, Sectional. T. F. Anderson. 1,649,886; Nov. 28. Partition, Sectionar.
Nov. 22.
Partition support, Adjustable. A. Ashkenas. 1,651,940; Nov. 22.
Partition support, Adjustable. A. Ashkenas. 1,651,940;
Partition unit and construction. U. C. Thies. 1,629,367;
Partition, Thimble structure for. E. C. Fox. 1,645,410;
Oct. 11.
Passages between chambers, Formation of. H. C. Zimmerman. 1,620,856; Mar. 15.
Passing light. B. A. Jeannotte. 1,626,281; Apr. 26.
Paste and preparation thereof, Frinting. H. Müller.
Paste dispensing device. E. Wisroth. 1,613,368; Jan. 4.
Paste, Mordant. S. Nisato. 1,647,539; Nov. 1.
Paste to battery grids, Apparatus for applying. R. J.
Rixdorff. 1,653,587; Dec. 20.
Paste to labels, Device for applying. G. A. Walstead.
Paste to labels, Device for applying. G. A. Walstead.
Paste to labels, Device for applying. G. A. Walstead.
Paste to labels, Device for applying. G. A. Walstead.
Paste tubers. S. I. Opone. 1,613,940; Jan. 11.
Paster cutting and applying machine. F. T. McGlynn.
1,636,611; July 19.
Pasteurizer. T. L. Cavalli. 1,623,909; Apr. 5.
Pasteurizer. T. W. W. Forrest. 1,625,529; Apr. 19.
Pasteurizer. T. W. W. Forrest. 1,625,529; Apr. 19.
Pasteurizer. T. W. Porrest. 1,625,529; Apr. 19.
Pasteurizer. T. W. Porrest. 1,627,672; Apr. 20.
Particutives. Valued. antiet for W. Ratgeonstein. Pasteurizing apparatus. A. J. Davis. 1,624,573; Apr. 12.
Pasteurizing apparatus. R. B. Bagby. 1,624,573; Apr. 12.
Pasteurizing apparatus. A. J. Davis. 1,638,535; Aur. 16.
Pasteurizing apparatus. A. J. Davis. 1,647,035;
Oat. 25. Oct. 25.

Oct. 25.

Pasteurizing apparatus. D. C. Kerckhoff and R. Copp.

1,653,629; Dec. 27.

S. Oyama. 1,640,289; Aug. 23.

Pasting machine. E. E. Sabin. 1,634,519; July 5.

Pastry and the like, Apparatus for making. W. J. Kaser.

1,653,402; Dec. 20.

Pastry-cream filling device. C. Cieslak. 1,630,924;

July 31.

July 31.

July 32.

July 32.

July 41.

July 42.

July 43.

July 43.

July 44.

July 44.

July 45.

July 46.

July 46. May 3. Mitter. A. W. Blendow and L. H. Blendermann.
1.616,198; Jan. 18.
Pastry cutter. J. Bolarsky. 1.649,803; Nov. 22.
Pastry cutter. R. J. R. Christensen. 1.615,569; Jan. 25.
Pastry cutter. R. J. R. Christensen. 1.615,569; Jan. 25.
Pastry dough. J. Fousek. 1,625,022; Apr. 19.
Patch. Blow-out. G. E. Biaylock. 1.644,104; Oct. 4.
Patch. Repair. A. H. Cooper. 1.639,989; Dec. 27.
Patch. Repair. A. H. Cooper. 1.639,989; Dec. 27.
Patter. H. G. Volckening. 1,649,989; Nov. 15.
Pattern: See—
Dress pattern.
Garment of dress prittern.
Garment pattern.
Garment pattern.
For the pattern.
For the pattern of the pattern.
Nov. 15.
Pattern-controlled shedding mechanism. T. A. B. Carver.
Pattern-controlled shedding mechanism. Pattern-controlled shedding mechanism. T. A. B. Carver. 1.633.475. June 21.
Patiern-copying machine. T. H. Seely.
Feb. 15.
Pattern-grading machine. M. V. Preston.
May 3. 1.617.502: 1,627,062; Pattern grading machines, Template holder for, J. H., H. J., and H. M. Sutherland. 1.633,295; June 21. Pattern mechanism for dobbies. J. Reynolds. 1,622,344-5; Mar. 29. Pattern stab, Automatic. E. E. Brinser. 1,646,744;

Patterns to pattern-carrying members, Forming and applying paper-marking. J. G. Callan. 1,653,148; Dec. 20.
Pavement. F. V. Lanbam. 1,623,417; Apr. 5.

Pavement H. D. Streator. 1,636,113-14; July 19. Pavement and process of constructing pavements. B. H. Wait. 1,628,482; May 10. Pavement and process of constructing pavements. B. H. Wait. 1,650,654; Nov. 22. Pavement. Cement-block. E. De Meyer. 1,643,879; Will. 1,630,034; Nov. 22.

Well. 1,630,034; Nov. 22.

Payement, Cement-block. E. De Meyer. 1,643,879; Revenent, Crossing. A. E. Scherm. 1,613,850; Jan. 11.

Payement-finishing machine. G. E. Webb. 1,628,088; May 10.

Payement finishing machine, Concrete. O. L. Kipp. 1,629,276; May 17.

Payement reenforcing, Positioning. W. D. Eaton and W. T. Lamb. 1,643,578; Sept. 27.

Payement, Sectional-rubber. A. F. Masury and A. H. Leighert. 1,648,024; Sept. 20.

Payement 1,648,024; Sept. 20.

Lolifedii; Feb. 8.

Payements, Appliance for finishing concrete. I. Shidler and R. D. Gregg. 1,626,879; May 3.

Payements, Compensating and drainage joint for. G. W. Warmoth. 1,625,176; Apr. 19.

Payements, Corrugated base for. W. Bannen. 1,641,655; Sept. 8. Pavements, Corrugated base for. W. Bannen. 1,641,655; Sept. 6.
Paving. W. B. Wescott. 1,645,635; Oct. 18.
Paving block. E. Clark. 1,626,289; Apr. 26.
Paving block. E. Clark. 1,626,438; Apr. 26.
Paving block. T. J. Friestman. 1,688,744; Aug. 9.
Paving block. T. J. Friestman. 1,688,744; Aug. 9.
Paving block. T. J. Friestman. 1,688,744; Aug. 9.
Paving block and tile. W. T. Bonner and J. W. Thropp. 1,629,433; May 17.
Paving block, Rubber-compound. R. F. Herrick. 1,637,567; Aug. 2.
Paving blocks and slabs made of rubber compound, Making. E. Draullette. 1,629,487; May 24.
Pure 28.
Paving composition, Asphaltic. C. N. Forrest. 1,634,241; June 28.
Paving compositions, Forming. C. Swan. 1,632,456; June 28.
Paving compositions, Forming. C. Swan. 1,632,456;
June 14.
Paving construction. R. B. Gage. 1,637,480; Aug. 2.
Paving foints, Elastic and expansible. A. C. Fischer.
Refl6,654; Feb. 22.
Paving material, Apparatus for sizing. M. Madsen.
Paving material, Treating Kentucky and similar rock
application of the making of S. S. Sadtler. 1,650,047;
Nov. 22. Paving materials, Treating asphaltic. P. J. McInerney. 1,634,264; July 5. Paving roller and steering mechanism. P. W. Dietly. 1,638,264; Aug. 9. Paving mechanism. J. Mortensen and L. Tropp. 1,614,847; Pegnut. and angels. Jan. 18.
Peanut and potato digger. B. K. Basho. 1,631,457;
June 7.
Peanut digger. G. D. Grizzard. 1,634,660; July 5.
Peanuts. Process and apparatus for bleaching. A. C.
Norsworthy, jr. 1,640,849; Jan. 30.
Pea sheller. J. C. Hardle. 1,615,081; Jan. 18.
Pea viner, Green. F. P. Ryder. 1,652,498; Dec. 13.
Pearl essence, Preparation of. J. Paisseau. 1,615,770;
Jan. 25. Pear iner, Green. F. P. Ryder. 1,502,405; Duc. 10.
Pearl essence, Preparation of. J. Paisseau. 1,615,770;
Jan. 25.
Pearls or the like, Securing rows of. A. Hadley.
1.646,289; Oct. 18.
Peat, Dewatering. G. A. Schroter. 1,625,058; Apr. 19.
Peat, Makling decorative material from. T. Viersen.
Peat. J. Peat. J. J. V. J. Hardy. 1,616.367; Feb. 1.
Pedial Accelerator. W. J. Hardy. 1,616.367; Feb. 1.
Pedial accutating and holding means, Low-speed. W. J.
Pedial faction of the first from the firs Pedessal of similar article. E. T. Palmenberg. Des. 72,011; Feb. 22.
Pediator the like. E. T. Palmenberg. Des. 72,910; Pediator the like. E. T. Palmenberg. Des. 72,910; Pediator the like. E. T. Palmenberg. Des. 72,910; Pediator the like. 1,647,872; Nov. 1.
Peeling machine. M. Benninger. 1,645,516; Oct. 18.
Peeling machine. F. M. Schaefer. 1,641,993; Sept. 13.
Peeling machine. Fruit. J. H. Korner and F. G. Stanford. 1,613,604; Jan. 25.
Peepholes and the like, Closure for. W. Mumbrauer. Peg. String-macker's. H. L. Diehl. 1,639,026; Aug. 16.
Peg. String-macker's. H. L. Diehl. 1,639,026; Aug. 16.
Peg. String-macker's. H. L. Diehl. 1,639,026; Aug. 16.
Peg. String-macker's. H. L. Diehl. 1,639,037; June 21.
Pellet-forming apparatus. A. Hefcke. 1,637,377; Aug. 2.
Pellet-forming apparatus. A. Hefcken. 1,632,307; June 21.
Pellet-forming

Pen and pencil clip. W. Halket. 1,640,498; Aug. 30. Pen and pencil, Fountain. P. S. Morris. 1,632,710; June 14. Pen ... June Pen and pencil grip. A. L. Baer. 1,619,801; Mar. 8. Pen and pencil holder. F. L. McCaskill. 1,623,966; Apr. 12. Apr. 12.
Peu and pencil holder for second finger, Short-barreled.
J. S. Vanek. 1,652,072; Dec. 6.
Pen stachment. S. Collander. 1,629,775; May 24.
Pen cilp and pocket check protector, Combined. R. G.
Clyne. 1,644,668; Oct. 11.
Pen cilp or similar article. J. L. Schnell. Des. 73,416; W. Heesch. June 21.

Pen, Fountain.

A. Harline. 1,615,768; Mar. 8.

Pen, Fountain.

M. Mach. 1,625,860; Apr. 26.

Pen, Fountain.

C. Osterbout, Fr. 1,647,862; Nov. 1.

Pen, Fountain.

Pen, Fountain.

C. Cetz. 1,648,241, Jan. 25.

Pen, Fountain.

Pen, Fountain.

C. Petz. 1,648,241, Jan. 25.

Pen, Fountain.

C. Petz. 1,648,241, Jan. 26.

Pen, Fountain.

C. Petz. 1,648,241, Jan. 26.

Pen, Fountain.

D. C. Petz. 1,648,241, Jan. 26.

Pen, Fountain.

D. C. Petz. 1,648,241, Jan. 26.

Pen, Fountain.

D. C. Schmidt. 1,651,647; Nov. 29.

Pen, Fountain.

J. C. Wahl. 1,624,190; Apr. 12.

Pen, Fountain.

Pen, Fountain.

Pen, Fountain.

D. C. Wahl. 1,624,190; Apr. 12.

Penholder.

M. Falco. 1,625,115; Apr. 19.

Penholder, Base for fountain.

B. T. Back. 72,885-6; June 21. 1,633,433; ne 21., holder, Fountain-. W. G. Lewis. Des. 72,903; Pen holder, Fountain- W. G. Lewis. Des. 72,903; June 21.
Pen holder, Fountain- J. B. Mattson. 1,612,932; Jan. 4.
Penholder or similar article. F. Di Ionno. Des. 72,603; May 10.
Pen May 1 Pen, Reservoir. T. Kovács. 1,633,111; June 21.
Pen, Self-filling fountain. A. F. Poole. 1,613,804; Jan. 11.
Pen stand or similar article. M. Flustone. Des. 71,908;
Pen, Writing. J. H. Eversole. 1,649,676; Nov. 15.
Pens and clip therefor, Cap for fountain. A. Montan. 1,629,835; May 24.
Pens and pencils, Pocket clasp for. J. A. Ewen. 1,614,607; Jan. 18.
Pens. 1614,607; Jan. 18.
Pens. 1614,607; Jan. 18.
Pens, Blotter device for. P. Becsi. 1,623,614; Apr. 5.
Pens, Cap attachment for fountain. G. G. Felt. 1,615,506; Jan. 25.
Pens, Clip and pencil for fountain. R. G. Antonio. 1,630,413; May 31.
Pens of pencils, Device for applying bands on. H. Esterow. 1,614,606; Jan. 18.
Pens or pencils, Device for applying bands on. H. Esterow. 1,614,606; Jan. 18.
Pens Pens for animal. R. B. Louden. 1,636,189; July 19.
Pens or pencils, Device for applying bands on. H. Esterow. 1,614,606; Jan. 18. July 19. v. annual, R. B. Louden. 1,636,189;
Peus, pencils, and the like, Clip for. P. S. Hauton.
1,647,093; Oct. 25.
Pens, Self-fills, Clip for fountain. W. A. RappePencil. E. B. Ackermann, W. C. Steffan, and W. J.
Greiner. 1,621,048; Mar. 15.
Pencil. W. R. Cuthbert and W. H. Lindemon. 1,653,151;
Dec. 20.
Dec. 20. F. Doebler. 1,650,116; Noy. 22.
Pencil. W. R. Pelace. Dec. 20.
Pencil. C. F. Doebler. 1.650,116; Nov. 22.
Pencil. G. Felger. Des. 73,761; Nov. 8.
Pencil. G. Felger. Des. 73,761; Nov. 8.
Pencil. Felger. Des. 73,761; Nov. 8.
Pencil. F. Furedy. 1,638,026; Aug. 9.
Pencil. G. W. Gilman. 1,632,271; June 14.
Pencil. J. W. Howey. 1,614,986; Jan. 18.
Pencil. J. Mitchell. 1,621,245; Mar. 22.
Pencil. C. A. Smith. 1,621,056; Mar. 22.
Pencil. J. Svanberg. 1,629,766; May 24.
Pencil. J. Svanberg. 1,629,766; May 24.
Pencil. J. Muomatic. L. H. Lippert and R. Bergeson.
Pencil. Automatic. L. H. Lippert and R. Bergeson.
1,623,990; Mar. 22.
Pencil baddies and the like, Making. J. P. Lynn.
1,638,002; Aug. 2.
Pencil case, Multicolor. L. di Rebayllo. 1,652,047;
Dec. 6. Dec. 6.
Pencil clip and eraser holder combined. G. T. Sheley.
1.633,135; June 21.
Pencil holder. T. W. Miller. 1.647.536; Nov. 1.
Pencil holder for shirt waists, etc. R. W. Batten.
1,615,322; Jan. 25.

Pencil, Illuminating. H. Bischoff. 1,649,656; Nov. 15.

Pencil, Lead. M. F. Giennon. 1,619,927; Mar. 8.

Pencil, Lead. C. O. Gronberg. 1,619,698; Mar. 1.

Pencil, Magazine. H. P. Fairchild. 1,614,463; Jan. 18.

Pencil, Magazine. H. M. Tolock. 1,644,769; Oct. 25.

Pencil, Magazine. H. Movlock. 1,644,769; Oct. 13.

Pencil, Magazine. R. D. Stevenson. 1,628,239; May 17.

Pencil, Mechanical. B. Avakian. 1,628,639; May 17.

Pencil, Mechanical. B. B. Goldsmith. 1,627,692; May 10.

Pencil, Mechanical. J. C. Wahl. 1,63,813; May 13.

Pencil, Mechanical. J. C. Wahl. 1,63,637, May 10.

Pencil, Mechanical. J. C. Wahl. 1,63,6761; Nov. 29.

Pencil, Mechanical. J. C. Wahl. 1,63,6761; Nov. 29.

Pencil, Mechanical. J. C. Wahl. 1,63,6761; Nov. 29.

Pencil, Mechanical. J. E. Hassinger. 1,638,862; July 26.

Pencil, Mechanical. J. E. Hissinger. 1,638,862; July 26.

Pencil, Refillable. J. M. Angeletti. 1,614,860; Jan. 18.

Pencil with external feed, Lead. C. F. Hartman. 1,628,741; May 17.

Pencil, Writing. N. Windecker. 1,613,861; Jan. 11.

Pencil, Writing. N. Windecker. 4,613,861; Jan. 14.

Pencil with external feed, Lead. C. F. Hartman. 1,628,741; May 17.

Pencil, Writing. D. M. Angeletti. 1,614,670; Jan. 14.

Pencils pound. J. B. Perrin, A. J. Marcelin, and H. L. M. J. Benard. 1,638,119; Dec. 20.

Pencils, Lead-laying machine for. J. S. Furst. 1,641,078; Aug. 30.

Pencils, Method and apparatus for making. C. E. Daniels. 1,644,892; Nov. 22.

Pencils, Pencils Pendulum, Gyroscopic. E. A. Sperry. Dec. 6. Dec. 0.

Penduium indication indicator. H. J. Smith. 1,619,317;

Mar. 1.

Mar. 1.

Benduium scale. W. N. Gilbert. 1,614,726; Jan. 18.

Penduium scale. W. N. Gilbert. 1,614,726; Jan. 18.

Pernolator. M. L. Bernon. 1,644,706; Oct. 4.

Perch, Bird. C. V. Muclier. 1,627,448; May 3.

Perch puller. J. E. Dowley. 1,620,084; Mar. 8.

Percolator. F. F. Forshee. Des. 71,787-8; Jan. 4.

Percolator. T. G. Tinsley. 1,638,969; Aug. 1,540, Aug. 1,640,022; Oct. 18.

Percolator. T. G. Tinsley. 1,638,969; Aug. 1,540, Aug. 1,646,5896; Oct. 18.

Percolator, Coffee. J. A. Crawford. 1,645,896; Oct. 18.

Percolator, Coffee. B. J. Lenerville. 1,613,801; Jan. 11.

Percolator, Coffee. R. J. Lenerville. 1,613,801; Jan. 11.

Percolator, Coffee. R. G. Vaughen and C. C. Harpster. 1,647,323; Nov. 1.

Percolator-top protector. B. Kumagal. 1,648,407; Nov. 8.

Percussion implement, Balanced rotary. G. E. Wagner. Pendulum indication indicator. H. J. Smith. 1,619,317; Nov. 8.

Percussion implement, Balanced rotary. G. E. Wagner.

1.632,937; June 21.

Percussion implement, Rotary. G. E. Wagner.

June 14.

Percussion implement, Rotary. G. E. Wagner.

June 14.

Percussive device. A. I. Woodring.

1.634,927; July 5.

1.629,730; May 24.

Perforating. F. B. Keall.

1.645,648; Oct. 18.

Perforating apparatus. A. Barbieri.

J. 1.620,711; Mar. 15.

Perforating device. L. J. Willhard.

J. F. B. Wagner.

Perforating device.

J. J. Willhard.

J. G. Staffars.

J. G. Staffars.

Perforating machine. Electric.

J. C. Staffars.

J. G. Staffa Perforating machine, Electric. H. C. Steffens. 1,651.074; Nov. 29. Perforating machine, Paper. S. A. Ragan. 1,644,950; Oct. 11. Perforating machine, Paper-. S. A. Ragan. 1,644,950; Oct. 11. granchines, Combination die for use in. W. F. Perforating machines, Gauge for, W. F. Lautenschlager. 1,634,752; July 5. Perforating machines, Gauge for. W. F. Lautenschlager. 1,633,044; May 31. Perforating machines of the monotype typesetting machines in Justifying-strip-. A. Groote. 1,635,748; July 12, Perforator by Machinest Machineston, 1,644,885; Oct. 11, Perforator. E. A. Ritchey. 1,642,970; Sept. 20, Perforator, Condensed-milk-can. M. E. Keuney. 1,651,923; Dec. 6. Perforator, Cryptographic. W. H. Lyman. 1,646,969; Oct. 25. Perforator, Receiving, H. Angel. 1,629,466; May 24. Oct. 25.

Perforator, Receiving. H. Angel. 1,629,466; May 24.
Perfume, Synthetic. C. S. Miner. 1,617,412; Feb. 15.
Periscope. J. Gearon. 1,614,466; Jan. 18.
Periscope, more particularly for submarines. J. Humbrecht. 1,624,733; April 16.
Deservational instrument. J. M. Strange. 1,645,880; Oct. 18.
Periscope, Vehicle. L. Sadier. 1,638,011; July 5.
Permanent moids, Vent plug for. W. S. Anderson. 1,627,879; May 10.
Permanent-wave device. C. Kadane and A. Joyce. 1,638,43; Aug. 9.
Permanent waving, Tube for. W. S. Lewis. 1,637,147; July 26.

Permutation lock. F. De Curtis. 1.628.712: May 17. Permutation lock. S. D. House. 1.643.244; Sept. 20. Permutation lock. G. M. Thomas. 1.629.239; May 17. Permutation lock. G. M. Thomas. 1.629.239; May 17. Permutation lock. P. A. Weigel. 1.616,725; Feb. 8. Permutation lock. P. A. Weigel. 1.616,725; Feb. 8. Permutation switch. A. L. de Leeuw. 1.652,708; Dec. 13. Peroxides, Making organic. R. H. McKee. 1.614,037; Perylene, Manufacture of. C. H. Marschalk. 1.639,655; Aug. 23. Petrolem. Manufacture of. C. H. Marschalk. 1.639,655; Aug. 23. Petrolem. Other finide. Measuring by volume. A. W. Mac-Petrol and other finide. Measuring by volume. A. W. Mac-Petrol. Production of. F. Tinker. 1.632,011; June 14. Petrolem and oil-field emulsions, Process of and apparatus for refining. L. E. Winkler and F. C. Koch. 1.655,613; Nov. 29. Petroleum and oil-field emulsions, Treating. C. P. Detroleum and the like into more volatile products, Process of and apparatus for breaking up the components of. W. C. and F. E. Weils. 1,635,519; July 12. Petroleum emulsions, Breaking. M. De Groote and W. C. Adams. 1,641,804; Sept. 6. Petroleum distillation. W. D. Mason. 1,615,991; Feb. 1. Petroleum in hydrocarbons into lower-bolling petroleum lydrocarbons, Converting higher-bolling. C. B. Buerger. Petroleum hydrocarbons, Method and apparatus for reating. W. M. Cross. 1,624,778; Mar. 15. Petroleum hydrocarbons, Freating. W. Cross. 1,624,477; Mar. 15. Petroleum hydrocarbons, Freating. W. Cross. 1,634,446; Petroleum hydrocarbons, Treating. W. Cross. 1,634,044; Petroleum hydrocarbons, Treating. W. Cross. 1,634,044; Petroleum hydrocarbons, Treating. W. Cross. 1,634,044; Petroleum-oil s. Distillation of. R. S. Wilson. 1,615,407; Jan. 25. Petroleum oils. Distillation of. R. W. and R. J. Hannas. Petroleum oils. Distillation of. R. W. and R. J. Hannas. Petroleum oils. Distillation of. R. W. and R. J. Hannas. Petroleum oils. Distillation of. R. W. and R. J. Hannas. Petroleum oils. Distillation. June 28.

Petroleum olls, Continuous distillation of crude. F. M. Rogers and R. E. Wilson. 1,615,407; Jan. 25.

Petroleum oils, Distillation of. R. W. and R. J. Hanna. 1,653,431; Dec. 20.

Petroleum oils, Distillation of. R. W. and R. J. Hanna. 1,633,431; Dec. 20.

Petroleum oils, Distillation of L. R. Sandard, J. R. Sandard, J. M. Milliff. 1,622,624; Sept. 1,28

Petroleum, Process of and apparatus for refining. F. A. and J. A. Milliff. 1,629,163; Mar. 8.

Petroleum products, Purifying. S. J. Dickey and R. C. Wheeler. 1,633,988; Aug. 23. J. C. Black, W. D. Petroleum, Refining. W. E. Lummus. 1,628,252; May 10.

Petroleum, Refining. W. E. Lummus. 1,628,252; May 10.

Petroleum Refining. W. E. Lummus. 1,628,252; May 10.

Petroleum Refining. W. E. Lummus. 1,628,252; May 10.

Petroleum residue. Treatment of J. C. Morrell. 1,618,669; Feb. 22. Rdai, and R. T. Howe.

Petroleum, Reining. W. E. Lummus. 1,628,252; May 10.

Petroleum Reining. W. E. Lummus. 1,628,252; May 10.

Petroleum Practing. R. Cross. 1,623,018; Mar. 29.

Pharmaceutical product. H. Habl. 1,616,365-6; Feb. 1.

Pharmaceutical product T. Kayser and K. Schranz. 1,651,458; Dec. 6.

Pharmaceutical product containing arsenic and making same. W. Schoeller and M. Gehrke. 1,616,144; Feb. 1.

Pharmaceutical product containing arsenic and making same. W. Schoeller and M. Gehrke. 1,642,830; Sept. 20.

Tharmaceutical product containing arsenic and making same. W. Schoeller and M. Gehrke. 1,642,830; Sept. 20.

1012 26.

Pharmaceutical product containing arsenic and making same. W. Schoeller and M. Gehrke. 1,642,830; Sept. 20.

1012 36.

Pharmaceutical product on the product of t Phenoile condensation product. A. L. Brown. 1,632,113; June 14.
Phenomens, Apparatus for recording the duration of very brief. I. A. D. Marti. 1,613,529; Jan. 4.
Phenomens, Apparatus for 1,632,638; Jan. 4.
Phenoile disphragm. H. G. Harrison. 1,632,638; June 14.
Phonic disphragm. H. G. Harrison. 1,624,337; Apr. 12.
Phonograph. F. D. Arnold. 1,647,389; Nov. 1.
Phonograph. S. Baidyzar. 1,625,466; Apr. 19.
Phonograph. B. F. H. Horning. 1,646,148; Oct. 18.
Phonograph. J. M. Lucarelle. 1,649,265; Nov. 22.
Phonograph. J. M. Lucarelle. 1,649,265; Nov. 22.
Phonograph. F. J. Scabolt. 1,622,606; Mar. 22.
Phonograph. F. J. Scabolt. 1,622,641; Mar. 29.
Phonograph. F. J. Scabolt. 1,622,641; Mar. 29.
Phonograph. G. Smith. 1,635,965; July 12.
Phonograph. G. Smith. 1,635,965; July 12.
Phonograph. H. C. Stoll and H. L. Schroder. 1,628,285; May 10. Phonograph, Phonograph, Phonograph, Phonograph, Phonograph, May 10, Phonograph, Phonograph, Phonograph, Phonograph, Phonograph May 10.
Phonograph. B. Stump. 1,643.228; Sept. 20.
Phonograph. J. Welter. 1,623,451; Apr. 5.
Phonograph. J. Wahlberg. 1,622,829; May 10.
Phonograph and making the same. A. Ames, fr. 1,626,591; May 3.
Phonograph and making the same. A. Combined. F. J. Hoke. Des. 73,912; Nov. 22.
Phonograph and radio and coordinating unit therefor, Phonograph and radio and coordinating unit therefor, Phonograph and radio sablest, Combination. A. H. Phonograph and radio sablest, Combination. A. H. Phonograph and radio receiving apparatus, Combined. J. W. Bishop. 1,636,210; July 19.

 Phonograph Nov. 22.
 attachment.
 D. H. Moss.
 1,650,089;

 Phonograph cabinet.
 J. Wolff.
 Des. 71,896;
 Jan. 18.

 Phonograph,
 Electric.
 A. A. Thomas.
 1,625,918;
 Phonograph cabinet. J. Wolff. Des. 71,896; Jan. 18. Phonograph Electric. A. A. Thomas. 1,622,918; Apr. 26. Phonograph mechanism. F. H. Doerr and G. E. Roedding. 1,622,423; Mar. 29. Phonograph, Multiple record. D. D. Beenken. 1,622,756; Mar. 29. Phonograph record. J. W. Bishop. 1,637,544; Aug. 2. Phonograph record. J. W. Bishop. 1,637,544; Aug. 2. Mar 29.

Phonograph record. J. W. Bishop. 1,637,644; Aug. 2.
Phonograph record. W. C. Hadley. Relf,688; Apr. 5.

Phonograph record. N. H. Holland. 1,643,770; Sept. 27.
Phonograph record. A. Johnson. 1,641,123; Aug. 80.

Mutscheller. 1,620,122; Mar. 8.

Mutscheller. 1,620,122; Mar. 8.

Mutscheller. 1,620,122; Mar. 8.

Phonograph record and producing the same. R. Quait, ir. 1,635,662; July 12.

Phonograph records. B. Marshall. 1,637,165; July 20.

Phonograph records. Production of. C. A. Hoxie. 1,637,637; July 20.

Phonograph repeater. H. House. 1,632,477; June 14.

Phonograph repeater, Adjustable. H. Seigman. 1,622,103, pp. 26.

J. 622,103, pp. 26. Phonograph repeater, Acjustane. H. Segman-1,629,100; Apr. 26.
Phonograph reproducer. H. S. Nelson. 1,649,483; Nov. 15.
Phonograph reproducer. H. Segal Des. 73,448; Sept. 13.
Phonograph reproducer, Electric. A. A. Thomas. 1,630,640; May 31.
Phonograph reproducer, Electric. J. J. Jakosky. Des. 71,837; Jan. 11.
Phonograph tone arm and resonator. W. T. Carnes. 1,630,642; June 28.
L633,624; June 28.
L633,624; June 28.
Bennett and H. C. Rochette. 1,651,800; Dec. 6.
Phonographs and the like, Driving mechanism for. M. H.
Bennett and H. C. Rochette. 1,651,800; Dec. 6.
Phonographs and the like, Telephone attachment for. H. R. Van Deventer. 1,619,394; Mar. 1.
Phonographs, Automatic stop for. H. F. Spengler. 1,613,914; Jan. 11.
Phonographs, Automatic stop for. H. F. Spengler. 1,613,914; Jan. 11. Phonographs, Needle retainer for. J. Wolff. 1,616,732; Feb. 8. Phonographs, Synchronizing attachment for. F. H. Strom. 1,642,702; Sept. 20.
Phonographs, Tone arm for. M. M. Gruber. 1,619,467; Mar. 1.

Phonographs, Tone regulator for. H. K. Hess. 1,617,158; Feb. 8.

Phonographs apparatus to identify hold-up men. J. Gagl. 1,619,715; Mar. 1.

Phonographic machines, Correction device for. W. L. Goldsborough. 1,651,056; Nov. 29.

Honographic records, Repeating device for. S. M. Bookman. 1,643,869; Sept. 27.

Phonographic reproducing apparatus. A. A. Thomas. 1,622,011; Mar. 22.

Phonographic reproducing apparatus. A. A. Thomas. 1,622,011; Mar. 22.

Phonographic reproducing apparatus. A. A. Thomas. 1,622,011; Mar. 22.

Phonometer. H. P. Dorn. 1,641,136; Aug. 30.

Phosphatides, Preparation of. A. Grün and R. Limpächer. 1,653,959; Dec. 27.

Phosphorescent and waterproof composition, Luminous. H. von Uffel. 1,632,766; June 14.

Phosphores containing nuclear substance of milk casein in a chemically-pure form and making the same. S. Posternak. 1,631,887; June 7.

Phosphorus containing nuclear substance of milk casein in a chemically-pure form and making the same. S. Posternak. 1,631,887; June 7.

Phosphorus containing nuclear substance of milk casein in a chemically-pure form and making the same. S. Posternak. 1,631,887; June 7.

Phosphorus containing nuclear substance of milk casein in a chemically-pure form and making the same. S. Posternak. 1,631,887; June 7.

Phosphorus irride and certain halides from raw marrials. Continuously producing. C. G. Miner. 1,634,795; July 26.

Photo-electric cell. T. R. Goldsborough and O. H. Eschholez. 1,645,280; Oct. 11.

Photo-electric device. T. W. Case. 1,628,822; May 17.

Photo-electric Mar. Phonographs, Tone regulator for. H. K. Hess. 1,617,158; Feb. 8. Rival. C. Bouin. 1.651.248; Nov. 29. washer. M. E. Charleston. 1,650,009; NOV. 22.
Photographer's light-distributing means. E. V. King.
1,632,606; June 14.
Photographing checks, etc., Apparatus for. J. J. Kaplan.
1,614,619; Jan. 18.

Photographs and the like, Easel mounting for. J. Young.
1.624,302; Apr. 12
Photographs and the like, Embossing appliance for. H.
A. E. Kraft. 1,634,466; July 5.
Photographs and the like, Mount for. G. A. Malme.
1.629,670; May 24.
Photographs, Apparatus for obtaining three-color. G.
Photographs, Dayley for taking. E. von Schubert.
1.632,770; June 14.
Photographs (positive prints on paper or the like), Producing colored. E. A. Lage. 1,623,123; Apr. 5.
Photographs, Producing composite. C. D. Dunning.
1.613,103; Jan. 4.
Photographic apparatus. A. M. Josepho. 1,631,503;
June 7.
Photographic apparatus. F. T. Powers. 1,631,832; Photographic apparatus. F. T. Powers. 1.612.832: Jan. 4. Photographic apparatus. F. T. Powers. 1,617,079; Feb. 8. Photographic apparatus, Finder for. E. Wandersleb. Photographic apparatus, Finder for. E. Wandersleb. Photographic appliance. V. C. Ernst. 1,645,590; Oct. 18.

Photographic bath tank. J. D. Hayes. 1,651,454; Dec. 6.

Dec. 6.

Dec. 6.

Photographic copies by reversal, Making. A. Miller. 1.

Photographic copying by the reflection method. A. Miller. 1,045,112; Oct. 11.

Photographic-developing apparatus. A. W. Caps. 1,653,429; Dec. 20.

Photographic developing apparatus. C. A. Hoxie. Photographic emulsion and material and process used in the preparation thereof. S. E. Sheppard and R. F. Punnett. 1,623,499; Apr. 5.

Photographic emilargements, Process of and apparatus for eliminating granular effects. F. E. Garbutt and R. G. Photographic emilargements, apparatus. R. E. Meder. 1,041,349; Sept. 6.

Photographic emilargements, Process of and apparatus for eliminating granular effects. F. E. Garbutt and R. G. Photographic emilarger. E. C. Rogers. 1,633,228; June 7.

Photographic emilargements, Process of emilargements, Proc Photographic bath tank. J. D. Hayes. 1,651,454; Photographic film developing machine. C. de Moos. 1,631,476; June 7. Photographic-film package. B. H. Meyering. 1,623,486; Apr. 5. Photographic-film spool. B. D. Chamberlin. 1,648,539; Apr. 5.
Photographic-film spool. B. D. Chamberlin. 1,648,539;
Nov. 8.
Photographic-film-spool-making machine, Automatic. J. G. Jones and H. G. Dewey, 1,616,873; Feb. 8.
Photographic films Developing apparatus for. A. M. Developing apparatus for. A. M. 1,648,621; Nov. 15.
Photographic films, Identifying means for. B. A. Slocum. 1,649,621; Nov. 15.
Photographic films, Lessening curling tendencies of. A. F. Sulzer. 1,644,401; Sept. 6.
Photographic films, Sheet-metal casing for. J. Schulz. 1,628,558; May 10.
Photographic machine, Automatic. R. E. Olsen. Photographic machine, Automatic. R. E. Olsen. Photographic machine, Röntgen-ray. M. M. Pomeranz. 1,638,952; July 12.
Photographic machine, Röntgen-ray. M. M. Pomeranz. 1,638,952; July 12.
Photographic machine, Shepping apparatus folder for. R. Kroedel. 1,616,906; Feb. 8.
Photographic machine, Automatic. R. E. Gleen. R. Kroedel. 1,616,906; Feb. 8. Photographic mount.
Aug. 9.
Photographic objective. Sonnefeld. A. 1,616,765: Feb. 8.

Photographic objectives, Lens attachment for, R. Richter, 1,637,917; Aug. 2.

Photographic papers for making prints from tracings, Producing. H. Kammerer, 1,618,931; Feb. 22.

Photographic plates and films, Protecting the gelatin coating of, C. Glaser, née Piettl, 1,640,148; Aug. 23.

Photographic plates, films papers, and the like, Developer photographic plates, Registration of, H. C. Jones, 1,650,132; Nov. 22.

Photographic printers, Light control for, N. B. Green, 1,651,132; Dec. 20.

Photographic printing apparatus. J. B. Hadaway, 1,650,152; Dec. 20.

Photographic printing apparatus. S. L. Lebby, 1,635,554; Detectors, Photographic printing apparatus. J. Dufay, 1,635,554; Photographic printing in colors. L. Dufay, 1,635,554; Photographic printing in colors. L. Dufay. 1,631.524; June 7. Photographic-printing machine. B. D. Chamberlin. 1.651.752; Dec. 6. Photographic-printing machine. A. G. Ogden. 1,647,246; Nov. 1.

Photographic-printing machine. G. A. Smith. 1,635,014; July 5. July 5.
Photographic prints, Machine for making. C. Barblerl and P. Carpenter, 1,615,155; Jan. 18.
Photographic prints, Machine for squeegeeing, mounting, and drying. J. A. MacBride and A. E. Peyser. 1,640,131; Aug. 23.
Photographic purposes, Collapsible copying apparatus for. A. Heyer. 1,651,954; Dec. 6.
Photographic shutter. H. L. Cooke, 1,622,398; Apr. 12.
Photographic shutter. H. L. Cooke, 1,622,398; Apr. 12.
Photographic shutter. W. A. Riddell. 1,629,634; May 24.
Photographic shutter. W. A. Riddell. 1,629,534; May 24. Photographic shutter. W. A. Riddell. 1,645,929; Oct. Photographic-shutter casing. W. A. Riddell. 1,616,925; Photographic transparency and coloring same. A. G. Walliugham. 1.633,652; June 28. Photographic two-lens objective. F. Weidert. 1,643,865; Sept. 27. Photographically recording sound. R. Hart. 1,627,387; May 3. Phototelegraphic apparatus. D. von Mapp. 26.

Apr. 26.
Physiologically-active substances from female internal sceretory organs. Manufacture of. M. Hartmann. 1.651,770; Dec. 6.
Physiologically-active substances from ovaries, corpus luteum, and placenta, Manufacture of. M. Hartmann. 1,625,360; Apr. 19.
Plano. A. G. 19.
Plano. A. 19.
Plano. Continuous-tone. J. F. Veaco. 1,639,241; Aug. 16.
Plano case, Grand. C. Farny. Des. 72,893-4; June 21. Plano action, Continuous-tone.

Aug. 16.
Aug. 16.
Plano case, Grand. C. Farny, Des. 72.893-4; June 21.
Plano cases, Truss structure for upright. J. D. Hurst.
Plano construction. C. F. Brey. 1.642.366; Sept. 13.
Plano construction. C. Mellin. 1,628.172; May 10.
Plano cover or the like. A. L. Ejk. Des. 73,652; Oct. 18. Piano device, Continuously-sounding. J. B. and S. Grinche. 1,619,722; Mar. 1. Planoforte and organic Combined electric. D. A. Barbieri. 1,622,364; Mar. 20. Plano key. G. J. Becker. 1,623,331; Apr. 5. Plano key. C. Gulbransen. 1,617,300; Feb. 8. Plano keys. Apparatus for leveling. E. S. Rauworth. 1,623,359; Apr. 5. Plano mediality. Plano here and property of the plano here and property of the plano here and property. S. R. Harcourt. 1,625,253; Apr. 19. Plano mediality resources. Apr. 19.

Plano-modulator-control device. J. H. Hammond, jr. 1.635,994; July 19.

Plano pedal mechanisms under control of a record, Operate. T. F. Check. 1.626,328; Apr. 26.

Operate. T. Check. 1.626,328; Apr. 26.

Operate. T. Check. 1.628,629; Aug. 9.

Plano-playing guide. G. E. Buzza. 1.646,574; Oct. 25.

Plano practice exerciser. E. Keller. 1.638,955; Aug. 16.

Plano, Reproducing. S. H. Perron. 1.639,105; Aug. 16.

Plano, Joright. W. Lane. 1.635,755; July 12.

Planos, Actuating player. C. H. Hanson. 1,722,827;

Mar. 28. the like Vital and States. Planos and the like Music roll for automatic. F. G. Dunham. 1.652 003; Dec. 6.
Planos, Automatic light indicator for. I. B. Grimaldi. Planos, Auxiliary motor-drive mechanism for player. F. Minutillo. 1.620.484; Mar. S. Planos, Drying pad for. F. C. Billings. 1,650,004; Nov. 22.

Pianos, Dust-collecting valve mechanism for player, C. F. Stoddard 1, 638, 439; Aug. 9, Planos, Equalizer for automatic player, C. F. Stoddard, 1,638, 419; Aug. 9, Planos, Mandolin attachment for, W. G. Betz, 1,614,946; Jan. 18. Planos, organs, and the like, Transposing mechanism for. O. Richards. 1,628,052; May 17. Planos, Sound board for. G. H. Jones. 1,634,669; July 5.

- Cotton picker. Loom picker.

Fruit and nut picker. Stone picker.

Fruit and nut picker. Stone picker.

Picker cleaner, sorter, and bagger, Potato. C. Jasperson. 1,641,492; Sept. 6.

Picking up objects and articles. J. C. Brown. 1,644,368; Uct. 4. Hut., etc. J. W. Beckman. 1,621,188; Mar. 15. Pickling Huuors, Removing deterrent salts from. G. S. Morgan. 1,628,623; May 3. Pickling ripe olives. H. de F. Olivarius. 1,625,494; Apr. 19. Morgan. 1,622,622, Blay o. F. Olivarius. 1,625,494; Apr. 19. Pickling ripe olives. H. de F. Olivarius. 1,625,494; Apr. 19. Pickling ripe olives. A. P. Young and J. Hutt. 1,654,203; Apr. 19. Dec. 27. Picot-cauting attachment. M. Siegel. 1,613,569; Nov. 22. Picture. C. Baldwin. 1,628,640; May 17. Picture. H. Matthews. 1,629,879; May 24. Picture. A. Matthews. 1,629,879; May 3. Picture advertising bus, Passenger and moving. A. Zibbersher. 1,627,473; May 3. Picture and sound reproduction, Synchronized motion-M. Hoffman. 1,634,869; Nov. 8. Picture apparatus, Film winding and unwinding device Picture apparatus, Motion-. A. S. Howell. 1,624,730; Apr. 12. Picture apparatus, Motion-. J. V. Knorre. 1,628,250; May 10. Picture apparatus, Motion-. J. W. Scott, Jr. 1,616,926; Picture apparatus, Motion-. J. W. Scott, Jr. 1,616,926; Picture apparatus, Motion-. J. Tessier. 1,623,505; Picture apparatus, Motion-. J. Tessier. 1,623,505; Apr. 5. Apr. 5
Picture apparatus, Talking-motion. C. F. Batehoits.
1.652.924; Dec. 18.
Picture device, Motion. M. H. Loughridge. 1,643,670;
Sept. 27.
Picture-easel mount. W. J. Helmquest. Des. 73,832;
Nov. 15.
Nov. 15.
Nov. 16.
Nov. 16.
Nov. 17.
Nov. 18.
Nov. 18.
Nov. 19.
Nov. 19. June 7. Picture-film strip, Motion-. P. Favour, June 7.

Picture-film strip, Motion- P. Favour. 1,631,478;

June 7.

Picture films, Apparatus for developing. L. J. Riggle. 1,645,452; Oct. 11.

Picture films, Apparatus for handling motion- V. C. de Ybarrondo. 1,629,097; May 17.

Picture films, Method and apparatus for printing motion- Picture films, Method and apparatus for printing motion- Picture films, Producing composite moving- A. V. Knechtel. 1,627,976; May 10.

Picture films, Producing composite moving- A. V. Knechtel. 1,627,976; May 10.

Picture films, Producing titles and inscriptions for motion. C. H. Thimme. 1,614,650; Jan. 11.

Picture films to winding cores, Attaching motion- A. N. Picture films. I. T. Johnson. 1,622,138; June 14.

Picture frame. S. Moseson. 1,649,415; Nov. 15.

Picture frame. G. J. Polo. Des. 73,804; Nov. 8.

Picture frame. G. J. Polo. Des. 73,804; Nov. 8.

Picture frame. B. H. Roberts. 1,637,589; Aug. 2.

Picture frame and stand therefor, Combined. M. Leskie
Wicz and W. Bartkowiak. Des. 72,212; Mar. 15.

Picture frame, Burglarproof. W. Zierenberg. 1,648,978; Nov. 15. 1,631,478; Picture frame, Changeable. S. Parda. Apr. 26. 1.626.150: Apr. 26.

Apr. 26.

Picture-frame construction. V. E. Hansen. 1,637,188; July 26.

Picture hanger. D. C. Baldwin. 1,637,981; Aug. 2.

Picture hanger. E. S. Hake. 1,615,903; Feb. 1.

Picture machine, Continuous moving. J. P. Burnett. Picture machine, High-speed motion. C. F. Jenkins. 1,618,903; Feb. 15.

Picture machine, Motion. J. R. Bradford. 1,641,727; Sept. 6.

Picture machine, Motion. G. H. Kern. 1,624,667; Apr. 12. Picture machine, Motion-. I. N. Steigman, Jan. 11. Picture machine, Moving-. E. J. Roy. Mar, 22. Picture machine, Talking-. T. W. Case. 1.613.730 : 1,621,953; 1,638,393;

machine, Picture machine, Talking moving, 1,638,392; Aug. 9.
Picture-machine attachment, Moving. E. R. Winslow. 1,653,328; Dec. 20.
Picture machines, Fire safety device for motion. G. Picture machines, Fire safety device for motion. T. F. 1633,328; Dec. 10: safety device for motion. G. 1633,328; Dec. 20: safety device for motion. G. Loschirico. 1.622,952; Mar. 29. Picture machines, Framing mechanism for motion. T. F. Uhlemann. 1,619,551; Mar. 1. Picture machines, Method and apparatus for fire protection in moving. J. E. Robin. 1,619,957; Mar. 8. Picture machines, Slot cleaner for motion. L. de Forest. Picture machines, Synchronizing mechanism for talking and motion. V. Bouza. 1,629,252; May 17. Picture mechanism, Motion. A. S. Howell. 1,637,378; Aug. 2. Picture in Control of the Medical Control of the Co Dec. 13.

Picture photography and projection, Motion. A. Hernandez-Mejia. 1,624,947; Apr. 19.

Picture photography, Color motion. W. L. and S. M. Wright. 1,641,466; Sept. 6.

Picture processing machines, Film-looping device for motion. W. D. Marshall. 1,645,916; Oct. 18.

Picture-projection apparatus, Motion. P. S. Gauriat. Re16,769; Oct. 11.

Picture-projecting apparatus. P. A. Nothstine. 1,651,467; Picture-projecting apparatus. I. Serrurier. 1,643,134; Sept. 20. Sept. 20.
Picture-projecting apparatus, Focusing device for motionH. W. Joy. 1,620,768; Mar. 15.
Picture-projecting device. A. D. V. Harnett. 1,616,747;
Feb. 8. Picture-projecting machine. P. A. Nothstine. 1,645,204; Oct. 11. Plcture-projecting machine, Motion. J. Fait. 1,619,606; Mar. 1. Mar. 1.
Picture projecting machine, Motion-. A. S. Howell.
1,624,732; Apr. 12.
Picture-projecting machines, Automatic safety shutter
and motor control for. C. F. Harrison. 1,637,749; Pleture-projecting machines, Film support for motion-L. M. Scofield and H. J. Thomas. 1,639,469; Aug. 16. Pleture-projecting machines, Fire-preventing apparatus for motion. T. L. Feeney and H. Godoy. 1,618,417; Feb. 22. Pleture-projecting machines, Safety device for motion-W. Maim. 1628,258; May 10. Picture projecting or peeping appliance, Moving- W. Porak. 1,639,792; Aug. 23. Picture projector, Motion- E. C. Fritts. 1,638,569; Aug. 9. Aug. 9.
Picture projector, Motion. E. C. Fritts. 1,623,609; Aug. 9.
Picture projectors, Color-changing attachment for motion. J. M. Kelley and J. A. Hueber. 1,626,841; May 3.
Picture projectors, Film attachment for motion. W. J. Citron. 1,626,786; May 3.
Picture projectors, Optical system for moving. A. J. Holman. 1,617,596; Feb. 15.
Picture projectors, Reflecting device for motion. J. E. Picture and L. 1,636,479; Nov. 22.
Picture and L. 1,636,479; Nov. 22.
Picture recorders, Ink supply for. R. H. Ranger. 1,635,977; July 12.
Picture, Rectifying the scale and perspective of a. E. H. Corlett and M. W. Garnett. 1,654,670; Dec. 27.
Picture screen, Motion. E. H. Amet. 1,631,240; June 7. Picture 1 June 7.
Picture screen, Motion-. W. Goldstein. 1,650,341;
Nov. 22.
Picture-transfer mechanism, Talking-. H. E. Chipman.
Rel6,586; Apr. 5.
Picture transmission, Method of and apparatus for
synchronization in. J. Herman. 1,626,731; May 3.
Picture-transmitting system. H. Nyquist. 1,627,111;
May 3.
Pictures. Annaratus for displaying changeable. A. Archi-Pictures, Apparatus for displaying changeable, A. Archipenko, 1,626,496; Apr. 26.

Pictures, Apparatus for displaying changeable, A. Archipenko, 1,626,496; Apr. 26.

Ographic, A. Heurung, 1,631,896; June 7.

Pictures, Apparatus for transmitting. T. T. Baker, 1,614,338; Jan. 11.

Pictures and views, Method and apparatus for the transmission of. C. A. Hoxie, 1,648,687; Nov. 8.

Pictures by electricity, Transmission of. J. W. Horton, 1,654,374; Dec. 27.

Pictures by electricity, Transmission of. H. E. Ives, 1,631,963; June 14.

Pictures by electricity, Transmission of. H. E. Ives, 1,631,963; June 14.

Pictures by electricity, Transmission of. D. C. Tanner, 1,613,976; Jan. 11.

Pictures by electricity, Transmission of. D. C. Tanner, 1,613,976; Jan. 11.

Pictures by electricity, Transmission of. D. C. Tanner, 1,613,976; Jan. 11.

Pictures by the transfer process, Production of. R. Von Arx, 1,643,529; Sept. 27.

Pictures Exhibiting moving. T. K. Peters and T. C. Bartlam, 1,536,834; July 26.

894 Pictures in broad daylight, Device for projecting stationary or moving. A. E. L. and R. J. Triana and J. Ortiz-Escolet. 1,624,816; Apr. 12.
Pictures, Making composite color. J. A. Ball. 1,641,566; Sept. 6.

Sept. 6.

Pictures, Making motion. J. F. Seitz. 1,616,237; Feb. 1.

Pictures, Method and apparatus for making composite motion. E. Schufftan. 1,627,295; May 3.

Pictures, Method and apparatus for producing colored motion. L. D. Mannes and L. Godowsky, jr. 1,619,949; Mar. 8. Mar. 8.
Pictures, Photomechanical reproduction of the mar. 1,649,309; Nov. 15.
Pictures, System for transmitting and reproducing. M. C. Hall. 1,627,701; May 10.
Pictures, Yransmitting. E. Belin. 1,635,027; July 5.
Pictures with the illusion of relief, Apparatus for view-ling. A. L. Hyde. 1,610,507; Feb. 8.
The conformation of the conformation o Mar. 8. ctures, Photomechanical reproduction of. H. E. Ives. Pie pan. M. T. Miles and G. B. Miles. 1,647,186; Nov. 1.
Pie-plate scoop. W. H. De Camp. 1,621,355; Mar. 15.
Pie-rolling machine. J. W. Denmend. 1,028,828; May 17.
Ples, Baking. F. M. Wakeman. 1,626,316; Apr. 26.
Ples, Making. W. J. Kaser. 1,624,490; Apr. 12.
Plezoaudion. A. M. Nicolson. 1,636,321; July 26.
Plezo-electric-crystal apparatus. A. Crossley. 1,619,854; Mar. 8.
Mar. 8. Mar. 8. Piezo-electric device. A. L. R. Ellis. 1,617,995; Feb. 15. Pig-breaking machine. J. P. Dovel. 1,622,029; Mar. 22. Pigment and making same. C. Dickens. 1,615,816; Jan. 25. Jan. 20.
Pigments and paints, Preparation of. J. Blumenfeld.
1,633,423; Aug. 16.
Pile. E. Bignell. 1,621,232; Mar. 15.
Pile. E. Bignell. 1,621,232; Mar. 15.
Pile-elevating mechanism. C. E. Christophel. 1,617,874; Pile. B. Bignell. 1,621,232; Mar. 15.
Pile-elevating mechanism. C. B. Christophel. 1,617,374;
Pile fabric. J. Gowans. Des. 74,053; Dec. 13.
Pile fabric. J. C. S. Hamilton. Des. 73,658; Oct. 18.
Pile fabric. J. Leiper. Des. 72,675; May 17.
Pile fabric. J. Leiper. Des. 72,663; Oct. 18.
Pile fabric. J. F. Nichola. Des. 72,439-40; Apr. 12.
Pile fabric. Making a. T. S. McHermott. 1,651,556; Pile taggie, manage ...

Pile taggie Making, T. Bachofen, 1,644.319; Oct 4,
Pile fabries, Production of knotted. F. H. Oldroyd, 1,636,613; July 19.
Pile-head protector. W. W. Wannamaker, jr. 1,637,627; Pile-nead profector: W. W. Wannamaker, jr. 1,634,627; Pile textile fabric. S. Freudenberg. 1,620,340; Mar. 8. Pile wire. N. H. Fairweather. 1,621,400; Mar. 15. Pile-wire cutter. W. B. Behrman. 1,616,344-8; Feb. 1. Pile-wire cutter. W. S. Gluck. 1,616,310; Feb. 1. Piler, Hay H. C. Yance. 1,647,664; Oct. 25. Piles 36,311; Dec. 20. L. Rice and L. B. Whitcomb. Piling 36,311; Dec. 20. Rice and L. B. Whitcomb. Piling 1,010; Jan 4 plan. 4. thanism, Sheet. W. F. Conklin, H. S. Hopkins, Ding To M. Hoyer. L619,804; Mar. F. Piling sheets of paper, Apparatus for. G. E. Maxner. Rel.6.779; Nov. 1. Piles, Apparatus for removing. E. Bignell. 1,644,560; Oct. 4. Oct. 4.
Piles, Apparatus for treating. A. G. Howerton. 1,631,532; June 7.
Piles or foundation elements, Construction of concrete. A. R. Neelands and G. Damry. 1,642,213; Sept. 13.
Pilferproof box. J. L. Hood. 1,618,340; Feb. 22.
Pillow cover or similar article. J. Derk. Des. 73,740; Nov. 1.
Pillow cover or similar article. J. Derk. Des. 73,970; Nov. 29.
Nov. 29.
Nov. 29.
Pillow top. M. J. Aboarah. Des. 74,131; Dec. 27.
Pillow top. J. Derk. Des. 72,982; July 5.
Pillow top. J. Derk. Des. 72,982; July 5.
Pillor channel-indicating system. H. A. Affel. 1,642,710; Sept. 20. Pilot-channel-indicating system. H. A. Affel. 1,642,710; Sept. 20.
Pilot headlight. J. A. Thomas. 1,650,402; Nov. 22.
Pilot light. J. A. Thomas. 1,650,401; Nov. 22.
Pilot light. J. A. Thomas. 1,650,401; Nov. 22.
Pilot-light control. E. A. Thora and A. G. Spinney.
Pilot-light, Oil. J. L. Breese, jr. 1,641,250; Sept. 6. Bonding pin. Bouquet pin. Bowling pin. Hair pin. Bouquet pin. Haft pin. Bouquet pin. Lock pin. Covered pin. Lock pin. Safety pin. Verley pin. Verley pin. Verley pin. Pin. C. G. King. 1,645,649; Oct. 18. Pin. H. K. Sakowski. 1,626,308; Apr. 26. Pin. G. A. Waters. 1,623,386; June 14. Pin. and clasp, Combination. L. O. Nichols.

Pin for brake levers and rods, Safety, J. P. Blass1.651.318; Nov. 29,
Pin gauge, Adjustable. P. D. Ritchey and R. A. Holt.
1.628,741; May 17.
Pin holder, Safety. A. Hagel. 1,636,558; July 19.
Pin-locking means. L. J. Brown. 1,630,523; May 31.
Pin-locking means. W. W. Swayze. 1,644,618; Oct. 4.
Pin-setting machine. J. W. Bishop. 1,615,064; Jan. 18.
Pin spotter. E. Hodenskoog. 1,612,867; Jan. 18.
Pin stellar, E. Hodenskoog. 1,612,867; Jan. 18,7830;
Pin stellar, Safety catch for. E. Mograhuse. Feb. 15.

Pin stems, Safety catch for E. Morehouse. Des. 73.536; Sept. 27.

Pin trimmer, Automatic. C. Lorenz, E. Kunlsh, and D. E. Seitz. 1.616,909; Feb. 8.

Pin with bayonet point, Safety. A. Dudas and A. P. Pins and J. P. Seitz. 1.630,365; Aps. 6.

Pin and J. P. J. Seitz. 1.630,365; May 31.

Pins, Holder for laundry marking. B. P. Stoer. 1,619,893; Mar. 8.

Pins to leaves, Machine for attaching. H. R. Schlueter and A. H. Hatke. 1,639,365; Aug. 16.

1.650,525; Nov. 22.

Pince-nez and spectacles. P. and S. M. Kirk. 1.629,794. Pince-nez and spectacles. P. and S. M. Kirk. 1,622,724; Mar. 9. Pipe ne and nipple blanks, Method of and apparatus manufacturing chamfered. J. A. Long. 1,618, imanufacturing chamfered. J. A. Louis.
Feb. 22.
Pipe and nut wrench with ratchetilite control. Adjustable single-lever. A. J. Thurley. 1,626,809; Apr. 26.
Pipe and row spider. B. F. Hiniker. 1,626,826; May 3.
Pipe and row spider. B. F. Hiniker. 1,626,826; May 3.
Pipe and sewer rods. Breaking head for. A. J. Coleman. 1,641,320; Sept. 6.
Pipe and sewer rods, Hand grip for. A. J. Coleman. 1,655,002; Dec. 20.
Pipe and testing plug therefor. A. E. Stringer.
Pipe and the like for smoking tobacco. L. A. Dravers. 1,652,654; Dec. 13.
Pipe bench. M. J. Wirth. 1,613,495; Jan. 4.
Pipe bench. M. J. Wirth. 1,613,495; Jan. 4.
Pipe bench. M. J. Wirth. 1,613,495; Nav. 29. Pipe bender. R. W. Miller. 1,650,955; Nov. 29. Pipe-bowl cleaner. J. Riebe and A. Prümassing. 1,649,487; Nov. 15. Nov. 15.

Pipe-bowl reamer. A. M. Goldstein. 1,651,593; Dec. 8.

Pipe dap, Breather. A. E. Wolter. 1,654,474; Dec. 27.

Pipe carrier. W. F. Bossert. 1,631,000; May 31.

Pipe chest, Sectional. H. P. Maus and D. M. Lamson.

1,645,608; Oct. 18.

Pipe damp. G. E. Kimer. 1,618,224; Psb. 22.

Pipe damp. C. H. Wisc. 1,616,019; Fsb. 12.

Pipe clump and connection. W. Pringle. 1,612,833;

Jan. 4. Pipe o Pipe cleaner, J. Peterson. 1,614,571; Jan. 18. Pipe cleaner, T. S. Ramsdell. 1,617,457; Feb. 15. Pipe cleaner, Drain- A. Locke. 1,644,436; Oct. 4. Pipe cleaner, Mechanical. W. H. Warman. 1,651,651; Dec. II. Plps cleaner, Tobacco-, J. W. Pitts. 1,639,200; Aug. 16. Plps cleaning apparatus. J. M. and W. H. Thompson. 1,612,842; Jan. 4. Plps-cleaning means. H. M. Murphy. 1,624,755; Apr. 12. Pior-cleaning machine. B. A. Hochtritt. 1,648,048; Nov. 8. Pipe-connecting device, Rotary. C. W. Daughs. 1,650,788; Nov. 29 Pipe connection. R. R. White. 1,627,219; May 3. Pipe connection, Flexible. J. Frumweller. 1,617,587; 1,640,205; Aug. 23. Pln fastener, E. Horton. 1,632.338; June 14. Pln fastener, Double-pointed. P. E. Fenton. 1,641,075; Aug. 30.

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Pipe connection, Flexible. E. H. Gold. Jan. 4.
                                                                                                                                                                                                                                                                                                                                                                                                        1.612.973:
         Pipe connection, Flexible. E. H. Gold.
Feb. 15.
                                                                                                                                                                                                                                                                                                                                                                                                        1,617,589;
         Pipe connections, Housing for.
May 24.
                                                                                                                                                                                                                                                                                                    A. Foltz.
                                                                                                                                                                                                                                                                                                                                                                                                        1.629.693;
  May 24.

Pipe connector, Automatic train- A. A. Leclerc. 1,647,571; Nov. 1.

Pipe coupling. A. Farnstrom. 1,628,132; May 10.

Pipe coupling. A. Farnstrom. 1,628,132; May 10.

Pipe coupling. B. Stevitt. 1,637,701; Aug. 2.

Pipe coupling. H. Stokesberry. 1,646,468; Oct. 20.

B. Stresau and H. Woodhead. 1,637,318; July 26.

Pipe coupling, Rotary. R. L. Howle. 1,663,763; Dec. 27.

Pipe coupling, Temporary. D. J. McGeehin. 1,627,044; May 3.

Pipe coupling, Valved. V. Bardin. 1,631,456; June 7.

Pipe cutter or threader. J. V. Jardine. 1,641,928; Pipe-cutting device. W. A. Geis. 1,623,833; Apr. 5.

Pipe-cutting machine. H. Knothe. 1,617,814; Feb. 15.

Pipe-cutting machine. H. Knothe. 1,617,814; Feb. 15.

Pipe-cutting machine. H. Knothe. 1,618,52,567; Dec. 20.
       Pipe-entering on macrowing and withdrawing, C. R. Bedwards, 1,627,842; May 10.

Pipe-elvating clamp. M. E. Davis. 1,649,451; Nov. 15.

Pipe-engaging slip, Flexible. T. W. Adair. 1,641,467;
Pipe-curvature

Fige-curvature

Fige-curvature
Pipe hanger. C. H. Votime. L. R. Zifferer. 1,012,000-)
Pipe hanger, Adjustable. L. R. Zifferer. 1,012,000-)
Pipe head core, Centrifugal. W. D. Moore. 1,613,899;
Jan. 11.
Pipe joint. G. C. Bartram. 1,613,434; Jan. 4.
Pipe joint. E. Feles. 1,647,247; Nov. 1.
Pipe joint. E. Feles. 1,647,247; Nov. 1.
Pipe joint. J. R. McWane. 1,643,494; Nov. 8.
Pipe joint. J. R. McWane. 1,643,494; Nov. 8.
Pipe joint. A. G. Perkins. 1,621,950; Mar. 22.
Pipe joint. C. Pleasant and E. R. Tibbets. 1,618,472; Feb. 22.
Pipe joint. G. Weiss and F. Gentzeke. 1,642,981; Sant. 20.
    Feb. 22.
Pipe joint. F. H. Sherrerd. 1,615,239; Jan. 25.
Pipe joint. G. Weiss and F. Gentzeke. 1,642,981;
Sept. 20.
Pipe joint and connection. H. D. Cook and H. Lundgren.
1,622,768; Mar. 29.
Pipe joint flighting spout. L. E. Kollock. 1,623,058; Apr. 5.
Pipe joint, Flexible. E. N. Roth. 1,649,616; Nov. 15.
Pipe joint, Flexible. E. A. Russell. 1,619,218; Mar. 1.
Pipe Joint, Rotary. F. C. Vandergrift. 1,638,224;
May John, Rotary. F. C. Vandergrift. 1,638,224;
    Aug. 9.
Pipe joint, Rotatable. L. N. Webster. 1,645,838; Oct. 18.
    Pipe joint, Swivel. G. Gronner. 1,625,536; Apr. 19.
Pipe-joint union. H. Del Mar. 1,615,536; Jan. 25.
Pipe-jointing apparatus. W. C. Ferguson. 1,615,008;
  Pipe-jointing apparatus. W. C. Ferguson. 1,615,008; Jan. 18.
Pipe-laying implement. A. E. Rasmussen. 1,636,243; July 19.
Pipe-line-cleaning device. J. M. and W. H. Thompson. 1,631,562; June 7.
Pipe-line system. G. D. Pogue. 1,621,683; Mar. 22.
Pipe-line system. Oil. G. D. Pogue. 1,621,221; Mar. 15.
Pipe lines, Cleaning-out. C. A. Burnett. 1,628,530; May 10.
Pipe lines, Cradle for hydraulic. E. Schaub. 1,646,432; Oct. 25.
Powice for cleaning B. Genber. 1,624,786.
  Pipe lines, Cradle for hydraunc.

Pipe lines, Device for cleaning. B. Gerber. 1,624,786;

Apr. 12.

Apr. 12.

Apr. 12.

Apr. 12.

Apr. 12.

Apr. 12.
  Apr. 12.

Pipe-making machine. G. C. Martin. 1,629,922; May 24.

Pipe mechanism, Swing. S. H. Brooks. 1,626,782; May 3.

Pipe-molding machine. S. M. Udale. 1,618,245; Feb. 22.

Pipe openings and producing the same, Liner for. L. C.

Gnagi. 1,651,269; Nov. 29.

Pipe or casing and preventing seepage and leakage in wells, Method of and apparatus for settling. G. A.

Pipe or classification of the control of the 
    Pipe of Current,
Apr. 5.
Pipe-perforating machine. B. C. Travis.
July 12.
A L. Fondren. 1,615,690
                                                                                                                                                                                                                                                                                                                                                                                                 1,635,590;
    Pipe perforator. A. L. Fondren. 1,615,690; Jan. 25,
Pipe press, Hydraulic sewer. T. A. Hibbins. 1,651,203;
Nov. 29.
  Nov. 29.

Pipe presses. Rotary knife for hydraulic or steam sewer.

T. A. Hibbins. 1,651,205; Nov. 29.

Pipe protector. H. J. Ferris. 1,624,485; Apr. 12.

Pipe rip and cut-off. J. Goff. 1,629,696; May 24.

Pipe saddle. D. U. Powell. 1,616,390; Feb. 1.
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Pipe scraper. D. J. McGeehin. 1,627,045; May 3. Pipe-sealing device. W. J. Pendry. 1,627,995; May 10. Pipe sections of different materials, Connection between Pipe-securing means. O. J. Parks. 1,649,642; Nov. 15. Pipe skelp, Method of and apparatus for forming. H. D. Cook. 1,650,607; Nov. 29. Pipe sleeve. G. Stone. 1,649,752; Nov. 15. Pipe sleeve, Antifriction. G. E. Fentress. 1,651,088; Pipe sleve, Antifriction. G. E. Fentress. 1,651,088; Pipe slip. W. D. Davidson. 1,630,732; May 31. Pipe stopper. J. W. MacClatchie. 1,616,978; Feb. 8. Pipe stopper. J. W. MacClatchie. 1,616,978; Feb. 8. Pipe straightener. J. B. Gocke and C. F. De Corse. 1,623,405; Apr. 5. McLaughlin. 1,617,239; Feb. 8. Pipe supporting clamp. E. C. Wilson. 1,643,688; Sept. 27. Pipe-testing machine. J. S. Beall. 1,647,121; Nov. 1. Pipe-thread protector. H. A. Unke. 1,621,647; Mar. 22. Pipe-thread protector. H. A. Unke. 1,642,367; Nov. 15. Pipe threader and chaser, Internal. H. K. Hyrup. 1,614,130; J. Mr. 1,614,753; J. Mr. 1,614,753; J. Pipe-threading diestock. T. Kellackey. 1,645,555; Oct. Pipe-threading machine. B. Borden. 1,626,649; Feb. 8. Pipe-threading machine. B. Borden. 1,612,619; Feb. 8. Pipe-threading machine. B. Borden. 1,626,649; Feb. 8. Pipe-threading machine. B. Borden. 1,612,649; Feb. 8. Pipe-threading machine. B. Borden. 1,616,649; Feb. 8. Pipe-threading machine. B. Borden. 1,622,411; Man. 29. Pipe-threading machine. L. S. Hail. 1,628,036; Aug. 9. Pipe-threading mcchanism. H. D. Pennington. 1,626,251; Apr. 26. Pipe-threads, Machine for cutting. I. W. Nonneman. 1,616,542; Feb. 8. Pipe vise. E. W. Bacon. 1,617,364; Feb. 15. Pipe vise. J. E. Kenerson. 1,624,252; Apr. 12. Pipe vise. J. E. Stephenson. 1,644,755; Oct. 11. Pipe-wise. T. E. Stephenson. 1,644,755; Oct. 11. Van. Huffel. 1,648,21; Nov. 55. Pipe-widding plant. J. H. Sennett. 1,640,220; Aug. 23. Pipe-wingping machine. C. S. Evans. 1,622,427; Mar. 29. Pipe-wapping machine. D. Finley. 1,622,432; Mar. 29. Pipe-wapping machine. D. Finley. 1,622,432; Mar. 29. | Pipe-wrapping machine. C. S. Evans. 1,622,427; Mar. 29. |
| Pipe-wrapping machine. D. Finiter. 1,622,432; Mar. 29. |
| Pipe-wrapping machine. D. Finiter. 1,622,432; Mar. 29. |
| Pipe-wrapping machine. D. Finiter. 1,623,776; Dec. 6. |
| Pipe-wrapping machine. D. Finiter. 1,621,153; Dec. 6. |
| Pipe-wrapping machine. D. Fipe-fipe. D. Fipe. 1,621,626; Dec. 6. |
| Pipe-wrapping machine. D. Fipe-wrapping. D. Apr. 19.
Pipes and facing plates, Sinking. W. T. McCarthy, 19.
19.624, 203; Nov. 1 bodies with bituminous compositions, Coating concrete. R. Illemann. 1626, 367; July 19.
Pipes and like hollow articles, Molding of. M. Levy. 1,622, 325; Mar. 29.
Pipes and other articles, Cleaning device for tobaccompact of the property of the propert Pipes and other articles, Cleaning device for tobacco, C. H. Fitz Gerald and G. H. Hutchins. 1,644,674; Oct. 4.

Oct. 4.

Pipes and the like Construction of. O. G. Luyties. Pipes and the like from metal sheets or plates, Apparatus for the manufacture of. W. R. Hume. 1,045,230; Oct. 11.

Pipes and the like, Producing and maintaining a sanitary condition in milk, A. W. Peacock. 1,649,460; Pipes, Alparatus for forming concrete. A. Horten, Pipes, Alparatus for forming concrete. A. Horten, tary condition in milk, A. W. Peacock. 1,649,466; Nov. 1.
Pipes, Apparatus for forming concrete. A. Horten. 1,623,539; Apr. 5.
Pipes, Apparatus for Joining or connecting. J. Kurkowski. Pipes, Closure plug for. P. Jackson. 1,620,728; Mar. 15.
Pipes, Coating cement. E. Ligonnet. 1,618,540; Feb. 22.
Pipes, Conting cement. E. Ligonnet. 1,618,540; Feb. 22.
Pipes, Composition for opening stopped. H. J. Haber. 1,618,376; Feb. 22.
Pipes, Composition for opening stopped. H. J. Haber. 1,618,376; Feb. 22.
Pipes, Portee for opening. L. R. Titcomb and H. S. Ashmun. 1,647,759; Nov. 1.
Pipes, Device for deaning. L. R. Titcomb and H. S. Ashmun. 1,647,759; Nov. 1.
Pipes, Device for measuring length of. G. W. Hall. 1,622,908; Mar. 29.
Pipes, Device for testing. A. Zore. 1,613,150; Jan. 4.
Pipes, Emerkency repair for. G. H. Mullinack. Pipes, Device for testing. A. Zore. 1,613,150; Jan. 4.
Pipes, The Composition of the property of the connecter heads. Terminal sleeve for train. E. A. Robinson. 1,640,807; Aug. 30.
Pipes, Installing ground. J. M. Humiston. 1,639,731; Aug. 23.

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Pipes, Insulating section for. M. V. Croker. 1,630.657;
May 31.
Pipes, Machine for shaping. J. H. Taylor. 1,634,057;
June 28.
Pipes, Manufacture of tobacco. C. F. Smith. 1,628,617;
May 10.
Pipes, Manufacture of tobacco. C. F. Smith. 1,628,617;
May 10.
Pipes, Manufacture of tobacco. C. F. Smith. 1,628,617;
Pipes or casings, Tool for opening collapsed. D. G. Lorraine. 1,615,306; Jan. 25.
Pipes, Plate thimble for. J. W. Farley. 1,627,961;
May 10.
Pipes, Plate thimble for. J. W. Farley. 1,651,261;
Pipes, Tods, etc., Mechanism for threading. J. A. Katzenmeyer. 1,613,395; Jan. 4.
Pipes, Seasoning and maturing bruyère-wood tobacco.
C. J. A. Coulishaw. 1,652,349; Dec. 13.
Pipes, Tamping device for tobacco. C. Gotz. 1,648,454;
Nov. 8.
Pipes, Tobacco burner for. E. Biber. 1,641,956;
Sept. 13.
                      Nov. Tobacco burner for. E. Biber. 1,044,038; Sept. 6.

Pipes, Trap for conductor. F. A. Traut. 1,641,938; Sept. 6.

Pipes, tubes, and the like, and method of and apparatus for making the same. L. Billé. Rc16,523; Jan. 4.

Pipes, tunnels, bridges, and other bodies or structures, Contractible and expansible supporting means suitable for use in the construction of. H. Berridge. 1,624,712; Dec. 4.

Pipes, Vent cap for soil. J. Comerford. 1,623,659; Pipes, Vent cap for soil. J. Comerford. 1,623,659; Apr. 5.
Pipes, Vent cap for soil. J. Comerford. 1,020,00...
Pipes, Vent cap for soil. J. Comerford. 1,020,00...
Pipes, Wrought-metal connection for threaded. J. Clark. F. N. Smith, and J. Meese. 1,651,186; Nov. 29.
Pipeste. M. Gervais and W. Biron. 1,634,183; June 28.
Pistol. Antomatic. E. Philippart. 1,638,783; Aug. 9.
Pistol. Antomatic. E. Philippart. 1,638,783; Aug. 9.
Pistol. Milminated. J. L. Selden and L. Amato. Tansley. 1,638,068; Aug. 9.
Pistols. Magazine safety device for automatic. G. H. Tansley. 1,638,068; Aug. 9.
Piston. G. C. Austin. 1,623,328; Apr. 5.
Piston. G. H. Brawner. 1,618,3253; Dec. 20.
Piston. G. R. W. Candler. 1,638,233; Dec. 20.
Piston. D. W. Candler. 1,638,233; Dec. 20.
Piston. P. W. Candler. 1,634,024; June 28.
Piston. P. M. Freer. 1,622,579; Mar. 29.
Piston. P. Gill, fr. 1,646,988; Oct. 25.
Piston. E. J. Hall. 1,625,119-20; Apr. 19.
Piston. F. Harros. 1,638,638; Peb. 32.
Piston. J. D. Lannon and R. R. Todd. 1,634,151; June 28.
June 29.
June 28.
June 29.
June 
                Piston. J. D. Lannon and R. R. Todd. 1,634,151; June 28.

Piston E. C. Long. 1,631,952; June 7.

Piston. E. M. Manley. 1,614,799; Jan. 18.

Piston. E. M. Manley. 1,614,799; Jan. 18.

Piston. M. M. Matthews. 1,614,799; Jan. 18.

Piston. M. H. Matthews. 1,624,400; May 3.

Piston. M. W. Muir. 1,634,037; June 28.

Piston. J. P. Norton. 1,637,273; July 26.

Piston. G. W. Robinson. 1,646,271; Oct. 25.

Piston. G. W. Robinson. 1,645,265; Oct. 11.

Piston. C. L. Walker. 1,634,093; Nov. 15.

Piston. C. L. Walker. 1,632,385; Dec. 13.

Piston. C. D. Welty. 1,638,598; Aug. 16.

Piston. G. D. Welty. 1,638,598; Aug. 16.

Piston and connecting rod mountings, Joint for. V. J. O'Brien. 1,639,102; Aug. 16.

Piston and connecting rod mountings, Joint for. V. J. O'Brien. 1,639,102; Aug. 16.

Piston and piston-pin construction. H. W. Pierce. Piston and piston-pin construction. H. W. Pierce. 1,654,102; Dec. 27.

Piston assembly. Apparatus for. H. M. Brown. 1,654,101; Dec. 27.

Piston. Compressor. G. F. Knoz. 1,616,128; Feb. 1, Mar. 1,918,102.

Piston. Compressor. C. F. Knoz. 1,616,128; Feb. 1, Mar. 1,918,102.

Piston. Compressor. C. E. Acrison. 1,628,632; May 17.

Piston. Compressor. C. F. Knoz. 1,616,128; Feb. 1, Mar. 1,918,102.

Piston. Engine. J. H. Burpee and D. E. Lain. 1,623,717; Piston. Compressor. C. E. Jorgensen. 1,619,618; Miston. 200,102.
                      Piston cooling device. O. E. Jorgensen. 1,619,618; Mar. I. Piston Engine. J. H. Burpee and D. E. Lain. 1,623,717; Piston Engine. J. H. Burpee and D. E. Lain. 1,623,717; Piston, Expansion. G. W. Booksh. 1,629,988; May 24. Piston having an adjustable head for facilitating the removal of the piston rings. J. P. Willis. 1,636,542; July 19. P. Willis. 1,636,542; July 19. Piston. Internal-combustion-engine. O. E. Jorgensen. 1,615,459; Jan. 25. Piston packing. C. L. Cook. 1,624,159; Apr. 12. Piston packing. C. L. Cook. 1,634,018; June 28. Piston packing. C. L. Cook. 1,634,018; June 28. Piston packing. J. F. Panyard. 1,644,644; Opt. 11. Piston packing. J. F. Panyard. 1,644,645; Oct. 25. Piston packing. J. F. Panyard. 1,644,678; Oct. 25. Piston packing. Apr. 1,646,310; Peb. 1. Piston packing. M. S. Davenport. 1,635,743; July 12. Piston packing ring. C. C. Farmer. 1,641,072; Aug. 30.
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C. H. Snyder. 1,637,247; July 26.
E. N. Broderick. 1,655,590; July 12.
E. Brown. 1,644,0109; Aug. 23.
E. Brown. 1,614,602; Jan. 18.
D. F. Dickieson, jr. 1,618,520; Feb. 22.
M. Forster. 1,646,143; Oct. 18.
R. Grover. 1,635,407; July 12.
C. F. Johnston and G. G. Rees. 1,649,47

                  Piston pin.
Piston ring.
Piston ring.
         Piston ring.
Piston ring.
Piston ring.
Piston ring.
             Piston ring.
Nov. 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.649.474:
                  Piston ring.
Oct. 11.
Oct. 13.

Oct. 13.

Oct. 14.

Piston ring. C. H. Lemery. 1,651,721; Dec. 6.

Piston ring. M. M. Moratta. 1,627,107; May 3.

Piston ring. J. A. Olson. 1,638,012; July 19.

Piston ring. J. F. Panyard. 1,638,6383; July 26.

Piston ring. J. F. Panyard. 1,638,6383; July 26.

Piston ring. J. F. Panyard. 1,638,6383; July 26.

Piston ring. G. L. Post. 1,613,410; Jan. 4.

Piston ring. G. L. Post. 1,613,410; Jan. 4.

Piston ring. D. M. Solenberger. 1,651,63; Nov. 29.

Piston ring. F. G. Lector. 1,638,637,721; July 19.

Piston ring. E. G. Young. 1,617,229; Feb. 8.

Piston-ring applier. S. M. McKee. 1,635,722; July 12.

Piston-ring applier. S. M. McKee. 1,635,722; July 12.

Piston-ring constraints of the control o
                                                                                                                                                                                                                                     L. Kinsley and J. W. S. Moss. 1,645,146:
         Piston-ring contracting tool. J. L. Oliver. 1,621,681; Mar. 22.
Piston-ring contractor. M. Jelbert, jr. 1,625,258; Apr. 19.
Piston-ring groove. H. Stoll. 1,619,993; Mar. 8.
Piston-ring grooves, Device for operating on. W. L. Slack. 1,650,169; Nov. 22.
Piston-ring remover. W. N. Hooks. 1,616,621; Feb. 8.
Piston ring remover and applier. E. G. Maki. 1,651,462; Dec. 6.
Piston-ring remover. W. N. Hooks. 1,615,621; Feb. 8. Piston ring remover and applier. E. G. Maki. 1,651,462; Piston-ring fool. J. P. McCarthy. 1,623,769; Apr. 5. Piston-rings and the like, Apparatus for georging. G. H. Higgins. 1,649,695; Nov. 15. Piston rings, Apparatus for electrically forming spiral. H. S. Graves. 1,619,296; Mar. 1. Piston rings, Apparatus for electrically forming spiral. H. S. Graves. 1,619,296; Mar. 1. Piston rings, Office of the control of the 
    May 17.

Pistons, Balancing single-acting. W. Mauss. 1,627,658;
May 10.

Pistons, Centering device for. K. F. McJilton. 1,636,918;

Pistons, Mold for casting. C. H. Kirby. 1,619,135;
Mar. 1.

Pistons, Self-adjusting packing for. L. C. Harrod. 1,623,407; Apr. 5.

Pit and grease rack. Drain. C. D. Fagan. 1,654,073;
Dec. 27.
    Dec. 27.

Pit from and bisecting single-stone friut, Removing the.
A. L. Dunean. 1,658,552: Dec. 20.

Pit tub, wagon, and the like. A. Weddell and W. T.

Tolhurst. 1,624,700; Apr. 12.

Pitch and cheer unsaponified organic matter of mineral Pitch and the proposition of the composition of the compos
         Aug. 30.
Pitches, Preparing. F. M. Rogers and O. E. Bransky,
1.613,723; Jan. 11.
Pitman. A. Wikind. 1.646.435; Oct. 25.
Pitman beging. H. L. Huut. 1.637,904; Aug. 2.
Pitman beging. H. L. and L. A. Huut. 1.632,480;
June 14.
Pitman connection. J. Sturrock. 1.646,464; Oct. 25.
Pitman for mowers, binders, and the like, Adjustable.
A. Wirth. 1.618,320; Feb. 22.
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Pitman, Self-lubricating. T. M. Finley and A. W. Brown, 1,621,976; Mar. 22. Pitman structure. R. Bloss. 1,646,948; Oct. 25. Pitot-static tube. C. H. Colvin. 1,620,633; Mar. 15. Pitot tube. H. W. Broudy and G. G. H. Rydberg, 1,644,815; Oct. 11, Poundy and G. G. H. Rydberg, 1,644,815; Oct. 11, Poundy and G. G. H. Rydberg, 1,644,815; Oct. 11, Poundy and G. G. H. Rydberg, 1,642,815; Oct. 11, Poundy and G. G. H. Rydberg, 1,629,131; Pitter, Combination peach. A. V. Sullivan. 1,629,131; 1.644.815; Oct. 11.
Pitter, Combination peach. A. V. Sullivan. 1,629,131;
May 17.
Pitter, Peach. L. K. Vaughan. 1,646,564; Oct. 25.
Pivot joint. D. D. Vann. 1,647,821; Nov. 1.
Pivotal connection. H. C. Harris. 1,624,239; Apr. 12.
Pivotal connection. H. C. Harris. 1,624,239; Apr. 12.
Pivotal closure-operating means and circuit closer.
J. E. Vaughn. 1,639,581; Aug. 16.
Placard. H. V. Marsi. 1,653,188; Dec. 20.
Placard device. W. A. Frye and F. Heady. 1,625,309;
Placer deposit washer and method of washing. H. N.
Tracy. 1,621,664; Mar. 22.
Tracy. 1,621,664; Mar. 22.
Tracy. 1,621,664; Dannis. 1,640,565; Aug. 30. Placer-deposit washer and method of washing. H. N. Tracy. 1,621,694; Mar. 22. Placer machine. A. C. Dennis. 1,640,565; Aug. 30. Plait pres, Conveyer. J. C. Ledbetter. 1,630,392; Plaiting machine. P. Plait press, Conveyer. J. C. Ledbetter. 1,630,392; May 31. Plaiting machine. B. F. Federhart. 1,617,018; Feb. 8. Plane. J. J. Ritter. 1,642,044; Sept. 13. Plaiting machine. B. A. Schade. 1,644,524; Sept. 27. Plane. B. A. Schade. 1,644,524; Sept. 27. Plane. Bench. J. Sacko. 1,645,761; Oct. 18. Plane, Bench. J. Sacko. 1,645,761; Oct. 18. Plane, Carpenter's. E. A. Schade. 1,651,634; Dec. 6. Planer. J. Kandera. 1,620,895; Mar. 15. Planer cross rails and side heads, Adjusting means for. C. L. Ricards. 1,618,308; Feb. 22. Planer, Edge. J. E. Ahlvin. 1,639 420; Aug. 16. Planer, Edge. J. E. Ahlvin. 1,639 420; Aug. 16. Planer, Forg and switch. N. Marcalus. 1,619,355; Planer, Motor-driven. H. N. and W. R. Buss. 1,651,013; Nov. 28. Planers and similar tools, Tool holder for. F. E. Cardullo. 1,643,873; Sept. 27. Planers, Guard for buzz. J. B. Watson. 1,618,120; Planers, Safety locking device for the shifting mechanism of metal. C. E. Linden and G. H. Langen. 1,622,159; Mar. 22. Planing machine, Shingle. C. J. Melby. 1,634,789; July 5. Planing machine, Sningle. C. J. Melby. 1,634,789; July 5. Planing machine, Sningle. C. J. Melby. 1,634,789; July 5. July 5
Planing machines and the like, Guard for. A. J. Retz.
1,636,671: May 31.
Planing machines, Sectional chip breaker for. C. G.
Wilderson, 1,619,008; Mar. 1.
Planing machines, Sectional feed roll for. C. G. Wilderson, 1,619,009; Mar. 1.
Planing for scarifying mechanism. F. M. Hargrave, 1,634,144; June 28.
Planing fool, C. G. Krook, 1,628,791; May 17.
Planineter. W. C. Brown and L. K. Spink, 1,650,490; Nov. 22. Planimeter, Radial averaging, A. B. Cunningham, 1,638,984; Aug. 18. Plans, charts, maps, and the like, Device for graphically indicating information on. J. H. A. Morichard, 1,628,677; May 17. Plant-controlling system. H. B. Halvorsen. 1,649,898; Nov. 22.
Plant-dusting attachment. G. Huebner. 1,629,872;
Planty 24.
May 24.
Hang 24 Tune 28.

Hant protector. C. M. Armstrong. 1,655,446; Dec. 27.
Plant protector. E. F. Lewis. 1,615,589; Jan. 25.
Plant protector. J. D. Walker. 1,616,290; Feb. 1.
Plant protector. T. H. Wilson. 1,635,449; July 12.
Plant protector. C. H. Wilson. 1,635,449; July 12.
Plant protector. C. H. Woodruff. 1,641,244; Sept. 6,
Plant-setting machine. G. A. Shaw. 1,638,868; Aug. 9.
Plant-setting machine. G. A. Shaw. 1,638,868; Aug. 9.
Plant-treating device. F. O. Farwell. 1,614, 355; Jan. 11.
Planter. B. Arnold. 1,637,890; Aug. 2.
Planter. C. A. Dempewolf. 1,627,017; May 3.
Planter. C. A. Dempewolf. 1,627,017; May 3.
Planter. G. A. Dempewolf. 1,627,017; May 3.
Planter attachment. H. T. Maze and L. Bever. 1,629,017; Mar. 15.
Planter attachment. H. T. Maze and L. Bever. 1,643,414; Sept. 27.
Planter attachment. Checkrow. J. P. Boddiger.
Planter, Checkrow. R. and R. Dhume. 1,635,359; July 12.
Planter, Checkrow. J. C. Reuse. 1,626,012; Apr. 26.
Planter, Checkrow. J. C. Reuse. 1,626,012; Apr. 26.
Planter, Checkrow. Gr. J. W. Gross. 1,652,714; Dec. 13. Planter, Dec. 13. Dec. 13.

Planter, Corn. C. James. 1,640,238; Aug. 23.

Planter, Corn. G. M. Yackley. 1,627,537; May 3.

Planter, Cotton. G. J. Dean. 1,651,327; Nov. 29.

Planter, Seed. H. N. Oliver. 1,637,834; Aug. 2.

Planter, Seed. M. V. Oliver. 1,637,834; Aug. 2.

Planter with one wheel support, Corn. J. M. Broz. 1,626,544; May 3.

Planters, Aftachment for cotton. J. S. Townsend and W. B. Camp. 1,635,866; July 12.

Planters, Drill and check control for. H. R. Traphagen.
1,616,933; Feb. 8.
Planters, Marking mechanism for. E. N. Richardson.
1,635,435; July 12.
Planters or the like, Stub-shoe attachment for runners of corn. F. D. Haberman. 1,619,670; Mar. 1.
Planters, Seed cup for. E. M. Cole. 1,654,411; Dec. 27.
Planting machine. F. Bonchina. 1,627,143; May 3.
Planting machine. F. Bonchina. 1,627,143; May 3.
Planting machine. Contour cane. W. Kassebeer.
1,018,955; Feb. 22.
Plants and fruits, Method to increase the crops of. A. Wendler. 1,636,6321; July 26.
Wendler. 1,636,6321; Puly 26.
Plants. Developing and transplanting. W. O. Roy.
1,634,727; July 5.
Plants, Dusting powder adherent to. R. Lieske, A. Thauss, and W. Bonrath. 1,616,523; Feb. 1.
Plants, Scutching fibrous. J. A. McLeod. 1,627,919; May 10. Nov. 8.
Plaque and making same, Concrete. I. M. Washington.
1,641,404; Sept. 6.
Plaster and mortax, Apparatus for making. A. E. Tuttle.
1,643,682; Jast. 1. Clark. 1,642,849; Sept. 20.
Plaster board. H. E. Hanson. 1,661,251; Dec. 6.
Plaster board. O. L. Routt. 1,646,598; Oct 25.
Plaster board. A. S. Speer. 1,641,648; Sept. 6.
Plaster board. 1. Strand. 1,640,786; Aug. 30.
Plaster-board-fastening means. J. S. Raynor. 1,640,468;
Plaster-board-fastening means. J. S. Raynor. 1,640,903;
Sept. 6. Plaster-board-fastening means, J. S. Raynor, 1,641,903; Sept. 6.
Plaster board, Making, O. L. Routt. 1,646,597; Oct. 25; Plaster board, Method and apparatus for constructing, C. R. Birdsey, 1,648,801; Sept. 27.
Plaster block and partition construction formed thereof, F. M. Venzie, 1,632,323; June 14.
Plaster blocks, Reenforcement for, T. H. Geraerdts, 1,633,837; Jan. 4.
1,633,837; Jan. 4.
1,620,957; Mar. 8.
Plaster cenner, E. Golden, 1,645,479; Oct. 11.
Plaster cennosition. A. C. Williamson, 1,620,587; Mar. 8.
Plaster material, Manufacture of, O. Gerlach, 1,634,459; Mar. 8.
Plaster material, Manufacture of. O. Gerlach. 1,634,459;
July 5.
Plaster, Method of and product for making. G. B. Wood.
1,635,891; July 12.
Plaster mixing device. N. Essick. 1,630,789; May 31.
Plaster mixing device. N. Essick. 1,630,799; May 31.
Plaster mixing device. N. Essick. 1,630,790; May 31.
Plaster-virus board. H. A. Cumfer. 1,653,037;
Dac 20. Plaster-receiving board. H. A. Cumfer. 1,653,037; Dec. 20.
Plaster reviver. C. W. Young. 1,613,689; Jan. 11.
Plaster terminal. I. A. Baum. 1,618,689; Jan. 11.
Plaster terminal. I. A. Baum. 1,618,695; Feb. 22.
Plaster walls board. C. R. Birdsey. 1,650,930; Nov. 29.
Plaster walls, Lathing structure for. J. F. Makowski.
Ref.6831; Dec. 27.
Plasterer's float. R. W. Rowley. 1,627,4410; May 3.
Plasterer's float. R. W. Rowley. 1,627,4410; May 3.
Plasterer's float. G. W. Rowley. 1,627,4410; May 3.
Plastering machine. J. Lofholm. 1,635,373; July 12.
Plastic and making same. L. Lilienfeld. 1,625,416;
Apr. 19. Plastic articles, Forming. L. W. Hottel. 1,652,940; Dec. 13. Plastic articles, Method and apparatus for producing. R. V. Mattison. 1,623,631; Apr. 5. Plastic articles, Press for forming. L. W. Hottel. 1,652,991; Dec. 13. July 19.

Plastic blocks, Apparatus for molding. A. Martindale. 1,637,495; Aug. 2.

Plastic blocks from one conveyer to another, Mechanism for transferring. H. R. Straight. 1,615,965; Feb. 1.

Plastic bullots from one conveyer to another, Mechanism for transferring. H. R. Straight. 1,615,965; Feb. 1.

Plastic composition, C. R. Revev. 1,626,859; May 3.

Plastic composition. C. S. Reeve. 1,643,520-1; Sept. 27.

Plastic composition product and producing articles of manufacture. A. J. Slosser. 1,627,296; May 3.

Plastic composition and product and pressure and means for unitable to composition for the plastic composition of the plastic composition of the plastic composition of the plastic composition and products and products. Mat. 1.

Mat. 1. Same, Precast. L. C. Krummel. 1,619,737; Mat. 1. July 19 Mar. 1.

Plastic compositions and products obtained thereby, Manufacturing. I. Ostromislensky. 1.613,673; Jan. 11.

Plastic floor and bearing therefor. J. S. Miller, jr. 1.640,796; Aug. 30.

Plastic glass. Method of and apparatus for conveying. V. Mulholland. 1,638,593; Aug. 9.

Plastic material. A. R. Kemp. 1,638,535; Aug. 9.

Plastic material. And making the same, Article made from.

R. T. Griffiths. 1,613,995; Jan. 11.

Plastic material and making the same, Covering of.

Plastic material, Apparatus for forming and cutting. J.

R. Gammeter. 1,628,536; May 17.

Plastic material, Die-molding apparatus for making articles of. E. De Journo. 1,633,031; Aug. 16.

Apparatus for dividing: F. Fe Lablets (1,600,546); Mar. S. Plastic material, measuring device for. C. N. Berguann and E. Z. and C. Taylor. 1,632,165; June 14.

Plastic material, Measuring device for. C. N. Berguann and E. Z. and C. Taylor. 1,632,165; June 14.

Plastic material, Method of and apparatus for forming articles of. J. M. Lamble and D. W. Ross. 1,614,526; Jan. 18.

Plastic material, Method of and apparatus for severing. Tax Milliten. 1,617,861; Feb. 15.

Plastic material, Method of and mechanism for perforating. A. H. Tyson. 1,628,342; May 10.

Plastic material, Shaping. K. Stoll and E. C. Meyer. 1,647,765; Nov. 1.

Plastic material, Shaping. K. Stoll and E. C. Meyer. 1,647,765; Nov. 1.

Plastic materials, Apparatus for forming. A. O. Austin and D. K. Macleed. 1,625,514; Apr. 19.

Plastic materials, Paparatus for forming. A. O. Austin and D. K. Macleed. 1,625,514; Apr. 19.

Plastic materials, Comparatus for forming. A. O. Austin and D. K. Macleed. 1,625,514; Apr. 19.

Plastic materials, Comparatus for forming. A. O. Austin and D. K. Macleed. 1,625,514; Apr. 19.

Plastic materials, Comparatus for forming. A. O. Austin and D. K. Macleed. 1,625,514; Apr. 19.

Plastic materials, Comparatus for forming. A. O. Austin and D. K. Macleed. 1,625,514; Apr. 19. ing and marking by compression. Plastic materials, Milling. F. F. Sutherland. 1,614,999; Jan. 18: Plastic materials, Mold for. June 21. W. Hinton, 1.633,328; Plastic materials, Mold for. C. E. Wright. 1,648,038; Nov. 8. Nov. 8.
Plastic materials, Press for forming. F. C. H. Müller. 1.640,514; Aug. 30.
Plastic materials, Sanitary dispenser for. J. F. C. Luhan. 1,613,761; Jan. 11.
Plastic Partiand cement and composition and making the same, Waterproof. H. V. Welch. 1.644,965; Oct. 11.
Plastic Portland cement and composition and making the same, Waterproof. H. V. Welch. 1.626,631; Aug. 16.
Plastic sheet or slab. N. E. Newman. 1628,631; Aug. 17.
Plastic sheet or slab. N. E. Newman. 1628,631; May 17.
Plastic substances, Dispensing container for. W. H. G. Geake. 1,631,931; June 7.
Plastics, Stabilization of. C. E. Burke. 1,626,916; May 3. Geake. 1,631,931; June 7.
Plastics, Stabilization of. C. E. Burke. 1,626,916; May 3.
Plate. E. M. Bottome, Des. 72,816; June 14.
Plate. C. W. Dennis. Des. 72,763; May 31.
Plate. E. L. Schnepf. Des. 72,573; May 34.
Plate. F. L. Schnepf. Des. 72,573; May 34.
Plate. F. H. Sebring, fr. Des. 73,104; July 19.
Plate and sheet trimming and squaring machine, Automatic. F. H. Streine. 1,629,233; May 17.
Plate attachment, Pie- W. Houston 1,640,409; Aug. 30. Plate-bolting-up machine. F. C. Moore. 1,629,925; May 24.
Plate-chain-feeding mechanism. F. De Minico. 1,649,021; Nov. 15.
Plate clamp. L. A. Schmidt. 1,649.928; N Plate clamping, Multiple. J. J. Halliwell. Nov. 22. Plate clamping, Multiple. J. J. Halliwell. 1,650,206;
Nov. 22.
Plate for cooking utensits, Heat-distributing. E. P. Mc1,635,236; July 12.
Plate glass, Apparatus for making. F. Gelstharp.
1,615,834; Feb. 1.
Plate glass, Apparatus for making. F. Gelstharp.
1,615,834; Feb. 1.
Plate glass, Method and device for manufacturing. L.
von Reis. 1,621,144; Mar. 15.
Plate glass, Folishing. F. J. Hess. 1,618,085; Feb. 15.
Plate glass, Folishing. F. J. Hess. 1,618,085; Feb. 15.
Plate of the foliation of th Aug. 9.

Plate or similar article. J. F. Carney. Des. 72,307;
Mar. 29.

Plate or similar article. B. J. De Passe. Des. 71,960;
Feb. 8.

Plate or similar article. W. De Ville. Des. 73,072; Plate or similar July 19. Plate or similar article. Aug. 2. W. De Ville. Des. 73.162: Aug. 2.
Plate or similar article. J. E. Goodwin.
Dec. 6.
Plate or similar article. U. Hagmann.
Aug. 2.
Plate or similar article. J. Harrison.
Jan. 18.
Plate or similar article. A. Hashagen.
Language. A. Hashagen.
Lune 28. Des. 74,009; Des. 73.174: Des. 71.872: Des. 72,209: Plate or 8 June 28. A. Hashagen. Des. 72,945; June 28.
Plate or similar article. E. O. Jones. Des. 73,610:
Oct. 11.
Plate or similar article. F. Katz. Des. 72,480; Apr. 19.
Plate or similar article. L. B. Kauffman. Des. 73,086;
July 19.

Plate or similar article. P. N. Leyland. Des. 73,092; Plate or similar article. F. Markert. Des. 72,176; Mar. 8. Plate or similar article. F. C. Merriman. Des. 72,524; Plate or similar article. T. C. Merriman. Des. 72,524; Plate or similar article. C. J. Noke. Des. 73,577; Oct. 4. Plate or similar article. M. J. Palm, jr. Des. 72,383-4; Apr. 5. similar article. M. J. Palm, jr. Des. 72,492; Plate or similar article. M. J. Palm, jr. Des. 72,383-4;
Apr. 5.
Plate or similar article. M. J. Palm, jr. Des. 72,492;
Apr. 26.
Plate or similar article. M. J. Palm, jr. Des. 72,493;
Apr. 26.
Plate or similar article. J. E. Phillips. Des. 72,493;
Apr. 19.
Plate or similar article. J. E. Phillips. Des. 72,724;
May 24.
Plate or similar article. H. Rampfel. Des. 73,441; Sept. 13. ate or similar article. Jan. 25. E Sainson Des 71 929 · Plate or similar article. II. Tomita. Des. 71.815: Jan. 4. Flate or similar article. U. Tomita. Des. 71,853-4; Plate or similar article. U. Tomita. Des. 73,988; Nov. 29. Plate or similar article. U. Tomita. Des. 74,983-4; Dec. 13, Dec. 13.
Plate or similar article. L. Walz. Des. 72,393; Apr. 5.
Plate or similar article. G. Wesp. Des. 72,649-54;
Plate or similar article. G. Wesp. Des. 72,609; June 7.
Plate or similar article. G. Wesp. Des. 73,458; Sept. 18.
Plate or similar article. G. Wesp. Des. 73,627; Oct. 11.
Plate or similar article. G. Wesp. Des. 73,627; Oct. 11.
Plate or similar article. J. H. Wilson. Des. 73,591; Flatte of similar article. J. H. Wilson. Des. 73,931; Platte or similar article. J. H. Wilson. Des. 73,813; Nov. 8. Plate, Paper baking. A. Bothe. 1,637,100; July 26. Plate pattern, Watch. L. G. Copeman. 1,644,368; Oct. 4. Platen support, Removable. O. A. Hokanson. 1,625,891; Platen, Tok-slip. H. A. Foothorap. 1,625,802; Apr. 26, Platen, Tok-slip. H. A. Foothorap. 1,625,802; Apr. 28, Platform, Car. E. G. Hallquist. 1,636,816; July 26. Platform, Car. E. G. Hallquist. 1,636,816; July 26. Platform, Elevator. J. Rice. 1,028,977; Apr. 19, Platform for trucks, Elevating. E. J. Kofford. 1,633,024; June 21. June 21.
Platform hoist. D. E. Parrish. 1,613,901; Jan. 11.
Platform, lamp and incense burner for smoking stands or similar articles, Combined. L. Zweig. Des. 73,463; Sept. 13.
Sept. 13.
Sept. 14.
Platform support. E. Prescott. 1642,265; Sept. 13.
Platform, weight-scale. E. Buechler. 1,619,594; Mar. 1, Platinum, Recovery of. D. C. Smith. 1,649,789; Nov. 15.
Platter or similar article. A. J. Bennett. Des. 74,092; Dec. 20.
Platter retaining device. C. H. Hapgood. 1,640,074; Platter. Service. E. W. James. Des. 73,744; Nov. 1. Platter vetaining device. C. H. Hapsood. 1,640,074; Aug. 23.
Platter, Service. S. W. James. Des. 73,744; Nov. 1.
Platter, Service. A. Barchoff. Des. 71,860; Jan. 18.
Platting machine. E. A. Gast. 1,643,604; Sept. 27.
Play ball. C. C. Collette. 1,646,347; Oct. 18.
Playball covering. B. L. Henry. 1,634,146; June 28.
Playground silde. J. Bezark. Des. 73,478; Sept. 20.
Playground silde. M. A. McCree. 1,626,142; Apr. 26.
Playbouse. M. Waschbusch. 1,649,938; Nov. 22.
Player actions. Transmission mechanism for. J. T. Ryd-Playbouse. M. Waschbusch. 1,649,938; Nov. 22.
Player actions. Transmission mechanism for automatic. J. H. Hammond, fr. 1,621,880; Mar. 22.
Players. Rewind and relay mechanism for automatic. F. J. Clark. 1,648,840; Nov. 8.
Playing ball. F. R. Pich. 1,653,893; Dec. 27.
Playing ball. G. L. Plerce. 1,621,898-9; Mar. 22.

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Playing ball. G. L. Pierce and H. V. Rau. 1,618,994;
Mar. 1,
Playing ball. R. W. Rost. 1,626,302; Apr. 26,
Playing instrument, Automatic. J. T. Rydberg. 1,630,034;
May 24.
        Playing instrument, Automaton.

May 24.

P. May 24.

P. God Stringed instruments. J. L. Warner.

1. May 24.

P. God Soy: Sept. 27.

Piler Safe. F. F. Hildebrand. 1,650,515; Nov. 22.

Piler wrench. P. F. King. 1,653,182; Dec. 20.

Pilers. G. W. Briggs. 1,619,400; Mar. 1.

Pilers. J. A. Burckhalter. 1,613,929; Jan. 11.

Pilers. J. A. Burckhalter. 1,628,274; Apr. 26.

Pilers. G. F. Ingraim. 1,638,183; Aug. 16.

Pilers. G. Kuttes. 1,622,613; Apr. 20.

Pilers. G. Kuttes. 1,623,613; Apr. 20.

Pilers. J. E. McWilliams. 1,647,678; Nov. 1.

Pilers. J. E. McWilliams. 1,647,678; Nov. 1.

Pilers. H. F. Newman. 1,653,779; Dec. 27.

Pilers. J. W. Ryan. 1,640,723; Aug. 30.

Pilers. J. W. Kyan. 1,640,723; Aug. 30.

Pilers. Binding and cutting. E. Fouquet. 1,641,077;

Aug. 30.

Passancon. 1,621,556.
                Aug. 30.

Pliers, Cotter-pin-extracting. G. Besancon. 1,621,576;
Mar. 22.
    Firers, Cotter-plin-extracting, G. Besancon, 1,621,576; Mar, 22.

Pliers, Mar, 22.

Pliers, Electrician's, V. Pellegrino, 1,644,351; Oct. 4.

Pliers, G. surgical operations, Double-spoon, K. Stiegiltz, 1,621,600; Diers, Watchmaker's, S. Gruber, 1,637,108; July 26.

Pliers, Watchmaker's, S. Gruber, 1,637,108; July 26.

Pliotting board, K. Petschenig, 1,644,791; Oct. 11.

Plotting device, J. B. Furber and K. L. Rankin, 1,633,402; June 21.

Plow, R. B. and 1,616,107; Feb. 1.

Plow, R. Brown, 1,618,003; June 14.

Plow, H. Clary, 1,661,673; Dec. 6.

Plow, H. Clary, 1,661,673; Dec. 6.

Plow, B. L. Driscoll, 1,620,085; Mar, 18.

Plow, B. C. Livingston, 1,620,385; Mar, 18.

Plow, C. Lester, 1,620,969; Mar, 16.

Plow, C. Lester, 1,620,969; Mar, 16.

Plow, G. F. Muchihause, 1,632,345; June 14.

Plow, J. F. Sheahan, 1,643,163; Sept, 20.

Plow, H. T. Young, 1,615,561; Jan, 25.

Plow and cultivator, Combined, W. Van Arsdale, 1,643,567; Sept, 27.

Plow and cultivator, Combined, W. Van Arsdale, 1,643,567; Sept, 27.

Plow and Tachment W. H. Chancey, 1,635,605; July 12.
Plow and planter, Lister. C. G. Strandlund. 1,640,625; Aug. 30.

Plow attachment. W. H. Chancey. 1,635,606; July 12.

Plow attachment. J. and S. Holley. 1,646,750; Oct. 25.

Plow bottom. G. Forgy. 1,642,301; Sept. 13.

Plow. Ditching. F. E. Duncan. 1,620,255; Wr. 1.

Plow. Ditching. F. E. Duncan. 1,620,255; War. 8.

Plow. Ditching. F. E. Duncan. 1,620,255; War. 8.

Plow. Gang. J. V. Holstein. 1,627,922; May 10.

Plow. Gang. J. V. Holstein. 1,627,922; May 10.

Plow. Gang. W. L. Paul. 1,627,922; May 10.

Plow. Bandles. D. Walton. 1,635,013; July 5.

Plow bandles. Detachable brace for. O. B. Riley. 1,612,934; Jan. 4.

Plow hitch. W. Bachewich. 1,616,299; Peb. 1.

Plow hitch. A. E. Sutherland. 1,623,642; Apr. 5.

Plow hitch. A. E. Sutherland. 1,623,642; Apr. 5.

Plow hitch. A. E. Sutherland. 1,623,642; Apr. 5.

Plow honose. E. B. Fisc. 1,644,524; Oct. 18.

Plow. Lister. V. Delaurier. 1,613,648; H. Sept. 27.

Plow. Lister. V. Delaurier. 1,613,648; H. Sept. 27.

Plow. Lister. J. Peterson. 1,644,894; Oct. 11.

Plow. One-way. E. Moegelin. 1,633,049; Aug. 16.

Plow. One-way disk. C. J. Angell. 1,613,499; Jan. 25.

Plow. Rotary. A. G. Stapel. 1,631,075; May 31.

Plow. Rotary. A. G. Stapel. 1,631,075; May 31.

Plow. Rotary ang. R. J. Wilson. 1,623,149; Apr. 5.

Plow. Book and C. S. Coleman. 1,635,538; July 12.

Plow. Rotary. A. G. Stapel. 1,631,075; May 31.

Plow
Plowshate, Adjustable. T. A. Behrends. 1,648,532; Nov. 8.
Plow. Snow. W. H. Wadsworth. 1,645,537; Oct. 18.
Plow. Snow removing and loading. J. L. Brennan. 19.
Plow. Snow removing and loading. J. L. Brennan. 19.
Plow. Structure. H. E. Chappell. 1,631,008; May 31.
Plow. Structure. H. E. Alfgelt. 1,613,509; Jan. 11.
Plow. Subsoil. W. L. Paul. 1,625,278; Apr. 19.
Plow support. M. Yakubowski. 1,630,397; May 31.
Plow. Swinging. B. T. Wilson. 1,644,970; Oct. 11.
Plow. Tractor. C. Haffse. 1,624,406; Apr. 12.
Plow. Tractor. C. Haffse. 1,624,406; Apr. 12.
Plow. Tractor. T. Histon. 1,632,869; Dec. 13.
Plow. Wheeld. C. G. Strandlund. 1,641,706; Sept. 6.
Plow. with subsoil loosener, Swivel. J. Schmidt. 1,615,656; Jan. 25.
Plowing device. J. P. Derrick. 1,624,041; Apr. 12.
Plowas, Adjusting mechanism for. H. R. Traphagen. 1,623,368; Apr. 26.
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Plows, Clod-breaking attachment for. R. E. Cunningham. 1,612,908; Jan. 4. Plows, Depth adjuster for. W. S. Graham. 1,632,128; June 14. Plows, Disk attachment for gang. P. Mayer and F. Veit. 1,616,697; Feb. 8. Plows, Disk-dr-control mechanism for. C. G. Strandlund. 1,653,678; Dec. 27. Plows, Draft device for. T. Brown. 1,653,695; Dec. 27. Plows, Draft device for. C. A. Berry. 1,652,925; Dec. 18. Plows, Draft device for. T. L. Keger. 1,613,469. Dec. 13.
Plows, etc., Draft connection for. J. J. Koger. 1,613,462;
Jan. 4.
Plows, Harrow attachment for. G. Lytle. 1,646,486;
Oct. 25.
Plows, Procr. lift for. W. J. Verity and P. A. Van
Plows, Procr. lift for. W. J. Verity and P. A. Van
Plows, Revoluble moldboard for. J. N. Ellenburg,
1,621,712; Mar. 22.
Plows, Spraying attachment for. J. S. Hale. 1,643,846;
Sept. 27.
Plows, Stalk-cutting attachment for. J. L. Amargos,
1,637,926; Aug. 2. Shidda, 1443,260. Solve Stalk cattling attachment State Stat 1.637,926; Aug. 2.
Plows, Tractor hitch for. F. S., Shields. 1,648,366; Nov. 8.
Plucking device, Fowl. A. Simons. 1,637,061; July 26.
Plucking device, Fowl. A. Simons. 1,637,061; July 29.
Plucking machine. E. Warner. 1,644,621; Oct. 4.
Plug. W. Kaising. 1,646,541; Oct. 25.
Plug. C. Moline. 1,663,724; Dec. 27.
Plug. E. F. Potter. 1,639,856; Aug. 23.
Plug. E. F. Potter. 1,639,856; Aug. 23.
Plug. E. F. Potter. 1,639,856; Aug. 23.
Plug. E. F. Potter. 1,648,651; Aug. 23.
Plug. Attachment. G. W. Goodridge. 1,621,364; Mar. 15.
Plug and switch for electrical appliances, Combination. C. Browning. Dec. 73,738; Nov. 12.
Plug. Attachment. Dec. 73,738; Nov. 12.
Plug. Attachment. E. C. Ballman. 1,636,798; July 26.
Plug. Attachment. E. C. Ballman. 1,636,798; July 26.
Plug. Attachment. E. C. Ballman. 1,636,798; July 29.
Plug. Attachment. W. Herskovitz. 1,639,899; May 31.
Plug. Attachment. W. Herskovitz. 1,639,899; May 31.
Plug. Attachment. W. Herskovitz. 1,639,899; May 31.
Plug. Bioler. B. H. Hughes. 1,636,135; July 19.
Plug. Bioler. B. H. Hughes. 1,636,135; July 19.
Plug. Bioler. B. H. Hughes. 1,636,135; July 19.
Plug. Censent. H. A. and C. F. Davis. 1,641,741; Sept. 6.
Plug. Censent. H. A. and C. F. Davis. 1,641,741; Sept. 6.
Plug. Censent. H. A. and C. F. Davis. 1,641,741; Sept. 6.
Plug. Electrical servew. J. H. Stackhouse and J. R.
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Plug. Electrical servew. J. Plug, High-frequency spark. F. Fulgora. 1,614,885; Jan. 18.
Flog, Inspection. G. H. Sargent. 1,619,273; Mar. 1.
Flog intensifier, Spark. H. M. Fuller. 1,614,961; J. Flog intensifier, Spark. H. M. Fuller. 1,614,961; J. Flog intensifier, Spark. H. M. Fuller. 1,614,761; J. Flog or valve, Drain. H. J. Pereira. 1,638,954; Aug. 16.
Flug. Multiple-point. O. E. Marvel. 1,652,776; Dec. 27.
Flug. Or valve, Drain. H. J. Pereira. 1,638,954; Aug. 16.
Flug. Player. C. E. Warner. 1,631,995; June 14.
Flug. Flog of the Market. 1,631,747; Dec. 6.
Flug. Spark. J. M. Bringman. 1,632,599; June 14.
Flug. Spark. J. M. Bringman. 1,616,779; Feb. 8.
Flug. Spark. E. J. Buckingham. 1,644,633; Oct. 4.
Flug. Swivel. M. Kranz. 1,633,025; June 21.
Flug. Swivel. M. Kranz. 1,633,025; June 21.
Flug. Wash. J. H. McEyoy, jr. 1,630,666; May 31.
Flugs. Flatening device for gas-main sweat. E. Schneider. 1,639,165; Aug. 16.
Flugs. Flatening device for gas-main sweat. E. Schneider. 1,639,165; Aug. 16.
Flugs. Flatening device for gas-main sweat. E. Schneider. 1,639,165; Aug. 16.
Flugs. Flatening feriner. J. H. McEvoy, jr. 1,632,090; May 10.
Flugs. Flatening feriner. J. H. McEvoy, jr. 1,632,090; May 10.
Flugs. Flatening feriner. J. H. McEvoy, jr. 1,632,090; May 10.
Flugs. Flatening feriner. J. H. McEvoy, jr. 1,632,090; May 10.
Flugs. Flatening feriner. J. H. McEvoy, jr. 1,632,090; May 10.
Flugs. Receptacle for connecting. G. Frankel. 1,628,399; May 10.
Flumb loob. E. Bärth. 1,626,130; Apr. 26.
Flumbling fixture. H. W. A. Lehnert. 1,647,643; Nov. 1.
Flumbling fixture. H. W. A. Lehnert. 1,647,643; Nov. 1.
Flumbling fixture. H. W. A. Lehnert. 1,647,643; Nov. 1.
Flumbling fixture. H. W. A. Lehnert. 1,647,643; Nov. 1.
Flumbling f

900 Plumbing system. H. J. Luff. 1,650,221; Nov. 22. Plunger and making same, Reenforced. A. L. Schram. 1,635,439; July 12. Plunger, body, One-piece. H. M. Green. 1,636,935; Polishing composition. A. B. Fisher, 1,624,783; Apr. July 26. July 27. July 28. July 28. July 28. July 28. July 29. Jul Apr. 26. Apr. 26,
Pneumatic conveyer. R. C. Mahon. 1,641,181; Sept. 6,
Pneumatic elevating device, Portable. W. B. Thiemann.
1,619,277; Mar. 1.
Pneumatic elevator. A. H. Mitchell. 1,624,424; Apr. Pleumatic elevator. E. L. Soland. 1,614,160; Jan. 11. Pleumatic motor. E. H. Shaff. 1,633,512; Aug. 9. 11. Pleumatic motor. F. Volare 1,613,62; Aug. 9. 12. Pleumatic motor. F. Volare 1,613,62; Jan. 4. Pleumatic pad. J. A. Schinner. 1,624,807; Apr. 12. Pleumatic suspension fee by compressed air. H. Mercler. 1,648,908; Nov. 15. Pleumatic tube. W. L. Fairchild. 1,625,460; Apr. 19. Pleumatic wheel. F. K. Svenson. 1,624,688; Apr. 12. Pleumatically -operated lubricator. J. E. Erskine. 1,621,975; Mar. 22. Pocket. C. R. Wood. 1,639,830; Aug. 23. Pocket and pencil clasp. J. A. Ewen. 1,639,651; Aug. 23. Pocket article and the like. R. S. Blair. 1,632,785; June 21. June 21.

Pocketbook. A. H. Shillman. 1,624,987; Apr. 19.

Pocketbook fastening device. D. N. Gray. 1,630,002; May 24.

Pocketbooks, etc., Safety attachment for. C. Wetzel. 1,619,644; Mar. 1.

Pocket-building table. C. H. Desautels. 1,615,445; Jun. 25.

Pocket, Combination safety and pencil. J. I. McDonald. Phys. 2606; June 14.

Pocket construction, J. B. Morrow. 1,615,616; Jan. 25.

Pocket construction, Trousers. N. J. Ader. 1,618,039; Feb. 15. Pocket for garments. M. Rosenblum, 1,616,140; Feb. 15.

Pocket for garments. L. P. Lewandowski, 1,613,664;

Jan. 11.

Pocket for garments. M. Rosenblum, 1,616,140; Feb. 1. Jan. 11. Porvancewest. 1,613,664;
Pocket for garments. M. Rosenblum. 1,616,140; Feb. 1.
Pocket iron leather guard. E. Hamblin, fr. 1,627,967;
May 10.
Pocket lighter. A. F. Reilly. Des. 72,965; June 28.
Pocket or similar article, Wall. R. De Boer. Des. 73, 4ug. 28.
Pocket or similar article, Wall. G. E. Roedding. Des. 72,331; Mar. 29.
Pocket outlift for the care of teeth. J. R. Merrill. 1,642,620; Sept. 13.
Pocket pecupacker. I. W. R. Buxton. 1,630,654;
May 31. May 31.

Pocket, Reenforced. H. Kirschenbaum. 1,643,162;
Sept. 20.

Pocket, Safety. M. R. Layman. 1,619,140; Mar. 1.

Pocket, Safety. C. R. Wood. 1,649,636; Nov. 15.

Pocket, Safety. C. R. Wood. 1,649,636; Nov. 15.

Pocket, Shirt. W. B. Fields. 1,618,418; Feb. 2.

Pocket stand. O. Stumpf. 1,532,717; June 14.

Pockets. Tool-holding attachment for F. W. Taylor. 1,618,402; Feb. 22.

Poison composition. O. F. Hedenburg. 1,636,776; July 26. July 26.

Poisoning machines, Material-dispensing means for. J. Q. Shunk. 1,643,423; Sept. 27.

Polsons from fruit, Removing residual. E. M. Sears. 1,624,074; Apr. 12.

Poke-hole over. M. C. Blest. 1,619,055; Mar. 1.

Pole. O. M. KROX. 1,641,227; Sept. 6, June 21.

Pole end. W. F. Hofmann. Pos. 72,258; Mar. 22.

Pole-craming jack. A. M. Smith and A. W. Rhoades. 1,635,291; July 12.

Pole, Hollow. H. K. Walker. 1,638,515; Aug. 9.

Pole, Meral. W. D. Hamer. 1,617,331; Feb. 15.

Pole, Meral. W. Malone. Re16,684; July 19.

Pole, Meral. W. Malone. Re16,684; July 19.

Pole or post. A. H. Tashjian. 1,639,542; Aug. 16.

Pole-opneturing machine. R. D. Valentine. 1,621,963; Mar. 22. Foilsh applier, Liquid. W. A. Clark, 1,620,801; Mar. 15. Polish-rol clamp. T. 0'Boyle and R. G. Hamaker. 1,629,584; May 24. Polisher, Pupier schoe. O. J. Sund. 1,651,481; Dec. 6. Polisher, Floor. A. F. Stelert and O. W. Linke. 1,635,016; July 5. Pollsher, Roll. H. D. Weisgerber. 1,634,005; June 28. Pollsher, Stone. C. S. Cushman. 1,617,678; Feb. 15. Pollshing and cleaning machine. A. Peterson. 1,650,035; Nov. 22.

Polishing compound. C. D. Hall. 1,615,756; Jan. 25.
Polishing device. E. Fulda. 1,638,570; Aug. 9.
Polishing device, Rotary. C. H. Fennell. 1,617,838; Polishing device. E. Fulds Polishing device, Rotary-. Feb. 15. Polishing implement. P. C. P. Booty. 1 615 436 . Jan. 25.
Pollshing machine. R. G. Guthrle. 1,636,557; July 19.
Polishing machine. L. P. Halladay. 1,652,486; Dec. 18.
Pollshing machine. P. Miller. 1,641,984; Sept. 13.
Pollshing machine. Propowire. G. P. Findlay and W. W.
Johnston. 1,651,117; Nov. 29.
Pollshing machine, Floor. L. W. Gillis. 1,635,474;
July 12. Polishing machine, Floor. R. E. Merrill. 1,638,591; Aug. 5. Polishing machine for shoes, Hand. J. Skrzeczkowski. 1,645,357; Oct. 11. Polishing machines, Carriage for. W. H. Grant. 1,615,977; Feb. 1. The series of polishing machines, Polishing machines, and the series of polishing machines, Mar. 8. Polishing, Method of and apparatus for. W. Taylor and F. W. Preston. 1,624,299; Apr. 12. Polishing mitt. S. S. Millen. 1,643,722; Sept. 27. Polishing or abrading devices, Trough and splash guard for the polishing or buffer wheel. N. A. Strand. 1,634,275; Dec. 27. Polishing or sizing machine, Tube. N. Marshall. for rotary. S. H. Wilson. 1,639,419; Aug. 16.
Polishing or buffer wheel. N. A. Strand. 1,634,275;
Dec. 27.
Polishing or sizing machine, Tube. N. Marshall.
Polishing of Strang. 1,634,275;
Polishing spencifs and other rod-shaped bodies, Machine for. N. Schwänhausser and W. Schwänhausser.
1,640,910; Aug. 30.
Polishing wheel. J. Steiner. 1,619,442; Mar. 1.
Polishing wheel and treating same. V. E. Foster.
1,633,523; June 21.
Polishing wheel and treating same. W. E. Foster.
1,633,523; June 21.
Polishing wheel and treating same. W. E. Foster.
1,633,523; June 21.
Polishing wheel stone-compounds, Making. H. Essex and
A. L. Ward. 1,626,239; Apr. 26.
Polymerized styrol and its homologues and products obtained thereby, Obtaining colored. I. Ostromislensky.
Polymerized styrol and making the same, Ether of. J. G.
Davidson. 1,633,927; June 28.
Polyphase plate-circuit excitation system. A. Nyman and F. Conrad. 1,645,291; Oct. 11.
Polyphase transformer. E. C. M. Stahl. 1,614,161;
Jan. 11. Grebowice. 1,630,033; May 24. Polyphase transformer. E. C. M. Stan.

Jan. 11.

Pontoon. I. Grebowiec. 1,630,003; May 24.

Pontoon. Sectional. A. E. Cook. 1,637,336; Aug. 2.

Pool pockets, Machine for forming leathers for. G. A.
and A. F. Jacger. 1,636,000; July 19.
Pool. Swimming. P. C. Miller. 1,637,423; Aug. 2.

Pool tables, Pocket holder for. N. F. Rolley. 1,625,685;
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A Pool tables, Pocket holder for. N. F. Rolley. 1,625,685; Apr. 19.
Pop-corn shaker. A. Steger. 1,653,442; Dec. 20.
Pop-gorn. C. F. Lefever. 1,633,031; June 21.
Porcelain. F. H. Riddle. 1,631,695; June 7.
Porcelain. Making and molding hard. A. M. McIntosh.
Porch-rail fastener. I. A. Anderson. 1,644,768; Oct. 11.
Porches, Capstone for. C. March. 1,621,799; Mar. 22.
Porous cementitious article, Producing a. A. T. Schenck. 1,622,396; Mar. 29.
Porous masses for storing explosive gases and making same. G. Dalen. 1,623,469; Apr. 5.
Portable carrier. A. L. Addrich. 1,638,794; Aug. 9. Aug. 9.
Portable carrier. A. L. Aldrich. 1.638.794; Aug. 9.
Ortable elevator. J. Doelcher. 1.643.448; Scpt. 27
Portable elevator. G. C. and F. C. Good. 1.641.8
Sept. 6. 1.641.847: Sept. 6.

Portable elevator. E. Johnson, 1,641,891; Sept. 6.

Portable elevator. W. J. Taylor. 1,645,554; Oct. 18.

Portable rack. R. T. Romine. 1,637,960; Aug. 2.

Portable theft-proof box. N. Urovsky. 1,643,189; Sept. 20.

Portlere. E. Lengyel. Des. 72,267; Mar. 22.

Portleres, curtains, and the like, Support for. A. Marczukowski. 1,621,639 Mar. 22.

Mar. 22.

Tortlouing, cigarettes or other staff-shaped articles for the packaging of the same. G. C. Ekström and B. A. B. Johnson. 1,639,429; Aug. 16.

Portlouing machine. L. L. Knox and W. H. Lewis. 1,640,126; Aug. 23. Portioning cigarettees of our statissingue activities in the packaging of the same. G. C. Eström and B. A. B. Johnson. 1.639.429; Aug. 16.
Portioning machine. L. L. Knox and W. H. Lewis. 1.640.126; Aug. 23.
Position indicator. H. L. Tanner. 1.621,290; Mar. 15.
Positives by reversal, Obtaining direct. G. E. Zelger. 1.628.445; May 10. sst: 8ce—Back-up post.
Battery binding post.
Battery binding post.
Belloming post.
Fence post.
Fence fightening post.
Mall-box post.
Make-up post.
ost. H. Barkschat. Des. 72,924; June 28. Plumbing-plug post. Railway bumping post. Steering post. Tennis-net post. Tool post. Turret tool post.

Post. D. R. Scholes. 1,630,804; May 31.
Post and lighting standard, Combination. H. Barkschat.
Des. 72,590; May 10.
Post bracket, Adjustable. J. R. Goodwin. 1,636,185;
July 19.
Postage meter machines, Multiple die for. A. H. Pitney.
1,639,384; Aug. 16.
Postage-meter machines, Moistener and sealer for. A. H.
Pitney. J. W. Ogden. B. G. Northrop, and W. H.
Postage-meter machines, Separator for. A. H. Pitney.
J. W. Ogden, E. G. Northrop, and W. H. Wheeler, jr.
1,646,107; Oct. 18.
Postage-meter machines, Trip mechanism for. A. H.
Pitney, J. W. Ogden, E. G. Northrop, and W. H.
Wheeler, jr. 1,646,103; Oct. 18.
Postal franking machine. E. H. Kinnard. 1,637,647;
Aug. 2. clamp, Storage-battery-. J. W. Roy. 1,648,914; Nov Post Nov 15.
Post driver. C. B. Murton. 1,646,039; Oct. 18.
Poster board. J. T. Jackson. 1,626,755; May S.
Poster board. T. T. Jackson. 1,626,755; May S.
1,623,047; J. T. Jackson. 1,626,755; May S.
Posters, Stand for. C. F. Wallace. 1,631,608; June 7.
Posthole digger. O. Coll. 1,622,704; Mar. 29.
Postholes and wells, Auger for. H. Grothe. 1,639,939;
Paug. 23.
Postholes and Wells, Auger for. H. Grothe. 1,639,939; Aug. 23.

Pating mechanism. H. C. Einstein. 1,650,937; Nov. 29.

Pating lengt and stamp-canceling machine. W. H.

Pot: See—
Coffee and tea pot.
Coffee and tea pot.
Transplanting pot. Coffeepot. Transplanting pot. Melting pot. Melting pot. Pot construction. Fire. O. J. Grochn and W. Blaske-Pot for plants, Wooden. J. C. Finn. 1,631,409; June 7. Pot fare Automatic disconnecting. A. C. Rumble. 1,637,009; July 26. Pot-holder rack. F. Arnett and L. Welspiel. Des. 71,859; Jan. 18. der rack. F. Arnett and L. Welspiel. Des. 72,129; Mar. 8.

Mar. 8.

Mar. 8.

Pot or similar article. G. N. Allen. Des. 72,541; May 8.

Pot or similar article. W. A. Hastings. Des. 73,598;

Oct. 25.

Oct. 25.

W. Gray. 1.653,957; Dec. 27. Foct. 28. The article. W. A. Hastings. Des. 18,009; Co. 27.
Potato agitator. A. W. Gray. 1,653,957; Dec. 27.
Potato-chip machine, Automatic. F. L. Morrow. 1,629,355; May 17.
Potato cutter. E. R. Born. 1,617,194; Feb. 8.
Potato cutter and planter. P. Israelson. 1,628,770; May 17.
Potato digger. A. L. Moon. 1,615,716; Jan. 25.
Potato digger, Tractor. G. Thortvedt. 1,631,234; June 7.
Potato digger, Tractor-driven. O. Knoerzer. 1,650,991; Potato digger, Tractor-driven. O. Knoerzer. 1,650,991; Potato feeder. B. P. Sutherland. 1,622,686; Mar. 29.
Potato-laying machine. C. Ruetz. 1,619,488; Mar. 1.
Potato-mashing machine. A. E. Bergquist. 1,631,910; June 7. June 7. Potato-peeling machine. W. Mannsdorff. 1.637.830: Time 21. String device. 3. B. Sciente, 1,053,269; Margin 21. Pourings-spout container. D. G. Magilli. 1,624,268; Apr. 12. Powder and skin bleach, Combined face. F. A. Marsek. 1,620,269; Mar. 8. Powder applicator, Medical. E. C. Haas. 1,642,950; Sept. 20. C. C. Apablasa. Des. 73,991; Dec. 6. Powder box. G. Huret, Des. 73,870; Oct. 4. Powder box. J. J. Vogler, 1,616,384; Feb. 8. Powder box. J. J. Vogler, 1,616,384; Feb. 8. Powder box or similar article. P. L. Blazer, Des. 73,886; Oct. 25. Powder box or similar article. P. L. Blazer, Des. 73,886; Oct. 25. Powder and W. L. Rutkowski. 1,653,471; Dec. 20. Powder dargen. W. L. Rutkowski. 1,658,742; July 26.

Powder container. J. Heilbron. 1,644,377; Oct. 4.
Powder container. T. Kirby. 1,647,527; Nov. 1.
Powder container and toothbrush holder, Combined. A.
E. Hennen. 1,633,397; Aug. 9.
Powder container, Face. J. H. Kjellstrom. 1,630,437;
May 31.
Powder container, Loose. S. S. Radley. 1,624,874;
Apr. 12.
Apr. 13.
Apr. 14.
Apr. 14. Powder dispenser, Adjustable. A. J. Krank. 1,642,447; Sept. 13. Powder dispenser, Adjustable. A. J. Krank. 1,642,447; Sept. 13.

Powder-dispensing containers, Closure for. E. L. Kendall. 1,627,781; May 10.

Powder-dispensing devices, Protected bearing for. R. R. Powder-distributing device, Agricultural. R. R. Root. 1,619,316; Mar. 1.

1,619,316; Mar. 1.

Powder-distributing device, Fine. R. R. Root. 1,632,732; Dec. 13.

Powder-distributing device, Fine. R. R. Root. 1,632,732; Dec. 13.

Powder-distributing device, Fine. R. R. Root. 1,632,732; Dec. 13.

Powder pad. R. Root. 19.

Cooper. 1,624,996; Apr. 19.

Cooper. 1,624,996; Apr. 19.

Cooper. 1,624,996; Apr. 19.

Powder pad. G. T. Parr. 1,616,197; Feb. 1.

Powder pad. G. T. Parr. 1,616,197; Feb. 1.

Powder propellant. C. H. Keck. 1,634,754; Nov. 15.

Powder, Propellant. C. H. Keck. 1,631,455; Dec. 6.

Powder, Propellant. C. H. Keck. 1,631,455; Dec. 6.

Powder, Propellant. G. H. Keck. 1,631,455; Dec. 6.

Powder puff. J. J. Cosin. 1,634,175; June 28.

Powder puff. Folding. A. Willk. 1,626,992; May 3.

Powdering machine. H. R. Congdon. 1,638,566; Aug. 9.

Powdering machine. H. R. Congdon. 1,638,566; Aug. 9.

Powdering machine. H. R. Congdon. 1,638,566; Aug. 9.

Occan compressed-air nower. Ocean compressed-air power.
ower actuator. C. S. Bragg and V. W. Kllesrath. Ocean compressed air power.

Power actuator. C. S. Bragg and V. W. Kliesrath.
1.620,513; Mar. 8.
Power actuator. C. S. Bragg and V. W. Kliesrath.
1.639,285; Aug. 16.
Power actuator. C. S. Bragg and V. W. Kliesrath.
1.640,526; Aug. 30.
Power actuator. C. S. Bragg and V. W. Kliesrath.
1.653,146; Dec. 20.
Power actuators, Providing suction for operating. C. S.
Bragg and V. W. Kliesrath. 1.639,979; Aug. 23.
Power apparatus, Hydraulic. B. A. Bristow. 1,635,457;
Power apparatus, Hydraulic. E. Temens. 1,615,103;
Jan. 18.
Power attachments, Governor for. G. B. Maxwell. Jan. 18.

Power attachments, Governor for. G. B. Maxwell, 1,627,660; May 10.

L627,660; May 10.

Lower baling press, J. Hansen. 1,645,906; Oct. 18.

Power back. A. Dewandre. Re16,724; Aug. 30.

Power check writer. J. Whitaker. 1,649,632; Nov. 15.

Power check writer. J. Whitaker. 1,636,322; Nov. 15.

Luly 19.

Power controller. J. G. Maclaren. 1,637,314; July 26.

Power, Device for transmitting. J. R. Rogers. 1,635,585; July 12. Power-factor meter. R. D. Erans. 1,621,006; Mor. 15. Power-factor meter, Graphic. R. T. Pierce. 1,652,495; Doc. 13. Power fork. S. Davey. 1,625,526; Apr. 19. Power-generating device, Wind. G. Silvestrin. 1,633,460; June 21. Power-generating device, Wind. G. Silvestrin. 1,633,460; June 21. Power generator. W. M. Smith. 1,631,069; May 31. Power installation. R. W. Davis. 1,633,166-7; June 21. Power Mechanical means for transmitting. R. J. Reaney. Power mechanism. G. W. Crumrine. 1,643,657; Sept. 20. Power mechanism. G. N. Simpson. 1,630,809-10; May 31. Power mechanism. R. G. Thompson and C. W. Crumrine. 1,644,645; Oct. 25. Power mechanism. A. F. Williams. 1,643,041; Sept. 20. Power-operated machines, Controller for. F. H. Oberschmidt. 1,634,382; July 3. Power plant. M. Skohison. 1,644,845; Sept. 6. Power plant. W. L. Jeffreys. 1,637,115; July 26. Power plant. E. R. Newton. 1,634,797; July 5. Power plant. E. R. Newton. 1,634,797; July 5. Power plant. T. Stein. 1,644,754; Oct. 11. Power plant. T. Stein. 1,644,754; Oct. 11. Power plant. Condensing-steam. C. A. Parsons and S. S. Cook. 1,618,722; Feb. 22. S. S. Cook. 1,618,722; Feb. 22.
Power plant, Converted motor-, A. B. Simon. 1,614,402;
Jan. 1.
Power-plant installations, Protective system for R.
Pohl. 1,641,691; Sept. 6.
Power plant installations, Protective system for R.
Power plant, Steam. C. A. French. 1,617,596; Feb. 15.
Power plant utilizing steam at different pressures, Portable, O. H. Hartmann and F. Wempe. 1,303,548; July 12. Power press. Z. P. Candee. 1,632.462; June 14 Power press. J. C. Ledbetter. 1,640,609; Aug. 30 Power press. J. C. Ledbetter. 1,642,252; Sept. 1

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Power presses, Clutch-operating mechanism for. E. W. Zeh. 1,630,882; May 31. Power production from solid fuel, Large scale. W. T. Bottonley and E. G. Weeks. 1,615,003; Jan. 18. Power shovel. C. E. Davis. 1,643,704; Sept. 27. Power shovel. C. E. Davis. 1,643,704; Sept. 27. Power shovel. J. S. Huber. 1,625,855; Apr. 26. Power shovel. J. D. Rauch. 1,635,434; July 12. Power shovel. G. T. Rosselle. 1,649,739; Nov. 15. Power shovel. L. A. Russell. 1,639,732; Aug. 28. Power shovel. W. W. Sloane. 1,640,055; Aug. 23. May 17. Power spring, Flat spiral. A. S. Howell. 1,625,668; May 17. Power structure, Upitary. J. B. Fisher. 1,652,668; Nower structure, Upitary. J. B. Fisher. 1,652,668;
              ower structure, Unitary, J. B. Fisher,
Dec. 13.
   Power
                                                                                                                                                                                                                                                                  1.652.432:
   P. McC. Assem. J. D. Hilliard. 1,624,729; Apr. 12. Power system. J. I. Hull. 1,835,788; July 12. Power system. Electric. J. J. Kane. 1,643,213; Sept. 20. Power system. Stem. I. Harter. 1,635,410; July 12. Power take-off. T. A. Jones. 1,633,814; June 28. Power take-off. T. A. Jones. 1,633,814; June 28. Power take-off. evice. J. M. Custenborder. 1,639,630;
   Power take-off device. H. J. Riach. 1,639,812; Aug. 16.
Power take-off device. H. J. Riach. 1,639,812; Aug. 23.
Power take-off device. A. H. Warren. 1,623,765; Apr. 5.
Power transformation. G. H. Schieferstein. 1,615,655;
                                               transmission
                                                                                                                                     G. Constantinesco.
                                                                                                                                                                                                                                                                  1,613,344;
    Power transmission. C. G. Garrard. 1,623,052;
Power transmission. W. W. Henderson. 1,
Sept. 6.
                                                                                                                                                                                                                                                                    2; Apr. 5.
1.641,428;
              ower transmission. F. A. Howard. 1,653,360; Dec. 20. wer transmission. M. R. Hutchison. 1,615,544; Jan. 25.
    Power transmission.
   Power
 Apr. 26.
Power-transmission device. A. S. Newmark. 1,631,500;
Power-transmission device. A S. Account.

June 7.

Power-transmission device, Combination. G. M. Mosher.

1,624,145; Apr. 12.

Power-transmission device, Reversible. O. A. Wibers.

1,621,228; Mar. 15.

Aug. 16.

Power transmission, Electric. A. M. Taylor. 1,639,473;

Aug. 16.

Power transmission, Electrical. E. Clarke. 1,641,737;

Sept. 6.

Power transmission, Fluid. E. H. McKinney. 1,633,550;

June 21.

June 21.
 June 21.

Super-transmission lines, Arrangement for coupling high-frequency apparatus to, M. Lock. 1,645,536; Oct. 18.

Sower-transmission mechanism, A. E. L. Chorlton. 1,619,703; Mar. 1.

Power-transmission mechanism, C. A. Criqui and E. T. Larkin, 1,639,259; Aug. 16.

Sower-transmission mechanism, P. C. Day, 1,616,415; Feb. 1.

Power-transmission mechanism, T. Dunbar, 1,652,819; Dec. 13.
    Dec. 13.
Power-transmission mechanism, C. Pallenberg, 1,613,191;
   Jan. 4.
Power-transmission mechanism. W. I. Wheeler.
1,614,637; Jan. 18.
Power transmission mechanism, Hydraulle.
1,627,294; May 3.
Power-transmission pulley. G. J. Abbott.
1,637,402;
    Aug. 2.
Power transmission, Selective. R. L. Dailey. 1,613,646;
    Jan. 11.
Power-transmission system. J. W. Thropp. 1,621,385;
    Power-transmission system. J. W. Thropp. 1,021,385; Mar. 15.
Power-transmission unit. J. H. Maxim. 1,628,260; May 10.
Power-transmission unit. F. Miller. 1,634,376; July 5.
 May 10.

Power-transmission unit. F. Miller. 1,634,376; July 5.

Power transmissions, Fluid-pressure control for. R. Q.

Davis. 1,633,981; June 28.

Power transmitter, Hydraulic. G. A. Klimek. 1,640,608;

Power-transmitting apparatus. E. F. Austin and A. F.

Phelps. 1,622,076; Mar. 22.

Power-transmitting apparatus. N. H. Sooy. 1,618,785;

Feb. 22.

Power-transmitting device. J. Arter and E. Schelling. 1,629,092; May 24.

Power-transmitting device. P. L. Clark. 1,639,925;

Power-transmitting device. W. J. Francke. Re16,829;

Dec. 27.

Power-transmitting device. W. J. Francke. Re16,829;
    Poec 27.

Dec 27.

De
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Power-transmitting device. C. McPherson. 1,649,611; Nov. 15. Power-transmitting means. E. E. Clark. Power-transmitting means. E. E. Clark. 1,651,097; Dec. 6.
Power-transmitting means. H. H. Frick. 1,645,746; Oct. 18.
Power-transmitting mechanism. J. W. Deroche. 1,639,260; Aug. 16.
Power-transmitting mechanism. D. H. Martin. 1,629,518; May 24. Power-transmitting mechanism. L. Melanowski. 1.613,566; Jan Power-transmitting mechanism. L. Melanowski. 1,615,397; Jan. 25. Power-transmitting mechanism. L. Melanowski. 1,617,265; Reb Power-transmitting mechanism. N. H. Soov. 1.618.786: Feb. 22.

Power-transmitting mechanism, Electrodynamic. J. F. Gill and J. N. Chaviara. 1,635,319; July 12.

Power transmitting system. L. A. Umansky, 1,622,561; Mar. 29.

Power wheel. A. J. Larkin. 1,620,363; Mar. 8.

Power wheel. A. J. Larkin. 1,634,602; July 5.

Practicing riding sport, Appliance for. W. Schoenke. 1,619,438; Mar. 1.

Frayer rail. J. J. Hiering. Apparatus for. L. D. Mills and T. B. Crowe. 1,634,720; July 5.

Precision adjustment device. J. R. Gammeter. 1,639,885; Aug. 23. Aug. 25.
Precioin indicator. K. Lauer. 1,648,138; Nov. 8.
Precooling structure. C. A. Moore. 1,654,343; Dec. 27.
Preservative and forming the same. R. H. Schumacher. 1,647,937; Nov. 1.
Preserver containers, Device for effecting a sterile closure for. E. Pause. 1,629,359; Miny 17.
Preserver jar. W. Menne. 1,629,833; May 24.
Preserving apparatus. C. C. E. Kersten. 1,636,661; July 16. Pour vine fruit. W. B. McLaughlin, 1.631,974; June 14. Preserving jnr, Food. H. Ritter. 1,623,764; Apr. 5. Preserving posts, Methods and apparatus for. M. E. Brown. 1,627,829; May 10. Preserving vessels and the like, Closure for. K. Telchmann, 1,614,022; Jan. 11. mann. Press: See— Baling press. Bending press. Machine press.
Molding press.
Packing press.
Pencil-printing press.
Photo-printing press. nress Block press. Clothes press. Continuous press. Continuous press.
Conveyer press.
Cutting press.
Die press.
Drawing press.
Electric press.
Extrusion press.
Friter press.
Freezing press.
Freezing press. Pipe press.
Plait press.
Powder press.
Power baling press. Power press. Printing press. Pulp-forming press. Pulp press. Punch press. Fruit press. Garment press. Hamburger press. Punch press. Riveting press. Seal press. Shearing and forging press. Hand press.

Hydraulic press.

Lettering press.

Luttering press.

Luttering press.

Hie p Hand press. Hydraulic Press and Mar. 29 Press apparatus, Molding. H. M. Sturgeon. 1,623,022; Mar. 20.

Press botter-adjusting construction, Forcings. G. E. Press botter adjustment. 11. C. Budfington and G. E. Weaver. 1,650,818; Nov. 20.

Press botter adjustment. 11. C. Budfington and G. E. Weaver. 1,650,818; Nov. 20.

Press brake. R. T. Hazelton. 1,618,825; Feb. 22.

Press control, Power. A. A. Byerlein. 1,636,497; July 19.

Press feeding. P. W. Larsson and O. E. Forsberg. Press for operating on metal sheets or for like purposes. H. A. and R. H. Griffiths. 1,615,623; Jan. 26.

Press of printing. embossing, or the like. R. P. Link. 1,635,132; July 5.

Press of printing. embossing. or the like. R. P. Link. 1,635,132; July 5.

Press plates, Machine for making offset. A. T. Koppe. Press plates, Machine for making. A. T. Koppe. 1,639,738; Aug. 23.

Press-ring washer. P. G. Ehrhardt. 1,640,650; Aug. 30.

Pressing apparatus. M. Rosenblum. 1,626,253; Apr. 26.

Pressing a apparatus, Hydraulic. C. Wigtel. 1,628,094; Pressing apparatus, 11,200.

May 10.

Pressing arm. A. Hopkins, 1,622,195; Mar. 22.

Inn. 18.

Pressing iron, H. C. D'Annunzio, 1,615,072, Jan. 18.

Pressing machine.

J. P. Dally 1,329,071; May 17.

Pressing machine.

J. Demenark. 1,628,792; May 3.

Pressing machine.

W. F. Haacke. 1,635,616; July 12.

Pressing machine.

E. D. Stocker and J. C. Ledbetter. Pressing machine. E. D. Stocker and J. C. Ledbetter. 1,653,192; Dec. 20. Pressing machine. A. Zeman. 1,620,248; Mar. 8. Pressing machine control. P. N. Braun. 1,637,729; Aug. Z.
Pressing-machine elements, Woven-wire cloth covering for.
G. F. Simpson. 1,639,458; Aug. 16.
Pressing machine for garments and the like. E. J.
Schremp. 1,631,770; June 7.
Pressing machine, Garment. A. R. Braun. 1,640,142; Pressing machine, Garment. A. R. Braun. 1,640,142; Aug. 23. Pressing machine, Garment. H. E. Page. 1,623,358; Apr. 5. Apr. 5.
Pressing-machine mechanism. A. B. Clisson. 1,639,427;
Aug. 16.

Davis. 1,635,610; Aug. 16.
Pressing-machine mechanism.
July 12. July 12.
Pressing-machine mechanism, Triple tandem. A. B. Clisson. 1,632,463; June 14.
Pressing-machine-operating mechanism. E. Davis. 1,652,706; Dec. 18. 1,652,706; Dec. 13.
Pressing machine (sliding head). P. N. Braun. 1,647,501;
Nov. 1.
Pressing machines, Attachment for steam. J. W. De
Ford. 1,638,293; Aug. 9.
Pressing machines having a start and stop motor,
Mechanism for. J. P. Daly. 1,640,144; Aug. 23.
Pressing machines, Pad for. H. Diener. 1,610,356; Pressing machines, Pad for. H. Diener. 1,010,000, Pressing machines, Power attachment for. C. E. Waream. 1,640,015; Aug. 23.

Presses and like machines, Construction of bearer plates for use in. F. Humphris. 1,643,893: Sept. 27.

Presses and like machines, Edge pressure plate for use in. F. Humphris. 1,645,849; Nov. 68.

Presses, All Like machines, Edge pressure plate for use in. F. Humphris. 1,645,849; Nov. 68.

Presses, A like machines, Edge pressure plate for use in. F. Humphris. 1,645,849; Nov. 68.

Presses, A frangement for disengaging the friction coupling of eccentric. L. Schull. 1,616,830; Feb. 8.

Presses, A frangement for disengaging the friction coupling of eccentric. L. Schull. 1,616,830; Feb. 8.

Presses, A frangement for printing. W. J. Mee and H. A. Tullis. 1,050,025; Nov. 22.

D. D. Huyett. 1,641,632: Sept. 6.

Presses, Charger for. H. Ackermann. 1,652,883; Dec. 13. Presses, Cushioning means for power. 1.633.267: June 21. 1.683.267; June 21.
Presses, Cylinder-stripping device for multicylinder. F. S.
English and T. L. Perey, 1,622,959; May 17.
Presses, Driving mechanism for. L. Schull. 1,618,479;
Feb. 22. Press, Ciripper-tensioning mechanism for. F. S. Eng-lish, 16,25,768; May 17. Presses, Gripper-tensioning mechanism for. F. S. Eng-lish and T. L. Perry, 1,623,960; May 17. Presses, Guard for punch. E. Ischinger, 1,648,232; Nov. S. Nov. 8. Guard for punch. E. Ischinger, 1,652,719; Presses, Guard for punch. E. Ischinger, 1,652,719; Dec. 18. D Presses, Printing cylinder for rotary. S. Smith. 1,648,698; Nov. 8. Presses, Rotary roll-paper feeder for two-revolution cyl-inder. A. Dager. 1,045,094; Oct. 11. Presses, Safety device for. E. Secor. 1,648,259; Sept. 2, Fresses, S. Ricky, device for purposes. Ricky, device for purposes. S. Fresses, Sheel-delivery mechanism for F. S. English. 1,619,106; Mar. 1. mechanism for multicylinder. 1,619,106; Mar. 1.

Presses, Sheet-transfer mechanism for multicylinder.

T. L. Perry and F. S. English. 1,651,409; Dec. 6.

Presses, Shock, absorber for power plate. J. J. Halliwell.

Presses, Type cylinder for rotary. A. F. Osterlind.

1,614,801; Jan. 18.

Presser foot. H. R. Rush. 1,615,042; Jan. 18.

Presser foot. C. L. Thomas. 1,623,075; Apr. 5.

Pressure-actuated circuit breaker. P. B. Parks and J.

Van Vulpen. 1,620,127; Mar. S.

1,619,866; Mar. Control device. H. A. Hoeschen.

1,619,866; Mar. Restructed switch. Combined. J. E. Mc. Pressure and float actuated switch, Combined. I. E. Mc-Cabe. 1.644.935; Oct. 11. Pressure and suction distributing mechanism. F. Remy. 1.644.792; Oct. 11. Pressure bags, Folder for. W. F. Irrgang. 1,627,779; Pressure bags, Folder for. W. F. Irrgang. 1,627,779; May 10. Pressure burner, Hand-pump. J. H. Hunt and H. Wallace. 1,640,774; Aug. 30.

Pressure containers, Discharge manifold for. W. C. Mc-Keown. 1,625,044; Apr. 19. Pressure-control apparatus. C. A. Sabbah. 1,618,109; Feb. 15. Pressure-control apparatus, Automatic, J. Astrom. 1,646,847; Oct. 25 Pressure-control device. S. C. Brady, 1,626,073; Apr. 26. Pressure-control device. G. E. Hazard. 1,636,561; re-control July 19.
Pressure cushion. F. J. Rode. 1,636,110; July 19.
Pressure cushion. F. J. Rode. device. J. Wilkinson. 1,634.708; Nov. 8.
1,634.708; Nov. 8.
Pressure gauge. H. Clerk. 1,625,085; Apr. 26.
Pressure gauge. W. P. Dalrymple. 1,645,184; Oct. 11.
Pressure gauge. J. T. Duffy. 1,616,032; Feb. 1.
Pressure gauge. J. F. Griffin. 1,621,320; Mar. 15.
Pressure gauge. J. F. Griffin. 1,622,517; Mar. 20.
Pressure gauge. J. H. Johnson. 1,622,517; Mar. 29.
Pressure gauge. J. H. Wyan. 1,636,0482; Mar. 8.
Pressure gauge. J. Weisler. 1,684,204; Nar. 8.
Pressure gauge. J. Weisler. 1,684,204; Nar. 8.
Pressure gauge. J. Weisler. 1,688,204; Nov. 19.
Prossure gauge. J. Weisler. 1,688,204; Nov. 19.
Prossure gauge. J. Weisler. 1,687,342; Nov. 19.
Prossure gauge. Lieutrical. H. Dystein. 1,638,514; essure gauge, Electrical, Aug. 9. Nov. H. Enstein. 1,638,814; Aug. 5. Pressure gauge, Gasoline. 1. Aug. 25. Pressure gauge, Piston. J. Shebol and W. F. Albrecht. 1,642,563; Sept. 13. Pressure indicator. A. B. Cunningham. 1,614,457; Pressure indicator. A. B. Cunningham. 1,614,457; Pressure Rauge, Paron. J. Succord and I. (1,642,563; Sept. 13. B. Cunningham. 1,614,457; Pressure indicator. E. W. Lipschutz. 1,637,421; Aug. 2. Pressure indicator. Electrical tire. V. E. Rouch and J. Abbott. 1,652,733; Dec. 13. Pressure indicator for showing gasoline height. T. M. Bynon. 1,615,263; Jan. 25. L. Solberg. 1,625,751; Apr. 13. Pressure indicator for showing gasoline height. T. M. Eynon. 1,615,263; Jan. 25. L. Solberg. 1,625,751; Apr. 13. Pressure indicator for showing gasoline height. T. M. Pressure indicator. J. F. MacIndoe. 1,644,343; Oct. 4. Pressure indicator. H. Ratyca. 1,643,956; Oct. 4. Pressure indicator. H. Ratyca. 1,643,956; Oct. 4. Pressure indicator. H. Ratyca. 1,628,291; May 10. Pressure motional fically relieving the pressure on. W. E. Abbott and J. R. Elgey. 1,628,291; May 10. Pressure meter. T. K. A. Nordensson. 1,637,653; Aug. 2. Pressure meter. Differential. R. Bosselmann. 1,650,060; Nov. 22. Pressure motor, Rotary fluid. M. P. Holmes. 1,637,568; Aug. 2. Aug. 2.
Pressure oil can. F. M. Dilley and C. F. Hallberg.
1,620,595; Mar. e. pansion device, Variable. C. E. P.
Gourdon 1,531,262; June 7.
Pressure-operated regulator, Fluid. T. Lindsay,
1,619,351; Mar. 1.
Pressure-pad-control device. F. J. Rode. 1,629,538;
May 24. Pressure processing. G. P. White. 1.621,698; Ma Pressure-reducing and gas-flow-regulating valve bined. H. F. Blomquist and G. C. Miller. 1,6 1,621,698; Mar. 22 1,651,507: Pressure-reducing device. J. O. Carrey. 1,638,110: Pressure-regulating apparatus. W. C. Shield. 1,628,859; May 17. Masy 1.7.

Messaure regulator. C. J. Coberly. 1,613,743; Jan. 11.

Pressure regulator. T. Coles. 14837.764; Aug. 2.

Pressure regulator. G. W. Engstrom. 1,613,879; Jan. 11.

Pressure regulator. R. G. Hubbard. 1,635,274; July 12.

Pressure regulator. R. E. Joyce. 1,622,151; Mar. 22.

Pressure regulator. W. F. Kriebbaum. 1,615,285; Jan. 25.
Pressure regulator.

A. M. Nichols. 1.637.085; July 26.
Pressure regulator.

E. Walker. 1.653.445; Dec. 20.
Pressure regulator.

J. M. Wilkins. 1.651.237; Nov. 29.
Pressure regulator, M. Wilkins. 1.651.237; Nov. 29. Apr. 5. Pressure-regulator casing. R. J. Kehl. Des. 72,830; June 14 Pressure-responsive device. D. M. Reeves. 1,634,961; July 5. Pressure still. A. J. Sloan. 1,619,440; Mar. 1. Pressure switch. C. P. Eisenhauer. 1,619,465; Mar. 1. Pressure tempering. G. W. O. Martin. 1,613,521; Jan. 4.
Price-card holder, A. Aquila. 1,645.640; Oct. 18.
Price indicator. W. A. McIntyre. 1.647,877; Nov. 1.
Price marker. J. H. Alden. 1.643,267; Sept. 20.
Price-tag-supporting means. F. Scott. 1,641,637; Sent. 6.
Primary battery. G. S. Engle. 1.637,991; Aug. 2.
Prime movers, Control of. E. Crewdson. 1,637,636;
Aug. 2. Prime movers, Controlling. F. and H. White. 1,641,943; Sept. 6. Prime movers, Governing mechanism for. W. L. R. Emmet. 1,620,527; Mar. 8. Primer. C. L. Butterfield and J. Sawdon. 1,648,258;

Primer, C. L. Butterneud and V. Nov. 8, Primer, P. J. Regan. 1.652.731; Dec. 13, Primer and gas mixer, Combined. F. Krelsel. 1,616,534; Fcb. 8.

Priming and vacuum tank. S. M. Hansen. 1,640,404; Aug. 30. Priming device. H. H. Bridge. 1,636,897; July 26. Print-bar mechanism. W. W. Lasker. 1,624,056; Apr. 19. Print papers. Method and menns for sensitizing. J. L. Casares. 1,623,49 Apr. 19. Printer papers. Method and menns for sensitizing. J. L. Printed form. H. O. Bonnar. 1,629,013; Mar. 22. Printed products, Slow-down mechanism for. E. P. Sheldon. 1,624,985; Apr. 19. Printer. E. J. Von Pein. 1,624,124; Apr. 12. Printer device, Tabulating card. J. W. Bryce. 1,620,068; Mar. 8. Printer device, Tabulating card. J. W. Bryce. 1,620,068; Mar. 8. Printer device, Tabulating card. J. W. Bryce. 1,629,068; Mar. 8. Printer device, Tabulating card. J. W. Bryce. 1,629,068; Mar. 8. Printer device, Tabulating card. J. W. Bryce. 1,626,069; Printer's composing stick. E. H. Rathbun. 1,644,033; Oct. 4. Printer's composing steading for unevenness in. L. J. Oct. 4, 174 pp. Compensating for unevenness in. L. J. 184 pp. 18 Printing ampulse, Machine for. A. Brand. 1,626,912; May 3. Printing and assembling manifolding books, pads, etc., Apparatus for. H. P. Brown. 1,621,139; Mar. 15. Printing and bronzing machine, Combined. E. R. Linebaugh. 1,641,177; Sept. 6. Printing apparatus. G. A. Mayer. 1,646,034; Oct. 18. Printing apparatus. G. L. Post. 1,623,975; Apr. 12. Printing apparatus. G. Waltere 1,634,555; July 5. Printing apparatus. G. H. Waltere 1,634,555; July 6. Printing apparatus. G. H. Waltere 1,634,555; July 6. Printing apparatus. G. H. Waltere 1,634,636; Nov. 1. Printing apparatus, Hand. A. Büchl. 1,647,967; Nov. 1. Printing apparatus, Hand. A. Büchl. 1,647,967; Nov. 1. Printing apparatus, Transfer. R. Weide. 1,635,297; July 12. Printing apparatus, Work-ejecting mechanism for. C. G. Printing apparatus, transcert.
July 12.
Printing apparatus, Work-ejecting mechanism for. C. G.
Tifefe. 1,626,649; Marg.
Tifefe. 1,626,649; Marg.
Tifefe. 1,626,649; Marg.
T. McGinnis. 1,651,143; Nov. 29.
Printing art. P. P. Merrill. 1,641,772; Sept. 6.
Printing attachment, Offset. D. Belcher. 1,653,198;
Dec. 20. Dec. 20.
Printing attachments, Facsimile. S. H. Plum. 1,625,908; Printing blocks or plates, Holding device for. J. C. F. A. Schütte. 1,645,876; Oct. 18.
Printing chase. C. Chisholm. 1,640,347; Aug. 30.
Printing data on racing programs, Device for automatically. R. T. Burke. 1,647,341; Nov. 1.
Printing designs. A. S. Speer. 1,640,678; Aug. 30.
Printing designs. Apparatus for. A. S. Speer. 1,640,678; Aug. 30.
Aug. 30. Printing designs, Apparatus 107.

Aug. 30.

Printing device. R. J. Delehanty. 1.642.016; Sept. 13.

Printing device. J. S. Duncan. 1.613.385; Jan. 4.

Printing device. J. S. Duncan. 1.613.385; Jan. 4.

Printing device. Automatic bulb. J. J. Higgins and R.

H. Burns. 1.647.625; Nov. 1.

Printing device having changeable form. V. H. Kline. 1.627.42; May 3.

Printing device, Rotary. F. W. Storck. 1.629.130;

Printing die. H. R. Wade and L. M. Harley. 1.637,094;

July 26. July 26.
Printing-die structure, R. F. Jahn, 1,23,478; Apr. 5.
Printing, drying, and embossing machine, MulticolorJ. Moscini, 1,651,925; Dec. 6.
Printing form and producing same. E. S. Ballard, 1,643,046; Sept. 20.
Printing form, Changeable. C. Chisholm, Re16,777;
Oct. 25. forms. Locking, device for A. J. Blazek Printing forms, Locking device for A. J. Blazek.
Printing forms, Locking device for A. J. Blazek.
1.637,069; July 26.
Printing forms, Process and apparatus for producing continuous strip elements of. P. S. Murphy. 1,614,626;
Jan. 18. Printing frame, Photographic. P. F. Kahler. 1,638,936; Aug. 16. Aug. 16.
Printing from negatives onto sensitized surfaces, Apparatus for. G. Rein. 1.646.595; Oct. 25.
Printing machine. F. Bridges, H. Firman, H. W. Tisdale, and B. D. W. Hoskins. 1,644,232; Oct. 4.
Printing machine. L. M. C. A. Dubuc. 1,652,470; Printing machine. Dec. 13. Printing machine. L. M. C. S. Printing machine. C. T. Frantz. 1,626,401; Apr. 26. Printing machine. C. A. Kellogg. 1,627,182; May 3. Printing machine. J. J. Leary. 1,627,041; May 3. Printing machine. W. G. Reynolds. 1,623,593; Apr. 26. Printing machine. D. J. Scott. 1,646,114; Oct. 18. Printing machine. Printing machine. P. W. Smith. 1,645,892; Oct. 18. Printing machine. F. W. Smith. 1,645,892; Oct. 18. Printing machine. F. W. Wright. 1,644,218; Oct. 4. Printing machine. F. W. Wright. 1,644,218; Oct. 4. Printing machine. Card-controlled. F. M. Carroll. Figure 1. State of the Card-controlled. F. M. Carroll. 1.623,163; Apr. 5.

Printing machine. Color or chromatic. E. Bueno. 1.650,110; Nov. 22.

Printing machine. Fabric. A. Crompton. 1.649,812; Nov. 22.

Nov. 22. Printing machine, Fabric.

Nov. 22.

Printing machine, Fabric. G. W. Simpson. 1,612,949;

Printing machine for printing on sheets, Intaglio. II.

Fischer. 1,650,339; Nov. 22.

Printing machine, Hand-operated bulletin. W. K. Sheffeld and A. J. Horton. 1,616,927; Feb. 8.

Printing machine, Ink fountain for. H. A. W. Wood. 1,648,209; Nov. 8. Printing machine, Intaglio. A. M. Zuckerman. 1,629,137; Printing machine, Manifold-web-. J. A. B. Smith. 1,624,688; Apr. 1,2 Manifold-web-. J. A. B. Smith. 1,624,688; Apr. 1,2 Manifold-web-. J. A. B. Smith. 1,614,241; Jan 1. Printing machine, Photographic. A. S. Howell. Pinting machine, Plate. R. K. Carson. 1,641,622; Sept. 6. Printing machine, Plate. G. W. Goldsworthy. 1,870,500. Sept. 5.
Printing machine, Plate-. G. W. Goldsworthy. 1,649,583;
Nov. 15.
Printing machine, Rotary. J. Murray. 1,617,342;
Feb. 15. Printing machine, Rotary. L. Ramdor. 1,616,922; Feb. 8. Feb. 8. Printing machine, Rotary intaglio. W. Pickup. and J. Berry. 1,654,431; Dec. 27. Printing machine, Rotary intaglio. A. Weiss. 1,631,169; June 7. Printing machine, Rotary-intaglio. C. Winkler. 1,647,948; Nov. 1.

Printing machine, Selective. A. L. Priestley. 1,643,008; Sept. 27.

Printing machine, Sheet-delivery mechanism for. J. W. Jakeman, 1,639,184; Aug. 16.

Printing machine. Textile. J. W. Wolstenholme. Printing machine with changeable form. L. H. Morse. 1,627,663; May 10.

Printing machinery. W. E. Molins. 1,651,007; Nov. 29.

Printing machinery. Multicolor. S. L. Sharpless. Printing machinery. Multicolor. S. L. Sharpless. Printing machinery. Tripping mechanism for. S. L. Sharpless. Printing machinery. Tripping mechanism for. S. L. Sharpless. Printing machines and the like, Sheet-feeding mechanism for. A. Büttner. 1,653,839; Dec. 27.

Printing machines, Apparatus for printing late news in newspaper. E. W. Smith. 1,654,055; Dec. 27.

Printing machines, attachment for envelope for blanker. Printing machines, attachment for envelope for blanker. Printing machines, ledlerry weethanism for. F. W. Wright. 1,614,940; Jan. 18.

Printing machines, Inking device for. H. P. Elliott. 1,614,547; Jan. 18.

Printing machines, Inking mechanism of planographic rotary. A. B. Evans. 1,654,250; Dec. 27.

Printing machines, Inking mechanism of planographic rotary. A. B. Evans. 1,654,250; Dec. 27.

Printing machines, Paper detector for. J. A. Hult. 1,614,624; Apr. 1,01 Printing machine, Selective. A. L. Priestley. 1,643,608; Sept. 27. July 12.
Printing machines, Paper detector for. J. A. Hult, 1,625,256; Apr. 19.
Printing machines, Paper detector for. L. H. Morse, 1,640,366; Aug. 30.
Printing machines, Platen-controlling mechanism for. C. Chisholm, and P. M. Colquboun. 1,647,560; Nov. 1.
Printing machines, Sheet-delivery mechanism for. T. R. G. Parker and F. Spence. 1,651,298; Nov. 29.
Printing machines, Sheet feeding and delivering mechanism for. C. L. Stern and A. V. Bugler. 1,617,668; Printing machines, Sheet feeding and delivering mechanism. Printing machines, Sheet feeding and delivering mechanism for. C. L. Stern and A. V. Bugler. 1,647,377; Nov. 1. Nov. 1.

Printing machines, Sheet-feeding mechanism for rotary.

C. F. Green. 1.633,568; Dec. 27.

Printing machines, Starting and stopping device for offset. L. Horn. 1,617,713; Feb. 15.

Printing machines, Web guide for rotary. L. A. Schmidt.

1.613,960; Jan. 11.

Printing mechanism to guide for rotary. L. A. Schmidt.

1.614,2451; Sept. 13.

Printing mechanism. Web-guiding mechanism for. J. J.

Printing mechanism. H. Thellgaard. 1,628,078; May 10.

Printing numbers. M. L. Parsons. 1,636,359; Nov. 15.

Printing numbers. M. L. Parsons. 1,605,635; Nov. 22.

Printing numbers. M. L. Parsons. 1,645,450; Cot. 11.

Printing on Jamo builds. Inking davice for chisting on Printing the. F. J. Albert. 1,645,460;

Oct. 11. Device for eliminating the. F. J. Albert. 1,645,409; Oct. 11.

10 orm M. N. Fredenburgh. 1,645,045; Oct. 11.

Printing plate and mold therefor, Making late-news. H. A. W. Wood. 1,636,346; July 19.

Printing plate and producing the same. Photocollographic. M. de Sperati. 1,625,714; Apr. 19.

Printing plate and producing the same. Photocollographic. M. de Sperati. 1,625,714; Apr. 19.

Printing plate and the like. J. Krell. 1,616,089; Feb. 1

Printing plate and the like. J. Krell. 1,616,089; Feb. 1

Printing plate eylinder for rotary intaglio. C. Winkler. 1,643,145; Sept. 20.

Printing plate eylinder for rotary intaglio. C. Winkler. 1,643,145; Sept. 20.

Printing plates. Apparatus for curving. A. Halstead, Jr. 1,637,747; Aug. 2.

Printing plates. Casting and fluishing machine for curved stereotype. H. A. W. Wood. 1,627,817; May 10.

Printing plates. Machine for bending. C. N. Smith. 1,640,582; Aug. 30.

Printing plates. Machine for correcting. E. Ericksson. 1,617,203; Feb. 8.

Printing plates, Machine for finishing tubular. H. A. W. Wood. 1.648,208; Nov. 8.
Printing plates, Machine for grooving. C. A. Ericson. 1.616,256; Feb. 1.
Printing plates, Producing multicolor. B. F. Hutchison. 1.614,925; Jan. 18.
Printing plates, Producing multicolor. B. F. Hutchison. 1.614,925; Jan. 18.
Printing plates, such as electrotype and stereotype plates, Machine for heating and bending metallic. C. N. Smith. 1.640,580-1; Aug. 30.
Printing plates such as stereotype and electrotype plates, which is such as stereotype and electrotype Printing press. R. Adams. 1.633,564; June 28.
Printing press. J. R. Blaine. 1.630,252; May 31.
Printing press. M. W. Brueshaber. 1,633,691; June 28.
Printing press. M. W. Brueshaber. 1,630,691; June 28.
Printing press. G. F. Bryant. 1,628,109: May 10. 30.
Printing press. G. F. Bryant. 1,628,109; May 10.
Printing press. W. M. Kelly. 1,651,774; Dec. 6.
Printing press. W. M. Kelly. 1,651,774; Dec. 6.
Printing press. R. McCormick. 1,636,917; July 26.
Printing press. L. H. Morse. 1,635,543-4; Aug. 9.
Printing press. R. S. Murphy. 1,633,600; June 28.
Printing press. V. L. Reeve. 1,630,995; May 31.
Printing press. J. J. Schultz. 1,617,608; Peb. 15.
Printing press. H. J. Schultz. 1,617,608; Peb. 15. Printing-press Automatic. A. J. Shickman, W. A. P. Printing-press Automatic. A. J. Shickman, W. A. Thun, and W. L. Dempsey, 1,625,569; Apr. 19. Printing-press chase. A. M. McMillan, 1,624,751; Apr. 12. Printing press chase. A. M. meannam.

Apr. 12.

Printing-press cylinder for enabling the printing, impression, or offset surfaces to be adjusted. J. Shuttleyworth. 1.651,295; Nov. 29

Printing-press. Inking mechanism. W. Evensen.

Printing press. Letter. T. C. Spelling. 1,613,417; Jan. 4.

Printing press. Multicolor rotary offset. O. Wohlrabe. 1,635,299; July 12.

Printing press, Platen. A. Büttner. 1,655,838; Dec. 27.

Printing press, Platen. C. H. Cochrane. 1,642,841; Jan. 4.

Printing press, Platen. P. Wieghardt. 1,628,816; May 17.

Printing-press-register-guide mechanism. A. G. Jacobson. Printing press, Platen. P. Wieghardt. 1,628,816; May 17.
Printing-press-register-guide mechanism. A. G. Jacobson, 1,618,202; Feb. 22. W. E. Oliver. 1,624,063; Apr. 12.
Printing press, Rotary-web offset. Benjamin J. J. Goulding. 1,616,083; Feb. 1.
Printing press, Three-color intaglic rotary. C. Schümann. 1,637,713; Aug. 2.
Printing press, Two-revolution. O. Finkhaus. 1,647,285; Printing-press, Two-revolution. 45. W. Kolmer, and E. Printing-press, Two-revolution fast. W. Kolmer, and E. Printing press, Two-revolution. U. Firmunau.

Printing press, Two-revolution fast.

W. Kolmer and E.

Wirschinger. 1,650,282; Nov. 22.

Printing presses, Adjustable roller track for Gordon.

R. J. Fracketton and F. C. Sixt. 1,619,018; Mar. 1.

Printing presses and the like, Automatic throwout mechanism for. C. E. Christophel. 1,620,800; Mar. 15.

Printing presses, Antionate mechanism for. R. J. GreenPrinting presses, Attachment for. W. D. Barnes.

1,626,444; Apr. 26.

Printing presses, Automatic inking fountain for. A. L.

Lengel. 1,633,338; June 21.

Printing presses, Control system for. E. W. Seeger.

Printing presses, Cutting and feeding attachment for.

H. M. Barber. 1,664,205; Dec. 27.

Printing presses, Cylinder for. N. C. Andersen.

1,626,592; May 3.

Printing presses, Driving mechanism for. H. M. Barber. Printing presses, Cutting and feeding attachment for H. M. Barber. 1,664,205; Dec. 2f.
Printing presses, Cylinder for. N. C. Andersen. 1,626,92; May 3.
Printing presses, Driving mechanism for. H. M. Barber. 1620,863; Mar. 15.
Printing presses, Feeding attachment for. D. Belcher. 1,620,863; Mar. 15.
Printing presses, Feeding attachment for. D. Belcher. 1,653,199; Drc. 20.
Printing presses, Feeding attachment for. D. Belcher. 1,653,199; Drc. 20.
Printing presses, Gas heater for. F. X. Smith. 1,630,709; July 26.
Printing presses, Gas heater for. F. X. Smith. 1,630,709; July 26.
Printing presses, Gripper block for. R. P. Knox. 1,642,197; Sept. 40.
Printing presses, Gripper block for. R. P. Knox. 1,642,200; Sept. 20.
Printing presses, Ink fountain for. W. H. Granger. 1,642,200; Sept. 20.
Printing presses, Inking mechanism for. H. McGeorge 1,654,301; Dec. 27.
Printing presses, Inking mechanism for. H. McGeorge 1,654,301; Dec. 27.
Printing presses, Proposition attachment for. P. Hemping presses, Proposition attachment for. P. Hemping presses, Proposition attachment for. P. Hemping presses, Plate-clamping mechanism for. H. M. Barber. 1,646,721; Oct. 25.
Printing presses, Plate-clamping mechanism for. W. Evensen. 1,637,680; Aug. 2.
Printing presses, Lake bolder for. W. C. Fellows. 1,633,51; June 28.

Dec. 27.

Pinting raised figures and the like. C. H. Allen. 1.641.143; Sept. 6.

Printing roller. W. C. Hart. 1.642.068; Sept. 13.

Printing sheet, Flexible. E. Lichtenstein. 1,644.597; Oct. 4.

Printing slug, Composition. A. R. Goldrick. 1,613.094; Jan. 4. Printing slugs and the like, Clamping means for. C. L.
Post. 1,623,974: Apr. 12.
Printing slugs and the like, Clamping means for. C. L.
Post. 1,623,974: Apr. 12.
Printing-strip mounting. J. W. Macklin. 1,649,606: NOV. 15.
NOV. 15.
NOV. 15.
NOV. 16.
NOV. 16.
NOV. 16.
NOV. 17.
Printing strips from holders. Apparatus for removing.
W. J. Demming. 1,644,773; Oct. 11.
Printing telegraph exchange system. D. B. Perry. 1,637,324; July 26.
Printing telegraph system.
G. S. Vernam and D. B.
Printing 1,642,045; Sept. 13.
Kleinschmidt. 1,620,664;
Mar. 15.
Printing 1,642,045; Dec. 6.
Printing 1,642,045; Dec. 6.
Printing 1,642,045; Dec. 6.
Process work and the like, Device for. O. Von Gruber. 1,632,073; Dec. 6.
Process work and the like, Device for. O. Von Gruber. 1,631,643; Dec. 6.
Product of with a nipple adjusted in the same. R. Vontobel. 1,652,073; Dec. 6.
Product of with a nipple adjusted in the same. R. Vontobel. 1,652,073; Dec. 6.
Product of with a nipple adjusted in the same. R. Vontobel. 1,652,073; Dec. 6.
Product of with a nipple adjusted in the same. R. Vontobel. 1,652,073; Dec. 6.
Product of with a nipple adjusted in the same. R. Vontobel. 1,652,073; Dec. 6.
Product of with a nipple adjusted in the same. R. Vontobel. 1,652,635; Aug. 2.
Product of with a nipple adjusted in the same. R. Vontobel. 1,652,635; May 17.
Program transmission, Subscriber's equipment for. J. F.
Projectling apparatus. J. Proken. 1,621,599; Mar. 22.
Projecting machine. O. P. R. Lehmann. 1,627,396; May 17.
Lebuston machine. J. Projec Projecting machine. E. E. Lehwess. 1,624,669; Apr. 12. Projecting machine, Image. W. E. Schwanhausser. 1,650,667; Nov. 29. Projection apparatus. W. L. Patterson. 1,636,647; July 19. Projection objective. C. W. Frederick and D. L. Wood. 1,020,339; Mar. 8, 1,020,339; Mar. 8, L. Macbeth. 1,628,414; May 10. Projection screen. A. L. Macbeth. 1,628,414; May 10. Projection screen. A. L. Macbeth. 1,628,410,606; May 10. Projection screen. A. L. Ponderick and D. L. Wood. May 10. Projection screen. A. L. Macbeth. 1,628,414; May 10. Projection screen. A. L. Macbeth. 1 May 10.

Projector system C. W. Frederick. 1,620,388; Mar. 8.

Projector. S. L. Lebby. 1,645,063; Oct. 11.

Propeler. H. Junkers. 1,645,811; Oct. 18.

Projector. L. Mann. 1,645,108; Oct. 11.

Projector compositions, Defensive and offensive. J. A.

Projector, Light. F. A. Benford. 1,629,333; May 17.

Projector, Light. F. F. Pfell. 1,645,721; Oct. 18.

Projector lights, Relieving the glare from. H. A. Rad
ford 1,637,622; Aug. 2.

Propellant powder and making same. A. S. O'Nell.

1,627,631–22; May 10.

Oct. 1, Implement, Tractor. G. D. Jones. 1,644,885;

Oct. 1, Barton. 1,634,393; July 5. Propeller. J. Barton. 1,634,393; July 5. Propeller. J. A. Blondin. 1,642,803; Sept. 20. Propeller. J. J. Callahan. 1,614,872; Jan. 18.

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Propeller.
                                                                                   A. Harper and S. A. Harper, 1.634.616;
    July 5.
Propeller.
Propeller.
                                                                               R. R. Hicklin. 1,616,123; Feb. 1.
O. A. Houkauen. 1,632,292; June 14.
W. H. Lelmwhert, 1,632,420; Apr. 5.
H. Malm. 1,634,328–30; July 5.
W. M. Paget. 1,623,424; Apr. 29.
D. E. Schumaker. 1,651,230; Nov. 29.
B. U. Sepülveda. 1,635,966; July 12.
W. Stellner. 1,622,472; Mar. 29.
M. D. Thompson. 1,626,056; Apr. 28.
Aeromatulcal. S. A. Reed. 1,650,464;
      Propeller
      Propeller.
      Propeller.
Propeller.
    Propeller.
Propeller,
Nov. 22.
Propeller. M. D. Thömpson. 1,626,096; Apr. 20. Propeller. Aeronautical. S. A. Reed. 1,650,464; Nov. 20. Propeller. Air. A. E. Short, H. O. Short, and A. Gouge. 1,633,612; June 28. Propeller and motor, Turbine-wheel. C. B. Strandgren. 1,633,908; Aug. 23. Propeller and ventilator, Water-craft. J. W. Sweency. Propeller and ventilator, Water-craft. J. W. Sweency. Propeller and ventilator, Water-craft. J. W. Sweency. Propeller case. C. S. Egpert. 1,622,137; Mar. 22. Propeller scae. C. S. Egpert. 1,622,137; Mar. 22. Propeller guard. G. Peterson. 1,620,129; Mar. 8. Propeller, Marine. J. Fischer. 1,633,948; Apr. 5. Propeller mounting. R. Chilton. 1,633,941; June 21. Propeller mounting. A. Nutt. 1,632,918; June 21. Propeller mounting. A. Nutt. 1,632,918; June 21. Propeller, Reaction vacuum. F. Travnicck. 1,643,862; Propeller, Reaction vacuum. F. Travnicck. 1,643,862; Propeller, Reaction vacuum. F. Travnicck. 1,643,862; Propeller, Reversible. W. Niedergessess. 1,633,824; June 28. Propeller, Reversible aeroplane. J. A. Williams. Propeller, Reversible aeroplane. J. A. Williams. Propeller, Screw. H. Leitner. 1,638,685; Aug. 9.
  June 28.

Propeller. Reversible aeroplane. J. A. Williams. 1,650,477; Nov. 22.

Propeller. Serew. H. Leitner. 1,638,695; Aug. 9.

Propeller. Serew. H. Leitner. 1,628,695; Aug. 9.

Propeller. Serew. H. Leitner. 1,627,236; May 10.

Propeller, Vacuum. F. Travnleek. 1,638,071; Aug. 9.

Propeller, Wood-veneer. N. S. Clay. 1,618,968; Mar. 1.

July 26.

Propelling and steering apparatus, Combined. J. J.

Novik. 1,643,314; Sept. 27.

Propelling device. J. F. Lyon. 1,644,259; Oct. 4.

Propelling mechanism. H. B. Maksabedian. 1,617,261; Feb. 8.

Propelling mechanism. Boat. J. Baker. 1,643,251; Feb. 8.
    Dec. 6.
Protective device. L. R. Golladay. 1,642,241; Sept. 13.
Protective device. G. Graf. 1,624,728; Apr. 12.
Protective device. C. H. Hodgkins. 1,652,627; Dec. 13.
Flore device. C. H. Hodgkins. 1,652,627; Dec. 13.
Holden. 1,633,375; Dec. 20. ckelford and W. H. T.
Protective device. O. C. Traver. 1,637,032; July 26.
Protective device. G. P. Wennemer. 1,632,050; June 14.
Protective device for boxers. M. Golomb. 1,627,382;
May 3.
Aug. 16.
Aug. 16. device, Overload. J. H. Asbbaugh. 1,638,819;
Aug. 16. device, Overload. J. H. Asbbaugh. 1,638,819;
      Protective dertes, W. Brückel. 1,652,974; Dec. 18.
Protective system. F. H. Penney. 1,622,539; Mar. 29.
Protective system. C. P. Steinmetz. 1,646,265; Oct.
    18.
Protective system. R. Willheim. 1,632,573; June 14.
Protector. B. J. Gilbert. 1,622,639; Mar. 29.
Protector. L. Stuart. 1,620,743; Mar. 15.
Protector. J. T. Turner. 1,637,974; Aug. 2.
Protector. J. T. Turner. 1,637,974; Aug. 2.
Protector. J. T. Turner. 1,637,974; Aug. 2.
Protector. J. T. Turner. 1,637,932; Aug. 2.
Protector. C. B. Galvin. 1,637,933; Aug. 2.
Protractor. C. B. Galvin. 1,637,933; Aug. 2.
Protractor and using same. G. M. Nava. 1,628,266; May 10.
Proving rine. H. L. Whittemore and S. N. Petrenko.
      May 10.
Proving ring. H. L. Whittemore and S. N. Petrenko. 1.648,375; Nov. 8.
Pruning ling. H. L. Whittemore and S. N. Petrenko. 1.648,375; Nov. 8.
Pruning implement. W. T. Long. 1,650,948; Nov. 29.
Pruning implement. L. Williams. 1,640,168; Aug. 28.
Pruning shears. H. W. Aikins. 1,640,635; Aug. 30.
Pruning shears. N. C. Enell. 1,648,884; Nov. 15.
Pruning shears. N. C. Perralis. 1,634,845; July 5.
Pruning shears. N. C. Perralis. 1,634,845; July 5.
Pruning shears. H. W. Aikins. 1,634,845; July 5.
        Psychrometer,
July 19.
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Public-address system. B. S. McCutchen. 1.642.040:
Public-address system. B. S. McCuttenn. 1,632,991; Sept. 13.
Puddiag Sin Nov. S. McKuttenn. 1,632,991; Sept. 13.
Puddiag Sin; Nov. S. McKuttenn. 1,632,891; Apr. 5.
Pud Iron. H. C. Holden. 1,634,608; July 5.
Pugsing wet pan. Continuous. H. R. Straight.
1,623,287; Apr. 5.
Puller: Seeal puller.
Battery-plate puller.
Bearing puller.
Bearing puller.
Beach puller.
Cable puller.
Cable puller.
Cotter-pin puller.
Cotter-pin puller.
Cotter-pin puller.
Cotter-pin puller.
Fish-tape pulle
                                                                                                                                                                                                                                                                                                                                                                              Pinion puller.
Pinion puller.
Rod puller.
Terminal puller.
Valve puller.
Valve-seat puller.
Wheel puller.
             Division and the property of t
          Pulley.
   Pulley.
May 10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1,627,572;
   May 10.

Pulley A. A. Serva. 1,632,519: June 14.

Pulley A. C. Sprean. 1,634,433: July 5.

Pulley C. W. Taylor. 1,636,492: July 19.

Pulley and ball thrust bearing. J. F.

1,649,712; Nov. 15.

Pulley and the like, Split. E. Hamilton. 1,646,692;

Oct. 25.
   Oct. 25.
Pulley block. A. W. Baker, 1,636,273; July 19.
Pulley block. W. G. Shedenhelm. 1,639,439; Aug. 16.
Pulley-block hanger, Adjustable. H. Murray. 1,520,861; May 3.
Pulley, Clothesline. A. J. Whelan. 1,633,506; June 21.
Pulley construction. G. O. Rockwood. 1,613,906; Jun. 11.
Pulley, Expansion. R. H. Garver. 1,634,285; July 5.
Pulley, Expansion. F. H. Sleeper. 1,634,2701; May 3.
Pulley, Priction-clutch. A. L. Preimesberger. 1,635,192;
Pulley, Prick-line broaden.
      July 12.
Pulley, Jerk-line break-out. R. D. Hill. 1,629,662;
Pulley Line. A. W. Taylor. 1,635,145; July 5.
Pulley or the like, Expansible. W. A. Kosken. 1,626,240;
Apr. 26.
Pulley, Safety. A. G. Steinmayer. 1,640,624; Aug. 30.
Pulley, Safety. A. G. Steinmayer. 1,640,624; Aug. 30.
Pulley, Safety. A. G. Steinmayer. 1,640,624; Aug. 30.
Pulley, Sash. C. E. McCall. 1,637,267; July 26.
Pulley, Sash-weight. E. S. and P. M. Relland. Re16 594;
Apr. 19.
                               Apr. 19.
   Apr. 19.
Pulley, Sash-weight, E. S. Reiland and P. M. Reiland.
1.644,276; Oct. 4.
Pulley, Self-olling, W. Edwards, 1,613,123; Feb. 15.
Pulley, Shet-metal, N. Barry, 1,613,433; Jan. 4.
Pulley, Split, W. T. Hensley, 1,639,500; Ang. 16.
Pulley Split, W. T. Hensley, 1,639,500; Ang. 16.
Pulley Split, L. Rouanet, 1,643,611; Sept. 27.
Pulley, Split, L. Rouanet, 1,649,978; Nov. 22.
Pulley, Universal, T. Crawford, 1,628,491; May 10.
Pulley, Variable-speed, F. C. Largen, 1,643,124; Sept. 20.
      Pulley, Universal: T. Crawtord: 1,625,491; May 10.
Pulley, Variable-speed. F. C. Largen. 1,643,124;
Sept. 20.
Pulley wheel. A. Anderson.
Pulley, Window-shade. Z. H. Williams. 1,613,071;
Jan. 4.
   Jan. 4.

Pulleys and the like, Hub for split. H. J. Gilbert. 1,029,488. May 24.

1,029,488. May 24.

1,029,488. May 24.

Van Patton. 1,650,463; Nov. 22.

Van Patton. 1,650,463; Nov. 22.

Van Patton. 1,650,463; Nov. 22.

Pulleys Relt shifter for stepped. M. J. Fleming. 1,630,931; May 31.

Pulleys, Quard for. H. F. Jones. 1,629,700; May 24.

Pulleys, Locking device for. L. Shaub and O. I. Farring-ton. 1,622,680; Mar. 2.

Pulleys, Making. W. T. Hensley, 1,639,501; Aug. 16.

Pulleys, Making. W. T. Hensley, 1,639,501; Aug. 16.

Pullington. H. J. Ferris. 1,614,111; Jan. 11.

Pull and paper, Manufacture of. L. Bradley and E. P. McKeefe. 1,651,665; Dec. 6.

Pulp, Apparatus for and method of screening. J. W. Pulp, Apparatus for molding articles from. B. R. Willlamson. 1,634,128; June 28.

Pulp. Apparatus for molding articles from. B. R. Willlamson. 1,634,128; June 28.

Pulp. Apparatus for reating. C. H. Allen. 1,633,552; June 21.
   June 21.

Pulp-cooking apparatus. C. H. Allen. 1,633,554; June 21.

Pulp. Dewatering apparatus for. J. Stephansen. 1,650,100; Nov. 22.

Pulp digesters, Charging. E. Olsson. 1,653,307; Dec. 20.

Pulp fiber, F. K. Fisb, jr. 1,633,738; June 28.

Pulp fiber, Mannifacturing bollow bodies from. P. E. Winnertz. 1,621,147; Mar. 16.
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Pulp for the manufacture of paper and cellulose there-
from, Apparatus for hydrating fibrous. H. Jackson.
J. 632,720; Dec. 13.
Pulp-forming machine. C. J. Keenan, E. P. Kennedy, and
G. H. Kirsch. 1,622,671; Mar. 22.
Pulp-forming press. E. Hutchens. 1,623,731; Apr. 5.
Pulp-freeness tester for. W. B. Campbell. 1,627,010;
     May 3

May 3

May 3

May 3

May 4

May 4

May 5

May 6

May 6

May 6

May 7

May 8

Ma
ducing. G. A. Richter. 1,640,835; Aug. 30.
Pulp, Improving the color of. F. 6, Rawling. 1,630,635;
Pulp, Manufacture of paper. J. B. Beveridge. 1,631,789;
June 7.
Pulp, Method and apparatus for mixing. W. E. Rosebush. 1,631,702;
June 7.
Pulp, Method and apparatus for mixing. W. E. Rosebush. 1,631,702;
June 7.
Pulp, Method and apparatus for mixing. W. E. Rosebush. 1,631,623;
Pulp of high strength, F. Louisot. 1,621,639; Mar. 22.
Pulp of high strength, Producing white. G. A. Richter. 1,635,637; July 12.
Pulp of high strength, Producing white. G. A. Richter. 1,635,124; Dec. 20.
Pulp, Pressing head. R. E. Hall. 1,623,111; Apr. 5.
Pulp-ressing and viscose process. Interrelated. G. A. Richter. 1,653,124; Dec. 20.
Pulp, Rotary screen for paper. R. S. Clarke. 1,635,258; Pulp Suspensions, Method of and mechanism for testing. M. O. Schur. 1,633,125; Dec. 20.
Pulp these for the like, Apparatus for handling. H. Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,472; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,473; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,625,473; Apr. 19.
Pulp web cutter. W. A. Kelly. 1,6
                           May 31.

alp, Manufacture of paper. J. B. Beveridge. 1,631,789;
  Pulsation compensated meter. C. A. Dawley. 1,621,354; Mar. 15.

Mar. 15.

Betrie. A. R. Arney. 1,641,368; Sept. 6.

Pulsation. J. A. Schmitt. 1,644,3971; Nov. 1.

Pulverizer. T. J. Barnes. 1,637,098; July 26.

Pulverizer. G. E. Brainard. 1,642,139; Sept. 13.

Pulverizer. R. L. Cawood. 1,642,8374; Sept. 27.

Pulverizer. R. L. Cawood. 1,642,874; Nov. 8.

Pulverizer. C. M. Stoner. 1,648,772; Oct. 25.

Pulverizer. A. A. Wickland. 1,628,295; May 10.

Pulverizer. B. E. Witz. 1,621,571; Mar. 22.

Pulverizer. B. E. Witz. 1,621,571; Mar. 27.

Pulverizer. B. E. Witz. 1,621,575; Mar. 15.

Pulverizer, Centrifugal impact. F. E. Agnew. 1,636,033; July 12.

Pulverizer, Centrifugal impact. F. E. Agnew. 1,636,033; July 19.

Pulverizer, Cond. A. A. Wickland. 1,628,294; May 10.

Pulverizer, Cond. A. A. Wickland. 1,628,294; May 10.

Pulverizer, Cond. A. A. Wickland. 1,628,294; May 10.
Pulverizer, Coal. A. A. Wichamor, Coal. A. B. Willoughby. 1,622,695; Mar. 29. Pulverizer, Impact. A. B. Willoughby. 1,622,695; Mar. 29. Pulverizer, Soil. J. Farker. 1,621,739; Mar. 22. Pulverizer, Soil. J. Farker. 1,621,739; Mar. 22. 1,618,826; Feb. 2. A. Carline and mulching attachment. J. J. McCarthy. 1,618,590; Feb. 8. Pulverizing and mulching attachment. J. J. McCarthy. 1,665,372; Dec. 6. Pulverizing apparatus. L. V. Andrews. 1,646,720; Oct. 25.
                                                                                                                 Coal. A. A. Wickland. 1,628,294; May 10.
Double-roller. H. S. Dickinson. 1,650,891;
        Oct. 25.
Pulverizing apparatus. W. J. A. London.
        Sept. 6.
Pulverizing machine. W. K. Cruickshank,
                                                                                                                                                                                                                                                                                                                                                                                                                                              1,633,164;
     Pulverizing machine. V. A. Hirsch. 1,636,693; July 26.
Pulverizing machine. W. K. Liggett. 1,621,938; Mar. 22.
Pulverizing machine. W. K. Liggett. 1,625,553-4;
        Apr. 19.
Pulverizing machine. A. M. Read. 1,614,899; Jan. 18.
Pulverizing machine, Coal.. C. E. Blyth. 1,649,148;
Nov. 15.
        Pulverizing or grinding mill. B. Scherbaum. 1.653.472:
     Dec. 20.
Pulyerulent materials, Method of and apparatus for transporting. W. O. Snelling and G. A. Rupp. 1.652,960; Dec. 13.
Pump. R. W. Allerton. 1,616,072; Feb. 1.
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D. H. Barnwell. 1,641,613; Sept. 6.
R. Borlettl. 1,632,867; July 5.
F. E. Brady, fr. 1,652,059; Dec. 13.
S. C. Brady. 1,626,072; Apr. 26.
G. A. Brown and F. G. Dennison. 1,624,209;
         Pump.
         Pump.
         Pump.
                                                              Pump.
      Apr. 12.
Pump. A
           Pump.
         Pump.
1,630,2
         Pump.
           Pump.
Pump.
         Pump.
Pump.
      Pump.
         Pump.
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      Pump.
         Pump.
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         Pump,
         Pump,
Pump,
         Pump.
  Lump, J. D. Nixon and G. R. Livergood. 1,620,222; Mar. 8.

Pump. W. Oliver. 1,635,006; July 5.

Pump. P. A. Pettersson. 1,652,323; Dec. 13.

Pump. L. B. Post, S. V. Lyon, and L. Blumenfeld. 1,641,501; Sept. 6.

1,641,501; Sept. 6.

1,625,153; Apr. 19.

Pump. J. W. Price and R. M. Leake. 1,623,268; Apr. 5.

Pump. J. W. Price and R. M. Leake. 1,623,268; Apr. 5.

Pump. J. W. Price and R. M. Leake. 1,623,268; Apr. 5.

Pump. J. S. Ragar. 1,615,484; Jan. 25.

Pump. J. S. Ragar. 1,615,484; Jan. 21.

Pump. J. S. Radolph. 1,625,509; Apr. 19.

Pump. W. S. Radolph. 1,625,609; Apr. 19.

Pump. W. S. Radolph. 1,625,609; Apr. 19.

Pump. W. J. Smith. 1,628,484; Apr. 26.

Pump. U. C. Tainton. 1,623,605; Apr. 5.

Pump. U. T. Toncer. 1,623,430; May 10.

Pump. A. E. Thornley. 1,636,878; July 26.

Pump. H. Wallace. 1,646,741; Aug. 364,742; Aug. 30.

Pump. G. J. Welter. 1,641,717; Sept. 64,0742; Aug. 30.

Pump. C. J. Welter. 1,641,717; Sept. 64,0742; Aug. 30.

Pump. C. U. Witehead. 1,634,841; July 5.

Pump. T. C. Whitehead. 1,634,265; July 19.

Pump. T. C. Whitehead. 1,636,265; July 9.

Pump. T. C. Whitehead. 1,636,265; July 9.

Pump. T. C. Whitehead. 1,636,276; July 19.

Pump. T. C. Whitehead. 1,636,276; July 28.

Pumpa-cruating mechanism. J. E. Shutt. 1,647,024; Oct. 28.
                       Mar. 8
Pump actuating mechanism. J. E. Shutt. 1,647,024; Oct. 25.
Pump, Air. H. Leo. 1,622.876; Mar. 29.
Pump, Air. H. Leo. 1,622.876; Mar. 29.
Pump, Air. W. J. Rudolph. 1,623.697; Apr. 19.
Pump, Air. W. J. Rudolph. 1,623.697; Apr. 19.
Pump, Air. W. J. Rudolph. 1,623.697; Apr. 19.
Pump, Air. H. J. Wepplo. 1,623.647; Apr. 5.
Pump, Air-lift. J. Oliphant. 1,633.189; Dec. 20.
Pump, Air-lift. J. Oliphant. 1,633.189; Dec. 20.
Pump Air-lift. J. Oliphant. 1,633.189; Dec. 20.
Pump Air-lift. J. Oliphant. 1,633.189; Dec. 20.
Pump and barrel attachment. R. Metcalt and F. Marshall. 1,613,898; Jan. 11.
Pump and can opener, Combined. R. A. Thornton. 1,643,933; Jun. 25.
Pump and faucet. Combined force-feed. D. A. Hill. 1,613.898; Jan. 12.
Pump and faucet. Combined force-feed. D. A. Hill. 1,613.893; Nov. 8.
Pump and forced-feed olling system, Vacuum. F. Gahm. 1,643.893; Nov. 8.
Pump and indicator. Draft-actuated circulating. A. Pump and indicators combistion engine therefor. W. S. Franklin. 1,623.402; Apr. 5.
Pump and making same, Composition for use in making sulphate or kraft. H. B. Kipper. 1,629.393; May 17.
Pump and motor of the swash-plate type, Hydraulic. M. K. Ingoldby. 1,612.925; Jan. 4.
Pump and motor, Grary. C. H. Kain. 1,623.924; Apr. 5.
Pump and power plant, Vacuum. E. and F. W. H. Bond.
    Apr. 5.
Pump and power plant, Vacuum. E. and F. W. H. Bond.
1,628,070; Apr. 26.
Pump and power plant, Hydraulic. E. B. Galbreath.
Pump, Antisubstitute lquid-dispensing. R. L. White.
1,633,355; June 21.
Pump attachment. F. R. Dudley. 1,617,017; Feb. 8.
Pump attachment. F. R. Dudley. 1,617,017; Feb. 8.
    runp attachment. F. R. Dudley, 1,617,017; Feb. 8, Pupp attachment, Automatic. C. F. De Corse. 1,682,799; Nov. 8, Pump attachment, Schf-service gasoline. G. W. Keck, 1,632,408; Dec. 13.
Pump, Automatic hydraulic. L. Stanworth. 1,615,556; Jan. 25.
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908 Pump, Automatic oil. J. C. Palmer. 1.635,220; July 12. Pump, Automobile. A. L. and W. H. Welsch. 1.630,150; Pump, Automatic oll. J. C. Palmer, 1,635,220; July 12. Pump, Automobile. A. L. and W. H. Welsch. 1,630,150; May 24. Pump, Batcher's. N. Weiler. 1,628,866; May 17. Pump, Blade. A. Maillefer, 1,619,429; Mar. 1. Pump, Brather. C. Danna. 1,627,377; May 3. Pump casing. C. P. Eisenhauer. Des. 71,961; Feb. 8. Pump casing, Liquid-dispensing. W. S. Townsend. Des. 75,881; Nov. 16. Tung, Centrifugal. C. F. Ames. 1,623,082; Apr. 5. Pump, Centrifugal. H. A. F. Borneman. 1,640,591; 9. Dump. Centrifugal. H. A. C. Durdin, ir. 1,645,498; Oct. 11. Pump. Centrifugal. A. C. Durdin, ir. 1,645,498; Oct. 11. Aug. 30.
Pump, Centrifugal. A. C. Durdin, jr. 1,645,498; Oct. 11.
Pump, Centrifugal. R. H. Frederick. 1,623,104; Apr. 5.
Pump. Centrifugal. J. H. Johnston. 1,650,522; Nov. 22. Pump, Centrifugal. V. Schleyer. 1,634,304; July 5. Pump, Centrifugal vacuum. K. G. Sommer. 1,622,355; Mar. 29. Pump, Circulating. E. M. Pfauser. 1,619,539; Mar. 1. Pump, Circulating plunger. C. S. Boden. 1,614,865; Jan. 18. Pump, Combined liquid and air. E. Hill. 1,631,591; Pump, June June 7.

Pump, Combined stoker and feed-water. N. M. Lower.

1.614,528; Jan. 18.

F. Jennings. 1.646,294; Oct. 18.

Pump, Compression. O. A. Olsen. 1.633,270; June 21.

Pump, compressor, and the like, Multi-cylinder plunger.

J. Svartz. 1,636,258; July 19.

Pump, compressor, or the like. B. Conklin. 1,629,202;

May 17.

May 17.

May 17. Pump, compressor, or the like. M. J. Leahy. 1,646,754; Oct. 25. Oct. 20. Pump. compressor, or the like. V. W. Malmstrom. 1,642,454; Sept. 13. Pump. Condensing. P. C. Lemale. 1,616,811; Feb. 8. Pump connection, Air. W. M. Ingram. 1,652,626; Dec. 13. Pure. Assumeding device, Deep-well. G. E. Willers. 1631,399; June 7. Pump construction. H. M. Boe. 1,637,727; Aug. 2. Pump construction, 011. I. E. Williams and J. D. McGilton. 1,646,569; Oct. 25. Pump construction, Pump construction, Pump und 1,631,274; ump-control mechanism. R. Conrader, Pump. Postroi mechanism. K. Conrader, 1,627,376; May 8, 101,008; Mar. 1.
1,619,098; Mar. 1.
Pump. Convertible-stage centrifugal. D. E. Yates. 1,635,655. July 12.
Pump, Deep well. O. W. Johnson. 1,649,593; Nov. 15.
Pump, Deep-well. J. D. Langdon. 1,642,211; Sept. 13.
Pump, Deep-well. J. D. Langdon. 1,642,210; Sept. 13.
Pump, Deep-well. J. D. Langdon. 1,642,216, Sept. 13.
Pump, Displayer. L. Nillosof. 1,650,1746; Mar. 15.
Pump, Displayer. L. Nillosof. 1,650,1746; Mar. 15.
Pump, Displayer. L. Nillosof. 1,650,1746; Mar. 15.
Pump, Displayer. L. Nillosof. 1,650,1742; Mar. 15.
Pump, Dispensing. C. L. Bastian and P. Koch. 1,649,209; Nov. 15.
Nov. 15.
Nov. 15.
Pump, Double-acting. J. S. Hunter. 1,629,992; May 24.
Pump, Double-acting. E. J. Shearer. 1,616,201; Feb. 1.
Pump, Double-acting. E. J. Shearer. 1,616,201; Feb. 1, Pump, Double-acting. C. L. Bastian and P. John. 1,620,934; Mar. 15.
Pump Dyr-pipe system, Testing device for booster. I. W. June 14.
Pump Fuel. John W., White. 1,639,623; Aug. 16.
Pump, Gasoline. T. B. Peterson and L. H. Holcomb.
1,613,845; Jan. 11.
Pump, Gear. H. H. Haight. 1,624,099; Apr. 12.
Pump, Gear. T. F. Nerst. 1,634,048; Dec. 27.
Pump, Gear. T. F. Forst. 1,634,048; Dec. 27.
Pump, Gear. T. F. Forst. 1,634,703; June 28.
Pump, Gear. T. F. Forst. 1,624,048; Dec. 27.
Pump, Gear. Turbine. J. Control and U. D. Coates.
1,644,817; Oct. 11.
Pump governor. W. Fletcher. 1,629,073; May 17.
Pump governor. Turbine. J. M. Barrett. 1,643,483;
Pump governor. Turbine. J. M. Barrett. 1,643,483;

1,629,141; May 17. hragm. B. Stevens. G. C. Graham and R. S. Robe. 1.621,414: Pump jack. Pump jack. Pump jack. Pump jack. E. E. Kinsey. 1,632,296; June 14. J. A. Lund. 1,627,708; May 10. C. O. Sams. 1,612,386; Jan. 4. C. F. Schaffer. 1,641,460; Sept. 6. T. J. Stebbins. 1,633,045; June 21. E. R. Thomas and P. B. Langfitt. 1,628,692; Pump jack. Pump jack. May 17. May 17.
Pump Jack. W. E. Wentworth. 1,628,702; May 17.
Pumb. Liquid. H. Wallace. 1,637,669; Aug. 2.
Pump, Liquid-dispensing. M. R. Jullan. 1,650,073 1.650.073: Fully 1522 Pump loading and unleading mechanism, P. W. Reck. 1,633,935; June 21, Pump, Lubricant, O. W. Fisher. 1,623,101; Apr. 5. Pump, Lubricating-oil. D. O. Barrett. 1,653,538; Dec. 20.
Pump machine, Rotary. W. J. Stern. 1,616,285; Feb. 1.
Pump, Magnetic. W. Werner. 1,629,329; May 17.
Pump, Measuring and dispensing. C. Spaeth. 1,619,492;
Mar. 1.
Pump mechanism. H. C. Thrift. 1,645,670; Oct. 18. mp mechanism. H. C. Thrift. 1,645,670; Oct. 18, upp mechanism, Oll. A. F. Frasca. 1,633,781; June 28. June 28.
Pump mechanism, Vertical-. A. Hollander. 1,625,893;
Apr. 26.
Pump, Metering. N. Nix. 1,628,058; May 10.
Pump, Multistage balanced. A. Hollander. 1,644,129; Pump, Multistage balanced, A. Pump, Multistage balanced, A. Pump, Multistage, W. Ferner, 1,634,279; July 5. Pump, Multistage centrifugal, A. Hollander, 1,628,841; May 27.

Ma May 17.

Pump, Oil. H. P. Jesperson. 1,824,738; Apr. 12.

Pump, Oil. L. P. Kesselman. 1,625,031; Apr. 19.

Pump, Oil. A. W. Manzel. 1,625,618; Apr. 19.

Pump, Oil. K. P. Nellsen. 1,643,971; Nov. 22.

Pump, Oil and water well. W. Winesburg. 1,623,150; Pump, Oil and water well. W. Winesburg. 1,623,150; Apr. 5.
Pump, Oil-engine-driven centrifugal and similar, P. P.
Bourne. 1,622,699; Mar. 29.
Pump, Oil-well. S. C. Ashton. 1,624,821; Apr. 12.
Pump, Oil-well. S. C. Ashton. 1,642,121; Sept. 18.
Pump, Oil-well. W. F. McMahon. 1,642,121; Sept. 18.
Pump, Oil-well. W. F. Thurston. 1,625,230; Apr. 19.
Pump-operating device. L. Stendahl and E. Hanson. 1,642,74; Sept. 18.
Pump-operating mechanism. R. E. L. Holmes. 1,651,330; Nov. 23.
Nov. 23. Nov. 29.

Pump-operating mechamism. Deep-well- J. W. Mac-Clatchie. 1,616,979; Fb. 8.

Pump-operating mechanism, Safe control and signal for. J. Fraser. 1,624,784; Apr. 12.

Pump or compressor, G. J. Boonzaler and S. Hartley.

Pump or compressor, Gyratory. F. I. L. Bylger. 1,633,183; Aug. 9.

Pump or compressor, Scavenging air. O. E. Jorgensen. 1,619,131; Mar. 1.

Pump or impelier. H. White. 1,632,357; June 14.

Pump or motor. W. J. Rusdell. 1,616,140; Jan. 18.

Pump or motor. Pluid. J. W. Gutley. 1,650,830; Pump or motor, Rotary. A. E. Weingartner. 1,622,986; 1,622,986; Pump or motor, Rotary. A. E. Weingartner. 1,622,986; 1,622,986; Pump or motor, Rotary. A. E. Weingartner. 1,622,986; 1,622,986; Pump or motor, Rotary. A. E. Weingartner. 1,622,986; 1,622,986; Pump or motor, Rotary. A. E. Weingartner. 1,622,986; 1,6 Dump or motor, Fluid. J. W. Guries. 1,650,830; Nov. 29.

Pump or motor, Rotary. A. E. Weingartner. 1,622,986; Mar. 29.

Pump or the like. O. C. Hufnagle. 1,644,733; Jan. 18.

Pump or the like. O. C. Hufnagle. 1,644,731; Jan. 18.

Pump or the like. O. C. Hufnagle. 1,644,731; Jan. 18.

Pump or the like. O. C. Hufnagle. 1,640,731; Nov. 19.

Pump platinger. H. McMahon. 1,650,877; Nov. 29.

Pump Plunger. H. Bockbolt. 1,616,883; Feb. 8.

Pump, Plunger. H. Bockbolt. 1,616,883; Feb. 8.

Pump, Plunger. G. A. Humason. 1,622,903; Apr. 19.

Pump plunger. G. A. Humason. 1,622,903; Apr. 19.

Pump plunger assembly. K. P. Neilsen. 1,628,901; May 17.

Pump plunger assembly. K. P. Neilsen. 1,628,901; May 17.

Pump plunger auditistage. L. C. Black. 1,646,134; Pump, Pneumatic. H. S. Rogers. 1,628,276; May 10.

Pump, Pneumatic. J. L. Latta. 1,615,514; Jan. 25.

Pump, Pneumatic. H. S. Rogers. 1,628,276; May 10.

Pump, Pneumatic. H. S. Rogers. 1,628,276; May 10.

Pump, Pneumatic. H. F. Schmidt. 1,633,690; June 28.

Clarke. 1,652,603; Dec. 13.

Pump, Reciprocating. L. Dinesen. 1,622,436; June 14.

Pump, Reciprocating. L. Dinesen. 1,622,436; June 14.

Pump, Reciprocating. J. A. Zublin. 1,625,182; Apr. 19.

Pump pump red connection, Quick-change. A. W. R. Schultz. Sept. 27.
Pump grip. N. I. Clark. 1.649.573; Nov. 15.
Pump in Andles and the like, Rod connection for. H. B.
Nelson. 1.637.125; July 26.
Pump having rolling pistons working in nuts. P.
Christieln and K. Werner. 1.625.794; Apr. 26.
Pump having sounding valve puller. J. C. Axelson and
W. Jardh. 1.614.771; Jan. 18. Oct. 11.
Pump-rod connection, Quick-change. A. W. R. Schultz.
1.642,464; Sept. 13.
Pump-rod-hanger mechanism. N. H. Sooy. 1,617,506;
Feb. 15.

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Pump-rod-rotating device. J. H. Collins. 1,619,700;
         Mar. I.
Pump-rod support. N. H. Sooy. 1,621,286; Mar. 15.
Pump rods, Shock absorber for oil-well. W. F. Reschke.
1,638,213; Aug. 9.
Pump, Rotary. E. M. Conradson. 1,621,495; Mar. 22.
Pump, Rotary. F. Egersdörfer. 1,626,115; Apr. 26.
Pump, Rotary. F. Egersdörfer. 1,626,115; Apr. 26.
Pump, Rotary. J. Kingo. 1,628,885; May 17.
Pump, Rotary. J. Kingo. 1,628,885; May 17.
Pump, Rotary. J. Kingo. 1,628,885; May 17.
Pump, Rotary. G. S. Mepstead. 1,626,555; May 3.
Pump, Rotary. G. S. Mepstead. 1,626,555; May 3.
Pump, Rotary. G. S. Mepstead. 1,7 atter. 1,613,767;
Jnn 11.
            Pump, Rotary.
Jan. 11.
Pump, Rotary.
Pump, Rotary.
Pump, Rotary.
Pump, Rotary.
Pump, Rotary.
Tany, Rotary, W. fl. Pascos and J. Tatter. 1,613,767; Jan, 11.

Pump, Rotary, T. S. Patterson. 1,646,967; Oct. 18.

Pump, Rotary, F. C. Peterson. 1,645,693; Oct. 11.

Pump, Rotary, B. R. Planche. 1,645,693; Oct. 11.

Pump, Rotary, H. H. Rex. 1,647,4309; Nov. 1,62,100; Nov. 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1,613,767;
            Pump-shaft bearing structure. V. J. and F. B. Nims. 1.649.320; Nov. 15. Pump, Siphon. W. Modra and A. W. Meier. 1,648,238; Nov. 8.
      Pump, Siphon. W. Modra and A. W. Meier. 1,084,280; Moy. 8.
Pump, Sirup. C. T. Joslin and C. W. Klotz. 1,641,280; Pump, Sirup. C. T. Joslin and C. W. Klotz. 1,641,280; Pump, Submersible. J. E. Baldwin. 1,638,387; Ang. 9.
Pump, Tank. R. C. Nicoll. 1,636,711; July 26.
Pump, Thermostatic. J. Fentress. 1,630,479; May 31.
Pump, Tire. B. N. Broderick. 1,612,853; Jan. 4.
Pump, Tire. R. C. Bushnell. 1,640,880; Aug. 30.
Pump, Tire. F. E. Refe. 1,625,374; Apr. 19.
Pump, Tireleatting, force, suction, and vacuum. C. G. Wahlstrom. 1,613,147; Jan. 4.
Pump, Turbine. J. B. Chockley. 1,648,541; Nov. 8.
Pump unit, Twin. W. Thomas. 1,613,491; Jan. 4.
Pump, Tiroline. J. B. Chockley. 1,648,541; Nov. 8.
Pump unit, Twin. W. Thomas. 1,613,491; Jan. 4.
Pump, Vacuum. C. H. Hopgood. 1,637,644; Aug. 2.
Pump, Vacuum. J. R. Kinney. 1,623,315; Apr. 5.
Pump, Vacuum. J. R. Kinney. 1,623,315; Apr. 5.
Pump, Vacuum. H. V. Ringgenberg. 1,650,539; Nov. 22.
            Fump. Vacuum. 1: Pump. Vacuum. 1: Nov. 22: Nov. 

Pump, Varieless. P. Vorenux. 1,645,854; Uct. 18.
Pump, Variable-capacity. F. W. Schubert. 1,638,367;
Aug. 8.
Pump, Variable-stroke. W. Glattes. 1,645,420; Oct. 11.
Pump, Vehicle attached and operated tire. R. O. Lewis. 1,627,634; May 10.
Pump, Vertical-shaft floating. A. Hollander. 1,625,892;
Apr. 26.

            Apr. 26.

Pump, Vibration-operated. C. II. Braselton and F. B.

MacLaren. 1,625,788; Apr. 26.

Pump, Water. F. Cárdenas. 1,632,948; June 21.

Pump, Water. J. and G. Popp. 1,622,840; Mar. 29.

Pump, Well. B. F. Marty. 1,619,950; Mar. 8.

Pump, Well. M. B. Williams. 1,616,017; Feb. 1.

Pump, Will. G. H. Christensen. 1,633,343; Dec. 20.

Pump with cam-controlled plungers. G. Schneggenburger. 1,612,888; Jan. 4.

Pump with liner plate, Rotary. P. I. Nagle. 1,638,055;

Aug. 3.
         Aug. 9.
Pumping apparatus. G. A. Buvinger
1,631,619; June 7.
Pumping apparatus. A. R. Le Grue. 1,619,302; Mar. 1.
Pumping apparatus. G. W. Kammerer and F. Hill.
         Dec. 27.

Pumping beam. H. G. Durnell. 1,635.118; July 5.

Pumping device. J. A. Hendricks. 1,615,761; Jan. 25.

Pumping device. J. Perrod and R. D. Thompson.

Pumping equipment, Shut-down device for oil-well-
J. Sutton. 1,621,692; Mar. 22.

Pumping installation. H. H. Macomber. 1,649,171;

Nov. 15.
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Pumping installation and the like, Deep-well. A. C. Potter. 1,639,703; Aug. 23.
Pumping jack. H. J. Smith. 1,649,137; Nov. 15.
Pumping liquid and apparatus therefor. W. J. Rusdell. 1,613,139; Jinn. 18.
pumping machine, Rotary. E. Hill. 1,631,592; June 7.
Pumping machine, Rotary. E. Hill. 1,648,730; Nov. 8.
Pumping mechanism. C. H. Braselton and C. P. Brock-pumping mechanism. C. H. Braselton and F. B. MacLaren. 1,629,857; May 24.
Pumping mechanism. W. P. Brett. 1,624,527; Apr. 12.
Pumping mechanism and system. J. A. Warren. Pumping mechanism and system. J. A. Warren. Pumping mechanism and system. J. A. Warren. Pumping mechanism. Long-stroke. F. F. Hill. 1,637,078; Apr. 12. Pumping mechanism, Long-stroke. F. F. Hill. 1,637,078; Plumping mechanisms, July 26.
Pumping plant for high-pressure steam generators. S. Löffler. 1,652,026; Dec. 6.
Pumping power, Duplex oil-well. H. H. Ice. 1,637.571; Aug. 2. Pumping rig. J. E. McComb. 1,621,940; Mar. 22. Pumping station, Sewage. C. Yeomans. 1,613,007; Jan. 4. Pumping rig. J. E. McComb. 1,621,940; Mar. 22. Pumping station, Sewage. C. Yeomans. 1,613,007; Jan. 4. Station, Sewage. C. Yeomans. 1,613,007; Jan. 4. Station, Sewage. C. Yeomans. 1,613,007; Jan. 4. Station, St Apr. 12.
Pumps, Plate for vacuum. H. P. Sachse. 1,020,000.
May 24.
Pumps, Power-transmission device for. J. A. Nitchie.
1,623,490; Apr. 5.
Pumps, Regulator system for condenser circulating. H. F. Schmidt. 1,630,767; May 31.
Pumps, Relief valve for rotary. J. R. Kinney. 1,623,316; Apr. 5.
Traveling valve for oil-well. W. Bradley. 1,632,216; June 14.
Pumps, Valve for cylinder. G. E. Parks. 1,647,144; Nov. 1. Pumps. Traveling valve for oil-well. W. Bradley. 1,632,216; June 14.

Pumps, Valve for cylinder, G. E. Parks. 1,647,144; Nov. 1.

Pumps, Valve for cylinder, G. E. Parks. 1,647,144; Nov. 1.

Pumps, Valve for cylinder, G. E. Parks. 1,647,144; Nov. 1.

Pumps, Valve for cylinder, G. E. Brass. 1,647,388; Nov. 1.

Pumps, Wear-preventing means for. F. J. Wise. 1,647,425; Nov. 1.

Pumps, Wear-preventing means for. F. J. Wise. 1,647,425; Nov. 1.

Pumps, Wear-preventing means for. F. J. Wise. 1,644,425; Nov. 1.

Pumps, Wear-preventing means for. F. J. Wise. 1,642,438; Nov. 1.

Pumps, Wear-preventing means for. F. J. Wise. 1,642,438; Nov. 1.

Punch and die retniner. O. K. Richard and C. C. Richard. 1,623,844; Apr. 2.

Punch and die retniner. O. K. Richard and A. F. Punch 1,632,844; Apr. 2.

Punch and die retniner. O. K. Richard and A. F. Sept. 6.

Punch press. E. Gauthier. 1,642,773; Nept. 20.

Punch press. E. Gauthier. 1,642,773; Nept. 20.

Punch press. C. Nulan. 1,639,100; Aug. 16.

Punch press. C. Nulan. 1,639,100; Aug. 16.

Punch press. C. Nulan. 1,639,100; Aug. 16.

Punch presses. Automatic sorter for. D. W. Reese. 1,620,687; Mar. 16.

Punches or other tools, Holder for. E. Henricson. 1,638,261; Aug. 9.

Punches, Stripper device for perforating. N. Loesel. 1,631,233; June 7, 11.

Punching for. 1,648,088; Nov. 8.

Punching bag. G. W. Abraham. 1,612,796; Jan. 4. Punching bags and the like, Double swivel hauger and support for. W. R. Harley. 1,628,973; May 17. Punching controlling bands, Feeling mechanism for ma-chines for. O. Wolters and K. Höper. 1,619,645;

Mar. 1.
Punching machine.
Punching machine.
E. A. Munger, 1,621,130; Mar. 15.
Punching machine.
Punching machine.
Punching machine.
Punching machine.
A. T. Yates. 1,620,217; Apr. 26.
Punching machine for cards and stenells.
P. A. Gollnick and J. J. Tooinu.
1,613,271; Jan. 4.
Punching machine for inner tubes, Valve-hole.
Stevens. 1,622,256; Mar. 22.
Punching machine, Metal.
C. P. Thomas. 1,650,748;
Nov. 29.
Punching machine, Selective.
W. S. Freeburg. 1,612,971;

Jan. 4.
Punching machines, Carriage return for, W. W. Lasker, 1,643,779; Sept. 27.
Punching machines, Spacing mechanism for, L. H. Vold and K. R. Hammerstrom, 1,633,718; June 28.
Punctureproof cushion wheel, M. A. Kohin, 1,637,280;

July 26.
Punciuring machine. C. S. Nelson. 1,622,538; Mar. 29.
Purifier, Centrifugal. J. M. Schutz. 1,612,836; Jan. 4.
Purifying mechanism and method. A. E.
1,634,893; July 5.
Purse. A. W. Hinrichs. 1,618,088; Feb. 15.
Purse. M. A. Myers. 1,638,594; Aug. 9.
Purse and like receptacle. W. C. Hiering. 1,632,337;

Pulse and the Exception of the Pulse (hg. 1,644,616; Oct. 4. Purse, Safety. M. J. Felz. 1,651,921; Dec. 6. Push and pull switch. B. A. Benson. 1,636,678; July

Pyropinspins Dec. 27.

Dec. 27.

Pyrotechnic lance holder. J. H. Shunk. 1,621,908;

Mar. 22.

Mar. 22.

H. C. Gammeter. 1,604,892; Aug. 30.

Pyrotechnic lance bolder. J. H. Shunk. 1,621,908; Mar. 22.
Pyrotechnic wheel. J. H. Shunk, ir. 1,617,084; Feb. 8.
Pyrotechnic wheel. J. H. Shunk, ir. 1,617,084; Feb. 8.
Pyrotechnic wheel. J. H. Shunk, ir. 1,617,084; Feb. 8.
Pyrotechnical devices, Holder for. J. H. Shunk. 1,613,862; Jan. 11.
Pyroxylin-lacquer maposition. B. K. Brown and C. Bogn. Method and apparatus for working. B. R. Berry and P. K. Devers. 1,645,866; Oct. 11.
Quartz working. B. R. Berry. 1,620,511; Mar. 8.
Quick-break switch. J. H. Penglilly. 1,631,503; June 7.
Quick-break switch. J. H. Penglilly. 1,631,503; June 7.
Quilling frame. A. T. Kasley. 1,635,615; Myr. 8.
Quilling frame. R. Simons. 1,643,331; Sept. 27.
Quilling machine. G. Adsit. 1,627,220; May 10.
Quinne solutions, suitable for subcutaneous injections, Manufacture of. A. Liebrecht. 1,648,487; Nov. 8.
Quoin. H. H. Strait. 1,632,422; June 14.
Race-course construction. J. F. Jennings. 1,634,326;
July 5.
Rack: Sceneral.

Apparel rack. Bag rack. Billiard-ball rack. Billiard-ball
Bobbin rack.
Botler rack.
Book rack.
Bottle rack.
Bread rack.
Calender rac Calender rack.
Card rack.
Cartridge rack.
Clothes-drying rack.
Clothes rack.

Collapsible rack. Directory rack. Display rack.
Display rack.
Drying rack.
Egg-turning rack.
Fender rack.
Festooning rack. Floral rack.
Floral rack.
Foldable rack.
Fountain-pen rack.
Harness rack. Hatrack. Index rack.

Rack : Sec-Seed-corn drying rack. Seed rack. Serving rack.

ack: 860— Laundry assorting rack, Ledger rack, Map rack, Milk-can rack, Milk-can rack.
Music rack.
Paper holder and display rack.
Portable rack.

rack.

Portable rack.

Portable rack.

Portable rack.

Portable rack.

Record rack.

Rould rack.

Rack.

Rack.

P. H. Chase and W. Foster.

Rack.

Rack.

P. H. Chase and W. Foster.

Rack.

Rack.

Rould rould rack.

Rack.

Rack.

Rould rould rack.

Rack.

Rack.

Rould rould rack.

Rack

Shoe rack. Steel stock rack.

Rack for tea, coffee, and spice containers. A. I. S. Halvorsen, 1,631,725; June 7.
Rack-tooth-cutting machine. II. E. Sloam. 1,625,402; Apr. 19.
Racket case. E. C. and I. C. Hoover. 1,629,105; May 17.
Racket frame. W. F. Reach. 1,613,727; Feb. 22.
Racket, Tennis. C. Schindler. 1,627,621; May 10.
Radial drill. J. C. Carlton. 1,638,654; Aug. 12.
Radial drill. J. C. Carlton. 1,638,654; Aug. C. Carlton.
Radial drill. J. C. Carlton. 1,638,654; Aug. C. Carlton.
Radial arting gauge. L. B. Carlson. 1,641,114; Aug. 30.
Radiant encrgy, Books reproducible by. R. A. Fessenden.
I,615,648; Feb. S.
Radiant encrgy, Books reproducible by. R. A. Fessenden.
I,615,648; Feb. S.
Radiant encrgy, Transmistion system for. J. H. Hammond. Jr. 1,627,310; July 26.
Radiant encrgy, Transmitting system for. A. F. Murray.
1,623,745; Apr. 5.
Radiant for gas heaters. W. L. Sharp. Des. 73,806; Nov. 8.
Radiant for gas heaters. W. L. Sharp. Des. 73,806; Nov. 8.
Radiant for gas heaters. W. L. Sharp. Des. 73,806; Nov. 8.
Radiant for gas heaters. W. L. Sharp. Des. 73,806; Nov. 8.
Radiant for gas heaters. W. L. Sharp. Des. 73,806; June 14.
Radiant heater. L. S. Lawson. Des. 72,850; June 14.
Radiant for E. M. Bassler. 1,641,448; Sept. 6.
Radiator. F. A. Barker. 1,616,776; Feb. 8.
Radiator. E. M. Bassler. 1,641,448; Sept. 6.
Radiator. G. M. Berger. 1,640,874; Aug. 80.
Radiator. G. M. Berger. 1,640,874; Aug. 80.
Radiator. T. E. Murray. 1,633,331; Mar. 1.
Radiator. T. E. Marray. 1,633,601; June 28.
Radiator. G. H. Lober. 1,644,655; Oct. 11.
Radiator. T. E. Marray. 1,633,601; June 28.
Radiator. T. F. Radiator. 1,633,601; June 28.
Radiator. A. Palka. Des. 72,800; June 7.
Radiator. A. Palka. Des. 72,80

Radiator, Antomobile. T. F. Rainsford. Des. 72,187; Mar. 8.
Radiator, Auxiliary cooler for. R. J. Coale. 1,637,102; July 26.
Radiator boxes, Damper control for. C. C. Shipp. 1,647,639; N. V. I. Billingsley. 1,626,177; Apr. 26.
Radiator cap. R. H. Hummert. Des. 73,259; Aug. 16.
Radiator cap. W. B. Jarvis. 1,645,384; Oct. 11.
Radiator cap. W. B. Jarvis. 1,645,384; Oct. 11.
Radiator cap. W. B. Jarvis. 1,645,384; Oct. 11.
Radiator cap. W. B. Jarvis. 1,645,384; Aug. 16.
Radiator cap. A. C. Lappert. Des. 73,263; Aug. 18.
Radiator cap. A. C. Lappert. Des. 73,263; Aug. 19.
Radiator cap. H. R. Petcellel. Des. 72,552; Mar. 19.
Radiator cap. W. Schnell. Des. 71,813; Jan. 4.
Radiator cap. W. Schnell. Des. 73,344; Aug. 28.
Radiator cap. W. H. Schulze. Des. 73,344; Aug. 28.
Radiator cap. K. E. Siant. 1,652,061; Dec. 6.
Radiator cap. M. Stockman. Des. 72,449; Apr. 12.
Radiator cap. M. Stockman. Des. 72,672; June 28.
Radiator cap. C. Weyndt. 1,623,511; Apr. 5.
Radiator cap. D. C. Weyndt. 1,623,511; Apr. 5.
Radiator cap. D. C. Weyndt. 1,623,511; Aug. 23.
Radiator cap. and the like. W. B. Jarvis. 1,648,129; Nov. 8.

Radiator, Thermosiphon. L. V. Pence. 1,629,298;
May 17.
Radiator, Transformer. W. M. Dann. 1,619,382; Mar. 1.
Radiator, Transformer. W. M. Dann. 1,619,334; Mar. 1.
Radiator, Transformer. W. M. Dann. 1,619,334; Mar. 1.
F. G. Dann. 1,619,334; Mar. 22.
Korvin-Kroukovsky. 1,621,918; Mar. 22.
Radiators and the like, Hanger for wall. A. J. Loepsinger. 1,642,075; Sept. 13.
Radiators, Article of manufacture for mending. E. C.
Hammond. 1,617,949; Feb. 15.
Radiators, Arsembling. F. M. Young. 1,623,327; Apr. 5.
Rock. 1,648,310; Oct. 25.
Radiators, Bracket for. G. W. Lindsay and H. Nordenmalln. 1,649,355; Nov. 15.
Radiators, Condenser for motor-webicle. A. E. Hostetter. 1,652,985; Dec. 13.
Radiators, Cushion support for. E. R. Gurney. 1,623,473; Apr. 5.
Radiators, Cushion support for. E. R. Gurney. 1,623,473; Apr. 5. Radiator cap, Automobile. A. Phillips. Des. 73,758; Nov. 1.
Radiator cap for motor vehicles. F. C. Ruppel. Des. 74,074; Dec. 13.
Radiator cap, Illuminated. R. Maranzino. 1,650,800; Nov. 29. Radiator-cap-latching device. R. D. Schnoor, 1,650,805; Nov. 29.
Radiator-cap ornament, J. E. Corker, Des. 73,026;
July 12.
Radiator-cap ornament, Automobile. S. Faith and S.
Klasstorner. Des. 74,004; Dec. 6.
Radiator-cap ornament, Automobile. C. C. Mose. Des.
72,182; Mar. 8.
Radiator-cap ornament for automobiles. F. J. Wilhelm.
Des. 72,2821; June 21.
Des. 72,2821; June 21.
J. L. Drucklich. Des. 74,003; Dec. 6.
Radiator-cap ornament or the like. D. Calarco. Des.
73,641; Oct. 18.
Radiator caps, Locking device for. A. L. Sohm. 1,616,878; Feb. 8. 1.623,473; Apr. 5. Radiators, Dust catcher for. C. K. Volckening. 1,614,580; Jan. 18. Radiator caps, Locking device for. A. L. Sohm. 1,616,878; Feb. S. Radiator caps, Ornament for. A. Chéron-Duval. Des. 72,934; June 28. Radiator casing. A. Palka. Des. 72,441; Apr. 12. Radiator casing or cover. B. Baxter. 1,625,931; Apr. 26. Radiator connection, Combination. R. J. Baldwin. 1,633,611; June 21. Radiator construction. E. G. Griese. 1,648,804; Nov. 8. Radiator construction. T. C. Whitehead. 1,634,612; Jan. 18, Radiators, Hanger for wall, W. F. Bach. 1,630,919; May 31. Radiators, Indicator for automobile. C. L. De Rochn. 1,622,095; Mar. 22. Radiators, Interior valve for. C. D. Hickman. 1,643,451; Sept. 27. Radiator construction. B. G. Griese. 1,648,804; Nov. 8. Radiator construction. T. C. Whitehead. 1,634,812; July 5. Radiator core. J. M. Fedders. 1,617,751; Feb. 15. Radiator core. J. M. Fedders. 1,618,279; Feb. 22. Radiator core. J. M. Fedders. 1,618,290; Mar. 1. Radiator cores. Apparatus for testing. W. J. Armstrong. 1,613,217; Jan. 4. Radiator cores. Apparatus for use in assembling. C. W. Dippert. 1,629,760; May 24. Radiator cores. Apparatus for testing. W. J. Armstrong. 1,613,217; Jan. 4. Radiator cores. Apparatus for use in assembling. C. W. Dippert. 1,629,760; May 24. Radiator cores. Machine for stripping nests from. B. H. Hawkins and E. R. Hansen. 1,615,272; Jan. 25. Radiator cover. A. E. Blackman. 1,638,688; July 19. Radiator cover. K. Drica. 1,630,239; May 31. 12. Radiator cover. K. Drica. 1,630,239; May 31. 12. Radiator cover, K. Drica. 1,630,239; May 31. 12. Radiator cover, K. Drica. 1,630,239; May 31. 12. Radiator cover, K. Drica. 1,630,247; May 17. Radiator cover, K. Drica. 1,630,247; May 17. Radiator cover of similar article. J. Meikle. Des. 72,105; Mar. 1. H. Cross. 1,632,000; June 14. Radiator faceplate. F. Mammi. Des. 72,717; May 24. Radiator flaps. Self-olling hub for. R. F. Crawford. 1,633,260; June 28. Radiator flips. Self-olling hub for. R. F. Crawford. 1,633,260; June 28. Radiator flips. Mechine for beading. B. H. Hawkins and Sept. 27.
Radiators, Locking cap for. A. C. Lippert. 1,630,259;
May 31.
Radiators of motor cars, Ornament for. H. S. Hewitt.
Des. 73,378; Aug. 30.
Radiators, Producing. Y. E. Bergström. 1,646,384; Radiators, Producing, Oct. 25.
Radiators, Shutter apparatus for. J. F. Raleigh, 1,633,794; June 28.
Radiatots, Shutter apparatus for engine. A. G. McCaleb. 1,614,075; Jan. 11.
Radiators, Shutter cover for. F. F. Hansen. 1,638,847; Radiators, Shutter cover for. F. F. Hansen. 1,638,847; Radiators, Shutter apparatus for engine. A. G. McChen. 1,614.075; Jan. 11.
Radiators, Shutter cover for. F. F. Hansen. 1,638,847; Aug. 13.
Lawler. 1,640,243; Aug. 23.
Radiators, Vapor condenser for motor-vehicle. J. J. Lawler. 1,640,243; Aug. 23.
Radiators, Vapor condenser for motor-vehicle. J. J. Donnelly. 1,613,873; Jan. 11.
Radioactive substances, Artificially producing. A. Gaschler. 1,644,370; Oct. 4.
Let. 1,644,370; Oct. 4.
Let. 1,645,370; Oct. 4.
Radio and direct-service system, Universal. E. McLarty, sr., and S. L. Blankenship. 1,631,690; June 7.
Radio and phonograph apparatus, Combination. E. V. Hughes. 1,648,644; Nov. 8.
Radio and phonograph apparatus, Combined. F. G. Madyer. 1,620,481; Mar. 8.
Radio and phonograph apparatus, Combined. F. G. Radio and phonograph apparatus, Combined. J. Di Stanlstao. 1,616,217; Feb. 1.
Stanlstao. 1,616,217; Feb. 1.
Sept. 20.
Radio and phonograph cabinet, Combination. J. Di Stanlstao. 1,616,217; Feb. 1.
Sept. 20.
Radio and phonograph cabinet, Combination. J. Di Stanlstao. 1,616,217; Feb. 1.
Radio and phonograph cabinet, Combination. Sept. 20.
Radio and phonograph cabinet, Sept. 20.
Radio and phonograph cabinet, W. Lytton Madiator filter. W. F. Cooms and J. M. Beck. 1,619,398; Mar. I. Radiator fins, Machine for beading. B. H. Hawkins and E. R. Hansen. 1,623,594; Apr. 5.
Radiator for heating and ventilating units. M. J. Callahan. 1,626,390; Apr. 26.
Radiator for the rooms for buildings, Baseboard. F. M. Nordling. 1,633,032; June 21.
Radiator, Gas steam. G. W. Blackmore. 1,630,107; May 24. Radio and phonograph cabinet, Combination. J. Di Stanislao, 1,616,217; Feb. 1.
Radio and phonograph cabinet or similar article. Combined. J. M. Beach and G. Ffetcher. Des. 73,474;
Radio and phonograph combination switch. W. Lytton and P. E. Edelman. 1,649,716; Nov. 15.
Radio and phonograph combination switch. W. Lytton and P. E. Edelman. 1,649,716; Nov. 15.
Radio and phonograph reproduction, Method and apparation of the coordination. R. A. Fessenden. 1,616,416;
Radio and phonograph reproduction, Method and apparation of the coordination. R. A. Fessenden. 1,616,416;
Radio and telephone reception, Sound amplifier for. J. Pavek. 1,644,605; Oct. 4.
Radioantenna. A. I. Blanc. 1,654,108; Dec. 27.
Radioantenna, Fortable. H. Farkoth. 1,640,929; Radio apparatus. L. B. Cogswell. 1,634,896; July 5.
Radio apparatus. L. B. Cogswell. 1,634,896; July 5.
Radio apparatus. J. J. W. Kenan and W. M. Cady. Radio apparatus. J. J. W. Kenan and W. M. Cady. Radio apparatus. T. E. New 1,650,032; Nov. 22.
Radio apparatus. T. E. New 1,650,032; Nov. 22.
Radio apparatus. G. Somersalo. 1,620,609; Mar. 8.
Radio apparatus. G. Wolff. 1,053,796; Dec. 27.
Radio apparatus. Dlal mechanism for. W. A. Ready. 1,632,875; Dec. 27.
Radio apparatus. Dlal mechanism for. W. A. Ready. 1,632,875; Dec. 27.
Radio apparatus, Grid leak for. R. E. Marbury. 1,632,875; Dec. 27.
Radio apparatus, Grid leak for. R. E. Marbury. 1,632,875; Dec. 27.
Radio apparatus, Sirid leak for. R. E. Marbury. 1,632,875; Dec. 27.
Radio apparatus, Dlal mechanism for. W. A. Ready. 1,632,875; Dec. 27.
Radio apparatus, Sirid leak for. R. E. Marbury. 1,632,875; Dec. 27.
Radio apparatus, Sirid leak for. R. E. Marbury. 1,632,640; Jan. 18.
Radio apparatus, Support for. A. C. Hayden. 1,631,953; A. Radio apparatus, Support for. A. C. Hayden. 1,631,953; Selly. 1,644,864; Jan. 18.
Radio apparatus, Support for. A. C. Hayden. 1,651,953; Selly. 1,644,86 May 24.

Radiator puard, H. B. Wilson. 1,631,846; June 7.

Radiator hanger. C. H. Cobb. 1,634,981; July 5.

Radiator hanger. H. H. Crawford. 1,645,833; Oct. 18.

Radiator hanger. W. F. Knox. 1,625,473; Apr. 19.

1,645,269; Nov. 22.

Radiator, Internal-combustion-engine. W. H. Ray. 1,632,693; June 21.

Radiator mount. J. W. Heiney. 1,631,981; June 14.

Radiator ornament. L. B. Campbell. 1,644,051; Oct. 4.

Radiator ornament. I. Von Haxthausen. Des. 73,455-6; Sept. 13. Radiator shutter, Rolling. A. Schepper and P. Schroeder. Schroeder. Schroeder. Schroeder. Radiator shutters, Operating mechanism for. F. J. Irving. 1,633,021; June 21. Radiator Stream-line high-pressure. A. H. Hart. 1,641,586; Sept. 6. Radiator tank. E. D. Treanor. 1,631,711; June 7.

Dec. 6. Radio apparatus, Vacuum-tube mountings for. B. H. Skelly, 1,614,696; Jan. 18.

Radiobattery. W. B. Schulte. 1,654,145; Dec. 27.
Radio battery charger. C. T. Webber. 1,627,815; May 10.
Radio Standacast distribution system. E. E. Clement. 1,635,156-8; July 5.
Radio broadcast distribution, Subdivided service system of. E. E. Clement. 1,635,153; July 5.
Radio broadcast selecting and distribution system. B. E. Clement. 1,635,152; July 5.
Radio broadcast selecting and distribution system. B. E. Clement. 1,635,152; July 5.
Radio broadcast selecting and distribution system. B. E. Clement. 1,635,152; July 5.
Radio broadcast selecting and distribution system. B. E. Radio broadcasting system. Wheel. R. D. Duncan, jr. 1,622,135; Mar. 2.
Radiocabinet. W. Bender, jr. Des. 71,779; Jan. 4.
Radiocabinet. W. G. Crumlish and W. F. Scott. Des. 72,699; May 24.
Radiocabinet. E. L. Hedemark. Des. 71,730; Jan. 4.
Radiocabinet. A. A. Kent. Des. 74,148; Dec. 27.
Radiocabinet. F. Magio. Des. 74,048; Dec. 42.
Radiocabinet. F. Magio. Des. 74,048; Dec. 46.
Radiocabinet. E. F. Pooley. Des. 72,443-4; Apr. 12.
Radiocabinet. E. F. Pooley. Des. 72,443-4; Apr. 12.
Radiocabinet. E. F. Pooley. Des. 72,443-4; Apr. 12.
Radiocabinet. A. R. Remss. 1,616,229; Feb. Nov. 22.
Radiocabinet. A. Remss. 1,616,229; Feb. Nov. 22.
Radiocabinet. A. Remss. 1,616,229; Feb. Nov. 22.
Radiocabinet. D. S. Spector. Des. 71,290; Mar. 22.
Radiocabinet. D. S. Spector. Des. 72,200; Mar. 22.
Radiocabinet. D. S. Spector. Des. 71,384; Jan. 25.
Radiocabinet. J. Wolff. Des. 74,088; Dec. 13.
Radiocabinet. J. Wolff. D Dec. 13. Dec. 13. Apr. 13. Apr. 13. Apr. 14. Apr. 15. App Radio-communication device. B, F. Miessner. 1,622,389; Radio communication over wires, System of. C. Schwarz. 1,649,132; Nov. 15.
Radio-communication System of. E. L. Chaffee. 1,642,663; Sept. 13.
Radio communication System of. E. L. Chaffee. 1,642,663; Sept. 13.
Radio communication Tuning arrangement for. C. Schwarz. 1,648,835; Nov. 8.
Radio communication. Tuning arrangement for. C. Schwarz. 1,648,431; Nov. 15.
Radio-compasses, Compensator for. W. B. Burgess. 1,646,443; Oct. 25.
Radio-condenser. C. V. Bates. 1,612,902; Jan. 4, Radio-condenser. P. A. Chamberlain. 1,635,459; July 12.
Radio-condenser. M. Guett. 1,652,118; Dec. 6, Radio-condenser. A. Pinkus. 1,625,350; Apr. 19.
Radio-condenser. A. Pinkus. 1,625,350; Apr. 19.
Radio-condenser. coupling. H. A. Bremer. 1,632,878; June 21. Additional Conference of the C June 21. July 5.
Radio extension conductor and reel. W. I. Licht.
1.620,562; Mar. 8.
Radio freadurn system. H. Garrett. 1,629,337; May 17.
Radiofrequency amplifying system. L. L. Jones.
Radiofrequency choke coll system. A. Crossley.
1.627,958; May 10.
Radiofrequency circuits, Tuned. D. R. Lovejoy.
1.650,898; Nov. 29.
Radiofrequency circuits, Circuit system for. R. S. Miner.
1.630,850; May 81.
1.630,850; May 81.
1.650,850; May 10.
1.651,515; Dec. 6. Radiofrequency transformer. C. Pfanstiehl, 1,614,151; Jan. 11. Radiofrequency transformer. R. M. Warren. 1,623,143;

Radiografonola, F. J. Renner, Re16,728; Aug. 30, Radiographic apparatus, J. R. Kelley, 1.622,320-1; Mar. 29.

Mar. 29.

Radiographic apparatus. J. R. Kelley. 1,843,382;
Sept. 27.

Radiographic examination, Method of and apparatus for.

A. St. John. 1,622,149; Mar. 22.

Radiography, Electric relay for. H. P. Pilon. 1,634,208; June ine 28. 1.630.980: May 31. Radiojack. May 31. Radiojack. R. M. C. R. August. 1,627,823; May 10. Radio loop or antenna, Telescoping. L. Adams. 1,642,350; Sept. 13.
Radio loud speaker. S. A. Baker. Des. 73,363; Aug. 30.
Radio loud speaker. P. Drew and L. C. Zabriskie. Des.
73,741; Nov. 1.
Radio loud speaker. B. W. Dulzo. Des. 71,784; Jan. 4.
Radio loud speaker. H. Green. 1,689,030; Aug. 16.
Radio loud speaker. J. M. Hofmann. Des. 72,095;
Mar. 1 Radio loud speaker, J. M. Hofmann. Des. 72,095; Mar. 1.
Radio loud speaker, J. Kersten. Des. 73,184; Aug. 2.
Radio loud speaker, W. Westphal. 1,648,668; Nov. 8.
Radio loud-speaker body. C. M. Boudette. Des. 72,695; May 24.
Radio loud speaker, Cabinet for a. C. A. Lippi. Des. 73,188; Aug. 2. May 24.
Radio loud speaker, Cabinet for a. C. A. Lippi. Des. 73.188; Aug. 2.
Radio loud speaker, Diaphragm for a. B. F. Waddell. Radio loud speakers, Diaphragm for a. B. F. Waddell. Radio loud speakers, Gille front for. R. T. Kingsford. Des. 73,261; Aug. 9.
Radio loud speakers, Mounting for. L. Wulkan. 1,616,246; Feb. 1.
Radiomantel. C. E. Jennings. Des. 72,016; Feb. 15.
Radiopanel and sound amplifier, Composite. W. B. Stevenson. 1,652,257; Dec. 13.
Radio parts, Device for supporting. M. Scigman. Louden parts, Device for supporting. M. Scigman. Louden meter. J. B. Hoge and E. E. Clement. 1,627,332; May 3.
Radio parts, Device, Billboard. C. F. Jenkins. 1,643,660; Sept. 27.
Radio position finding. R. H. Ranger. 1,639,667; Aug. 23.
Radio printing telegraph system. G. S. Vernam. Aug. 23, Radio printing telegraph system. G. S. Vernam. 1,622,297; Mar. 29, Radioreceiver, H. F. Worner, 1,626,370; Apr. 26, Radio receiver and trouble alarm. R. K. Potter. 1,625,822-3; Apr. 26, Radio receiver attachment for telephones. G. F. Mitchell. 20, Radioreceiver, Coin-controlled. R. Sause. 1,650,238; Nov. 22, Radioreceivers, Connecter for. S. Siegel. 1,633,827; June 28, Radioreceivers, Connecter for. S. Siegel. 2, Radioreceivers, Connecter for. S. Siegel. 3, Radioreceivers, Connecter Radioreceivers, Connecter for. S. Siegel. 1,633,827; June 28.
Radioreceivers, Escutcheon plate for. S. Ballantine. Des. 72,138; Mar. 8.
Radioreceivers, Time-control mechanism for. R. B. Schultheis, 1,628,810; May 17.
Radioreceiving apparatus. A. H. Grebe. 1,623,918; A. Radio receiving apparatus. A. H. Grebe. 1,623,918; D. July 19.
Radio receiving apparatus. F. A. Kolster. 1,636,670; July 19.
Radio receiving apparatus. H. E. Lowenstein and E. E. Clement. Re16,606; Apr. 26.
Radlo receiving apparatus. G. H. Stevenson. 1,612,952; Jan. 4. Jan. 4. Radio receiving apparatus. A. A. Thomas. 1,652,219; Dec. 18. Radio receiving apparatus. G. W. Wacker. 1,631,993; June 14. Time 14.

Handio receiving apparatus. M. Wallace. 1,627,758; May 10.

Radio receiving apparatus. Interference-reducing means for. R. H. Ranger. 1,616,923; Feb. 8.

Radio receiving apparatus. Reproducer for. T. Lindenberg. 1,636,940; July 26.

Mary 16.

Mary 16.

Radio receiving circuit. W. Kaufman. 1,620,973; Mary 1,620,973; Mary 1,620,973; Mary 1,620,973; Mary 1,620,973; Mary 1,646,471; Oct. 25.

Radio receiving devices, Station-recording means for. A. Zillger. 1,646,471; Oct. 25.

Radio receiving loop. A. Longworth. Des. 72,161; Mar. 8.

Radio receiving set. H. D. Currier. 1,650,432; Nov. 22. Radio receiving set. H. D. Currier. 1.650.432; Nov. 22. Radio receiving set. A. Wikstrom. 1.648.521; Nov. 8. Radio receiving set. and sound-amplifying horn. Combined. W. Lytton. 1.649.715; Nov. 15. Radio receiving set. Fortable. H. Csanyl. 1,617.236; Feb. 8. Fortable. H. Csanyl. 1,617.236; Feb. 8. Radio receiving sets and phonographs. Sounding board of C. Lindsey. 1,638.944; June 28. Radio receiving sets, Cabinet for. M. C. Lindseyn. 1.625.478; Apr. 19. Radio receiving sets, Concelled loud speaker for. J. Wolff. 1,653.795; Dec. 27. Radio receiving sets, Control switch for the A batteries Radio receiving sets, Control switch for the A batteries Radio receiving sets, Control switch for the A batteries Radio receiving sets, Control for the A. C. McCanellonius for the control of the control of

May

Radio receiving sets, Escutcheon plate for. D. De Mare.
Des. 71,827; Jan. 11.
Radio receiving sets, Mounting means for. F. L. Lord,
1,640,200; Aug. 23.
Radio receiving sets, Station-selector dial for. M.
Nystrom. 1,634,625; July 5.
Radio receiving system. O. R. Curtis. 1,614,458; Jan. 18.
Radio receiving system. W. N. Fanning. 1,649,341;
July 26.
Radio receiving system. E. W. Kellogg. 1,637,045;
July 26.
Radio receiving system. J. M. Miller. 1,839,414; July 26, Radio receiving system. J. M. Miller. 1,639,414; Aug. 16. Radio receiving system. C. W. Rice. 1,640,427; Aug. 30. Radio receiving system. R. Sachtleber. 1,634,962; July 5. o receiving system, L. C. Young. Radio receiving system, Directive. R. A. Heising. 1,620,655; Mar. 15. Radio receiving unit, Self-contained. J. S. Fishback. 1,620,803; May 3. Radio receiving unit, Self-contained. J. S. Fishback. Radiorecorbion, Acrial for. C. F. Peitzman. 1,649,727; Radiorecord. E. C. Smith. 1,638,000. Radioreccytion, Aecial for. C. F. Peitzman. 1,649,727; No. 15.
 Radio sets, Supply circuits for. J. G. Aceves. 1,622,170;

 Mar. 22.
 Radio shield, Rectifying. T. Moore. 1,641,395; Sept. A. Radio signal circuit. A. H. Taylor. 1,613,733; Jan. 11.

 Radio signal circuit. A. H. Taylor. 1,613,733; Jan. 11.
 Radiosignaling. C. S. Agate and P. W. Willans. 1,624,201; Apr. 12.

 Radiosignaling. artema. 1,014,990; Jan. 18.
 System. P. O. Pedersen. 1,614,030; Jan. 18.

 Radiosignaling apparatus. M. Latour. 1,643,075; Sept. 20.
 Radio signaling apparatus. T. D. Parkin. 1,630,354; May 31.

 Radio signaling circuit. A. H. Taylor and L. C. Young.
 May 31.

Radio signaling circuit. A, H, Taylor and L. C. Young. 1,639,516; Aug. 23.

Radio signaling system. G. H, Clark. 1,624,215; Apr. 12.

Radio signaling system. A, Crossley. 1,632,369; June 14.

Radio signaling system. J. F. Farrington. 1,550,701; Nadio signaling system. M. Latour. 1,627,707; Nov. 29, Radio signaling system. M. Latour. 1,627,707; May 10. Radio signaling system. R. S. Ohl. 1,641,289; Sept. 6. Radio signaling system. H. J. Round. 1,642,173; Sept. 15. Radio signaling system. L. S. Uphoff. 1,617,467; Feb. 15. Feb. 15.

Radiosignaling, Varying-frequency system of. J. H.
Hammond Jr. 1,648,682; Nov. 8.

Radiosignals, Method and arrangement for the multiple
and directed receiving of. V. I. Bashenoff. 1,652,388;
Dec. 13.

Radiospatian.

and directed receiving of. V. I. Bashenoff. 1,652,388; Dec. 13.

Bec. 13.

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Bec. 18.

B

Radio transmitting system. F. Conrad. 1, 652,516; Dec. 13.
Radiotube. H. K. Huppert. 1,631,035; May 31.
Radiotube and lamp parts, Machine for making. C. Eisler. 1,633,316; July 12.
Radio tube and lamp parts, Machine for making. C. Eisler. 1,633,316; July 12.
Radiotube and other gevice. A. E. Schuffenhauer. Radiotube socket. G. Mendez. 1,637,084; July 26.
Radiotube socket. P. A. Chamberlain. 1,641,530; Sept. 6.
Radiotubes and other purposes, Apparatus and method of wire drawing and alloy wires used for. C. A. Laske. 1,616,176; Feb. 1.
Radiotubes, Vibration absorber for. H. A. Bremer. 1,616,176; Feb. 1.
Radiotuner, Electrostatic. J. Sleplan. 1,626,634; May 3.
Radio tuning coil. G. C. Brooks, 1r. 1,646,231; Oct. 18.
Radio tuning device. W. L. Miller. 1,626,834; May 3.
Radio tuning device. W. E. Miller. 1,631,380; June 7.
Radio tuning device. W. E. Miller. 1,631,380; June 7.
Radio tuning instruments, Logging device for. E. H.
Larson. 1,630,302; May 31.
Radio vanum tubes, Socket for. C. Saenger. 1,639,971; Aug. 27.
Radio, Vanum tubes, Socket for. C. Saenger. 1,639,971; Aug. 27.
Radio, Web message. C. F. Jenkins, 1,635,324; July 12.
Radios, Condenser control for. W. G. Dunn. 1,613,088; Radiumator. S. A. Stein. 1,648,746; Nov. 8.
Radiumator. S. A. Stein. 1,648,746; Nov. 8. Radios, Condenser control for. W. G. Dunn. 4,013,000; Jan. 4.
Radiumator. S. A. Stein. 1,648,746; Nov. 8.
Radium emanation in fluids, Process of and apparatus for dissolving. A. Cervi. 1,635,113; July 5.
Radium emanations, Apparatus for absorbing. A. Cervi. 1,614,825; Jan. 18.
Radium emanations, Apparatus for administering. G. H. B. Fulner. 1,620,9634; Mar. 15.
Radium emanator. J. W. O'Nelll. 1,615,912; Feb. 1.
Radium emanator. J. W. O'Nelll. 1,615,912; Feb. 1.
Radium evalver. Apparatus for generating. A. de Clairmont. 1,645,899; Oct. 18.
Radius rod. J. A. Potts. 1,616,548; Feb. 8.
Radius rod and front-rate bracing means. E. Abbott. 1,614,639; Jan. 18.
Radius-rod attachment. G. F. Coley. 1,623,046; Apr. 5.
Radius-rod attachment. G. F. Coley. 1,623,046; Apr. 5.
Radius-rod attachment. J. Radius-rod brace. M. C. Skaggs and F. Hammock. 1,647,375; Nov. 1.
 Radius-rod attachment.
 G. F. Coley.
 1,623,046; Apr. 5.

 Radius-rod brace.
 M. C. Skaggs and F. Hammock.

 1.647,375; Nov.
 1.

 Radius-rod clamp.
 S. C. Ewens.
 1,627,695; May 10.

 Radius-rod connection.
 D. Martln.
 1,652,248; Dec. 13.

 Radius-rod holder.
 W. L. Roper.
 1,644,037; Oct.

 Radius-rod reuforcement.
 E. J. Fagan.
 1,649,158;
 Radius-Fod donnection. D. Martin. 1,622,248; Dec. 13.
Radius-Fod holder. W. L. Roper. 1,644,037; Oct. 4.
Nov. 15.
Rodius-Fod bupport. N. K. Hearn. 1,644,037; Oct. 4.
Nov. 15.
Radius-Fod support. N. K. Hearn. 1,644,031; Oct. 4.
Nov. 15.
Radius-Fod support. N. K. Hearn. 1,644,031; Nov. 15.
Radius-Fod State 1,638,324; Aug. 9.
Radius-Fod. 1,638,324; Aug. 9.
Rafter gauge. E. Attaway. 1,628,447; May 10.
Rail. W. G. Coughlin. 1,619,403; Mar. 1.
Rail anchor. R. L. Cochrane. 1,628,231; May 10.
Rail. W. G. Coughlin. 1,619,403; Mar. 1.
Rail anchor. F. W. Cooper. 1,618,458; Dec. 27.
Rail anchor. F. W. Cooper. 1,618,477; Feb. 22.
Rail anchor. H. H. Gifford. 1,625,938-9; Apr. 26.
Rail anchor. H. H. Gifford. 1,625,938-9; Apr. 26.
Rail anchor. H. G. Gillimor. 1,647,909; Nov. 1.
Rail anchor. G. L. Moore. 1,630,229; Nov. 2.
Rail anchor. G. L. Moore. 1,630,229; Nov. 2.
Rail anchor. G. L. Moore. 1,632,471; Jan. 4.
Rail anchor. G. Fradia. 1,632,847; June 21.
Rail anchor. H. G. Warr. 1,641,421; Jan. 4.
Rail anchor. H. G. Warr. 1,641,7490; Nov. 1.
Rail anchor. H. G. Warr. 1,641,7490; Nov. 2.
Rail anchor. H. G. Warr. 1,641,7490; Nov. 2.
Rail anchor. H. G. Warr. 1,641,7490; Nov. 2.
Rail anchor. H. G. Warr. 1,648,084; Nov. 8.
Rail anchor. H. G. Warr. 1,648,084; Nov. 8.
Rail anchor. H. G. Warr. 1,648,084; Nov. 8.
Rail anchor. E. Woodings. 1,646,780; Oct. 25.
Rail anchor. H. G. Warr. 1,648,084; Nov. 8.
Rail anchor. E. Woodings. 1,646,780; Oct. 25.
Rail anchor, E. Woodings. 1,646,780; Oct. 25.
Rail anchor, Two-piece spring. A. J. Cook. 1,638,984; Jug. 16. Ruft. 4. do. plate. S. Sorensen. 1,641.299; Sept. 6. Ruft. and T. Twe-plees. A. J. Cook. 1,638,982; Aug. 16. Rail anchors, Appearatus for manufacturing. L. A. Schneider. 1,644.283; Oct. 4. do. Rail and tie plate, Railway. H. J. Coerper. 1,653,001; Dec. 20. Rail anticreeper. R. Hill. 1,614,365; Jan. 11, Rail anticreeper. E. M. McVicker. 1,635,377; July 12

Radio transmission system. P. S. Carter. 1,623,996; Apr. 12. Radio transmission system. H. Schieferstein. 1,626,699;

otransmitter, Vacuum-tube. G. Messtorff. 1,626,744; May 5. Radiotransmitters, Arrangement for suppressing idle current in. A. Melssner. 1,630,349; May 31. Radio transmitting system. F. Conrad. 1, 652,516; Dec. 13.

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Rail anticreeper. W. M. Osborn. 1.612.879; Jan. 4.
Rail anticreeper. A. T. Palmer. 1.620.83; Mar. 15.
Rail anticreeping and dis-plate device. E. J. Boland. 1.653.738; July 12.
Rail bond. W. F. Daugherty. 1.617.836; Feb. 15.
Rail bond. C. L. Larson. 1.646.917; Oct. 25.
Rail bond. F. C. Lavarnek and W. M. Fage. 1,643.306;
Rail bound. F. C. Lavarack and W. M. Page. 1,643,306; S. Subond. F. C. Lavarack and W. M. Page. 1,643,306; S. Subond. F. C. Lavarack and W. M. Page. 1,643,306; S. Subond. T. G. Stiles. 1,642,755; Sept. 27. Rail, Bonding. G. E. Thackray. 1,627,352; May 3. Rail bonds. Terminal structure for. K. J. Mosebach. 1,634,678; July 5. Rail butz. connection with fishplate. H. Deiders. 1,629,996; May 24. Rail-chair. W. M. Geborn. Reif,592; Apr. 12. Rail-chair. W. M. Geborn. Reif,592; Apr. 12. Rail-chair. W. M. Geborn. Reif,592; Apr. 122. Rail-chair. H. Schultz. 1,644,338; Oct. 4. Rail-champ signal. M. A. Ankele. 1,639,877; Aug. 23. Rail-champing device. W. F. Huther. 1,647,701; Nov. 1. Rail connecter. M. Talaga. 1,616,996; Feb. 8. Rail-connecting device. A. H. McCarty. 1,651,723; Dec. 6.
Rail connecter. M. Talaga. 1,616,996; Feb. 8; Rail-connecting device. A. H. McCarty. 1,651,723; Dec. 6. Rail fastener, Guard. T. Maney. 1,639,524; Aug. 16. Rail fastening. T. Buchholz. 1,640,750; Aug. 30. Rail-fastening device. W. C. Leiser. 1,624,5373; Oct. 4. Rail falter. A. C. Fischer. 1,619,524; May. 8. Rail-fastening means. W. F. Hart. 1,644,373; Oct. 4. Rail falter. A. C. Fischer. 1,619,524; May. 8. Rail faster. H. L. Rogers. 1,649,192; Nov. 15. Rail faller. H. L. Rogers. 1,649,192; Nov. 15. Rail faller. H. L. Rogers. 1,649,192; Nov. 15. Rail faller. Occomotive stalls. T. Cardwell. 1,625,454; Apr. 19. Rail-handling device. J. White. 1,619,908; Mar. 8. Rail-handling device. C. F. Kimmel. 1,629,344; May 17. 1,440,245; C. May. 10. Rail joint. W. H. Bowles. 1,643,830; Sept. 27. Rail joint. W. H. Bowles. 1,643,830; Sept. 27. Rail joint. W. T. Burkhalter and J. Stripling. 1,644,235; Oct. 4. Rail joint. W. T. Burkhalter and J. Stripling. 1,644,235; Oct. 4. Rail joint. W. T. Burkhalter and J. Stripling. 1,644,235; Oct. 4. Rail joint. H. J. Coerper. 1,613,870; Jan. 11.
                                                                                                                                                                  H. J. Corper, 1,613,879, Jan. 1,11
L. D'Amours. 1,622,183; Mar. 22.
C. Eickeneyer. 1,640,985; Aug. 80.
E. E. Erickson. 1,645,857; Oct. 18.
N. G. Franklin. 1,639,003; May 24.
G. Gal. 1,619,710; Mar. 1.
Z. T. Hoskins. 1,629,703; Mar. 1.
J. H. Kator. 1,647,293; Nov. 1.
F. B. King. 1,645,564; Oct. 18.
F. C. Kronauer. 1,637,449; Aug. 2.
W. T. Masters. 1,649,310; Nov. 15.
D. B. Moisselle. 1,626,534; Apr. 26.
S. Myers. 1,637,685,0 Aug. 23.
D. R. Richards. 1,639,969; Aug. 23.
D. R. Richards. 1,639,969; Aug. 23.
R. T. Scholes. 1,636,442; July 19.
A. Sekely and A. Ladanyi. 1,65
           Rail joint.
Rail joint.
Rail joint.
               Rail joint.
Rail joint.
           Rail joint.
Rail joint.
Rail joint.
Rail joint.
Rail joint.
Rail joint.
Rail joint.
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Rail joint.
Rail joint.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.652,739:
                                                                                               joint.
       Rail joint. A. Sekely and A. Ladanyi. 1,652,739; Dec. 13.
Rail joint. W. Sipes. 1,641,014; Aug. 30.
Rail joint. C. Troup. 1,639,620; Aug. 16.
Rail joint. W. Waskewig. 3,763; June 14.
Rail joint. W. F. Wayne. 1,638,6384; July 26.
Rail joint. W. F. Wayne. 1,638,6384; July 26.
Rail joint. W. F. Wayne. 1,638,6384; July 26.
Rail joint. Flexible. C. A. Disbrow. 1,641,760; Feb. 15.
Rail joint, Noiseless. C. A. Johnson. 1,617,760; Feb. 15.
Rail joint, Reversible head-free. V. C. Armstrong. Rail-joint spring. R. L. Cairneross. 1,619,595; Mar. 1.
Rail-joint spring. R. L. Cairneross. 1,619,595; Mar. 1.
Rail-joint spring. R. L. Cairneross. 1,619,595; Mar. 1.
Rail-joint support. W. G. Convertible. M. Thomson. 1,650,651; Nov. 22.
Rail-joint support. W. G. Coughlin. 1,632,998; June 21.
Rail joints, Composite wear plate for. C. A. Disbrow. 1,635,648; July 12.
Rail joints, Composite wear plate for. C. A. Disbrow. 1,635,648; July 12.
Rail joints, User-compensating means for. V. C. Armstrong. 1,615,509; Jun. 25.
Rail-fitting device. H. E. Austin and J. C. Cook. 1,629,468; May 24.
                                               Dec
           strong. 1.615.560; Jan. 2. Landing means for. V. C. Arm-Rail-Hifting device, Jan. 2. Austin and J. C. Cook. 1.629.468; May 24. E. Austin and J. C. Cook. 1.629.468; May 24. Rail lock. W. Kupke. 1,627,433; May 10. Rail obstacle. J. B. O'Connor. 1.628.522; May 10. Rail obstacle. J. B. O'Connor. 1.628.522; May 10. Rail or rolled member. G. R. Anthonio.
                   Rail of March 1, 1975 March 1,
                   Man. 15.
Rail-spike puller. E. E. Sarr. 1,650,096; Nov. 22.
Rail spike. A. S. Karr. 1,645,386; Oct. 11.
Rail spreader. F. W. Harris. 1,634,664; July 5.
Rail steel. J. K. Smith. 1,643,321; Sept. 27.
Rail structure. G. Standfest, fr. 1,640,858; Aug. 30.
Rail structure, Guard. E. R. Packer. 1,633,232;
Aug. 16.
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Rail support. G. Michalek. 1,632,662; June 14. Rail-switch-locking device. Z. Molnar. 1.642.380; Rail-switch-locking device. Z. Molnar. 1,642,380; Sept. 13.
Sept. 13.
Rail tie. C. D. Curry. 1,626,517; Apr. 26.
Rail tie. M. J. McAndrew. 1,638,740; Aug. 9.
Rail tie. J. T. Rohm. 1,650,235; Nov. 22.
Rail tie. J. T. Rohm. 1,650,235; Nov. 22.
Rail tie. J. T. Rohm. 1,650,237; Apr. 26.
Jan. 4.
Rail tie. M. S. C. Sawyer. 1,613,295;
Jan. 4.
Rail-tie. Support. L. L. Webster. 1,626,317; Apr. 26.
Rail-tie. Support. Shock isambeted. A. F. Weesser and E. C. Rail tie, J. T. Rohm. 1,650,235; Nov. 22.
Rail tie and rail fastening means. C. Sawyer, 1,613,295;
Jan. 4.
Rail tie and rail fastening means. C. Sawyer, 1,613,295;
Jan. 4.
Rail-tie support. L. L. Webster. 1,626,317; Apr. 26.
Rail-tie support. L. L. Webster. 1,626,317; Apr. 26.
Rail-tie support. L. L. Webster. 1,626,317; Apr. 26.
Rail-tie support. L. L. Webster. 1,636,636-7; May 31.
Rails and tie like, Machine for preparing bases for.
Rails and the like, Machine for preparing bases for.
Rails, Benned splice bar for running. V. G. Arm.
Salls, Benned splice bar for running. V. G. Arm.
Rails, Device for tilting. F. E. Howells and L. L. Leach.
1,643,714; Sept. 27.
Rails, Severing means for. S. Klen. 1,632,605; June 14.
Rails, Severing means for. S. Klen. 1,632,605; June 14.
Rails, Control (227,93); Mar. L.
Railroad grass-tine and ditch cutter. W. H. Rednour.
1,628,505; May 17.
Railroad grass-tine and ditch cutter. W. H. Rednour.
1,628,505; May 17.
Railroad switch. P. O. Brown. 1,625,241; Apr. 19.
Railroad witch. P. O. Brown. 1,625,241; Apr. 19.
Railroad witch. P. O. Brown. 1,625,280; Dec. 27.
Railroad tie, Metal. L. F. Cavagna. 1,654,280; Dec. 27.
Railroad tie, Metal. L. P. Cavagna. 1,654,280; Dec. 27.
Railroad tie, Metal. L. P. Cavagna. 1,654,280; Dec. 27.
Railroad tie, Metal. L. P. Cavagna. 1,654,280; Dec. 27.
Railroad and M. S. Archer. 1,636,619; July 19.
Railroad tie, Metal. L. P. Cavagna. 1,654,280; Dec. 27.
Railway apparatus. A. W. Fisher and W. B. Wells.
Railway apparatus. C. S. Saavely and A. W. Fisher.
1,021,197; Mar. 15.
Railway appliances, Automatic time-limit control means for interlocking levers of. C. Adler, pr. 1,638,793; Railway Parke. W. Hildebrand. 1,618,197; Feb. 22.
Railway Parke. W. Hildebrand. 1,618,197; Feb. 22.
Railway Parke. W. Hildebrand. 1,618,197; Feb. 22. Aug. 9.
Railway brake, W. Hildebrand, 1,618,197; Feb. 22.
Railway braking apparatus. J. P. Coleman, 1,626,919;
May 3. May 3
Railway braking apparatus. L. V. Lewis. 1,626,941;
May 3.
Railway braking apparatus. H. S. Loomis. 1,643,660;
Sept. 27.
Railway braking apparatus. Audible signal for. L. V.
Lewis. 1,641,768; Sept. 6.
Railway, Braking arrangement for high-speed suspension.
F. Kruckenberg and C. Stedefeld. 1,644,841; Jan. 18.
Railway, Braking arrangement for high-speed suspension.
F. Kruckenberg and C. Stedefeld. 1,644,842; Jan. 18.
Railway, Braking arrangement for high-speed suspension.
F. Kruckenberg and C. Stedefeld. 1,624,141; Apr. 12.
Railway buffer construction. F. Rawie. 1,614,208;
Jan. 11. F. Kruckenness, unifer construction. B. Railway bumping post. A. E. Schultz. 1,629,124;
Railway bumping post. A. E. Schultz. 1,629,124; May 17.
Railway cars, Side bearing for. H. M. Perry. 1,615,955;
Feb. 1.
Automatic. G. M. B. Hawley. 1,621,838; Railway cars, Side bearing for. H. M. Perry. 1,615,955; Feb. 1.
Railway control, Automatie. G. M. B. Hawley. 1,621,838; Mar. 22.
Railway crossing. J. W. Brown. 1.632,725; June 14.
Railway crossing. B. M. Mctcalf. 1,613,236; Jan. 4.
Railway crossing. R. Mills. 1,627,807; May 10.
Railway crossing. N. Zink. 1,627,877; May 10.
Railway crossing. R. Zink. 1,627,877; May 10.
Railway-crossing gate. L. Hirsch. 1,047,042 Feb. 8.
1,635,502; Aug. 86.
1, A. Moore and T. M. Ely.
Railway-crossing gate. E. E. Sarr. 1,346,877; Oct. 25.
Railway-crossing gate. W. B. Watson. 1,629,605; May 20. May 24.
Railway-crossing-gate-operating device. G. Moore.
1,627,052; May 3.
Railway-crossing gate, Train-controlled. A. E. Brown.
1,633,517; June 21.
Railway-crossing gates, Yieldable barrier for automatic.
J. R. Burress. 1,628,651; May 17.
Railway-crossing guard. W. H. Golding. 1,619,070;
Mar. I. Mar. 1.

Railway-crossing safety device. G. P. Springfield.

1.631,387; June 7.

Railway-crossing signal. J. H. Estes and W. P. Williams.

1.625,459; Apr. 19.

Railway-crossing surface. J. F. Redman and K. W. Schmidt. 1.618,948; Feb. 2.

Railway-crossing system. M. A. Kuhn and G. D. Gebhart. 1.616,509; Feb. S.

Railway-crossings system. M. A. Kuhn and G. D. Gebhart. 1.616,509; Feb. S.

Railway-crossings Safety device for B. Thomself. Railway crossings, Safety device for. B. Thomas 1.615,629; Jun. 25. Railway, Draft appliance. W. McConway, Jr. 1,617,404; Feb. 15. Railway, Elevated. J. M. Rose. 1,616,761; Feb. 8.

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Railway frog. L. M. Leedom. 1,636,373; July 19. Railway frog. A. L. Vissat. 1,634,638; July 5. Railway gate. J. M. Cobros. 1,616,887; Feb. 8. Railway gate. P. Frulla. 1,625,937; Apr. 26. Railway gate. C. D. Scott. 1,640,748; Nov. 15. Railway gate, Automatic. A. W. Musselman. 1,654,010; Dec. 27.
Railway gate, Automatic. A. W. Musselman. 1,654,010; Dec 27.
Railway gate. Pneumatically-operated. F. L. Beck. 1,638,315; Aug. 9.
Railway guard rails, Plate and brace for. H. Goodwin. Railway guard rails, Plate and brace for. H. Goodwin. Railway guide. G.-R. Luginbull. 1,642,616; Sept. 13.
Railway guide. G.-R. Luginbull. 1,642,616; Sept. 13.
Railway journal boxes, Lubricator for. C. B. Royal. 1,626,428; Apr. 26.
Railway of Like webicles, Ale-box cover for. G. F. Railway or like webicles, Ale-box cover for. G. F. Railway or like webicles, Transition coupling for. G. A. R. Trimming. 1,647,436; Nov. 1.
Railway or Like webicles, Transition coupling for. G. A. R. Trimming. 1,647,436; Nov. 1.
Railway or tramway rail joint. E. A. Byrde. 1,633,977; June 28.
Railway point, signal, and the like, J. H. Nicholson and W. S. Roberts. 1,636,088; July 19.
Railway points and switches. Ground lever for. J. J. Ferguson, R. Maguire, G. J. Ferguson, J. Ferguson, Dec. 27.
Railway-rail brace. C. L. Ruse. 1,643,177; Sept. 20.
Jr., J. 11. Anderson, and P. McGuire. 1,653,952; Dec. 27.
Railway-rail brace. C. L. Ruse. 1,643,177; Sept. 20.
Railway-rail for detaching brake skids. L. Digna. 1,645,379; Nov. 8.
Railway-rail joint. P. McGinley. 1,640,791; Aug. 30.
Railway-rail support. H. Eiberridge. 1,615,327; Jan. 25.
Leedom. 1,653,917; Dec. 7.
Railway rails, Anticreeper and brace for. M. L. Harvey. 1,647,176; Nov. 1.
Railway rails, Anticreeper for. W. S. Weston. 1,646,512; Oct. 25.
Railway rails, Anticreeping device for. E. F. Holinger. 1,615,190; Jan. 18.
Railway rails, Power for preventing spreading of. C. H. Tilbetts. 1,651,075; Nov. 20.
Railway rails, Guard means for. H. B. Cowley. 1,614,658; Jan. 18.
Railway rails, Guard means for. H. B. Cowley. 1,614,658; Jan. 18.
     and 18. Railway rolling stock, Sander for. W. H. Quin. 1.614.207; Jan. 11. Railway safety appliance. C. H. Gage. 1.648,383; Nov. 8.
   Riniway safety block. J. Lippis and M. E. Somerville. 1,629,669; May 24: Railway signal. L. Wyant. 1,648,527; Nov. 8. Railway signal and train-control system. M. H. Loughridge. 1,627,665; May 10. Railway signal, Automatic. R. Gross. 1,628,663; May 17. Sailway signal, Humaingted, C. H. W. Edmonds.
   Railway signaling. L. O. Grondahl, Des. 16,784;
Nov. 8
   Railway signaling. L. O. Grondahl. 1,619,028; Mar. 8. Railway signaling. S. M. Lucus. 1,621,074; Mar. 22. Railway signaling. F. H. Nicholson. 1,621,079; Mar. 22. Railway signaling. F. H. Nicholson. 1,621,079; Mar. 22. Railway signaling. L. Wyant. 1,633,302; June 21. Railway signaling. paratus. L. O. Grondahl. 1,655,625; Dec. 27.
   Dec. 27.
Railway signaling apparatus. L. H. Peter. 1,646,420;
COCL. 28.
Nar. 16.
Nar. 16.
Railway signaling apparatus. H. A. Wencill. 1,620,704;
Mar. 16.
Railway signaling apparatus. H. A. Wallace.
1,628,209; May 10.
Railway signaling apparatus. H. S. Young. 1,626,657;
May 3.
     Railway signaling device. J. Müller. 1.617,268;
Railway signaling system. J. M. Andersen. 1.6
Apr. 12.
                                                                                                                                                                                                                                                                                                          68; Feb. 8.
1,624,087
 Advivay signaling system, J. M. Andersen, 1624,087;

Apr. 12.

Railway signaling system, E. C. Larry, 1,627,440;

May 3.

Railway signals, Direct-current track circuit for, S. S.

Stolp, 1,626,643; May 3.

Railway signals, Direct-current track circuit for, S. S.

Stolp, 1,626,643; May 3.

Railway skate operating apparatus, E. G. Little, 1,641,174; Sept. 6.

Railway structure, Pleasure, J. A. Miller, 1,629,520;

May 24.

Railway structure, Pleasure, J. A. Miller, 1,629,520;

May 24.

Railway switch, D. C. Boone and J. T. Burkett, 1,638,911; Aug. 16.

Railway switch, L. M. Evans, 1,653,998; Dec. 27.

Railway switch, L. M. H. H. A. Drive, 1,623,520; May 3.

Railway switch, Automatic, J. Szabo and A. Ladane, 1,622,980; Mar. 29.

Railway switch, Automatic, T. Tostado, 1,618,300; Feb. 22.
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Railway switch circuits, Overhead contact for electric-C. S. Eppley. 1,613,225; Jan. 4. Railway-switch locking and operating means. D. F. Griffley. 1,627,503; May 3. Railway-switch-operating device. J. and C. Czerniak. 1,620,326; Mar. 8. Railway switches, Locking bar and plate for. G. L. Railway switches, Control and indication of. A. T. Johnston. 1,620,893; Mar. 15. Railway switches, Safety device for. C. Googe and H. Lindsey. 1,645,287; Oct. 18. Railway switching device. B. Martini, 1,640,204; Aug. 23. 1011; 14. Railway system, Electric. J. A. Jackson. 1,632,653; June 14. Railway system, Overhead. J. C. King. 1,621,790; Mar. 22. Railway tie. A. L. Addamy. 1,645,514; Oct. 18. | Mailway system, Overhead. J. C. King. 1,621,790; Mailway system, Overhead. J. C. King. 1,621,790; Mailway tie. A. L. Adamy. 1,645,514; Oct. 18. Inlinear tie. K. S. C. Karlwood. 1,618,066; Feb. 15. Kallway tie. W. R. Hailerty. 1,626,082; Apr. 26. Railway tie. J. L. Henry. 1,615,047; Oct. 11. Railway tie. J. E. Reillway tie. J. Sutinen. 1,651,766; Nov. 29. Railway tie. A. J. Stoberg. 1,648,622; Oct. 18. Railway tie. C. A. Widner. 1,653,577; Dec. 20. Railway tie and rail fastener. C. Biernat. 1,628,449; Railway tie and rail fastener. J. F. Brown. 1,626,075; Apr. 26. Railway tie and rail fastener. J. F. Brown. 1,626,075; Apr. 26. Railway tie. Generate. N. F. Brown and C. M. Reppert. Railway tie, Concrete. H. J. Lipham. 1,622,259; Mar. 22. Railway tie, Machine for replacing. R. S. Kniffen. 1,618,037; Jan. 4. Railway-tie mechanism. A. V. Rudd. 1,623,130; June 21. Railway tie, Machine for replacing. R. S. Kniffen. 1,618,037; Jan. 4. Railway-tie mechanism. A. V. Rudd. 1,623,130; June 21. Railway-tie mechanism. A. V. Rudd. 1,623,248; Oct. 18. Railway-tie remover. B. J. Hoover. 1,627,094; May 3. Railway-tie remover. B. J. Hoover. 1,627,094; May 3. Railway-tie remover. B. J. Hoover. 1,627,094; May 3. Railway-track cross trends means for. C. W. Lee. 1,633,20; June 24. Railway-track construction. R. L. Spencer. 1,625,288; Railway-track construction. R. J. Wells. 1,627,217; May 3. Railway-track crossing structure. L. Morrow. 1,626,146; Apr. 26. Railway-track cr And the state of t Railway-track dresser. A. J. Applegate. Dec. 20. 1,653,423;

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Railway-traffic-controlling apparatus.

1.636,067; July 19 ling apparatus.
L. L. Nettleton and L. 638,068; Aug. 9.
Railway-traffic-controlling apparatus.
1.616,541; Feb. 8.
Railway-traffic-controlling apparatus.
1.632,037; June 14.
Railway-traffic-controlling apparatus.
1.632,037; June 14.
Railway-traffic-controlling apparatus.
1.631,542; June 7.
Railway-traffic-controlling apparatus.
1.631,542; June 7.
Railway-traffic-controlling apparatus.
1.631,542; June 7.
Railway-traffic-controlling apparatus.
1.633,049; June 21.
Railway-traffic-controlling apparatus.
1.636,066; App. 26.
Railway-traffic-controlling apparatus.
1.636,067; May 10.
Railway-traffic-controlling apparatus.
1.636,067; May 10.
Railway-traffic-controlling apparatus.
1.636,067; May 10.
Railway-traffic-controlling apparatus.
1.636,066; App. 26.
Railway-traffic-controlling apparatus.
1.638,178; May 171; M
                                                                         attway vehicles, Repositioning device for swinging
coupling heads on, M. Alma and C. E. Alma
1.632.942; June 21.
aliway wagons and the like, Construction of, A. L.
Wright and F. I. Smedley, 1,614.941; Jan. 18.
aliways, Air brake for, F. Kasantzeff. 1,621,987;
                                    Railways
                              Adur. 22.
Adur. 23.
Adur. 23.
Adur. 23.
Adur. 24.
Adur. 24.
Adur. 24.
Adur. 25.
Adur. 
                        Railways, Cattle guard for. J. F. Hollenback. 1,633,872: July 5.
Railways Guard-rall structure for. C. R. Miller. 1,636,935 Nov. 29.
1,636,935 Nov. 29.
1,633,906: June 28.
Railways. Third-rall electric-current feeding system for electric. A. Doan. 1,629,025: May 17.
Railways. Thriff-rall electric-current feeding system for electric. A. Doan. 1,629,025: May 17.
Railways. Traffic-controlling apparatus for. W. S. Roberts and J. H. Burton. 1,615,652: Jan. 25.
Railways. Transport wagon for. J. Jonsson. 1,628,543; May 10.
Railways. Transport wagon for. J. Jonsson. 1,639,185; Aug. 16.
1
                              1.651.291:
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Range. W. A. Busick. 1,616,680; Feb. 8.
Range and burner therefor, Gas. A. Stockstrom.
1,648,789; Nov. 8.
Range, Cond. II. Lange. Des. 73,661; Oct. 18.
Range, Condition. II. Lange. 1,637,959; Aug. 2.
Range, Cooking. C. C. Armstrong. 1,632,292; Dec. 13.
Range, Gos. C. A. Lange. Des. 73,636; Aug. 2.
Range, Gas. J. Hansen. Des. 73,636; Oct. 25.
Range, Gas. J. Hansen. Des. 73,691; Oct. 25.
Range, Gas. E. R. Methudy. Des. 73,708; Oct. 25.
Range, Gas. S. A. Wilde. 1,645,784; Oct. 18.
Range, Kitchen. W. Bennett. Des. 72,202; Mar. 15.
Range, Liquid-fuel gas. W. C. McKeown. 1,653,867; Dec. 27.
Ringe, Gills. A. Wilde. L643,643; 0et. 18.
Range, Klichen. A. Bennett. Dec. 72,202. Mar. 15.
Range, Klichen. A. Bennett. Dec. 72,202. Mar. 15.
Range, Richen. A. Bennett. Dec. 72,202. Mar. 16.
Range Storary roasting. A. E. Troiel. 1,630,644;
May 31.
Range water top, Gas. P. Gustason. 1,613,454; Jan. 4.
Ranges, Defachable plate for concealed manifolds of gas. Ranges, Manifold for gas. A. H. Tinnerman. 1,651,166;
Nov. 29.
Ranges, Switch mounting for electric. G. H. Hart. 1,632,097; June 21.
Range Switch mounting for electric. G. H. Hart. 1,632,097; June 21.
Rasp. Welt. J. E. McCutchen. 1,648,619; Nov. 8.
Rat and mink trap T. H. 1,641,043,435; Sept. 6.
Rat-poison bolder. T. Davis. 1,633,982; June 28.
Rat tand. W. A. Mead. 1,641,345; Sept. 6.
Rat-poison bolder. T. Davis. 1,633,892; June 28.
Rat trap. A. S. Bacon. 1,641,062; Aug. 30.
Ratchet drill. H. W. Barbour. 1,635,882; July 12.
Ratchet verench. J. E. Coe. 1,639,078; Aug. 16.
Ratchet wrench. J. E. Coe. 1,639,078; Aug. 16.
Ratchet wrench. S. R. Braberz. 1,621,499; Mar. 22.
Ratchet wrench. J. F. Owell. 1,644,079; Oct. 4.
Ratchet wrench. J. F. Owell. 1,624,707; Oct. 4.
Ratchet wrench. J. E. Owell-acting. K. Langkammerer. 1,622,377; Dec. 13.
Ray 17.
Ray 17.
Ray 17.
Ray 17.
Ray 17.
Ray 19.

                Range, Liquid-fuel gas.
Dec. 27.
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Razor, Safety. C. L. Skelley. 1,635,642; July 12.
Razor, Safety. C. Spahr. 1,639,441; Aug. 16.
Razor, Safety. R. C. G. Staats-Oels. 1,633,139; June 21.
Razor, Safety. L. Taplinger. 1,618,895; Feb. 22.
Razor strop. M. W. McArdle. 1,646,415; Oct. 25.
Razor strop and treating the same. D. P. Shen.
Razor-strop stretcher. T. Thompson. 1,624,851; Apr. 12.
Apr. 1,525,408;
Apr. 1,525,408
       Razor-stropping device. M. H. Rhodes.
Jan. 18.
Razor-stropping means. H. J. Gaisman.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1,614,492;
   Jan. 18.

Razor-stropping means. H. J. Gaisman. 1,624,328;
Apr. 12.
Razor with rolling blade, Safety. R. Piro. 1,635,342;
Razor with rolling blade, Safety. R. Piro. 1,635,342;
Razors, Sanitary device for cleaning and wiping. L.
Humbert. 1,618,661; Feb. 22.
Reactor. J. S. Hebrew and E. E. Ross. 1,635,042; July 5.
Reactor. W. B. Kirke. 1,644,135; Oct. 4.
Reamer. F. F. Blanco. 1,636,067; July 5.
Reamer. F. F. Blanco. 1,636,067; July 5.
Reamer. S. H. Norton. 1,635,217; Feb. 22.
Reamer. S. H. Norton. 1,618,217; Feb. 22.
Reamer. C. P. Whetmore. 1,621,227; Mar. 15.
Reamer. G. P. Whetmore. 1,621,212; Mar. 25.
Reamer. G. P. Whetmore. 1,621,812; Mar. 22.
Reamer. Expanding. S. Welsby. 1,635,103; July 5.
Reamer, Expanding. S. Welsby. 1,635,103; July 5.
Reamer, Expanding. B. Davis. 1,635,051; Mar. 8.
Reaming mechanism. B. C. Hinckley. J. Thoman, and G. E. Holton. 1,630,083; May 24.
Reaming or boring tool. G. W. Benedict. 1,630,515; May 31.
Reaming or boring tool. R. R. Davis. 1,627,887; May 10.
Reaming or boring tool. R. R. Davis. 1,627,887; May 10.
Reaming or boring tool. R. R. Davis. 1,627,887; May 10.
Reaming or boring tool. R. R. Davis. 1,627,887; May 10.
Reaming or boring tool. R. R. Davis. 1,627,887; Mar. 20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1,624,328;
       May 10.

Reamers. Grinding attachment for. A. C. Lindholm.
1,026,244; Apr. 26.

Reaping, mowing, and the like machines, Cutting device for. V. Hejma. 1,627,644; May 10.

Reboring device. C. W. Wright. 1,618,037; Feb. 15.

Reboring machine, Connecting rode. O. Kylin. 1,616,052; Feb. 1.
Rebound check. R. H. Hassler. 1,646,584; Oct. 25.
Rebound check. R. H. Hassler. 1,646,584; Oct. 25.
Rebound check with lubricating system. R. H. Hassler.
1,646,588; Oct. 25.
Rebound check with lubricating system. R. H. Hassler.
1,646,588; Oct. 25.
Receiver. R. G. B. Kirby. 1,641,334; Sept. 6.
Receiver. W. C. Jones. 1,642,777; Sept. 20.
Receiver. W. C. Jones. 1,642,777; Sept. 20.
Receiver. W. C. Jones. 1,642,777; Sept. 20.
Receiver. R. G. G. M. C. Lieux. 1,627,333; May 3.
Receptacle. R. B. Girdler. R. G. G. G. M. C. Lieux. 1,627,333; May 3.
Receptacle. F. Goertz. 1,642,663, Sept. 13.
Receptacle. F. Goertz. 1,642,663; Sept. 13.
Receptacle. F. Goertz. 1,642,663; Sept. 13.
Receptacle. G. M. G. Lieux. 1,627,238; May 2.
Receptacle. A. Janer. 1,622,318; Mar. 29.
Receptacle. G. H. Knowles. 1,624,955; Apr. 19.
Receptacle. E. Korsetz. 1,622,728; Mar. 29.
Receptacle. E. Korsetz. 1,623,728; Mar. 29.
Receptacle. E. Korsetz. 1,634,876; July 5.
   July 19.

Receptacle.
LA. Marcus. 1634.376; July 5.
Receptacle.
LA. Marcus. 1634.376; June 7.
Receptacle.
LA. Rose. 1613.536; Jan. 4.
Receptacle.
LA. Rose. 1633.334; June 7.
Receptacle and blank therefor. C. Barbieri. 1,632.019; June 14.
Receptacle and cover for same. S. W. Hind.
       Name 14.

Note 14.

Note 14.

Locapitacle and cover for same. S. W. Hind. 1,613,826; Jan. 1.

Receptacle and handle therefor. F. J. Hempen and O. Lipsmeier. 1,623,409; Apr. 5.

Receptacle and illuminated sign. Combined. B. L. Overton and F. L. Overton. 1,645,870; Oct. 18.

Receptacle, Ash. J. S. Wise, jr. 1,639,700; Aug. 23.

Receptacle, Bagilke. M. G. Scheuer. 1,639,005; Aug. 28.

Receptacle, Balike. M. G. Scheuer. 1,639,005; Aug. 28.

Receptacle balis, Attaching device for. J. C. Andresen and H. F. Marten. 1,639,773; Aug. 23.

Receptacle Button. J. C. Dav. 1,633,725; June 28.

Receptacle closure. L. R. N. Carvalho. 1,626,917; May 3.

Receptacle closure. L. R. N. Carvalho. 1,626,918; May 3.

Receptacle closure. A. J. Dowling. 1,617,202; Feb. 3.

Receptacle closure. W. C. Mills. 1,620,825; Mar. 15.
   Receptacle closure. A. J. Dowling. 1,617,202; Feb. 8. Receptacle closure. W. C. Mills. 1,620,825; Mar. 15. Receptacle closure. R. A. Russell. 1,620,825; Mar. 15. Receptacle closure. R. A. Russell. 1,633,276; June 21. Receptacle closure. E. C. Seward. 1,645,168; Oct. 11. Receptacle closure. I. T. Sayder. 1,530,300; May 31. Receptacle closure. II. T. Sayder. 1,530,300; May 31. Receptacle. Collapsible. J. B. Curran. 1,620,802. Receptacle. Collapsible. J. B. Curran. 1,620,802.
           Mar. 10.
Receptiacle, Collapsible. C. A. Hickson. 1,636,186;
July 19.
Receptiacle, Contact. A. C. Gaynor. 1.641,223; Sept. 6.
Receptiacle cover. A. C. Grunwaldt. 1,640,934; Aug. 30.
Receptiacle, Covered. C. J. Aulbach. 1,621,487; Mar. 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1,636,186;
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| Receptacle, Deposit, J. M. Sawdey, 1,644,039; Oct. 4, Receptacle-depositing mechanism. C. N. Bergmann, 1,636,208; July 19, Receptacle, Dispensing, B. J. H. Miller. 1,642,425; Sept. 18, Receptacle, Dispensing, B. O. Raodes. 1,648,029; Nov. 1,642,425; Receptacle, Dispensing, R. R. Ricketts. 1,619,315; Receptacle, Dispensing, R. R. Ricketts. 1,619,315; Recepticle, Dispensing, R. J. Miller. 1,642,425; Sept. 13.
Receptacle, Dispensing, R. J. Miller. 1,642,425; Sept. 13.
Receptacle, Dispensing, R. J. Miller. 1,642,425; Sept. 13.
Receptacle, Dispensing, R. R. Ricketts. 1,643,515; M. R. R. Ricketts. 1,643,650; M. R. R. Receptacle, Display, C. T. Hatch. 1,640,405; Aug. 30.
Receptacle, Display, R. G. Peck and A. Brown. 1,628,530; May 10.
Receptacle, Duplex. W. He. 1,633,668; June 28.
Receptacle, Duplex. W. He. 1,633,668; June 28.
Receptacle, Electrical. F. J. Hines. 1,645,950; Oct. 18.
Receptacle filling and draining device. W. H. Scott. 1,635,654; May 31.
Receptacle filling apparatus. C. N. Bergmann. 1,635,163–60; July S. Receptacle, Flush. M. A. Rollman. 1,623,201; Jan. 25.
Receptacle for sheep and the like. F. E. Wakefield. 1,615,968; Feb. 1.
Receptacle for carrying infants. T. H. Love. 1,625,038; Apr. 19.
Receptacle for carrying infants. T. H. Love. 1,625,038; Apr. 19.
Receptacle for carrying infants. T. H. Love. 1,625,038; Apr. 19.
Receptacle for one of the sease and the like. W. F. Herold. 1,654,252; Jun. 25.
Receptacle for carrying infants. T. H. Love. 1,625,038; Apr. 19.
Receptacle for one of the sease and the like. W. F. Herold. 1,654,252; Jun. 25.
Receptacle for political fields. W. M. Fulton. 1,643,245; Nov. 15.
Receptacle for paste or mucilage. C. H. Payne. Receptacle for paste or mucilage. C. H. Payne. Receptacle for swoking materials. P. V. Spinner. 1,648,380; Sept. 27.
Receptacle for swoking materials. P. V. Spinner. 1,648,380; Sept. 27.
Receptacle for swoking materials. P. V. Spinner. 1,648,632; Oct. 25.
Receptacle for swoking materials. P. V. Spinner. 1,648,632; Oct. 25.
Receptacle for wolls of tollet paper. R. E. Jordan. and S. Pearce. 1,644,960; Jan. 18.
Receptacle for swoking materials. P. V. Spinner. 1,648,648; Oct. 25.
Receptacle for Sept. 27.
Receptacle for Sept. 27.
Receptacle for Garbage. F. J. Mulhern. 1,643,547; Sept. 27. Receptacle, Heat-Insulated, R. B. Prindle. 1,615,649; Jan. 25.
Receptacle holder, W. T. Henry. 1,616,574; Feb. 8.
Receptacle holder, E. J. Snow. 1,646,562; Get. 25.
Receptacle, Inclosed. G. F. Scott. 1,624,438; Apr. 12.
1,635,66; Julid. S. Hammer. 1,632,762; June 14.
Receptacle, Metal. S. Hammer. 1,632,762; June 14.
Receptacle, Metal. S. Hammer. 1,632,783 -4; June 14.
Receptacle, Metal. S. Hammer. 1,632,783 -4; June 14.
Receptacle, Money. M. H. Moffett, 1,631,934; June 7.
Receptacle, Money. I. H. Shafer. 1,644,495; Oct. 4.
Receptacle, Money. M. H. Moffett, 1,631,934; June 7.
Receptacle, Newspaper. A. C. Crimmel. 1,654,364; Dec. 27.
Receptacle, Newspaper. A. C. Crimmel. 1,654,364; Dec. 27.
Receptacle, Vewspaper. A. C. Crimmel. 1,654,364; Dec. 27.
Receptacle, Peper. L. S. Rosener. 1,613,133; Jan. 4.
Receptacle, Paper. L. S. Rosener. 1,613,133; Jan. 4.
Receptacle, Refuse. P. A. Schulert. 1,649,055; Nov. 8.
Receptacle, Refuse. P. A. Schulert. 1,649,055; Nov. 8.
Receptacle, Safety deposit. E. S. Peer. 1,634,884; Mar. 1.
Receptacle, Safety deposit. E. S. Peer. 1,634.884;
July 5.
Receptacle, Saturating. C. Still. 1,639,709; Aug. 23.
Receptacle, Saturating. C. Still. 1,639,709; Aug. 23.
Rocch. 1,619,526; Mar. 1.
Receptacle, Smoker's. W. A. Freeman. 1,644,245; Oct. 4.
Receptacle stand. A. Szymczak. 1,617,139; Feb. 8.
Receptacle, Sugar-dispensing. S. Horvath. 1,642,678; Receptacle, Sugar-dispensing. S. Horvath. 1,642,678; Sept. 20, Receptacle-supporting means. W. C. Coleman. 4,637,558; Aug. 2. Receptacle, Tollet-paper. M. E. Thatcher. 1,626,308; Apr. 26. Apr. 26.

Receptacles, Trash. J. E. P. Dillon. 1,632,542; June 14.

Receptacles and support therefor, Cover for. A. S.

Smiley. 1,623,646; July 19.

Receptacles, Apparatus for making. I. Stanley.
1,628,074; May 10.

Receptacles, Apparatus for washing. I. H. Kendall.
1,644,355; Oct. 4.

Receptacles, Bushing for metal. C. F. Schriner.
1,644,153-4; Oct. 4.

Receptacles, Cap for. F. A. Brown. 1,615,533; Jan. 25.

Receptacles, Clennsing milk. I. H. Kendall. 1,644,385; Oct. 4. Receptacles, Closure for. A. Mauser. 1.617,076; Feb. 8. Receptacles, Closure for. W. J. Snyder. 1,633,197; June 21.
Receptacles, Cover attachment for. R. M. Switzer. 1.618,489; Feb. 22.
Receptacles, Died-out blank for. R. R. Reilly. 1,623,269; Apr. 6.

918 Receptacles, Door closure for rotatable. M. F. Beetham and R. H. Moore. 1,630,600; May 31. Receptacles, Dust collector and controller for ash. W. A. Dillon. 1,652,615; Dec. 13. Receptacles, Hermetic closure for. W. W. Davis. A. Dilbin. Receptacles, Hermetic closure for. W. W. Davis. 1,618,639; Feb. 22. Receptacles, Lock-up cover for. E. Gemeinder. 1,619,506; Mar. 1. Leabing for flanging and seaming sheet-Mar. I. Receptacles, Machine for flanging and seaming sheet-metal. C. J. Rhodes. 1,643,470; Sept. 27. Receptacles, Manufacturing. R. J. Bieber. 1,642,717; Sept. 20. Recptacles, anautacturing. R. J. Bieber. 1,642,717; Sept. 20.
Receptacles, Mechanism for charging portable. R. H. Plass. 1,651,149; Nov. 29.
Receptacles or the like, Closure member for. C. E. Billings. 1,642,138; Sept. 13.
1,614,701; Jan. 18.
Receptacles, Scaling. H. J. Poolo. 1,630,215; May 24.
Reciprocating bed motion. C. Berthiez, 1,613,554; Jan. 4.
Reciprocating bolt. Automatic. E. Ruff and E. C. L.
Bailey, 1,628,808; May 17;
Reciprocating engine, J. Shearer, 1,644,954; Oct. 11.
Redp. 26.
Reciprocating engine, Rotary, A. H. Wright, 1,625,841;
Reciprocating feeder. A. W. Hennel, 1,625,841;
Reciprocating feeder. A. W. Hennel, 1,625,841; Reciprocating engine, Rotary, A. H. Wright. 1,625,841; Apr. 26.
Reciprocating feeder. A. W. Happel. 1,631,125; June 7.
Reciprocating machine members, Paeumatic buffer for.
G. Fornaca. 1,648,408; Sept. 27.
G. Fornaca. 1,648,408; Sept. 27.
G. Fornaca. 1,648,408; Sept. 27.
Reclaing chair. A. C. Beech. 1,626,609; Apr. 26.
Reclosing mechanism. C. A. McCain. 1,621,263; McCain. 2,648,404; Dec. 20.
Recolosing mechanism, Automatic. G. II. Middlemiss. 1,653,404; Dec. 20.
Recolor. E. A. Brooks. 1,614,647; Jan. 18.
Record and the manufacture thereof for calking machines.
Record book, Comparative visible. J. E. Bemis. 1,635,357; July 12. Record book, Comparative visible. J. E. Bemis. 1,633,357;
July 12.
Record book, Manifold. A. J. Mirski. 1,637,156; July 26,
Record-ophones, Reel-stopping device for. J. Kaplan. 1,633,407; Dec. 20.
Record-ophones, Reel-stopping device for. J. Kaplan. 1,642,208;
Sept. 13.
Record rack, Hotel-room. P. N. Joslin. 1,642,208;
Sept. 13.
Record systems, Unit for holding the leaves in visible.
H. C. Miller. 1,634,936; July 5.
Recorder: Sce—
Bridge-score recorder.
Contour recorder.
Contour recorder.
Contour recorder.
Siphon recorder.
Contour recorder.
Radio recorder.
Recorder musical ecorder.
Siphon recorder.
Recorder and regulator, High-temperature vapor-pressure.
Oct. 25. Recording and resulting products. H. A. Kuauss, 1,652,483; Dec. 13. 1.602.483; Dec. 13.

Recording apparatus. O. Bovner. 1.615.160; Jan. 18.

Recording device. E. B. Wheeler. 1.642.525; Sept. 13.

Recording device for farm use. G. A. Morrie and C. S. Pallot. 1.626.478; Apr. 26.

Recording instrument. W. C. Brandenburg. 1.637.852; Aug. 2 Aug. 2.

Recording instrument. R. P. Brown. 1,631,578; June 7.

Recording instruments, Pen lifter for. A. B. Cunningham. 1,619,241; Mar. 1.

Recording instruments. Pen support for. H. W. Heesch
and J. Schoffeld. 1,648,227; Nov. 8.

Recording machine. J. F. Kiely. 1,629,078; May 17.

Recording machine. L. B. Swift. 1,646,430; Oct. 25.

Recording system. E. Roucka. 1,641,199; Sept. 6.

Automatic overe for G. Pelseler. 551,102; Nov. 29.

Recording time, Machine for. F. Mansel. 1,640,955;
Aug. 30. Automatic device for. G. Peiseler. 1,651,102; Nov. 29; Recording time, Machine for. P. Mansel. 1,640,955; Aug. 30. Records, Making sound. H. W. Webb. 1,653.524; Dec. 20. Rectal appliance. A. Donovan. 1,640,928; Aug. 30. Rectal irrigator. H. G. Carter. 1,616,962; Feb. 8. Rectifier and modulator. J. P. Schafer. 1,648, Noy. 8. Rectifier and months of the control 1.648,006;

Rectifying and modulating system. J. C. Schelleng. 1.634,800; July 5. F. Cyphers. 1,640,068-9; Aug. 28. Rectifying column. J. F. Cyphers. 1,640,068-9; Aug. 28. Recuperative turnace. F. T. Cope. 1,647,725; Nov. 1. C. Cyphers. 1,640,068-9; Aug. 28. Recuperator. W. A. Morton. 1,619,747; Mar. 1. Recuperator. W. A. Morton. 1,619,747; Mar. 1. Recuperator or mechanisms, Control valve for. H. C. Zimmerman. 1,627,818; May 10. Reducing arrangement, Frequency. J. G. Fallou. 1,633,481; June 21. L. Cohen. 1,645,588; Oct. 18. Reduction block. L. L. Cohen. 1,645,588; Oct. 18. Reducing and, Hat-size. J. Hanna. L. 628,403; May 10. Reducing arrangement, Frequency. J. G. Fallou. 1,643,585; Oct. 4. Reducing high distribution of the complex control of the con Jan. 25. ped-saving device, Automatic. O. B. Meyers. 1,635,051; Read trimmer. W. Majeski. 1,035,004; July 5. Reed-weaving machine. M. B. Lloyd. 1,640,610; Aug. 30. Reefing fron. C. L. Laird. 1,627,515; May 3. Reej: Sec— July 5. Antenna reel. Cable reel.
Casting reel.
Clothes-line reel.
Electric-cord reel.
Film reel. Hose reel. Rewinding reel. Ribbon reel. Sand reel.
Spring reel.
Take-up reel.
Tape reel.
Wire reel. Electric-cord reel.
Film reel.
Film reel.
Film reel.
Fishing reel.
Wire reel.
Wire reel.
Reel. E. F. Miehle, jr. 1,619,952; Mar. 8.
Reel. F. Mossberg. 1,630,670; May 31.
Reel and awl, Chalk-line. G. D. Savage.
Doc. 20. 1,653,191; Reel and awl, Chalk-line. G. D. Savage. 1,653,191; Dec. 20.
Reen and carrier, Hose. C. S. Huntington. 1,652,718; Dec. 20.
Reel and carrier, Hose. C. S. Huntington. 1,652,718; Dec. 20.
Reel for barbed wire. H. J. Peterson. 1,644,857; Oct. 25.
Reel for strip metal. B. R. Shover. 1,644,857; Oct. 11.
Reel for winding filaments, yarns, threads, silks, and the like, Collapsible. F. W. Schubert. 1,631,431; June 7.
Reel filaments are the like, Collapsible. F. W. Schubert. 1,631,431; June 7.
Reel glack. A. J. Speirs. 1,629,644; May 24.
Reel glack. A. J. Speirs. 1,629,644; May 24.
Reel glack. A. J. Speirs. 1,629,644; May 24.
Reel mill. H. C. Chase. 1,624,858; Apr. 12.
Reel or swift for use in the winding of textile yarns. Reel or swift for use in the winding of textile yarns. Reel or swift for use in the winding of textile yarns. Reel or swift for use in the winding of textile yarns. Reel so. W. Jordan, 1047,951, Feb. 15.
Reel and W. Jordan, 1047,951, Feb. 15.
Reels. W. Jordan, 1047,951, Feb. 15.
Reels. Click check for. P. Catucci 1,637,334; Aug. 2.
Reels. Click check for. P. Catucci 1,637,334; Aug. 2.
Reels. Click check for. P. Catucci 1,637,334; Aug. 2.
Reels. Guard for. A. J. Plotz. 1,629,918; Mar. 15.
Reels. Guard for. A. J. Plotz. 1,629,918; Mar. 15.
Reels. Line-guide mechanism for fishing. W. L. Adams. 1,639,302; Aug. 10.
Reels. Line-guide mechanism for fishing. W. L. Adams. 1,639,302; Aug. 10.
Reels. Line-guide mechanism for fishing. W. L. Adams. 1,639,302; Aug. 10.
Reenforced glass. M. Liptak. 1,646,097; Oct. 18.
Reenforced wheel. I. M. Laddon, W. A. Ring, and F. W. Herman. 1,640,573; Aug. 30.
Referced stand. L. A. Schwan. 1,616,395; Feb. 1.
Reflector. L. N. Auger. 1,614,224; Jan. 11.
Reflector. L. N. Auger. 1,614,224; Jan. 11.
Reflector. D. Bart. 1,635,609; Dec. 27.
Reflector. J. N. Auger. 1,614,224; Jan. 11.
Reflector. O. B. Bart. 1,635,609; Dec. 27.
Reflector. O. B. Bart. 1,635,609; Dec. 27.
Reflector. O. B. Bart. 1,628,138; Reels. 1,628,138; Reels. Line-glass. 1,628,138; Reeflector. A. de Lugo and J. W. Rober Reel and carrier, Hose. C. S. Huntington. 1.852.718: May 10.
Reflector and glare shield, Slight, C. Zartman, 1,628,704; May 17.
Reflector and support therefor, Combined, J. J. Holshuh, Des. 73,914; Nov. 22.
Reflector for Christmas-tree decoration, C. Kempf, Des. Reflector, Diurnal, W. J. Harvey, 1,642,645; Sept. 13.
Reflector, Pewel mounting, J. P. Wood, 1,024,300; Apr. 12.
Reflector, Lamp, N. Lang, 1,628,948; Apr. 26.
Reflector, Light-projecting, J. G. Balshille, 1,639,363; Aug. 16. Reflector signal. V. L. Oestnaes. Des. 73,800-01;

Reflector signal, V. L. Oestnaes. Des. 74,020-1; Dec. 6, Reflectors, Manufacturing, R. N. Chubb. 1,615,358; Reflectors, Nonglare attachment for. R. L. Berg. 1,625,932; Apr. 26. Reflectorsope, Macular. C. E. H. Armbruster. 1,651,661; Refractive value of the principal point of the eye, Apparatus for the objective measurement of the. O. Henker, 1,613,658; Jan. 11.

Refractory article and making the same, Cast. G. S. Fulcher, 1,615,750; Jan. 25.

Refractory block. R. J. Humelright. 1,634,357; July 5.

Refractory block. R. J. Humelright. 1,634,357; July 5.

Refractory body. G. D. Morris. 1,642,886; Sept. 20.

Refractory body and producing the same. M. J. Rentschier. 1,653,123; Dec. 20.

Refractory luling. R. B. Pogue. 1,629,047; May 17.

Refractory luling. R. B. Pogue. 1,629,047; May 17.

Refractory Juling. R. B. Pogue. 1,629,047; May 17. Jan. 25. Refractory, Zirconia-faced. P. G. Willetts. 1.650.577: Nov. 22.
Refractometer. O. Henker. 1,649.064; Nov. 15.
Refractometer. O. Henker. 1,649.114; Nov. 15.
Refresbment dispenser, Liquid. H. Wanerman. Des.
72,301; Mar. 22.
Refrigerant. G. Barsky. 1,631.578; June 7.
Refrigerant compressor. F. Oppman. 1,613,121; Jan. 4.
Refrigerant container for cooling apparatus. J. Remonte. 1,617,630; Feb. 15.
Refrigeranting apparatus. A. P. Anderson. 1,644,165; Oct. 4.
Refrigerating apparatus.
Apr. 26. E. L. Barnes. 1.625.878: Refrigerating apparatus. Sept. 13. J. J. Batterman. Refrigerating apparatus. 3. O. Boving. 1.646.607: Refrigerating apparatus. C. R. Bushnell. 1,628,820; Refrigerating apparatus. 1,614,455; Α Refrigerating apparatus. W. W. Conner. 1.639.986: Refrigerating apparatus. W. W. Conner.
Refrigerating apparatus. R. Cramer. 1.642(Refrigerating apparatus. R. W. Davenport July 5.
Refrigerating apparatus. L. B. Green. 1.621,1 Refrigerating apparatus. L. B. Green. Sept. 20.
Sept. 20.
Sept. 20.
Refrigerating apparatus. F. J. Heideman July 6.
Refrigerating apparatus. E. F. James. May 3.
Refrigerating apparatus. P. M. Jauvert. Refrigerating apparatus. A. J. Kercher. Jan. 18. 1.642.015; Sept. 13. Davenport. A. Green. 1,621,161; Mar. 15. L. B. Green. 1,642,922; F. J. Heideman. 1.648.178: Nov. 1,626,835: 1,626,836; Jan. 18.
Refrigerating apparatus. A. J. Kercher.
Refrigerating apparatus. J. G. King. 1,654.5
Refrigerating apparatus. C. E. L. Lipman.
Oct. 25. 1.614.676: 1,654,504; Dec. 27. dpman. 1,646,919; Refrigerating apparatus.
Nov. 22.
Refrigerating apparatus.
Apr. 19.
Refrigerating apparatus.
May 24. W Newcomb 1 650 230 : T. I. Potter. 1,624,972; F. W. Schwinn. 1,630,077; Refrigerating apparatus.
June 7.
Refrigerating apparatus.
Oct. 25.
Refrigerating apparatus. 1,631,345; Δ T. Stock. A, H. Strong. 1,646,712; A. E. Thornley. 1,636,877; Refrigerating apparatus. Nov. 15. H. Torrance. 1.649.330; Nov. 15.
Refrigerating apparatus. T. C. Whitehead.
July 5.
Refrigerating apparatus. E. T. Williams.
Oct. 11. 1.634,813; 1.645.314: Refrigerating apparatus. Valves fitting for. J. R. Replogle. 1,634,628; July 5. Refrigerating appliance. C. A. Moore, 1,644,073; Oct. 4. Refrigerating compartment and cover therefor. T. Jenney and H. G. Miner. 1,615,628; Jan. 25.

Refrigerating device. J. W. Anderson. 1,627,629; May 10. Refrigerating household unit. J. G. Burns and H. S. Davis. 1,622,626; Mar. 29. May 10.

Refrigerating household unit. J. G. Burns and H. S. Davis. 1,622,626; Mar. 29.

Refrigerating machine. A. Delas. 1,636,294; July 19.

Refrigerating machine. F. G. Keyes. 1,622,620; Mar. 29.

Refrigerating machine. L. F. Wegener. 1,622,965; Retrigerating machine. F. G. Keyes. 1,622,529; Mar. 29.
Dec. 13.
Refrigerating machine, B. G. Keyes. 1,622,529; Mar. 29.
Dec. 13.
Refrigerating machine, Absorption. E. Wirth. 1,627,071;
May 3.
Refrigerating machine, Brine-unit-type. II. E. Harris.
1,620,083; Apr. 26.
Refrigerating machine, Brine-unit-type. II. E. Harris.
1,620,083; Apr. 26.
Refrigerating machine, Rotary-compressor. H. W. and W. Wishart. 1,633,086; June 14.
Refrigerating machiner, Compressor for. D. F. Smith.
1,642,909; Sept. 20.
Ref. 1,612,612; Mar. 20.
Ref. 1,612,613; Mar. 20.
Refrigerating machines, Safety device for adsorption. E. Niemann. 1,635,337; July 12.
Refrigerating machines, Safety device for adsorption. E. Niemann. 1,635,337; July 12.
Refrigerating plants. Regenerative purging system for.
Refrigerating plants. Regenerative purging system for.
Refrigerating system. W. H. Carrier. 1,639,023; Aug. 16.
Refrigerating system. A. F. Sawyer. 1,643,179; Sept. 20.
Refrigerating system and appliance. R. C. Cory and C. M. Refrigerating system of the Refrigerating system of the Refrigerating system of the Refrigerating system. R. E. Schurtz. 1,027,808; May 10.
Refrigerating system. R. E. Schurtz. 1,027,808; May 10.
Refrigerating system, Intermittent-absorption. H. F., E. J., and B. G. Gellenbeck. 1,632,701; June 14.
Refrigerating system, Compressor for. W. Burlingham and R. L. Lovell. 1,622,023; Mar. 22.
Refrigerating systems, Distributor for use in. W. G. E. Refrigerating systems, Compressor for. W. Burlingham and R. L. Lovell. 1,622,023; Mar. 22.
Refrigerating systems, Purge device for. J. G. Bergdell.
Refrigerating mystems, Purge device for. J. G. Refrigeration. H. C. Folzer. 1,632,701; June 14.
Refrigerati Refrigerating Dec. 13. Refrigerating machine, Absorption-, E. Wirth, 1,627,071; Mar. 1.

Refrigeration systems, Compressor for. J. O. Carrey, 1.651,670; Dec. 6.
Refrigeration systems, Thermosiphon circulation for absorption. A. Lenning. 1.645,706; Oct. 18.
Refrigeration. Working fluid for. A. A. Kucher. 1.645,108; Oct. W. R. 1.645,108; Oct. W. R. 1.630,160; May 24.
Refrigerator. G. C. Bohn. 1.644,610; Oct. 11.
Refrigerator. G. C. Bohn. 1.644,610; Oct. 11.
Refrigerator. L. G. Copeman. 1.644,982,4; Oct. 11.
Refrigerator. L. G. Copeman. 1.644,987; Oct. 11.
Refrigerator. R. J. Couchlin. 1.644,987; Oct. 11.
Refrigerator. S. Cozcollino. 1.633,991; Aux. 16.
Refrigerator. G. G. J. Gruendler. 1.635,668; July 12.
Refrigerator. G. J. Gruendler. 1.646,241; Oct. 18.
Rofrigerator. G. J. Gruendler. 1.636,68; July 12.
Refrigerator. G. J. Gruendler. 1.646,241; Oct. 18.
Rofrigerator. G. J. Gruendler. 1.646,241; Oct. 18.
Rofrigerator. G. J. Gruendler. 1.646,241; Oct. 18. Refrigerator Oct. 11. Refrigerator. Refrigerator. Refrigerator. Refrigerator. H. A. Hawn, 1,621,322; Mar. 15. M. W. Heath, 1,616,085; Feb. 1. H. J. McClafferty, 1,613,468; Jan. 4. T. S. Morton, 1,623,802; Apr. 5.

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920
Refrigerator.
Re
Refrigerator, C. O. Williams. Reebsing.

Absorption. L. Reebsing.

Apr. 26.

Apr. 26.

Refrigerator, Absorption. E. Wirth. 1,630,648; May 31.

Refrigerator and dispenser. G. C. Bell. 1,638,181; Aug. 9.

Refrigerator apparatus. F. Meyer. 1,639,528; Aug. 16.

Refrigerator basket. E. A. Florang. 1,642,414-16;

A-Frick. 1,623,947; Apr. 5.
 Refrigerator apparatus. F. Meyer, 1,639,528; Aug. 16. Refrigerator basket. E. A. Florang, 1,642,414-15; Refrigerator, Bottle. C. A. Friek. 1,623,947; Apr. 5. Refrigerator box. T. M. Condit and G. W. Anderson. 1,616,441; Feb. 8. Refrigerator box. J. C. Jankus. 1,646,616; Oct. 25. Refrigerator-cabinet construction. A. Tangenberg. 1,651,741; Dec. 6.
  Refrigerator-car construction. R. J. Kuhl. 1,616,582;
 Feb. 8.

Refrigerator cars, Automatic drain and discharge trap Refrigerator. A Sandman. 1.613.908; Jan. 11.

Refrigerator cars, Ventilating door for the hatchways of. G. A. Hull. 1.613,830; Jan. 11.

Refrigerator condenser. C. L. Olin. 1,613,717; Jan. 11.

Refrigerator construction. L. G. Copeman. 1,644.981;
                                                                                                                                                                           1,613,717; Jan. 11.
  Refrigerator construction. L. G. Copeman. 1,644,986;
Oct. 11.
  Refrigerator construction. F. S. Gibson. 1,650,791;
Nov. 29.
Refrigerator construction. R. A. Riek. 1,615,099;
  Refrigerator display case. E. Friedrich. Des. 73,253;
 Refrigerator door. A. R. Peacock. 1,629,408; May 17. Refrigerator door. R. A. Riek. 1,618,476; Feb. 22. Refrigerator doors, Fastener for. A. Rubin. 1,619,831;
 Mar. 8.
Refrigerator doorlock. A. E. Titus. 1,616,998; Feb. 8.
Refrigerator drain. C. A. Frick. 1,652,665; Dec. 13.
Refrigerator-flue construction. H. C. Leonard and W. H.
Refrigerator, 1,630,065; May 2,646,77; Oct. 11.
Refrigerator, heater, ventilator, and humidifier, Combination. C. A. Moore. 1,612,827; Jan. 4.
Refrigerator, Ice-saving. L. Lowy. 1,619,741; Mar. 15.
Refrigerator-ice-tank support. V. P. Warren. 1,621,387; Mar. 15.
    Refrigerator manufacture. L. G. Copeman. 1,644,985;
    Refrigerator-pipe insulate, H. B. Lindsay, 1,618,455;
  Refrigerator-pipe insulate. H. B. Lindsay. 1,618,455; Feb. 22.
Refrigerator show case. G. Schmidt. 1,614,319; Jan. 11.
Refrigerator, Soda-fountain. H. J. Mackey. 1,641,980; Sept. 13.
  Refrigerator, Soft-drink. L. Locker and O. M. Frazler. 1,638,402; Aug. 9. Refrigerator tank, Iceless. L. B. Olin. 1,641,192; Sept. 6.
  Sept. 6. Refrigerator wall. V. P. Warren. 1,621,386; Mar. 15. Refrigerator, Window. J. C. Spatrow. 1,637,460; Aug. 2. Refrigerators, Drinking-water supply for. L. G. Copeman. 1,618,341; Feb. 22. Refrigerators, Guide for bottle. C. A. Frick. 1,631,091;
             May 31.
  Refrigerators or the like, Compressor for. G. Middendorf. 1,626,621; May 3, Refrigerators, Wall construction for. D. I. Walker. 1,630,168; Nov. 22. Refrigerators, Water Cooler for. F. C. Green. 1,621,162;
             Mar. 15.
  Refuse furnice. J. E. Hess. 1,633,282; Dec. 20.
Refuse containing precious metal. Apparatus for wash-
ng. G. Unrath. 1,627,129; May 3.
Refuse destructors and other furnaces, Top-feed door for.
W. J. Bulgin. 1,642,100; Sept. 18.
Refuse-discharge mechanism. R. A. Foresman. 1,624,661;
              Apr. 12
 Apr. 14.

Regeneration, Mechanism and process for effecting. F. F. Ault. 1,630,512; May 31.

Regenerative air and gas preheater. F. Ljungström and N. F. F. Andersson. 1,638,539; Aug. 9.

Regenerative furnace. R. D. Pike. 1,648,191; Nov. 8.

Regenerative furnace. A. W. Soderberg. 1,629,056; May 17.
    Regenerative rotary repeater. A. H. Howard. 1,626,534;
    Apr. 26.
Regencrator engine. E. W. Swartwout. 1,641,830;
Sept. 6.
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Register: See—
Air register.
Automathie register.
Cash register.
Cash register.
Register-controlling system.
June 21.

A E. Lundell. 1,632,908;
        Register dial. C. M. F. Friden. 1,643,551; Sept. 27.
Register-front fastener. W. T. Truax. 1,643,863;
Sept. 27.
Register-Iront Iastener. W. T. Truax. 1,643,863; Sept. 27.
Register hood. W. S. Elters. 1,622,2031; Mar. 22.
Register hood. W. S. Elters. 1,624,225–6; Apr. 12.
Register hood. W. S. Elters. 1,624,225–6; Apr. 12.
Register hood. W. S. Elters. 1,624,225–6; Apr. 12.
Registering device. J. H. Sheats. 1,651,522; Register senders, Testing device for testing. J. B. Registering device. I. S. Dennent. 1,637,606; Aug. 2.
Registering device. I. S. Dennent. 1,637,606; Aug. 2.
Registering mechanism, Roll-side-. D. J. Scott. 1,618,963; Jan. 11.
Registering mechanism, Roll-side-. D. J. Scott. 1,618,963; Jan. 11.
Registers, Hood for. W. S. Elters. Des. 72,514; Apr. 26.
Regulating and recording device. E. B. Wood. 1,623,712; Apr. 6.
Regulating apparatus. A. W. Hull. 1,641,679; Sept. 6.
Regulating apparatus. F. H. Winter. 1,620,564; Mar. 8.
Regulating apparatus. F. H. Winter. 1,622,620; Mar. 29.
  Regulating apparatus. F. H. Winter. 1,622,620; Mar. 29.

Re ..lating apparatus, Electric speed. W. S. Richmond. 1,616,230; Feb. 1.

Regulating apparatus for central heating appliances. C. Withoeft. 1,649,090; Nov. 16.

Regulating apparatus, Time-controlled. H. Y. Norwood. 1,630,305; May 31. V. Giesler. 1,628,137; May 10.

Regulating device, H. Y. Giesler. 1,628,137; May 10.

Jan. 11.

Regulating gate, Automatic. C. W. Cheatham. 1,645,943; Oct. 18.
  Regulating gate, Automatic C. W. Chem. Co. 18.

Regulating method and apparatus. W. D. Coolidge. Regulating system. R. M. Carothers. 1,624,736;

Apr. 12.

Regulating system. G. R. McDonald, 1,617,130; Feb. 8.

Regulating system. L. W. Thompson. 1,633,831;

Linus 28.
  Regulating system. L. W. Ruomps...
June 28. Regulating system. L. W. Ruomps...
Feeling and State of the State
     Nov. 29.
Regulator: See—
Air-pressure regulator.
Automatic regulator.
Boiler-feed regulator.
Boiler-regulator.
Centrifugal regulator.
Circuit regulator.
Constant-volume regulator.
Constant-volume regulator.
                                                                                                                                                                                                                                                                                                                Gasoline regulator.
                                                                                                                                                                                                                                                                                                                Gasoline regulator.
Governor regulator.
Heat regulator.
Humidity regulator.
Lamp regulator.
Level regulator.
                                                                                                                                                                                                                                                                                                                Oil-level regulator.
                            Constant-volume re
Control regulator.
Damper regulator.
Draft regulator.
                                                                                                                                                                                                                                                                                                             On regulator.
Pressure regulator.
Sash regulator.
Speed regulator.
Tandem writer regulator.
Temperature regulator.
Thermostatic regulator.
Thermostatic gas regulator.
                               Draft regulator.
Electric regulator.
Electric-current regulator.
Feed regulator.
Feed-water regulator.
                         Feed-water regulator,
Flow regulator,
Fluid - pressure - operated
regulator,
Fluid-pressure regulator,
Fuel regulator,
Furnace regulator,
Gas-pressure regulator,
                                                                                                                                                                                                                                                                                                                   Voltage - balancing regula-
                                                                                                                                                                                                                                                                                                                Voltage regulator.
Water regulator.
Window regulator
Windshield regula
Furnace regulator. Gas-pressure regulator. Gas-pressure regulator. Windshield regulator. Gas-pressure regulator. Windshield regulator. F. S. Bernhard. 1,645.850; Oct. 18. Regulator. L. Campbell, jr. 1,632.055; June 14. Regulator. J. G. Ferguson. 1,532.062; June 14. Regulator. J. G. Ferguson. 1,532.062; June 14. Regulator. J. Harris. 1,643.803.120; July 5. Regulator and economizer, Combination. A. Johnson. 1,653.401; Dec. 20. Regulator for the pressure of a common source of fluid utilized in operating independent devices. J. S. Larson. 1,643.624; Sept. 27. E. McLen. 1,653.488; Dec. 20. Regulator system. J. H. Ashbaugh. 1,621,050; Mar. 18. Regulator system. J. H. Ashbaugh. 1,621,050; Mar. 18. Regulator system. J. H. Ashbaugh. 1,645.4360; Dec. 27. Regulator system. J. H. Ashbaugh. 1,645.4360; Dec. 27. Regulator system. W. M. Bradshaw. 1,615,678; Jan. 25. Regulator system. W. W. Bradshaw and J. H. Ashbaugh. Regulator system. W. W. Bradshaw and J. H. Ashbaugh. Regulator system. W. W. Bradshaw and J. H. Ashbaugh. Regulator system. W. W. Bradshaw and J. H. Ashbaugh. Regulator system. 1. W. W. Boson. 1,626,603; May 3. Relay. R. Brooks. 1,626,665; May 3. Relay. L. N. Crichton. 1,617,377; Feb. 15. Relay. L. J. Girard. 1,636,932; July 26. Relay. R. B. Hall. 1,628,728; May 17. Relay. R. E. Hall. 1,628,728; May 17. Relay. R. E. Hall. 1,628,728; May 17. Relay. C. O. Harrington. 1,617,594; Feb. 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                   regulator.
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Relay. E. G. Johnson. 1,632,186; June 14. Relay. D. D. Miller. 1,641,285; Sept. 6 Relay. H. C. Rochette. 1,638,098; Aug. 9. Relay. W. W. Schilling. 1,646,219; Oct. 18. Relay. M. B. Stazak. 1,604,321; Aug. 30. Relay. F. H. Winter. 1,603,078; Dec. 20. Relay. Alg. 10,602,781; Relay and the like, Selective. R. E. Hall. 1,652,199; Dec. 13.
Mar. 15.
Relay and the like, Selective. R. E. Hall. 1,652,199; Dec. 13.
Relay, Demand-limiting. R. C. Schott and A. J. A. Peterson. 1,47,316; Nov. 1.
Peterson. 1,47,411; May 3.
Peterson. 1,47,411; May
Relieving mechanism. F. Humphrls. 1.647,045; Oct. 25. Relieving mechanism. C. Schram. 1.617,168; Feb. 8. Remedy for seasickness. G. N. Banker. 1,634,315; July 5. Remote-control and pull-to handle assembly. Combination. T. P. Archer and P. M. Edgar. 1,638,231; Aug. 9. Remote-control and pull-to handle assembly. Combination. T. P. Archer and P. M. Edgar. 1,638,231; Aug. 9. Strument for. W. Barfield. 1,614,615; Jan. 18. Rendering fat-bearing animal material. R. McTavish. 1,654,506; Dec. 27. Renovating fat-bearing animal material. R. McTavish. 1,654,506; Dec. 27. Renovating machine, Fabric. E. F. Fisher. 1,619,614; Repairing cracked or broken structures by welding. R. Mattice. 1,650,144; Nov. 22. Repair chamber, Portable. C. E. Ward. 1,619,642; Mar. 1. Repairing cracked or broken structures by welding. R. Mattice. 1,650,144; Nov. 22. Repeater. Compass. E. A. Sperry. 1,617,310; Feb. 8. Repeaters. System for energizing and testing. E. Vroom Reproducer, Push-pull. F. E. Miller. 1,642,124; Sept. 13. Reproducing fall the movements of the steps of quadrupeds, Mechanism for. V. Gobbato. 1,638,332; Aug. 9. Reproducing position. E. M. Hewlett and W. W. Willard. G. J. Lewis. 1,615,638; Jan. 25. Rerailing device. J. Wilburn and J. J. Jefferson. 1,654,042; Dec. 27. Rerailing frog. K. S. and F. L. Hooks. 1,614,985; Jan. 18. Reservoir, device. C. C. Farmer. 1,626,604; May 3. Reservoir device. C. C. Farmer. 1,628,604; May 3. Reservoir device
                    Resilient member. W. W. Doty. 1,630,893; May 31. Resilient watering surface. J. W. Fellows. 1,632,395; June 14 pt. 1,622,395; June 14 pt. 1,622,162; June 14 pt. 1,622,162; June 15,622,162; June 17,622; June 17,622
                           Resilient wheel, venicle, R. J. Fess.
Oct. 18.
Resin and its manufacture, Synthetic. E. R. Littmann.
1,618,209; Feb. 22.
Resin and making same. C. O. Terwilliger. 1,624,638;
Resin and making same, Synthetic. J. McIntosh and
E. Y. Wolford. 1,642,078; Sept. 13.
Resin and making same, Synthetic. J. McIntosh.
1,642,079; Sept. 13.
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Resin composition, Synthetic. H. L. Bender. 1,650,109; Nov. 22.

Resin-containing coating composition. J. M. Kessler.

1,642,155; Sept. 13.

Resinlike bodies from cracked hydrocarbon products, Obtaining. J. C. Morrell and G. Egolff. 1,627,054; Resinous compositions, Production of articles and covers from. E. Wieland. 1,633,475; Aug. 16.
Resinous condensation product from dihydroxydiphenylethane and reactive methylene bodies and making same. L. H. Enekeland. 1,637,512; Aug. 2.
Resinous product and making same, Synthetic. B. N. Lougovoy. 1,648,852; Nov. 8.
Resinous reaction product of urea and formaldehyde. F. Lauter. 1,633,337; June 21.
Resins and making the same. C. O. Terwilliger. Resins and making the same. C. O. Terwilliger. Resistance control apparatus. H. J. Wiegand. 1,643,105; Sept. 20.
Resistance control apparatus. H. J. Wiegand. 1,643,105; Sept. 20. Fonrobert 1,423,901; Apr. 5.
Resistance control apparatus. H. J. Wiegand. 1,643,105; Sept. 20.
Resistance element. C. Horton. 1,646,535; Oct. 25.
Resistance furnace, Electric. H. M. Bichel. 1,638,822; Resistance furnace, Electric. H. M. Bichel. 1,638,822; Dec. 13.
Resistance, Variable. E. R. Stockie. 1,653,745; Dec. 27.
Resistant substance. P. S. Williams. 1,618,397; Feb. 22.
Resiston. G. H. Whittingham. 1,648,571; Nov. 8.
Aug. 16.
Resistor material. J. Sleplan. 1,648,713; Nov. 8.
Aug. 16.
Resistor material. J. Sleplan. 1,638,888; Aug. 16.
Resistor-supporting means. K. Ehrgott. 1,647,346; Nov. 1.
Ray 17.
Resistor-supporting means. G. E. Shawk. 1,628,858; Aug. 16.
Resistor-supporting means. G. E. Shawk. 1,628,538; Aug. 16.
Resistor-supporting means. G. E. Shawk. 1,628,658; Aug. 16.
Resistor-supporting means. G. E. Shawk. 1,628,658; Aug. 16.
Resistor-supporting means. G. E. Shawk. 1,649,005; Aug. 16.
Resistor-supporting means. G. E. Shawk. 1,649,005; Aug. 16.
Resistor-supporting means. G. E. Shawk. 1,647,066; Oct. 25.
Restaurant equipment. M. L. Bayley. 1,648,551; Nov. 8.
Resurfacing device. F. C. Westman. 1,647,066; Oct. 25.
Retainer. H. H. Honighaum. 1,616,392; Dec. G.
Retainer. H. H. Honighaum. 1,616,392; Dec. G.
Retainer. H. H. Honighaum. 1,616,392; Dec. G.
Retainer. H. H. Honighaum. 1,632,722; June 14.
Retainer. A. Nelson. 1,647,575; Nov. 1.
Retarding device. G. F. C. Bauer. 1,613,732; Jan. 11.
Retarding device. G. F. C. Bauer. 1,613,744; Mar. 1. Nov. 15.
Retarder. A. Nelson. 1,647.575; Nov. 1.
Retarding device. G. F. C. Bauer. 1,613.782; Jan. 11.
Retarding device. A. A. Horton. 1,619.574; Mar. 1.
Retarding device. A. A. Horton. 1,619.574; Mar. 1.
Retlanscope. J. Copeland. 1,648.013; Nov. 8.
Retort. K. I. Ford. 1,632.768; July 22.
Retort. H. J. and H. C. McElvain. 1,642.457; Sept. 13.
Retort and gas-flow-regulating apparatus. E. P. G.
Wünsch. 1,632.934; Jung. 16.
Retort and operating the same, Distillation and carbonization. F. Duplan. 1,618.865; Feb. 22.
Retort field distributor and support, Tubular rotary. E.
Retort for treatment of feet. B. Roth. 1,649.195;
Nov. 15. Nov. 15.
Retort for treatment of fruit. E. G. Grab. 1,613,452;
Jan. 4. Jan. 4. Continuously-operating ore or ore-shale converting. A. M. Beam. 1,627,538; May 3. Retort oven for low-temperature carbonization. P. C. Retort, Rofary. B. Young. 1,638,270; July 19. Retorts, Closure for vertical. P. G. Strassmann. 1,646,325; Oct. 18. Retorts, Coke extractor for vertical. F. J. and E. West. 1,617,732; Feb. 15. Retread mold. F. M. Milford. 1,641,499; Sept. 6. Retreading mold. J. E. Howell and G. E. Sapp. Retorts and D. E. De Lape. 1,621,658; Mar. 22. Return bend and terminal fitting. S. Thurstensen. 1,647,321; Nov. 1. Return state, Automatic. E. A. Dohmann. 1,628,622; May 10. Return trap. E. L. Cortis-Stanford. 1,636,626; July 19. May 10.

Return trap. E. L. Cortis-Stanford. 1.636,626; July 19.

Revaporizer. A. F. Timme. 1.650,246; Nov. 22.

Reverbeardry furnace. G. W. Prince. 1.650,907;

Reverbeardry-furnace waste-heat boiler. A. G. McGregor. 1.632,844; June 21.

Reverse-motion brake, Automatic. W. Jones. 1,644,061;
Oct. 4. Reversible comb. J. de D. Moreno. 1,624,753; Apr. 12, Reversing mechanism. F. W. A. Henrich. 1,627,434; Reversing mechanism. S. Vernet. 1,625,512; Apr. 19, Reversing mechanism. E. J. Westmoreland. 1,613,549; Jan. 4. Revolving chair, R. F. Stubblebine and J. V. Dolan. 1,634,922; July 5.

| Revolving valve-sleeve gas engine. O. O. Storle. | 1,514,634; Jan. 18. |
| Rewinding recl. E. G. K. Anderson. 1,626,876; Apr. 26. |
| Rheostat. H. E. Adams. 1,618,967; Mar. 1. |
| Rheostat. E. H. Bobo. 1,625,703; Apr. 19. |
| Rheostat. E. H. Bobo. 1,625,703; Apr. 19. |
| Rheostat. E. A. Bohiman. 1,618,801; Feb. 22. |
| Rheostat. E. A. Bohiman. 1,618,801; Feb. 22. |
| Rheostat. E. A. Bohiman. 1,618,801; Feb. 22. |
| Rheostat. E. A. Bohiman. 1,618,201; Feb. 22. |
| Rheostat. E. A. Bohiman. 1,620,202; Mar. 29. |
| Rheostat. P. Crosley; pt. 1,640,202; Aug. 23. |
| Rheostat. P. Crosley; pt. 1,640,202; Aug. 23. |
| Rheostat. J. E. Jenkins. 1,621,466; Mar. 15. |
| Rheostat. F. W. Knisling. 1,618,013; Feb. 15. |
| Rheostat. F. W. Knisling. 1,618,015; Feb. 15. |
| Rheostat. R. A. Krauss. 1,652,017; Dec. 9. |
| Rheostat. B. A. Krauss. 1,652,017; Dec. 9. |
| Rheostat. B. A. Krauss. 1,652,017; Dec. 9. |
| Rheostat. D. B. Nowosielski. 1,623,198; Apr. 5. |
| Rheostat. D. B. Nowosielski. 1,623,198; Apr. 5. |
| Rheostat. J. A. Nugent. 1,629,523; May. 24. |
| Rheostat. J. A. Roston. 1,620,573; Mar. 8. |
| Rheostat. J. A. Roston. 1,620,573; Mar. 8. |
| Rheostat. J. A. Roston. 1,620,573; Mar. 8. |
| Rheostat. J. A. Roston. 1,620,573; Mar. 8. |
| Rheostat. Liquid. B. Gray and R. Curtis. 1,630,176; May. 24. |
| Rheostat. Liquid. C. C. Whittaker and D. C. West. 1,653,394; Dec. 27. |
| Rheostat. Pressure. G. O. Wilms. 1,631,111; May. 31. |
| Rheostat. Pressure. G. O. Wilms. 1,631,111; May. 31. |
| Rheostat. Pressure. G. O. Wilms. 1,631,111; May. 31. |
| Rheostat. Pressure. G. O. Wilms. 1,631,111; May. 31. |
| Rheostat. Pressure. G. O. Wilms. 1,630,301. | Nov. 15. Ribber-machine attachment. F. Bolonski. 1 628 572 : May 10 May 10.
Ribbon E. Schloss, 1,614,258; Jan. 11.
Ribbon fastener, E. Sweet, 1,647,589; Nov. 1.
Ribbon reel, J. S. May, 1,628,795; May 17.
Ribbon-reversing mechanism, A. Pateman, 1.4 Ribbon reel. J. S. ARY. Apocontrol many J. Ribbon-reversing mechanism. A. Pateman. 1.634,593; July 5. Rib top fabrics and mechanism for producing the same, Production of. E. Masllorens. 1,646,301; Oct. 18. Rice food, Making Fried. B. Yokoyama. 1,621,763; Rice product, Making. J. F. Newman. 1,631,145; June 7. Rice separator. A. A. Schoenegs. 1,640,010; Aug. 23. Ridge. E. Bourke. 1,637,728; Aug. 2. Ridge cap. O. P. Greenstreet. 1,658,847; Dec. 27. Ridge-splitter attachment. L. W. Chase. 1,620,441; Mar. 8. Rice bar. Fiction head for. G. W. Hulshizer. 1,636,341; Apr. 5. Ridge-splitter attachment. L. W. Chase. 1,620,693; July 19. Ridges, Rear sight for. J. L. Hatcher. 1,636,509; July 19. Ridge-splitter attachment for air. J. B. Mulholland and A. F. Borschel. 1,625,966; Apr. 26. Right-of-way indicator. W. S. Harrington. Des. 71,941; Feb. 1. 1.634.593: Feb. 1. Fig. 1.

Rim. C. J. Rabidoux and W. M. Einhorn. 1,629,411;
May 17.

Rim. C. E. Stigers. 1,641,399; Sept. 6.

Rim and attaching same, Auxiliary. A. P. Armington. 1,619,175; Mar. 1.

Rim. and attachment therefor, Wheel. A. L. Putnam. 1,624,974; Apr. 19.

Rim. Automobile. B. D. Gordon and W. H. Pearen. R. 1,632,896; Aug. 23.

Rim. construction. W. D. McCullough. 1,644,159; Oct. 4.

Rim. construction. W. D. McCullough. 1,647,411;

Nov. 1. Rim treatment process. J. B. Scott. 1,628,516; May 10. Rim, Two-piece demountable. F. E. Peterson. 1,616,984; Rim, Two-piece demountable, F. C. Mallette. 1,638,352; Feb. 8.
Rim wheel, Demountable. E. C. Mallette. 1,638,352; Aug. 9.
ms. Actuating attachment for. L. L. Klingaman.
1,620,470; Mar. 8.

Rims, and making the same, Joint for split. E. R. Jacobi.
1.632,550; June 14.
Rims and wheel disks, Manufacturing scamless. A. J.
Rims and wheel disks, Manufacturing scamless. A. J.
Rims, Device of the state of th ms o. able. J. Oil recovering and obturat-ing ring. Packing ring. Piston packing ring. Piston ring. Angle split ring. Bead-placing ring. Buildingerore bead ring.
Chain ring.
Chain ring.
Clamping ring.
Clamping ring.
Crown ring.
Glass-gathering ring.
Ring.
Glass-gathering ring.
Ring.
Ring.
G. C. Beckstein. Des.
Ring.
Ring.
G. D. Savage.
Des.
Ring.
G. D. Savage.
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G. D. Savage.
Des.
Ring.
Ring.
G. D. Savage.
Des.
Ring.
R Bead ring.
Building core bead ring.
Chain ring.
Clamping ring,
Crown ring.
Glass-gathering ring. Sept. 21.

River control. Method and apparatus for. E. Bignell. 1,622,568; Mar. 29.

Rivet. J. W. Iseman. 1,643,771; Sept. 27.

Rivet. H. V. Ream. 1,648,165; Aug. 9.

Rivet heter. P. J. Culhane, jr. 1,641,122; Aug. 30.

Rivet heater. W. E. Irish. 1,641,085; Aug. 30.

Rivet heater, Automatic-feed. G. A. E. Jones. 1,650,943; Nov. 29. Rivet-making machine. M. Dwyer and R. J. Boyle. 1,637,107; July 26. Rivet, Self-anchoring. R. Stresau. 1,647,062; Oct. 25. Rivet-setting implement. C. A. Chisholm. 1,643,112; Sept. 20. Rivet-setting machine. A. R. Havener. 1.621 405: Mar. 15. Rivet-setting machine. IC. B. Stimpson. 1,635,865: River-setting harding. July 12.
River-setting machine. E. B. Stimpson.
Oct. 18.
River-setting machine. E. B. Stimpson. E. B. Stimpson. 1.646.072: 1.651.976-7: Dec. 6.

Riveting machine. A. R. Havener. 1,628,044; May 10.

Riveting machine. H. W. Pierce. 1,615,724; Jan. 25.

Riveting machine. B. B. Stimpson. 1,614,937; Jan. 18.

Riveting machine. E. B. Stimpson. 1,629,847; May 24.

Riveting machine. E. B. Stimpson. 1,629,847; May 24.

Riveting machine. E. B. Stimpson. 1,629,847; May 24.

Riveting machines. Fixture for. W. J. Lehman. 1,629,846; May 24.

Riveting machines. Fixture for. W. J. Lehman. 1,623,796; Apr. 5.

Riveting machines. Safety device for. H. C. Vance. 1,643,795; Sept. 27.

Riveting press. M. O. Kuhn. 1,622,248; Mar. 22.

Rivetis. Michod and apparatus for forming heads on. Rocchites. Michod and Apparatus for forming heads on. 1,633,638; July 26.

Rocchites. Complexition and preparing. P. F. Harris. 1,632,838; July 26.

Road-bed-building machine. R. Payne. 1,622,970; Mar. 29.

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Road-building machine. F. M. Hargrave. 1,619,614; Mar. 1.
Road building machinery. C. D. Farmer and H. W. Libby. Dess. 16,782; Nov. 8.
Road-building material, Machine for treating. E. B. Horner and L. Holt. 1,632,669; June 21.
Road-building material, Preparing. O. L. Dillon, jr. Road-drag, H. D. Meyer. 1,624,421; Apr. 12.
Road form. H. A. Trester. 1,640,739; Aug. 30.
Road-forming materials, Spreading discrete. M. B. W. Fitz Gerald and F. F. Maynard. 1,644,575; Oct. 4.
Road grader. C. P. Denison. 1,644,575; Oct. 4.
Road grader. C. P. Denison. 1,644,580; Sept. 6.
Road grader. C. P. Denison. 1,644,580; Sept. 6.
Road grader. Pelescoping-axle, leaning-wheel. W. T. Beatty, F. S. Davis, and F. D. Wilson. 1,651,315; Nov. 29.
Road leveler or planer. E. A. Burrow. 1,629,678; May 24. F. G. Farwell. 1,620,138; Mar. 8.
               Road-building machine. F. M. Hargrave. 1,619,614;
          Road leveler or planer. E. A. Burrow. 4,024,000. May 24.
Road light. F. G. Farwell. 1,620,198; Mar. 8.
Road machine. J. Fleming. 1,633,559; Dec. 20.
Road machine. F. L. Napier. 1,613,051; Jan. 4.
Road machine. S. A. Stouffer. 1,623,994; Apr. 12.
Road machine. S. A. Stouffer. 1,623,944; Apr. 12.
Road machine. S. A. Stouffer. 1,623,941; Apr. 12.
Road machine, Concrete. E. G. Carr. 1,644,511; Oct. 4.
Road machine, Concrete. E. G. Carr. 1,644,511; Oct. 4.
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Road machine. Concrete. E. G. Carr. 1,644,511; Oct. 4.
Road machine. Concrete. E. G. Carr. 1,644,511; Oct
     Road matchine and grader. J. H. Welsh. 1,622,635; Sup. 4.

Road-making machine. J. M. Rathmell. 1,648,913; Nov. 15.

Road marker. H. O. Kuhlhoff. 1,640,777; Aug. 30.

Road marker. M. Thingan. Des. 73,717; Oct. 25.

Road material and the like, Machine for mixing. T. J.

Barrett. 1,521,099; Mar. 15.

Road material. Making asphalite. J. D. Forrester. 1,620,813; Mar. 15.

Road-paving block. H. H. Duke. 1,642,846; Sept. 20.

Road planing evic. C. O. ollepple. 1,630,422; May 31.

Road-paring machine. C. B. Christians, jt. 1,624,830; Apr. 12.

Road resurfacing machine. F. and J. G. Bodenstein, it.
Roud repairing machine. C. B. Christians, Jr. 1,624,390:

Road resurfacing machine. F. and J. G. Bodenstein, Jr.
1,651,247; Nov. 29.

Road resurfacing machine. F. and J. G. Bodenstein, Jr.
1,651,247; Nov. 29.

Road roller and scarifier. G. C. Abbe and R. C. Williamson. 1,637,720: Aug. 2.

Road scraper. G. C. Abbe. 1,612,898; Jan. 4.

Road scraper. J. K. Farris. 1,615,271; Jan. 25.

Road scraper. R. A. Russell. 1,634,216; Jun. 25.

Road-scraper adjusting mechanism. D. E. Burns.
1,625,019; Apr. 19.

Road-scraper blades. Cutting section for. C. O. Wold.
1,633,057; June 21.

Road-scraper blades. Cutting section for. C. O. Wold.
1,633,057; June 21.

Road-scraper blades. Cutting scation for. C. D. Freeman.
6,49,708; Nov. 29.

Road structure and process of making. J. S. Burdge.
Rel6,799; Nov. 29.

Road structures Matturing and stabilizing. S. E. Fin-
1ey. 1,637,998; Aug. 2.

Road structures Matturing and stabilizing. S. E. Fin-
1ey. 1,637,998; Aug. 2.

Road structures Matturing and stabilizing. R. Road structures Matturing and stabilizing. R. E. Fin-
1ey. 1,637,998; Aug. 2.

Road-scraper. W. G. Proctor and F. R. Dudley.
               Road-Startec results 1, 1912 26.
Road tamper W. G. Proctor and F. R. Dudley. 1,654 014; Dec. 27.
Road tool. D. M. Watters. 1,620,247; Mar. 8.
Roadway construction. A. E. Schutte. 1,639,276; Aug.
Road tool. D. M. Watters. 1,620,247; Mar. 8.
Roadway construction. A. E. Schutte. 1,639,276; Aug.
Roadway construction. A. E. Schutte. 1,639,276; Aug.
Roadways. Strip for. W. E. White. 1,626,291; Apr. 26.
Road wheel, Resilient. E. C. Gibson. 1,622,867; Mar. 29.
Roads. Finishing machine for concrete. G. Maxon, jr.
1,619,083; Mar. 1.
Roads, Rut filler for logging. J. Bernier. 1,615,867;
Roads. Fur foster.
Roats roads. Ro
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Rock drill. F. M. Slater. 1,629,179; May 17.
Rock drill. W. A. Smith. 1,616,470; Feb. 8.
Rock drill. H. H. Swartz. 1,614,216; Jan. 11.
Rock drill and automatic hammer and boring machine,
Electric-driven. E. P. Jones. 1,625,211; Apr. 19.
Rock-drill bit. A. A. Coaton. 1,650,492; Nov. 22.
Rock-drill bit. A. A. Coaton. 1,650,492; Nov. 22.
Rock-drill bit. G. F. Nevin and J. Goodland, jr.
1,662,673; Q. Goodland, J. V. Rice, jr. 1,653,373; Dec. 20.
Rock-drilling device. E. G. Gartin. 1,626,277; Apr. 26.
Rock-drilling device. E. G. Gartin. 1,626,277; Apr. 26.
Rock-drilling mechanism. C. F. Osgood. 1,650,383;
Nov. 22. Nov. 22.

Nov. 22.

Rock drills, Disk valve for. C. C. Hansen. 1,637,185;

Rock drills, Distributing valve for. F. W. Rudlin. 1,614,969; Jan. 18.

Rock drills, Feed-screw motor for. C. C. Hansen. 1,637,168; July 26.

Rock drills, Tube connection for. F. M. Slater. 1,637,204; July 26.

Rock drills, Valve for. C. C. Hansen. 1,636,632; July 19.

Mar. 15., Valve for. G. W. Hulshizer. 1,621,254;

Mar. 15.

Rock or ore crushing machine. J. G. Malone and J. A. Dormer. 1,630,194; May 24.

Rocking-horse. W. H. Sherrod. 1,637,509; Aug. 2.

Rocking-horse. W. H. Sherrod. 1,637,509; Aug. 2.

Rocking-horse. W. H. Sherrod. 1,637,509; Aug. 2.

Rocking-horse. W. H. Sherrod. 1,621,243; Aug. 2.

Rocket. To G. Hitt. 1,658,176; Dec. 20.

Rocket. Rotary balanced. 2, G. Hitt. 1,945,427; Oct. 11.

Rodg: See— Rock drills, Disk valve for. C. C. Hansen. 1,637,185; Rod: See—
Circuiting rod.
Connecting rod.
Curler rod.
Curtain rod.
Curtain rod. Lightning rod.
Locomotive main rod.
Piston rod. Curtain rod. Radius rod.
Fishing rod. Stair rod.
Front rod. Stair rod.
Front rod. Stoker rod.
Rod and reel. C. L. Dewey. 1,640,350; Aug. 30.
Rod chair, Concrete-reenforcing. R. Vogel. 1,620,501; Mar. 8.
Rod-cigarette machine. P. L. Graupner. 1,622,378; Mar. 29. Rod clamp. A. T. Holmes. 1,634,422; July 5. Rod clamp, Awning. F. R. Clifton. 1,633,436; June 21. Rod, clamp and clevis. A. O. Koppin. 1,641,038; Aug. 30. Rod coupling. C. O. Mast. 1,625,266; Apr. 19. Rod grip. L. J. Lewellen and O. C. Willis. 1,623,928; Apr. 5. Apr. 5.
Rod grip and slip support, Combined. H. J. Byers. 1,613,439; Jan. 4.
Rod grip, Polished. J. R. Mshan. 1,622,331; Mar. 29.
Rod guide, Pull.. W. E. Brown. 1,618,509; Feb. 22.
Rod holder, Welding. J. F. Kelly. 1,652,944; Dec. 13.
Rod hook, Safety. J. E. Potter. 1,650,038; Nov. 22.
Rod joint. L. K. Singiey. 1,653,009; Aug. 16.
Rod packing. Apparatus for and method of making. H.
Rod protector. R. H. Penwarden. 1,647,884; Nov. 1.
Rod puller, Concrete. H. W. Rannikko. 1,652,729; Dec. 13. Rod-pulling device. W. Holt. 1,653,046; Dec. 20. Rod rack. R. M. Tibbetts. 1,634,859; July 5. Rod rotor, Polished. A. Boynton. 1,638,064; June 21. Rod structure, Connecting. L. J. McKone. 1,043,720; Sept. 27. Sept. 27.
Rods and shafts, Retaining device for. L. Bonsieur.
1,622,990; Mar. 29.
Rods and the resulting product, Making welding. W. F.
Stoody. 1,622,748; May 24.
Rods and wrist pins of internal-combustion engines,
Aligning machine for connecting. W. Aab. 1,622,560;
Mar. 29. Rods, Automatic adjuster for push. J. E. Titus.
1.631.563. June 7
Rods. Fixture for adjusting connecting. W. F. Reynolds.
1.631.546; Dec. 6
Rods, pipes, and the like, Lift for sucker. W. W. Donnelly. 1.634.935; July 5.
Rods, poles, and the like, Fixing for. E. G. Cleverly.
1.624.392; Apr. 12. Rods, spindles, and the like, Locking device for ad-stantial Mark S. Napier, G. S. Wilkinson, and H. C. Tryon. 1,622,203 ; Mar. 22. Rods, wires, or the like, Machinery for bending metallic. A. Melville and D. McDougall. 1,619,951; Mar. 8. Rodent and insect exterminator. A. Schille. 1,646,767; Oct. 25. Rodent trap. J. P. Lewis, 1,650,455; Nov. 22. Roll-adjusting means. L. Johnson. 1,653,709; Dec. 27. Roll-forming machine, Vienna-. C. Gottfried. 1,625,649; Roll grizzly. R. C. Newhouse. 1,641,777; Sept. 6. Roll fleater. H. E. McCrery A. E. Jesser, and A. B. Montgomery. 1,619,303; Mar. 1. Roll-making machine. O. Schhaupitz and W. Schum. 1,640,644; Aug. 30. Roll, Multiple-feed sorting. G. B. Willcox. 1,618,500; Peb. 22. Rolled plates. Scraper for. D. T. Spring and S. E. Spring. 1,626,435; Apr. 26.

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Roller: Sec—
Breaking roller.
Clutch roller.
Corn-snapping roller.
Curtain and shade roller.
Feed roller.
Hand roller.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Land roller.
Power roller.
Frinting roller.
Rope-guide roller.
Sanding roller,
Saw-tooth roller.
Shade roller.
Track roller.
red roller.

Rope guide roller.

Rading roller.

Hand roller.

Hand roller.

Saw-tooth roller.

Track roller.

Land or lawn roller.

Track roller.

Land or lawn roller.

Roller. P. N. Joslin. 1,627,561; May 10.

Roller. R. Ware: 1,618,496; Feb. 22.

1.651,622; Dec. 6.

Roller and brushing device, Combination. F. Maurer.

1.620,774; Mar. 15.

Roller and drum. E. Schmitt. 1,618,554; Feb. 22.

Roller and pulverizer, Land. J. F. Wagner. 1,624,084; Apr. 12.

Roller and pulverizer, Land. J. F. Wagner. 1,624,084; Apr. 12.

Roller and pulverizer, Land. J. R. Wagner. 1,624,084; Apr. 12.

Roller and roller tealing. Apparatus for manufactur.

Roller bearing. R. B. Bukolt. 1,614,823; Jan. 18.

Roller bearing. R. B. Bukolt. 1,614,823; Jan. 18.

Roller bearing free wheel. W. C. Klein. 1,637,906; Aug. 2.
         Aug. 2.
Roller-bearing remover. J. M. Reiter. 1,612,884; Jan. 4.
Roller bit, C. H. M. Bull. 1,647,260; Nov. 1.
Roller bit, C. H. M. Bull. 1,632,297; Dec. 13.
Roller box. H. G. Durnell. 1,635,520; June 21.
Roller box. H. G. Durnell. 6,000; June 21.
Roller box. H. G. Durnell. 6,000; June 21.
Roller box. H. M. Bull. 1,634,318; Roller-cutter mounting. C. H. M. Bull. 1,634,318;
    1.619.806; Mar. 8.

Roller-cutter mounting. C. H. M. Bull. 1,634.318;

July 5.

Roller for finishing concrete and the like, Self-adjusting and self-advancing. R. C. Stubbs. 1.650.746; Nov. 29.

Roller leveler mechanism. G. L. Kelley and C. L. Eksergian. 1.649.706; Nov. 15.

Roller studies and the like of 
                  Rolling machine. K. F. Ungerer. 1.624,448; Apr. 12. Rolling machine, Cap-thread. W. Cameron. 1,639,367; Aug. 16.
                  Aug. 16.
Rolling mill.
Rolling mill.
Rolling mill.
Rolling mill.
                  Aug. 16.
Rolling mill. J. R. Coe. 1,614,422-5; Jan. 11.
Rolling mill. L. Jones. 1,636,037; July 19.
Rolling mill. L. Jones. 1,636,037; July 19.
Rolling mill. L. Lee. 1,620,476; Mar. 88.
Rolling mill. L. Elee. 1,620,476; Mar. 88.
Rolling mill. L. Pierce. 1,633,349; June 21.
Rolling mill. L. Pierce. 1,633,349; June 21.
Rolling mill. L. Pierce. 1,633,349; June 21.
Rolling mill. J. W. Schraishuhn. 1,633,463; Aug. 9.
Rolling mill. J. W. Schpherdson. 1,647,668; Nov. 1
Rolling mill. E. E. Slick. 1,621,284; Mar. 15.
Rolling-mill appliance. G. Boscarelli. 1,618,864; Feb. 22.
Rolling-mill guide. H. Mercer. 1,620,566; Mar. 8.
Rolling-mill secrew-down. J. B. Tytus. 1,629,602;
         Rolling-mill guide. H. Mercer. 1,620,566; Mar. 8. Rolling-mill serew-down. J. B. Tytus. 1,629,602; Rolling-mill serew-down. J. B. Tytus. 1,629,602; Rolling-mill table. L. E. Hunt. 1,626,734; May 3. Rolling-mill, Variable-speed. D. A. Keating. 1,639,851; Aug. 23. Rolling-mills, Repeater for. A. E. Jupp and F. Seigh. 1,648,732; Nov. 8. R. Breylev. 1,648,012; Nov. 8. Rolling-stock, Transportation of. C. H. Walthall. 1,626,709; May 3. Rolling-stock, Transportation of. C. H. Walthall. 1,626,709; May 3. Rolling-stock, Transportation of. C. H. Walthall. 1,628,709; May 3. Rolling-stock, Transportation of. C. H. Walthall. 1,608,709; May 3. Rolling-stock, Transportation of. C. H. Walthall. 1,608,709; May 3. Rolling-stock, Transportation of. C. H. Walthall. 1,608,709; May 3. Rolling-stock, Transportation of the Horst. 1,641,698; Sept. 13. R. Grubb 1,630,842; Rolls, Heating means for. G. Fox. 1,638,626; Aug. 9. Rolls, Method and apparatus for heating. R. L. McRolling, Method and apparatus for heating. R. L. McRolling, Method and apparatus for heating. R. L. McRolling, Method and apparatus for heating. R. S. Bilderback and C. A. Franke. 1,630,106; May 24. Rolling-stock and C. A. Franke. 1,630,307; July 12. Roof. Car. C. D. Bonsall. 1,633,305-7; July 12. Roof. Car. C. D. Bonsall. 1,633,305-7; July 12. Roof. Car. W. P. Murphy. 1,643,991; Oct. 4. Rolling, Method of Rolling, R. C. C. Car. W. P. Murphy. 1,643,991; Oct. 4. Rolling, R. C. C. Buckles, J. Henri, and R. Clow. 1,615,329; Roof construction. F. C. Kasch. 1,633,641; June 28. Rolling, R. C. Buckles, J. Henri, and R. Clow. Schneffer. 1,625,688; Apr. 19.
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Roof-gutter bracket. G. K. Thompson. 1,613,784; Rooming, Froceted metal. T. Roomson. 1,636,388; May L. Roomson. 1,636,388; May L. Roomson. 1,636,388; May L. Roomson. 1,641,637; Sept. 6. Roofing seam. H. Yost. 1,618,902; Feb. 22. Roofing strip. H. G. Kelly. 1,634,465; July 5. Roofing-supporting strip. H. G. Hose and W. E. Ramsdell. Roofings, Manufacture of prepared. J. E. Miller. 1,636,750; July 26. Room and from leater, Combined dry. S. C. Markatos. 1,651,463; Dec. 6. Room. Hospital operating. P. M. Burgess. 1,645,520; Room. Open-air sleeping. E. T. Heinson. 1,643,070; Sept. 20 Oct. 18.

Room, Open-air sleeping. E. T. Heinson. 1,643,070; Sept. 20.

Room, Supporting means for dry. S. C. Markatos. 1,637,261; July 26.

C. Wollenhaupt. 1,646,334; Oct. 18.

Roost, Chicken A. T. Doser. 1,623,171; Apr. 18.

Roost, Poultry. B. T. Bouma. 1,627,268; May 3.

Roost, Poultry. B. T. Bouma. 1,627,268; May 3.

Roost, Poultry. G. A. Miller. 1,648,079; Sept. 20.

Roost, Poultry. G. Schwan. 1,639,006; Aug. 16.

Roost, Poultry. G. Schwan. 1,639,006; Aug. 18.

Roost, Sanitary poultry. E. O. Dorsey. 1,631,799; June 7, C. Wilson. 1,613,633; 361,11. June 7.

Rope. C.F. Cunningham. 1.631,086; May 81.

Rope. Clamb. 8. Rdm. 1.622,615; Apr. 5.

Rope cutter, J. H. Koehn. 1.621,672; Mar. 22.

Rope-fastening device. J. O. E. Zimmerlund. 1.4

Jan. 11. 1,613,635; Jan. 11.

Rope for holsting apparatus, Compensating. F. Hymans. 1,625,083; Apr. 19.

Rope grin. A. Lucibello. 1,631,746; June 7.

Rope-guide roller. R. H. Fox. 1,619,413; Mar. 1.

Rope, Jumping. W. Fairbanks. 1,629,209; May 17.

Rope, Jumping. E. J. Mordt. Des. 73,755; Nov. 1.

Rope. Label for. F. A. Jenks. 1,635,750; July 12.

Rope-making machine. W. H. Fullington. 1,632,111;

Rope, Marking device for. E. W. Brewster. 1,635,731;

July 12.

Rope Minesweenium. J. P. Hogg. 1,629,647, Mar. 201 July 12.

Rome Mine-sweeping J. F. Howe 1.630 847: May 31.

Rome or wick puckage, Asbestos. G. U. Obetz and R. F. Walter. 1.640.368; Aug. 50.

Rope-securing device. A. F. Nelson, 1.643.676; Sept. 27.

Rope Skipping. I. M. Goldstein. 1.651.057: Nov. 29.

Rope socket. C. C. Sunderland. 1.639.236; Aug. 16.

Rope-tired wheel. E. N. Turner. 1.629.381; May 24.

Rope to skip huckets and counterweights. Fastening hoisting. H. E. Rirch. 1.632.755; June 14.

Ropes, cables, and the like, Apparatus for making wire, hemp, or other. B. Edwards, C. Jones, and R. Hanson. 1.631.439; June 7.

Rosin and producing the same, Purified. W. B. Logan. 1.643.276; Sept. 20.

Rosin dipper. E. A. Smith. 1.632.247; June 14.

Rotary. I. Patterson. 1.639.208; Aug. 16.

Rotary. I. Patterson. 1.639.208; Aug. 16.

Rotary bit, Expanding. R. N. Ferguson. 1,639,222; Aug. 16.
Rotary bodies, Method of and apparatus for testing the dynamic balance of. C. M. Linley. 1,634,428; July 5.
Rotary both lock. F. J. Dowling. 1,617,678; Feb. 15.
Rotary converters, Control of commutating pole strength on nonbooster. F. T. Hague. 1,645,261; Cot. 11.
Rotary conveyers. Intermittent grip mechanism for. W.
Rotary could. 1,627,461 Suly 3.
Rotary coupling. Flexible. F. R. Simms. 1,636,389: Rotary cooler. A. W. Lissauer and J. Credo. 1,617,810; Feb. 15.
Rotary coupling, Flexible. F. R. Simms. 1,636,389; Gardy crossover switch. C. L. Moon. 1,632,558; June 14.
Rotary cutter. E. A. Hoener. 1,643,120; Sept. 20.
Rotary disk-cutter cleaner. E. H. Philaditakis. 1,616,388; Gardy disk-cutter disk-cutte Rotary coupling, Flexible. F. R. Simms, 1,636,389; July 19. tion between a. G. E. A. Haileft. 1,627,775; May 10. Rotating sprinkler. O. A. Kittinger. 1,618,537-8; Feb. 22. Rotaty member. Means to prevent reverse. R. L. Wallace. 1,641,360; Sept. 6. Rotation of a rotary member, Means to prevent reverse. R. L. Wallace. 1,641,463-4; Sept. 6. Rotator. L. P. Burgess and E. E. Stevenson. 1,644,913; QCt. 13. M. Hansen. 1,651,820; Dec. 6. Rotors, Guide body for reaction. H. Fritzel. 1,640,891; Aug. 30. Rotors, Guide body for reaction. H. Fritzel. 1,640,891; Aug. 30. Rotors, Producting. C. E. Johnson. 1,639,456; Aug. 16. Rouge. R. H. Sharp. 1,614,211; Jan. 11. Rouge and powder puff. K. D. Jewell. 1,650,839; Rouge. R. H. Sharp. 1,614,211; Jan. 14. Rouge and powder puff. K. D. Jewell. 1,650,839; Rouge. R. H. Sharp. 1,614,211; Jan. 14. Rouge and powder puff. K. D. Jewell. 1,650,839; Rouge. R. H. Sharp. 1,614,211; Jan. 14. Rouge. Making. P. J. Hess, sr. 1,618,086; Feb. 15. Roundabout. C. C. Hulsman. 1,643,499; Sept. 27. Roundabout. R. J. Strigl. 1,641,707; Sept. 6. Roundabout. R. J. Strigl. 1,644,707; Sept. 6. Roundabout. Centrifugal. A. A. Stewart and J. H. Stewart. 1,622,692; June 14. Roundabout. Centrifugal. A. A. Stewart and J. H. Stewart. 1,642,997; Sept. 20. Router bit. R. L. Carter. 1,530,830; May 31. Routing machines. G. H. Carlson. 1,639,485; Aug. 16. Routing machines. G. H. Carlson. 1,639,485; Aug. 16. Routing machines. Template for guiding. R. L. Carter. 1,638,086; Aug. 9. Routing machines. Template for guiding. R. L. Carter. 1,631,513; Jan. 25. Roving frames. Top clearer for. W. E. Henderson. 1,631,727; June 7, Kop. motion for. J. H. Ower. Routing machines. Template for guiding. R. L. Carter. 1,632,642; Jun. 23. Roving frames. Top clearer for. W. E. Henderson. 1,633,644; June 14. Rowboat motor. F. K. Johnson. 1,640,999; Aug. 30. Rowboat motor. A. P. Knauber. 1,632,444; June 14. Rowboat motor

Rubber, Accelerating the vulcanization of. W. Scott. 1,639,903; Aug. 23.
Rubber, Acceleratior for the vulcanization of. G. S. Whitb. 1,634,924-5, July 5.
Leave 1,634,924-5, July 5.
Leave 1,634,924-5, July 5.
Leave 1,634,924-5, July 5.
Leave 1,634,924-5, July 6.
Leave 1,634,924-5, July 6.
Rubber and apparatus therefor, Masticating of. H. C. Voung and H. C. Burr. 1,628,869; May 17.
Rubber and compound resulting therefrom, Vulcanizing, N. A. Shepard and S. Krall, Reifo.638; June 7.
Rubber and like material, Machine for mixing or mastication, March 1,622,163; Aug. R. D. Bowen and C. F. Schuck. 1,622,163; Aug. R. D. Bowen and C. F. Schuck. 1,622,163; Noung and H. C. Burr. 1,623,689; May 17 Vulcanizing.
Ruber and compound resulting therefore the carried of the Rubber-cutting machine. R. W. Dinzl. 1,646,447; Rubber-cutting machine. R. W. Dinzl. 1,646,447; Oct. 25.
Rubber-deterioration retarder and process of making. S. M. Cadwell. 1,626,784; May 3.
Rubber dispension and producing the same. W. B. Pratt. Rubber flap. G. H. Wheatley. 1,621,388; Mar. 15.
Rubber goods and product of same. Surface-finishing. H. W. Emery. 1,631,722; June 7.
Rubber heels, Tool for placing washers in. C. I. Schrock. 1,639,312; Aug. 16.
H. W. Emily. Aug. 16. like, Curing. C. H. Paeplow. 1,622,340; Mar. 29.
Rubber Laminated. L. C. Peterson. 1,640,800; Aug. 30.
Rubber latex and product obtained thereby. Treating. H. W. Kelley and W. D. Wolfe. 1,644,730; Oct. 11.
Rubber Jaicx, Treating. E. Hopkinson and W. A. Gibbins. Rubber machine. H. C. Bartling. 1,614,708; Jan. 18.
Rubber machine. H. C. Bartling. 1,614,708; Jan. 18.
Rubber, Machine for uniting sheet, J. Stein. 1,628,203; Rubber, Making reclaimed. C. H. Campbell. 1,640,817; Aug. 30.
Rubber, Method of and apparatus for vulcanizing. L. F. Lamplough. 1,653,590; June 28.
Rubber Method of and apparatus for vulcanizing. L. F. Lamplough. 1,652,218; Dec. 13.

Rubber or similar substances and products resulting therefrom, Combining halogen-containing materials with C. E. Bradley and W. A. Gibbons. 1,627,725; May 10.

Rubber or the like and making same, Varlegated articles of. T. J. Mell. 1,619,359; Mar. 1.

Rubber packing upon a cylindrical article, Method and apparatus for vulcanizing. J. C. Croviey. 1,621,001; 1,614,019; Jan. 11.

Rubber product and making same, Sponge-. W. B. Pratt. 1,614,019; Jan. 11.

Rubber product and producing the same. S. G. Luther. 1,647,184; Nov. 1.

Rubber, Reclaiming. M. J. Fessler. 1,626,800; May 3.

Rubber, Reclaiming. G. J. Miller. 1,641,518; Sept. 6.

Rubber refluers. Scaper frame for. W. Breiding. Rubber refluers. Scaper frame for. W. Breiding. Rubber refluers. Scaper frame for. W. Breiding. Rubber scheeting, Making decorative. T. J. Mell. 1,635,684; July 12.

Rubber sheeting, Making patterned. T. J. Mell. 1,635,684; July 12.

Rubber sheeting, Making patterned. T. J. Mell. Rubber sheeting, Making patterned. T. J. Mell. 1,625,926; Dec. 13.

Rubber sheets, Protecting covering for. G. J. Esselen, jr. 1,622,276; Apr. 26.

Rubber sole, Composite. B. F. Hartwell. 1,642,878; Rubber sponge and making same. J. Lebr. 1,622,550; Mar. 24.

Rubber surfaces, Treating. G. F. Wikle. 1,621,655; Mar. 22.

Rubber sponge and making same. J. Lehr. 1,621,550; Mar. 22.
Rubber surfaces, Treating. G. F. Wikle. 1,621,615; Mar. 22.
Rubber surfaces of other material or to rubber, particularly with reference to foodwear, Securing layers of. Rubber, Treating. H. A. Bruson. 1,631,947; June 7.
Rubber, Treating. H. A. Bruson. 1,631,947; June 7.
Rubber, Treating. H. A. Bruson and rolling machine. W. Nicholas. 1,640,050; Aug. 23.
Rubber tubes, Making. J. D. Tew. 1,628,286; May 10.
Rubber-vulcanization accelerator. C. O. North. 1,631,931; Dec. 6.
1,631,931; Dec. 6.
1,632,631; Dec. 6.
Rubber-vulcanization and products thereof. S. B. Molony and Y. Nikaido. 1,632,636-7; June 14.
Rubber vulcanization and product thereof. S. B. Molony and Y. Nikaido. 1,632,636-7; June 14.
Rubber-vulcanization and product thereof. S. B. Molony and Y. Nikaido. 1,632,636-7; June 14.
S. Naunton. 1,627,636; May 10.
Rubber-vulcanization of. C. J. T. Cronshaw and W. J. S. Naunton. 1,627,636; May 10.
Rubber-vulcanization process. C. O. North. 1,638,236; July 5.

Rubber-vulcanization process. C. O. North. 1634,336; July 5.
Rubber, Vulcanizing. C. W. Beefford. 1,650,975; Nov. 29.
Rubber, Vulcanizing. W. A. Gibbons. 1,654,167; Nov. 29.
Rubber, Vulcanizing. J. Teppema. 1,637,790-1; Aug. 2.
Rubber, Vulcanizing. E. M. Warner. Re16,682; July 19.
Rean. 1,620,712; Mar. 15.
Rubberized fibrous composition. Machine for making a.
P. Beebe. 1,642,008; Sept. 13.
Rubbing machine. A. B. Kratz. 1,622,592; Mar. 29.
Ruching forming and applying machine. A. Collins.
Rudder-control mechanism. E. G. McCauley. 1,650,636: Nov. 29.
Rug. S. B. Dickinson. Des. 73,645; Oct. 18.

Rug. S. B. Dickinson. Des. 73.645; Oct. 18. Rug. J. Stabler. Des. 72,533; Apr. 26. Rug. D. H. Stroud. Des. 74,032-6; Dec. 6. Rug-cleaning machine. A. S. Khanzadian. 1,635.366; July 12. Rug or similar article, C. F. Humphreys. Des. 71,794; Jan. 4.

Rug or similar article. H. S. Humphreys. Des. T1,974-5; Feb. 8, Rug or similar article. H. S. Humphreys. Des. T2,051-2; Feb. 15, Rug or similar article. H. S. Humphreys. Des. T2,007-8; Mar 1, Rug pad. R. Hendel. 1,622,035; Mar. 22. Rug-renovating machine. T. L. Wagoner. 1,624,293; Apr. 12.

Rug-weaving machine. J. F. Ptacek. 1,629.886; May 24. Rugs and the like, Exhibitor for. J. J. Loberg. 1,616,588; like, Machine for hooking. H. Levy.

1,613,087;

Rule, 31de. H. Ritow. 1,632,505; June 14. Ruler. E. R. Johnson. 1,631,731; June 7. Ruler. C. Röbrich. 1,614,044; Jan. 11. Ruler. R. Trane and C. T. Brewer. 1,614,812; Jan. 18. Ruler, Pants and pocket. C. Capuano. 1,625,453; Apr. 19.

Ruler, Set-shift parallel. A. Morris and V. L. Morris, 1.633,493; June 21.
Ruling machine. C. H. Martin. 1,646,206; Oct. 18.
Ruling machine. F. Morensky. 1.634,880; July 6.
Ruling machine and the like, Feeding mechanism for.
Ruling machine and the like, Feeding mechanism for.
Ruling machines and the like, Set stop mechanism for.
A. Broadmeyer. 1,636,983; July 20.
Running board. M. W. Huber. 1,637,570; Aug. 2.
Running board. Retracting sectional. W. H. Cleveland and C. W. Bothe. 1,621,479; Mar. 18c. 13.
Ruptural safety means. O. Georg. 1,852,2552; Dec. 18.
Rustproofing. M. Green, E. M. Jones, and H. H. Willard. 1,651,694; Dec. 6.
Rustproofing and articles produced thereby. M. Green and H. H. Willard. 1,659,694; Aug. 23.
Sacking, packing and mixing machine. M. Gotten. 1,652,690; Dec. 13.
Sack closure. G. Möller. 1,625,772; Apr. 19.
Sack ligger. H. G. Williams. 1,640,103; Aug. 23.
Sacking, packing and mixing machine. M. Gotten. 1,653,593, July 12.
Sacking, packing and mixing machine. M. Gotten. 1,653,593, July 12.
Sacking, packing and mixing machine. M. Gotten. 1,652,693, July 12.
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Sacking, packing and mixing machine. M. Gotten. 1,653,694, July 12.
Sacking, packing and mixing machine. M. Gotten. 1,654,911; Sept. 20.
Saddle panel. F. Eassie. 1,663,6310; Aug. 2.
Saddle ester. A. Dourdonfis. 1,620,448; Mar. 8.
Saddle ester. A. Dourdonfis. 1,620,448; Mar. 8.
Saddle ester. A. Dourdonfis. 1,620,448; Mar. 8.

Oct. 11.

Saddle seat. A. Dourdonfis. 1,620,448; Mar. 8.

Saddle stirrups, Safety device for. M. Hendriks.

Saddle stirrups, Safety device for. M. Hendriks.

Saddle, 510; Mar. 22.

Saddle, 510; Mar. 24.

Saddle, 510; Mar. 25.

Saddron, Electric. J. E. Marsden. 1,615,464; Jan. 25.

Saddron, Electric. J. E. Marsden. 1,615,464; Jan. 25.

Saddron, Electric. O. Spahr. 1,645,667; Oct. 18.

Saddron, Electric. O. Spahr. 1,645,667; Oct. 18.

Saddron, Electric. J. Chew. 1,613,160; Jan. 25.

Saddron, Saddron. 26.

Saddron 200 Covertempore. 1,636,162; Saddron. 200 Covertempore. 1,636,162; Saddrons. 200 Covertemp

July 19, Sadirons, Overtemperature control for electric. O. Dodge. 1,644,875; Oct. 11. Sadirons, Rest for. H. Selzman. 1,626,101; Apr. 26, Safe. F. X. Bergs. 1,649,504; Nov. 15. Safe. C. F. Kloss. 1,637,381; Aug. 2. Safe. O. P. Le Compte and S. A. Cahn. 1,623,255; Apr. 5.

Sate. O. P. Le Compte and S. A. Cahn. 1,623,255; Apr. 5.
Safe. M. Salamon. 1,627,464; May 3.
Safe. B. H. Westland. 1,613,813; Jan 11,
Safe, Physic. C. B. H. Westland. 1,613,813; Jan 11,
Safe, Physic. C. B. H. H. Safe, Physic. C. B. H. H. Safe, Physic. C. B. H. Safe, Physic. C. B. H. Safe, Physic. Recharge mechanism. W. T. Benham and J. E. Dwyer. 1,632,428; June 14.
Safe. March. J. B. Neahr. 1,637,496; Aug. 2, 2, 87; Safe on 3 vault, Wall. G. R. Meyercord. 1,652,987; Safe on 3 vault, P. S. Miller. 1,642,552; Sept. 13.

Dec. 18.

Safe vault. P. S. Millice. 1.642.552; Sept. 13.

Safe, Wall. S. L. Belknap. 1.644.410; Oct. 4.

Safes. Automatic emergency lock for. E. M. Jones. 1.638.204; Aug. 9.

Safes, Constructing. S. F. Laucks and W. B. Wilkinson. 1.619.139; Jan. 29.

Safes, Locking device for. W. R. Harris and J. L. Garrison. 1.613,407; Jan. 4.

Safes, Locking device for. C. F. Meilink. 1,619.676; Mar. 1.

Mar. 1.

Safes, Locking mechanism for. H. M. Dalton. 1,634,933;
July 5.

Safety apparatus. G. Pagano. 1,645,819; Oct. 18.

Safety apparatus. C. C. Smith. 1,642,182; Sept. 13.

Safety appliance. F. Hymans. 1,663,909; Dec. 27.

Safety appliance. W. E. Smiley. 1,040,077; Aug. 30.

Safety appliance, Automatic. C. A. Howe. 1,663,934; Safety-appliance gauge. W. B. Shea. 1,638,885; Aug. 16.

Safety appliance gauge. W. B. Shea. 1,638,885; Aug. 16.

Safety appliance gauge. W. B. Shea. 1,638,885; Aug. 16.

Safety bracket, Frake-beam. J. A. Fozgrover. 1,650,503; Safety of the Control of the Cont

Feb. 8.
Safety eatch. P. W. Jones. 1,631,824; June 7.
Safety eatch, Forming the body member of a. E. Morchouse. 1,635,188; July 12. 1,444,562; Oct. 4.
Safety clasp. R. J. Brownin. 1,636,077; Apr. 26.
Safety device. A. A. Garey. 1,645,181; Oct. 11.
Safety device. J. W. Lee. 1,651,609; Dec. 6.
Safety device. J. C. Mendonca. 1,464,971; Oct. 25.
Safety device. J. B. Monnham. 1,630,402; May 31.
Safety device. W. Web. 1,921,146; Mar. 15.
Safety device and bumper. C. Kirch. 1,621,835; Mar. 22.
Safety device and bumper. C. Kirch. 1,621,835; Mar. 22.
Safety general C. T. J. Junnis. 1,60,820; Oct. 25.
Safety grant Come-along. C. C. Coon. 1,642,874;
Sept. 20.

Sept. 20.
Safety guard for dangerous highways and the like H. C. Lookabaugh. Re16.649; June 7.
Safety guard for dangerous highways and the like. H. C. Lookabaugh. 1.614.795; Jan. 18.
Safety high. G. Den Sesten. 1.643.653; Sept. 27.
Safety hook. J. F. Moody and V. L. Du Bolse. Re10,613; May 3.

Safety hook. R. E. Nellson. 1.626,865; May 3. Safety hook. G. N. Porter. 1.622,971; Mar. 29. Safety hook. H. E. Stockstad. 1.623,642; May 3. Safety hook. S. K. Tibbens. 1.627,470; May 3. Safety hook. B. Woods. 1.618,321; Feb. 22. Safety lock. E. D. White. 1.653,487; Dec. 20. Safety lock, Automatic. A. B. Small. 1.653 Safety hook. B. Woods. 1,618,21; Feb. 22.
Safety hook. B. Woods. 1,618,321; Feb. 22.
Safety lock. B. Woods. 1,618,321; Feb. 22.
Safety lock. Automatic. A. B. Small. 1,633,515;
DCc. 20.
Safety pin. A. Dudas and A. P. Wasll. 1,623,532;
Apr. 5: Safety pin. A. Dudas and A. P. Wasll. 1,623,532;
Apr. 5: Safety pin. A. Dudas and A. P. Wasll. 1,623,537;
Safety sine against burning during cooking. A. Butz.
Safety signal. G. Dawkins. 1,618,580; Feb. 22.
Safety signal. G. Dawkins. 1,618,580; Feb. 22.
Safety signal. G. Safety signal. G. A. Suith and B. L. Evans. 1,618,681;
Feb. 26.
Safety switch. H. J. L. Frank. 1,643,768; Sept. 27.
Safety switch. H. J. L. Frank. 1,643,768; Sept. 27.
Safety switch. G. F. Schwennker. 1,651,835; Dec. 6.
Safety switch. C. F. Schwennker. 1,651,835; Dec. 6.
Safety switch. Externally-operated. T. A. Both. Mar. 15.
Safety switch, Externally-operated. T. A. Both.
1,622,573; Apr. 5.
Safety-fread unit. E. Van Der Pyl. 1,619,773; Mar. 1.
Sailboat. L. F. Herreshoff. 1,613,890; Jan. 11.
Sails, Silding device for. H. Reckmann. 1,647,813;
NOV. 1.
Sails, Sai July 26. Sales-indicating container. J. S. Cochran. 1,638,813; Aug. 9. K. F. C. Kenyon, jr., and F. R. Goodell. 1,636,608; July 19.

K. Ino. Des. 71,836; Jan. 11.
Salt and pepper shaker. W. C. McCartney. Des. 73,707; Sait and pepper shaker. W. C. McCartney. Des. 73,707; Oct. 25.

Sait and pepper shaker, Combination. O. W. Baldwin. Des. 73,224; Sept. 13.

Sait and pepper shaker, Combination. O. W. Baldwin. 1,644,811; Oct. 11.

Sait and pepper shaker, Combination. T. C. Heisey. Des. 73,032; July 12.

Substance of the state of the Sampling apparatus and system. C. G. Dresser and F. S. Youtsey. 1,641,748; Sept. 6. Sampling device. W. W. Smith. 1,641,996; Sept. 13. Sampling device. Liquid. W. W. Lewis. 1,649,241; Nov. 15. Sampling device, Liquid. W. W. Lewis. 4,039,242.

Nov. 15.
Sanatorium. M. Mederer. 1,645,611; Oct. 18.
Sand and gravel washer. S. A. Loftus and T. Cureton.
Sand and gravel washer. S. A. Loftus and T. Cureton.
Sand and the like, Machine for distributing. T. F.
McGuiness. 1,623,743; Apr. 5.
Sand, Apparatus for cutting and mixing. V. E. Minich.
1,632,746; June 14.
Sand blast apparatus. E. R. Rich, jr. 1,643,175; Sept. 20.
Sand-blast apparatus. Carriage arrangement for. H. F.
Hoevel. 1,628,217; May 10.
Sand-blast relief carving. G. R. Philip. 1,627,456;
May 3.
Sand-blast relief carving. G. R. Ophilip. 1,627,456;
May 3. Sand-blast system. W. C. Mauney and W. L. Dunn. 1,641,842; Sept. 6. Sand-blasting machine. F. Leu. 1,637,196; July 26. Sand cleaning and classifying device. E. Shaw. Sand St. 602; Jung 2. ADDATES AUG. 2. Sand cutting and mixing machine. H. R. Slivinski. 1.645.625; Oct. 18. Sand cutting and piling machine. H. Smith. 1,652,588; Dec. 18.

Sand-cutting machine. O. A. Butterfield. 1,636,168; Sand-cutting machine. O. A. Butterfield. 1,636,168; July 19.
Sand distributor. T. E. Barton. 1,640,636; Aug. 30.
Sand, emery, or other abrasive paper, cloth or the like.
H. C. Simons. 1,635,350; July 12.
Sand, Foundry. W. Cureton. 1,614,659; Jan. 18.
Sand-heating apparatus for building purposes. F. Selmet. 1,631,639; Jun. 7.
Sand-heating apparatus for forming. J. T. Stoney.
1,635,675; Dec. 27.
Sand muiling and aerating machine. W. H. Nicholls.
1,633,634; July 19.
Sand or other riddle or sieve. W. M. O'Keefe. 1,614,384; Jan. 11. Sand mulling and merating machine. W. R. (614,384; Sand or other riddle or sieve. W. M. O'Keefe. 1,614,384; Sand roci. C. F. Fernald. 1,634,988; July 5. Sand roci. C. F. Fernald. 1,634,988; July 5. Sand roci. C. F. Fernald. 1,634,988; July 5. Sand separator. A. G. J. Rapp. 1,634,385; July 5. Sand sifter. R. Ruemelin. 1,652,878; Dec. 13. Sand-testing tool. C. Newburn. 1,625,674; Apr. 19. Sand-testing machine. V. E. Minich and R. H. Moore. 1,647,243; Nov. 1. Sand-testing machine. V. E. Minich and R. H. Moore. 1,647,243; Nov. 1. Sand-testing machine. V. E. Minich and R. H. Moore. 1,647,243; Nov. 1. Sand-testing machine. V. E. Minich and R. H. Moore. 1,647,243; Nov. 1. Sand-testing machine. V. E. Minich and R. H. Moore. 1,647,243; Nov. 1. Sand-testing machine. Sand-testing machine. 1,628,531; May 10. Sand-testing machine. T. S. Gilmore. 1,637,609; Aug. 2. Sand-testing machine. E. J. Fischer. 1,633,292; Apr. 12, May 10. Sanding machine. E. J. Fischer. 1,633,392; Apr. 12, Sanding machine. E. J. Fischer. 1,633,392; Apr. 12, Sanding machine. E. J. Fischer. 1,633,493; June 7. Sandpaper and rubbing machine. L. Ferrara. 1,624,400; Apr. 12, holder. C. M. Canada. 1,618,052; Feb. 15. Sand-wich-display fixture. W. Cecil. 1,630,469; May 31. Sand-testing machine. L. Ferrara. 1,624,400; Apr. 12, holder. C. M. Canada. 1,618,052; Feb. 15. Sand-wich-display fixture. W. Cecil. 1,630,469; May 31. Sand-testing machine. L. Ferrara. 1,624,400; Apr. 12, holder. C. M. Canada. 1,618,052; Feb. 15. Sand-wich-display fixture. W. Cecil. 1,630,469; May 31. Sand-testing philance. A. Friedman. 1,616,616; Feb. 8. Sanitary bedbug trap. L. E. Schneider. 1,614,157; Jan. 11. Jan. H. Schrader. 1,650,572; Nov. 22. Sanitary bedbug trap. L. E. Schneider. 1,614,157; Jan. 13. Sanitary beauty trape Jan. 11.

Sanitary can. H. Schrader. 1.650,572; Nov. 22.

Sanitary closets, Scat-actuating means for. W. E. Chastain. 1.632,819; June 21.

Sanitary napkin. H. S. Williams. 1,643,615; Sept. 27.

Sanitary napkin, End-locked. R. W. Johnson. 1,629,390; May 17.

Sanitary nankin or the like. E. B. Thomas. Re16,603; May 17.

Sanitary pad, M. V. Bauer. Re16,570; Mar. 15.

Sanitary pad. M. V. Bauer. Re16,570; Mar. 15.

Sanitary pad. P. H. McKay. 1,648,316; Nov. 8.

Sanitary waste can. J. F. Gelbel. 1,645,100; Oct. 11.

Sash. W. C. Coryell. 1,619,811; Mar. 8.

Sash. D. Patasnik. 1,619,631; Mar. 1.

Sash adjuster and fastener. A. E. Molberg. 1,633,645; June 28. Saba dayastes, Operating means for. L. Roth. 1,615,851;
Feb. 1,585, All-metal window. O. V. Nelson. 1,635,336;
July 12. July 12.
Ish and lock construction, Window. R. T. Axe.
1,640,173; Aug. 25.
Ish and sash cord. Connecter for. G. W. Lancaster.
1,627,786; May 10.
Ish and screen, Window. A. W. Goldman. 1,626,336;
Applications of the control of the c Apr. 26.
Sash antirattler. T. F. Wharton. 1,653.830; Dec. 27.
Sash attrichment, Window. H. Huyard. 1,620.817;
Mar. 15.
Sash balance, Spring. R. Lanzillotta. 1,654.423;
Dec. 27.
Sash-balancing device. A. L. Wagniere. 1,626,018;
Apr. 26 Sash-balancing device. A. L. Wagniere. 1,626,018; Apr. 26.
Sash-balar construction. G. W. Clay. 1,636,764; July 26.
Sash-bar construction. J. F. Levan. 1,637,865; Aug. 2.
Sash construction, Window. H. E. Campbell. 1,652,607; Dec. 13.
Sash construction, Window. C. M. Gibson. 1,629,076; May 17.
Sash-cord fastener. T. W. Barrett. 1,622,988; Mar. 29.
Sash-cord guide. L. R. Talbert. 1,616,205; Feb. 1.
Sash. Double-hung window. J. Brough. 1,643,920; Sash Carter J. J. Raddley. 1,825,338; Apr. 19. Sept. 24.
Sash fastener. J. J. Bradley. 1.625.238; Apr. 19.
Sash fastener. G. O. Briggs. 1.634.350; July 5.
Sash fastener. T. Dols. 1.613.315; Jan. 4.
Sash fastener. W. H. Gillette. 1.631.370; June 7.
Sash fastener. F. J. Hart and D. W. McGee. 1.637,937; Sast insteher. F. J. Harr and D. W. Acceles. 1,657,357; Nafe fastener. T. C. Judge. 1,617,813; Feb. 1. Sast fastener. C. Raw. 1,642,266; Sept. 13. Sast fastener. J. T. Williams. 1,630,153; May 24. Sast fastener, Automatic. G. J. Talbot. 1,651,048; Nov. 29. Sast fastener, Actomatic. H. H. Brugmann. 1,651,320; Nov. 29. Sast fastener, Korm. H. H. Brugmann. 1,651,320; Sast fastener, Window. N. Sirbola. 1,642,551; Sept. 6. Sast fastener, Window. N. Sirbola. 1,652,068; Dec. 6.

Sash frame.

A. L. Doering. 1,644,645; Oct. 4.
Sash frame and other frame, Window. L. Manning.
1,651,899; Dec. 6.
Sash frame, Casement. F. C. Andersen, E. C. Madson, and G. A. Chapman. 1,623,772; Apr. 5.
Sash frame, Fireproof. O. W. L. Buss. 1,640,595; ash frame, Aug. 30 Aug. 30.
Sash guide. T. W. Holt. 1,621,507-8; Mar. 2
Sash guide. T. W. Holt. 1,632,648-9; June 14
Sash hanger. A. C. Soule. 1,648,331; Nov. 8
Sash holder. O. Dannehl. 1,622,732; Mar. 22
Sash holder, Adjustable. W. A. Wolford. 2 1,624,819; Sash holder, Adjustable. W. A. Wolford. 1,624,819; Apr. 12.
Sash holder and window release, Combined. J. L. Armstrong. 1,640,004; Aug. 28.
Sash holder, Storms. J. A. Lee. 1,644,886; Oct. 11.
Sash holder, Storms. J. A. Lee. 1,644,886; Oct. 11.
Sash holder, Window. R. H. Shelton. 1,631,772; June 7.
Sash lifter. O. Gessier. 1,613,003; Jan. 4.
Sash lifter on Glesser. 1,613,003; Jan. 4.
Sash lifter and latch. T. C. Williams. 1,035,448;
JUN 12. July 12.

Sash lock and counterbalance. W. W. White. 1,928,346;
May 10.

Sash, Metal window. C. G. Nelson. 1,649,914; Nov. 22.

Sash-operating device. W. S. Odle. 1,652,632; Dec. 13.

Sash-operating device and lock. N. Q. Kelso. 1,622,949;
Mar. 29,
Sash-operating mechanism. E. L. Ackerman. 1,641,954; Sash-operating mechanism. E. L. Ackerman. 1,644,809; Oct. 11. Sash-operating mechanism. U. E. Tuomi. Mar Sash-pulley June 21. Sash-regulating device. O. G. Burch, 1,621,104; Mar. 15. Sash-regulating device. K. H. Gettner. 1,640,931; Aug. 30. Sash-regulating device. C. Ungerman. May 24.
Sash regulator. C. Ungerman. 1.640,864;
Sash retaining device, Window. F. Rooney Aug. 30. v. 1,644,036;
 Sash retaining devices, visual of Oct. 4.
 Cash, Self-supporting.
 C. G. Nelson.
 1,649,918; Nov. 22.

 Sash, Self-supporting window.
 C. G. Nelson.
 1,649,919; Nov. 22.

 Sash, Self-supporting window.
 V. J. Whitney.
 1,618,618; Feb. 22.

 Feb. 22.
 Window.
 W. L. Thomas.
 1,634,599;
 Sash support, Window. W. D. Sash. Ventilating. E. F. McHugh. 1,626,547; Apr. 26.
Sash. Ventilating. E. Grant. 1,649,162; Nov. 15.
Sash-weight mold. E. Grant. 1,649,162; Nov. 15.
J. J. Fleming. 1,629,492; May 2,44.
Sash-weight support. C. L. Schneider. 1,649,861; Sash-welding spparatus.

Nov. 8.
Sash, Window. C. F. Lynch. 1,614,564; Jan. 18.
Satchels, Automatic alarm for. E. F. Scales. 1,640,254;
Satin. White, Preparing. J. F. Fredriksson. 1,632,891;
June 21.
Saturants, Preparation of. J. Zavertnik, jr. 1,636,271;
July 19.
Saturating materials, Apparatus for. L. Kirschbraun
Saturator apparatus, Ammonia. J. Becker. 1,654,159;
Dec. 27.

Advantage device for. H. A.

Dec. 27. Sash-welding apparatus. C. F. Kuney. 1,648,409: Dec. 27.
Saturators and coaters, Adjusting device for. H. A. Cumfer. 1,652,518; Dec. 13.
Saucepan. R. S. Dunlap. 1,623,397; Apr. 5.
Saucepan and the like. P. Branch. 1,628,107; May 10.
Saucer A. Awoki. 1,614,338; Jan. 1819.
Saucer or similar article. E. W. Heisey. Des. 72,064; Ph. 22.
Field. 22.
Heisey and meking some. H. Hansel. 1,464,368. Sausage casing and making same. H. Hensel. 1,645,425; Oct. 11. Sausage casing, etc. W. F. Henderson. Oct. 11. 1.645.505: Oct. 11.
Sausage casings for stuffing, Preparation of, W. F. Henderson. 1,616,971; Feb. 8.
Sausage casings. Method of sind apparatus for making. Method of sind apparatus for making. Method of sind apparatus for making. Sausage hanger. G. Ritter. 1,616,231; Feb. 1.
Sausage hanger. G. Ritter. 1,616,231; Feb. 8.
Sausage machines, Length control for. F. C. Arey. 1,642,363; Sept. 13.
Sausage-making machine. C. Curry. 1,629,655; May 24.
Sausage-making machine. W. H. Potter. 1,639,270; Sunsage meat and producing same. J. Alsberg. 1,635,302; July 12. Sausage striffer. E. W. Knowlton. 1,628,726; May 17. Sausage-stuffing machine. T. Lutostanski. 1,636,424; July 19. usage-twisting machine. J. L. Morris and C. H. Allen. 1.621.994: Mar. 22.

Sausages, Preparing wiener. E. O. Freund. 1,631,723; January Street, W. A. Ringler, 1,630,095; May 24, Saving Sunk, C. Fisher, 1,631,315; June 7, Saw, F. Arimond, 1,652,084; Dec. 6, Saw, J. C. De Penning, 1,635,465; July 12, Saw, R. Farren, 1,620,454; Mar. 8, Saw, R. Farren, 1,624,647; Apr. 12, Saw, J. P. Salmi, 1,624,072; Apr. 12, Saw, J. Schreiner, 1,627,622; May 10, Saw, W. S. Sherman, 1,649,864; Nov. 22, Saw, J. Weller, 1,650,476; Nov. 22, Saw, Adjustable power, C. E. Johnson, 1,615,2 Jap. 25. 1.615.281: Jan. 25.
Saw and drill, Combination portable electric. H. W.
Howland. 1,644,432; Oct. 4.
Saw and square, Combination. R. R. Irvine. 1,620,891;
Mar. 15.
Saw and wheel therefor, Band. J. W. Causey. 1,630,468;
May 31.
Saw, Band. A. Obermoser. 1,636,484; July 19.
Saw, Breaking-down. P. S. O'Neill. 1,624,064; Apr. 12.
Saw, Bush-cutting. T. L. Douglass. 1,649,360; 1,649,360; Saw, Brush-eutting. T. L. Douglass. 1,649,950; Nov. 22.
Saw, Chain. S. J. Bens. 1,652,295; Dec. 13.
Saw, Circular. F. W. Adolf. 1,619,780; Mar. 1.
Saw clump. E. N. Large. 1,025,065; Apr. 19.
1,628,526; May 10.
Saw, Composing-room. E. Cheshire. 1,618,170; Feb. 22.
Saw construction. A. Westgard. 1,642,185; Sept. 18.
Saw construction. A. Westgard. 1,642,185; Sept. 18.
Saw construction. A. Westgard. 1,642,185; Apr. 5.
Saw dresser, Fand. A. S. Avery. 1,643,148; Sept. 20.
Saw, Electric hand. W. P. Casey. 1,631,995; Dec. 6.
Saw-filling guide. A. K. Sears. 1,648,246; Nov. 8.
Saw guard. M. Halbre. 1,624,2650; Apr. 12.
Saw guard. W. N. Johnson. 1,647,868; Nov. 1,
Saw guide. J. W. Causey. 1,642,838; Sept. 20.
Saw guide. J. F. Jeffers. 1,615,703; Jan. 25.
Saw guide. J. F. Jeffers. 1,615,703; Jan. 25.
Saw guide. J. F. Jeffers. 1,615,703; Jan. 25.
Saw, Hack. H. M. German. 1,616,364; Feb. 1.
Saw, Hack. H. M. German. 1,646,364; Feb. 1.
Saw, Hack. D. E. Gommel. 1,646,369; Oct. 18.
Saw guide. H. M. German. 1,646,364; Feb. 1.
Saw, Hack. D. E. Gommel. 1,646,369; Oct. 18.
Saw mother, Band. W. Hess. 1,617,712; Feb. 15.
Saw mother, Band. W. Hess. 1,617,712; Feb. 15. Saw, High-speed friction. A. Jacobowitz. 1,640,832; Aug. 30.
Saw machine, Band. W. Hess. 1,617,712; Feb. 15.
Saw machine, Jig., F. E. Grose. 1,623,673; Apr. 5.
Saw machine, Jig., F. E. Grose. 1,623,673; Apr. 5.
Saw machine more particularly for the sawing of metals. Reciprocating. A. Fays. 1,651,101; Nov. 2, Sosiancic. 1,637,616; Aug. 2.
Saw, Metal. G. F. Feister. 1,613,366; June 7.
Saw, Metal. G. F. Feister. 1,618,585; Feb. 22.
Saw, Motor-driven. J. Beck and A. E. Gallin. 1,648,632; Nov. 8.
Saw, Motor-driven. C. Lynn. 1,622,120; Mar. 22.
Saw, Motor-persated. M. Clodfelter. 1,627,552; May 10.
Saw, Motorized hand. E. J. Maioney. 1,620,374; Mar. 8.
Saw of or the Saw guide, Gang. D. F. Denham. 1,614,188; Jan. 11.
Saw, Plaster-cast. D. G. Sayre. 1,641,505; Sept. 6.
Saw, Portable. F. W. Wappat. 1,623,290; Apr. 5.
Saw, Portable motor-driven. J. M. Crowe. 1,624,326; Oct. 4. Saw, Power B. M. Kennedy. 1,623,703; Apr. 26.
Saw, Power C. H. Uill. 1,623,237; Mar. 22.
Saw, Power C. H. Saw, Power C. P. Saw, Power C. H. Saw, Power C. P. Saw, Power Apr. 26.

Saw protector. C. T. Perry. 1,643,085; Sept. 20.

Saw, Pruning. A. E. Kness. 1,646,484; Oct. 25.

Saw, Pruning. G. F. Santoyo. 1,688,749; Aug. 9.

Saw set. A. Johnson. 1,631,634; June 7.

Saw set. A. Johnson. 1,631,634; June 7.

Saw sharpening machine. O. H. Fletcher and J. A. Tenney. 1,624,864; Apr. 12.

Saw shifter, G. W. Dorman. 1,650,613; Nov. 29.

Saw side file, Hand and band. S. A. Sheller. 1,643,135; Sept. 20. Sept. 20.

Saw, Stone and marble. W. J. Jones. 1,620,466; Mar. 8.

Saw support, Undercutting. A. Dahlman. 1,632,727;

June 14.

Saw tool. A. Turcotte. 1,616,340; Feb. 1.

Saw tool. B. Foerster. 1,653,265; Dec. 20.

Saw-toolb gauge. C. A. Briggs. 1,426,029; Apr. 28.

Saw-toolb roller, Band. A. E. Frector. 1,631,336; June 7 Saw. Tree. R. Wiard and A. J. Van Sise. 1.644.816; Oct. 4. Saw, Tree-felling. A. Palmigiano, jr. 1.645.924; Oct. 18. Saw, Tubular stone. J. A. Hall. 1,620,255; Mar. 8.

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Sawing and boring on a plurality of angles, Machine for.
H. W. Howland. 1,618,341; Feb. 22.
Sawing apparatus and method. W. S. Dietrich.
Rel6,747; Sept. 27.
Sawing apparatus and method. W. S. Dietrich.
1,631,927; June 7.
Sawing apparatus, Tree. S. J. Bens. 1,617,565; Feb. 15.
Sawing machine. L. B. Skogund. 1,695,290; July 12.
Sawing machine. D. C. Slaght. 1,634,692; July 57.
Sawing machine. Adjustable. N. Maddox. 1,620,370;
Sawing machine. Adjustable. N. Maddox. 1,620,370;
Sawing machine. Adjustable. N. Marcfield. 1,644,887.
        Mar. 8.
Sawing machine, Adjustable. A. Mansfield. 1,644,887;
Oct. 11.
Sawing machine, Band. W. R. Harden. 1,651,702; Dec. 6.
Sawing machine, Cut-off. P. D. Parsons. 1,643,994;
Oct. 4.
Saving machine, Cut-off. P. D. Farsons. 1,648,594; Saving machine, Portable. N. M. and H. F. Nelson. 1,618,505; Feb. S. Saving or cutting machine, Universal. C. J. Carlson. 1,618,504; Feb. 1. dil.,605; Feb. S. Saving or cutting machine, Universal. C. J. Carlson. 1,618,504; Feb. 1. dil.,608,612; Feb. 1. dil.,618,619; Apr. 5. Saws, Blower for. C. J. Abbey. 1,623,859; Apr. 5. Saws, Cutting disk for, High-speed friction. A. Jucobowitz. 1,630,945; May 31.
Saws, Girt-pin connection for gang. F. S. Floeter. 1,617,684; Feb. 13.
Saws, Gaard for circular. J. B. Watson. 1,616,478; Saws, Machine for the filing and setting of. R. T. Myers. 1,652,454; Dec. 13.
Saws, Machine for the filing and setting of. R. T. Myers. 1,652,454; Dec. 13.
Saws, Methine. L. Swett. 1,631,657; June 7.
S. Saws, Mathine. L. Swett. 1,631,657; June 7.
S. Saws, Method of and machine for making. H. H. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. H. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. H. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. H. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. H. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. H. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. H. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. R. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. R. Powers. 1,646,870; Oct. 25.
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Saws, Method of and machine for making. H. R. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. R. Powers. 1,646,870; Oct. 25.
Saws, Method of and machine for making. H. R. Powers. 1,648,940; Nov. 16.
Saws, Method of and m
        Sawdust burner, Domestic. E. R. Bryer. 1,618,260; Jan. 4. Street. 1,648,920; Nov. 15 Sawmill, Automatic. L. H. Street. 1,648,920; Nov. 15 Sawmill carriage. D. Brown and A. H. Irving. 1,613,139; Jan. 4. Eucht. 1,632,708; June 14. Sawmill-carriage offset. J. H. Rooney. 1,623,554;
        Apr. 5.
Sawmill carriages, Holding device for. R. W. Stockemer, 1,622,059; Mar. 22.
Sawmill dog. R. E. Langill and W. B. Grueter. 1,637,907;
     1.622.059; Mar. 22.
Sawmill dog. R. E. Langill and W. B. Grueter. 1,637,907; Aug. 2.
Sawmill dog. W. Newsom. 1,641,900; Sept. 6.
Sawmills. Green declaration of the sawmills. Sawmills. Chain-driven belt feed works for. G. E. Sawmills. Chain-driven belt feed works for. G. E. Sawmills. Thansfer table for. C. Mosen and W. J. Sawmills. Transfer table for. C. Mosen and W. J. Sawmills. Transfer table for. C. Mosen and W. J. Sawmills. Transfer table for. C. Mosen and W. J. Sawmills. Transfer table for. C. Mosen and W. J. Sawmills. Transfer table for. C. Mosen and W. J. Sawmills. Grant declaration of the sammillar feed of the sammillar fee
           Scaffold bracket. A. E. Metz. 1.626.745; May 3.
Scaffold bracket, Combination. P. E. Goodwin. 1,650,939;
                                                                                         bracket, Shingle-. W. E. Martens. 1,646,923;
           Scaffold Dracket, Diningto. U. 2. Scaffold, Painter's. A. Damore. 1,642,333; Sept. 13. Scaffold, Portable. H. J. Yager. 1,631,848; June 7. Scaffold shoe. L. Sobray. 1,623,892; Apr. 5. Scaffold shopport. T. Scott. 1,614,496; Jan. 18. Scaffold, Window washers. W. R. Tate. 1,622,067;
           Scaffold, Window washers. W. R. Tate. 1,622.067;
Mar. 22.
Scaffolds, Clamp for. A. Vila. 1,636,930; July 26.
Scaffolding and other framework structures, Coupling
or clamping device for. D. Palmer-Jones. 1,631,831;
           or camping device for. D. Faimer-Sories. 1,051,051; 51,1 June 7. Scaffolding or the like, Clamp for. K. Henningsen. 1,627,177; May 3. Scalding apparatus, Hog. F. J. Smith. 1,646,084: Oct. 25.
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Oct. 25.
Scale. J. W. Bryce. 1,614,710; Jan. 18.
Scale. J. W. Bryce. 1,628,110; May 10.
Scale. H. M. Cameron. 1,646,009; Oct. 18.
Scale. P. A. Engle. 1,641,070; Aug. 30.
Scale. W. N. Gilbert. 1,550,204; Nov. 22.
Scale. N. A. Hallwood. 1,622,106; Mar. 22.
Scale. N. A. Hamblin. 1,636,908; July 26.

72535-P-59

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F. B. Hamblin. 1,653,044; Dec. 20,
S. L. Hanssen. 1,650,349; Nov. 22,
J. Hopkinson. 1,628,282 May 3,
L. Jaenichen. 1,628,781; May 17.
H. Kenneyu. 1,646,541; Oct. 18.
G. W. Kepler. 1,640,536; Aug. 30,
F. W. Kepler. 1,640,536; Aug. 30,
L. L. A. Osgood and E. E. Wolf. 1,
18.
   Scale.
   Scale.
   Scale.
Scale.
                                                                                                                                                                                                                                                                                            1,614,681-2;
 Scale. L. A. Osgood and E. C. Wolf. 4,014,081-2;
Jan. 18.
Scale. J. W. Rockefeller, jr. 1,630,096; May 24.
Scale. J. W. Rockefeller, jr. 1,641,603; Sept. 6.
Scale. M. H. Starr. Re16,840; Dec. 27.
scale. W. F. Stimpson. 1,624,995; Apr. 19.
Scale. M. J. Weber. 1,628,205; May 10.
Scale. Advertising. S. C. Crane. 1,640,112; Aug. 23.
Scale advertising. F. L. Hague. 1,647,351;
Nov. 1.
Scale air vent, Weighing. F. L. Hague. 1,647,351; Nov. 1.
Scale, Automatic weighing. T. C. Jensen. 1,623,414; Apr. 5.
Scale base. V. F. Siczak. 1,616,422; Feb. 1.
Scale base. Adjustable leveling foot for. C. H. Hartmann. 1,647,992; Nov. 8.
Scale, Beam. D. Siebenmann. 1,640,967; Aug. 30.
Scale beam mechanism. G. W. Britton. 1,620,474; May 24.
Scale, Scale clustaing. W. R. Mittendorf. 1,650,227; Scale casing. R. Craig. 1,635,631, July 12.
   NOV. 22.
Scale casing. R. Craig. 1,635 661; July 12.
Scale casing. N. A. Hadleyo. Des. 78,146; Dec. 27.
Scale casing. N. A. Hallwood. Des. 73,079-80; July 19.
Scale casing. V. A. Schultz. Des. 72,969; June 28.
Scale casing. Velghing. T. W. B. Watling. Des.
 Scale casing, Veighing, T. W. B. Watting, Des. 73,765-6; Nov. 1. Scale casing, Weighing, T. W. B. Watting, Des. 74,087; Dec. 13.
   Scale, Computing. H. O. Hem. 1,619,121; Mar. 1.
Scale, Computing. W. R. Mittendorf. 1,650,224;
                 ale, Computing. W. R. Mittendorf. 1,650,224;
Nov. 22.
ale, Computing. W. R. Mittendorf. 1,650,225-6;
Nov. 22.
 Nov. 22.

Scale, Computing. W. R. Mittendorf. 1,650,228;
Nov. 22.
Scale, Computing. W. J. Rouleau. 1,623,134; Apr. 5.
Scale, Counting. E. B. Locke. 1,625,126; Apr. 19.
Scale, Counting. R. B. Locke. 1,625,126; Apr. 19.
Wright. 1,662,338; Dec. 18.
Scale frame. A. J. and H. M. Jacobs. Des. 73,132;
July 26.
Scale head. J. W. Rockefeller, jr. Des. 73,237; Aug.
Scale in boliers, Furifying, composition for counteract-
May 10.

Locked Formation of H. Lillejord. 1,628,163;
Scale, Infant, M. J. Weber. 1,639,212; Aug. 16.
Scale in Donese, he formation of. H. Leney...
Ing the formation of. H. Leney...
May 10.
Scale, Infant. M. J. Weber. 1,639,121; Aug. 16.
Scale, Infant. M. J. Weber. 1,639,123; Mar. 1.
Scale, Mason's. R. W. Mellor. 1,653,016; Dec. 20.
Scale, Measuring-instrument. C. O. Fairchild and F. E.
Bash. 1,615,447; Jan. 25.
Scale, Personal weighing. H. C. Schaper. 1,631,341;
June 7.

Lune 7.

G. Ohaus. 1,627,710; May 10.
 Scale. Personal weighing. H. C. Schaper. 1,631,34
June 7.
Scale plate, Weighing. G. Ohaus. 1,627,710; May 1
Scale, Platform. M. H. Hansen. 1,638,260; Aug. 9.
Scale, Porkhole. L. A. Osgood. 1,626,976; May 3.
Scale, Porkhole. L. A. Osgood. 1,622,924; Mary 23.
Scale, Postal. J. K. Richie. 1,622,924; Mary 24.
Scale, Recording. B. MacNutt. 1,629,322; May 17.
Scale, Recording weighing. H. O. Hem. 1,640,078
Aug. 23.
Aug. 23.
Scale, Scoop. E. R. Ball. 1,620,000; Mar. 8.
Scale, Spring. J. W. Rockefeller, jr. 1,636,708; July 26.
Scale, Spring. T. H. Strachan. 1,650,913; Nov. 29.
Scale, Vehicle load. G. W. Gartner. 1,640,930; Aug. 30.
Scale, Weighing. A. A. Callie. 1,622,671; Mar. 29.
Scale, Weighing. H. Cummer. 1,622,692; Mar. 22.
Scale, Weighing. H. Cummer. 1,632,992; Mar. 22.
Scale, Weighing. C. H. Hapgood. 1,635,996; July 19.
Scale, Weighing. C. H. Hapgood. 1,635,996; July 19.
Scale, Weighing. G. H. Hapgood. 1,640,073; Aug. 23.
Scale, Weighing. H. W. Hem. 1,622,113; Mar. 22.
Scale, Weighing. H. W. Hem. 1,622,113; Mar. 22.
Scale, Weighing. G. O. Marshall. 1,645,326; Oct. 11.
Scale, Weighing. J. A. Osgood. 1,620,125; Mar. 8.
Scale, Weighing. L. A. Osgood and E. E. Wolf.
1,622,932; May. 3.
Scale. Weighing. L. A. Osgood and E. E. Wolf.
1,829,693; May 3.

Scale, Weighing. O. C. Reeves. 1,629,811; Aug. 23.

Scale, Weighing. O. C. Reeves. 1,647,307-8; Nov. 1.

Scale, Weighing. E. G. Thomas. 1,619,195; Mar. 1.

Scale, Weighing. E. G. Thomas. 1,619,195; Mar. 1.

Scale with improved hopper-supporting means, Far-distant weighing. L. E. Foss. 1,617,245; Feb. 2.

Scales, Fish. W. Reilly. 1,645,970; Oct. 18.

Scales, Fish. W. Reilly. 1,645,970; Oct. 18.

Scales, Actuating mechanism for con-controlled ticket-printing weighing. V. F. Slezak. 1,644,752; Oct. 11.

Scales, Eccurrically-adjusable cam for. L. S. Shively. 1,638,873; July 26.

Scales and Canada and Controlling device for.
 Scales, Indicator Scales, and controlling device for. G. Indicator Scales, Indicator Scales, Indicator Scales, Indicator Scales, Indicator Scales, Platform lever mechanism for. H. O. Hem. 1,627,702; May 10.
Scales, Preventing sag and protecting bearings of platform weighing. M. H. Winslow. 1,628,829; Aug. 23.
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Scales, Printing attachment for. F. A. Hasse.
1,048,725; Nov. 8.
Scales, Shipping attachment for weighing. T. H.
Strachan. 1,622,137; Apr. 5.
Scales, Shipping attachment for weighing. T. H.
Strachan. 1,622,137; Apr. 5.
Standard and the standard
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Scraper, Draft-operated. A. B. Esseltine. 1,644,243; Oct. 4. Scraper, Draft-operated. C. F. Poole. 1,644,273-4; Scraper, Oct. 4. Oct. 4.

Scraper-dgc turner. J. R. Houts. 1,633,329; June 21.

Scraper for golf greens. J. S. Carl. 1,652,852; Dec. 13.

Scraper Foru-wheeled. A. R. Van Alstine. 1,629,242;
May 17.

Scraper loading apparatus. E. J. Doberstein. 1,622,823;
Mar. 29.

Scraper loading apparatus. R. J. Wood. 1,622,819;
Mar. 29.

Scraper loader apparatus. J. S. Housman. 1,646,536;
Oct. 25.

Scraper mold. L. J. Whitman. 1,639,122; Aug. 16. Oct. 25.
Scraper mold. L. J. Whitman. 1,639,122; Aug. 16.
Scraper, Oll-well-tube. J. S. Spencer. 1,653,883; Dec. 27.
Scraper, Pan. E. W. McLain. 1,646,303; Oct. 18.
Scraper, Revolving. D. R. Throop. 1,621,646; Mar. 22.
Scraper shoe. C. E. Gilbert. 1,629,785; May 24.
Scraper with automatic elevating control, Rotary. J. S.
Reynolds. 1,642,826; Sept. 20.
Scrapers, Hitch for earth. L. O. Bird. 1,616,212;
Feb. 1. Feb. 1. Scraping machine. W. F. Evans. 1,652,820; Dec. 13. Screed chair. W. E. White. 1,629,753; May 24. Screed support. G. F. Pawling. 1,631,502; June Screen: See— June 7. Cotor screen.

Dock screen.
Dock screen.
Dock screen.
Dock screen.
Dock screen.
Dock screen.
Dock screen.
Fireplace screen.
Fileplace screen.
Fileplace screen.
Fileplace screen.
Folding screen.
Folding screen.
Folding screen.
Funnel screen.
Caurided-opening screen.
Ulprating screen.
Will screen.
Will screen.
Projecting screen.
Projecting screen.
Projecting screen.
Projecting screen.
Projecting screen.
Projecting screen.
Window screen.
Projecting screen.
Window screen.
Projecting screen.
Window screen.
Frojelling screen.
Window screen.
Screen. F. Bland, 1,622,305; May 10.
Screen. E. Dokster. 1628,405; May 4.
Screen. F. L. Jahn. 1,631,822; June 7.
Screen. H. J. Reed and C. L. Spafford.
Screen. Al. Stebbins. 1,616,472–3; Feb. 8.
Screen. Al. H. Stebbins. 1,616,472–3; Feb. 8.
Screen adjuster. J. L. Carrigan. 1,648,390; Oct. 25.
Screen. Al. Gelscher.
Screen. Al. Stebbins. 1,616,472–3; Feb. 8.
Screen. And defector, Combination hot-air. F. A. Walloch.
1,640,630; Aug. 30.
Screen and the like, Port-light. T. M. Crowell.
1,648,445; Nov. 8.
Screen attachment. J. T. Huntington. 1,647,179; Color screen.
Deck screen.
Door or window screen.
Fireplace screen. Pulp screen. Roller screen Nov. 1.
Screen belt for the mechanical purification of water, Rotating endless. E. Geiger. 1,640,635; Aug. 30.
Screen-cleaner, L. O. Corkran. 1,639,590; Aug. 10.
Screen-cleaning apparatus. W. L. D'Olier. 1,624,221; Apr. 12.
Screen conveyer, W. M. Schwartz. 1,634,963; July 5.
Screen conveyer, W. M. Schwartz. 1,634,963; July 5.
Screen conveyer, W. Wolf. 1,686,728; July 26.
Screen for conveyer. A. L. Shaw. 1,045,405; Or. 1,625,215; July 21.
Screen-hanger. W. F. Rapp. 1,624,181; Apr. 12.
Screen-hanger. W. G. Chryst. 1,636,928; Feb. 8.
Screen-inclosure. W. G. Chryst. 1,636,928 Screen attachment. J. T. Huntington. 1,647,179; Screen Inclosure. W. G. Chryst. 1,627,335; Aug. 2 Screen or sieve for drying purposes. A. Gobiet. 1,642,662; Sept. 13. Screen pipe, Forming stotted. J. H. McEvoy, fr. 1,652,205; Dec. 13. Screen pipe, Producing. C. J. Coberly. 1,654,160; Dec. 27. Screen pine. W. L. D'Oller and T. Tohlin. 1,631,585; Screen strip. Varification. Screen strip, Ventilating. J. C. Scheppers. 1,651,071: Nov. 29.

Screen support, Metal-fenestra. E. W. Pendery. 1,645,448; Oct. 11.

Screen-vibrating mechanism. E. H. Shackelford, jr. 1,632,927; June 21.

Streen wall for centrifugal baskets. E. N. Stone. Screen wall for centrifugal baskets. E. N. Stone. 1,624,287–3; Apr. 12.

Local Streen and Sparatus. A. Leaby. 1,650,896; Nov. 29.

Screening paparatus. M. B. Tark. 1,615,559; Jan. 25.

Screening pulp and paper slock. Rotary screen for. E. W. Lindquist. 1,627,655; May 10.

Screens, Supporting vibrating. A. J. Sayers. 1,651,934; Dec. 6. Screens, S Dec. 6. Street of the third of the thir

Screw blanks, rivets, and similar headed articles, Making cold. J. Kuhne. 1,618,446; Feb. 22. Screw clamp. G. Roberts and M. Dysthe. 1,616,232; Feb. 1. Screw cutter. E. Wille. 1,633,913; June 28. Screw device. E. W. Richards and E. J. Janso. 1,618,677; Screw device, Stop. F. G. Williamson. 1,650,313; Nov. 22.
Screw, Double-threaded. J. A. Arenz. 1,651,796; Dec. 6.
Screw driver. F. Bido. 1,616,300; Feb. 1.
Screw driver. R. O. Caruso. 1,024,301; Apr. 12.
Screw driver. R. O. Caruso. 1,024,301; Apr. 12.
Screw driver. R. J. Velepec. 1,641,307; Sept. 6.
Screw driver. C. F. Wahl. 1,616,670; Feb. 1.
Screw driver. G. F. Wahl. 1,616,670; Feb. 1.
Screw driver. G. F. Wahl. 1,627,301; May 3.
Screw driver. G. F. Wahl. 1,627,301; May 3.
Screw driver. G. F. Wahl. 1,627,301; May 3.
Screw driver and attachment, Angle. D. P. Owens. 1,628,553; May 10.
Screw driver and wrench-clutch cup. Portable power-driven. A. G. Decker. 1,624,2490; Sept. 13.
Screw-driver attachment. A. W. Staupe. 1,625,227; Apr. 19.
Screw driver attachment. A. W. Staupe. 1,625,227; Apr. 19.
Screw-driving guide, Electric. E. G. Morgan. 1,644,074; Oct. 4.
Screw-driving guide, Electric. E. G. Morgan. 1,644,074; Oct. 4.
Screw-driving machine. J. C. Steen. 1,624,189; Apr. 12.
Screw driving machine. J. C. Steen. 1,624,189; Apr. 12.
Screw driving machine. J. C. Steen. 1,624,189; Apr. 12.
Screw driving machine. J. C. Steen. 1,624,189; Apr. 12.
Screw driving machine. J. C. Steen. 1,624,189; Apr. 12.
Screw driving machine. J. C. Steen. 1,624,189; Apr. 12.
Screw making and turning lathes, Lubrication for. L. K.
Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning machine. L. K. Braren. 1,629,451; May 17.
Screw making and turning device, Stop-. F. G. Williamson. 1,650,313; Screws and bolts, Making. C. Kaufman. 1.617.122; Feb. 1. Screws. Apparatus for and method of truing abrasive. B. M. W. Hanson. 1.623.113; Apr. 5. Screws, Forming set. C. E. Lyman. 1.624.736; Sept. 30. Screws, Forming set. C. E. Lyman. 1.642.736; Sept. 30. Screws, Lock washer for cap. R. T. Hosking. 1.645,859; Oct. 18. Screws Lock washer for cap. R. T. Hosking. 1.645,859; Oct. 18. Scheiwer. 1.619.043; Mar. 18. Scheiwer. 1.619.043; Mar. 18. Scheiwer. 1.619.043; Mar. 19. Scheiwer. 1.619.043; Mar. 19. Scheiwer. N. B. Braly. 1.621,261; Mar. 8. Scrubbing device. and material therefor. C. Field. Scrubbing machine. M. B. Baily. 1,627,263; May. 8. Scrubbing machine. A. I. Riedel. 1.636,437; July 19. Scrubbing machine. A. I. Riedel. 1.636,437; July 19. Scrubbing machine. S. Strader. 1,644,859; Oct. 11. Scrubbing machine. S. Strader. 1,644,859; Oct. 11. Scrubbing machine. Settlement of the scrubbing machine. Settlement of the scrubbing machine. Settlement of the scrubbing machine. Scrubbing machine. Scrubbing machine. Scrubbing machine. Strader. 1,644,859; Oct. 11. Scrubbing machine. Settlement of the scrubbing machine. Settlement of the scrubbing machine. Scrubbin Seal and making same, Hermette, 18, voter Aug. 30.
Seal and making the same. S. A. Hamnett. 1,625,466:
Seal and and same and the same. S. A. Hamnett. 1,625,466:
Seal for container. A. P. Poupart. 1,635,955; July 12.
Seal for stening. W. Gulard. 1,618,282; Peb. 22.
Seal for stening. W. Gulard. 1,618,282; Peb. 22.
Seal for yessels and the like. H. J. Bragdon. 1,635,529; July 12.
Seal For July 12.
Seal July 12.
Seal July 12.
Seal July 14.
Seal press. D. C. Sasseman. 1,619,959; Mar. 8.
June 14.
Seal press. D. C. Sasseman. 1,619,959; Mar. 8. June 14, Seal press. D. C. Sasseman. 1,619,959; Mar. 8, Seal, Self-locking. E. Dietze. 1,626,273; Apr. 26, Sealed container. C. J. Aulhach. 1,614,589; Jan. 18, Sealer, Envelope. D. C. Davis. 1,633,698; June 28, Sealing, bottles, etc., Machine for. J. Talansier. 1,649,141; Nov. 16, Machine for. J. Talansier. 1,649,141; Nov. 16, Machine for. 3, Talansier. 1,647,744; Sealing cap and package. G. Ramsey. 1,634,724; Sealing capuling Ontelle Jatachald. M. P. July 5. Scaling coupling, Quickly-detachable. M. B. Brewster. 1.641,528; Sept. 6. Sealing device. C. H. Howard. 1.652.861: Dec. 13, Sealing device. V. F. Slezak. 1.616.423; Feb. 1.

Sealing device, Dispensing container, C. D. Henriques. 1,635,122; July 5.
Sealing gland. A. E. L. Scanes and T. Brighouse. 1,617,500; Feb. 13.
Sealing in machine. J. J. Higgins. 1,645,991; Oct. 18.
Sealing machine. Raiston. 1,615,619; Jan. 25.
Sealing machine. Raiston. 1,615,619; Jan. 25.
Sealing machine. J. D. Smith and C. R. Phillips. 1,616,671; Feb. 8.
Sealing machine. J. D. Smith and C. R. Phillips. 1,616,671; Feb. 8.
Sealing machine. H. E. Townsend. 1,635,237; July 12.
Sealing machine, Envelope. J. W. Eskholme. 1,633,244;
Sealing machine, Envelope. J. W. Eskholme. 1,633,248;
Sealing machine, Breedope. J. W. Eskholme. 1,633,248;
Sealing machine, Breedope. J. W. Eskholme. 1,633,248;
Sealing means. A. Schuh. 1,621,907; Mar. 22.
Sealing means. A. Schuh. 1,621,907; Mar. 22.
Sealing means. A. Schuh. 1,621,907; Mar. 22.
Sealing off device. Winfried W. Loebe and M. Grossmann. 1,631,377; June 7.
Sealing off device. Winfried W. Loebe and M. Grossmann. 1,631,377; June 7.
Sealing off device. C. Martin. 1,631,379; June 7.
Sealing fing. J. G. Dorward. 1,618,412; Feb. 22.
Sealing ing. J. G. Dorward. 1,618,412; Feb. 22.
Sealing ring. J. G. Dorward. 1,641,8412; Feb. 22.
Sealing ring. J. G. Dorward. 1,621,350; Sept. 13.
Seam. C. C. Blake. 1,619,497; Mar. 1.
Seam for sewed articles. C. F. Rubel and F. Kucera. 1110,477; Mar. 1.
Seam of sewed articles. C. F. Rubel and F. Kucera. 1110,477; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 1110,477; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 1110,477; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 1110,479; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 1110,479; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 1110,479; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 1110,479; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 1110,479; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 1110,470; Mar. 1.
Seam of the sewed articles. C. F. Rubel and F. Kucera. 111 Mar. 22. Seaming mechanism. P. H. Lange. 1,639,515; Aug. 16. Searchight. C. E. Fraser. 1,642,436; Sept. 13. Searchight. T. Hall. 1,632,163; June 14. Searchight. T. Hall. 1,634,663; July 5. Searchight. E. J. Murphy and L. P. Hutt. 1,618,103; Feb. 15. Searchlight cooling and ventilating means. E. A. Sperry. 1,641,301; Sept. 6. Searchlight range finder. R. Kauch. 1,627,097; May 3. Seat: See-Adjustable seat. Flush-tank ball seat. Moyable seat. Reel seat. Saddle seat. Automobile seat.
Baby seat.
Bathtub seat. Automonie seat.
Baby seat.
Baby seat.
Board Seat.
Board Seat.
Board Seat.
Board Seat.
Board Seat.
Char seat.
Char seat.
Char seat.
Char seat.
Char seat.
Char seat.
Whide seat.
Disappearing seat.
Window seat.
Disappearing seat.
Window seat.
Window seat.
Seat. A. H. Leipert. 1,644,685; Oct. 11.
Seat. A. F. Masury. 1,637,780; Aug. 2.
Seat. H. W. Shyder. 1,621,520; Mar. 2.
Seat. A. H. Leipert. 1,624,520; Mar. 2.
Seat. and cover, Toilet.
Seat. and cover, Toilet.
Seat. and desk, Combined.
Seat. and desk, Combined.
Seat. and desk, Combined.
Seat. A. Beiperl. 1,654,455; Dec. 27. Seat and desk, Combined. S. W. Conwell. 1,654,455; Dec. 27.
Seat construction. L. C. Freeman, 1,639,371; Aug. 1,639,371; Aug. 1,647,522; Nov. 1.
J. H. Bourgon. 1,647,522; Nov. 1.
Seat covering. H. J. Joachim. 1,650,130; Nov. 22.
Seat cushions, Frame for. V. Willoughby. 1,649,431; Nov. 15. Nov. 15.
Seat for metallic containers, Closure. L. B. Wackman.
1,617,302; Feb. 8.
Seat for window cleaning, Folding, B. W. Dreyer.
Seat mount, Resilient, C. Pollenberg, 1,647,247; Nov. 1.
Seat mount, Resilient, C. Pollenberg, 1,647,247; Nov. 1.
Seat pad. E. P. Elzey, 1,650,335; Nov. 22.
Seat pad for sportsmen's coats. W. D. Stair, 1,626,166;
Apr. 26. Apr. 26.
Seat support, Front-. L. A. McDowell. 1,623,800;
Apr. 5. Seat support, table, and luggage carrier for automobiles, Combined. D. C. Stater. 1,625,916; Apr. 26. Seat with folding back. J. A. Halais. 1,640,273; Aug. 23. Saug. 24. Seats and the like, Support for. V. Collier. 1,633,476; Sears and the like, support for. Y. Coller. 1,055,270; June 21. Secondary battery. T. S. Cole. 1,622,767; Mar. 29. Secret system. L. Espenschied. 1,633,625; June 28. Secret communication. J. W. Horton. 1,624,601; Secret communication.

Apr. 12.

Sectional bin. W. Korb. 1,648.277; Nov. 8.

Sectional bin. W. Korb. 1,648.277; Nov. 8.

Sectional heating boiler, J. B. Bernhard. 1,619,235; Securities, Protecting financial, C. B. Brewer. 1,615,566; Jan. 25. Sediment collector. W. B. Pohle. 1,623,437; Apr. 5. Sediment tester. E. A. and J. R. Shikles. 1,649,198; Nov. 15. Seed and fertilizer distributor. W. S. Austin. 1,651,312; Nov. 29.

Seed-cell-removing apparatus. B. C. Coons. 1,650,694;

Seed-cell-removing apparatus. B. C. Coons. 1,650,694; Nov. 29. Seed-cleaning machine. M. L. Kollman and E. L. Klappal. Seed-cleaning machine. M. L. Kollman and E. L. Klappal. Seed-corn drying rack. B. L. Bain. 1,638,651; Aug. S. Seed-corn hanger. C. N. Hill. 1,639,729; Aug. 23. Seed-corn hanger. C. N. Hill. 1,639,729; Aug. 23. Seed-corn haller. H. E. Ebmeier. 1,633,365; June 21. Seed-corn haller. H. E. Ebmeier. 1,633,365; June 21. Seed-corn haller. H. E. Ebmeier. 1,633,565; June 21. Seed-corn haller. H. E. Ebmeier. 1,633,51; Jun. 11. Seed disinfectant, Nonhygroscopic. M. Englemann and A. R. Albright. 1,618,370; Feb. 22. Seed dropper, Sugar-bect. A. A. Matheson. 1,638,048; Seed zerminator. M. Isaacs. 1,648,309; Nov. 8.

A. R. Albright. 103.0001, A. A. Matheson. 1,638,048; Seed dropper, Sugar-beet. A. A. Matheson. 1,638,048; Seed grain, Machine for treating. C. C. Calkins. 1,648,538; Nov. 8. Seed grain, Method and apparatus for treating. S. J. Williams. 1,633,301; June 21. Seed huller. W. B. Spurr. 1,651,641; Dec. 6. Seed treatment machine, Dust. F. C. Hersman. Seed dispenser. O. Wodke. 1,619,687; Mar. 1. Seed drill. S. H. Yancey. 1,625,345; Apr. 19. Seed drill. Double-row ginseng. J. C. and J. B. Peters. 1,620,283; Mar. 8. Seed-gathering device. S. L. Mosher. 1,626,207; Apr. 26. Seed or fertilizer distributing machine. J. G. Bailey. 1,629,247; May 17. Seedsers, Attachment for. F. Thietten. 1,632,861; Mar. 2, apparatus for germinating. E. J.

Seed planters, Attachment for. F. Thietten. 1.632,861; June 21.

Seed, Process and apparatus for germinating. E. J. Stoddard. 1,621,440; Mar. 15.

Seed rack. E. A. Luther. 1,630,347; May 31.

Seed separator. W. U. Arthur. 1,633,553; Jan. 4.

Seeders and the like, Adjustable safety device for. H. Goose, sr. 1,613,272; Jan. 4.

Seeders. Traction-machine hitch for. J. Mader. Seeders and plants, Process and apparatus for inducing germination and growth of. J. Zellweger. 1,625,181; Apr. 19.

Apr. 19.
Seeds or oleaginous vegetable substances for the purpose of extracting the oil contained therein. Treatment of oleaginous. G. Kammermann. 1,616,319; Feb. 1.
Segment fastener. W. Garrett and G. Gaylets. 1,618,422;

Segment fastener. W. Garrett and G. Gaytens. 1,010, 22. Feb. 22. Seine landing. O. H. Belknap. 1,648,671; Nov. 8. Seismograph. N. H. Ricker. 1,625,625; Apr. 19. Selecting apparatus. L. A. Watters and S. F. Lloyd. Selecting device. L. L. Ladd. 1,649,168; Nov. 15. Selector switch. G. Deakin. 1,612,966; Jun. 4. Selector switch. E. O. Walker. 1,640,385; Jun. 30. Self-cleaning mixer, Continuous. C. Payne. 1,628,632; May 10.

May 10.

Self-leeding burner, J. J. McCoy. 1,641,545; Sept. 6.

Self-leeding burner, M. Mallory. 1,621,552;
Mar. 22.

Self-locking device, H. Vissering. 1,638,788; Aug. 9.

Self-locking switch. G. H. Whittingham. 1,624,882;
Apr. 12

Self-locking switch.

Apr. 12.

Self-sealing trap. S. Opdyke. 1,630,861; May 31.

Self-service machine. J. Riikonen. 1,629,536; May 24.

Self-threading winding means. A. Stuber. 1,645,882;

Self-threaum winting oct. 18. Semaphore signals, Snubbing circuits for. J. E. Stephenson. 1.630,981; May 31. Semiduid dispensing device. W. H. G. Geake. 1,641,671;

Sept. 6. Semitrailer. Semitrailer. R. B. Jones. 1,617.714; Feb. 15. Semitrailer. R. B. Jones. 1,654.503; Dec. 27. Semitrailers, Dumping mechanism for. M. 1.652.262; Dec. 13.

Semitrailer. R. B. Jones. 1,617,714; Feb. 15.
Semitrailer. R. B. Jones. 1,654,503; Dec. 27.
Semitrailers. Dumping mechanism for. M. Walter.
Semitrailers. Dumping mechanism for. M. Walter.
Semitrailers. Landing and raising gear for. I. H. Judd.
1,631,135; June 7.
Sensitive layer on a sultable base and making same. M. F. Schmidt and W. Krieger. 1,628,279; May 10.
Separating coupling. A. E. Welngartner. 1,650,557; Mrs. 20.
Separable ring. W. C. Niebuhr. 1,638,209; Aug. 9.
Separable ring. W. C. Niebuhr. 1,638,209; Aug. 9.
Separable and grading machine. F. A. Rappleye.
1,645,402; Oct. 11.
Separating apparatus, Centrifugal. H. J. Holford.
Separating apparatus, Centrifugal. R. A. Sturgeon.
1,648,790; Nov. S.
Separating apparatus, Centrifugal. R. A. Sturgeon.
1,648,790; Nov. S.
Separating apparatus, Dry. R. W. Arms. 1,641,407;
Separating materials of different specific gravities, Method apparatus for. T. M. Chance. Rc16,674;
Separatus or classifying machine. W. A. Riddell.

od and apparatus for. T. M. Chance. Rc16.674; July 12. Separating or classifying machine. W. A. Riddell. 1.947.815-6; Nov. 1. Separating potatoes from floatable foreign matter, Device for. R. C. Zuckerman. 1,643.596; Sept. 27. Separating purposes. Centrifucal apparatus for. F. A. Quiroz. 1,631.383; June 7.

Separating substances, Method and mechanism for centrifugally. L. D. Jones. 1,649,117; Nov. 15. Separating substances, Method and apparatus for censeparating the whites from the yolks of eggs, Machine for. W. Conner. 1,622,181; Mar. 22. Separating two or more substances from a solution. I. Isaachsen. 1,646,454; Oct. 25.

Grain separator.

separating two or more successionances. Lotal, 494; Oct. Separator: Rev. Ash separator. Battery separator. Benzine and oil separator. Benzine and oil separator. Carton-blank separator. Centrifugal fan separator. Centrifugal separator. Cream separator. Cream separator. Dust separator. Egg separator. Egg separator. Fluid separator. Fluid separator. Gas and oil separator. Gas, oii, and sand separator.

Grain separator.
Leaf separator.
Magnetic separator.
Milk separator.
Milk separator.
Mineral separator.
Oil and gas separator.
Oil and water separator.
Oil separator.
Oil-diluent separator.
Oil-separator.
Pine-seed separator.
Rice separator.
Sand separator.
Spiral separator.
Steim separator.
Steim separator.
Steim separator.
Steim separator. Storage-battery separator.

rator.
Gold separator.
Separator.
P. Balletto. 1,650,480; Nov. 22.
Separator.
Separator.
P. Balletto. 1,650,480; Nov. 22.
Separator.
Separator.
Separator.
C. G. Hawley 1,612,814; Jan. 4.
Separator.
B. T. Jones. 1,622,872; Mar. 29.
Separator.
M. H. Kotzebue. 1,637,947; Aug. 2.
Separator.
C. S. Lenz and G. E. Jupp. 1,614,074;

Jan. 11. Separator. Apr. 26. Separator. Jan. 4. Separator. W. M. Little and J. L. Sherman. 1,626,245; 1 613 933 .

O. H. and E. H. Ludeman.

Separator. O. H. and E. H. Ludeman. 1,613,233; Jan. 4.

Separator. D. T. Sharples. 1,644,615; Oct. 4.
Separator. T. J. Sturtevant. 1,621,564; Mar. 22.
Separator and amalgamator, Centrifugal. W. C. Coleman. 1,632,256; June 21.
Separators. Apparatus for cleaning the bowls of centrifugal. W. J. Blanchard. Separator-bowl washer, Cream. A. F. Schwanke. 1,623,363; Apr. 5.
Separator-bowl washer, Cream. A. F. Schwanke. 1,623,363; Apr. 5.
Separator joints, Apparatus for installing pavement. W. F. Shaw. 1,629,544; May 24.
Separators, Aerator and cooler for cream. I. S. Anderson. 1,635,877; July 12.
Separators, Brake for cream. J. Martin. 1,642,997; Sept. 20.
Sept. 6.
Sept. 6. Sep

I. Gutman. 1,649,028; Nov. 15. A. L. Hepler. 1,634,871; July 5. H. A. Ledyard and J. J. Jelley. 1,644,532; Septic tank.

Septic tank. H. A. Leuyert and J. C. (20, 4). Oct, 4. Sptic tank. F. J. Moss. 1,638,869; Aug. 16. Septic tank. W. Rose. 1,645,116; Oct. 11. Septic tank. G. L. Schiding. 1,616,394; Feb. 1. Septic tank. F. E. Wilson. 1,616,394; Feb. 8. Serrated steel structural units, Joining. F. H. Moyer. 1,644,940; Oct. 11. Serum and producing same, Modified pneumococcic antigen, antipneumococcic. W. P. Larson. 1,621,117; Mar. 15.

Mar. 15.

Serums and producing them, Modified bacteria and toxins, immunizing. W. P. Larson. 1,621,118; Mar. 15.

Service bin. H. Muenzenmayer. 1,641,775; Sept. 6.

Service indicator, Automobile. C. R. McClellan and O. L. Seward. 1,651,033; Nov. 29.

Service-recording device, Motorist's. T. P. Hagerman. 1,644,471; Oct. 4.

Service stand, Combination. L. Aunes. 1,630,035; July 19. material. G. A. Bouvier. 1,614,590;

Serving a material. G. A. Bouvier. 1.614.596:

Jan. 18.
Serving implement. S. W. James, 1,643,456; Sept. 27.
Serving machine. H. F. Carter. 1.532,884; June 21.
Serving material to a core, Method and apparatus for.
H. R. Massingham. 1,629,169; May 17.
Serving material upon a core, Method and apparatus for.
H. R. Massingham. 1,629,169; May 17.
Serving mechanism. H. J. Boe. 1,644,594; Jan. 18.
Serving rack, Refreshment. C. N. Smyser. 1,641,358;
Sept. 6.

asph. 6. Serving tray or similar article. S. W. Farber. Des. 72,702; May 25 mile. E. P. Renaux. 1,629,532; May 24, Setting clamp, Asihar. D. N. Angel. 1,621,650; Mar. 22. Settling machine, Centrifugal. F. C. Rawolle. 1,644,492; Oct. 4.

Oct. 4. A. Settling tank. W. C. McKesson. 1,652,036; Dec. 6. Settling tank, White-water self-cleaning. J. P. Hass. 1,629,701; May 24. Setworks, Fractional. C. H. Turner, 1,649,758; Nov. 15. Sewage, Disposal of. C. P. Derleth. 1,617,014; Feb. 8.

Sewage-purifying device. H. E. Elrod. 1,646,478; Oct. 25. Sewage-purifying device. H. E. Elrod. 1,640,478; Oct. 25.

Sewage tank, Bacterial. L. S. R. Hopkins and H. L. Corthell. 1,622,646; Mar. 29.

Sewage treatment by activated sludge in combination with sludge digestion, Apparatus for. K. Imhoff. 1,642,206; Sept. 13.

Sewer cleaner, Rotary. T. Peltola. 1,637,914; Aug. 2.

Sewer construction. V. H. Cochrane. 1,638,473; Aug. 9.

Sewer construction. V. H. Cochrane. 1,638,473; Aug. 9.

Sewer outlet, Safety. F. Schneider. 1,651,473; Dec. 6.

Sewer pipe. O. R. Humphreys. 1,639,989; Aug. 23.

Sewers and the like, Lining block for. L. P. Kovanda and J. H. Hubbell. 1,642,447; Sept. 13.

Sewing apparatus, Buttonhole. F. Frohlich. 1,639,405; Aug. 16.

Sewing leather bags or similar articles, Machine for. Sewing machine. Sewing machine, Sewing machine, Sewing machine, Sewing machine, Sewing machine. E. Kicks and E. G. E. Burgoyne. 1,643,385; June 7. Sewing machine. G. R. Robinson. 1,613,130; Jan. 4. Sewing machine. L. Rosenman. 1,647,148; Nov. 1. Sewing machine. L. Rosenman. 1,647,148; Nov. 1. Sewing machine. L. E. Topham. 1,625,221; Apr. 19. Sewing machine. D. P. Watson. 1,644,700; Oct. 11. Sewing machine. F. Zaleski. 1,641,179; June 7. Sewing machine. Traveling. F. E. and G. E. Wiggins. 1,010,155; Feb. 1. Sewing machine and method of securing material to a currier wite therefor. Traveling. F. E. and G. E. Wiggins. 1,010,155; Feb. 1. 1. 1,620,249; Sewing-machine. All Corral and J. Heggie. Sewing-machine. attachment. M. Moran. 1,658,115; Dec. 20. Sewing-machine. Page. 4. M. Moran. 1,658,115; Seving machine attachment. M. Moran. 1,653,115; Dec. 20.

Sewing machine, Bag. A. M. Bates and J. E. Dancker. 1,625,782; Apr. 26.

Sewing-machine batteries, Driving mechanism for. J. R. Hauson. 1,639,995; July 26.

Sewing machine, Blindstitch. W. Arbetter. 1,615,782; Jan. 25.

Sewing machine, Buttonhole. E. J. Ray. 1,617,477; Sewing machine, Buttonhole. E. J. Ray. 1,617,477; Sewing mechine, Buttonhole. Sewing machine, Buttonhole-. E. J. Ray. 1,638,785; Aug. 9. Sewing machine, Filled-bag-. R. M. Seper. 1,613,140; Jan. 4. Jan. 4.

Sewing machine for cording. C. F. Rubel and F. Kucera. 1,619,430; Mar. 1.

Sewing machine for darning. E. Wieland. 1,642,283; Sept. 13.

Sewing machine guide. J. M. Merrow. 1,649,360; Nov. 15.

Sewing machine, Lock-stitch. N. F. Hopkins. 1,616,049.

Feb. 1. Nov. 15.
Sewing machine, Lock-stitch. N. F. Hopkins. 1,016,049
Feb. 1.
Sewing-machine motor. F. F. Hillix. 1,646,962; Oct. 25.
Sewing-machine motor. A. F. Welch. 1,643,191; Sept. 20.
Sewing-machine motor. A. F. Welch. 1,643,191; Sept. 20.
Sewing-machine motors. Mounting for. W. Bangser.
1,632,781; June 21.
Sewing machine, Overedge-. H. Corrall and J. Heggle.
1,643,794; Nov. 1.
Sewing machine, Portable. D. Beswick. 1,622,901;
Sewing machine, Fortable. D. Beswick. 1,622,901;
Sewing machine, Fortable. D. Beswick. 1,622,901;
Sewing machine, Fortable. C. Roger. 1,645,872;
Oct. 18.
Sewing machine, Shoe-sole-. G. C. Roger. 1,645,872;
Oct. 18.
Sewing machine, Shoe-sole-. G. C. Roger. 1,645,872;
Oct. 18.
Sewing machines and the like Driving and aupporting means for. A. B. Spencer and F. E. Walker.
Sewing machines, Attachment for. G. Boulton. 1,627,228;
May 3.
Sewing machines, Attachment for. S. Wechsler.
Sewing machines, Automatic stop mechanism for. J. Hoston. 1,629,090; May 17.
Sewing machines, Hutomatic stop mechanism for button-hole-. E. B. Allen. 1,646,946; Oct. 25.
Sewing machines, Fed mechanism for. D. L. Anthony. 1,622,171; Mar. 22.
Sewing machines, Feed mechanism for. F. A. Larson. 1,043,748; July 26.
Sewing machines, Feed mechanism for. J. C. Ringe.
Sewing machines, Hemmer for. F. Thomas. 1,025,753; Apr. 19.
Sewing machines, Hemmer for. F. Thomas. 1,025,753; Apr. 19.
Sewing machines, Looper-actuating mechanisms for. A. B. Clayton. 1,641,135; Aug. 30.
Sewing machines, Looper-actuating mechanisms for. A. B. Clayton. 1,641,135; Aug. 30.
Sewing machines, Looper-actuating mechanisms for. A. B. Clayton. 1,641,135; Aug. 30.

Sewing machines, Looper-thread-controlling mechanism for. J. R. Moffatt. 1,635,493; July 12.

1,638,256; Aug. Sor attachment for. B. Grossbard. 1,648,267; Nov. 8.

Sewing machines, Motor attachment for. B. Grossbard. 1,648,267; Nov. 8.

Sewing machines, Out pan for. I. Feldman. 1,622,258.

Swing machines, Out pan for. I. Feldman. 1,622,258.

Swing machines, Out pan for. I. Feldman. 1,622,258.

Swing machines, Overedge looper mechanism for. S. G. Tate. 1,663,366; Nov. 22.

Sewing machines, Presser foot for. G. S. Gatchell. 1,648,681; Oct. 25.

Sewing machines, Presser foot for. W. B. Long. Sewing machines, Spreader mechanism for. R. Becker. 1,622,277; Mar. 29.

Sewing machines, Spreader mechanism for. R. Becker. 1,622,277; Mar. 29.

Sewing machines, Stitch-forming mechanism for. K. Sewing machines, Tape reversing and feeding attachment for. G. Bogdonoff. 1,638,823; Aug. 16.

Sewing machines, Timening mechanism for. A. R. Sewing machines, Timening mechanism for. A. R. Sewing machines, Timening mechanism for. J. R. Moffatt. 1,643,820; Sept. 27.

Sewing machines, Timming mechanism for. J. R. Moffatt. 1,643,820; Sept. 27.

Sewing machines, Timming mechanism for. J. R. Moffatt. 1,643,820; Sept. 27.

Sewing machines, Work-clamping mechanism for. E. B. Allen. 1,650,588; Nov. 29.

Sewing machines, Work holder for. W. H. Fisher. Sewing machines, Work holder for. Robinson. 1,639,668; Aug. 23.
Shade and curtain holder. G. Lavole. 1,643.020; Shade and curtain holder. G. Lavole. 1,643.020; Shade and curtain holder, Combined. J. W. Buck. 1,615,868; Feb. 1.
Shade and curtain-rod holder. O. Reinhardt. 1,649,079; Nov. 15.
Shade and curtain support. L. Flesce. 1,637,755; Shade and drapery supports, Adjusting and holding device for. L. H. Robinson. 1,623,274; Apr. 5.
Shade and drapery supports, Roller suspension for. L. H. Robinson. 1,637,162; July 26.
Shade bracket. L. Shoren. 1,649,262; Nov. 15.
Shade bracket. Adjustable. L. Frasca. 1,622,779; Mar. 29.
Shade bracket, Adjustable. J. C. Klappenberger. 1,622,450; Mar. 29.
Shade cloth and constituting, Window. J. W. Stratman. Shade guide. E. E. Minard. 1,632,742; June 14.
Shade guide. E. E. Minard. 1,632,742; June 14.
Shade guide. L. C. Denre 1,631,613; June 7.
Shade bolder. L. W. Anderson. 1,631,613; June 7. June 7.
Shade holder. L. W. Anderson. 1.631.613; June 7.
Shade holder. L. C. Doane. 1,632,391; June 14.
Shade holder. E. H. Nostrand. 1.653.370; Dec. 20.
Shade holder. J. R. Townsend. 1,628,863; May 17.
Shade holder, Lamp. E. Furst and S. Tave. 1,632,268;
July 12.
Shade holder, Porcelain. W. E. Turner. 1,613,067;
Jan. 4.
Shade, Huminating glass. S. H. Barnes. Des. 73,818; Shode, Limmung Beres, 15, 100 and 100

Shade-roller bracket. F. Cooney. 1,633,069; June 21. Shade-roller fixture. S. I. Wharton. 1,616,681; Feb. 8. Ilade-roller fixture. S. I. Wharton and D. R. Peevey. 1,639,278; Aug. 16. Shade-roller holder and curtain-rod bracket. K. Jakubicc. 1,334,364; July 5. Shade-roller support. H. F. Buchheit. 1,620,515; Mar. 8. Shade support, Window. E. S. Bigelow. 1,635,700; July 12. July 12.

Shade-supporting structure. W. A. Biles. 1,618,074;
Jan. 4.

Jan. 4.

Jan. 4.

Jan. 5.

Jan. 5.

Jan. 6.

Jan. 6.

Jan. 7.

Jan. Shades, Detachable collar for. L. W. Andersen. 1,615,531; Jan. 25.
Shades on the vegetable fiber and in materials treated according to such process, Producing combined. G. Petzold and H. Rittner. 1,640,802; Aug. 30.
Shaft-adjusting mechanism. A. E. Showalter and J. W. Johnson. 1,633,910; June 28.
Shaft and crossbar connection. B. Baker, 1,613,011; Jan. 4.
Shaft box O. E. Bishop. 1,645,982; Oct. 18.
Aug. 30. Jan. 4.
Shaft box. O. E. Bishop. 1,645,982; Oct. 18.
Shaft box. O. E. Bishop. 1,645,982; Oct. 18.
Shaft construction. C. D. R. Schaeffer. 1,640,670; Shaft coupling. H. F. Cares and R. Marsland. 1,638,796; Aug. 9.
Shaft coupling. J. O. Carrey. 1,651,671; Dec. 6.
Shaft coupling. D. H. Couch. 1,613,502; Jan. 4.
Shaft coupling. J. A. and P. H. Davey and C. L. Gaugler. 1,636,290; July 19.
Holdsworth. 1,634,499; July 5.
Shaft coupling. F. E. Josef. 1,647,802; Nov. 1.
Shaft coupling. A. W. Rybeck. 1,653,390; Dec. 27.
Shaft coupling. K. F. Ungerer. 1,625,511; Apr. 19.
Shaft coupling. Flexible. G. Fast. 1,641,669; Sept. 6.
Shaft coupling. Flexible. G. Fast. 1,641,669; Sept. 6. Shaft-driving stand, Flexible. W. W. Elliott. 1,641,130; Aug. 30.
Shaft, Flexible. E. A. Joline. 1,649,310; Nov. 15.
Shaft, Flexible. H. A. Kjelsberg. 1,649,1319; Nov. 15.
Shafting, Cushioning connection for. C. T. Runyon.
1,615,138; Jun. 18. T. Dunn. 1,622,772; Mar. 29.
Shafting, Northeld T. T. Dunn. 1,622,772; Mar. 29.
1,631,216; June 7.
Shaft lining. W. Brell. 1,618,166; Feb. 22.
Shaft packing. R. F. Halliwell. 1,614,120; Jan. 11.
Shaft relatively to a driving shaft, Advancing and retarding a driven. G. Constantinesco. 1,627,632;
May 10 prort. K. E. Lyman. 1,658,112; Dec. 20.
Shaft analysis. July 12.
Shafts, Center finder for. A. Raber. 1,640.295; Aug. 23.
Shafts, Connector sleeve for telescoping. B. H. Urschel.
1,644,809; Oct. 11.
Shafts, Counterbalancing device for. J. L. Burns.
1,640,897; Oct. 25.
Shafts, Fiexible coupling for. K. Baumann. 1,639,480;
Aug. 16,
Shafts, Flexible coupling for. K. Baumann. 1,639,644;
Aug. 23. Shafts relatively to a third, Mechanism for varying the angular relationship of two. L. Coatalen and S. H. Attwood. 1,622,491; Mar. 29.
Shafts, Suffing box for. H. Boltshauser. 1,613,924; wood. 1,622,491; Mar. 29.
Shafts, Stuffing box for. H. Boltshauser. 1,613,924;
Jan. 11.
Jan. 12.
Jan. 13.
Jan. 19.
Jan. Shampoo shield. J. E. Shaeffer. 1,640,676; Aug. 30. Shank and edge trimmer. E. L. McMurtrey. 1,646,654; Oct. 25. Oct. 20.

Shank and socket fastening device. G. H. Elwell.
1,637,521; Aug. 2.

Shank beating and stitch-rubbing machine. L. G. Freeman.
Rel6,710; Aug. 23.

Shank beating and stitch-rubbing machine. L. G. Freeman.
1,624,326; Apr. 12.

Shank Renforced. W. E. Small.
1,652,420; Dec. 13.

Shank reenforced. R. J. Griesedieck.
1,628,960;
May 17.

Shank stiffener. R. E. Bartels. 1,638,136; Aug. 9. Shank stiffener. R. Davis. 1,642,362; Sept. 13. Shank stiffener. C. M. Moore. 1,649,414; Nov. 15.

Shank stiffener with a shee sole, Incorporating a. R. E. Bartels. J.619,648. Mar. 1.
Shaped articles of set plastic material, Manufacture of. O. E. Roberts, jr. 1,628,807; May 17.
Shaper. R. T. Hazelton. 1,632,375; June 14.
Shaper_stable, Woodword. E. Reaveley, 1,626,158; Apr. 26 Shaping and stapling machine. C. H. Grings. 1,647,443: Shaping and stapling machine. C. H. Grings. 1,647,443; Nov. I. Shaping mechanism. P. A. Berg. 1,681,505; Dec. 6. Shaping mechanism. P. A. Berg. 1,681,505; Dec. 6. Shaping or planing machine for worm or screw shaped bevel wheel operating according to the development method. H. Brandenberger. 1,636,120; July 19. Sharpener, Blade. E. Feist. 1,641,704; Aux. 21,104; Sharpener, Blade. J. H. Gibson. 1,644,778; Oct. 11. Sharpener, Drill. A. E. Peters. 1,629,175; May 17. Sharpener, Drill. A. E. Peters. 1,629,175; May 17. Sharpener, Drill. A. E. Peters. 1,632,621; June 14. Sharpener, Drill. A. E. Peters. 1,632,621; June 14. 1,617,225; Feb. 8. Sharpener, Drill. A. E. Peters. 1,632,621; June 14. 1,621,522; Feb. 8. Fritzl. 1,625,631; May 10. Sharpener, Drill. A. M. Keezer and F. A. Osgood. 1,622,197; Mar. 22. Sharpener, Knife. W. H. McCall. 1,625,219; Apr. 19. Sharpener, Lawn-mower. S. E. Cline. 1,621,538; Mar. 22. Sharpener, Lawn-mower. G. A. Miles. 1,617,538; Mar. 22.
Sharpener, Pencil. G. E. Bartol, fr. 1,637,849; Ang. 2.
Sharpener, Pencil. G. W. Brown. 1,647,078; Oct. 25.
Sharpener, Pencil. G. W. Brown. 1,647,078; Oct. 25.
Sharpener, Pencil. C. R. Clare. 1,636,552; July 19.
Sharpener, Pencil. M. D. Meserole. 1,635,974; July 12.
Sharpener, Pencil. M. D. Meserole. 1,635,974; July 12.
Sharpener, Pencil. R. Sato. 1,632,583; Dec. 13.
Sharpener, Pencil. J. Slunicko and J. A. Nixon. Sharpener, Pencil. G. W. Brown, 16, 1, 1637,849; Aug. 2.
Sharpener, Pencil. C. R. Clare, 1,634,055, 0ct, 25.
Sharpener, Pencil. C. O. Kowol, 1,627,243; May 3.
Sharpener, Pencil. M. D. Meserol. 1,627,243; May 3.
Sharpener, Pencil. M. B. Meserol. 1,627,243; May 3.
Sharpener, Pencil. J. Sluncko, 1,635,562; July 12.
Sharpener, Pencil. C. M. Sykes, 1,628,076; May 10.
Sharpener, Pencil. G. G. Weis, 1,628,076; May 10.
Sharpener, Razor, P. A. Frank, 1,635,827; July 2.
Dec. 20.
Sharpener, Safety-associated, J. M. Sullivan, 1,633,434;
Sharpener, Safety-associated Dec. 20. Sharpener, Safety-razor-blade. F. J. Tillman. 1,648,972; Nov. 15. Sharpener, Safety-razor-blade. J. Vaughan. 1,630,551; May 31. Sharpener Skate S. Turl 1.622.476; Mar. 29.
Sharpener, Grinder for the cutters of pencil. G. E.
Burton. 1,633.845; June 28.
Sharpeners, Lubricating system for rock-drill. A. H.
Skaer and O. E. Clark. 1.637.012; July 26.
Sharpening device, Pocketkinic. H. L. Welch. 4,639.204; Aug. 10.
Sharpening device, Razor-blade. H. J. Sewoster. 1,616,004; Feb. 1.
Sharpening machine, Knife. R. Forshaw. 1,633.085; June 21. 1.633,085; June 21.
Sharpening machine, Razor-blade. J. Holtzman.
1,614,302; Jan. 11.
Sharpening machine, Tool. W. K. Dodge. 1,652,469;
Dec. 13. Dec. 13.
Sharpening mechanism, Blade. C. A. Strand. 1,628,754;
May 17.
Sharpening tongs, Reversible disk. I. H. Farmer.
1,625,199; Apr. 19.
Shaving compact. W. L. Orme. 1,643,171; Sept. 20.
Shaving coup. Coliapsible. C. E. Rand. 1,636,323;
July 19. Sanitary. A. J. Eigenberg. 1441,208. Shaving cup, Sanitary. A. J. Eisenberg. Sept. 6. 1.641,805; Sept. 6.
Sept. 6.
Shaving cup, Smittery. A. J. Infeenberg. 1,641,805;
Sept. 6.
Shaving cup stand. A. Faiella. 1,622,633; Mar. 29.
Shaving cip stand. A. Faiella. 1,622,633; Mar. 29.
Jan. 25.
Shaving stick holder. E. R. Butler and W. T. Singer. 1,640,627; Aug. 23.
Shawl carrier. J. R. Scohy. 1,642,562; Sept. 13.
Shawl, Shower. H. La Beaud. 1,641,039; Aug. 30.
Sheaf carrier. J. R. Scohy. 1,642,562; Sept. 13.
Shawl, Shower. H. La Beaud. 1,641,039; Aug. 30.
Sheaf carrier. J. R. Scohy. 1,642,562; Sept. 13.
Sheaf Carrier. J. Smithans. 1,634,276; July 60.
Shear and scrap cutter, Combined rotary bevel. L. Williams. 1,636,267; July 19.
Shear made, Shear head. C. D. Wagner. 1,653,936; Dec. 27.
Shear machine. L. Williams. 1,651,654; Dec. 6.
Shearing and forging press. J. A. Lucas. 1,638,403; Shearing of metal plates or sheets, Machinery employed. Aug. 9.

Shearing of metal plates or sheets, Machinery employed in the H. S. Thomas and W. R. Davies. 1,619,684; Mar. 1. Shears: See— Motor-driven shears. Motor shears. Pruning shears. Sheet-nietal shears. Shears. W. Dooley. 1,618.817; Feb. 22.
Shears. A. Gardiner. 1,632.284; June 14.
Shears. C. E. Lacdtke. 1,615.882; Feb. 1.
Shears. T. M. Vauzhan. 1,639.077; Aug. 23.
Shears. C. H. Wilkes and G. E. Calboun. 1,632.255; Shears. C. H. Wilkes and G. E. Calhoun. 1.6 June 14. Shears and the like Shearing blade for sheep. Wright and F. G. Bristow. 1.646.470; Oct. 25. Shears and the like, Vibrating cutter for sheep. McArdle. 1,644,140; Oct. 4. H. C. M. W.

Shears, Attachment for. R. P. Hafner. 1,618,082; Feb. 15. Feb. 15.
Shears attachment, Grass-. M. S. Dearborn. 1,647,085;
Oct. 55.
Oct. 55.
Shears Attachment, B. S. Otis. 1,623,130; Apr. 5.
Shears, Flying. F. L. Sessions. 1,648,829; Nov. 8.
Shears for cutting heavy sheet metal, Facing. C. L. Huston. 1,617,486; Feb. 15.
Shears for rice straw. H. O. Cranton. 1,617,461;
Feb. 15.
Feb. 15. Shears 10: Free Straw. H. O. Cranton. 1,611,401; Shears, Kick-off for. T. D. Hodge. 1,641,678; Sept. 6. Shears, Making. W. A. Isbell and H. H. Canfield. 1,637,572; Aug. 2.
Shears, Metal. R. Heinrich and P. Kramer. 1,647,622; Nov. 1.
Shears or scissors and the like. A. T. Firth. 1,633,441; June 21.
Shears, Simultaneous intensifier feed for separate. C. L. Huston. 1,616,856; Feb. 8.
Shears, Spring-opened clipping. W. M. Eggers and G. Shears, Spring-opened clipping. W. M. Eggers and G. Shears, Vibrating atter for sheep. M. W. McArdle. 1,644,141; Oct. 4. C. Grunwald. 1,627,558; May 10.
Sheave block, Safety. W. H. McKissick. 1,645,014; Oct. 11. Sheave Dock, Safety. W. H. McKissick. 1,645,014;
Sheave Dlock, Safety. W. H. McKissick. 1,645,014;
Sbeave block, Safety. W. H. McKissick. 1,650,903-1;
Nov. 29.
Sheave tensioning and adjusting device. H. A. Clark. 1,617,668; Feb. 15.
Sheave, Traction. E. L. Rieske. 1,653,062; Dec. 20.
Sheave, Wheel or sprocket. S. J. Bens. 1,634,646;
Sheaves and cables on lift bridges, Method and apparatus for changing math. E. A. Pearson. 1,620,263; Mar. 8.
Sheet-bending machine. Corrugated. C. A. Frick. 1,642,657; Sept. 13.
Sheet-control mechanism. J. R. Blaine. 1,636,404;
Sheet control mechanism. J. R. Blaine. 1,636,404;
Sheet control machine. Corrugated. A. J. Bvers. 1,617,331; Feb. 15.
Sheet-delivering device. A. and E. Kluge. 1,621,547;
Mar. 22. Mar, 22. Sheet delivery, Extension. W. M. Kelly. 1,645,993; Oct. 18. Sheet-delivery mechanism. A. and E. Kluge. 1,621,546; Sheet-delivery mechanism. A. and E. Kiuge. 1,0 Mar. 22. Sheet-drawing apparatus. N. Mambourg. 1,0 Sheet-fastening machines for applying adhesive the sheets, Apparatus for. U. Bischof. 1,0 Oct. 25. 1.641.894: the sheets, Apparatus for. Ü. Bischof. 1,646,783; Oct. 25.
Sheet-feed-control apparatus. A. Broadmeyer. 1,655,604; July 12.
Sheet feeder. W. Belluche. 1,618,624; Feb. 22.
Sheet feeder. H. W. Belluche. 1,618,624; Feb. 22.
L. W. Belluche. 1,618,632; Feb. 22.
L. W. Belluche. 1,618,632; Feb. 22.
Sheet feeder. S. Lipsus. 1,630,707; May 31.
Sheet feeders. Automatic pile-elevating mechanism for. W. M. Kelly. 1,629,874; May 24.
Sheet feeding. H. K. King. 1,653,806; Dec. 27.
Sheet feeding and associating mechanism. A. M. Zucker-Sheet feeding and associating mechanism. R. J. Smith. 1,638,221; Aug. 9.
Sheet-feeding apparatus. A. Broadmeyer. 1,617,893; Feb. 15.
Sheet-feeding apparatus. A. Broadmeyer. 1,632,945; June 21.
Sheet-feeding apparatus. A. Broadmeyer. 1,632,945; June 21.
Sheet-feeding apparatus. A. Broadmeyer. 1,637,019; Neet-feeding apparatus. A. Broadmeyer. 1,631,637; June 7.
Beroadmeyer. 1,631,617; June 7.
Sheet-feeding apparatus. Sheet-retarding means for. A. Broadmeyer. 1,631,637; June 7.
Sheet-feeding apparatus. C. L. Post. 1,629,118; May 17.
Sheet-feeding control means. C. L. Post. 1,629,118; May 17. Sheet-feeding machine. C. E. Christophel. 1,651,444; Mar. 29. Sheet-feeding mechanism. W. M. Kelly. 1,621,788; Sheet-feeding mechanism. W. hr. Action Mar. 22.
Sheet-feeding mechanism. S. H. Plum, 2d, and A. Ackley. 1.624,069; Apr. 12.
Sheet-feeding mechanism. K. Sieg. 1.634,088; June 28.
Sheet-feeding mechanism. K. Sieg. 1.634,088; June 28.
Sheet-feeding mechanism. E. R. Smith, W. R. Rice, and J. R. Jackson. 1.646,117; Oct. 18.

Sheet-feeding mechanism, G. W. Swift, ir. 1.647,819: Nov. 1. Sheet-feeding mechanism. L. R. Tufts. 1,629,444; May 17.
Sheet-feeding mechanism, Feed table for. C. F. Root. 1,627,064; May 3.
Sheet-flowing apparatus, Multiple. F. Fraser. 1,623,051; Section 1. Feb. 1. Sheet glass, Drawing flat. E. T. Ferngren. 1,614,110; Jan. 11.

Sheet-glass-drawing machines, Constant-temperature heater for. W. A. Gibson. 1,641,807; Sept. 6.

Sheet glass, Method and apparatus for annealing and cooling. W. L. Monro. 1,641,896; Sept. 6.

Blair. 1,641,948; Sept. 6.

Blair. 1,641,948; Sept. 6.

Sheet glass, Method of and apparatus for forming. J. C. Blair. 1,641,948; Jept. 6.

Howard. 1,616,841; Feb. 1.

Sheet glass, Procuestion of. N. Franzen. 1,617,800; Feb. 15.

Sheet glass, Production of. N. Franzen. 1,617,800; Feb. 15. Sheet glass, Production of. N. Franzen. 1,617,800; Feb. 15.
Sheet glass, Transport table for rolled. M. Bicheroux. 1,621,064; Mar. 15.
Sheet glass, Transport table for rolled. M. Bicheroux. 1,620,165; Mar. 15.
Sheet glass width-maintaining shield. E. T. Ferngren. 1,639,435; Aug. 23.
Sheet insertee. C. M. Miller. 1,640,132; Aug. 23.
Sheet leaf Reenforced, G. H. Worrall, 1,628,759; May 17.
Sheetlike material, Method and apparatus for rolling. F. C. Bigsert; ir., and L. Johnson. 1,654,235; Dec. 27.
Sheet material, Apparatus for assembling. V. H. Bodle and W. E. Jaquith. 1,649,802; Nov. 22.
Sheet material and producing the same, Colored. T. M. Sheet material, English tester for. M. O. Schur. 1,613,231; Feb. 22.
Sheet material, English tester for. M. O. Schur. 1,613,231; Feb. 22.
Nov. 1.
Sheet material, Feeder for. H. S. Labombarde. 1,634,074; June 28.
Sheet material, Frame for fiexible. E. R. Johnson. Sheet material, Frame for fiexible. E. R. Johnson. Sheet material, Frame for splitting. J. J. Callahan. 1,624,743; Nov. 1.
Sheet material, Frame for cutting or punching. J. R. Oliver. 1,619,482; Mar. 1.
Sheet material, Slitting. T. B. Munroe. 1,629,522; May 24.
Sheet material, Fitting. T. B. Munroe. 1,629,522; Sheet material, Flumphris. 1,650,518; Nov. 22.
Sheet-metal article. E. F. Tobold. 1,645,832; Oct. 18.
Sheet-metal article. E. F. Tobold. 1,645,832; Oct. 18. May 24.
Sheet metal. F. Humphris. 1,650,518; Nov. 22.
Sheet-metal article. E. F. Tobold. 1,645,682; Oct. 18.
Sheet-metal articles, Producing certain. T. E. Murray, jr.
Relf.,691; Aug. 2.
Sheet-metal assembling and working machine. H. Hermanl. 1,620,205; Mar. 8.
Sheet-metal assembling machine. W. Bittner. 1,613,307; Jan. 4.
Sheet-metal. Bracing apparatus for. R. T. Romine.
Jan. 4.
Sheet-metal. Cont. 4.
Sheet-metal conts. Mechine for operating upon. W.
Cameron. 1,639,646; Aug. 23.
Sheet-metal contsiner. F. A. Prahl. 1,632,848; June 21.
Sheet-metal cutter, P. Winter. 1,624,853; Apr. 12.
Sheet-metal cutter, Electric. T. J. Kelleher. 1,651,823; Dec. 6. Sheet-metal-cutting tool. F. J. McFarland. 1,621,798; Mar. 22. Sheet metal, Drawing. O. May. 1,649,841; Nov. 22. Sheet metal, Drawing press for heating and drawing. F. J. Rode. 1,636,111; July 19. Sheet metal, Expanded. H. M. Gersman. 1,621,664; Mar. 22. Sheet metal, Manufacturing. W. E. Ruder. 1,621,380; Mar. 15.

Sheet metal or the like, Feeder for. W. W. Leach. 1,625,085; Apr. 19. Sheet-metal packs. Machine for opening. W. J. Stoop. 1,647,061; Oct. 25. Sheet-metal packing band. J. H. Schlafly. 1,646,982; Oct. 25.
Sheet-metal plates, Joint for. H. N. Wylie and F. M. Green. 1,630,658; May 31.
Sheet-metal resistance units, Assembling. H. E. Campbell. 1,649,809; Nov. 22.
Sheet-metal shears, Portable. T. F. Bannon. 1,651,176; Sheet metal sink construction. J. E. Gloekler. 1,642,853; Sept. 20.
Sept. 20.
Sheet-rubber stock, Wind-up device for. T. P. Little.
1,648,990; Nov. 15.
Sheet metal, Stretching die for. T. Jolstad. 1,622,590; Sheet metal, Stretching die for. T. Joistad. 1,622,590; Mar. 29.
Sheet metal, Welded butt-strap connection for. E. Hoehn. 1,617,114; Feb. 8.
Sheet-metal-working machine. F. J. Rode. 1,617,420; Sheet piler, L. Jones. 1,634,196; June 28. Sheet piling. F. L. Simon. 1,620,137; Mar. 8. Sheet-shearing apparatus. W. M. Blecker. 1,646,989; Oct. 25. Sheet-stacking mechanism. A. Zimnlewicz. 1,643,482; Sheet-stacking mechanism. A. Zimnlewicz. 1,643,482; Sheet straightener. C. A. Dickhaut. 1,634,984; July 5. Sheet straightener. L. Dodds. 1,649,458; Nov. 15. Sheeting machines, Attachment for. J. P. Renz. 1,642,746; Sept. 20. Sheets Structure. E. I. Dodos. 1,689,308; Nov. 1,882,108; Nov. 28. Sheeting machines, Attachment for, J. P. Renz. 1,642,746; Sheetis from sheet bars. Rolling thin or middle. G. Boscarelli. 1,622,177; Mar. 22.
Sheets from webs, Mechanism for cutting. H. M. Barber. 1,630,927; Nov. 29.
Sheets, Making. O. M. Otte. 1,635,151; Aug. 9.
Sheets, Making. O. M. Otte. 1,635,151; Aug. 9.
Sheets, Making. O. M. Otte. 1,651,222; Nov. 29.
Sheets, Method and mechanism for delivering and stacking. M. A. Droitcour. 1,625,642; Apr. 1,9.
Sheets of paper, Apparatus for piling. G. E. Maxner. Shelf. 3, Offenbach. 1,619,307; Mar. 1.
Shelf. Offenbach. 1,619,307; Mar. 1.
Shelf. and rack device. Fortable. T. C. Browne. 1,654,409; Dec. 27.
Shelf, Antproof. F. W. French. 1,625,412; Apr. 19.
Shelf, Library. A. H. Levenc. 1,617,685; Feb. 15.
Shelling for bleaching purposes, Decolorizing, treating, and dissolving. F. C. Rawolle. 1,644,491; Oct. 4.
Shellac-viscosity tester. J. R. McClain. 1,637,386; Aug. 2. Aug. 2. Sheller: See— Corn sheller. Egg sheller. Pea sheller. Seed-corn sheller. Egg sheller.

Shelling and polishing grain and the like, Machine for.

M. Hoff. 1,640,996; Aug. 30.

Shelling machine, Nut. E. H. Powell. 1,653,413;
Dec. 20.

Shells and the like projectiles, Clockwork-operated mesons for A. Yarnud. 1,640,165; Aug. 23.

Shell-shaped no ody for the allowed and the projectiles, Shell-shaped no ody for the allowed and the stresses. H. Debor. 1,644,83; Dec. 27.

Shelving, L. Mayer. 1,664,183; Dec. 27.

Shelving, L. Mayer. 1,664,183; Dec. 27.

Shelving, Chang, P. Boano. 1,641,568; Sept. 6.

Shield, Expansion. J. K. Fisher. 1,639,223; Aug. 16.

Shield, Expansion. C. C. Tomkinson. 1,636,842;

July 26. July 26.
Shield, Expansion, C. C. Tomkinson, 1,651,004; Nov. 29.
Shield. J. Toth. 1,649,996; Nov. 22.
Shield J. Toth. 1,649,996; Nov. 22.
Shield for the protection of valuables during transfer.
R. L. MacDonald. 1,647,572; Nov. 1.
Shield, Smoke. L. B. Clark. 1,627,482; May 3.
Shield, Smoke. L. B. Clark. 1,627,482; May 3.
Shielding and balancing means. W. J. Adams and A. Haddock. 1,624,459; Apr. 12.
Shields, Fastening device for. E. C. Goebert. 1,636,128; Shields, Shoulder-strap holder for arm-pit. A. B. Mahoney. 1,641,004; Aug. 30. Shields, Shutter latch for. H. Holsington. 1,626,827; Shields, Shutter latch for. H. Holsington. 1,626,827; Shields, Shutter latch for. H. Holsington. Sheingis, Sautter fatch for. H. Holsington. 1,626,821; May 3.

Shift lever. A. S. Dutell. 1,628,182; Aug. 9.

Shift, Leven. A. S. Dutell. 1,628,182; Aug. 9.

Shim. J. L. Breder. 1,623,644; C. Or. 19.

Shim. Laminated. L. A. Johnson. 1,638,758; July 12.

Shine stand. C. L. Stoglin. 1,617,507; Feb. 15.

Shingle. F. R. Brydle. 1,614,871; Jan. 18.

Shingle. R. B. Buckley. 1,655,808; Dec. 20.

Shingle. N. P. Harshberger. 1,613,102–3; Jan. 4.

Shingle. M. F. Harshberger. 1,613,102–3; Jan. 4.

Shingle. M. H. Honigbaum. 1,646,963; Oct. 25.

Shingle. J. E. Hooker. 1,637,309; July 26.

Shingle. G. Ritter. 1,643,697; Oct. 18.

Shingle. G. Ritter. 1,640,806; Aug. 30.

Shingle. G. Ritter. 1,640,806; June 28.

Shingle. M. K. Tyra. 1,634,125; June 28.

Shingle and laying the same. G. R. Wyman. 1,635,733; July 12.

Shingle construction. C. O'Dell. Re16,832; Dec. 27. Shingle covering. J. H. Graham. 1,637,522; Aug. 2. Shingle element. H. A. Cumfer. 1,619,599; Mar. 1. Shingle fastening. H. R. Wardenn. 1,629,558; May 24. Shingle, Flexible. W. Freegard. 1,625,608; Apr. 19. Shingle, Flexible. G. Ritter. 1,631,936; June 7. Shingle, Interlocking multiple. I. Davis. 1,627,429; Smingle, Flexible. G. Ritter. 1, 1051, 2007.
Shingle, Flexible. G. Ritter. 1, 1051, 2007.
Shingle, Interlocking multiple. I. Davis. 1,627,429;
Shingle machine. H. Applin. 1,623,612; Apr. 5.
Shingle machine. H. Applin. 1,623,612; Apr. 5.
Shingle, Metallic B. G. Call. 1,648,445; Sept. 27.
Shingle, Grite. B. F. Whiteside. 1,613,302; Jan. 4.
Shingle, Roofing. J. A. McCarthy. 1,648,692; Vov. 8.
Shingle, Strip. L. Busha. 1,629,146; May 10.
Shingle, Strip. L. Busha. 1,629,146; May 17.
Shingle strip. L. A. Cumfer. 1,614,601; Mar. 1.
Shingle strip. L. Busha. 1,629,146; May 17.
Shingle support and cornice-protecting device, Combined. J. E. Richards. 1,627,805; May 10.
Shingles and roofing. F. P. Leonard. 1,630,019; May 24.
Shingles, Cutting strip. A. R. Lukens. 1,614,446;
Jan. 11. Sungles and Stripe A. R. Louveston Jan. 11.

Jan. 11.

Shingles, Device for fastening. J. C. Bergner. 1,613,156;

Jan. 4. Jan. 4.

Shingles, Holding device for, H. and J. Fulenwider, 1.618,077; Feb. 15.

Shingles, Lock butt for asphalt. N. R. Bartlett, 1.634,972; July 5.

Shingles, Method and apparatus for dipping. C. M. Abbott, 1.624,379; Apr. 12.

Abbott, 1.624,379; Apr. 12.

Abbott, 1.624,379; Apr. 12.

Abbott, 1.624,379; Apr. 12.

Shingles and similar building articles, Making. W. H. Graveman, 1.650,709; Nov. 29.

Shingling gauge. F. F. Gregel, 1.645,908; Oct. 18.

Shining machine, Shoe. F. H. Newton, 1.654,049; Dec. 27.

Dec. Sing construction, Passenger.

Ship construction, Passenger.

Ship construction, Passenger.

Ship ct., Distance indicator for. G. Walker. 1,638,971;

Aug. 16.

W. C. Dennis, 1,624,718; Apr. 12.

R. Ringe, Aug. 10.
Ship governor. W. C. Dennis. 1,624,718: Apr. 12.
Ship-propelling plant. G. Bauer and H. Kluge.
1,614,819: Jan. 18.
Ship propulsion. D. B. Jewitt. 1,618,827; Feb. 22.
Ship propulsion. G. O. Watson. 1,618,790; Feb. 22.
Ship signal buoy, Sunken. S. V. Clyde. 1,615,108;
Jan. 18. Stip-ventilator closing and opening mechanism. W Borrow. 1,616,437, Jan. 25, Borrow. 1,616,437, Jan. 25, Shipping box and holder for flowers and the P. Morin and F. D. Lorenz. 1,640,797; Aug. 30. Shipping box, Egg. M. O. Ginsburg. 1,620,641, M. Shipping box for chickens. F. W. Ruebensaal. 1,647, Oct. 25, Oct. 25. Shipping box for chicks, etc., Feeder. K. I. Miller. 1.632,033; June 14. Shipping box for clothing. W. H. Batts. 1,617,365; Feb. 15. Feb. 16.

Shipping box for clothing. W. H. Batts. 1,620,381;
Apr. 26.

Shipping case. J. W. Parks. 1,630,802; May 31.

Shipping case, Folding. J. S. Williamson 1,626,369;

Apr. 26.

Shipping case, Folding pinno
Aucker. 1,642,381; Sopt. 13.

Shipping cases, Assembling fiber. H. R. Bilss. 1,627,311;

May 3. May 3.

Shipping cases, Packing unit for, E. E. Maston. 1,625,620; Apr. 19.

Shipping container. C. A. Agar. 1,613,162; Jan. 4.

Shipping container. W. R. Brown. 1,619,917; Mar. 8.

Shipping deck. Automobile. E. T. Cunningham. 1,644,713; Oct. 11.

Shipping device. R. E. Baus. 1,638,612; Aug. 9.

Shipping device. Automobile. F. J. Nemethy, jr. 1,651,405; Dec. 6.

Shipping goods, Container for. A. C. Scott. 1,827,344; May 3. May 8.

Ships materials, Packing strip for. W. B. Alcorn. 1217,222; May 8.

Shipping nember. C. A. Agar. 1,619,011; Mar. 1.

Shipping package. S. C. Cary. 1,631,516; June 7.

Shipping package. S. C. Cary. 1,631,516; June 7.

Shipping apockage. S. C. Cary. 1,631,516; June 7.

Shipping apockage. S. C. Cary. 1,631,516; June 7.

Shipping apockage. S. C. Cary. 1,631,516; June 7.

Ships, All intake for. C. G. Hawley. 1,612,813; Jan. 4.

Ship's and like propeller shafts and propellers. Preventing the fouling of. F. J. Blade. 1,649,657; Nov. 15.

Ships, Apparatus for raising sunken. W. La Grange. 1,643,247; Sept. 20.

Ships, Device 21,63; Sept. 13.

Ship's hull. P. Bonnemaison. 1,637,677; Aug. 2.

Ship's instrument. G. Walker. 1,638,970; Aug. 16.

Ship's instrument. G. Walker. 1,638,970; Aug. 16.

Ship's laft-saving means for sunken. B. M. Bonilla. 1,625,704; Apr. 19.

Ship's log. R. Star. 1,641,907; Sept. 6.

1,643,051;

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Ships or the like, Disintegrating or cutting to pleces or demolishing wrecked. O. F. A. E. Grumpelt. Ships or the like, Propeller for. J. K. Lowe. 1,631,744; June 7. Ships, Propelling mechanism for. F. Gebers. 1,628,837; May 17. Ships. Rescuing device for sunken. H. S. Wilson. Ships rigging. A. Bentzen. 1,642,716; Sept. 20. Ships rigging. A. Bentzen. 1,642,716; Sept. 20. Ships rigging. A. Bentzen. 1,642,716; Sept. 20. Ships signaling and broadcasting device. E. A. Sperry. 1,638,417; Aug. 9. Shirt. R. G. Dray. 1,631,856; June 7. Shirt. J. H. Lamberton. Des. 72,157; Mar. 8. Shirt. L. M. C. Shen. 1,647,645,899; Jan. 18. Shirt. L. T. and F. W. Wilcox. 1,635,473; July 12. Shirt and shirt pocket. J. H. Cronin. 1,636,858; July 26. Shirt and supporter, Combined. N. Pelton. 1,615,192; Jan. 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shock absorber and equalizer. M. L. Frink. 1,618,703;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shock absorber and rebound check. E. Davls. 1,639,631; 25 G. 36. Shock absorber and snubber combined. C. II. Linu. 1,622,200; Mar. 22. Shock absorber and the like for vehicles. J. B. Hawley, jr. 1,647,518; Nov. I. Shock absorber, Automobile. A. Jenschke. 1,619,422; Mar. 1. Shock absorber for automobiles. S. K. Wellman. 1,631,679; May 31. Shock absorber for automobiles. S. K. Oct. 4. Oct.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shock absorber and rebound check. E. Davis, 1,639,631;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shock absorber for vehicles. S. Shock absorber for vehicles. Oct. 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S. Lewis. 1,620,112; Mar. 8.
es. C. Marcus. 1,644,438;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oct. 4.
Shock-absorber shackle. F. D. Armstrong. 1,635,880;
July 12.
Shock absorber, Snubbing. R. T. Roberson. 1,613,198;
Jan. 4.
Shirt and shirt pocket. J. H. Cronin. 1,636,808; July 26.
Shirt and supporter, Combined. N. Pelton. 1,615,192; Shirt attachment. O. G. I. O'Heir. 1,641,008; Aug. 30.
Shirt board. L. De Doory. Des. 72,355; Apr. 5.
Shirt nets hand and making the same. P. Leichter. 1,620,477; Mar. 8.
Shirt nets hand and making the same. P. Leichter. 1,620,477; Mar. 8.
Shirt netainer. R. J. Johnson. 1,653,288; Dec. 20.
Shirt, Stiff-bosomed. J. W. Krause. 1,617,398; Feb. 15.
Shirt retainer. R. J. Johnson. 1,653,288; Dec. 20.
Shirt, Stiff-bosomed. J. W. Krause. 1,617,398; Feb. 15.
Shirt retainer. R. J. Johnson. 1,653,288; Dec. 20.
Shirt stiff-bosomed. J. W. Krause. 1,617,398; Feb. 15.
Shock absorber. J. B. Adduci. 1,640,340; Aug. 30.
Shock absorber. J. E. Arzens. 1,610,021; Feb. 19.
Shock absorber. J. R. Arzens. 1,610,021; Feb. 19.
Shock absorber. J. P. Baldwin. 1,638,234-26; Aug. 9.
Shock absorber. J. P. Baldwin. 1,638,234-26; Aug. 9.
Shock absorber. J. P. Baldwin. 1,638,234-26; Aug. 9.
Shock absorber. P. M. Beconnier. 1,643,576; Oct. 18.
Shock absorber. P. M. Benonier. 1,643,576; Oct. 18.
Shock absorber. P. Baldwin. 1,620,945; Mar. 15.
Shock absorber. J. S. Burwell. 1,621,579; Mar. 22.
Shock absorber. J. S. Burwell. 1,621,579; Mar. 22.
Shock absorber. J. S. Burwell. 1,621,579; Mar. 22.
Shock absorber. J. Cosentino. 1,643,051; Dec. 6.
Shock absorber. J. Cosentino. 1,643,051; Dec. 6.
Shock absorber. J. Cosentino. 1,643,051; Dec. 6.
Shock absorber. J. Cosentino. 1,643,543; Dec. 6.
Shock absorber. A. G. Dalin. 1,644,647; Nov. 15.
Shock absorber. N. S. Bruwell. 1,621,579; Mar. 22.
Shock absorber. J. Cosentino. 1,643,543; Dec. 6.
Shock absorber. M. Edgarton. 1,633,679; Jan. 24.
Shock absorber. N. S. Gott. 1,618,312; Dec. 6.
Shock absorber. N. S. Focht. 1,617,752; Feb. 15.
Shock absorber. N. S. Focht. 1,617,752; Feb. 15.
Shock absorber. N. S. Focht. 1,617,752; Feb. 16.
Shock absorber. N. S. Focht. 1,618,328; Mar. 22.
Shock absorber. N. S. Focht. 1,618,328; Mar. 22.
Shock absorber. N. S. Focht. 1,618,328; Mar. 22.
Shock absorber. N. S. Foc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shock absorber, Vehicle. F. L. O. Wadsworth. 1,622,553;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shock absorber, M. Nov. 29.
Shock absorbers and the like, Demonstrating device for.
H. R. Stuart. 1,627,125; May 3.
Shock absorbers, Device for determining pressure in vehicle. C. Pintacuda and U. Frilli. 1,623,009; Apr. 5.
Shock-absorbers, Device for A. A. Anglada. 1,445,507; A. A. Anglada. 1,445,507; A. A. Anglada. 1,445,507; A. A. Anglada.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shock absorber, Wire-jerk-line. F. Redick. 1,651,069;
Nov. 29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      vehicle. C. Pintacuda and U. Frilli. 1,623,669; Apr. 5. Shock-absorbing device. J. A. Anglada. 1,643,597; Sept. 27. Shock-absorbing device. B. F. Shleids, C. G. Crombie, and G. A. Windell. 1,625,570; Apr. 19. Shock-absorbing device, Rod-rotating and. J. P. Ratigan. 1,649,078; Nov. 15. Shock-absorbing means. W. G. Mayer. 1,653,580; Dec. 20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shock-absorbing means, F. J. Stolpe. 1.634.522; July 5. Shock-absorbing means, Friction. G. A. Johnson. 1.648,274; Nov. 8. Shock-absorbing mechanism. W. Blackmore. 1.643,051;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shock-absorbing mechanism, Sept. 20.
Shock-absorbing mechanism.
Dec. 27.
Shock-absorbing mechanism.
Be. Haseltine.
Mar. 16.
Shock-absorbing mechanism.
Be. Haseltine.
Shock-absorbing mechanism.
H. B. Madder.
1,643,053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sept. 20.
Shock-absorbing mechanism. P. S. Morgan. 1,616,540;
    Shock absorber.
May 24.
Shock absorber.
1,640,894; Aug.
Shock absorber.
Shock absorber.
1,640,894; Aug.
Shock absorber.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Feb. 8.
Shock-absorbing mechanism. J. F. O'Connor. 1,631,147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        June 7. Shock-absorbing mechanism. J. F. O'Connor. 1,640,209; Aug. 23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shock-absorbing mechanism. J. F. O'Connor. 1,648,319;
Nov. 8.
Shock-absorbing mechanism. E. H. Schmidt. 1,643,052;
Sept. 20.
Shock-absorbing mechanism. A. P. Withall. 1,627,367;
May 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 O. G. Halliburton. 1,641,268; Sept. 6
J. A. Harding. 1,613,098; Jan. 4.
H. Herbert and J. A. Lambert.
                                                                                                                                     g. 30.

E. J. Kolodziej. 1,651,895; Dec. 6.
H. E. Krammer. 1,653,361; Dec. 20.
F. J. Laher. 1,640,785; Aug. 30.
F. F. Landis. 1,631,039; May 31.
E. L. Leinbach. 1,636,005; July 19.
J. Levesque. 1,628,503; May 10.
H. H. Logan 1,624,265; Apr. 12,5.
L. L. Lomar. 1,633,234; July 12.
G. C. Martin. 1,633,234; July 12.
G. C. Martin. 1,633,248; Apr. 5.
W. P. Martin and L. Mikile. 1,618,940;
         Shock absorber.
Shock absorber.
Shock absorber.
Shock absorber.
Shock absorber.
                    bock absorbe
           Shock absorber.
         Shock 22.
Feb. 22.
Shock absorber.
Shock absorber.
                                                                                                                                       F. C. Mock. 1,650,087; Nov. 22.
T. Morinelli. Rel6,582; Apr. 5.
P. Festourie. 1,623,755; May 3.
A. Ratter. 1,619,085; Mar. 1.
D. C. Rodgers. 1,682,715; June 14.
A. J. Root. 1,631,222; June 7.
J. V. Rowan. 1,680,742; Nov. 29.
F. A. Ruff. 1,650,275; May 31.
E. Ryder. 1,015,916; Feb. 1.
B. Scott. 1,015,916; Feb. 1.
B. Scott. 1,015,916; Feb. 1.
B. Shultz and A. B. Casper. y 10.
           Shock absorber.
Shock absorber.
Shock absorber.
           Shock absorber.
Shock absorber.
Shock absorber.
Shock absorber.
      Shock absorber. F. A. Shock absorber. E. A. Shock absorber. B. E. Shock absorber. B. Shock absorber. A. 1.627.819. May 10. Shock absorber. A. 1.627.811; May 17. Shock absorber. J. S. Shock absorber. J. S. Shock absorber. J. S. Shock absorber. G. A. Shock absorber. W. Shock absorber. Shock absorber. W. Shock absorber. Shock abso
                                                                                                                                       7 10.
A. B. Shultz and A. B. Casper. 7 17.
J. Sidney. 1,648,201; Nov. 8.
J. A. Sřevens. 1,633,317; Dec. 20.
C. A. Sitchey. 1,642,902; Sept. 20.
H. R. Stuarr. 1,645,854-5; Feb. 1.
W. Stuarr. 1,645,854-5; Feb. 1.
S. K. Wellman. 1,643,047-8; May 31.
L. H. Wheeler. 1,653,682; Dec. 27.
T. H. Williams. 1,630,915; May 31.
L. W. Wood. 1,641,623; Feb. 8.
G. F. Yevseyeff. 1,641,217; Sept. 6.
O. Youse. 1,650,663 Nov. 29.
Alf-storing. E. Landon. 1,636,915;
Alf-storing. E. Landon. 1,636,915;
           Shock absorber.
Shock absorber.
         Shock absorber,
Shock absorber,
Shock absorber,
Shock absorber,
Shock absorber,
Shock absorber,
                                                       absorber and buffer. W. Barber. 1,646,518; Oct.
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Shock-absorbing mechanism, Friction.

1,631,149; June 7.
Shock-absorbing mechanism, Friction.
1,632,034-4; June 21.
Shock-absorbing mechanism, Friction.
1,633,033-4; June 21.
Shock-absorbing mechanism, Friction.
1,634,032-4; June 21.
Shock-absorbing mechanism, Friction.
1,640,066; Aug. 23.
Shock-absorbing mechanism, Friction.
1,640,266; Aug. 23.
Shock-absorbing mechanism, Friction.
1,640,21-2; Aug. 30.
Shock-absorbing mechanism, Friction.
1,640,21-2; Aug. 30.
Shock-absorbing mechanism, Friction.
1,648,312; Nov. 23.
Shock-absorbing mechanism, Friction.
1,648,312; Nov. 12.
Shock-absorbing mechanism, Friction.
1,630,379-81; Nov. 22.
Shock-absorbing mechanism, Friction.
1,648,312; Nov. 12.
Shock-absorbing mechanism, Friction.
1,630,379-81; Nov. 22.
Shock-absorbing mechanism, Friction.
1,630,379-81; Nov. 22.
Shock-absorbing mechanism, Friction.
1,630,379-81; Nov. 22.
Shock-absorbing mechanism, Friction.
1,649,078; Mar. 1.
Shock-absorbing mechanism, Friction.
1,649,078; Mar. 1.
Shock-absorbing mechanism, Friction.
1,640,066; Aug. 23.
Shock-absorbing mechanism, Friction.
1,640,067; Aug. 23.
Shock-absorbing mechanism, Friction.
1,648,312; Nov. 12.
Shock-absorbing mechanism, Friction.
1,648,312; Nov. 23.
Shock-absorbing mechanism, Fricti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shoe-bottom construction. L. H. Gilson. 1,639,769:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aug. 23.
Shoe-bottom-filling machine, N. J. Westhaver. 1,626,571;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shoe-bottom-illing matches. Apr. 26.
Shoe bottoms, Machine for operating on. E. E. Winkley. 1,645,566; Oct. 18.
Shoe, Box-toe. J. J. Daly. 1,630,788; May 31.
Shoe brake. C. Waseige. 1,633,380; Aug. 9.
Shoe, Child's. T. W. Brockel and P. F. Ebling. 1,632,430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shoe, Child's. T. W. Brockel and P. F. Euling. 1,000,200. June 14.

Shoe closure attachment. E. G. Marinetti. 1,648,651; Nov. 8.

Shoe construction. E. J. Ramsey. 1,614,933; Jan. 18. Shoe construction. E. J. Ramsey. 1,614,933; Jan. 18. Shoe construction. E. J. Ramsey. 1,614,935; July 26. Shoe-display form. W. L. C. Niles. 1,628,734; May 17. Shoe-display stand. B. H. Harris. 1,639,290; Aug. 16. Shoe, Feather-trimmed. E. Véran. Des. 73,808-9; Nov. 8. Shoe-fitting device. R. P. Morse. 1,644,015; Oct. 4. Shoe for rheumatism. L. M. de Sufrez. 1,616,254; Ph.). 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shoe display stand. R. H. Harris. 1,639,200; Aug. 16.
Shoe, Fenther-trimmed. E. Véran. Des. 73,808-9; Nov. 8.
Shoe-fitting device. R. P. Morse. 1,644,075; Oct. 4.
Shoe-fitting device. R. P. Morse. 1,644,075; Oct. 4.
Shoe for rheumatism. L. M. de Suárez. 1,616,254; Feb. 1.
Shoe form, Expansible. W. J. De Witt. 1,646,016; Shoe form, Hollow. W. J. De Witt. 1,632,054-5; June 21.
Shoe form. W. J. De Witt. 1,632,054-5; June 21.
Shoe form. Hollow. W. J. De Witt. 1,032,053; June 21.
Shoe form. Hollow. W. J. De Witt. 1,032,053; June 21.
Shoe heel. A. Bono. 1,619,458; Mar. 1.
Shoe heel. W. H. Nutt. Des. 73,007; Jul. 20.
Shoe, High. A. Shoe Hollow. J. J. Shoe heel. W. H. Shoe Hollow. J. J. Shoe heels. F. I. Gross. 1,645,191; Dec. 11.
Shoe heels. A. Horris. J. J. J. Shoe heels. A. Mirriction device for. S. Buchsbaum. 1,640,593; Aug. 30.
Shoe, High. A. Niemi. 1,618,818; Feb. S.
Shoeborn, Collapsible. R. E. Lunday. 1,645,695; Oct. 18.
Shoe lace. C. T. E. Gould. 1,625,204; Apr. 19.
Shoe lace. C. H. Gunn. 1,649,027; Nov. 15.
Shoe-lace fastener. A. M. Berger. 1,646,849; Oct. 25.
Shoe-lace fastener. S. R. Shetzline, jr., and E. A. Dodelin. 1,621,282; Mar. 1,8
Shoe last. P. Borda. 1,626,071; Apr. 26.
Shoe last. C. H. Brown. 1,642,744; Sept. 20.
Shoe last. C. H. Brown. 1,642,744; Sept. 20.
Shoe last. J. K. Northrup. 1,645,744; Sept. 20.
Shoe last. J. K. Northrup. 1,645,744; Sept. 20.
Shoe last. J. K. Northrup. 1,643,841; Aug. 9.
Shoe inst. J. K. Northrup. 1,643,841; Aug. 9.
Shoe machine. L. E. Topham. 1,616,712-13; Feb. 8.
Shoe machine. L. 
   Shock-absorbing seat support. J. X. Turner. 1,629,939; May 24. Shock-absorbing wheel. I. M. Laddon. 1,619,078; Mar. 1. Shock eliminator and spring control. H. H. Hill: 1,626,377; Sept. 13. L642,547 Sept. 14. L642,547 Sept.
Shoe. A. E. Falor and F.
Shoe. A. E. Falor and F.
July 26.
Shoe. F. Grubs. 1,652,354; Dec. 13.
Shoe. F. Hermann. 1,623,007; Mar. 29.
Shoe. F. Hermann. 1,623,007; Mar. 29.
Shoe. G. F. Johnson. 1,638,339; Aug. 9.
Shoe. L. B. Joseph. 1,643,851; Sept. 27.
Shoe. L. S. Macdonald and J. E. Small. 1,635,852;
   July 12.

Shoe F. H. Martin 1,642,737; Sept. 20.

Shoe R. E. McKibben 1,620,612; Mar. 8.

Shoe W. Nelmeier and T. Schult 1,647,807; Nov. 1.

Shoe M. Siegel. Des. 72,685; May 17.

Shoe M. Siegel. Des. 72,685; May 17.

Shoe M. Siegel. Des. 72,685; May 18.

Shoe F. G. Tauber. Des. 73,460; Sept. 13.

Shoe F. Torio. 1,629,325; May 17.

Shoe J. M. Wilke, Sr. 1,640,633, 413; June 21.

Shoe J. M. Wilke, Sr. 1,640,633,413; June 21.

Shoe and arch support therefor, Corrective. O. H.

Starner. 1,618,684; Feb. 22.

McLaughlin. 1,648,907; Nov. 15.

Shoe and making same. T. J. Butler. 1,615,786; Jan. 25.

Shoe and making same. T. J. Butler. 1,615,786; Jan. 25.

Shoe and making same. T. J. Cristellini 1,631,910;

Aug. 2. Teampfacture C. O. Cristellini 1,631,910;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shept. 6. Muscente. Shepting. F. A. Muscente. 1640,655 Aug. 30.
Shoe, Orthopedic. J. McDonough 1,649,173; Nov. 15.
Shoe overall. T. Arnsberg. 1,620,936; Mar. 15.
Shoe, Physical-development. A. L. Gordon. 1,637,565; Aug. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shoe, Physical-development. A. L. Gordon. 1,634,006; Aug. 2. Shoe-polishing machine: J. L. Thompson. 1,623,218; Apr. 5. Shoe protector. J. A. Reecc. 1,616,281; Feb. 1. Shoe rack. C. S. Angers. 1,642,712; Sept. 20. Shoe rack. I. B. Hooper. 1,623,244, Apr. 5. Shoe rack. I. B. Hooper. 1,623,244, Apr. 5. Shoe-racking-platform device. C. Liberman. 1,630,101; May 24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shoe-traising plactors. May 24.
Shoe-repair stand. E. F. Eichenberger. 1,628,130;
May 10.
Shoe, Reversible bearing. H. K. Wolfe. 1,616,479;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shoe-repair stand. E. F. Eichenberger. 1,628,130; May 10.
Shoe, Reversible bearing. H. K. Wolfe. 1,616,479; Feb. R. Shoe-shank. M. Cherney. 1,651,184; Nov. 29.
Shoe-shank. M. Cherney. 1,651,184; Nov. 29.
Shoe-shank M. Cherney. 1,651,184; Nov. 29.
Shoe-shank stiffener. J. F. Marshall. 1,613,401; Jan. 4.
Shoe-shank stiffener and making the same. R. E. Bartels. 1,638,137; Aug. 9.
Shoe-shanping machine. N. L. Gulliford. 1,641,968; Shoe-shining machine. S. W. Croy. 1,648,578; Nov. 8.
Shoe-shining machine. S. W. Croy. 1,648,578; Nov. 8.
Shoe-shining stands, Adjustable foot rest for. M. Shear. 1,636,341; June 12.
Shoe-shining stands, Adjustable foot rest for. M. Shear. 1,636,341; June 12.
Shoe-shining stands. Foot rest for. R. J. Jauch. 1,622,382; Mar. 29.
Shoe-shin Des. 72,474; Apr. 19.
Shoe sole. E. Calvin. Des. 72,474; Apr. 19.
Shoe sole. J. E. Grosfenn. Des. 72,208; Mar. 15.
Shoe sole. J. E. Grosfenn. Des. 72,208; Mar. 15.
Shoe-sole construction. G. W. Blair. 1,650,817; Nov. 29.
Shoe-sole drier. L. H. Dastis. 1,638,592; Aug. 16.
                                           Aug.
           Shoe and manufacture. C. O. Cristallini. 1,631,919;
June 7.
       June 7.

Shoe and manufacturing the same. A. R. Leshin. 1,623,350; Apr. 5.

Shoe and method for use in the manufacture thereof. J. H. Richardson. 1,618,729; Feb. 22.

Shoe and method of manufacture. L. L. Comeau. 1,634,397; July 5.

Shoe and commenting same, Ornamental. C. Wolfelt. Shoe and slipper lasting machine. E. Tweedale and J. H. Nelson. 1,622,929; Mar. 29.

Shoe and stocking protector. F. A. Colburn. 1,640,334: Aug. 23.
       Aug. 23.

Shoe and welt therefor, Welted. A. Dvilnsky. 1,632.768; June. 14.

June. 14.

June. 14.

June. 14.

June. 14.

June. 16.

June. 16.
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Shoe sole, Metal dancing. W. J. Haney. 1,636,909; July 26. Shoe sole, Pneumatic. G. Manelas. 1,639,381; Aug. 16. Shoe-sole presses, Band press for. C. L. Huntoon. 1,634,969; July 5. Shoe soles, Apparatus for locating shank stiffeners in. Shoe soles, Machine for. G. A. Holmes. 1,625,026; Apr. 19. Shoe soles, Machine for. G. A. Holmes. 1,625,026; Apr. 19. Shoe soles, Machine for operating upon. M. F. Brogan. 1,638,720; Aug. 23. Shoe, Sporting. L. Deschamps. 1,634,611; July 5. Shoe, Sporting. L. Deschamps. 1,634,611; July 5. Shoe stiffener. A. L. Clapp. 1,617,376; Feb. 15. Shoe stiffeners, Augustaling. J. J. Daly. 1,613,314; Jan. 4. Jan. 4. oe stiffeners, Manufacturing. F. Ricks. Jan. 4.
Shoe stiffeners, Manufacturing. F. Mar. 15.
Mar. 15.
Shoe stretcher. A. J. Quist and B. A. Mellander.
1.637,915; Aug. 2.
Shoe-string fastener. P. A. De Haan. 1,629.684; May 24.
Shoe support and stretcher. S. J. Campbell. 1,646,137; Oct. 18.
Bhoe-supporting-jack mechanism. L. E. Topham. Shoe support and stretcher. S. J. Campbell. 1,646,137; Oct. 18.

Baoe-supporting-jack mechanism. L. E. Toham. 1,616,718; Feb. 8.

Feinauer. 1,633,169; June 21.

Shoe, Swimming. J. Noesske. 1,636,316; July 19.

Shoe, Swimming. J. Timmer. 1,626,176; Apr. 26.

Shoe, Swimming. J. Zimmer. 1,626,176; Apr. 26.

Shoe, Swimming. J. Zimmer. 1,626,176; Apr. 26.

Shoe, Swimming. J. Zimmer. 1,627,521; May 3.

Shoe tempering machine. D. B. Heath. 1,619,724; Mar. 1.

Shoe tip. E. Frank. 1,651,345; Nov. 29.

Shoe-tip. E. Frank. 1,651,345; Nov. 29.

Shoe-tree. J. F. Jonas. 1,638,263; Aug. 9.

Shoe-tree. S. Battilani. 1,631,765; June 7.

Shoe-tree. S. Battilani. 1,631,765; June 7.

Shoe-tree. C. A. Elmstrom. 1,651,329; Nov. 29.

Shoe-tree. A. Scimonelli. 1,651,001; Nov. 29.

Shoe-tree. J. L. Sommer and B. Biehl, sr. 1,641,935; Sept. 6. Shoe-tree. J. L. Sommer and B. Biehl, sr. 1,641,935; Sept. 6. Shoe, Turn. A. P. Wilder and A. P. Fay. 1,615,496; Jan. 25. Snoe, Turn. A. P. Wilder and A. P. Fay. 1,615,496; Jan. 23.
Shoe-upper sections, Method of and apparatus for markStochastic States of the St July 19.

1621,519; Mar. 22.

1621,519; Mar. 22.

1624,525; Nov. 1.

1632,625; Nov. 1.

1632,634; Dec. 6.

1632,634; Dec. 6.

1632,634; Aug. 16.

1632,634; Aug. 16. Shoes, Custom lift for, J. B. Righter. 1,650,466; Nov. 22. Shoes, Foot bearing for, W. H. Nickerson. 1,634,116; June 28. Shoes, Heel for, L. Lazzarri and D. Saudino. 1,631,741; June 7. Subsections J. H. Pope. 1,631,155; June 7.
Shoes, Last for making. S. J. Allen. 1,634,515; July 5.
Shoes, Lasting. B. Jorgensen. 1,653,290; Dec. 20.
Shoes, Machine for leveling. B. P. Cooper. 1,615,869; Feb. 1,
Shoes, Machine for operating on. S. P. Lovell. Shees, Machine for leveling. B. P. Cooper. 1,615,869; Feb. 1.
She Shees, Machine for operating on. S. P. Lovell. Shees, Machine for use in lasting. B. Jorgensen. 1,635,2627; July 12.
Shees, Machine for use in lasting. B. Jorgensen. 1,632,239; Dec. 20.
Shees, Making. C. C. Blake. 1,632,944; June 21.
Shees, Making. G. M. R. Brogan. 1,639,721; Aug. 23.
Shees, Making. G. M. Ray. 1,641,725; Sept. 65.
Shees, Making. G. M. Ray. 1,641,725; Sept. 65.
Shees, Making. G. M. E. Topham. 1,646,434; Oct. 25.
Shees, Making welt. C. A. Morln. 1,617,132; Feb. S.
Shees, Manufacture of. H. D. Hamilton. 1,620,018; Mar. 8.
Shees, Manufacture of. J. J. Mahler and H. D. Webb.
Shees, Manufacture of. G. E. Warren. 1,649,272; Nov. 15.
Shees, Manufacture of. E. E. Winkley and H. A. Davenport. 1,644,971; Oct. 11.
Shees, Manufacture of. E. E. W. Dunbar and H. Shees, Manufacture of the Shees, Manufacture of the Shees, Manufacture of the Shees, Manufacture of the Shees, Machine Shees, Manufacture of the Shees, Machine Shees, Manufacture of the Shees, Machine Shees, Machine

Shoes of shoe skates, Cover for. N. J. Matthews. 1,649,840; Nov. 22.
St. 1,649,840; Nov. 22.
St. 1,649,840; Nov. 22.
St. 1,649,841; July 12.
Shoes, Ornamentation for. F. A. Ballou and R. T. Stafford. 1,650,104; Aug. 23.
Shoes, Ornamentation for. F. A. Ballou and R. T. Stafford. 1,650,104; Aug. 28.
Shoes, Roussle for. E. R. Connelly. 1,636,044; July 19.
Shoes, Removable half sole for. A. S. Sinko. 1,627,465;
Shoes, Resiltent material for soling and heeling. C. Emanuele. 1,642,247; Sept. 20.
Shoes, Shank stiffener for. G. A. Hurley. 1,624,001;
Apr. 12.
Shoes, Shank stiffener for. J. F. Jonas. 1,637,943;
Shoes, Stangbling and attaching bindings to tops for. J. Wood. 1,651,745; Dec. 6.
Shoes, Stand for supporting. B. B. Bodden. 1,618,264; Feb. 22. Shoes, Stand for supporting. B. B. Bouch. I, 10.1, 202; Feb. 22.
Shock-storing machine. J. N. Bratton and W. N. Bryant. Shooting device, Seif-defense. M. Hofmann. 1,618,976. Mar. 1.
Shooting device, Seif-defense. M. Hofmann. 1,618,976. Mar. 1.
Shooting strips, Attaching. W. Leriche. 1,636,098; July 19.
Shopping bag. C. H. Worth. 1,618,914; Feb. 22.
Shopping bag. C. H. Worth. 1,618,417; Nov. 8.
Shopping bag. C. H. Worth. 1,618,617; Nov. 8.
Shore, Adjustable. C. H. Markham. 1,631,610; Dec. d. Shoring device. E. J. Langham. 1,639,516; Aug. 16.
Short circuiter. E. P. Larsh. 1,640,900; Jug. 30.
Short-circuiting device. P. M. Hengstenberg. 1,642,070; Sept. 13.
Shot-circuiting device. W. J. Krause. 1,630,491; May 31. Short-circuiting device W. J. Krause. 1,630,491;
Short-treuiting device W. J. Krause. 1,630,491;
Short-wave radiation into space, Arrangement for improving. A. Bsau. 1,647,283; Nov. 1.
Short waves, Frequency changer for, M. Osnos. 1,624,065; Apr. 12.
Shottening mixer. P. D. Merrill. 1,615,308; Jan. 25.
Shot-firing device, Electric. A. J. Marshall. 1,644,843;
Oct. 1.
Shotting sighting attachment for. A. MacNaughton. 1,612,877; Jan. 4.
Shotting and Sighting attachment for. A. MacNaughton. 1,612,877; Jan. 4.
Shoulder pad. G. A. Rick. 1,631,994; June 7.
Shoulder strap. J. M. Van Heusen. 1,650,916; Nov. 25.
Shoulder strap. J. M. Van Heusen. 1,650,916; Nov. 25.
Shoulder-strap fastener. M. M. Maider. 1,620,372; Mar. 8. Shoulder-strap retainer. J. McOrin. 1,648,776; Nov. 8. Shoulder-strap retainer. C. B. Warren. 1,631,444; Shoulder-strap retainer. J. McOrin. 1,648,776; Nov. 8. Shouldering attachment. C. B. Warreu. 1,631,444; June 7. Snovel; Sco—Ash-sifting shovel. Meelanical shovel. Steam shovel. Meelanical shovel. Steam shovel. Power shovel. H. H. Miller. 1,645,656; Oct. 18. Shovel. H. H. Miller. 1,645,656; Oct. 18. Shovel and making the same. M. Hokanson. 1,614,956; Jan. 18. Shovel, H. H. Miller. 1,945,656; Oct. 18.
Shovel and making the same. M. Hokanson. 1,614,956;
Jan. 18.
Shovel handrip. M. Hokanson. 1,648,985; Nov. 8.
Shovel handrip. M. L. Bassett. 1,648,714; Nov. 8.
Shovel handrip. M. L. Bassett. 1,648,714; Nov. 8.
Shovel of crane. C. B. Sollinger. 1,652,976; Dec. 6.
Shovel of crane. C. B. Zollinger. 1,652,974; Dec. 20.
Shoveling machine. A. T. Kennedy. 1,615,284; Jan. 25.
Shoveling machine. A. T. Kennedy. 1,615,284; Jan. 25.
Shoveling machine. A. Milligan. 1,616,273; Feb. 1.
Shovels, Machine for making. J. M. Denning. 1,615,326;
Shovels, Making. A. Milligan. 1,616,273; Feb. 1.
Shovels, Making. A. Milligan. 1,616,273; Feb. 1.
Shovels, Method and apparatus for testing. J. W.
Browning. 1,622,871; Mar. 29.
Show case. C. J. Abeln. 1,639,875; Aug. 23.
Show case. F. Davis, 1,622,771; Mar. 29.
Show case, J. Williams. 1,634,732; July 5.
Show case, J. Williams. 1,634,732; July 5.
Show case, J. Williams. 1,634,732; July 6.
Show-case lock. H. G. Michaelson. 1,642,685; Sept. 20.
Shower baths, Inclosure for. M. J. Tracy. 1,622,983;
Mar. 29.
Thredded wheat biscuit, Marking. G. M. Anderson: Mar. 29.
Showers, Producing luminous. H. Guérard. 1,658,701;
Dec. 27.
Shredded wheat biscult. Marking. G. M. Anderson;
1,621,863; Mar. 22.
Shredded, Cornstalk. T. E. Burner. 1,639,837; Aug. 23.
1,643,341; Nov. 8.
Shredding machine. A. R. Adamson. 1,629,1318; May 17.
Shrimp-shelling machine. F. C. Bucknam. 1,627,479;
May 3.
Shrinking and felting felt articles, Method of and apparatus for. H. A. Genest. 1,620,937; Mar. 15.
Shufflebaard construction. M. J. Sherry. 1,636,535;
July 19. July 19. Shunt. C. G. Brown. 1.617.145; Feb. 8. Shunt, Instrument. W. A. Atwood. 1.614.174; Jan. 11. Shut-off, Automatic. V. A. Burrows. 1.653,983; Dec. 27.

940 Shut-off, Automatic. J. A. Lockhart. 1,640,947; Aug. 30.
Shutter-controlling-mechanism, Swell. J. T. Austin.
1,639,324; Aug. 16.
Shutter, Focal-plane. O. Barnack. 1,652,553; Dec. 13.
Shutter for measuring-machine charts. G. C. Hosch.
1,619,935; Mart. 8.
13,674; Nov. 15,971; Combined. E. J. Sibley. Des.
73,874; Nov. 15,971; Combined. E. J. Sibley. Des.
Shutter opening and closing device. J. C. Poetz.
1,635,008; July 5.
Shutter operating device. C. H. Veeder. 1,645,673;
UCCL 18. Oct. 18.
Shutter-operating means. W. A. Collins. 1,640,233;
Aug. 23.
Shutter-operating means. W. A. Collins. 1,640,233;
Aug. 23.
Shutter or door. H. M. Vetterlein. 1,636,200; July 19.
Shutter, Radiator. W. A. Allen. 1,615,781; Jan. 25.
Shutter, Radiator. W. A. Allen. 1,615,781; Jan. 25.
Shutter sleenes holder. L. Page. 1,633,1345; June 21.
Shutter slleneer. J. L. Wheeler. 1,616,244; Feb. 1.
Shutter window. L. Kocher. 1,638,344; Aug. 9.
Shutters, Safety catch for. C. Bornmann. 1,637,513;
Aug. 2. Shutters, Safety catch for, C. Bornmann, 1,637,513; Aug. 2. Shutting-off device and valve. O. Roschanek, 1,649,735; Nov. 15. Shuttle, B. N. Allen, 1,643,360; Sept. 27. Shuttle, L. Pavia, 1,630,355; May 31. Shuttle, P. L. Spencer, 1,624,516; Apr. 12. Shuttle, P. L. Spencer and W. H. Wilson, 1,636,841; July 26. Shuttle block, F. H. Stetson, 1,621,439; Mar. 15. July 26.

Shuttle block. F. H. Stetson. 1,621,439; Mar. 15.
Shuttle-eye guide plate. I. Snow. 1,635,728; July 12.
Shuttle-feeler thread parter and clamp. F. W. Mathis. 1,626,564; Apr. 26.
Sl. 262,032; Mar. 15.
Shuttle-locking and releasing control. A. Gaulard. 1,649,302; Nov. 15.
Shuttle locking and releasing control. A. Gaulard. 1,649,302; Nov. 15.
Shuttle povided with a hand or automatic threading device. C. Bourgeois. 1,621,101; Mar. 15.
Shuttle, Self-incading. H. Poiler. 1,638,505; Aug. 9.
Shuttle, Jan. 25.
Shuttle resion. G. Renhe. 1,601,141. Jan. 20.
Shuttle tension. G. Brahs. 1,631,305; June 7.
Shuttle-tension device. F. Renzo. 1,647,542; Nov. 1.
Shuttle-tension device. A. Templeton. 1,637,359; Aug. 2. Aug. 2. Shuttle-throwing device. C. C. Farwell. 1,641,882; Shuttle: Incoving detactions and J. D. Clarke. 1,618,569; Feb. 22.
Shuttle tip. E. E. Royal. 1,620,234; Mar. 8.
Shuttles, Tension device for. H. A. Davol. 1,654,115; Dec. 27. Shuttles, Thread guide for. I. Snow. 1,613,487; Jan. 4. Shuttles, Threading device for. A. Bernier. 1,627,308; Side-slip feeler controlled by box motion, W. H. Oberfield, 1,651,109; Nov. 29.
Sidewalk elevator, Counterweighted, A. J. Rosell, 1.628,556; May 10.
Sleve, Rotary, A. J. Paynter, 1,633,126; June 21.
Sifter, Flour, A. Di Larenzo, 1,617,797; Feb. 15.
Sifter, Flour, F. Lauterbur, 1,612,976; Jan. 4.
Sifter, Flour, F. L. Leonard and F. J. Connor, 1,630,353; May 31.
Sifter, Flour, T. O. Nall and E. J. Beauvals, 1,631,105; May 31. Sifter, Flour. T. O. Nall and E. J. Beauvals. 1,631,105; May 31.
Sifter-top can. J. M. Hothersall. 1,649,230; Nov. 15.
Sifting device. W. Elmenthaler. 1,646,757; Oct. 25.
Sifting device. W. Elmenthaler. 1,646,757; Oct. 25.
Sifting device. J. B. Henderson. 1,628,776; May 17.
Sign. H. F. Anderson. 1,616,163; Feb. 1.
Sign. H. F. Anderson. 1,616,163; Feb. 1.
Sign. H. C. Bloomingdale. 1,653,033; Dec. 20.
Sign. W. A. Furns. 1,611,189; Mar. 1.
Sign. P. D. Egan. 1,637,988; Mar. 2.
Sign. P. D. Egan. 1,637,988; Aug. 2.
Sign. A. C. Elphinstone. 1,629,689; Aug. 23.
Sign. C. E. Fayle. 1,623,685; Apr. 5.
Sign. D. M. Goetschius. 1,654,370; Dec. 27.
Sign. J. B. Grob. 1,642,022; Sept. 13.
Sign. A. H. H. Humphrey. 1,627,437; May. 15.
Sign. A. H. H. H. H. G. L. G. S. Sign. M. R. Lenly. 1,652,207; Dec. 13.
Sign. M. R. Lenly. 1,652,207; Dec. 149.
Sign. M. R. Lenly. 1,652,207; Dec. 149.
Sign. J. L. H. Humphrey. 1,627,437; May. 3.
Sign. M. R. Lenly. 1,652,207; Dec. 149.
Sign. J. L. R. Long. 1,637,579; Aug. 2.

Sign. H. G. Russell. Des. 74,123; Dec. 20
Sign. E. Sharp, ir. 1,629,229; May 17.
Sign. W. H. Smith. 1,637,626; Aug. 2.
Sign. R. A. Thompson. 1,649,268; Nov. 15.
Sign. W. H. Smith. 1,637,626; Aug. 2.
Sign. R. A. Thompson. 1,649,268; Nov. 15.
Sign. W. H. Winchurgh. 1,651,429; Dec. 6.
Sign. H. H. Winchurgh. 1,651,429; Dec. 6.
Sign. Advertising. H. E. Boillon. 1,641,914; Sept. 6.
Sign. Advertising. H. E. Boillon. 1,641,914; Sept. 6.
Sign. Advertising. S. A. Gill. Des. 72,148; Mar. 8.
Sign. Advertising. S. A. Gill. Des. 72,148; Mar. 8.
Sign. Advertising. S. A. Gill. Des. 72,148; Mar. 8.
Sign. Advertising. S. J. Sieber. 1,645,500; Oct. 25.
Sign and its manufacture, Perforated illuminated. H.
Collaboration of the same, Display. S. Cornett. 1,634,174; June 28.
Sign. Bich: etter. W. G. Shelton. 1,654,350; Dec. 27.
Signboard. Aquatic. J. E. Cramer. 1,628,393; May 10.
Signboard of article of similar nature. P. D. Griggs.
Sign. Changeable. H. H. Early. 1,620,450; Mar. 8.
Sign.-composing device. L. A. Graham and C. L. Low.
May 3.
Sign. control., Electric. H. Hirsch. 1,651,276; Nov. 22.
Sign. display. A. Bartolomucci. 1,650,052; Nov. 22.
Sign. Display. A. Bartolomucci. 1,650,052; Nov. 22.
Sign. Electric. J. E. Long. 1,650,6575; Nov. 29.
Sign. Electric. J. E. Long. 1,650,6575; Nov. 29.
Sign. Electric. J. F. Long. 1,650,6575; Nov. 29.
Sign. Electrically-illuminated. J. M. Gllenits. 1,651,837; Sign. Electric. J. F. L. J. Wilde. 1,628,999; May 3.
Sign. Electric. J. P. Geresen. 1,627,993; May 10.
Sign. Electrically-illuminated. J. A. Glerier. 2,623,837; SAD. Sign. Holenter. J. M. Guenras. 1,023,0837; Apr. 1,020,080; Peb. 6.

Sign chibitor, Movable. A. J. Gutierrez. 1,623,837; Apr. 1,020,081; Peb. 22.

Sign holder. M. Dyer. 1,634,743; July 5.

Sign holder. C. T. Marton. 1,946,444; Oct. 25.

Sign holder. C. T. Marton. 1,624,635; Oct. 1.

Sign. Huminated. R. Austin. 1,624,350; May 3.

Sign. Huminated. J. Horchner. 1,633,785; June 28.

Sign. Huminated. J. Horchner. 1,633,785; June 28.

Sign. Huminated. E. Lowinger. 1,654,337; Dec. 27.

Sign. Huminated. E. D. and C. F. Kreiss. 1,620,472–3; Mar. 8.

Sign. Huminated. E. P. MacNicol. 1,634,3506; Sept. 27.

Sign. Huminated. E. P. MacNicol. 1,634,3506; Sept. 27.

Sign. Huminated. E. P. MacNicol. 1,634,3506; Sept. 27.

Sign. Huminated. B. Norden. 1,628,912; May 17.

Sign. Huminated. P. E. Schnormeier. 1,649,547; Nov. 15.

Sign. Interchangeable. F. Movnihan. 1,644,742; Oct. 11.

Sign. Laminated. B. J. Kaji. 1,633,703; June 28.

Sign. Mininated. S. J. Kaji. 1,633,703; June 28.

Sign. Mininated. S. Sign. 1,641,742; Oct. 11.

Sign. Laminated. P. E. Schnormeier. 1,649,547; Nov. 15.

Sign. Jone 1,631,853; June 28.

Sign. Myning display. L. R. Ports. 1,649,075; Nov. 15.

Sign. Myning display. L. R. Ports. 1,649,075; Nov. 15.

Sign. Revolving. A. B. Kiline. 1,618,343; Feb. 22.

Sign. Road. J. P. Gommels. Des. 73,694; Oct. 25.

Sign. Spare-tire advertising. R. A. Tariel. 1,645,940; Sign. Spare-tire advertising. R. P. P. Vincent. 1,627,528; May 3. Dec. 6. gn exhibitor, Movable. Sign A. J. Gutierrez. 1.623.837; Sign, New-reading Illuminated. E. r. 1997. May 3. Sign, Side-reading Illuminated. E. r. 1997. May 3. Sign, Spare-tire advertising. R. A. Tariel. 1,645,940: Oct. 18. Sign, Street. H. C. Gatchell. 1,643,552; Sept. 27. Sign, Street. H. C. Gatchell. 1,643,552; Sept. 27. Sign, support for temporary structures. E. Pitou. Oct. 18.

1.645,940;
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1 Dec. 27.

Dec. 27.

Signs, Traveling. A. G. Sharkey. 1.650.659; Nov. 29.

Signs, Apparatus for producing series of. A. G. Damm.

1.644.239; Oct. 4.

Signs. Device for making. J. Bagnall and P. G. Copeman.

1.647.844; Nov. 1.

Red. 1.627.484; Nov. 1.

Red. 1.621.482; Mar. 15.

Signs, Making. A. E. Vaughn. 1.646.565; Oct. 25.

Signs, Receiver for heat. R. Mechau. 1.639.411;

Aug. 16.

Signs to materials. Producing. Signs to materials. Producing and affixing. F. Hart. 1,634,617; July 5. Direction signal.
Electric audible signal.
Electric signal.
Hollowarm signal.
Light signal.
Magnetically operated
signal. Signal: See—
Alarm signal.
Auto signal.
Auto traffic signal.
Automobile safety signal.
Automobile semaphore signal.
Automobile signal. Rail-clamp signal. Railway-crossing signal. Railway signal. Reflecting signal. Car signal.
Colored-vapor signal.
Crossing signal.
Danger signal.

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Road signal.

Road signal.

Road signal.

Roadside signal.

Roadside signal.

Switchboard signal.

Signal. A. E. Ashieman and T. E. Haney 1,646,675;

Oct. 25.

Oct. 25.

Oct. 26.

Oct. 26.

Oct. 27.

Oct. 27.

Oct. 28.

Oct. 28.

Oct. 29.

Oct. 2
    Signal casing, Direction. J. W. Dunlap. Des. 73,210; July 26. Signal casing, Direction. J. W. Dunlap. Des. 73,210; Apr. 19. Signal device. B. W. G. W. Direction. J. W. Dunlap. Des. 73,210; Apr. 19. Signal casing and radiator cap, Combined. P. McManaman and J. Namet. Des. 73,140; July 26. Signal casing and radiator cap, Combined. P. McManaman and J. Namet. Des. 73,140; July 26. Signal casing and tag bolder, Combined. P. McManaman and J. Namet. Des. 73,140; July 26. Signal casing, Combined. R. L. Barton. Des. 73,120; July 26. Signal casing, Combined. P. McManaman and J. Namet. Des. 73,120; July 26. Signal casing, Combined. P. McManaman and J. Namet. Des. 73,120; July 26. Signal casing, Combination. R. L. Barton. Des. 73,120; July 26. Signal casing, Combination. H. Des. 70,120; July 26. Signal casing, Combination. J. W. Dunlap. Des. 72,476; Apr. 19. Signal device. W. G. Keith. Des. 71,801; Jan. 4. Signal device. J. M. Mele. 1,624,963; Apr. 19. Signal device. J. M. Mele. 1,624,963; Apr. 19. Signal device. B. Watts. 1,653,235; Dec. 20. Signal device. B. Watts. 1,653,255; Dec. 20. Signal device, Motor-vehicle. O. R. Dinsmore. 1,648,651; Nov. 8. Signal device, Order. J. D. Kelly. 1,617,850; Feb. 15. Signal device, Reflecting. T. L. Boyden. 1,652,138; Signal device, Safety. N. W. Wainwright. 1,649,997; Nov. 29.
                                                    gnal apparatus for railways and highways. E. D. Scarborough. 1,645,875; Oct. 18. gnal arm. A. Sesto and J. Loiacono. Des. 73,210;
Signal device, Reflecting- T. l. Boyden. 1,602,185; Dec. 6.
Signal device, Safety. N. W. Wainwright. 1,649,997; Nov. 22.
Signal faceplate. J. Neu. Des. 73,413; Sept. 6.
Signal for chokers and the like. E. B. Wilcox. 1,628,209; Signal for chokers and the like. E. B. Wilcox. 1,628,209; Signal for fuel-supply systems. J. D. Sartakoff. 1,633,608; June 28.
Signal for motor cars. T. J. O'Leary. 1,620,385; Mar. 8.
Signal for motor cars. T. J. O'Leary. 1,620,385; Mar. 8.
Signal for motor cars. T. J. O'Leary. 1,620,385; Mar. 8.
Signal lamp and supporting bracket for automobiles and an analysis of the like. Electric. B. J. Shald. 1,625,873; Apr. 26.
Signal lamp and supporting bracket for automobiles and an analysis of the learner of the large of the learner of the learner of the learner of the learner of the like l
        Signal light switch. C. J. Himel. 1.613.891; Jan. 11.
Signal light, Telephone. W. H. Dillon. 1.650.699;
Nov. 29.
Signal lights to flicker, Device for causing vehicle. S.
        Nov. 29.
Signal lights to flicker, Device for causing vehicle. S. Gobos. 1,620,939; Mar. 15.
Signal-operating means. Attachment for. H. L. Furr. 1,642,237; Sept. 13.
Signal-operating mechanism. E. J. Cain. 1,638,827;
                                               Aug. 16.
    Aug. 10.

Signal plant, Mine. F. Scheffler. 1,614.257; Jan. 11.

Signal-receiving circuits. E. L. Powell. 1,624,148; Apr. 12.

Signal-receiving system. F. W. Dunmore. 1,635,117; July 5.

July 5.

Signal switch. H. J. Cohen. 1,617,376; Feb. 15.

Signal switch. A. E. Miller. 1,644,538; Oct. 4.

Signal switch. G. J. Tockwin. 1,634,347; July 5.

Signal switch, Air-operated. W. L. Slayton. 1,615,853; Signal switch, Air-operated. W. L. Slayton. 1,615,853;
                                           Feb. 1.
    Signal switch, Automobile direction. S. Caminita. 1.624,828; Apr. 12. Signal switch, Collision-. O. C. and E. R. Stump. 1.625,505; Apr. 19. Signal switch, Traffic-. J. M. Galius and J. J. Scheits. 1.504,556; Mar. 8. Signal switchen. E. E. Salisbury. 1,645,353; Oct. 11.
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Signal system, Automatic. F. Gilday and W. J. Duffy. 1,627,350; May 3.

Signal system, Coordinating. J. E. Robin. 1,645,024; Oct. 11.

Signal system, Coordinating. J. E. Robin. 1,650,858; Signal system for railways. H. B. Worster. 1,650,858; Signal systems, Police. W. E. Frost. 1,631,368; June 7.

Signal systems, Call switch for hospital. W. P. Crockett. 1,620,961; Mar. 15.

Signal systems, Transformer for open and closed. W. F. Leather. 1,643,958; Oct. 18.

Signal transmission system. A. H. Taylor. 1,628,000; Signal transmister. F. Rizzo. 1,630,764; May 31.

Signal transmitter. Electric. C. H. Kesses. 1,637,080; July 26.

Signaling and advertising device, Combined. E. H. Signaling and advertising device, Combined. E. H. Signaling apparatus. C. A. Hoxie. 1,653,099; Dec. 20.

Signaling apparatus. W. G. Lamb. 1,640,129-30; Aug. 23.

Signaling apparatus. R. B. Pollock. 1,647,663; Nov. 1.

Signaling apparatus, Railway. P. H. Gelger. 1,620,015; Mar. 8.

Signaling apparatus, System of synchronizing, A. L. Matte. 1,645,607; Oct. 18.

Signaling, Carrier-wave. R. C. Mathes. 1,624,495; Apr. 12. Signating by June 7.

Signating Carrier-wave. R. C. Mathes. 1,624,495;
Apr. 12.

Signating conductor, Loaded. J. G. Roberts. 1,623,555;
Apr. 6.

Apr. 6. Signaling conductor system and operation. O. E. Buckley. 1,624,470; Apr. 12. Signaling current, Modulating. E. L. Chaffee. 1,625,296; Apr. 19. Apr. 19. Signaling device. G. H. Daugherty. 1.630,730; May 31. Signaling device. M. Goldman and R. Karaban. 1,629,380; May 17. Signaling device. W. T. Marcott. 1,637,779; Aug. 2. Signaling device. C. E. Myers. 1,638,868; June 28. Signaling device. C. Taylor. 1,628,750; May 17. Signaling device. J. Weech. 1,620,147; Mar. 8. Signaling device. J. Weech. 1,620,147; Mar. 8. Signaling device, J. Weech. 1,620,147; Mar. 8. Nov. 15. Signaling device, Rallway. J. Bennewitz. 1,649,441; Nov. 15.

Signaling device, Thermally-controlled. F. C. Leonard and C. W. Rietzel. 1,636,698; July 26.

Signaling elicited. 1,636,698; July 26.

Signaling metholation, Sound. J. P. Northey. 1,619,585; Signaling means. F. Satterstrom. 1,639,112; Aug. 16.

Signaling means. F. Satterstrom. 1,639,112; Aug. 16.

Signaling means. B. Satterstrom. 1,639,112; Aug. 16.

Signaling mechanism. R. A. Neuschotz. 1,640,286; Aug. 23.

Signaling mechanism. H. Smith. 1,616,877; Feb. 8.

Signaling mechanism. N. H. Suren. 1,616,6879; Feb. 8.

Signaling method and system. R. V. L. Hartley. 1,624,596; Apr. 12.

Signaling, Rallway. R. M. Glison 1,646,401; Oct. 25.

Signaling, Rallway. R. M. Glison 1,646,401; Oct. 25.

Signaling, Rallway. R. G. Grondall. Rel.6,441; Sept. 27.

Signaling, System. C. Grondall. Rel.6,441; Sept. 27.

Signaling system. C. E. Beach. 1,627,685; May 10.

Signaling system. J. C. Burkholder. 1,625,779; Apr. 5.

Signaling system. J. C. Burkholder. 1,625,779; Apr. 12.

Signaling system. A. M. Curtis. 1,624,395; Apr. 12.

Signaling system. A. M. Curtis. 1,629,033; May 17.

Signaling system. A. M. Curtis. 1,629,037; June 14.

Signaling system. J. C. Field. 1,647,244; Nov. 1.

Signaling system. J. C. Burkholder. 1,639,329; Apr. 12.

Signaling system. J. C. Burkholder. 1,639,329; Apr. 12.

Signaling system. A. M. Curtis. 1,629,037; June 14. Signaling system.
1,634,941; July 5,
Signaling system.
1,634,941; July 5,
Signaling system.
Signaling system.
Signaling system.
Signaling system.
Galgnaling system.
Signaling system. 5. H. Hewett and W. White.
5. H. Hill. 1,634,287; July 5.
J. S. Jammer. 1,632,078; June 14.
J. Langmuir. 1,615,638; Jan. 25.
G. A. Locke. 1,616,538; Feb. 8.
G. A. Locke. 1,616,538; Feb. 8.
T. A. Moller. 1,630,962; May 31.
T. A. Mollard. 1,611,369; Jan. 11.
H. W. O'Neill. 1,617,414; Feb. 15.
E. F. Potter. 1,614,391; Jan. 18.
H. E. Shreeve. Re16,835; Dec. 27.
J. F. Tolomy. 1,644,761; Oct. 11.
E. F. Vetter. 1,614,610; May 41.
C. G. Von Zastrow. 1,647,760; Signaling system. Signaling system. Signaling system. Signaling system. Signaling system. Signaling system. Signaling system.
Signaling system.
Nov. 1.
Signaling system.
Signaling system.
Signaling system.
Signaling system.
Signaling system.
Signaling system.
1,653,898; Dec. F. Zogbaum. 1,632,106; June 14. F. Zogbaum. 1,638,559; Aug. 9. F. Zogbaum. 1,653,031; Dec. 20. and apparatus. A. F. Gilson. 27. Carrier. R. A. Heising. 1,654,080; Signaling system, Dec. 27.

Signaling system, Carrier-current. D. G. Little. 1.640,550; Aug. 30. Signaling system, Carrier-current. H. Nyquist. 1,619,085; Mar. 1. Mar. 5.

Mar. 7.

Signaling aystem, Carrier-wave. H. S. Black. 1,620,629; Mar. 15.

Signaling system, Carrier-wave. R. A. Heising. 1,620,636; Mar. 15.

Signaling system, Carrier-wave. J. W. Horton. 1,636,134; July 19.

Signaling system, Carrier-wave. J. S. Jammer. 1,613,051; Jan. 11.

Signaling system, Carrier-wave. H. M. Pruden. Signaling system, Carrier-wave. H. M. Pruden. May 10.

Signaling system, Electric. J. T. Donahoe. 1,628,493; May 10.

Signaling system, High-frequency. H. A. Affel. 1,615,896; Feb. 1. Teb. f.
Signaling system, High-frequency. E. F. W. Alexanderson. 1,648.711; Nov. 8.
Signaling system, High-frequency. I. F. Byrnes. 1,631.670; June 7.
High-frequency. L. M. Clement. 1,624.737; Apr. 12.
Signaling system, High-frequency. L. Espenschied. 1,638.925; Aug. 16.
Signaling system, High-frequency. H. Keyl. 1,645.956; Oct. 18.
Signaling system, High-frequency. H. Keyl. 1,645.956; Oct. 18. Signaling system, Multiplex. H. Nyquist. 1,620,735; Signaling system, Multiplex. G. W. Flynn. 1,638,330; Signaling system, Selective. G. W. Flynn. 1,638,330; Aug. 9. Aug. 9. System, Traffic. J. J. Ruddick. 1,641,694; Sept. 6. Signaling system, Trunk. L. L. Eagon. 1,632,826; June 21. Signaling system, Vacuum-tube. Dec. 13. S. Loewe. 1,652,486; Dec. 13
Signaling system, Wave. L. A. Hazeltine. 1,649,589;
Nov. 15.
Signaling transmitter. E. E. Kleinschmidt. 1,632,298;
Signaling transmitter. E. T. Kleinschmidt. 1,627,463;
Market S. G. Signaling transmitter. Signaling transmitter. 1,627,463;
Market S. Signaling. Controlling apparatus for highway crossing. H. S. Toung. 1,636,348; July 19.
Signaling disabiling. P. G. Whittington. 1,653,685:
Dec. 27. H. S. Young. 1,636,548; July 19.
Signals for eagine-temperature indicators, Device for producing flashing. F. G. Whittington. 1,653,685: Mignals for radio dynamic receiving systems. Changing the intensity of. J. H. Hammond, Jr., and E. L. Chaffee. 1,649,778; Nov. 16.
Signals, Transmitting. J. W. Horton. 1,638,580; Aug. 9.
Signature-feeding mechanism. M. Christensen. 1,614,715; Jan. 18.
Signature machine. F. J. Greene. 1,641,482; Sept. 6.
Signature stitching machine. R. G. Hoffert. 1,651,122; Nov. 29.
Signature-stitching machine. R. G. Hoffert. 1,651,122; Nov. 29.
Silencer. H. P. Maxim. 1,637,385; Aug. 2.
Silenc ducing Dec. 27.

ducing colloidal. H. Cohn and C. Siebert. 1,655,087; Dec. 20.
Silverware, etc., Shipping and display device for. J. L.
Lee. 1,614,740; Jan. 18.
Sinew extractor. J. A. MaeDonald. 1,629,349; May 17.
Singeing apparatus. E. J. Ziock. 1,644,808; Oct. 11.
1,622,631; Apr. 19.
Sink. P. A. Gandillon. 1,614,358; Jan. 11.
Sink and dishwashing machine, Combined. C. A. Murdoch 1,645,815; Oct. 18.
Sink and faucet, Combination. B. G. Stern. 1,651,104; Nov. 29.
Sink and refrigerator, Combination. C. R. Carrick. Des. 73,776; Nov. 8.
Sink and refrigerator, Combination. C. R. Carrick. Des. 73,776; Nov. 8.
Sink fixture. F. F. Burfitt. 1,637,820; July 28.
Sink fixture. F. F. Burfitt. 1,637,820; July 28.
Sink footbale. W. N. Grover. 1,648,386; Nov. 8.
Sink stopple and soap dish, Combined. W. F. Schacht. 1,622,859; Mar. 29.
Sink structure. I. Fuson. 1,635,361; July 12.
Sink, washbasin, and the like. F. S. Corrigan. 1,635,811; July 12.
Sinker. H. Lowry. 1,618,100; Feb. 15. July 12.
Sinker, H. Lowry, 1,618,100; Feb. 15.
Sinking shaft and bore holes, W. G. Minuth. 1,638,313;
July 19.
July 19.
Sinkering paparatus. T. M. Alexovitis. 1,617,561; Feb. 15.
Sinkering machine. J. Kaox. 1,618,205; Feb. 22.
Siphon, G. C. R. Hall. 1,625,477; July 12.
Siphon, J. H. Palmer. 1,627,451; May 3.
Siphon and like recorder. J. Riddle. 1,628,913; May 17.
Siphon, Automatic. J. F. Rottger. 1,634,518; July 5.
Siphon believe. W. F. Brown. 1,636,128; July 19.
Siphon believe. W. F. Brown. 1,637,134; May 19.
Siphon believe. W. F. Brown. 1,677,734; May 10. Feb. 22.

Siphon holder. G. V. Gavaza. 1,627,734; May 10.

Siphon recorder. E. Blakeney. 1,630,324; May 31.

Siphon starter and automatic shut-off. J. Mohn.

1,623,260; Apr. 5.

Siphons. Expansion and contraction anchorage for thermic. J. L. Nicholson. 1,645,128; Sept. 20.

Sirbons. Expansion and contraction anchorage for thermic. J. L. Nicholson. 1,645,128; Sept. 20.

Stren. T. Decord. 1,645,637, Sept. 10.

Sirch. T. Decord. 1,45,537, Sept. 10.

Sirch. R. McClure. 1,618,210; Feb. 22.

Sirup. Manufacturing. W. F. Cole. 1,647,082; Oct. 25.

Sirup. Manufacturing. W. F. Cole. 1,647,082; Oct. 25.

Sirup. Sirup. Manufacturing. W. F. Cole. 1,647,082; Oct. 25.

Sirup. Sirup. Manufacturing. W. F. Cole. 1,647,082; Oct. 25.

Sirup. Manufacturing. M. F. A. Sebright. 1,645,118; Oct. 11. Oct. 11.

Sizing apparatus. E. A. White. 1,652,466; Dec. 13.

Sizing composition for coating purposes. F. R., M., and A. Hervé. 1,615,584; Jan. 25.

State. J. Lunn. 1,650,222; Nov. 22.

State. J. Kitow. 1,620,232; Mar. 8.

State. B. Ritow. 1,620,232; Mar. 8.

State. S. E. Winslow. 1,646,843-4; Oct. 25.

State Biele. F. B. Fisher. 1,653,558; Dec. 20.

State machine. W. K. Howe. 1,635,577; July 12.

State, Roller. J. Biggio. 1,617,984; Feb. 15.

State, Roller. J. Ballon. 1,617,984; Feb. 15.

State, Roller. J. Ballon. 1,617,984; Feb. 15.

State, Roller. G. R. Salberg. 1,640,134; Aug. 23.

Skate, Roller. G. R. Salberg. 1,640,134; Aug. 23.

Skate, Roller. H. F. Whittomb, Jr. 1,640,476; Aug. 30

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Skate, Roller ball. E. G. de Festenburg and A. G. de Festenburg. 1.616,442; Feb. 8. Skate, Wheel. T. J. Connolly. 1.682,997; June 21. Skater's article. W. W. Warnach, 1.634,643; June 28. Skating-rink floor. G. C. Funk 1.634,043; June 28. Skating-rink floor. G. C. Funk 1.634,938; July 5. Skating-rink, Ice-. G. C. Funk. 1.634,938; July 5. Skates and the like, Tie device for snow. J. C. Miller and R. H. Fayried. 1.612,874; Jan. 4. Skein-winding machine. J. F. Schenck, sr. 1,631,893; Skew arch. D. B. Luten. 1.634,548; July 5.
   June 7.

Skewarch. D. B. Luten. 1,634,548; July 5.

Ski. A. A. Casner. 1,613,309; Jan. 4.

Ski. Data 1,624,521,548; July 5.

Ski. Data 1,624,521,548; July 5.

Ski. July 5.

Ski. July 5.

Ski. July 5.

Ski. July 6.

Ski. July 6
Skid-chain fastener. F. H. McBride. 1,615,845; Feb. 1.
Skidding-preventing device. L. M. Crews. 1,627,708;
May 10.
Skin cleaner. M. Crawford. 1,651,085; Nov. 29.
Skins and leather, Apparatus for stretching. I. M. Jones.
Skins, experience of the stretching. I. M. Jones.
Skins, experience of the stretching. I. M. Jones.
Skins, experience of the stretching. I. M. Jones.
Skins, in mitation of more expensive furs. Treating
cheap. A. Nathan. 1,642,505; Sept. 13.
Skins, leather, and other materials, Apparatus for stretch-
ing and drying. E. E. Kornitz. 1,620,821; Mar. 15.
Skins, eather, and other materials, Apparatus for stretch-
ing and drying. E. E. Kornitz. 1,620,821; Mar. 15.
Skins, eather, and other materials, Apparatus for stretch-
ing and drying. E. C. W. Hobbs, Jr. 1,616,046; Feb. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,616,046; Feb. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,616,046; Feb. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,616,046; Feb. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,616,046; Feb. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,616,046; Feb. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,616,046; Feb. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,616,046; Feb. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,635,032; Dec. 1.
Skirtlength gauge. C. W. Hobbs, Jr. 1,635,032; Jup. 2.
Skirtlength gauge. C. W. Hobbs, Jr. 1,635,032; Jup. 2.
Skylight. G. Golden, J. 1,624,288; July 5.
Skylight. G. Golden, Jr. 1,633,668; July 5.
Skylight. R. P. Holysz. 1,631,391; Dec. 6.
Skyritling, Apparatus for. E. Thoresen, 1,632,153; Jup. 4.
Slack adjuster. W. H. Sauvage. 1,618,732; Feb. 2.
Skylight. Scotlons and the like, Actuating mechanism for.
J. E. Blaski. 1,653,386; Dec. 20.
Skyritling, Apparatus for. E. Thoresen, 1,632,153; Jup. 14.
Slack adjuster. W. H. Sauvage. 1,618,732; Feb. 2.
Slack adjuster. W. H. Sauvage. 1,618,732; Feb. 2.
Slack adjuster. W. H. Sauvage. 1,645,777; Oct. 18.
Slack
      Slags by fluids under pressure, Treatment of. M. Maguet. 1,627.982; May 10.
Sled. W. H. Elfreth and G. B. Weiss. Des. 73,225;
Sled. W. H. Elliteth and G. J.
Aug. 9.
Sled. J. C. Robinson, 1,613,722; Jan. 11.
Sled and wagon. E. H. and E. Kenney. 1,622,789;
Mar. 29.
Sled brake. J. V. Tobin. 1,628,693; May 17.
Sled, Coaster. J. H. Seiter. 1,635,641; July 12.
Sled, Motor. A. I. Sylvester. 1,635,641; July 12.
Sled, Motor. A. I. Sylvester. 1,633,692; Julie 11.
Sled, Brake for. R. Limbers. 1,4137; Jan. 11.
Sleds, Brake for. R. Limbers. 1,4137; Jan. 11.
Sleds, Brake for. R. Limbers. 1,630,970;
May 31.
Sleds, Wheel attachment for. P. Killinger. 1,637,999;
Aug. 2.
      Sleds, Wheel attachment for. P. Killinger. 1,637,999; Sales, S. A. White. Bel6,572; Mar. 1,537,899; Sales, S. A. White. Bel6,572; Mar. 1,538,638; Dec. 27. Sleeping bag. M. B. Miller. 1,632,1478; Mar. 15. Sleeping car. A. R. Rossman. 1,647,584; Nov. 1. Sleeping car. A. R. Rossman. 1,647,584; Nov. 1. Sleeping car. A. R. W. Danlel, sr. 1,631,250; June 7; Sleeve coupling, Bottless. F. W. Danlel, sr. 1,631,250; June 7; Gregory Boller-Sparing. J. M. Belter. 1,654,210.
      Sidene extractor, Roller-bearing-. J. M. Reiter. 1,654,310; Dec. 27. Sleeve-finishing board, Dry-steam. W. W. Campbell. 1,623,091; Apr. 5. Sleeve-finishing board, Dry-steam. I. W. Cox. 1,625,935; Sleeve-finishing board, Dry-steam. I. W. Cox. 1,625,935;
   neave-inishing board, Dry-steam. I. W. Cox. 1,625,935; Apr. 26. Sleeve-finishing board, Dry-steam. I. W. Cox. 1,636,590; July 19. Sleeve-holder fastener. H. P. Nissen. 1,621,680; Mar. 22. Sleeve holders, Fastener for. H. P. Nissen. 1,643,627; Sept. 27.
      Sleeve-pressing form. L. T. Chellis. 1,624,777; Apr. 12.
      12. Sleeves and associating them with articles, Apparatus for forming. G. L. Matthias and W. D. Kmentt. 1,629,170; May 17. Sleigh. M. Kundrat. 1,617,529; Feb. 15.
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Slicer and shredder, Vegetable. L. Pysher. 1,617,499;
        Sheer and Shreuder, Vegetable. L. Fysher. 1,011,200; Feb. 15.
Slicer, Bread. H. Stukart. 1,631,231; June 7.
Slicer, Meat. J. J. Quinn. 1,622,609; Mar. 29.
Slicer, Meat. J. J. Quinn. 1,622,609; Mar. 29.
Slicer, Vegetable. T. V. Miccochd. 1,636,113; Oct. 11.
Slicer, Vegetable and fruit. R. Cleary. 1,614,282; Jan. 11.
Slicer, Vegetable and fruit. C. C. Hanks. 1,651,202; Nav. 29.
           Jan. 13. Silicer, Vegetable and fruit. P. Sokolowski. 1,620,138; Nov. 29. Silicer, Vegetable and fruit. P. Sokolowski. 1,620,138; re. p. muttle. 1,642,705;
        Nov. 29.

Slicer, Vegetable and fruit. P. Sokolowski. 1,620,138;
Mar. 8.

Slicers, Stone catcher for beet, H. R. Tuttle. 1,642,705;
Slicing board. F. M. Dolan. 1,623,100; Apr. 5.

Slicing board. G. E. Sandbeck. 1,623,498; Apr. 5.

Slicing device. A. J. Carlson. 1,620,995; Mar. 15.

Slicing machine. V. H. Donald. 1,626,811; July 28.

Slicing machine. V. H. Donald. 1,636,811; July 28.

Slicing machine. J. Eldridge and J. Schor. 1,648,583;

Slicing machine. J. G. Perrett and F. T. Lambert.
Silcing machine. W. H. Donald. 1,633,631; July 26.
Silcing machine. J. Eldridge and J. Schor. 1,648,583; Nov. 8.
Silcing machine. I. G. Perrett and F. T. Lambert. 1,633,302; Aug. 9.
10,63,302; Aug. 9.
11,63,302; Aug. 9.
12,64,65,65; Aug. 9.
13,64,65; Aug. 9.
13,64,65; Aug. 9.
14,64,65; Aug. 9.
15,64,65; Aug. 9.
16,64,65; Aug. 9.
16,64
  Sippers, Cover for ballet. B. S. Bonaventure. 1,621,455; Mar. 15.
Slicit. Mar. 16.
Slicit. 
        Sept. 13.
Sludging wheel. E. A. Chase. 1,618,057; Feb. 15.
Slug case. H. D. Seibert. 1,625,285; Apr. 19.
Slug-casting machine. A. L. Chalfonte. 1,64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.649.811:
     Nov. 22.
Slug-casting machine. J. G. McNamara.
Mar. 15.
Mar. 15.
L. T. Remas. 1,630.05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.620,978;
  Mar. 15.
Slug-casting machine. I. T. Remas. 1,630,094; May 24.
Slug-casting machine. A. G. Stevenson. 1,617,610; Feb. 15.
Slug-casting machines, Mold for. R. R. Mead. 1,626,854; May 3.
Slug holder. E. G. Magnus and H. C. Dosch. 1,627,598; May 3.
     May 3.
Sluice-gate construction. H. B. Pratt. 1,644,445;
Oct. 4.
Sluice, Roller. V. Mann. 1,618,545; Feb. 22.
Sluiceway construction. F. B. Allen. 1,613,601; Jan. 11.
                                                                                                                                                                                                                                                                        H. B. Pratt. 1.644.445:
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Slumber bed, cooling board, and casket support, Combined undertaker's, M. C. Hoard. 1,624,950, Apr. 19.
Slurry, etc., Apparatus for agitating. J. S. Fasting.
Small arm. G. Norman. 1,637,236; July 26.
Small preveners. E. E. Lambert. 1,647,870; Nov. 1.
Smelter spout. L. H. Williams and R. E. Watt. 1,625,755; Apr. 19.
Smelting furnace. F. W. Corsalli. 1,647,606; Nov. 1.
Smelting furnace. F. W. Corsalli. 1,647,606; Nov. 1.
Smelting furnace. T. Lewin. 1,640,544; Ang. 30.
Smoke and Gas collector. J. W. Ebert. 1,630,927; May 31.
Smoke bay Apparatus for producing. H. M. Robertson. 1,644,603; Oct. 11.
Smoke box. Locomotive. W. L. Bean. 1,639,792; Aug. 23.
Smoke-box structure, Locomotive. W. L. Bean. 1,650,684; Nov. 23.

Smoke, Apparatus for producing. H. M. Robertson. 1,644,695; Oct. 11.
Smoke box, Locomotive. W. L. Bean. 1,689,792; Aug. 23.
Smoke-box Structure. Locomotive. W. L. Bean. 1,660,684; Nov. 29.
Smoke cleaner. P. Barnel. 1,639,179; Aug. 16.
Smoke cleaner. P. D. Hoffman. 1,613,536; Feb. 22.
Smoke consumer. J. T. Jones. 1,639,736; Aug. 28.
Smoke consumer. F. D. Hoffman. 1,618,336; Feb. 22.
Smoke consumer. W. C. Mitchell. 1,620,826; Mar. 15.
Smoke consumer. W. C. Mitchell. 1,620,826; Mar. 15.
Smoke consumer. W. C. Mitchell. 1,620,826; Mar. 15.
Smoke vanter. W. C. Mitchell. 1,635,539; Dec. 20.
Smoke separator. V. E. Lombard. 1,615,099; Feb. 15.
Smoker stand. F. A. Sllaj. Des. 7,1932; Jan. 25.
Smoker stand. F. A. Sllaj. Des. 7,1932; Jan. 25.
Smoker's appliance. M. T. Barker, jr. 1,650,973;
Nov. 29.
Smoker's article. E. Caldwell. 1,623,144; May. 10.
Smoker's article. E. Caldwell. 1,623,144; May. 10.
Smoker's article. E. Caldwell. 1,623,147; Jan. 21.
Smoker's companion. B. C. Howell. 1,622,196; Mar. 22.
Smoker's set. R. L. Blumenthal. 1,633,389; Aug. 9.
Smoker's set. F. C. Copeland. Des. 73,965; Nov. 29.
Smoker's set. F. C. Copeland. Des. 73,965; Nov. 29.
Smoker's set. F. C. Copeland. Des. 73,965; Nov. 29.
Smoker's set. Glarette. H. R. Whittier. 1,615,001; Jan. 18.
Smoker's stand. W. J. Barr. Des. 74,900-1; Dec. 20.
Smoker's stand. G. E. Beardsley. Des. 73,965; Oct. 18.
Smoker's stand. G. E. Beardsley. Des. 73,965; Oct. 11.
Smoker's stand. G. E. Beardsley. Des. 73,965; Oct. 11.
Smoker's stand. G. G. Fleming. 1,645,525; Oct. 18.
Smoker's stand. G. G. Fleming. 1,645,525; Oct.

June 21.

Smoking appliance. W. C. Dodge. 1,623,661; Apr. 5.

Smoking meat. M. Britt. 1,631,463; June 7.

Smoking pipe. J. F. Bushee. 1,629,438; Mar. 8.

Smoking pipe. R. Hadley. 1,641,649; Sept. 6.

Smoking pipe. I. A. Harrisberger. 1,622,588; Mar. 29,

Smoking pipe. I. A. Highfield. 1,652,572; Dec. 13.

Smoking pipe. M. Pirce. 1,654,384; Dec. 27.

Smoking pipe. G. F. Kood. 1,640,870; Oct. 25.

Smoking pipe. C. F. Kood. 1,640,870; Oct. 25.

Smoking pipe. L. Shakel. 1,644,963; Jan. 18.

Smoking pipe. E. W. Swartwout. 1,632,100; June 14.

Smoking pipe accessory. C. L. Congdon. 1,617,322; Feb. 15.

Feb. 15. Smoking-pipe attachment. F. J. J. Lechleder. 1,617,257; Feb. 8.

Feb. 8.

Smoking-pipe holder. B. F. Mallory. 1.636;378; July 19.

Smoking set. T. Bear. 1,641,657; Sept. 6.

Smoking set or similar article. J. K. Raugstad. Des. 72,030; Feb. 15.

Smoking stand. E. Schultz. Des. 72,286; Mar. 22.

Smoking stand. P. C. Shapiro. Des. 72,455; Apr. 12.

Smoking stand. H. C. Shapiro. Des. 73,986; Nov. 29.

Smoking stand. H. R. Wungh. 1,619,367; Mar. 1.

Snap. 1, Cerpmill and H. G. Enpock. 1,646,745; Oct. 25. Snap-action mechanism. G. A. Knaak. 1,618,963;

Feb. 22.
Feb. 22.
Feb. 23.
Feb. 24.
Feb. 25.
Feb. 25.
Feb. 26.
Feb

Snare, J. Kleffman. 1,615,586; Jan. 25. Snare, Animal. E. C. Marlin. 1,624,003; Apr. 12. Snare drum. F. J. Bacon and D. L. Day. 1,t 1.630.461 : May 31.

Snare trap. A. Boerner. 1,643,602; Sept. 27. Snatch block. K. Berger. 1,630,517; May 31. Snow cleaner and digger. A. Zilbersher. 1,621,448;

Show metter. A. L. Serger. 1,503,011; Many 51.

Show-clearing apparatus for automobiles. J. B. Sewell. 1,623,409; Apr. 12.

Snow elevator and remover. G. Heronimus. 1,617,111; Feb. 8.

Snow fence. D. A. Sargent. 1,647,585; Nov. 1.

Snow fence. D. A. Sargent. 1,647,585; Nov. 1.

Snow fence. D. A. Sargent. 1,626,998; May 3.

Nov. 1.

Snow leader. A. L. Schwenke. 1,664,311; Dec. 27.

Snow metter. J. F. Daly, G. A. Coats, and G. H. Lutz. 1,652,767; Dec. 13.

Snow-metting apparatus. V. I. Heermance. 1,629,160; May 17.

Snowplow. S. W. Lombard. 1,624,839; Apr. 12.

Snowplow. L. Martin. 1,634,311; May 17.

Snowplow. S. W. Lombard. 1,624,839; Apr. 12.

L. Isbell. 1,629,341; May 17.
S. W. Lombard. 1,624,339; Apr. 12.
L. Martin. 1,634,673; July 5.
C. R. Newhaus. 1,622,338; Mar. 29.
R. S. Pellette. 1,653,118; Dec. 20.
I. Reckard. 1,619,314; Mar. 1.
F. Saxon. 1,638,703; Aug. 9.
J. T. Somnis. 1,647,560; Nov. 1.
F. Thompson. 1,621,240; Mar. 15.
D. Zim. 1,641,225; Sept. 6.
Automobile. J. Hojbrowski. 1,635, Snowplow. Snowplow. Snowplow. Snowplow.

Snowplow. Snowplow.

Showplow. D. Zhim. 1,021,032,032,033; Showplow, Automobile. J. Hojnowski. 1,635,043; July 5. Snow remover. H. D. Curtis. 1,623,910; Apr. 5. Snow remover. J. E. Reberhardt. 1,638,150; Aug. 8. Snow remover. J. E. Wagoner. 1,616,835; Feb. 8. Snow-removing machine. D. H. Lichtenberg. 1,615,461; Tap. 95.

Show remover, J. E. Wagoner, 1,616,835; Feb. 8.
Snow-removing machine. B. H. Lichtenberg, 1,615,461;
Jan. 25.
Snow-removing machine. C. B. Robinson and R. S. Carty,
1,642,896; Sept. 20.
Snow-sen and manufacturing same. E. W. Vose, 1,630,041;
May 24.
Snow-shovel. C. J. Janosko, 1,628,732; May 17.
Snow-shovel. F. Nims, 1,634,294; June 28.
Snubber, J. Dixon, 1,643,997; Sept. 27.
Snubber, J. I. Everest, 1,640,651; Aug. 30.
Snubber, A. C. Rippy, 1,614,392; Jan. 11.
Snubber, A. C. Rippy, 1,614,392; Jan. 11.
Snubber, A. C. Rippy, 1,614,392; Jan. 11.
Snubber, Look and quick-fastener link. D. M. Bateson, Oct. 18.
Snubber, Hydraulic. A. L. Poudrier, 1,632,041; June 14.
Soap and water mixer. F. Y. McKenney and W. H. Cheney, Relf.797; Nov. 22.
Soap compound and making the same. II. H. Hanson, 1,623,540; Apr. 5.
Soap dispenser, M. W. Levernier, Des. 73,185; Aug. 2.
Soap dispenser, Liquid. W. C. Morrill. 1,647,245; Soap dispensing device, Powdered. H. Helberger.

June 21.
Soap dispenser, Liquid. W. C. Morrill. 1,647,240;
Nov. 1.
Soap-dispensing device, Powdered. H. Helberger.
1,637,189; July 26.
Soap, Flaking. B. W. Coltman. 1,653,390; Dec. 20.
Soap-flaking device. H. B. Brougham. 1,613,558; Jan. 4.
Soap, Floating, J. Stern. 1,615,244; Jan. 25.
Soap holder with ring cup. S. D. Baker. Des. 73,739

Sonp holder with ring cup. S. D. Baker. Des. 73.734; No. 25. Sonp holder with ring cup. S. D. Baker. Des. 73.734; Nov. 16. Sonp. Mechanic's. C. Blomstrom. 1,618,323; Feb. 22. Sonp. Mechanic's. C. Blomstrom. 1,618,323; Feb. 22. Sonp. Mechanic's. C. Blomstrom. 1,618,323; Feb. 22. Sonp. Mechanic's. C. Blomstrom. 1,628,200; Mechanic's. C. Blomstrom. 1,628,200; Mechanic's. C. Blomstrom. 1,628,200; Mechanic's. C. Blomstrom. 1,628,200; Mechanic's. C. Blomstrom. 1,628,229; May 10. Sonp. System for conveying and inspecting. H. C. Knowies. 1,636,23; Th. 1,633,6389; June 28. Sonp. with advertising matter. Providing cakes of. C. Schmidt. 1,636,709; July 26. Sonps. Holder 1,636,200; July 26. Sonps. Holder 1,636,708; May 3. Sonps. Making perfumed or medicated transparent. F. Villain. 1,628,708; May 3. Sonps. Making perfumed or medicated transparent. F. Villain. 1,628,708; May 3. Sonps. Making perfumed or medicated transparent. F. Villain. 1,628,708; May 3. Socket. E. L. Brenk. 1,646,609; Oct. 25. Socket. E. L. Brenk. 1,646,609; Oct. 25. Socket. E. L. Brenk. 1,648,609; Dec. 27. Socket. H. S. Taylor. 1,642,517; Sept. 13. Socket adapter. F. H. Weston. 1,643,434; Aug. 30. Socket adapter. F. H. Weston. 1,644,344; Aug. 30. Socket and Jar, Combined. H. R. Standice. 1,620,985; Socket, Audion-bulb. A. Morton. 1,649,596; Nov. 22. Socket, Audion-bulb. A. Morton. 1,645,552; Oct. 18.

Socket, Audion-bulb. A. Morton. 1.649.969; Nov. 22 Socket, Candle pull. H. Hubbell. 1.645,952; Oct. 18.

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Soil fitting. D. L. Ernst. 1,629,208; May 17.
Soil pulverizer, Sprocket-type. M. P. Ohlsen. 1,617,821;
Feb. 15.
     Socket cap and making the same. E. G. Oakley. 1,622,067; Apr. 5. Socket casing. M. C. Recker. 1,637,874; Aug. 2. Socket closure, Swivel. J. J. Kearney. 1,620,029; Mar. 8. Socket, Double-pin. P. E. Fenton and P. de F. Warner. 1,645,500; Oct. 11. F. Giles. 1,643,655; Sept. 27. Socket, Electric. I. F. Giles. 1,643,655; Sept. 27. Socket, Electric. H. Shapiro. 1,646,499; Oct. 25. Socket, Electric connecting. F. W. C. Neumer. 1,630,272; May 31. Socket, Electric-lamp. W. G. Chizlett. 1,627,631; May 10. Socket, Electric-switch. C. S. Cross and C. A. Smith.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Soil-vibrating apparatus. C. A. Brewer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1,614.273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Soil-vibrating apparatum.

Jan. 11, L. Jones. 1,651,709; Dec. 6,
Solder, Alumino. M. Toril. 1,840,161; Aug. 23.
Solder and producing same, Granular brazing. C. H.
Davis. 1,817,285; Feb. 8.
Solder, Fixed Solder, J. Jan. 1,835,222; July 12.
Solder for aluminum and its alloys. E. Contl. 1,619,852;
Mar. R. Wales.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Solder for aluminum and its alloys. E. Conti. 1,619,852; Mar S. Wier form, Manufacturing fluxed. T. E. Wales. Solder fron. J. M. Russell. 1,641,604; Sept. 6. Solder, Tape. R. B. Campbell. 1,653,546; Dec. 20. Solder, Tape. R. B. Campbell. 1,653,546; Dec. 20. Solder, Tape. R. P. Shields. 1,652,740; Dec. 13. Soldering. J. Wenz, J. Alvera, and G. Brunhübner. 1,619,837; Mar. S.
        Socket, Dieteric switch. C. S. Cross and C. A. Smith. Socket for scaffold trestles. J. B. Hect. 1.642,069; Sept. 13. Socket for scaffold trestles. J. B. Hect. 1.642,069; Sept. 13. Socket Lamp. H. C. White. 1,647,100; Oct. 25. Socket member. W. W. Largent and C. A. Stiles. 1,629,217; May 17. Socket, Multiple sucker-rod. A. H. Neilson. 1,640,847; Aug. 30. Socket, Multiple sucker-rod. W. A. O'Bannon. 1,620,486; Mar. 8. Socket, Plug. L. Propp. 1,613,959; Jan. 11. Socket, Pull. B. C. Webster. 1,646,002; Oct. 18. Socket, Pull. B. C. Webster. 1,641,325; Nov. 1. Socket, Pull. B. C. Webster. 1,641,325; Nov. 1. Socket, Pull. B. C. Webster. 1,647,325; Nov. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Soldering J. Wenz, J. Alvera, and G. Brunhübner. 1,619,837; Mar. 8.
Soldering articles. E. Thoma. 1,630,771; May 31.
Soldering flux. C. J. Meier. 1,642,884; Sept. 20.
Soldering iron. H. B. Brach. 1,626,911; May 31.
Soldering iron. P. H. Rognley. 1,631,631; May 31.
Soldering iron. F. H. Rognley. 1,631,633; May 31.
Soldering iron. F. S. Uttenthal. 1,614,090; Jan. 11.
Soldering iron. F. S. Uttenthal. 1,614,090; Jan. 11.
Soldering iron. Electrical. W. Ensort and J. Sandberg.
Soldering iron. Electrical. W. Ensort and J. Sandberg.
Apr. 26.
Soldering iron, Electrical. W. Ensort and J. Sandberg.
Soldering more, Fountain. W. E. Quillen. 1,626,552;
Apr. 26.
Soldering machine. J. H. Murch. 1,630,955; Aug. 23.
Soldering machine. Can. G. H. Casper and L. F. Dillon. 1,645,644; Dec. 27.
Sole, Composite rubber. A. L. Murray. 1,624,500; Solecuting machine. P. J. McGowan. 1,645,441; Oct. 11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               May a
Socket, Pull E. C. Webster, 1,647,320: Nov. 1.
Socket, Pull E. C. Webster, 1,647,320: Nov. 1.
Socket, Push-switch. E. H. Freeman, 1,645,130;
Oct. 11.
Socket, Radius and steering rod. G. F. Colley, 1,641,474;
Sept. 6.
Socket-seing and fuse-testing block, Combination. W.
Socket, Single-pin, P. E. Fenton, 1,625,303; Apr. 19.
Socket, Single-pin, P. E. Fenton, 1,625,303; Apr. 19.
Socket, Single-pin, P. E. Fenton, 1,625,303; Apr. 19.
Socket, Switch, R. B. Benjamin, 1,635,170; July 12.
Socket, Switch, M. Bair and C. O. Grove, 1,017,664; Sept. 15.
Socket, Swivel rope, P. A. Schmuck, 1,641,696; Sept. 6.
Socket, Tent-pole, S. T. Anderson, 1,622,273; Mar. 29.
Socket, Three-way cap pin-type, W. H. 1,645,240; Oct. 11.
Socket, Three-way cap pin-type, W. H. 1,645,240; Oct. 11.
Socket, Turin, H. T. Palste, 1,642,266; Sept. 13.
           Socket, Three-w.
Socket, Twin. H. T. Pair
Socket, Twin. H. T. Pair
Socket, Two-way. W. H.
Socket, Vacuum-tube. H.
Socket, Vacuum-tube. H.
Socket, Vacuum tube.
                                                                                                                                                        H. T. Paiste. 1,642,626; Sept. 13.
ay. W. He. 1,641,277; Sept. 6.
m-tube. H. C. Davis. 1,651,257; Nov. 29.
um tube. R. H. Manson. 1,642,684;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oct. 11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oct. 11.

Sole-cutting machines, Brake construction for. H. K. Bayer and H. J. Epstein. 1627,370; May 8.

Edwards at Archael and Archael and Archael for. J. Zdvornesk. 1627,873; May 10.

Sole-edge burnisher. E. L. McMurtrey. 1,646,655; Oct. 25.

Sole for shoes, Exchangeable. A. Torchia. 1,640,301; Aug. 23.
        Seeket, Vacuum tube. R. H. Manson. 1,642,684; Sept. 20.
Socket, Vented electric. E. D. and H. A. Hallowell. 1,644,665; Oct. 4.
Socket wrench. J. N. Fitzgerald, ir. 1638,252; Aug. 9.
Socket wrench. H. F. Haynes. 1,619,255; Mar. 1.
Socket wrench. H. F. Haynes. 1,619,255; Mar. 1.
Socket wrench. J. N. Peterson. 1,643,814; Nov. 8.
Socket wrench. J. N. Peterson. 1,643,814; Sept. 27.
Socket wrench. J. N. Peterson. 1,643,855; Sept. 27.
Socket wrench. J. N. Peterson. 1,643,855; Sept. 27.
Socket wrench. J. N. Peterson. 1,643,801; Sept. 27.
Socket wrench. J. S. Socket wrench. J. N. Setson. 1,643,801; Sept. 27.
Socket wrench. J. S. Socket wrench. J. S. Socket was and F. M. Isaacs. 1,615,701; Jan. 18.
Socket wrench. Automatic reversible double-acting. O. M. Naylor. 1,613,282; Jan. 4.
Socket wrench. Multiple. G. J. C. and A. F. R. Lammers. 1,618,715; Feb. 22.
Socket wrench sets, Holder for. H. G. Rice. 1,649,615; Soda fountain. H. J. McCue. 1,621,846; Mar. 22.
Sodaminde Producing. J. F. Wait. 1,646,872; Oct. 18.
Sodium anuminate, Producing. J. B. Barnitt. 1,616,674; Feb. 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alg. 20.

Sole-laying machine, A. C. Estey, 1,642,017; Sept. 13.

Sole-laying machine, Pneumatic, A. Demnitz, 1,625,527;

Apr. 19.

Sole or heel, Shoe, L. E. Packard, 1,644,855; Oct. 13.

Sole-pressing apparatus for use in the manufacture and repair of boots and shoes. T. E. Cann. 1,622,418;

Mar. 29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mar. 29.
Sole-pressing machine. R. B. Woodcock. 1,637,506;
Aug. 2.
Sole-rounding machine. G. Julian. 1,420,027; Mar. 8.
Sole-rounding machine. When the foot is under load and not under load, Apparatus for observing the variation of the. J. May. 1,448,626; Sept. 27.
Soles and analogous articles, Manufacture of rubber. J. A. Howard. 1,654,001; Dec. 27.
Soles, Machine for pressing. A. B. Fowler. 1,640,353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aug. 30.

Soles to shoe uppers, Apparatus for cementing. W. F. Traudt. 1,627,358; May 3.

Solenoid, Electric. T. L. Lee. 1,650.799: Nov. 29.

Solenoid motor. A. F. Godefroy. 1,635,935; July 12.

Solenoids and the like, Testing apparatus for. H. J. Solid matterials, Method of and apparatus for grading. G. R. Baker, W. E. Prescott, and C. W. Gilderdale. 1,623,049; Apr. 5.

Solid matter from rotary mud. Apparatus for removing. C. C. Richardson. 1,647,310; Nov. 1.

Solids from liquids or liquids from liquids, Machine for separating. W. C. Laughlin. 1,640,707; Aug. 30.

Solids from liquids. Separation of. F. Bachmann. Solids from liquids. Separation of. S. Symington. 1,641,708; Sept. 6.

Solids from press liquids, Apparatus for recovering. H. B. Bergen. 1,624,385; Apr. 12.

Solution, Noncorrosive. M. R. Sherbino. 1,638,710-11; Aug. 9.

Solutions and the like, Filtration of. J. Blumenfeld.
              Feb. 8.
Sodium and borax from brines, Recovery of carbonate compounds of. W. A. Kuhnert. 1,618,835; Feb. 22.
Sodium azide. Manufacture of. F. Wilcoxon and B. Grotta. 1,628,330; May 10.
Sodium carbonate. Production of hydrated. C. Sundstrom and G. N. Terziev. 1,630,244; Nov. 22.

G. C. H. Milligan. 1,625, 230; Dec. 1 2005. Recovery of the C. H. Milligan. 1,625, 230; Dec. 1 2005. Sodium finoride, Producing. E. P. Stevenson. 1,634,122; June 28.
           of. C. H. Milligan. 1.652.725; Dec. 13. Sollium figuride, Producting. E. P. Stevenson. 1,634,122; Sollium hydrosulphide and valuable by-products. Production of. B. B. Alvord. 1,650.106; Nov. 22. Sodium phosphates, Making. H. Howard. 1,642,244; Sept. 13. Sollium sequicarbonate from brines, Recovery of. W. A. Sollium subphites and boric acid, Making. H. Blumenberg, jr. 1,642,535; Sept. 13. Sodium thogrante, Recovery of. R. B. Hall. 1,648,224; Nov. 8. Sollium sciphides and Recovery of. R. B. Hall. 1,648,224; Nov. 8. Sollium thogrante, Recovery of. R. B. Hall. 1,648,224; Nov. 8. Sollium thogrante, Recovery of. R. B. Stoddard and I. Hochstadter. 1,652,646; Dec. 13. Sollium thogrante, Recovery of. S. Sollium thogrante, Recovery of. S. Sollium thogrante, Porming. W. B. Stoddard and I. Hochstadter. 1,652,646; Dec. 13. Softening water. Apparatus for. A. J. Dotterweich. Soll-breaking machine, J. A. Ayers. 1,637,290; July 26. Soll, Device for aerating and fertilizing. L. Lindsay. 1,650,081; Nov. 22.
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Aug. 9.

Solutions and the like, Filtration of. J. Blumenfeld.
1.653.621; June 28.
1.653.621; June 28.
1.616.202; Feb. 1.

Solutions containing organic phosphorous and complex auro compounds. Stable and sterilizable. L. Benda.
1.655.169; July 12.

Solvent. R. C. Luly. 1,648.314; Nov. 8.

946 Solvent-recovery apparatus. A. Zimmerli. 1,613,073; Jan. 4. Solvents and method of using it. Agent for recovery of volatile. W. Runge. 1,651,155; Nov. 29. Soot blower. F. Bowers. 1,637,646; Aug. 2. Soot blower. A. H. Loucks. 1,623,220; Dec. 20. Soot blower. J. H. Reedy and W. J. Lickert. Re16,714; Aug. 23. Soot blower. E. P. Stroup and W. A. Cook. 1,649,001; Nov. 15.
Soot-blower connection, C. W. E. Clarke. 1,624,927;
Apr. 19.

Nov. 15. Sort-browler Connections.

Apr. 19.

Apr. 19.

Sort-blower element. N. L. Snow. 1,644,286; Oct. 4.

Sort-blower system. G. C. Vennum. 1,642,845; Dec. 13.

Soot receptacle. P. W. Thayer. 1,628,621; May 10.

Soot, Removing. J. L. Bresse ir. 1,628,648; May 17.

Sorting and grading device. F. W. Cutler. 1,644,052;

Oct. 4.

S. B. Tulloss. 1,626,126; Apr. 26. Oct. 4
Sorting case. S. B. Tulloss. 1,626,126; Apr. 26. Sorting device. G. W. Cox, jr. 1,625,711; Apr. 19. Sorting machine. J. W. Bryce. 1,651,180; Nov. 29. Sorting machine. L. A. Medcalf. 1,636,477; July 19. Sorting machine. E. Vosburgh. 1,625,438; Apr. 19. Sorting machine. E. Vosburgh. 1,625,438; Apr. 19. Sorting machine. Centrifugal. R. V. Judson. 1,650,218; Nov. 22. Nov. 22.
Sorting machine, Centrifugal. R. V. Judson. 1,650,218;
Nov. 22.
Sorting machines and the like, Perforation-reading device for. E. A. Ford. 1,633,936; June 28.
Sound amplifier, F. D. Standle, 1,633,503; July 12.
Sound amplifier, G. B. Balley, Des. 72,304; Mar. 29.
Sound amplifier, G. C. Blieberger, 1,645,284; Sept. 20.
Sound amplifier, H. Fischer. 1,633,366; June 21.
Sound amplifier, H. Fischer. 1,633,366; June 21.
Sound amplifier, H. S. Satterlee, 1,647,253; Nov. 1.
Sound amplifier, H. S. Satterlee, 1,647,253; Nov. 1.
Sound amplifier, G. C. Wilhelmi, 1,639,359; Aug. 16.
Sound amplifier of megaphone tone box. J. L. Wright. 1,614,582; Jan. 18.
Sound-amplifying construction, J. Kersten. 1,639,656;
Aug. 23.
Sound-amplifying device, P. H. Fuller, 1,614,983; Sound-amplifying device. P. H. Fuller. 1.614.983: Jan. 18. Sound-amplifying device. B. F. Miessner. 1,639,048; Aug. 16. Sound-amplifying instrument. R. Rodriguez. 1,634,340; July 5. Sound apparatus. A. du Bois-Reymond. 1,640,538; Aug. 30 Aug. 30.
Sound, Apparatus for and reproducing. F. W. Lee.
1,622,039; Mar. 22.
Sound boxes, Stylus mounting for. C. Scrabic. 1,636,715;
July 26. Sound boxes, Stylus mounting for. C. Scrabic. 1,638,715; July 26.

Sound collecting and transmitting. C. K. Woodbridge. 1,630,367; May 31.

Sound, Combination recorder and reproducer of. C. Sound damper. H. W. K. De Brey. 1,631,924; June 7.

Sound damper. H. W. K. De Brey. 1,631,924; June 7.

Sound deadener. W. A. Scott. 1,622,469; Mar. 29.

Sound-detection-training device. L. H. Richmond. 1,646,874; Oct. 25.

Sound-Device for recording and reproducing. E. Kramer. 1,649,911; Oct. 18.

Lift,911; Oct. 18.

Brown. 1,639,924; Aug. 23.

Sound-direction finder. W. Rudolph and A. du Bols-Reymond. 1,636,765; July 19.

Sound director. W. S. Dickson. 1,647,439; Nov. 1.

Sound director. W. S. Dickson. 1,647,439; Nov. 1.

Sound director. W. S. Dickson. 1,647,439; Nov. 1.

C. K. Woodbridge. 1,628,6700 Apr. 26.

C. K. Woodbridge. 1,648,6700 Apr. 26.

Sound from graphical records, Photo-electric means for reproducing. R. Hart. 1,647,353; Nov. 1.

Sound-heading apparatus. I. Langmuir. 1,622,594; Nov. 1,622,699; May 10.

Sound-locating apparatus. I. Langmuir. 1,622,594; Mar. 29.

Sound magnifier. S. P. Knut. 1,619,981; Mar. 8.

Sound, Method of and apparatus for electrically producSound, Method of and apparatus for electrically producing. T. Bodde. 1,640,141; Aug. 23.

Sound modifier. A. V. Bodine. 1,645,087; Oct. 11.

Sound-modifier. A. V. Bodine. 1,645,087; Oct. 11.

Sound modifier. A. V. Bodine. 1,645,087; Oct. 11.

Sound producing machines. W. Orr. 1,639,308; Aug. 16.

Sound producing modelines. Production or reproduction of.
S. G. Brown. 1,624,823; Apr. 12.

Sound producer comprising a vibratory system coupled
with a recommendation of the producing and controlling device. L. A. Nemcovsky.

1,646,657; Oct. 18.

Sound-producing apparatus. T. W. Case. 1,647,504;
Nov. 1.

Sound-producing device. A. L. Grupman. 1,619,203; Sound-producing device. A. L. Grubman. 1,619,203; Sound-producing device. A. L. Grubman. 1,654,499;

Sound-producing device. L. J. Grubman.

Sound-producing device. L. J. Grubman. 1,627,384-5; May 8.

1,619,204;

Sound-producing device. L. J. Grubman. 1,654,497-8; Dec. 27. Dec. 27.
Sound-producing device. L. J. Grabman. 1,654,500;
Dec. 27.
Sound-producing device. F. J. and W. L. Kaehni.
1,632,408; June 14.
Sound-producing device. B. E. Lloyd. 1,649,242; Nov. 15. B. E. Lloyd. 1,649,242; Nov. 15. e. H. W. May. 1,653,221; Sound-producing device. H. W. May. 1,653,221;
Dec. 20.
Sound-producing device. G. Ramsey. 1,651,150; Nov. 29.
Sound-producing device. O. A. Shann and F. A. Kuntz.
1,645,823; Oct. 18.
Sound-puritying device. H. Lion. 1,620,367; Mar. 8.
Sound-nys, Receiving and sending directional. M. Maurer
and E. Haschek. 1,649,538; Nov. 15.
Sound-receiver and transmitter. F. W. Hochstetter and
Sound-receiving earpiece. H. J. Mathieu. 1,624,144;
Apr. 12.
Sound-receiving earpiece. H. J. Mathieu. 1,624,144;
Apr. 12.
Sound-receiving system. J. E. Aiken. 1,625,568;
July 12.
July 12.
July 12.
Sound-record. F. W. Stone. 1,622,285; Apr. 19.
Sound-record. F. W. Stone. 1,622,285; Apr. 3
Sound-record. F. W. Stone. 1,623,641; Feb. 22.
Sound, Recording. V. C. J. Nightingall. 1,649,847; Nov. 22. Sound-producing Nov. 22.
Sound recording and reproducing machine. H. A. Rogers.
1,618,888; Feb. 22.
Sound-recording device. H. W. Webb. 1,638,424; Aug. 9.
Sound-recording mechanism. F. Pucek. 1,638,059; Sound-recording methanism. F. Pucek. 1,638,009;
Sound-recording methanism. F. Pucek. 1,637,082;
July 26.
Sound reflector. J. A. Landis. 1,624,873; Apr. 12.
Sound reflector. W. C. Brunow. 1,630,742; May 31.
Sound reproducer. M. Well. 1,637,322; July 26.
Sound reproducer. M. Well. 1,637,322; July 26.
Sound reproducer, Electric. A. A. Thomas. 1,630,641-2;
May 31.
Sound reproducer, Electromagnetic. F. Dietrich and W. H. Gerns. 1,645,231; Oct. 11.
Sound reproducer, Electromagnetic. H. C. Hayes. 1,632,332; June 14.
Sound reproducer, Electromagnetic. F. A. Kolster and S. A. Solike. 1,637,110; July 26.
So. A. Solike. 1,637,110; July 26.
Solike. 1,637,110; July 26.
Solike. 1,637,110; July 26. S. A. Sollie. 1,637,119; July 26.
Sound reproducer, Electromagnetic, C. D. 1,613,776; Jan. 11.
Sound reproducer, Loud-speaking. G. R. Lum. 74,114; Dec. 20.
Sound-reproducer mounting. G. A. Gillen. 1,62: Apr. 6. Des Apr. 5.

Sound reproducers, Machine for testing electromagnetic. R. H. Stacy. 1,648,428; Nov. 8.

Sound reproducers, Suspension for armatures of electromagnetic. C. R. Rowe and W. H. Gerns. 1,649,257; Sound. Reproducing. Apr. 26.

Sound-reproducing apparatus. C. M. Boudette. Rel.6748; Sept. 27.

Sound-reproducing apparatus. C. A. Brigham. 1,625,844; Apr. 26.

Sound-reproducing apparatus. C. A. Brigham. 1,628,844; Apr. 28.

Sound-reproducing apparatus. C. A. Brigham. 1,628,844; Apr. 28. Sound-reproducing apparatus. C. A. Brigham. 1,688,320: Aug. 9.
Sound-reproducing apparatus. M. M. Gruber. 1,684,662; July 5.
Sound-reproducing apparatus. C. W. Rice. 1,631,646; June 7.
Sound-reproducing apparatus. C. K. Sugden. 1,642,905; Sept. 20.
Sound-reproducing device. M. De Cesare. 1,642,767; Sept. 20.
Sound-reproducing device. P. Y. Hodge. 1,645,051; Oct. 11. Oct. 11.
Sound-reproducing device. E. U. Iwwerks.
Sound-leproducing device construction. J.
schneider. 1,641,667; Sept. 6.
Sound-reproducing diaphragm. M. C.
1,616,555; Feb. 28.
Sound-reproducing instrument. T. Brewin. 1.646.201 -J. B. Elen-Rypinski. 1,633,760; Sound-reproducing instrument. A. W. Harris. 1,648,226; Nov. 8.
Sound-reproducing instrument. H. B. Rook. 1,629,071;
May 24.
May 24.
J. Roston. 1,621,278; Sound-reproducing instrument. H. B. Rook. 1,629,371;
May 24.

Sound-reproducing instrument. J. Roston. 1,621,278;
Mar. 15.

Sound-reproducing machine. H. L. T. Buckle. 1,624,578;
Apr. 12. Apr. 12.
Sound-reproducing machine. H. J. Küchenmeister.
1.649.477; Nov. 15.
Sound-reproducing machine. J. R. O'Brien and W. Revell. 1.645.922; Oct. 18. Repeating attachment for.
C. J. Cooke and T. A. Rennie. 1.631.797; June 7.
Sound-reproducing machine. L. Sound-reproducing machine. Sound-reproducing machanism, Adjusting means for.
C. E. Pearson. 1.622.416; June 0.441ner for. R. S. Blatt and B. D. Wells. 1,628.106; May 10.

Sound, Reproduction of. A. F. Sykes. 1,639,713; Aug. 23. Sound reproductions, Apparatus for. J. J. Jakosky. Aug. 23.
Sound reproductions, Apparatus for, J. J. Jakosky. 1,626,088; Apr. 26.
Sound resonator, Musical. S. Cabot. 1,620,869; Mar. 15.
Sound resonator, Musical. S. Cabot. 1,620,869; Mar. 15.
Sound transmission, Directive. H. C. Hayes and M. Mason. 1,636,510; July 19.
Sound, Transmission of. K. M. Lederer. 1,634.292; July 5.
Sov. 15.
Sound, Transmitting, recording. H. C. Hayes. 1,649,113; Sound. Transmitting, recording. Sound transmitter, Submarine. H. C. Hayes. 1,649,113; May C. Sound, Transmitting, recording, and reproducing. J. Tykocinski-Tykocinet. 1,640,557; Aug. 50. Sound-vibration-translating device. E. Grissinger. 1,628,242; May 10. Sound vibrations. System for location of a source of. Sound vibrations. System for location of a source of. Sound vibrations. System for recording. C. J. Lapp. 1,633,335; June 21. Sounding figure. A. Werlitz. 1,627,365; May 3. Sounding figure. A. Werlitz. 1,627,365; May 3. Sounding figure. A. Haynes. 1,633,701; June 28. Sounds on sensitized traveling nim bands, System for 1,655,363; Dec. 27. of. S. O. P. A:son Berglund. 1,655,363; Dec. 27. C. Sounds. Recording and reproducing of. C. F. Sacia. 1,622,765; Apr. 5. Space-adjusting means for ground-engaging implements. J. Spence. 1,620,697; Mar. 15. Space closure. Automatic threshold. L. H. Woodcock. 1,651,570; Dec. 6. Space-discharge system. H. J. van der Bill. 1,613,626; Jan. 11. Statistiple. F. S. Thompson. 1,643,968; Oct. 4. Spacer or space band, Justifying. J. L. Rousseau. 1,635,670; July 12. Spark plug. E. A. Schneider and M. Hertz. 1,646,318; Oct. 18.

Oct. 18.

Spark-plug cleaner. M. Hyen. 1,642,807; Apr. 19.

Spark-plug cleaner. M. Hyen. 1,642,808; Sept. 27.

Spark-plug cleaning apparatus. G. Browning. 1,641,781; Sept. 6.

Spark-plug protector. J. D. Moore. 1,615,289; Jan. 25.

Spark-plug protector, Combustion-engine. A. Manchester. 1,619,524; Mar. 1.

Spark plug, Self-cleaning. E. W. Lockenvitz. 1,645,708; Oct. 18.

Oct. 18.

Sept. W. G. Williams. 1,628,942; May 17. Spark plug, Self-cleaning. E. W. Lockenvitz. 1,635,708; Oct. 13.

Oct. 13.

Spark-plus tester. W. G. Williams. 1,628,542; May 17.

Spark-plugs testing device. F. W. Gowland. 1,639,603; Aug. 16.

Spark plugs, Terminal connecter for. A. Champion. 1,631,611; June 7.

Spark plugs, Terminal connecter for. A. Champion. Spark plugs, Terminal testing unit for. H. J. Strahan. 1,630,546; Nov. 22.

Spark plugs, Terminal testing unit for. H. J. Strahan. 1,630,546; Nov. 22.

Spark plugs, Terminal testing unit for. H. J. Strahan. 1,630,546; Nov. 23.

Spark lings, Terminal testing unit for. H. J. Strahan. 1,630,546; Nov. 23.

Spark lings, Terminal testing unit for. H. J. Strahan. 1,630,546; Nov. 23.

Spark unit, Film-piercing, C. F. Jenkins. 1,630,775; Aug. 23.

Sparklers and analogous lights, Color changer for. K. Kohn. 1,620,560; Mar. 8.

Spartlets L. Goldner; 1,650,509; Nov. 2.

Spatulating machine. T. J. Lewis, 1,622,833; Mar. 29.

Spear, C. Hart. 1,619,254; Mar. 1.

Spear for oil-well casings or tubing. J. L. Cameron. 1,655,547; Dec. 20.
Spear, Frog. C. T. Pflueger. 1,621,082; Mar. 15.
Specific-gravity balance. T. F. Manns. 1,643,443; Sept. 27.
Specific-gravity-determining apparatus. G. B. Linderman, Special of the special Spectacle frame, E. Pappert. Des. 73,578; Oct. 4. Spectacle frame blanks, Manufacturing compressed. W. P. Spectacle frame blanks, Manufacturing compressed. W. P. Spectacle frame blanks, Manufacturing compressed. W. P. Spectacle temple. J. N. Nelson. 1,630,964; May 21. Spectacle temple. J. W. Welsh. 1,636,340; July 19. Spectacle temple and making the same. F. A. Stevens. Spectacle temple and making the same. J. W. Welsh. 1,642,833; Sept. 20. Spectacle temple and making the same. J. W. Welsh. 1,642,833; Sept. 20. Spectacle temple and making the same. J. W. Welsh. 1,649,791; Nov. 15. Spectacles. D. E. Hickey. 1,636,740; July 26. Spectacles. Nose bridge of. O. Jich. 1,651,062; Nov. 29. Speculum, Vaginal. B. Guttmann. 1,644,3665; Dec. 27. Spech recording or reproducing machines. Record cylinder carrier of. W. Greenchum. 1,644,355; Oct. 4. Spech accelerating mechanism. T. J. Butler. 1,638,084; Add. 24. Spech. C. Chh. and C. C. Marc. Add. C. C. Marc. 20. Spech. 20. C. Spechales. C. C. Spech. C. C. Chh. and C. C. Marc. Add. 20. Spech. C. C. Marc. 20. C. Marc. 20. Spech. 20. C. Spech. 20. Spech. 20. C. Spech. 20. C. Spech. 20. Spech. 20. Spech. 20. C. Spech. 20. Spech. 2 Aug. 9.
Speed and direction indicator. C. Cobb and C. C. Marshall. 1,632,643; June 14.
Speed-change mechanism. W. M. Mitchell. 1,623,695; Speed-change mechanism. W. M. Mitchell. 1,623,695; Apr. 5.
Speed changer. H. J. Smith. 1,629,180; May 17.
Speed-changing mechanism. E. G. Kesling. 1,635,483; July 12.
Speed-changing mechanism. Friction. R. E. Winters. 1,645,270; Oct. 11.
Speed-control. F. Kuehnel. 1,628,606; May 10.
Speed-control. F. Kuehnel. 1,628,606; May 10.
Speed-control mechanism. J. E. Renholdt. 1,625,093; Apr. 19.
Speed-control system. J. Schombourger. 1,632,627; June 14.
Speed-control system. W. Selz. 1,632,682; June 14. Speed-control system. L. Schombourger. 1,632,627;
June 14.
Speed-control system. W. Seiz. 1,632,632; June 14.
Speed-controlling device. E. F. Puls. 1,647,589; Nov. 1.
Speed device, Frogressive change. R. Esmanti-Pelterle.
Speed device, Frogressive change. R. Esmanti-Pelterle.
Mar. 22.
Speed-governing device. E. F. Brown. 1,623,655; Apr. 5.
Speed governor. J. A. Miller. 1,639,265; Aug. 16.
Speed governor. R. G. Richardson. 1,653,660; Dec. 27.
Speed governor. R. G. Richardson. 1,653,660; Dec. 27.
Speed governor. R. G. Richardson. 1,653,660; Dec. 27.
Speed modelating apparatus. P. A. Kourtzman. 1,632,476; Nov. 29.
Speed-indicating apparatus. P. A. Kourtzman. 1,632,476; Nov. 29.
Speed-indicating device. A. P. Brant and C. M. Derby. 1,647,550; Nov. 1.
Speed-indicator. M. Marcus. 1,642,617; Sept. 13.
Speed indicator. M. Marcus. 1,642,617; Sept. 13.
Speed indicator. M. Mortessen. 1,630,963; May 31.
Speed indicator. Floctric. R. E. Woolley. 1,650,679; Nov. 29.
Speed indicators, Cound. R. Kauch. 1,635,045; July 5.
Speed indicators, Cound. R. Kauch. 1,635,045; July 5.
Speed indicators, ornstruction of. C. H. H. Rodanet. 1,621,433; Mar. 15.
Speed indicators or the like by one of the steering wheels of a motor vehicle, control for. C. H. H. Rodanet. 1,621,433; Mar. 15.
Speed indicators set, Variable. W. C. De Roo and J. E. Larsh. 1,647,087; Oct. 25.
Speed mechanism. Variable. W. C. De Roo and J. E. Larsh. 1,647,087; Oct. 25.
Speed mechanism Variable. J. H. Wells. 1,628,939; May 17.
Speed of driven members, Controlling the. P. B. Reeves.
Speed-reduction mechanism. A. J. Krause. 1,631,739; June 7. Speed-reduction mechanism. A. J. Krause. 1,631,739; June 7. Speed-regulating system. K. Schmidt. 1,647,020; Oct. 25. Speed regulation, C. E. Carpenter. 1,627,832; May 10. Speed regulator. W. M. Bradshaw and J. H. Ashbaugh. 1,647,337; Nov. 1. Speed regulator. C. A. Hoxie. 1,618,757; Feb. 22.

Speed regulator. K. Schmidt. 1,632,565; June 14. Speed regulator. H. E. Warren. 1,646,269; Oct. 18. Speed repeating mechanism, Variable. A. D. Trenor. 1,651,852; Dec. 6. Speed-responsive device. E. C. Vroman. 1,638,718; Speed transmission, Variable-, R. H. Pratt. 1.641.692; Sept. 6. Speed transmissions, Controlling mechanism for variable. Speed transmissions, Controlling mechanism for variable. Speed variable E. Chehire. 148,027; Feb. 1. Speedway. A. Avery. 1,613,866; Jan. 11. Speedway. A. Avery. 1,613,866; Jan. 14. Speedwarench. C. Callison. 1,626,719; May 3. Speeding reactions. Apparatus for. H. B. Kipper. 1,632,340; June 14. Speedometer. A. H. Joseph. 1,649,830; Nov. 22. Speedometer. G. Ramsey. 1,628,271; May 10. Speedometer. A. Seguin. 1,613,249; Jan. 4. Speedometer. A. Seguin. 1,613,310; Feb. 22. Speedometer and road indicator. J. L. Blanchard. 1,618,049; Feb. 15. Speedometer construction. J. M. Lea. 1,645,331; Speedometer drive. D. H. Nash. 1,627,616; May 10. Speedometer drive. D. H. Nash. 1,627,616; May 10. Oct. 11. Speedometer drive. D. H. Nash. 1,627,616; May 10. Speedometer drive mechanism. E. L. McIntyre. 1.644.888; Oct. 11. 1.644.888; Oct. 11. mechanism. F. H. Lundgren. Speedometer-driving mechanism. F. H. Lundgren. Speedometer-fastening means, T. D. Adair, jr. 1.622.897; Mar. 29. Speedometer for automobiles and the like, Indicating, T. E. Fetersen and J. and E. Rasmussen. 1,615,568; T. E. F Jan. 25 Solutions and the state of the Speedometer, Magnetic. J. K. Olsen. 1,625,500; Apr. 5. Speedometer, Magnetic. J. K. Olsen. 1,625,122; Apr. 1,9 Speedometer transmission drive. E. Gustafson. 1,650,125; Nov. 22.

Spiles of the speedometer transmission drive. E. Gustafson. 1,650,125; Nov. 22.

Spiles of the speedometer transmission drive. E. Gustafson. 1,650,125; Nov. 22.

Spiles of the speedometer transmission drive. E. Gustafson. 1,642,068; Spile. 1,623,264; Apr. 5. Spiles Pale and the spile spile. P. C. Olin. 1,623,264; Apr. 5. Spiles machine, Automatic. G. Weber. 1,634,567; July 5. Spiles machine, Automatic. G. Weber. 1,634,567; July 5. Spiles machine. H. O. Crippen. 1,621,768; Mar. 22. Spiles retainer. H. O. Crippen. 1,621,768; Mar. 22. Spiles retainer. H. O. Crippen. 1,621,768; Mar. 22. Spiles retainer. H. O. Crippen. 1,621,768; Mar. 1,642,158; Spilla brace. H. Pieper. 1,650,650; Nov. 29. Spilles Eec—

Door-knob spille.

Lock spille. J. J. Flanjan. 1,642,486; Sept. 13. Spille attachment. A. M. Drake. 1,622,234; Mar. 22. 22,
Spindle attachment, Surfacing-machine. A. E. Maynard.
1,634,952; July 5.
Spindle automatic machine, Multiple- R. M. Mero and
R. J. Mullin. 1,650,374; Nov. 22.
Spindle bott, Adjustable. B. H. Rehn. 1,620,688;
Mar. 15.
Spindle carriage and clutch. M. Walker. 1,620,844;
Mar. 1,520,688; Dec. 1,547,747; Nov. 1,
Spindle guard. Clear-vision. H. Hokmer and L. T. Johnson. 1,652,669; Dec. 13.
Spindle machine, Multiple-tool. S. W. Fish. 1,625,116; son. 1.652.669; Dec. 13.

Spindle machine, Multiple-tool. S. W. Fish. 1,625.116;
Apr. 19.

Spindle mounting. A. Turner and A. P. Burns. 1,619,995;

Spindles, Bobbin-clutching means for rotatable, J. A. Miller. 1,647,109; Oct. 25.
Spindles, Friving. J. Kirner. 1,642,815; Sept. 20.
Spindles, Friving. J. Kirner. 1,642,815; Sept. 20.
F. K. Blauvelt. 1,636,689; July 19.
Spine stretcher. J. R. Anderson. 1,614,641; Jan. 18.
Spinmerter. R. V. Williams. 1,647,822; Nov. 1.
Spinning. H. L. J. Chavassien. 1,622,368; Mar. 29.
Spinning. H. D. Colman. 1,614,79; Jan. 18.
Spinning and analogous machines. Driving mechanism of.
Nov. 15.
Spinning and like machines, Overhead gear-driven spindle mechanism for. O. Lambert. 1,654,376; Dec. 27.
Spinning and twisting machine. E. E. Bradley.
1,616,349; Feb. 8. rings, Tool for removing travelers
Spinning and wisting rings, Tool for removing travelers
Spinning apparatus. F. Perutz. 1,649,322; Nov. 15.
Spinning device. S. Gjankovich. 1,639,844; Aug. 23.
Spinning device. S. Gjankovich. 1,639,844; Aug. 23.
Spinning device. A. T. Petrie. 1,623,183; Apr. 5.
Spinning, doubling, and the like machines, Driving mechanism for. J. G. Barke and F. Hardman. 1,622,689; Mar. 29.
SMar. 29. anism for. J. G. Barke and F. Hardman. 1,622,698; Mar. 29.
Spinning, doubling, twisting, and like machines, Doffine mechanism for. A. and C. Rhodes. 1,639,868; Aug. 23.
Spinning frame. C. Morton. 1,619,985-6; Mar. 8.
Spinning frame. C. Morton. 1,619,985-6; Mar. 8.
Spinning frame, Ring. E. Stubbs. 1,029,366 (May 17.
Spinning frames, Bunch-building mechanism for. W. T.
Spinning frames, Leveling apparatus for spindles in. W.
Spinning frames, Leveling apparatus for spindles in. W.
Spinning frames, Means for leveling and lining. A. M.
Guillet. 1,616,034; Feb. 1.
Spinning frames, Michael for the spindles in. W.
Spinning frames, Michael for the spindles in. W.
Spinning frames, Singles for the spindles in. W.
Spinning frames, Singles for the spindles in. W.
Spinning frames, Stop-motion device for. I. Linon and L. B. Hasbrouck. 1,634,614; July 5.
Spinning frames, Stop-motion device for. H. E. Van
Ness. 1636,945; July 26.
Spinning machine. 4. D. Colman and B. A. Peterson.
1,635,205; July 120.
Spinning machine. D. Edelmann. 1,621,158; Mar. 15.
Spinning machine. F. K. Hendrickson. 1,628,778; May
Spinning machine. F. K. Hendrickson. 1,628,778; May
Spinning machine. F. K. Hendrickson. 1,628,778; May 17.
Spinning machine.
Spinning Spinning-machines guide. Jan. 4.
Spinning machines and the like, Flier for. H. C. Herr. 1,013,013; Jan. 4.
Liu, 13,13; Jan. 4.
Liu, 14,14,152; Jan. 4.
Liu, 14,152; Jan. 18.
Spinning machines, Bobbin for. P. Sharp. 1,642,972; Sept. 20.
Sept. 20.
Liu, 15,152; Jan. 18, Slippining machines, Bobbin for. J. R. Milson. 1,625,488; 1,614,552; Jan. 18.
Splinning machines, Bobbin for. P. Sharp. 1,642,972; Sept. 20.
Splinning machines, Oller for. J. R. Milson. 1,625,488; Appliance of the control of the Prince S. 1,630,075; May 24.

Ross. 1,630,075; May 24.

Fig. Ross. 1,630,075; May 24.

Fig. Ross. 1,630,075; May 24.

Fig. Ross. 1,630,075; May 24.

Findle of filer spinning, roving, and analogous machines, W. Prince-Smith and J. Robinson. 1,629,365; May 17.

Spindle retainer. J. Ross. 1,626,252; Apr. 26.

Spindle-stock guide, Head. J. Dahmen. 1,622,375; Mar. 29. Mar. 29. Spindles and bobbins or spools, Friction connection for. E. J. Emery. 1.640.760; Aug. 30. Spindles, Bobbin-clutching means for rotatable. H. H. Burdett. 1,647.106; Oct. 25.

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Spiral separator. F. Pardee. 1.617,345; Feb. 15.
Spirit level. V. E. Ivarson. 1.630,122; May 24.
Spiral Level. V. Island Interest level. Spiral le
  Sponge-rubber articles, Unitaring flexible modes for producing.

Peb. 18. L. Schleppy and A. A. Bureau. 1,617,421;
Peb. 15. L. Schleppy and A. A. Bureau. 1,617,421;
Peb. 15. L. Schleppy and A. A. Bureau. 1,617,421;
Peb. 15. L. Schleppy and A. A. Bureau. 1,617,421;
Peb. 15. L. Schleppy and A. A. Bureau. 1,617,421;
Peb. 15. Spool and making the same. S. R. Gleason. 1,630,791;
May 31. Spool and pin cushion holder, Combination. F. Lafin.
Pool and pin cushion holder, Combination. F. Lafin.
Pool and pin cushion holder, Combination. F. Lafin.
Pool and Peb. H. Wilson. 1,630,155; May 24.
Pool Electromagnet. J. W. Wardell. 1,616,207; Feb. 1.
Pool Electromagnet. J. W. Wardell. 1,616,207; Feb. 1.
Pool Electromagnet. J. W. Wardell. 1,636,207; Feb. 1.
Pool Electromagnet. J. W. Wardell. 1,636,496; May 124.
Pool Market May 16.
Pool Support. B. B. Franke. 1,628,040; May 126.
Pool Support. B. B. Franke. 1,628,040; May 1,631,202; June 7.
Pool Support. G. Crossland. 1,631,201; June 7.
Pool Support. G. Crossland. 1,631,201; June 7.
  June 7.

Spool support. G. Crossland. 1,631,921; June 7.

Spool support. G. Crossland. 1,631,921; June 7.

Spooler-bobbin holder. H. H. Burton. 1,621,059;

Spooling machine. H. S. Busey and W. A. Hallstrom. 1,627,831; May 10.

Spooling mechanism and method. F. Honig. 1,627,239;

May 8.
Spooling mechanism and method. F. Honig. 1,627.239:
May 3.
Spooling process. B. A. Peterson. 1.646.833; Oct. 25.
Spoolis, Making. A. C. Hopkins. 1,645.701; Oct. 18.
Spools, Teels, bobbins, and the like, Core for. H. W.
Archer. 1,625.585; Apr. 19.
Spoon. L. H. Henr. Des. 72.7679; May 31.
Spoon. L. R. Zifferer. 1.614.270: Jan. 11.
Spoon. Baby medicine. R. E. Hodgman. 1,648,123;
Nov. 8.
Spoon, Dosage. H. D. Morgan and F. P. Bushey. 1,619.878; Mar. 8.
Spoon hook. W. D. Elwood. 1,638.904: July 26.
Spoon on analogous article. A. L. Barney. Des. 73.735:
Oct. 25.
Spoon or analogous article. A. L. Barney. Des. 73.735:
     Spoon or analogous article. A. L. Barney. Des. 73,735;
Nov. 1.
     Spoon or similar article. G. N. Allen. Des. 72,657;
May 17.
Spoon or similar article. G. N. Allen. Des. 72,747;
May 31.
                                                                                          similar article. E. T. Beck.
       Spoon or similar article. W. T. Brown. Des. 73,279;
Aug. 23.
     Spalls, 23. Spalls, 24. Spalls, 25. Spalls
       Spoon or similar article. J. Leach. Des. 73.384; Aug. 30. Spoon or similar article. J. Rothlis. Des. 74.026; Dec. 6. Spoon or similar article. A. H. Staf. Des. 73,149;
                                                                                               similar article. A. H. Staf.
                                                                                                                                                                                                                                                                                                                                                                                            Des. 74.030:
     Spoon or similar article. F. W. Stark. Des. 73,588;
       Spoon or similar article. F. S. Trumbull. Des. 71,816;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Spraying device, Medicinal. J. F. Morgan, and W. A. Jones. 1.650.460: Nov. 22.
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Spoon or similar article. F. S. Trumbull. Des. 72,877;
June 14.
Special Specia Spotlight, J. E. Tomlinson. 1.614,904; Jan. 18. Spotlight, C. A. Whitsett. 1,633,148; June 21. Spotlight, Adjustable. W. W. Gehersky. 1,612,806; Jan. 4. Spotlight, Adjustable. W. W. Gehersky. 1,612,806; Jan. 4. Spotlight, Adjustable. J. M. Johnson. 1,614,743; Spotlight, Corner-post. H. Hansen. Des. 71,970; Feb. 8. Spotlight, Corner-post. H. Hansen. Des. 71,970; Feb. 8. Spotlight, Dirigible. T. P. Burton and S. W. Ford. 1,613,642; Jan. 11. V. C. Williams. 1,624,813; Apr. 19. Spotlight mounting. H. R. Freund. 1,625,413; Apr. 19. Spotlight mounting. H. R. Freund. 1,625,413; Apr. 19. Spotlight mounting. H. M. Johnson. 1,614,745; Jan. 18. Spotlight mounting. H. M. Johnson. 1,614,745; June 14. Spotlights and the like, Controlling switch for. E. G. K. Anderson. 1,632,764; June 14. Spotlights, Support for H. J. Mescher. 1,649,175; Spotting and labeling machine. C. H. Oslund and J. E. Johnson. 1,641,045; Aug. 30. Spot-welded point and point retainer. B. P. Lloyd. 1,618,383; Feb. 22. Spout and spray Sture, Combination. M. J. Glauber. Spout and spray Sture, Combination. M. J. Glauber. Spout, Collapsible. B. A. McAnsh. 1,631,951; June 7. Spout, Collapsible. B. A. McAnsh. 1,631,851; June 7. Spout, Collapsible. B. R. Sausen and H. D. Binks. 1,626,360; Apr. 26. Spray appliance. M. Ascherl. 1,652,422; Dec. 13. Spray cooling. B. R. Sausen and H. D. Binks. 1,633,891; June 7. June 21. C. L. Reichenbach. 1,626,096; Apr. 26. Spray gun. W. F. Gradolph and G. Mueller. 1,613,823; Jan. 11. C. L. Reichenbach. 1,626,096; Apr. 26. Spray gun. W. F. Gradolph and G. Mueller. 1,613,829; June 21. June 21. Lune 21. June 21. Lune 21. June 21. J Spray gun. C. L. Reichenbach. 1,026,096; Apr. 26. Spray gun. B. R. Sausen and E. B. Olsen. 1,633,291; June 21. Spray, Hog. A. H. Eckerman. 1,620,013; Mar. S. Spray harker. W. H. Cannard. 1,622,305; May 10. Spray harker. W. H. Cannard. 1,622,305; May 10. Spray horzel. M. W. McArdle. 1,625,042; Apr. 19. Spray processing apparatus. P. T. Zizinia. 1,634,640; July 5. Spray, Vegetable. A. J. Lane. 1,633,809; Dec. 27. Spray, Vegetable. A. J. Lane. 1,653,809; Dec. 27. Spray, Vegetable. A. J. Lane. 1,653,809; Dec. 27. Spray, Vegetable. A. J. Lane. 1,653,809; Dec. 27. Sprayer. A. G. Bulle. 1,635,809; Dup. 21. Sprayer. A. W. Kegler. 1,639,297; Aug. 16. Sprayer. A. W. Kegler. 1,639,297; Aug. 16. Sprayer. A. W. Kegler. 1,639,297; Aug. 16. Sprayer. J. Lquid. F. T. and W. W. Stewart. 1,622,213; Sprayer, Liquid strainer for orchard. L. W. Weaver. 1,645,364; Oct. 11. Spraying apparatus. E. M. Bassler. 1,636,349; July 26. Spraying apparatus. W. Clauson. 1,640,111; Aug. 23. Spraying apparatus. W. Clauson. 1,640,111; Aug. 23. Spraying apparatus. Molten material. L. P. Kovanda and J. H. Hubbell. 1,642,418; Sept. 13. Spraying apparatus. Plant. J. B. Boyett. 1,638,758; Aug. 8. Spraying apparatus. Plant. J. B. Boyett. 1,638,758; Aug. 8. Calbinet and apparatus. H. C. Bartling. Spraying device. J. A. Brown. 1,641,778; Jun. 18. Spraying device. J. A. Brown. 1,641,778; Sept. 6. Spraying device. J. W. Kreuder. 1,642,761; July 19. Spraying device. Dust-laying. T. French. 1,628,468; May 10. Spraying device. Medicinal. J. F. Morgan, and W. A. Jones. 1,650,460; Nov. 22. Spray gun. C. L. Reichenbach. 1,626,096; Apr. 26. Spray gun. B. R. Sausen and E. E. Olsen. 1,633,291; June 21.

Spraying device, Mouth. L. L. Tuorto. 1,646,942; Oct. 25.

Oct. 25.

Spraying, Light motor-truck attachment for high-pressure. A. F. Burgess. 1,620,946; Mar. 15.

Spraying machine. P. W. Ramer. 1,623,702; Apr. 5.

Spraying machine. D. W. Smith. 1,622,047; June 14.

Spraying machine. J. J. Steiger. 1,648,154; June 24.

Spraying machine. G. A. Urbach. 1,654,059; Dec. 27.

Spraying machine. G. A. Urbach. 1,654,059; Dec. 27.

Spraying machine. Liquid. L. Ratliff. 1,643,518; Sept. 27.

Spreader. S. W. Varnado. 1,639,203; Aug. 16.

Spreader. Siraw. E. F. Anderson. 1,639,447; Lug. 16.

Spreader fool. J. L. Buchnann. 1,628,650; May 17.

Spreader fool. J. L. Buchnann. 1,628,650; May 17.

Spreading device, Portable. W. P. Tarrant. 1,639,238; Aug. 16.

Spreading of sowing machine for root planting. H. C. Aug. 16.

Spreading or sowing machine for root planting. H. C. Toomey. 1,636,536; July 19. Toomey. 1, Air spring.

Bed spring.

Car-truck spring.

Carbuck-valve Lubricating spring. Machine spring. Multiple spring. Power spring. Rail-joint spring. spring, Rail-joint spring,
Ironing spring, Tube spring,
Luminated spring.
Lubricating and internalVehicular leaf spring. Spring-anchoring means. D. Hanauer. 1,649,227;
Nov. 15.
Spring and manufacturing the same. E. B. Utter.
1,621,095; Mar. 15.
Spring and recoil check. A. S. Samuels. 1,628,749;
May 17.
Springboard. F. Albach. 1,639,323; Aug. 16.
Spring bottom. J. F. Brown. 1,642,225; Sept. 13.
Spring bracket. E. R. Gurney. 1,613,750; Jan. 11.
Spring bracket. Automatically-adjustable. N. Alikakos.
1,629,671; May 24.
Spring clup. L. Mailette. 1,617,070; Feb. 8.
Spring clup. L. Mailette. 1,617,070; Feb. 8.
Spring clup, Making. J. A. Hoffman. 1,641,631; Sept. 6.
Spring clup, Making. J. A. Hoffman. 1,641,631; Sept. 6.
May 17.
Spring compressor. D. C. Feather. 1,630,334; May 31. May 17.

Spring compressor. D. C. Feather.

Spring compressor and replacer.

1,632,318; Jan. 11.

Spring connection, Flexible. E. H. Belden. 1,616,842;

Feb. 8.

Spring construction. F. D'Arcy.

Spring construction. H. G. Lord.

Spring construction, Rear. H. Athons. 1,629,879;

May 24.

May 24.

Spring construction, Rear. H. Athons. 1,629,679;

May 24.

Spring construction. May 24.
Spring control. K. O. Schauman, S. R. Yancey, and J. L. Mifsud. 1,650,963; Nov. 29.
Spring cover. F. D. Madge. 1,625,861; Apr. 26.
Spring cover. H. C. Paul. 1,614,150; Jan. 11.
Spring cover. F. Schesser. 1,648,742; Nov. S.
Spring cover or wrapper, Lenf.. S. L. Young. 1,645,493; Oct. 11. Spring-cross yieldable coupling. J. J. Serrell. 1,635,150; Spring-cushion construction. S. Suekoff. Mar. 15. 1,621,091; Spring-cushlon construction. S. Suekoff. 1,621,091; Mar. 15.
Spring cushion structure. P. Krakauer. 1,649,832; Spring cushion structure. P. Krakauer. 1,649,832; Spring cycle. V. P. Albert. 1,649,643; Nov. 15.
Spring equalizer. C. C. Goodrich. 1,615,5376; Jan. 25.
Spring-eye bender. J. O. Parrish. 1,619,537; Mar. 1,
Spring for shock absorber. S. H. Bishop and N. F. McNaught. 1,642,058; Sept. 13.
Spring governor. T. F. Williams. 1,632,739; Nov. 18.
Spring jack. R. A. Clarke. 1,647,477; Feb. 15.
Spring jack. E. B. Yazley. 1,636,3202; Dec. 20.
Spring lubricator. E. F. Blackburn. 1,635,665; Jan. 18.
Spring morior. A. M. Babcock. 1,634,864; July 56.
Spring motor. A. M. Babcock. 1,632,633; June 14.
Spring motor. A. M. Babcock. 1,632,633; June 14.
Spring motor. J. Buttigieg. 1,632,633; June 14.
Spring motor. W. Rotter and E. J. Panish. 1,616,142; Feb. 1. Feb. 1.
Spring motor. J. Wolff. 1,616,731; Feb. 8.
Spring older. F. G. Withrow. 1,620,150; Mar. 8.
Spring-olling clip. J. M. Jackson. 1,616,805; Feb.
Spring-pad construction. A. B. Clisson. 1,63 Spring-pad construction.
May 31.
Spring-pad construction.
May 31. 1,630,655; A. D. Maury. 1.630.665: May 31. Spring-pad construction. G. E. Ryan. 1,628,196; May 10. Spring plates. Apparatus for forming. W. H. Frater. 1,654,251; Dec. 27. Spring red. B. G. Johnson. 1,648,948; Nov. 15.

Spring seat. H. J. Pierson. 1.616,546; Feb. 8.

Spring shackle and shock absorber, Combined. N. Skillman. 1.646,884; Oct. 25.

Man. 1.646,884; Oct. 26.

Mar. 16.

Mar. 16.

Spring stabilizer. C. Hlavacek. 1.615,874; Feb. 1.

Spring stabilizer. A. J. Hollifield. 1.639,944; Aug. 28.

Spring structure. D. Hanauer. 1.633,546; June 21.

Spring structure. D. H. Van Hove. 1.632,936; June 21.

Spring structure. D. H. Van Hove. 1.632,936; June 21.

Spring structure. Diolstered box. E. H. Hebenstreit.

1.629,977; May 17.

Spring structures, Base frame for. G. Kolsmith.

1.650,284; Nov. 22.

Spring structures, Base frame for. H. A. Palmer.

1.650,294; Nov. 22.

Spring support. S. P. Bush. 1.629,475–6; May 24.

Spring support. S. P. Bush. 1.629,475–6; May 24.

Spring support. S. P. Bush. 1.629,475–6; May 27.

Spring support. S. P. Bush. 1.629,475–6; May 27.

Spring support. S. P. Bush. 1.629,475–6; May 27.

Spring support. S. P. Bush. 1.629,475–6; May 28.

Spring support. S. P. Bush. 1.629,475–6; May 28.

Spring support. S. P. Bush. 1.629,475–6; May 24.

Spring support. E. C. Keielens and J. S. Coffin. jr. 1.620,491–2; Mar. 8.

Spring support. E. E. Kreissig. Mar. 15.
Spring-supporting means and the like. E. Kreissig.
1.633,027; June 21.
Spring surface bolt. S. Gold. 1,632,832; June 21.
Spring-suspended sleeve. D. C. Klausmeyer. 1,650,756; NOV. 29.
Spring suspension. C. H. Buckler. 1,620,070; Mar. 8.
Spring suspension. A. F. Masury. 1,621,677; Mar. 22.
1,647,470; Nov. 1
Spring suspension device. D. B. Whitehill. 1,619,452; Mar. 1, 1 Mar. 1.
Spring suspension device or shock absorber.
blad. 1,626,966; May 3.
Spring suspension means. L. A. Tussing.
Feb. 8. Feb. 8. Spring suspension of motor and other vehicle bodies. J. M. Strachan. 1,652,841; Dec. 13. Spring-tension neutralizer, G. M. Cross. 1,618,516; Feb. 22. J. M. Strachan. 1,652,841; Dec. 13.
Spring-tension neutralizer. G. M. Cross. 1,618,516;
Feb. 22.
Spring terminal clip. A. P. Fahnestock. 1,622,631–2;
Spring terminal clip. A. P. Fahnestock. 1,622,631–2;
Spring terminal clip. A. P. Fahnestock. 1,622,631–2;
Spring washer. C. H. Loutrel. 1,613,232; Jan. 4.
Spring wheel. R. Chilton. 1,646,991; Oct. 25.
Spring wheel. R. W. J. Beisel. 1,625,518; Apr. 19.
Spring wheel. R. W. Decker. 1,622,905; Mar. 29.
Spring wheel. F. W. Decker. 1,622,905; Mar. 29.
Spring wheel. G. H. Martin. 1,637,263; July 26.
Spring wheel. G. H. Martin. 1,637,263; July 26.
Spring wheel. C. F. Mendez. 1,622,5270–1; Apr. 19.
Spring wheel. W. W. Tew. 1,618,689; Feb. 22.
Spring wheel. R. W. Wood. 1,617,34; Feb. 8.
Spring winding machine. F. S. Folger and H. W. AltSprings winding machine. 12. J. A. Hittle. 1,627,604; May 10.
Springs, Apparatus for winding. S. H. Hartshorn. 1,636,689; July 26.
Springs, Machine for knotting. F. G. Fencl. 1,651,518; Dec. 6.
Springs, Machine for knotting. F. G. Fencl. 1,651,518; Dec. 6.
Springs, Machine for knotting. J. A. Findora. 1,638,010; June 21.
Springs, Machine for compound helical. J. F. Gail.
Springs, Mally 10.
Springs, Mally 10.
Springs, Protecting device for. B. Lowy. 1,618,638; Appr. 12. 1.618.516: Springs, 12 Springs, Protecting device for. B. Lowy. 1,616,133; Feb. 1. Springs Trotecting device for. B. Lowy. 1,616,133; Feb. 1.

Springs used in hydrostatic logs for balancing the presure. Adjusting arrangement for. K. G. Lissel. 1,644,783; Oct. 11.

3.644,783; Oct. 11.

3.644,783; Oct. 11.

3.644,783; Oct. 11.

3.640,781; Oct. 11.

3.640,781; Oct. 11.

3.640,781; Oct. 12.

3.640,781; Oct. 12.

4. Sprinkler. C. A. Brewer. 1,612,964; Jan. 4.

5. Sprinkler. G. Buelna. 1,640,781; Aug. 30.

5. Sprinkler. G. Buelna. 1,640,781; Aug. 30.

5. Sprinkler. W. L. Hawes. 1,651,887; Dec. 6.

5. Sprinkler. G. F. Humphrey. 1,621,204; Mar. 15.

5. Sprinkler. M. W. McArdle. Des. 73,327; Aug. 22.

5. Sprinkler. L. R. Nelson. 1,631,881; June 7.

5. Sprinkler. B. W. Roberts. 1,647,582; Nov. 1.

6. Sprinkler and of the ment therefor. L. Olschewskl. 1,628,993; May 17.

5. Sprinkler apparatus for fire extinguishing, Valve for automatic. S. Horton. 1,614,002; Jan. 11.

5. Sprinkler sparatus for fire extinguishing, Valve for automatic. S. Horton. 1,614,002; Jan. 11.

5. Sprinkler sparatus for fire extinguishing, Valve for automatic. S. Horton. 1,614,002; Jan. 11.

5. Sprinkler stand. B. C. Bank. 1,649,640; Nov. 15.

5. Sprinkler system. M. F. Silva. 1,638,444; July 19.

5. Sprinkler system. M. F. Silva. 1,636,444; July 19.

5. Sprinkler system. M. F. Silva. 1,636,640; Nov. 15.

5. Sprinkler system. M. F. Silva. 1,636,640; Nov. 15.

5. Sprinkler system. M. F. Silva. 1,636,640; Nov. 15.

5. Sprinkler system. M. F. Silva. 1,636,640; Nov. 15.

5. Sprinkler system. M. F. Silva. 1,636,640; Nov. 15.

5. Sprinkler stand. B. C. Bank. 1,649,640; Nov. 15.

5. Sprinkler stand. B. C. Bank. 1,649,640; Nov. 15.

5. Sprinkler stand. B. C. Bank. 1,649,640; Nov. 15.

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5. Sprinkler stand. B. C. Bank. 1,649,640; Nov. 15.

5. Sprinkler stand. B. C. Bank. 1,649,640; Nov. 15.

5. Sprinkler stand. B. C. Bank. 1,649,640; Sprinkler system, Dry-pipe, A. v. Ever-pipe, Oct. 4.
Sprinkler tops, Reenforcement for E. H. Barker, 1,625,016; Apr. 19;
Sprinkler with resistance motor. W. V. E. Thompson, Sprinklers, Automatic shut-off device for lawn. J. M. Noble. 1,642,821; Sept. 20.

Sprinkling device. F. C. Orr. 1,649,179; Nov. 15. Sprinkling device, Lawn. W. H. Coles. 1,628,118; Sprinking device, F. C. Off. 1,689,179; Nov. 15. Sprinking device, Lawn. W. H. Coles. 1,628,118; May 10. Sprinkling system, Automatic. J. A. Brooks. 1,638,519; Aug. 9. Aug. 9.
Sprinkling systems, Automatic sprinkler head for. H. M.
Nacey. 1,626,863; May 3.
Sprecket. M. P. Holmes. 1,642,856; Sept. 20.
Sprocket chain and link therefor. W. F. Hall. 1,641,536; Sprecket. M. P. Holmes. 1.642.806; Sept. 20.
Sprecket. Schain and link therefor. W. F. Hall. 1,641,536;
Sprecket, Split. N. H. Scott. 1.623,814; Apr. 5.
Sprecket, Traveling track. E. J. Armstrong. 1,643,598;
Sept. 27.
Sprecket wheel. C. Rorabeck. 1.630,313; May 31.
Sprecket wheel, Expansible. W. H. Tschappat. 1,614,266;
Sprecket wheel, Expansible. W. H. Tschappat. 1,614,266;
Sprecket wheel, Renewable-rim. C. Rorabeck. 1,643,472;
Sept. 27.
Sprecket wheel, Renewable-rim. C. Rorabeck. 1,643,492;
Spreading shoe. J. A. Bellman. 1,645,7250; July 26.
Spudding shoe. J. A. Bellman. 1,645,472; Oct. 11.
Spuds, Making. C. P. Wetmore. 1,623,954; Apr. 5.
Spuds, Making. C. P. Wetmore. 1,623,954; Apr. 5.
Sputshobbling machine. W. F. Zimmermann. 1,625,580;
Dipt. or prod for horses. W. R. Hill. 1,653,768;
Dec. 27.
Sputum-cup holder. M. M. Andrews. 1,647,427; Nov. 1. Dec. 27.

Sputum-cup holder, M. M. Andrews, 1,647,427; Nov. 1.

Square, E. W. Delph, 1,615,745; Jan. 25.

Square, Adjustible framing, drafting, and bevel. S. J.

Hester, 1,638,200; Aug. 9.

Mar. 15.

Square and gauge, Frame, J. Bunger, 1,643,695; Square and gauge, Frame, J. Bunger, 1,643,695; 27.

Square and level, Combination, D. G. Gray, 1,653,561; Dec. 20.

Square and protractor, Folding steel, G. S. Schretz Dec. 20.
Square and protractor. Folding steel. G. S. Schvetz.
1,643,033 ; Sept. 20.
Square, Combination. R. K. Collins. 1,618,862; Feb. 22.
Square, Combination. R. W. Hauber. 1,640,604; Aux. 30.
Square, Combination cut-off scriber and bevel. R. A.
Wynkoop. 1,638,874; July Williams. 1,616,457; Feb. 8.
Square, Higned folding. E. J. Elsas. 1,638,993; Dec. 27.
Square, Plotting. F. Holland. 1,623,117; Apr. 5.
Square, Plotting. F. Holland. 1,623,117; Apr. 5.
Square, Square, F. I. Kimball. 1,615,013; Jan. 18.
Square, Square, F. I. Kimball. 1,615,013; Jan. 18.
Square, Attachment for Square, Squares, Attachment for. J. L. Grass. 1,648,266; Nov. 8.

Squares, Attachment for combination. A. Milleman. 1,617,453; Feb. 15.

Squash-ball tester. P. G. Cole. 1,630,110; May 24.

Squezze, Fruit and vegetable. G. Alfisi. 1,615,734; Squitzel-cage motor, Variable-speed. H. D. Hineline. 1,027,330; May 3.

Stabilizer. A. N. Lucian. 1,634,950; July 5.

Stabilizer. R. T. Newton. 1,616,327; Feb. 1, 19.

Stabilizer. R. T. Newton. 1,616,327; Feb. 1, 19.

Stabilizer. J. M. Seawell. 1,625,224; Apr. 19.

Stabilizer. J. M. Seawell. 1,625,224; Apr. 19.

Stabilizer. J. A. Ewald. 1,629,265; May 17.

Stabilizer. J. A. Ewald. 1,629,265; May 17.

Stabilizer. J. A. Ewald. 1,629,265; May 17.

Stabilizer and feeding mechanism. E. L. Smith and A. E. Fib. 3, 163,903; June 7.

Stack forming and feeding mechanism. F. B. Roberts. 1,646,667; Oct. 18.

Stacking and conveying mechanism. F. B. Roberts. 1,646,667; Oct. 18.

Stacking and conveying mechanism. F. B. Roberts. 1,646,667; Oct. 18.

Stacking device. G. A. Bell and J. H. Carson. 1,620,058; Mar. 8.

Stacking device. W. F. Boettger. 1,652,698; Dec. 13.

Stacking mechane. G. Wilcox. 1,615,250; Jan. 25.

Stacking mechane. G. Wilcox. 1,615,250; Jan. 25. Mar. 1.
Stacking machine. G. Wilcox. 1,615,250; Jan. 25.
Stacking machine, Portable. W. S. Young. 1,629,771;
May 24.
Staff base. E. E. See. 1,631,227; June 7.
Staff support. H. G. Hays. 1,632,965; June 21.
Stagging hook. C. C. Burmelster. 1,620,436; Mar. 8.
Stair cleaner. L. E. Macksy. 1,633,119; June 21.
Stair, Concrete. A. E. Shlager and B. M. Groisser. 1,613,777; Jan 11.
Stair covering, Reversible folded. E. Hyman. 1,635,084;
July 5. July 5.

Stair, Metallic. J. Lehman. 1.643.342; Sept. 27.

Stair plate. H. Rosenblum and M. Schneider. 1,622,739; Mar. 29.

Stair square. C. A. Christianson. 1,624,555; Apr. 12.

Stair square. C. A. Christianson. 1,624,555; Apr. 12.

Stair square. C. A. Christianson. 1,624,555; Apr. 12.

Stair square. H. H. Runker. 1,613,604; Jan. 11.

Stair-tread carrier. H. H. Runker. 1,613,604; Jan. 11.

Stairway, Concealed. B. Frazier. 1,633,632; June 21.

Stairway, Disappearing. E. C. Loetscher. 1,614,006; Jan. 11.

Stairway, Movehile. F. E. Esseler. 1,630,280-1; July 19.

Stake, Anchoring. N. E. Bray. 1,635,923; July 12.

Stake, Anchoring. N. E. Bray. 1,635,923; July 12.

Stalk cutter. J. A. McKay and P. H. Lynch. 1,628,730; Stalk cutter. J. A. McKay and P. H. Lynch. 1,628,730; May 17. Stalk cutter. O. T. Waiters. 1,652,847; Dec. 13. Stalk cutters. O. T. Waiters. 1,652,847; Dec. 13. Stalk cutters and other wheeled agricultural implements, Lock for the wheeled axies of. J. A. McKay and P. H. Lynch. 1,620,3639; Mar. S. Stall cutters and Stanchion. A. Quade and A. H. Klumb. 131 and Stanchion. A. Quade and A. H. Klumb. Stall for animals. Operating. O. Stader and J. B. Olson. 1,621,760; Mar. 22. Stamp-affixing machine. W. F. Schweiger. 1,645,073; Oct. 11. Stange-canceling machine. J. W. Eskholme. 1,632,281; Stamp-canceling machine. J. W. Eskholme. 1,632,241; Stamp-canceling machine. J. W. Eskholme. 1,632,245. Stamp-canceling machine. J. W. Eskholme. 1,633,245-6; June 21. Stamp, Christmas-club saving, J. J. Hickey, Des. 72,153; Mar. 8.
Stamp-dispensing machine, W. F. Schweiger, 1,625,827; Stamp. And C. Stamp. St Apr. 26. Stanchion. A. Quade and July 19. Stand: See— Advertising stand. Pocket stand.
Radiator-repair stand.
Receptacle stand.
Referee's stand.
Service stand. Advertising stand.
Ash stand.
Automobile stand.
Boiler stand.
Card-drying stand.
Card-drying stand.
Creel stand.
Dish stand.
Dispensing stand.
Dispensing stand.
Dispensing stand.
Elowerpot stand.
Flowerpot stand.
Knockdown stand.
Knockdown stand.
Lamp stand.
Meter stand.
Meter stand. Shaft-driving stand. Shaving-cup stand. Shaving-cup stand. Shine stand. Shoe-display stand. Shoe-repair stand. Smoker's stand. Sprinkler stand. Swing stand.
Switch stand.
Telephone stand.
Transport stand. Motor-cycle stand. Music stand. Tub stand. Typewriter stand. Vise stand. Vise stand.
Plant stand.
Stand. E. Knoche. 1,653, 751ve. 26.
Stand for a drinking set or similar article. P. Scheiner, Des. 72,499; Apr. 19.
Stand for crocks, Tilting. J. Disblo. 1,627,490; May 3.
Stand for fitting shoes. W. H. White. 1,646,717; Oct. 25. Stand for fitting shoes. W. H. White. 1.646,717; Oct. 25.

Stand for radio loud speakers or similar articles. F. Schwartz. Des. 73,760-1; Nov. 265; Nov. 29.

Standard. C. T. Des. 73,760-1; Nov. 29.

Standing board. C. Jonasson and H. J. Boal. 1,640,326; Aug. 23.

Standing board. C. Jonasson and H. J. Boal. 1,640,326; Aug. 24.

Staple. J. H. Crofoot. 1,614,831; Jan. 18.

Staple. M. De Bonis. 1,623,335; Apr. 27.

Staple. E. B. Payson. 1,639,530; Aug. 16.

Staple. Furring. G. F. Voight. 1,648,666; Nov. 8.

Stapler. J. B. Crofoot. 1,621,496; Mar. 22.

Stapler. J. B. Crofoot. 1,621,496; Mar. 22.

Stapler. J. B. Crofoot. 1,621,496; Mar. 29.

Stapling and other machines. Feed attachment for. L.

Stapling device. J. D. Clemence. 1,644,176; Oct. 4.

Stapling device. J. H. Routson. 1,623,293; Mar. 20.

Stapling machine. A. Fremont. 1,643,727; Aug. 9.

Stapling machine. W. Foley. 1,638,117; Aug. 9.

Stapling machine. J. H. Reeds. 1,623,535; Apr. 26.

Stapling machine. J. H. Reeds. 1,623,535; Apr. 26.

Stapling machine. J. H. Reeds. 1,623,535; Apr. 26.

Stapling machines. Gauge mechanism for. H. G. Allen. 1,614,911; Jan. 18.

952 INDEX OF PATENTS, 1927 Stapling 20. mechanism. 1. W. Litchfield. 1,653,052; Steam-boiler water, Testing. R. E. Hall. 1,613,656; Stapling tags to articles. R. B. Kingman. 1,628,848; May 17. May 17. Stapling tool. C. J. Westin. 1,630,877; May 31. Staples, Clamping tool for wire-fence. J. A. Gaffney and M. J. Hanson. 1,621,631; Mar. 22. Starch-molding apparatus. A. L. Bausman. 1,627,138; May 3 May 3.

Starch, of esters, of the higher fatty acids, soluble in hydrocarbons of the aromatic series, Preparation from. P. Berthon. 1,651,366; Dec. 6.

Starch system, Closed wet- R. O. McCoy. 1,651,611; Dec. 6. Stars, Device for projecting. W. Bauersfeld. 1,616,736; Feb. 8. Statis, Device for projecting. W. Balersteid. 1,616,736; Febre Engine. W. L. McGrath 1,650,637; Nov. 29. Starting and stopping mechanism. M. H. Ballard. 1,640,637; Apr. 30. Starting device. U. S. Geiger. 1,632,399; June 14. Starting mechanism. J. P. Johnson. 1,646,202; Oct. 18. Starting mechanism. J. P. Johnson. 1,646,202; Oct. 18. Starting mechanism. J. P. Johnson. 1,646,103; Apr. 19. Static electricity from extractors. Conducting. J. Zimmerman and F. A. Glock. 1,661,983; Dec. 6. Static eliminator. J. Astrom and V. L. Tannehill. 1,623,435; Apr. 19. Astrom and V. L. Tannehill. 1,623,435; Apr. 19. Astrom. Astrom. 1,634,505; Dec. 27. Station, Automatic. C. E. Carey. 1,635,574; July 12. Station, Automatic. C. M. Moss. 1,649,938; Nov. 18. Station, Automatic. W. L. Newmeyer. 1,626,688; Station, Automatic. W. L. Newmeyer. 1,626,6872; Station, Automatic. W. L. Newmeyer. 1,638,872; Station, Automatic. W. L. Newmeyer. 1,638,872; Station, Aug. 16 W. L. Newmeyer. 1,638,872; Automatic. Station, Automatic. W. L. Newmeyer. 1,638,872; Aug. 16. Station, Automatic. R. J. Wensley. 1,650,970; Nov. 29. Station, Automatic and V. W. E. Feeley and W. Danmar. 1,642,934; Sept. 13. Station indicator. E. Alessio. 1,615,153; Jan. 18. Station indicator. G. W. Farmer. 1,632,465; June 14. Station indicator. D. Friedman. 1,633,455; Dec. 20. Stations, Transfer system for automatic. R. J. Wensley and S. G. Leonard. 1,649,048; Nov. 15. Stationery and office-appliance assembler. F. A. Warren. 1,643,477; Sept. 27. Sept. 27. Stationery and office-appliance assembler. F. A. Warren. 1,643,477; Sept. 27. Sept. 27. Statuette. S. J. Berger. Des. 73,223; Aug. 9. Statuette. S. J. Berger. Des. 73,223; Aug. 9. Statuette. S. J. Berger. Des. 73,277; Aug. 23. Statuette. E. S. K. Goo. Des. 73,695; Oct. 25. Statuette H. L. Kratz. Des. 72,099; Mar. J. Statuette or similar article. W. H. Fulper. Des. 72,605; May 10. May 10. ishing machine. O. A. Melang. 1,645,015; Stay bolts, Manufacture of steam-boiler. A. F. Pitkin. 1,628,063; May 10. Stay-put parking brake. E. C. Petsch. 1,633,348; June 21. June 21, Stays to box corners, Apparatus for applying, R. G. Stays to box corners, Apparatus for applying, R. G. Clark, 1.617,821; Feb. 15, July 28, amuniator plant. F. Wettstein. 1,637,066; July 28, amuniator plant. F. Wettstein. 1,637,066; Steam, air and signal line connection. C. E. Sullivan and L. Zabolitzky, 1,4643,229; Sept. 20, Steam and air blower, High-speed. T. M. Eynon. 1.637,402; Nev. 1. 1.647.402; Nov. 1. S. A. Gott. 1,617.755; Feb. 15. Steam. Afrangement or system for the generation of the Abendroth. 1,623,575; June 14. Steam. Afrangement of the generation of the generation of the generation of the generation of the property of the steam boards, Attachment for. R. W. Dawn. 1,624,829; Apr. 12. Steam boards onstruction. H. Culp. 1,622,994; Mar. 29. Steamboat rudders, Suspension apparatus for. L. W. Doak. 1,618,175; Feb. 22. Steam boiler. C. J. Carlson and O. M. Elton. 1,637,929; Aug. 2. Aug. 2 Aug. 2. Steam boiler. L. D. Copeland. 1,640,535; Aug. 30. Steam boiler. C. W. Crowell. 1,634,020; June 28. Steam boiler. L. Glashow. 1,641,162; Sept. 6. Steam boiler. C. H. Haas and L. J. Mitchell. 1,640,317; Aug. 23.

Aug. 23.

Aug. 24.

Aug. 25.

Beam boiler.

F. John, sr. 1,622,736; Mar. 29.

Steam boiler.

E. Kidwell. 1,623,954–5; May. 24.

Steam boiler.

E. Kidwell. 1,623,954–5; May. 24.

Steam boiler.

E. Kidwell. 1,623,954–5; May. 24.

Steam boiler.

E. Kidwell. 1,623,954–1; May. 24.

Steam boiler.

E. W. Kronenberg. 1,625,549; Apr. 1, Steam boiler.

C. W. Obert. 1,642,692; Sept. 20.

Steam boiler.

C. W. Obert. 1,642,692; Sept. 20.

Steam boiler.

J. H. Targior. 1,636,465; June. 28.

Steam boiler.

J. H. Targior. 1,636,465; June. 28.

Steam boiler.

J. H. Targior. 1,636,465; June. 28.

Steam boiler.

C. Uebelmesser. 1,619,447; Mar. 1.

Steam boiler.

C. Uebelmesser. 1,618,58,28; Dec. 27.

Steam boiler.

Steam boiler.

Electrode.

S. Kowallik. 1,650. Aug. 23. Steam boiler. Apr. 19. Steam boiler, Nov. 29 Steam-boiler feed, N. E. Lewis. 1,632,301; June 14 Steam boiler, High-pressure. J. Buchli. 1,636,98 _ July 26. 1.636.985: Steam boiler, High-pressure. E. A. Hardison. 1,633,663; eam boller, Garage June 28.

June 28.

eam boller, Sectional. C. Z. and E. S. Alexander.

1.627.530; May 3.

Steam-boller Whete, Resting.

Jan. 11.

Steam boilers, Apparatus for removing soot from. N. E.

McClelland. 1,653,503; Dec. 20.

Steam boilers, Composition for removing scales from.

W. F. Stafford. 1,638,3473; Aug.

Steam chambers, Drainage of. C. H. Atkins. 1,637,327; Aug. 2. Steam-circulating fitting. J. O. Woodsome. 1,628,382; May 10. Steam connection. C. W. Daughs. 1,650,787; Nov. 29. Steam engine. J. V. Glesler. 1,628,138; May 10. Steam engine. W. B. Lipscomb. 1,631,743; June 7. Steam engine. W. M. Lower. 1,643,671; Sept. 27. Steam engine. H. G. Mueller. 1,650,642-3; Nov. 29. Steam engine, Rotary. W. G. Parmele. 1,647,464; Nov. 1. Steam-fitter's appliance. W. L. Graves. 1.622.506 . Steam-generating and discharging device. E. E. Hodshon.
Steam 6 512; Oct. 25.
Steam-generating apparatus. H. H. Mercer. 1,626,950;
May 3. Steam generating apparatus, Domestic. F. L. Middleton. 1,621,736; Mar. 22. Steam generator. H. S. Anderson. 1,634,604; July 5. Steam generator. W. Bey. 1,642,098; Sept. 13. Steam generator. G. Bryan. 1,634,561; July 5. Steam generator. T. Charkson. 1,634,631; July 5. Steam generator. T. Charkson. 1,634,632; July 5. Steam generator. J. R. Evans. 1,644,715; Oct. 11. Steam generator. W. B. Ewing. 1,642,748; July 5. Steam generator. J. B. Eving. 1,642,748; July 5. Steam generator. J. B. Dist. 1,622,505; Mar. 22. Steam generator. J. B. Dist. 1,622,505 May 3. Steam generator. J. B. Dist. 1,622,636; May 10. Steam generator. H. Robbins. 1,627,668; May 10. Steam generator. H. Swartz and P. C. Mulligan. 1,630,546; May 10. eam generator. 1,630,546; May 31. 1,000,046; May 31. Steam generator. R. A. and J. Thom. 1,623,944; Apr. 5. Steam generator. Continuous-water-lube flash-type. J. H. O'Neill. 1,644,078; Oct. 4. Steam generator, Electric. E. J. Carroll. 1,646,746; Oct. 25. Oct. 25.
Steam generator for portable plants. W. Höjer.
1,619,671; Mar. 1,7 Mar. 25.
Steam generator steam-separating apparatus for. T. A.
Steam-heated 1:00. A. Graf. 1,625,535; Apr. 19.
Steam-heated iron. L. Swenson. 1,629,553; May 24.
Steam hydraulic system. W. H. Ridgway. 1,626,556; Apr. 26.
Apr. 26. Steam hydraunc system.

Apr. 26.
Steam impelled motive apparatus, C. V. Haynes, 1,623,243; Apr. 5.
Steam in an inclosed cycle, Method and apparatus for the generation and utilization of. W. P. Caine, 1,616,526; Feb. 8.
Steam injector, Exhaust.

L. Friedmann and H. Deutsch, 1,633,954; Dec. 27.
Steam injector, Exhaust. N. T. McKee, 1,618,135; Feb. 15.
Steam injector, Exhaust. N. T. McKee, 1,618,136; Feb. 15. Steam mangles, Safety device for. E. Rumsch. 1,639,386; Steam mangles, Safety device for. E. Rumsch. 1,630,886;
Aug. 16.
Steam plant. E. Constam. 1,634,609; July 5.
Steam plant. G. Forner. 1,617,041; Feb. 8.
Steam plant. J. Ruths. 1,622,675; Mar. 29.
Steam plants, Automatic regulating means for. C. M.
Terry. 1,653,324; Dec. 20.
Steam power and heating plants, Regulating. O. H.
Hartmann. 1,648,343; Nov. 8.
Steam-power plants, Boiler for movable. O. H. Hartmann.
1,648,343; Nov. 8.
Steam-condensing and boiler-water-supply apparatus of. H. Fothergill and H. Hiller.
1,629,028; May 17.
Steam-power system. B. Schroeder. 1,625,336; Apr. 19.
Steam press. M. M. Tutterington. 1,654,353; Dec. 27.
Steam pressing apparatus. N. Bencanti. 1,641,876;
Sept. 6.
Steam spaparator. F. F. Emory. 1,632,280; June 14. Sept. 6.
Steam separator. F. F. Emory. 1,632,280; June 14.
Steamship-driving mechanism. A. Fletcher, jr., and J. A. Capstatf. 1,632,451; June 14.
Steam shovel. H. J. Barnhart. 1,639,421; Aug. 16.
Steam shovel. H. J. Barnhart. 1,646,781; Oct. 25.
Steam shovel. J. Barnhart. 1,637,683; Aug. 2.
Steam shovel. Frame for. A. B. Rudy. 1,619,156; Steam shovels, Frame for. A. D. Rudy. 1,619,150; Steam shovels, Frame for. A. D. Rudy. 1,619,150; Steam, Stopping leakage of. L. S. Watres. 1,640,062; Aug. 23.
Steam superheating unit. T. Larrey. 1,623,670; July 5. Steam superheating unit. T. Larrey. 1,623,670; July 5. Steam steam superheating unit. T. Larrey. 1,624,670; July 26.
Steam through one distance July 28.
Steam trap. F. Basenau. 1,639,208; Aug. 16.
Steam trap. F. Basenau. 1,639,208; Aug. 16.
Steam trap. H. C. Davis. 1,633,165; June 21.
Steam trap. A. L. Grandstaff. 1,618,081; Feb. 15.
Steam trap. A. L. Grandstaff. 1,618,081; Feb. 15.
Steam trap. A. L. Grandstaff. 1,622,003; Mar. 29.
Nicom trap. H. C. Macculay. 1,638,187; June 7.
Steam trap. H. C. Dacculay. 1,638,187; June 7.
Steam trap. H. C. Macculay. 1,638,187; June 7.
Steam trap. H. C. Macculay. 1,638,187; June 7.

Steam trap, Expansion. R. J. Burns. 1,621,623; Mar. eel, Making. J. K. Smith. 1,651,638; Dec. 6. eel, Making basic, open hearth. J. L. Schueler. 1,628,281; May 10. eel, Making molybdenum. F. M. Becket. 1,613,571; Steel, Making molybdenum. F. M. Becket. 1,613,571; Jan. 4.
Steel, Making molybdenum. F. M. Becket. 1,615,501; Jan. 25.
Steel, Manufacture of. F. N. Speller. 1,617,726; Feb. 1; Steel of high-temperature stability. W. R. Shimer. 1,624,075; Apr. 12.
Steel of high-temperature stability. W. R. Shimer. 1,624,075; Apr. 12.
Steel of high-temperature stability. W. R. Shimer. 1,624,075; Apr. 12.
Steel of other metals, Annealing or heat treating. F. W. Gulbert. 1,644,823; Oct. 11.
Steel. Process and compound for tempering. J. F. Edwards. 1,643,044; Nov. S.
Steel, 1,644,623; Apr. 1,633,659; June 28.
Steel radium. F. Cerny. 1,633,659; June 28. Mar. 1.

Mar. 1.

F. Cerny. 1,633,659; June 28.

Steel retainer. C. C. Hansen. 1,632,373; June 14.

Steel retainer. C. C. Hansen. 1,632,373; June 14.

Steel retainer. C. C. Hansen. 1,632,837; June 14.

Steel retainer. C. C. Hansen. 1,648,091; Oct. 18.

Steel retainer. F. M. Slater. 1,646,773; Oct. 25.

Steel Rustiess alloy. J. T. Whiteley. 1,647,491; Nov. 1.

Steel Steels alloy. J. T. Whiteley. 1,647,491; Nov. 1.

Steel Steel Apr. 19.

Steel Steel Apr. 19.

Steel Stock rack. H. S. Jones. 1,619,476; Mar. 1.

Steel stock rack. H. S. Jones. 1,619,476; Mar. 1.

Steel stock rack. H. S. Jones. 1,619,476; Mar. 1.

Steel stock Adjustable safety. E. G. Patton. 1,617,346; Feb. 15. Steel tread, Adjustable safety. E. G. Patton. 1,617,349; Feb. 15.

Steel tubing, Hook for forming. J. Fentress. 1,643,008; Sept. 20.

Steel-wool buffer. W. H. Robbins. 1,636,196; July 19.

Steel-wool holder. B. Gundersen. 1,653,702; Dec. 27.

Steel-wool holder. B. Gundersen. 1,653,702; Dec. 27.

Steel-wool removing machine. W. H. Robbins. 1,625,158; Apr. 19.

Steel-wool removing machine. W. H. Robbins. 1,625,159; Apr. 19.

Steel-wool removing machine. W. H. Robbins. 1,625,159; Apr. 19.

Steel-steel-Steering errive wheel. R. S. Trott. 1,613,065; Jan. 4. Steering gear. W. C. Anthony and W. B. Mackintosh. 1,630,046; May 24. Steering gear. L. W. Chase. 1,647,034; Oct. 25. Steering gear. H. M. Denyes and W. A. Kull. 1,627,839; May 10. May 10.

Steering gear.

Steering gear.

H. Marles. 1,642,164; Sept. 13.

Steering gear.

W. Overdick. 1,633,415; June 21.

Steering gear.

B. Williams. 1,640,885; Aug. 30.

Steering gear attachment. A. G. Proulx. 1,622,751;

Apr. 5.

Steering-gear brake. N. C. Frikke. 1,635,210; July 12.

Steering-gear-centering device. G. F. Colley. 1,633,695;

June 28. Steering gear, Coaster-wagon. F. A. Pearl. 1,625,421; Apr. 19. Apr. 19.
Apr. 19.
Steering gear for automobile vehicles. A. B. Henninger. 1.633.209; June 21.
Steering gear for road graders. E. C. Gledhill. 1.629.573; May 24.

Steering gear, Hydraulic. C. H. Williams and M. L. Tucker. 1,621,916; Mar. 22. Steering-gear mechanism. E. Hassig. 1,618,558; Feb. 22. Steering-gear reduction. H. Ford. 1,633,590; June 28. Steering-gear stabilizer. J. F. Cavanagh. 1,636,568; July 19. Steering knuckle. R. Sirl. 1,643,034; Sept. 20. Steering knuckle. R. Sirl. 1,643,034; Sept. 20. Steering knuckle. R. Sirl. 2,642,640; Sept. 13. July 18.
Steering knuckle. R. Sirl. 1,643,034; Sept. 20.
Steering knuckle, Adjustable. E. Bouch and T. R. Shriver. 1,642,640; Sept. 15.
Steering mechanism. G. Cattane. 1,617,666; Feb. 15.
Steering mechanism for vehicles. H. L. Weyers.
L. 1,646,409; Oct. 11.
L. Hydraulic. R. L. Francis.
Steering mechanism, Road-vehicle. J. M. Larsh. 1,628,861;
May 17.
Steering mechanism, Road-vehicle. J. M. Larsh. 1,628,861;
Steering mechanism, Road-vehicle. Steering mechanism, Stabilizer for trailers. W. E. Plank. Steering-mechanism stabilizer for trailers. W. E. Plank. 1,631,332; June 7. Steering post, Adjustable. C. E. Postlethwait. 1,623,493; Steering post, Adjustants.

Apr. 5.

Steering-post control. F. F. Chandler and R. E. Young.

1,631,795; June 7.

Steering-post control-lever assembly. E. J. Gruenewald and D. E. Ross. 1,631,809; June 7.

Steering-post guard. G. W. Cook. 1,647,903; Nov. 1.

Steering-posts, Horn button for. J. H. Dennis. 1,627,709; May 10. May 10.
Steering posts of automobiles, Mail receptacle for. J. Rogers. 1,618,227; Feb. 22.
Rogers. 1,618,227; Feb. 22.
Steering Webl. R. E. C. B. 1,616,681; Feb. 8.
Steering Webl. J. E. D. Fierre. 1,646,410; Oct. 25.
Steering wheel. J. E. La Pierre. 1,646,411; Oct. 25.
Steering wheel. W. K. McQuown. 1,849,359; Nov. 15.
Steering wheel. W. K. McQuown. 1,849,359; Nov. 15.
Steering wheel. W. K. McQuown. 1,649,359; Nov. 15.
Oct. 11. Oct. 11.
Steering wheel. A. L. Roebuck. 1,618,137; Feb. 15.
Steering wheel. G. M. Schwieman. 1,637,284; July 26.
Steering wheel. H. J. Sewell and L. C. Wilking.
1,646,172; Oct. 18.
Steering wheel. Armored. A. E. Bronson and E. F.
Tobold. 1,652,234; Dec. 13.
Steering wheel attachment, Vehicle. H. R. East.
1,643,706; Sept. 27.
Steering-wheel brake. E. G. Heinzelman. 1,624,598;
Steering-wheel brake. E. G. Heinzelman. 1,624,598;
Steering-wheel brake of motor vehicles and the like. Steering wheel brake. E. G. Heinzelman. 1,624,588; Apr. 12.

Steering wheel brake. E. G. Heinzelman. 1,624,588; Apr. 12.

Steering wheel bendles of motor vebicles and the like. Cover for application to. A. G. Barrett and H. H. Burton. 1,641,311; Sept. 6.

Steering wheel Lieating. S. Kuno. 1,615,635; Jan. 25.

Steering wheel look. B. D. F. Noercoss. 1,620,2223; Mar. 8.

Steering wheel look. D. E. Noercoss. 1,620,2223; Mar. 8.

Steering wheel look. L. J. Hugues. 1,613,477; Jan. 11.

Steering wheel look. L. Laxion and C. L. Trosper. 1,622,454; Mar. 29.

Steering wheel look mechanism. D. J. Dolan. 1,622,575; Mar. 23.

Mar. 23.

Steering wheel reminder. H. D. Geyer and A. W. Scott. 1,640,763; Aug. 30.

Steering wheel reminder. H. E. Hodgson. 1,621,882; Mar. 22. Steering-wheel reminder. H. E. Hodgson. 1.621,882; Mar. 22.
Steering-wheel warmer. A. D. White and J. R. Riley. Steering-wheel warmer. A. D. White and J. R. Riley. Steering-wheel warmer. A. D. White and J. R. Riley. Steering-wheel, Wood-spoked. A. G. Jones. 1,642,029; Sept. 33.
Steering wheels, Auxiliary band grtp for. J. V. H. Whipple. 1,614,417; Jan. 11.
Steering wheels, Brake mechanism for. N. E. Wahlberg. 1,634,474; July 5.
Steering wheels in vehicles. Arrangement for indication of the rosition or direction of the. K. Stensaeter. 1,635,447; Dec. 27.
Steering wheels. Signaling attachment for. M. B. Holstein, 1,621,408; Mar. 15.
Steering wheels, Signaling attachment for. M. B. Holstein, 1,621,408; Mar. 15.
Stem-forming machine. A. Raus and E. B. Isaac. 1,640,258; Oct. 18.
Stem-making machine. G. R. Cernwall. 1,641,220, Aug. 30. Stem 1, Marchine. H. De Jong. 1,640,442; Aug. 30. Stemming machine. G. R. Cornwall. 1,641,120; Aug. 30. Stems of tobacco pipes, cigar holders, etc., Sanitary protector for. S. Ellis. 1,647,580; Feb. 15. Stencil and making same, Printing. S. S. Bendick. 1,626,323; Apr. 26. Stencil and making the same. A. M. Bates and J. E. Dancker. 1,635,646; July A. M. Bates and J. E. Dancker. 1,635,646; Magnetic. H. G. Crain. 1,624,538; Apr. 12. older, Magnetic. H. G. Crain. 1,624,538; Apr. 12. older, Magnetic. H. G. Crain. 1,624,538; Apr. 12. Stencil card, Colored. E. A. Geiger. 1,645,593; Oct. 18. Stencil cytlinder machine. Revolving. V. Rosato. 1,625,054; Apr. 19. Stencil device for electric-light bulbs. J. G. Niederer. 1,643,933; Nov. 15. Stencil device for electric-light bulbs. J. G. Niederer. 1,643,028; Stencil for convex surfaces. J. G. Niederer. 1,618,216; Feb. 22. Stencil machine and stencil therefor. H. P. Elliott. 1,637,443; Aug. 2. Stencil machine and stencil therefor, H. P. Elliott. 1,637,443; Aug. 2. Stencil sheet. A. B. Davis. 1.633.072; June 21.

Stencil sheet. A. R. Davis. 1.633,696; June 28.
Stencil sheet. S. Horiland, 1645,1442,159; Sept. 13.
Stencil sheet. C. Filland, 1645,1442,159; Sept. 13.
Stencil sheet. W. H. Kurth. 1.643,019; Sept. 20.
Stencil sheet and producing the same. A. B. Davis. 1.649,058; Nov. 15.
Stencil sheet and stencil adapted for use in duplicating. S. G. Gesteiner, 1,614,569; Jan. 18.
St. Gesteiner, 1,614,569; Jan. 18.
St. Davis. 1,623,080; A. B. Davis. 1,639,080; Aug. 16,ets, Manufacture of. P. Vosyka. 1,614,569; Jan. 18.
Stencil sheets, Process of and apparatus for making. J. D. Grange and E. F. Vosyka. 1,614,509; Jan. 18.
Stencil sheets, Process of and apparatus for making. J. Stenciling machine. E. G. Rowley. 1,618,309; Feb. 22.
Stenciling machine. E. G. Rowley. 1,618,309; Feb. 22.
Stenciling machine. E. G. Rowley. 1,638,461; Aug. 9.
Stencils for duplicating apparatus, Manufacture of. P. Campion. 1,626,113; Apr. 26.
Stencils Making cloth. B. Tull. 1,622,747; Mar. 29.
Stencils Making cloth. B. Tull. 1,622,747; Mar. 29.
Step. Extension. E. R. Lundquist. 1,628,505; May 10.
Stepladder. J. E. Kalgren. 1,641,591; Sept. 6.
Stepladder. J. E. Kalgren. 1,641,591; Sept. 6.
Stepladder. B. E. Willett. 1,624,569; Anr. 12.

Stepladder, Stepladder, June 28, Stepladder,

June 28.
Stepladder. B. E. Willett. 1,624,569; Apr. 12.
Stepladder. F. G. Yawman. 1,649,206; Nov. 15.
Stepladder and chair, Combination. A. I. Johnson. 1,630,747; May 31.
Stepladder-assembling machine. J. E. Kalgren. 1,645,414;
Oct. 11.

Oct. 11. Stepladder, Combination. E. A. Cardarelli. 1,635,705; July 12.

Nov. 29.

Nov. 29.

Nov. 29.

Nov. 29.

Nov. 1. 620.956; Mar. 15.

Reparatus for. C. M. Fox. 1.620.956; Mar. 15.

Reparatus for. C. M. Fox. 1.620.956; Mar. 15.

Reparatus for. C. M. Fox. 1.620.956; Mar. 15.

Stereoscopic projection. A. Chessin 1.652.556; Dec. 18.

Stereotype-plate mechanism. A. A. Henzi. 1.637.641; Aug. 2.

Aug. 2.

Stereotype plates, Apparatus for casting curved. S. Stereotype plates, Apparatus for casting curved. S. Werbner. 1,631,944; June 7. Stereotype plates, Casting curved and flat. J. P. Catlin. 1,623,997; Apr. 12. Stereotype plates, Conveyer for segmental. W. Hall. 1,652,959; Dec. 13. Stereotype plates, Machine for finishing curved. C. E. Hopkins. 1,652,717; Dec. 13. Stereotype plates, Machine for operating upon. W. Evensen. 1,614,230; Jan. 11. Sterilization of fleuidis, Process and material for. A. Sterilizer. T. R. Kragen and T. A. Errett. 1,620,360; Mar. 8. Sterilizer. Dental hand-piece. J. E. Keefe. 1,647,637; Sterilizer. Dental hand-piece. J. E. Keefe. 1,647,637;

Sterilizer, J. H. Woolsey. 1,618,622; Feb. 22. Sterilizer, Dental hand-piece. J. E. Keefe. 1 1.647.637:

Nov. I.
Sterilizer, Instrument. A. Amann. 1,647,070; Oct. 25.
Sterilizer, Receptacle. C. Braun. 1,632,588; June 14.
Sterilizing and washing machine. L. F. Utz. 1,624,026;
Apr. 12.
Sterilizing apparatus. J. O. Golden. 1,651,346; Nov. 29.

Apr. 12.
Sterllizing apparatus. J. O. Golden. 1,651,346; Nov. 29.
Sterllizing apparatus. B. E. Taylor. 1,646,713; Oct. 25.
Sterllizing apparatus. B. E. Taylor. 1,646,713; Oct. 25.
Sterllizing apparatus. B. E. Taylor. 1,646,715; Oct. 25.
Sterllizing cotton and other seeds. P. H. Rylander. 1,641,097; Aug. 30.
Sterllizing device. A. Fischer. 1,614,950; Jan. 18.
Sterhosope. S. Sato. 1,617,692; Feb. 15.
Sterpan or similar article. S. Dachman. Des. 73,070;
Stilletin C. E. Willer. 1,614,950; Jan. 18.

Stewpan or similar article. S. Dachman. Des. 73,070; July 19. Stilleto. C. E. Winkler. 1,621,319; Mar. 15. Still. H. B. Gilbert. 1,621,319; Mar. 15. Still. H. B. Gilbert. 1,622,452; Mar. 29. Still. Changer. J. W. Booth. 1,616,7732; Oct. 25. Still. Coking. R. Cross. 1,622,573; Mar. 29. Still. Governor, 1,635,142; July 5. Still. Gil. J. Frimree. 1,614,689; Jan. 15. Still. Gil. J. Frimree. 1,614,689; Jan. 25. Still. Steam-jacketed. W. Knapp. 1,639,189; Aug. 16. Still. Steam-jacketed. W. Knapp. 1,639,189; Aug. 16. Still. Water. E. V. Oliver. 1,626,980; May. 3. Stills, Steam-jacketed. W. Knapp. 1,639,189; Aug. 16. Mar. 15. Stills, Chain brush for. W. Knapp. 1,621,417; Mar. 15. Stills, Chain brush for. W. Knapp. 1,621,417; Mar. 15. Stills, Chain brush for. W. Knapp. 1,621,417; Mar. 15. Stills, Chain brush for. W. Knapp. 1,621,417; Mar. 15. Stills, Condenser for. E. V. Oliver. 1,628,736–7; May 17. Stills, Chain brush for. W. Knapp. 1,621,417; Mar. 15. Stills, Condenser for. E. V. Oliver. 1,628,736–7; May 17. Stills, Chain brush for. W. Knapp. 1,621,417; Mar. 15. Stills, Chain brush for. W. Knapp. 1,621,417; Mar. 15. Stills, Chain brush for. W. Knapp. 1,621,417; Mar. 15. Stills, Chain brush for. W. Knapp. 1,639,073; Aug. 16. Stiren pick. II. A. Rowlett. 1,642,510; Sept. 13.

Stitch-picking device. O. Peterson. 1.644,444; Oct. 4. Stitch remover. L. Schildkuecht. 1,624,013; Apr. 12. Stitch remover. C. F. Wilber. 1,638,389; Aug. 16. Stitching. D. E. Hennessy. 1,638,326; June 21. Stitching machine. E. Leschhorn. 1,612,870; Jan. 4. Stitching machines, Feeding mechanism for. J. A. Jacobson. 1,618,691; Feb. 2,124,75; Apr. 12. Stock-fitting machine. J. E. Jackson. 1,632,332;

Julie 14. Stock fitting machine. H. A. Rising. 1,649,253; Nov. 15. Stock fountain. G. H. Brechtbill. 1,650,489; Nov. 22. Stock guard. I. E. Cumpston and L. N. Pyzer. 1,646,476; Oct. 25.

Stock guard. I. B. Cumpston and L. N. Pyzer. 1,646,476; Oct. 23.

1. Classificated and pass way, Combined. F. Frinka. 1,616,532; Feb. 8.

1. Clos. 361; Feb. 1. W. Kirby. 1,616,532; Feb. 8.

1. Clos. 367; Dec. 20.

1. Clos. 367; Dec. 367;

23.
Stocking and the like and finishing the same. C. S. Mc-Master. 1,616,537; Feb. 8.
Stocking and the manufacture thereof. R. W. Scott. Stocking and the manufacture thereof. R. W. Scott. 1,637,244; July 26.
Stocking, Infant's. M. Heilman. 1,621,200; Mar. 15.
Stocking, Infant's. M. Heilman. 1,621,200; Mar. 15.
Stocking, Infant's. M. Heilman. 1,646,199; Oct. 18.
Stocking or similar article. S. Silverman. Des. 73,714; Oct. 25.

Oct. 25.
Stocking protector. H. C. Willette. 1,635,298; July 12.
Stocking top. A. E. Sanborn. 1,616,003; Feb. 1.
Stocking with longitudinal and transverse reenforcements.
O. Rottloff. 1,621,133; Mar. 15.
Stockings, Making. P. Weissbach. 1,652,849; Dec. 13.
Stockings, Rubber protector for. A. Henderson. 1,619,934;
Mar. 8.
Argm. 1,624,651; Aug. 1

Stoker, O. Aram. 1,624,651; Apr. 12.
Stoker, O. Aram. 1,624,651; Apr. 12.
Stoker, C. L. Davidson. 1,626,791; May 3.
Stoker, J. Harrington. 1,613,324; Jan. 4.
Stoker, E. Lundgren. 1,636,376; July 19.
Stoker, E. Lundgren. 1,636,376; July 19.
Stoker, D. J. Mossbart. 1,619,480; Mar. 1.
Stoker, D. J. Mossbart. 1,619,480; Mar. 1.
Stoker, D. J. Mossbart. 1,619,480; Mar. 1.
Stoker, Automatic. E. Lundgren. 1,623,660; Apr. 5.
Stoker, Automatic. E. Lundgren. 1,638,375; July 19.
Stoker, Automatic. M. Ratel. 1,635,501; July 19.
Stoker, Forced-draft. A. P. Strong. 1,632,423; June 14.
Stoker, Forced-draft. A. P. Strong. 1,632,423; June 14.
Stoker furnace. T. A. Marsh. 1,620,270; Mar. 8.
Stoker, Locomotive. W. T. Capps and H. G. Mastin.
Stoker, Locomotive. N. M. Lower. 1,634,467; July 5.
Stoker, Mechanical. W. M. Duncan. 1,625,077-9;
Apr. 19.

Stoker, Mechanical. W. M. Duncan. Appendix Apr. 19.
Stoker, Mechanical. A. B. Fahnestock. 1,647,126; Nov. 1.
Stoker, Mechanical. C. F. Miller. 1,624,004; Apr. 12.
Stoker, Mechanical. C. F. Miller. 1,624,004; Apr. 12.
Stoker, Underfeed. D. F. Grahame. 1,632,0774; May 31.
Stoker, Underfeed. E. L. Beers. 1,625,975; Apr. 26.
Stoker, Underfeed. E. Lundgren. 1,629,282-3; May 17.
Stoker, Underfeed. W. F. Trotter. 1,640,164; Aug. 23.
Stokers, Air box for. R. A. Foresman. 1,617,479; 20.

Stokers, Air box for. R. A. Foresman. 1,617,476; Feb. 15.

Stokers, Air-control means for mechanical. C. F. Miller. 1,620,672; Mar. 15.

Stokers, Ash-discharge mechanism for mechanical. I. A. Taylor and C. H. Rich. 1,651,484; Dec. 6.

Stokers, Automatic feed-controlling system for mechanical. D. J. Machen. 1,649,557; Nov. 1,640,704; Aug. 30.

Stokers, Delivering coal to hoppers of continuous fuelfeed. A. F. Strouse. 1,624,079; Apr. 12.

Stokers, Delivering coal to hoppers of continuous fuelfeed. A. F. Strouse. 1,624,079; Apr. 12.

Stokers, Drive for. D. F. Grahame. 1,639,087; Aug. 18.

Stokers, Drumping mechanism for mechanical. R. S. Richers, Dumping mechanism for mechanical. R. S. Richers, Dumping mechanism for underfeed. R. L. Heers. 1,625,369; Mar. S.

Stokers, Fuel-feeding mechanism for underfeed. I. A. Taylor. 1,635,244; July 12.

Stokers, Lower ram for. C. F. Miller. 1,616,865; Feb. 8.

Stokers, Lower ram for. C. F. Miller. 1,616,865; Feb. 8.

Stokers, Rear-end structure for rear-dump. R. L. Beers. 1,630,464; May 31.

Stokers, Retort unit for. R. A. Foresman. 1,630,738; May 31.

tone and other stone or rock products, Preparing a ma-terial for the manufacture of artificial. R. Schoen-hoefer, 1,633,132; June 21.

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Storage battery, Automobile. O. C. Towle. 1,622,550;
Mar. 29.
         Stone crusher. E. F. Cookinham. 1,620,078; Mar. 8. Stone crushers and the like, Jaw or breaker plate for P. Bechgaard. 1,643,048; Sept. 20. Stone, Curling. P. McLeod. 1,637,754; Aug. 2. Stone-cutting machine. E. and F. D. Bolton. 1,627,142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mar. 29.
Storage-battery cell and the like. J. Waddell. Re-
10.5.48; Feb. 8.
Storage-battery container. C. J. Dunzweller. 1,639,492;
Aug. 16.
Storage-battery container. L. O. Percy. 1,635,976;
July 12.
Storage-battery cover. D. Grill. 1,618,528; Feb. 22.
Storage battery, Electric. J. L. Woodbridge. 1,638,427;
Aug. 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aug. 2.
      Stone-cutting machine, E. Raus F. May 3.

Stone-dressing tool. G. Machl. 1,622,915; Mar. 29.

Stone-dressing tool. E. Romazzi. 1,628,352; May 10.

Stone in coal mines, Unit for crushing and distributing Stone in coal mines, Unit for crushing and distributing of the coal of the coal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aug. 9.

Storage battery elements, Making. L. C. Werking. 1,50 and method of storage battery rids. Apparatus for and method of storage battery manufacture. 1,636,242; July 19.

Storage battery manufacture. J. M. Lea. 1,616,585;
         Stone picker. H. Morris. 1,625,560; Apr. 19.
Stones, blocks, bricks, or the like, Press for the manufacture of artificial. H. Ackermann. 1,652,884; Dec.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Feb. 8.
Storage-battery-plate separator. J. H. Meyer. 1,622,961;
Mar. 29.
Storage-battery plates and separators, Insulating means
for. E. W. Fletcher. 1,641,842; Sept. 6.
W. H. Nordhaus. 1,637,426; Aug. 2.
Storage battery plates, Manufacturing, W. J. Plews. 1,629,636; May 24.
Storage-battery separator. W. T. Foley. 1,641,379;
Storage-battery system. D. C. Wilderhold.
   13.

Stones or the like, Machine for splitting of. C. G. Smith. 1,651,973; Dec. 6.

Stooking machine. J. F. Willows. 1,639,123; Aug. 16.

Stooking machine. J. F. Willows. 1,639,123; Aug. 16.

Stool, Adjustable. R. H. Irvine. 1,615,278; Jan. 25.

Stool and chair construction. W. Edwards. 1,641,129; Aug. 30.

Stool, Camp. R. F. Franzdorf. 1,635,828; July 12.

Stool, Camp. W. Wilkowski. 1,619,686; Mar. 1.

Stool, Camp. W. Wilkowski. 1,619,686; Mar. 1.

Stool, Endshe. A. P. Ahles. 1,625,292; Dec. 13.

Stool, Knapsacklike carrying frame and camp. J. J.

Bonner. 1,615,159; Jan. 18.

Stool, Endshecounter J. F. Huckel. Des. 72,015; Phys. 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Storage-battery sparator. W. T. Foley. 1,641,379; Storage-battery system. O. C. Wiederhold. 1,626,488; Apr. 26.
Storage-battery terminal. R. R. Beezley. 1,623,332; Apr. 26.
Storage-battery terminal. M. E. Rutherford. 1,630,218; Storage-battery terminal connection. G. Spurgeon. 1,635,351; July 12.
Storage-battery terminal, Connection for. A. C. Collins. 1,614,880; Jan. 18.
Storage-battery terminal, Connection for. A. C. Collins. 1,614,880; Jan. 18.
Storage-cell and electrode therefor. R. C. Benner and Learned therefor. R. C. Benner and Electrode therefor. R. C. Benner. 1,616,015; Feb. 8.
Storage cells, Active-material support for. R. C. Benner. 1,651,989; Dec. 6.
Storage conveyer. C. E. Fuller. 1,642,992; Sept. 20.
Storage captured and storing and removing from storage and storage and removing from storage a liquid. M. B. Anfenger. 1,626,066; Apr. 26.
Storage tank. E. M. Clark. 1,643,924; Sept. 27.
Storage tank. E. M. Clark. 1,642,824; Sept. 27.
   Stool. Linch-counter J. F. Huckel. Des. (2,015; Feb. 15.
Feb. 15.
Feb. 15.
Feb. 15.
Feb. 15.
Feb. 15.
Stool. Milking. J. G. Rieft. 1.652-639; Dec. 13.
Stool. Milking. J. G. Rieft. 1.652-639; Dec. 13.
Stool of table. Folding. E. F. James. 1.652-942; Dec. 13.
Stool stepladder. E. L. Reed. 1.644-856; Oct. 11.
Stool. steps, and tool box, Combined. A. A. Jeannotte. 1,635,183; July 12.
Stools, stands, and the like, Construction for metal.
S. A. Flowers. 1,621,245; Mar. 15.
Stop bar. R. J. Langer. 1,622,1974; May 10.
Stoppock, Self-closing. E. V. Sprague. 1,631,166; June 7.
Stoppock, Self-closing. E. V. Sprague. 1,631,166; June 7.
Stoppock Self-closing. E. V. Sprague. 1,631,166; June 7.
Stoppock Self-closing. E. V. Sprague. 1,631,166; June 7.
Stoppock Self-closing. E. V. Sprague. 1,631,166; June 7.
Stop for rotating parts. E. M. Shinkle. 1,625,571; Apr. 19.
Stop mechanism. J. H. Reed. 1,636,324; July 19.
Stop mechanism. S. Magnano. 1,630,708; May 31.
Stop mechanism. J. H. Reed. 1,636,324; July 19.
Stop mechanism. J. H. Reed. 1,636,324; July 19.
Mar. 15.
      Stop medianism, Safety. J. W. Thropp. 1,621,442; Mar. 16. 20. Stop methanism. C. C. Wilson. 1,653,076; Dec. 20. Stop motion. H. Dohetty, jr. 1,646,642; Oct. 25. Stop motion, Automatic. A. J. Gallant. 1,651,761; Dec. 6.
      Stop-motion apparatus for use in machines employing conveyed trays or equivalents. W. E. Prescott. 1.613.330; Jan. 4.

Stop signal, Safety. M. D. Smith. 1,653,441; Dec. 20.
Stop signal, Safety, M. D. Smith. 1,653,441; Dec. 20.

Stop signal, Safety, M. D. Smith. 1,653,441; Dec. 20.

Stop signal, Safety, M. D. Smith. 1,650,760; Nov. 29.

Stopper Stopper. Flue stopper. Flue stopper. Flue stopper. Flue stopper. Stopper for containers. F. Lobl. 1,650,760; Nov. 29.

Stopper for containers. F. Lobl. 1,650,760; Nov. 29.

Stopper made of pasteboard, Waxed milk-bottie. C. and Stopper made of pasteboard, Waxed milk-bottie. C. and 1,650,762; Apr. 19.

Stopper or closure member for containers. E. Druiff. 1,614,236; Jan. 11.

Stopper and the like, Attachment for. J. D. Coughlin 1,650,264; Nov. 22.

Stoppie. W. F. Schacht. 1,646,112; Oct. 18.

Storage and conveying apparatus, Motion. E. A. White. Storage and filter tank, Water. H. O. Dahlin. 1,653,204; Dec. 20.

Storage and handling system, Material. R. H. Beaumont. 1,622,566; Mar. 29.

Storage sparatus. W. Laird. 1,628,635; May 10.

Storage sparatus. W. Laird. 1,628,635; May 10.
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Storage battery. F. T. Lahey, 1.633.257; June 21 Storage battery. F. T. Lahey, 1.633.257; June 21 Storage battery. H. Lesley, 1.613.955; Jan. 11. Storage battery. A. Miller, 1.613.617; Jan. 11. Storage battery. C. E. Ogden. 1.633.224; June 21. Storage battery. G. W. Poillon. 1.622.250; Mar Storage battery. A. Setzer, 1.618.112; Feb. 15. Storage battery. W. H. Wood. 1.634.527; July 5.

Store Structure Rotary. T. A. Taylor. 1,633,233.

Dec. 20.

Storing drying oils. E. M. S. Chandler. 1,631,999;
June 14.

Storing or storing and filling tailors' patterns; and the
Storing or storing and filling tailors' patterns; and the
Store. A. Ahlberg. 1,635,632; Dec. 20.

Stove. H. M. Britan. 1,641,064; Aug. 30.
Stove. E. V. Coulston. 1653,003; Dec. 20.

Stove. J. Crain. 1,632,176; June 14.

Stove. J. Dugan. 1,617,046; Feb. Mar. 15.

Stove. J. Dugan. 1,617,046; Feb. Mar. 15.

Stove. M. G. Klemme. 1,645,244; Oct. 11.

Stove. M. G. Klemme. 1,645,244; Oct. 11.

Stove. M. P. F. Smith. 1,639,115; Mar. 8.

Stove. H. Prell. 1,648,192; Nov. 8.

Stove. H. F. Smith. 1,639,115; Aug. 16.

Stove. W. E. Toler. 1,619,166; Mar. 1.

Stove. W. E. Toler. 1,619,166; Mar. 1.

Stove. All-heating oil. C. Davis. 1,622,184; Mar. 22.

Stove and burner therefor, Hydrocarbon. L. Stockstrom. 1,624,854; Jan. 18.

1,624,859; Mar. 8.

Stove and furnace. E. Wagner. 1,648,976; Nov. 15.

1,623,570; Aug. 2.

Stove and valve therefor, Closed gas. F. G. Nicolaus. 1,623,570; Aug. 2.

Stove Brooder. J. B. Smith. 1,642,565; Sept. 13.

Stove Camp. T. Johnson. 1,627,513; May 3.

Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Stove, Camp. G. F. Miller and F. Keith. 1,633,707; Aug. 2. Dec. 27.

Storage-battery separator. P. E. Norris. 1,644,853;
Oct. 11.

Storage batteries, Indicator for. R. D. Mowry.
1,625,047; Apr. 19.

Storage batteries, Manufacturing. C. M. Angell.
1,622,304; Mar. 29.

Storage battery. R. C. Benner. 1,631,511; June 7.

Storage battery. S. A. Breuls. 1,639,922; Aug. 23.

Storage battery. C. L. Dickerson. 1,632,097; Dec. 6.

Storage battery. T. A. Edison. 1,651,196; Nov. 29.

Storage battery. T. A. Edison. 1,651,196; Nov. 29.

Storage battery. A. D. and C. Gritman. 1,645,698;
Oct. 18. W. E. Holland and W. H. Grimditch. Stove, Camp. G. F. Miller and F. Keith. 1,633,707; June 28. Stove, Camber's. L. W. Montgomery. 1,650,529; Nov. 22. Stove, Camberian M. M. Miller, 1,615,629; Amr. 26. Stove construction. C. M. Miller, 1,613,624; Amr. 1,810ve construction. A. G. Sherman. 1,649,987; Nov. 22. Stove, Cook and heat. A. L. Smith. 1,615,600; Feb. 1,810ve-door construction. A. J. Reedy. 1,624,976; Apr. 19. Mar. 22.

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Stove-door mounting. C. Herwig, Jr., and H. E. Mills. 1,653,280; Dec. 20
D. Brand. 1,653,797; Dec. 27. Stove, Electric. D. Brand. 1,653,797; Dec. 27. Stove, Electric. J. E. Marsden. 1,643,714; Jun. 26. Stove, Electric. C. A. Pierson. 1,640,371; Jun. 26. Stove, Fireplace. J. C. Williamson. 1,640,831; Nov. 22. Stove, Fireplace. J. C. Williamson. 1,640,831; Nov. 22. Stove, Gas. J. C. Williamson. 1,640,831; Nov. 22. Stove, Gas. G. S. Morley. 1,622,647; Apr. 19. Stove, Gas. G. S. Morley. 1,626,647; Apr. 26. Stove, Gas. J. M. O'lbowd. 1,630,966; May 31. Stove, Gasoline camp. L. B., N., W., and J. M. Goldberg. 1,620,995; Mar. 8. Stove, Heating. L. W. Mitchell. Des. 73,799; Nov. 8. Stove, Heating. F. Scully. 1,630,674; May 31. Stove Heating. F. Scully. 1,630,674; May 31. Stove Heating. F. Scully. 1,630,674; May 31. Stove Heating. F. Scully. 1,630,674; May 31. Stove, Hochbist, F. E. Kilng. 1,647,570; Nov. 1. Stove, Hock Safety, Gas. G. Bevillenous. 1,633,111.
         Stove-leg 18.
         Oct. 18.
Stove lock, Safety gas. G. Bevilacqua. 1,632,111;
June 14.
Stove, Magazine and slow-burning. J. Vokac. 1,648,517;
Oct. 18.
Stove lock, Safety gas. G. Bevilacqua. 1,632,111;
June 14.
Stove, Magazine and slow-burning. J. Vokac. 1,648,517;
Stove, Oil. P. W. Coppock. 1,641,475; Sept. 6.
Stove, Oil. R. Hoffman. 1,630,368; May 31.
Stove, Oil. R. Hoffman. 1,630,368; May 31.
Stove, Oil. R. Hoffman. 1,630,368; May 31.
Stove, Oil-burning. A. E. James. 1,632,971; June 21.
Stove or range. J. J. Toomey. 1,624,550; Apr. 12.
Stove or range. J. J. Toomey. 1,621,141; Mar. 15.
Stove or range. J. J. Toomey. 1,621,141; Mar. 15.
Lof3,044; Nov. 20.
Stovepipe blanks, Machine for folding. J. M. Brown. 1,636,803; July 26.
Stovepipe blanks, Machine for folding. J. M. Brown. 1,636,803; July 26.
Stovepipe lanks, Machine for folding. J. M. Stovepipe casings, Joint for, M. R. Shipley. 1,639,315;
Aug. 18.
Stovepipe blanks. H. T. Chinn. 1,647,081; Oct. 25.
Stovepipe seam. M. Osborn. 1,647,081; Oct. 25.
Stovepipe seam. M. Osborn. 1,647,081; Oct. 25.
Stovepipe seam. M. Osborn. 1,647,081; Oct. 25.
Stove, Portable. W. T. Bishop. 1,622,176; Mar. 22.
Stove, Portable. W. T. Bishop. 1,622,176; Mar. 22.
Stove, Portable. W. T. A. Taylor and A. J. Yeager. 1,633,223; Aug. 9.
Stove, Rotary combination. R. G. Williams. 1,643,650; Sept. 27.
Stove, Spirit. P. G. J. Colbourne. 1,622,180; Mar. 22.
Stove stove, Spirit. P. G. J. Colbourne. 1,622,180; Mar. 22.
Stove stove, Nonwarping. G. Douglas. 1,632,060; June 14.
Stove using liquid vaporizing fuel, Heating. H. C. Hanson. 1,615,378; Jan. 25.
Stove top. Nonwarping. G. Douglas. 1,632,060; June 14.
Stove waive-locking device, Gas. E. N. Trottier. 1,652,815; Dec. 13.
Stoves ond the like. Oven door for. H. H. Wolverton. 1,615,378; Jan. 25.
Stoves and the like. Oven door for. H. H. Wolverton. 1,617,431; Feb. 15.
Stoves, Alt-deflecting means for closed-top-burner chambers of gas. J. C. Weisman. 1,628,701; May 17.
Stoves and the like. Oven door for. H. H. Wolverton. 1,617,431; Feb. 15.
Stoves, Alt-deflecting means for closed-top-burner chambers of gas. J. C. Weisman. 1,628,701; May 17.
Stoves and the like. Oven door for. H. H. Wol
         Stoves, Log attachment for. B. E. Meacham. 1,647,777; Nov. St. Jan for oil. T. Morris. 1,642,592; Sept. 13. Stoves. Oil-reservoir alarm for cook. J. H. Allen. 1,646,337; Oct. 18. Stoves or the like, Section for. G. A. Aronson. 1,629,245; May 17.
                                                                               Oven for camp. H. C. Hanson.
            Stov
                                                                                                                                                                                                                                                                                                                                                                                                      1,626,035;
                               oves, O
Apr. 26
         Stoves, 1....
1.638,745 :
Pro
                                                                             Pan-turning device for cooking. L. G. Randolph.
            1.638,745; Aug. 9.
Stoves, Protective top for. J. F. Heiman. 1,613,999;
Jan. 11.
            Stoves, Safety lighter for gas. W. F. Dester. 1,618,979;
Mar. 1.
         Mar. 1.
Stoves, Splasher back for. F. A. Gerelch. 1,633,089;
June 21.
Stoves, Wick for cooking and heating. W. A. Jones. 1,651,209; Nov. 29.
Stoves, Wick for oil. R. M. Tborley. 1,633,353; June 21.
Straighteduce instrument. G. Leo., 1,625,639; Apr. 26.
Straighteding machine. G. A. Wise. 1,629,769; May 24.
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Straightening press and method of straightening. B. P. Schiltz. 1,646,260; Oct. 18.
Straightening roll. G. A. Wise. 1,649,204; Nov. 15.
Strain gauge. H. L. Whittemore. 1,638,425; Aug. 9.
Strainer. G. F. Gregory. 1,618,106; Jan. 4.
Strainer. G. F. Gregory. 1,618,106; Jan. 4.
Strainer. F. L. Hammer. 1,647,709; Nov. 1.
Strainer. J. T. Janette. 1,616,577; Feb. 8.
Strainer. J. T. Janette. 1,663,214; Ibec. 20.
Strainer. N. A. McMahon. 1,630,108; May 24.
Strainer. E. M. Scoville. 1,634,086; June 28.
June 14.
Strainer. G. Wilkinson. 1,617,777; Feb. 16.
June 14.
Strainer. G. M. Hubbard. 1,618,483; June 14. Strainer-cloth fastener, C. M. Hubbard. Feb. 22.
Strainer, Detachable. M. E. Wedge 1,616.644; Feb. S.
Strainer, Digester. P. R. Panel. 1,625.373; Apr. 19.
Strainer, Drain. A. Izquierdo. 1,621.015; Mar. 15.
Strainer, Duplex. F. Hall. 1,625.624; Apr. 19.
Strainer for automobiles, Gasoline. T. A. Smythe. 1,638,066; Aug. 9.
Strainer for sugar juices and the like. S. S. Peck. 1,619,484; Mar. 1.
Strainer for sugar juices and the like. S. S. Peck. 1,646,536; Oct. 25.
Strainer for tube wells or the like. S. Leggett. 1,618.837; Ibilgo21; Am. H. Hitchcock. 1,614,553; Jan. 18. Strand gauge. C. H. Hitchcock. 1,614,553; Jan. 18. Strand handling apparatus. G. A. Bouvier. 1,632,875; Strand holder. A. E. Schulz. 1,612,988; Jan. 4. Strand-manipulating device. S. Magnano. 1,650,287; May 209 Strand-manipurating device. S. Magnano. 1,000,26; Nov. 22. Strand material, Apparatus for working. E. C. Wegman and W. A. Southwick. 1,617,427; Feb. 15. Strand package. J. E. Barbour. 1,613,431; Jan. 4. Strand-tensioning Strand-fensioning: device. G. A. Bouvier. 1,022,000 June 21.

Strand tightener. N. D. Connors. 1,638,432; Aug. 9.

Strand-working machine. A. H. Adams. 1,618,402; Fcb. 22.

Strands, Coated. W. F. Hosford. 1,627,740; May 10.

Strands, Method of and apparatus for determining the pliability of. G. A. Bouvier. 1,617,938; Feb. 15.

Strands or yarns, Instrument for manipulating. R. W. Barker. 1,612,797; Jan. 4.

Strands or yarns, Manipulating. R. W. Barker. 1,612,788; Jan. 4. 1.612.798; Jan. 4.

Strap: Sec. —

Doorcheck strap. —

Doorcheck strap. —

Doorcheck strap. —

Fix ture-attaching strap. —

Fix ture-attaching strap. —

Strap. & Johannesen. 1,613.516; Jan. 4.

Strap and connecter, Martingale. J. M. Walsh. 1,630,067; Aug. 16.

Strap Connecter, Throat. J. M. Walsh. 1,630,066; Aug. 16.

Strap facener, Wire-. E. F. Murdock. 1,622,878; Strap fastening. J. H. Vineberg. 1,617,556; Feb. 15.

Strap for personal wear. G. Kollstede. 1,619.138; Mar. 1. Mar. 20.
Strap fastening. J. H. Vineberg. 1,617,556; Feb. 15.
Strap for personal wear. G. Kollstede. 1,619,138;
Mar. 1.
Strap for personal wear. G. Kollstede. 1,619,138;
Mar. 1.
Strap for use in bending wood to form parts of curved and the strap bolder, check. A. C. Hudgens. 1,620,463; Mar. 8.
Strap bolder, Check. A. C. Hudgens. 1,620,463; Mar. 8.
Strap bolder, Shoulder. G. Orlov. 1,947,811; Nov. 1.
Strap slide, Breast. J. M. Walsh. 1,619,225; Mar. 1.
Straps. 161ding means for detachable. D. Bonhajo. 1,635,353; Dec. 20.
Strawboard, Manufacture of. M. E. Pennington and A. B. Davis. 1,625,090; Apr. 19.
Strawboard, Manufacture of. M. E. Pennington and A. B. Davis. 1,645,997; Oct. 18.
Straw person. J. F. Murray. 1,631,831; June 7.
Straw person. T. D. G. 1,633,831; June 7.
Straw person. W. C. Itzen. 1,613,892; Jan. 11.
Stream defector and river-bank protector. II. M. Smith. 1,627,623; May 10.
Street and road paving and the like. Mensuring device for. R. C. Stubbs. 1,638,715; Aug. 9.
Street and trifling in the street barrier. G. L. Culver. 1,633,000; June 21.
Street charrier. G. L. Culver. 1,633,000; June 21.
Street-cleaning machine. A. Schroeder. 1,630,719; May 31.
Street-cleaning machine. A. Schroeder. 1,630,719; May 31.
Street-cleaning structure and advertising means, Combined. S. Mendoza. 1,648,459; Nov. S.

Street fusher. W. H. Cooke. 1,623,778; Apr. 5.
Street occurrences, Investigating. G. E. Marshall.
1,625,041; Apr. 19.
Street or road cleaning apparatus. J. W. Weismantel.
1,042,000; Sept 13.
Strength of articles, Process and apparatus for increasStrength of articles, Process and apparatus for increasApr. 12.
Stretcher. J. G. Blaine and C. B. Patton. 1,624,090;
Apr. 12.
Stretcher. Boot and shoe. C. Gregory. 1,630,295;
May 31.
Stretcher. Boot and shoe. C. Gregory. 1,630,295;
May 31.
Stretching machines, Driving gear for paper-sieve. R.
Engler. 1,614,002; Jun. 11.
Engler. 1,614,002; Jun. 16.
May 31.
Striker plate, Adjustable. E. E. Lundberg. 1,630,533;
May 31.
Striker plate, Adjustable. F. J. Westrope. 1,624,508;
Apr. 12.
Striker plate, Adjustable. C. J. Williams. 1,634,814;
July 5.
Striker plate assembly. L. A. McDowell. 1,646,588;
Striker plate samenty. L. A. McDowell. 1,646,588;
String Instrument, C. L. Lowey. 1,823,534, Jun. 29.
String Instrument, C. L. Lowey. 1,823,534, Jun. 29. Striker-plate assembly. L. A. McDowell. 1.646,358; Oct. 25.
String fastener. C. J. Lippold. 1,635,283; July 12.
String instrument. C. L. Dewey. 1,633,574; July 28.
String-tuning device.
J. Bernardini. 1,629,855; May 24.
Stringed instrument. A. A. Carlucci. 1,631,794; June 7.
Stringed instrument. A. Pranic. 1,637,659; Aug. 2.
Stringed instrument. E. P. Norwood. 1,642,726; Sept. Stripper-block machine. F. J. Straub. 1,652,381; Dec. 13.
Stripping device. M. A. Marquette. 1,642,455; Sept. 18.
Stripping machine. S. Coe. 1,622,5477; Apr. 6.
Stripping machine. H. I. Morris. 1,652,417; Apr. 6.
Stripping machine. H. I. Morris. 1,652,617; Apr. 10.
Stripping machine. H. I. Morris. 1,614,720; J. M. 18.
Strips. Machine for making grooved. J. H. Killion. 1,615,984; Feb. 1.
Strips of material. Process and appractus for uniting. H. E. Van Derhoef. 1,641,403; Sept. 6.
Strips to shoe parts, Machine for preparing and securing. W. R. Barclay and F. B. Keall. 1,618,162; Feb. 22.
Strips with withviles cord. Strockers of the series of the Time 14.

Structural unit. D. H. Bliney. 1.636.163; July 19.

Structural unit. S. Macomber. 1.614.247; Jan. 11.

Structural unit. S. Macomber. 1.651.032; Nov. 29.

Structural unit. S. Macomber. 1.651.032; Nov. 29.

Structural unit and producing the same, Molded. H. E. Brookby. 1.652.162; Dec. 13.

Structural units, Rolling. A. W. Heinle. 1.652.860; Dec. 13.

Dec. 13.

Structural units, Rolling. A. W. Heinle. 1.652.860; Dec. 13.

Structural units, Rolling. A. W. Heinle. 1.652.860; Dec. 1.65

 Stucco jointer.
 E. J. Kennedy.
 1,646,150;
 Oct.
 18.

 Stud.
 M. F. Carr.
 Re16,561;
 Mar.
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 1,631,880;
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 June 7.
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 <t Stud. M. F. Carr. Re16,561; Mar. 1.
Stud.and.socket-type fastening. T. Morton. 1,631,880;
June 7.
June 8.
June 14.
June 18.
Ju Submarine. A. Heise. 1,653,175; Dec. 20.
Submarine craft. H. N. Atwood. 1,638,817; Aug. 16.
Submarine detection float. T. L. Standish. 1,638,447;
July 19.
Submarine hulls, Forming. H. N. Atwood. 1,638,818; Aug. 16. Submarine life-saving device. K. Taniguchi. 1.634.055; June June 28.
Submarine lifting device. P. C. Wood. 1,643,733;
Sept. 27.
Submarine mines, Depth-setting gear for. H. B. Pratt.
1,639,810; Aug. 23.
Submarine safety apparatus. J. F. Webb, sr. 1,613,594; Jan. 4. Submarine signaling. J. J. Gilbert. 1,654,328; Dec. 27. Submarine signaling. J. W. Horton. 1,624,412; Apr. 12. Submarine signaling system. A. M. Curtis. 1,624,396; Apr. 12.
Submarine sound receiver. H. C. Hayes. Apr. 12.
Submarine sound receiver. H. C. Hayes. 1,632,331;
June 14.
Submarine vessels. A. Horlak. 1,647,866; Nov. 1.
Submarine vessels. Phild-light arrangement for cannon mounted in fluid-tight turrets upon. R. de Courseulles. 1,638,435; Aug. 9.
Submarine vessels, Life-saving device for. W. Orlowsky. 1,642,127; Sept. 13.
Submarines, Crew-saving device for. A. Rasmussen. Submarines, Device for raising sunken. L. T. Gardner. 1,622,866; Mar. 29.
Submarines, Steam power plant for. W. Schmidt. 1,635,561; July 12.
Submarines, Underse. Mar. 22.
Submarines with twin screw propellers, Internal structure for large. N. Soliant. 1,634,220; June 28.
Subsoil ditcher. T. Dominick. 1,623,530; Apr. 5.
Subsoiler. A. C. Lindgren. 1,651,031; Nov. 29.
Substation, Automatic. G. W. Müller. 1,614,147; June 12 for horn and javory from ylsosy. Making. 1.632.331 -Substation, Automatic. G. W. Müller. 1,614,147; Jan. 11.
Substitutes for horn and ivory from viscose, Making. H. Eggert. 1,652,271; Dec. 13.
Subterranean strata, Investigating the nature of. L. Zuschlag. 1,652,227; Dec. 18.
Sucker rod and lock. H. L. Sullins and J. E. Mustain. 1,626,307; Apr. 26.
Sucker-rod and plunger rotator. E. L. Gluyas. 1,633,013; June 21.
Sucker rod and plunger rotor. S. B. Sargent. 1,653,510; Sucker-rod controlleger G. E. Moreland. 1,614,81; Sucker rod and plunger rotor. S. B. Sargent. 1,000,010 Dec. 20.

Sucker-rod centralizer. G. E. Moreland. 1,614,381 Jan. 11.

Sucker-rod clewator. S. McGregor. 1,630,537; May 31.

Sucker-rod elevator. S. McGregor. 1,630,537; May 31.

Sucker-rod elevator. A. H. Nelison. 1,622,537; May 29.

Sucker-rod elevator. E. E. Westmoreland and pr. 12.

Taylor. 1,631,845; June 7.

Sucker-rod guide, Snap-on. R. R. Bostic. 1,633,843; June 28.

Sucker-rod hanger. G. E. Frits. 1,627,733 : May 10.

Sucker-rod, Quick-connecting: H. L. Sullins. 1,622,064; Mar. 22. Sucker rod, Quick-connecting: H. L. Sullins. 1,622,064; Mar. 22. Sucker-rod rotor. D. F. Alexson. 1,635,776; July 12. Sucker-rod turner. E. T. Gribble. 1,633,092; June 21. Sucker-rod twister. B. C. Nugent. 1,623,696; Apr. 5. Suction box. E. E. Berry. 1,644,897; Oct. 11. Suction box. J. H. Reedy and T. A. Cape. 1,630,027; May 24. May 24.
Suction cleaner. P. Dadio. 1,635.821; July 12.
Suction cleaner. T. W. Green. 1,633.367; June 21.
Suction cleaner. H. B. Hoover. 1,624.246-7; Apr. 12.
Suction head. P. Musson. 1,637.255; July 26.
Suction bead. P. Musson. 1,637.255; July 26.
Suction bead. P. Musson. 1,637.255; July 26.
Suction phen. Pelescoping. G. C. Starper. 7,925.76;
Apr. 19.
Suction sheet-pick-up mechanism. C. W. Tremper. 1,625.578; Apr. 19.
Suction sheet-pick-up mechanism. C. W. Tremper. 1,625.578; Apr. 19.

Suction topper. P. W. Fleischer. 1.641.480; Sept. 6. Sudatory receptor pad. W. A. Hunter. 1,633,536; June 28. Suction topper. F. W. Flescher. 1.64,180; Sept. 5.6; National Process and apparatus for cooling. G. L. Lonsdale 1.654,133; Dec. 27.
Sugar-bearing solutions, Economical reduction of composite. H. J. Creighton. 1.653,004; Dec. 20.
Sugar bowl. S. Brunt. Des. 73,062; July 19.
Sugar bowl. J. Burian. Des. 74,137; Dec. 27.
Sugar bowl. J. Burian. Des. 74,137; Dec. 27.
Sugar bowl. J. Burian. Des. 73,062; July 19.
Sugar bowl or similar article. F. Schmidt. Des. 72,280; Mar. 22.
Sugar cane, Apparatus for disintegrating. W. H. Morgan, sr. 1,646,761; Oct. 25.
Sugar-cane mills, Julce-straining system for. W. G. Hall. 1,627,283-4; May. 3.
Sugar-cane mills, Julce-straining system for. W. G. Hall. 1,627,283-4; May. 3.
Sugar-cane, Working. A. E. Kienzle. 1,633,895; June 28.
Sugar-cane in the success of and apparatus for macerating. N. Nobel. 1,617,902; Feb. 16.
Sugar and S. Sugar-contining materials, Process of and apparatus Sor macerating. Periodicing pure. C. Arsem. 1,616,168; Feb. 1.
Sugar indices, Purifying. W. C. Arsem. 1,616,168; Feb. 1.
Sugar-mill machinery. J. E. Stuntz. 1,640,059; Aug. 23.
Sugar-mill machinery. G. I. Thelle, 1,640,069; Aug. 23.

Sugar. Manufacturing white. W. F. R. Murrie. i,015,846; Feb. 1.

Sugar-mill machinery. J. E. Stuntz. 1,640,059; Aug. 23.

Sugar, Purifying Iduids and making. E. B. Battelle. Sugar-mill machinery. G. I. Theile. 1,640,060; Aug. 23.

Sugar, Purifying Iduids and making. E. B. Battelle. Sugar Theoremse. Product and testing. A. Seaton and W. O. Rader. 1,625,165; Apr. 19.

Sugar, Treating. H. C. Welle. 1,624,296; Apr. 12.

Suit, Parachute. P. Bunevac. 1,626,136; Apr. 26.

Suit, Parachute. P. Bunevac. 1,624,136; Apr. 26.

Suit, Parachute. P. Bunevac. 1,640,110; Aug. 23.

Suitcase. O. J. Willinsky. Des. 72,032; Apr. 52.

Suitcase. Attaché case, and the like. F. C. Gadsby. 1,642,851; Sept. 20.

Suitcase. Expanding. A. B. Hawes, R. W. Horton, and F. C. C. Mayo. 1,646,092; Oct. 18.

Sulphace Expanding. A. B. Hawes, R. W. Horton, and F. C. C. Mayo. 1,646,092; Oct. 18.

Sulphides, Manufacture of alkali-metal. H. Freeman. 1,640,314-15; Aug. 23.

Sulphite cloudes lye, Utilizing waste. C. G. Schwaibe. 1,615,102; Jan. 18.

Sulphite Iduors, Making. Igno-tanning material from waste. V. Drewsen. 1,629,448; May 17.

Sulphite Iduors, Making. Igno-tanning material from waste. V. Drewsen. 1,629,448; May 17.

Sulphite Journey from anthraquinone sulphonic-acid despendence. Solitting of R. E. Schmidt. 1,650,185; V. Schwaiber. Solitting of R. E. Schwidt. 1,650,185; V. Schwaiber. Schwaiber. Solitting of R. E. Schwidt. 1,650,185; V. Schwaiber. Schwaib

Sulpho groups from anthraquinone sulphonic-acid derivatives, Splitting off. R. E. Schmidt. 1,650,158; Nov. 22.

Nov. 22.
Sulphur burner. H. Rlumenberg, jr. 1,634,092; June 28.
Sulphur burner. L. Gillett, 1,638,992; Aug. 16.
Sulphur burner. H. F. Merriam, 1,629,352; May 17.
Sulphur composition. W. H. Kobbé. 1,612,869; Jan. 4.
Sulphur composition of diminished indammability and producing same. C. Marx. 1,619,357; Mar. 1.
Sulphur compound and making same. F. A. Frazier.
1,614,063; Jan. 11.
Sulphur, Controlling evolutions of elemental. G. N.
Kirsebom. 1,646,837; Aug. 30.
Sulphur mining. A. T. May 1,530,532; July 28.
Sulphur mining. B. Andrews. 1,648,210; Nov. 8.
Sulphur mining. A. T. Drachenberg. 1,628,873 * May 17.
Sulphur, Mining of. R. H. Stewart. 1,615,050-1; Jan. 18.

Sulphur, Jan. 18.

Sulphur, Petroleum-refining process and reagent for the removal of. F. C. Axiell. 1,645,679; Oct. 18. Sulphur phenol resin. Making. C. Ellis. 1,636,596; July 19. Sulphur, Prepared. F. H. Pough. 1,629,528; May 24. Sulphur, Priffying. H. H. Wilkinson. 1,613,632; Jan. 11.

Jan. 11.
Sulphur, Treating. J. W. Schwab. 1,646,838; Oct. 25.
Sun blind. H. Boeck. 1,649,943; Nov. 22.
Sundial. S. O'Sullivan. 1,651,621; Dec. 6.
Sundial. S. Terraz. 1,629,238; May 17.
Sunshade. H. H. Seaman. 1,613,296; Jan. 4.
Sunshade attachment, Automobile. J. Menzies. 1,639,413;
Sunshade for automobile windows. F. B. Marshall. 1,646,621; Oct. 25.
Sunshade, Vehicle. C. M. Stainbrook. 1,631,074; May 31.
Sun watch, Waterproof vest-pocket. M. Frank.
Suneradiusthic consents. H. W. Lavigne. 1,640,410.

Superadjustable generator. H. W. Lavigne. 1,642,448;

Supercharking device. A. F. Masury and C. Froesch. 1.646.757; Oct. 25. Superheater. L. E. Whittington and W. Robinson. 1,653,028; Dec. 20.

Superheater and boiler, Combined. H. O. Woolley. 1,626,220; Apr. 26. Superheater boiler. W. F. Keenan, jr. 1,630,087;

Superheater and boiler, Combined. H. O. Woolley.
1,256,259, Apr. 26.
Superheater boiler. W. F. Keenan, jr. 1,630,087;
May 24.
Superheater boiler. F. M. MacDowell. 1,627,918;
May 10.
Superheater boiler. J. Nelis. 1,623,805; Apr. 5.
Superheating cleant. C. A. Mestre and E. E. H.
Superheating cleant. C. A. Mestre and E. E. H.
Superheating steam, Apparatus for. B. Broido.
1,648,634; Nov. S.
Superheating steam by means of a high-pressure medium, Apparatus for. O. Hartmann. 1,617,519; Feb. 15.
Superlighway. D. L. Turner and J. P. Hallhan.
Superhane. J. E. Broyles. 1,639,553; Aug. 16.
Superplover system. D. A. Quaries. 1,616,823; Feb. S.
Supports. J. L. Boyles. 1,639,553; Aug. 16.
Superplover system. D. A. Quaries. 1,616,823; Feb. S.
Support. A. Allen. 1,629,430; May 17.
Support. J. L. Davidson. 1,624,657; Apr. 12.
Support. J. L. Davidson. 1,624,657; Apr. 12.
Support. J. T. L. Barldson. 1,624,657; Apr. 12.
Support. A. Thiele. 1,618,728; Jan. 25.
Support. A. Thiele. 1,618,728; Jan. 25.
Support or holder.
Support or H. M. Pfaltzgraff. 1,638,7706; Aug. 2.
Supporter L. H. M. Pfaltzgraff. 1,638,7706; Aug. 2.
Supporter L. Elastic. J. R. Santhônes. 1,634,439; P.
Supporter C. Elastic. J. R. Santhônes. 1,634,439; P.
Supporter for ladies' garments, Removable stocking. P.

Supporter, Abdominal, E. J. R. Santbanez. 1,004;100.
Suporter, Elastic. J. R. Santbanez. 1,004;100.
Supporter, for ladies' garments, Removable stocking. P. Kutzin. 1,634,071; June 28.
Supporter, Hose. R. E. Bennett. 1,615,910; Feb. 22.
Supporter, Hose. J. Jacobs. 1,618,435; Feb. 22.
Supporters, Detachable connector for hose. C. J. Hazelton. 1,617,431; Feb. 16.
Supporting blot, Brake-beam. E. C. Lunsford. 1,646,587; Oct. 25.
Supporting bracket. H. F. Albers. 1,647,330; Nev. 1.
Supporting bracket. A. Marlewski. 1,640,203; Aug. 23.
Supporting bracket. Bed-spring. G. A. Stackhouse. 1,647,672; Nov. 1.

Supporting bracket. A. A. A. Stackski. 1,649,028 Aug. 25. Supporting bracket. Bed-spring. G. A. Stackshouse. 1,647,672; Nov. 1. Supporting device. J. C. Relnke, fr. 1,620,288; Mar. 22. Supporting device. F. Sohnle. 1,622,038; Mar. 22. Supporting device. B. M. A. Trebes. 1,615,149; Jan. 18. Supporting device. W. H. Woods. 1,623,757; Apr. 19. Supporting fevice. W. H. Woods. 1,623,757; Apr. 19. Supporting fixture. A. E. Sparrow. 1,653,742; Dec. 27. Supporting means for horizontally-disposed surfaces. J. E. Glockler. 1,645,421; Oct. 11. Supporting rack. E. W. House. 1,621,410; Mar. 15. Supporting structure. F. A. Davidson. 1,646,725; Supporting structure. C. S. Wagner. 1,621,649; Mar. 2. Supporting structure. C. S. Wagner. 1,621,649; Mar. 22. Supporting structure. C. S. Wagner. 1,621,649; Mar. 22.

Supporting structure. F. A. Davidson. 1,646,725; Oct. 25.

Supporting structure. C. S. Wagner. 1,621,649; Mar. 22.

Supporting the hand while writing, Device for. C. Craig. 1,627,635; May 10.

Supporting wheel, Alripane-tail. C. J. Smith and H. A. Hicks. 1,642,691; Sept. 20.

Langle 1,624,635; May 10.

Supporting wheel, Alripane-tail. C. J. Smith and H. A. Hicks. 1,644,582; Oct. 4.

Surface breaking and loosening machine. F. M. Hargrave. 1,644,582; Oct. 4.

Surface condenser and method. F. M. Doyle. 1,637,558; Aug. 2.

Surface for highways, floors, and the like. J. 1,637,558; Aug. 2.

Surface for highways, floors, and the like. J. J. Stark. 1,613,063; Jan. 4.

Surface est indicator. A. G. Cash. 1,645,473; Oct. 11.

Surface washer. F. G. Stone. 1,620,698; Mar. 15.

Surfacing machine. R. Cavicell. 1,650,690; Nov. 29.

Surfacing machine. R. Cavicell. 1,650,690; Nov. 29.

Surfacing machine. B. O. Tillyer and N. M. Baker. 1,639,123; Aug. 2.

Surfacing machine. E. D. Tillyer and N. M. Baker. 1,630,12; Aug. 12.

Surfacing machine. E. D. Tillyer and N. M. Baker. 1,630,01; Aug. 18.

Surfacing machine. E. D. Tillyer and N. M. Baker. 1,630,01; Aug. 18.

Surfaces, Coloring. J. Lecjaky. 1,650,079; Nov. 22.

Surfaces and tight, Readering. J. A. H. Hier. 1,649,592; Surgercal anoparatus. A. L. Soresi. 1,827,714; May 10.

Surge recorder. J. F. Peters. 1,649,180; Nov. 15.
Surgical apparatus. A. L. Soresi. 1,627,714; May 10.
Surgical apparatus, Electrical. F. E. Bauer. 1,645,215;
Oct. 11.

Oct. 11.

Surgical appliance. C. Bartholomew. 1,635,919; July 12.

Surgical appliance. H. G. Gould and K. D. Obenshain. 1,625,602; Apr. 19.

Surgical appliance. T. James. 1,615,945; Feb. 1.

Surgical abser. H. J. O'Neill. 1,617,923; Feb. 15.

Surgical device. R. H. De Mott. 1,638,074; June 21.

Surgical device. C. Nicusirk. 1,617,961; Feb. 15.

Surgical device. C. Nicusirk. 1,617,961; Feb. 15.

Surgical device. C. Nicusirk. 1,617,961; Feb. 15.

Surgical device. C. Nicusirk. 1,617,961; Feb. 10.

1,637,837; Aug. 2.

Surgical device and making it. W. R. Dorman. 1,637,837; Aug. 2.

Surgical devicesings and the like, Applicator for. O. C. Willis. 1,646,365; Oct. 18.

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Surgical instrument. W. C. Dawes. 1,640,311; Aug. 23. Surgical instrument. W. S. Humble. 1,636,636; July 19. Surgical instrument. M. C. Myers. 1,621,212; Mar. 15. Surgical instrument. O. H. Oesterwitz. Des. 16,687;
Surgical instrument. W. C. Myers. 1,621,212; Mar. 15. Surgical instrument. O. H. Oesterwitz. Des. 16,687; July 19. Surgical instrument. C. H. Oesterwitz. Des. 16,687; July 19. Surgical instrument. R. L. Schulz. 1,643,631; Sept. 27. Surgical instrument. R. L. Schulz. 1,643,631; Sept. 27. Surgical instrument. W. A. Wells. 1,635,066; July 5. Surgical needle. H. S. Souttar. 1,613,206; July 40. Surgical needle and making it. E. A. Quint. 1,636,615; July 19. Surgical or orthopedic appliance. J. Buckowitz. 1,630,108; May 24. Surgical retractor instrument. H. E. Stein. 1,613,141; Surgical retractor instrument. H. E. Stein. 1,613,141; Surgical table. S. G. Austin. 1,648,631; Nov. 8. Surgical tables, Step for. S. Tascarella. 1,652,065; Dec. 6. Surprice device. G. E. Ditzler. 1,648,630; Nov. 8.
     Surveying instrument. A. Langsner. 1,638,749; June 28. Surveying instrument with drawing device. M. Sander. 1,631,891; June 7.
     1.631.891: June 7.
Surveying instruments, Microscope attachment for. E. W. Arms. 1,629.373; May 17.
Surveyor's instrument. R. L. Huffman. 1,630,180; May 24.
Suspended carrier. E. T. Bennington. 1,624,205; Apr. 12.
S. Newman. 1,646,975: Oct. 25.
Suppender Algebraset. B. B. Bennington. 1,624,275; May 12.
        Suspender, S. Newman. 1,846,975; Oct. 25.
Suspender attachment. E. E. Peck. 1,363,712; July 26.
Suspender, Garment. R. Stephenson. 1,525,305; Apr. 26.
Suspenders. A. B. Pellerin. 1,617,306; Feb. S.
Suspenders, Woven strap for. H. C. Martin. 1,616,272;
Suspender, Garment. R. Stephenson, 1,026,305; Apr. 26. Suspenders, M. D. Pellerin, 1,617,306; Feb. 8. Suspenders, Woven strap for. H. C. Martin, 1,616,272; Feb. 1.

Suspenders, Woven strap for. H. C. Martin, 1,616,272; Feb. 1.

Suspension and transmission, Combined resilient. B. F. Seymour. 1,637,392; Aug. 2.

Suspension standard and strain and strai
  Swage and raker gauge. D. D. Thomas. 1,622,745; Mar. 29.

Mar. 29. achine. N. D. Abbey. 1,617,890; Feb. 15.

Swagling machines, Feeding mechanism for. E. A. Dean. 1,619,791; Mar. 8.

Swaging mill roll. S. E. Diescher. 1,634,452; July 5.

Swatter, Fly. N. T. Hendrickson and C. Roholt 1,631,864; Juny 6.

Swatter, J. Swager, 1,632,3446; June 14.

Sweater. B. C. and D. N. Piscitello. 1,652,183; Dec. 13.

Sweater, Knitted. L. S. Sack. Dees 7,3,671–2; Oct. 18.

Sweaters and the like, Attachment for. S. H. Cohen. 1,639,928; T. Far. 38.

Sweeper and floor polisher, Convertible vacuum. E. H. Blanchard and D. Mott. 1,644,169; Oct. 4.

Sweeper, Carpet. W. H. Kenyon. 1,620,258; Mar. 8.

Sweeper, Carpet. T. Dickinson. 1,625,739; Oct. 18.

Sweeper, Carpet. W. H. Kenyon. 1,620,358; Mar. 8.

Sweeper, Carpet. I. J. Owen. 1,614,638; Jan. 18.

Sweeper, Carpet. I. J. L. Shorrock. 1,620,257; Mar. 8.

Sweeper, Carpet. I. J. L. Shorrock. 1,620,257; Mar. 8.

Sweeper, Carpet. I. J. L. Shorrock. 1,620,257; Mar. 8.

Sweeper, Electric suction. T. W. Green. 1,646,088; Oct. 18.
          Sweeper,
Oct. 18
        Sweeper, Electric suction. I. J. Owen. 1,639,959; Aug. 23.
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Swimmer's hand paddle. C. H. Theobold. 1,621,698;
Mar. 22.
Mar. 28.
Webbed hand for. A. H. Lake. 1,625,730;
Apr. 19.
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Apr. 1
    Swimming bags, Vulve for. H. A. Ayrad, 1,634,314; July 5.
Swimming board or life preserver. F. Walcher, 1,653,974; Dec. 27.
Swimming device; J. P. La Bosa, 1,626,541; Apr. 26.
Swimming device, G. B. Nichols, 1,615,954; Feb. 1.
Swimming device, G. B. Nichols, 1,615,954; Feb. 1.
Swimming device, G. P. Pile, 1,628,852; Apr. 5.
Swimming bistructing machine, T. A. Walton, 1,020,146;
Mar. 8.
Swimming-instructing machine. T. A. Walton. 1,620,146; Mar. 8.

Swimming pad. F. Jr. Smith. 1,626,163; Apr. 26.

Swimming pad. F. Jr. Smith. 1,626,163; Apr. 26.

Swimming pad. F. Jr. Smith. 1,626,163; Apr. 26.

Swimming index of the state 
        Feb. 22.
Swing stand. B. F. Lindsley. 1,629,281; May 17.
Swinging hook. B. F. Moore. 1,637,047; July 26.
Swinging table. A. Blitz and A. S. Kux. 1,634,929;
July 5.
    Swinging table. A. Blitz and A. S. Kux. 1,648,717;
Swinging table. A. Blitz and A. S. Kux. 1,648,717;
Switch: See—
Air-break line switch.
Alarm-clock switch.
Light-control switch.
Light switch.
Lighting and ignition switch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Light switch.
Light switch.
Light switch.
Lighting and ignition
switch.
Lighting switch.
Lighting-system switch.
Limit switch.
Lock-actuated switch.
Lock controlled switch.
                                       Automotic systch.
Automotic signal control
switch,
Battery switch.
Canopy switch.
Centrifugal switch.
Circuit switch.
Combination switch.
Control switch.
Control switch.
Cut-out switch.
Cut-out switch.
Cut-out switch.
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Cut-out switch.
Switch.
Cut-out switch.
Cut-out switch.
Swit
                                                Automatic switch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lock-controlled switch.
Mail - box - cover - actuated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Manhole switch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Manhole switch.
Mercury wwitch.
Mercury tube switch.
Multiple plural switch.
Permutation switch.
Plug switch.
Pressure and float actuated switch.
Pressure switch.
Pressure switch.
Preshoutton switch.
Fush-button switch.
Fush-button switch.
Fush-button switch.
                                       Cut-out switch.
Cut-over and safety switch.
Dashpot-controlled switch.
Dashpot-controlled switch.
Dismore switch.
Disconnecting switch.
Display switch.
Distributing switch.
Distributing switch.
Electric and air switch.
Electric socket switch.
Electric system.
Electric switch.
Electric switch.
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Electric switch.
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Electrical relay switch.
Electrical relay switch.
Electrical time switch.
Electrical time switch.
Electromagnetic switch.
Switch.
Electromagnetic switch.
Float-operated switch.
Float-operated switch.
Float-operated switch.
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Push-through switch.
Quick-break switch.
Railo and phonograph com-
Railway switch.
Railway switch.
Relay switch.
Relay switch.
Rotary crossover switch.
Rotary switch.
Safety switch.
Safety switch.
Selector switch.
Selector switch.
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Selector switch.
Selector switch.
Stepnia switch.
Stepnia switch.
Stepnia switch.
Telephone switch.
Thermostat switch.
Thermostat switch.
Themostatically-controlled switch.
Time switch.
Time switch.
Transfer switch.
Wall switch.
                                            Flush switch.
Foot-actuated switch.
Foot switch.
Fuse switch.
                                            Fuse switch.
Governor switch.
Headlight-control switch.
Headlight switch.
High-tension switch.
Ignition switch.
Inclosed switch.
Instantaneous switch.
Instantaneous switch.
Instantaneous switch.
             Instantaneous switch.
Iron switch.
Kuffe-blade switch.
Lamp-socket switch.
Switch. B. O. Austin.
Switch. A. E. Bost. 1,631,001; May 31.
Switch. N. J. Courad. 1,631,012; May 31.
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Switch. P. K. Cramblet. 1,625,456; Apr. 19.

Switch. U. Feichter. 1,634,179; June 28.

Switch. W. J. Fraser. 1,622,497; May 24.

Switch. W. J. Fraser. 1,622,497; May 24.

Switch. W. E. Freese. 1,622,969; Mar. 29.

Switch. I. F. Harrington. 1626,463; Apr. 26.

Switch. H. D. James. 1,622,649; Mar. 29.

Switch. L. Kellner. 1,631,135; Oct. 11.

Switch. J. A. Kopp. J. G. Guenthner, F. J. Wellkamp, and C. J. Meyer. 1,660,137; Nov. 22.

Switch. J. T. Miller and M. Haniey. 1,619,148; Mar. 1.

Switch. B. Palm. 1,631,054; May 31.

Switch. B. Palm. 1,631,054; May 31.

Switch. B. Falm. 1,631,054; May 31.

Switch. W. U. Pistor. 1,617,862; Feb. 15.

Switch. B. E. Queener. 1,046,764; Oct. 25.

Switch. C. H. Williams. 1,630,455; Mag. 31.

Switch. C. H. Williams. 1,630,455; Mag. 31.

Switch. G. H. Williams. 1,630,455; May 31.

Switch. And appurtenant protective fitting, Service. B. D.

Horton. 1,628,465; May 1.

Switch and Lighting arrester, Combined. H. J. Lewis. 1,630,954; May 31.

Switch and Lighting arrester, Combined. H. J. Lewis. 1,630,954; May 31.

Switch and Lighting arrester, Combined. H. J. Lewis. 1,630,954; May 31.

Switch and Lighting arrester, Combined. H. J. Lewis. 1,630,954; May 31.

Switch and Lighting arrester, Combined. H. J. Lewis. 1,630,954; May 31.
     Switch and switch-operating mechanism, Auxiliary Ford
starter. C. B. Steffens. 1,621,288; Mar. 15.
Switch assembly, Range. F. F. Forshee. 1,649,024;
Nov. 15.
startec. C. B. Sieffens. 1,621,288; Mar. 15.
Switch assembly, Range. F. F. Forsiee. 1,649,024;
Nov. 15.
Switchboard. W. G. Balph. 1,626,660; May 3.
Switchboard. A. C. Lyen and C. W. Morgan. 1,642,883;
Sept. 20.
Switchboard. S. L. S. Keilholtz and E. Dickey.
Switchboard signal. C. J. Erickson. 1,654,325; Dec. 27.
Switchboard signal. C. J. Erickson. 1,654,325; Dec. 27.
Switchboards, Protective device for electric. G. W. Ashlock, fr. 1,616,946; Feb. 8.
Switch box. O. S. Jennings. 1,652,531; Dec. 13.
Switch box. H. K. Krantz. 1,615,817; Jan. 25.
Switch box. H. K. Krantz. 1,628,889; May 17.
Switch box. Gonduit. C. D. Converse. 1,625,882;
App. 26.
Switch box. Gonduit. C. D. Converse. 1,625,882;
App. 26.
Switch boxes, Cover for. R. Werden. 1,614,542; Jan. 18.
Switch bracket. H. A. Ziola. 1,629,765; May 24.
Switch-circuit controller. O. S. Field. 1,629,998; May 24.
Switch-circuit, Machine-switching selector. F. A. Stearn. 1,648,009; Nov. 8.
Switch controlls for step-by-step systems, Selector., R. L. Stokely. 1,647,256; Nov. L. Steator. 1,641,690; Sept. 6.
Switch controll. Safety. H. Stone. 1,645,023; Oct. 11.
Switch controll Safety. H. Stone. 1,645,023; Oct. 11.
Switch construction. R. B. Benjamin. 1,639,126; Aug. 18.
       Switch construction. R. B. Benjamin. 1,639.126;
Aug. 16.
     Aug. 16.

Switch construction. H. W. Faust. 1,628,496; May 10.

Switch construction. T. W. Varley. 1,618,495; Feb. 22.

Switch contact. A. Rawling. 1,626,692; May 3.

Switch device, Automatically controlled. R. J. Patterson. 1,613,893; Jun 11.

1,613,893; Jun 11.

R. B. W. Franklin. 1,616,120; Feb. 1.

Switch for mine railways. H. W. Davis. 1,651,192; Nov. 29.

Switch for motor vehicles. Lighting. J. L. Hitchcock and A. R. Pangborn. 1,647,520; Nov. 1.

Switch housing. A. Koron. 1,637,520; Nov. 1.

Switch charles and A. R. Sangborn. 1,628,040; Aug. 16.

Switch-interlocking device. F. C. Anderson. 1,622,019; Mar. 22.
     Mar. 22.

Switch lock. N. E. Murphy. 1,642,820: Sept. 20.

Switch bock. C. L. Stooltzlen. 1,624,372; Apr. 12.

Switch mechanism. H. K. Ansingh. 1,617,363; Feb. 15.

Switch mechanism. H. K. Ansingh. 1,623,955; Apr. 12.

Switch mechanism. H. G. Baxter. 1,643,799; Sept. 27.

Switch mechanism. W. M. Grant. 1,652,569; Dec. 13.

Switch mechanism. U. E. Harrison. 1,649,030; Nov. 15.

Switch mechanism. O. S. Jennings. 1,649,030; Nov. 15.

Switch mechanism. O. S. Jennings. 1,649,032; Sept. 27.

Switch mechanism. F. B. Kniskern and J. R. Shuster. 1,652,484; Dec. 18.

Switch mechanism. E. H. Remde. 1,620,1617; Mar. 8.

Switch mechanism. E. H. Remde. 1,620,1617; Mar. 8.

Switch mechanism. E. H. Turston. Rej6,810; Dec. 6.

Switch mechanism. Interlocking. J. E. Sederholm. 1,634,121; June 28.
                           Mar. 22
       Switch mechanism. E. H. W. Ulrich. 1,626,650; May 3. Switch mechanism. Interlocking. J. E. Sederholm. Swift-1, June 28. Swifch 4,121; June 28. Meter-testing. O. S. Jennings. 1,615,704; Jan. 25. Switch mechanism, Safety. I. E. McCabe. 1,648,390; Nov. 8.
       Nov. 8.
Switch mounting, Automatic. H. F. Obergfell. 1,624,502;
Apr. 12.
Switch-operating mechanism. J. D. Hilliard. 1,621,368;
Mar. 15.
       Switch-operating mechanism. A. F. C. Lotz. 1,648,553;
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Switch-operating mechanism. P. Peterson. 1.633.869:
  Switch-operating mechanism. P. Peterson. 1,633,899; June 28. Switch or circuit breaker, Electric. R. W. Gregory and L. C. Grant. 1,645,905; Oct. 18. Switch or cut-out, Thermostatic safety. P. Strughold. 1,640,300; Aug. 23. Switch plate F. H. Audd. 1,643,599; Sept. 27. Switch plate F. H. Audd. 1,643,599; Sept. 27. Switch plate E. W. Chesler. 1,651,252; Nov. 29. Switch-point guard. P. Hofman and J. B. Strong. 1,628,882; May 17. Switch-point protector. R. G. Detmer. 1,629,817; May 24. Switch-point protector. L. H. Fulton. 1,649,954; Nov. 22.
Switch-point protector. R. G. Detmer. 1,629,817 May 24.
Switch-point protector. L. H. Fulton. 1,649,954;
Nov. 22.
Switch and J. R. B. Benjamin. 1,617,077; Feb. 8.
Switch stand. J. Trusch. 1,645,776; Oct. 25.
Switch throwing and locking device. J. Bruce.
1,614,183; Jan. 11.
Switch throwing and locking mechanism. C. C. Thorn.
1,654,023; Dec. 27.
Switch-throwing mechanism. H. N. Burress. 1,620,947;
Switch-throwing mechanism. H. N. Burress. 1,620,947;
Switch-throwing mechanism. H. N. Burress. 1,620,947;
Switch-throwing mechanism. V. E. Goodwin.
1,646,240; Oct. 18.
Switching apparatus, Condenser. V. E. Goodwin.
1,646,240; Oct. 18.
Switching apparatus, Electric. H. G. French. 1,614,115;
Jan. 11.
Switching apparatus, Electric. H. G. French. 1,614,115;
Jan. 11.
Switching device. J. Bruynes. 1,650,601; Nov. 29.
Switching device. B. W. Gent. 1,647,792; Nov. 1.
Switching device. D. D. Miller. 1,628,991; May 17.
Switching device. D. D. Miller. 1,628,991; May 17.
Switching device. J. C. Rinker and A. J. Kraisinger.
Switching device. J. C. Rinker and A. J. Kraisinger.
Switching device. B. Settegast. 1,651,141; Dec. 6.
Switching device. A. R. Swobodn. 1,624,374; Apr. 12.
Switching device. A. R. Swobodn. 1,624,374; Apr. 12.
Switching system, Automatic. H. Bany. 1,615,669;
Valan. 25.
Switching system, Automatic. H. Bany. 1,615,669;
Switching system, Automatic. H. Bany. 1,615,669;
Switching system, Automatic. T. Aldendorff. 1,634,007;
June 28.
Switching system, Automatic. H. Bany. 1,615,669;
Switching system, Automatic. T. Aldendorff. 1,634,007;
June 28.
Switching system, Automatic. H. Bany. 1,615,669;
Switching system, Automatic. T. Aldendorff. 1,634,007;
June 28.
Switching system, Automatic. T. Aldendorff. 1,634,
     Jan. 25.
Switching system, Automatic transformer-. C. M. Moss.
1,654,308; Dec. 27.
Switches, Attachment for oil. J. D. Hilliard. 1,620,155;
Mar. 8.
  switches, Attachment for oil. J. D. Hilllard. 1,620,155; Mar. 8.

Switches, Contact device for key. R. Pudelko. 1,653,823; Dec. 27.

Switches, Cut-out device for nonumatically-operated. G. Switches, Device for operating. A. C. Frue. 1,622,439; Mar. 29.

Switches, Device for operating. A. C. Frue. 1,622,439; Mar. 29.

Switches, Tripping device for electric. J. D. Wood. 1,653,195; Dec. 20. 1,645,747; Cet. 18.

Swivel. R. 1, F. Minster. 1,616,325; Feb. 1.

Swivel. R. Taylor. 1,647,776; Feb. 15.

Swivel. R. Taylor. 1,627,873; May 10.

Swivel attachment. C. R. Barry. 1,649,208; Nov. 15.

Swivel attachment. C. R. Barry. 1,649,208; Nov. 15.

Swivel connecter, Electrical. A. R. Goldrick. 1,650,014,

Swivel hook. G. F. Joyner. 1,642,256; Sept. 20.

Swivel hook. G. F. Joyner. 1,642,256; Sept. 20.

Swivel hook. G. F. Joyner. 1,642,258; Sept. 20.

Swivel hook. Hydraulic. F. Redick. 1,631,890 June 7.

Swivel hook. Hydraulic. F. Redick. 1,631,890 June 7.

Swivel hook. G. F. Joyner. 1,642,258; Sept. 20.

Swivel hook. G. F. Joyner. 1,642,258; Sept. 20.

Swivel hook. G. F. Joyner. 1,644,441; Apr. 12.

Swivel with the switch of the swit
        Synchronizing device. O. C. Traver. Re16,540; Feb. 8. Synchronizing mechanism. T. L. Dowey. 1,653,843; Dec. 27.
     Dec. 27.
Synchronizing mechanism. C. D. Richard. 1.637,161;
July 26.
Synchronizing mechanism. A. D. Trenor. 1.636,020;
July 19.
        Synchronizing system. T. L. Dowey. 1,617.991; Feb. 15. Synchronizing system. E. E. Kleinschmidt. 1,616,808;
     Feb. 22.

Synchronous motor. H. Weichsel. 1,643.398; Sept. 27.

Synchronous rectifier. T. C. Lennox. 1,655.001; July 5.

Syringe. A. Barth. 1,644.225; Oct. 4.

Syringe. G. L. Cantwell. 1,645.984; Oct. 18.

Syringe. I. W. Friedman. 1,652.163; Dec. 20.

Syringe. R. E. Klett. 1,645.135; Nov. 8.

Syringe. T. Lowenfeld. 1,643.741; Sept. 27.

Syringe. J. Masonick and G. and J. Stuchner. 1,637,264;

Syringe. W. F. Patten. 1,636.265; Oct. 18.

Syringe. E. J. Peglay. 1,643,289; Sept. 20.
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Syringe. G. F. Piercy. 1.616.389: Feb. 1.
Syringe and needle therefor, Hypodermic. S. J. Everett.
Syringe, Combined stopper and bulb. H. K. Mulford.
1.654.267; Dec. 27.
Syringe, Combined stopper and bulb. H. K. Mulford.
1.654.267; Dec. 27.
Syringe for hypodermic needles or the like. W. Wolf.
Syringe for hypodermic needles or the like. W. Wolf.
Syringe for hypodermic and similar purposes, Glass. A.
Günther. 1.652.894; Dec. 18.
Syringe for local anæsthesia. J. L. Raison. 1,615.136;
Jan. 18.
Syringe for local anæsthesia. J. L. Raison. 1,615.136;
Jan. 18.
Syringe head. E. Kallmeyer. 1,638.532; Aug. 9.
Syringe head. E. Kallmeyer. 1,638.532; Aug. 9.
Syringe head. E. Kallmeyer. 1,638.532; Aug. 9.
Syringe, Hypodermic. F. J. Hofschneider. 1,648,308; Nov. 8.
Syringe, Hypodermic. F. J. Hofschneider. 1,648,308; Nov. 8.
Syringe, Syringe. W. Grinley. 1,653.662; Dec. 20.
Syringe, Separable. O. Hasselmann. 1,648,548; Nov. 8.
Syringe, Surgical. L. D. Smith. 1,624,990; Apr. 19.
Syringe, Surgical. L. D. Smith. 1,624,990; Apr. 19.
Syringe, Bulb for hydrometer. W. A. Reynolds. Des.
73,147; July 26.
Syringes, Seedle mounting for hypodermic. B. Friedman.
1,624,327; Apr. 12.
Syringes, Seedle mounting for hypodermic. B. Friedman.
1,624,327; Apr. 12.
Syringes, Seedle mounting a plurality of values, Compound.
E. Roucka. 1,633,713; June 28.
System of distribution. M. Herklotz. 1,633,800; June 28.
System of content. W. E. Hand. 1,624,292; Sept. 13.
Tsquare. A. M. Rasmusen. 1,642,280; Apr. 12.
Tsquare. A. M. Rasmusen. 1,642,280; Apr. 12.
Tsquare. A. M. Rasmusen. 1,624,280; Apr. 12.
Tsquare. A. Masmusen. 1,624,280; Apr. 12.
Tsquare. A. Masmusen. 1,624,280; Apr. 12.
Tsquare. Magnetic. U. E. Edwards. 1,642,232; Sept. 13.
Table: See— Aug. 16. W. S. Hunkins. 1,621,589; Mar. 22. T-square, Magnetic, W. Aug. 16.
Tab end. W. S. Hunkins. Table: Sec—
Bed table.
Billiard table.
Camp table.
Card table.
Casting table.
Changcable-top table.
Checking and assembling Checking table. Gravity table. Kitchen table.
Knockdown table.
Leg foldable table.
Operating table.
Paper-hanger's table.
Potnto-sorting table.
Rolling mili table.
Rolling mili table.
Spacing table.
Spacing table.
Spacing table.
Swinging table.
Treating table.
Treating table.
Treating table.
Writing table.
Writing table.
Writing table.
Writing table. Casting table.
Changeable-top table.
Checking and assembling
Checking table assembling
Checking table.
Concentrating table.
Concentrating table.
Concentrating table.
Convertible table.
Drafting table.
Drafting table.
Extension table.
Extension table.
Feed table.
Feed table.
Feed table.
Concentration table.
Concentration table.
Feed table.
Fracting table.
Tracting table.
Tracting table.
Checking table.
Checking table.
Feed table.
Feed table.
Feed table.
Concentration table.
Tracting table.
Tracting table.
Tracting table.
Checking table.
Checking table.
Checking table.
Tracting table.
Tracting table.
Tracting table.
Checking table.
Checking table.
Tracting table.
Tracting table.
Tracting table.
Checking table.
Tracting table.

Tablecloth. D. A. Kemp. Des. 71,838; Jan. 11.
Tablecloth. D. A. Kemp. Des. 74,184; Dec. 27.
Table concentrator. A. H. Stebbins. 1,648,286; Nov. 8.
Table concentrator. A. H. Stebbins. 1,648,286; Nov. 8.
Table cover holder. C. E. S. 6,644; Oct. 8.
Table cover or similar article. H. 62,1720; Mar. 22.
Table cover or similar article. H. S. Hull. Des.
73,082-3; July 19.
Table cover or similar article. J. F. Newton. Des. 73,860;
Nov. 15.
Table cover or the like. A. L. Ejk. Des. 73,651; Oct. 18.
Table cover or the like. A. L. Ejk. Des. 73,651; Oct. 18.
Table cover or the like, Embrodered cloth. S. N. Mallouk. Des.
72,164-6; Mar. 8.
Table cover or the like, Lace. S. N. Mallouk. Des.
72,164-6; Mar. 8.
Table cover or the like, Lace. S. N. Mallouk. Des.
72,121; Mar. 15.
Table cover or the like, Lace. S. N. Mallouk. Des.
72,21; Mar. 15.
Table for attachment to seats, desks, and other articles.
C. Vinegrad. 1,649,761; Nov. 15.
Table for vegetables and fruits, Grading. S. B. Lindley.
1,620,217; Mar. 2.
Table on the subject of the seatest of Tables, Extension top for. G. W. Krick. Sept. 6. Tables, Revolving Tables, Extension top for. G. W. Krick, 1,041,495; Spt. 6.
T. 1,028,018; May 10.
Tablet shield, Rainy-day, W. A. Pryor. 1,642,384-5; Sept. 13.
Tablets and the like, Support for writing. R. H. Bell and F. R. Searles, 1,656,275; July 19.
Tablets and the like, Support for writing. R. H. Bell and F. R. Searles, 1,656,275; July 19.
Lashar, 1,618,82; Lashar, 1,618,62; Tabulating apparatus, J. R. Peirce, 1,623,204; Apr. 5.
Tabulating apparatus, J. R. Peirce, 1,623,204; Apr. 5.
Tabulating machines, Variable-feed mechanism for. W. W. Lasker and J. Mueller, 1,627,394; May 3.
Tabulator particularly for calculating wages. G. Taus-Tachometer, E. Blum, 1,639,978; Ang. 23.
Tack, G. A. Taylor, 1,618,239; Feb. 22.
Tack and nail extractor. H. B. Beest, 1,612,793; Jan. 4.
Tack amachine. G. B., H. B., and E. C. Baker, 1,618,628; Feb. 22. Tack-pulling machine. C. F. Pym. 1,614,628; Jan. 18. Tack-supplying mechanism. B. Jorgensen. 1,631,134; June 7. June 7.
Tack-supplying mechanism. A. M. Long. 1,624,958;
Apr. 19. Apr. 19.
Tacker, Hand. H. A. Ballard. 1648.364; Sept. 27.
Tacks, nalls, iriets, pins, or the like, Machine for makTackle. P. W. Sleurin. 1.619.000; Mar. 1.
Tag. H. E. Kondolf. 1.640.196; Aug. 23.
Tag. H. E. Kondolf. 1.642.781; Sept. 20.
Tag. H. A. Johnsos. 1.634.544; July 5.
Tag and making same. H. E. Kondolf. 1,640.195; Aug. 23Tag and tag holder, Price. C. E. Brigel. Tag case, Information. T. G. Reynolds. 1,644,150; Oct. 4. Tag exhibitor. E. F. Stanton. Des. 74,031; Dec. 6. Tag. Laundry-marking. C. W. Canine. Re16,717; Aug. 23. Tag-making machine. C. C. Kurtz. 1,627,978; May 10. Tag price-marking machine. F. Kohnle. 1,631,933; June 7. June 7.

Tag stringing machines and the like, Feeding mechanism for. H. L. Roberts. 1,625,157; Apr. 19.

Tags. Method and apparatus for making. H. E. Kondolf. 1,645,013; Oct. 11.

1,645,013; Oct. 11.

Tags. Method and apparatus for making. H. E. Kondolf. 1,105,000; Jun. 25.

Taliboard fastener. J. T. Cantrell. 1,615,300; Jan. 25.

Taliboard scraper. G. S. Spreyer. 1,633,464; June 21.

Talil-docking machine. K. W. Moore. 1,629,042; May 17.

Talil light and illuminated license plate, Combination.

P. E. Clement. 1,621,351; Mar. 15.

Tali light and stop signal, Combined. E. O. Seitz. 1,626,632; May 3.

H. C. Mummert and J. F. Meade. 1.613.843; Jan. 11.
Tailstock. C. F. Randolph. 1,652,412; Dec. 13.
Tailstock clamp. E. A. Moyer. 1,616,136; Feb.
Tailstock with tool slide. F. B. Cockburn. 1,61 1,613,161; Tailoring, System of. G. A. Mongelli. Apr. 12. Tailor's measure. Apr. 12.
Tailor's measure. B. Simpson. 1,624,768; Apr. 12.
Tailcum-powder box. H. R. Corey. 1,644,989; Oct. 11.
Take-down apparatus. T. F. Waters. 1,636,794; July 26.
Take-off clamp, Current. A. L. Sawyer. 1,648,326; Take-up bolt, Automatic. J. A. Anderson. 1,651,240-1; Nov. 29. Nov. 29.

Take-up bolt, Automatic. J. A. Anderson. 1,651,240-1; Nov. 29.

Take-up bolt, Automatic. O. Miller. 1,631,878; June 7. Take-up device. W. S. Lewis. 1,627,244; May S. S. Lewis. 1,627,244; May S. S. Lewis. 1,631,482; June 7.

Talking, dictating, and like machine, Magnetic. G. Scheel. 1,639,060; Aug. 16.

Talking machine. K. Holtz. 1,620,257; Mar. 8.

Talking machine. I. Jacobsolm. 1,633,743; June 2,7

Talking machine. Constant-surface-speed. G. M. Thomas. 1,627,353; May S. Talking machine reord. F. L. Dyer. 1,628,658; May 17.

Talking machines, Controlling device for electromagnetic. W. Hornauer. 1,658,998; Aug. 8.

Talking machines, Controlling device for electromagnetic. W. Hornauer. 1,658,998; Aug. 8.

Talking machines, Korn for. B. R. Seabrook. 1,651,841; Dec. 6.

Talking machines, Horn for. B. R. Seabrook. 1,651,841; Talking machines, Horn for. B. R. Seabrook. 1,650,471. Talking machines, Horn for. H. Wünsch. 1,650,171;
Nov. 22.
Talking machines, Magnet carrier for electromagnetic.
W. Hornauer. 1,638,999; Aug. 16.
Talking machines, Repeating electanism for. S. B.
Talking machines, Record holder for. P. D. Bodwell and
H. W. Bellows. 1,635,341; Dec. 20.
Talking machines, Stop mechanism for. L. Y. Squibb.
1,615,243; Jan. 25.
Tally. B. B. Bley. 1,637,211; July 26.
Tamper. C. H. Bliss. 1,644,320; Oct. 4.
Tangle C. H. Bliss. 1,644,320; Oct. 4.
Tangle C. J. Squibs. 1,638,808; Aug. 9. Apr. 12.
Tampion pad. E. J. Gulick. 1,638,808; Aug. 9.
Tandem wafer regulator. A. J. Hermesmeyer. 1 1,635,083; July 5. Tank : See Locomotive-tender tank, Liquid-storage tank, Oil-storage tank, Oil tank, Air tank. Bath tank. Bath tank.
Evaporating tank.
Feed tank.
Flittering tank.
Flush tank.
Flush tank.
Flushing tank.
Fuel tank.
Fuel-supply tank.
Gasoline-dispensing tank.
Gasoline tank.
Class melting tank. Radiator tank. Refrigerator tank. Refrigerator tank.
Retting tank.
Septic tank.
Septiling tank.
Sewage tank.
Stock-watering tank.
Storage tank.
Swimming tank.
Transformer tank.
Vacuum fuel-feed tank.
Vacuum tank. Glass-melting tank.
Glass tank.
Liquid-dispensing tank.
Liquid-feed tank.
Liquid-feed tank.
Vacuum tank.
Liquid-feed tank.
Vacuum tank.
Liquid-measuring tank.
Vacuum tank.
Tank. C. P. Elsenhauer. 1.3746; Jan. 11.
Tank. H. F. Koeppe. 1.604,771; Mar. 8.
Tank. E. B. Staley. 1.649,729; Nov. 15.
Tank. E. B. Staley. 1.649,729; Nov. 15.
Tank. I. B. Tanner. 1.613,716; Jan. 11.
Tank. I. B. Tanner. 1.613,735; Feb. 15.
Tank. I. B. Tanner. 1.613,735; Feb. 15.
Tank. A. W. Ward. 1.642,739; Sept. 20.
Tank and carburetor. Combined. H. Dalton, sr. 1.634,704; Univ. Combined. H. Dalton, sr. 1.634,744; Sept. 20.
Tank bank. A. H. Canheld. 1.652,237; Dec. 13.
Tank-car bottom outlet, Railway. E. G. Todt. 1,644,861; Oct. 11. Glass-melting tank. Oct. 11.
Tank-car cleaning device. F. E. Freel. 1,624,865;
Apr. 12. Tank car cleaning device. F. E. Freel. 1,624,865; Apr. 12.
Tank cars, Device for testing safety valves on. W. H. Fine. 1,637,743; Aug. 2.
Tank cleaner. E. J. Hah. 1,625,721; Apr. 19.
Tank cleaner. E. J. Hah. W. Force. 1,616,6218; Feb. 1.
Tank construction and valve-lever-operating mechanism therefor, Flush. C. C. Wright. 1,626,128; Apr. 26.
Tank construction, Glass. J. Rotheram and A. E. Evans. 1,622,346; Mar. 29.
Tank cover, Leakproof. W. T. Van Orman. 1,620,415; Mar. 8.
Tank cover, Leakproof. W. T. Van Orman. 1,620,415; Mar. 8.
Tank for gases and volutile liquids, Storage. J. H. Wiggins. 1,645,313; Oct. 11.
Tank for separating oil and water from gas. F. A. Ray. 1,626,357; Dept. 19.
Tank for separating oil and water from gas. F. A. Ray. 1,625,357; Deven. 1,616,934; Feb. 8.
Tank cars. E. Tyden. 1,616,934; Feb. 8.
Tank cars. Collar and cover for. T. J. Calhoun. 1,628,023; May 10.

Tank-gauging device. G. O. Wilson. 1,629,758; May 24. Tank hanger, Brine-. R. Bult. 1,646,186; Oct. 18. Tank-head construction. J. P. Keene. 1,651,604; Dec. 6. Tank heater. A. C. Mott, Jr. 1,635,052; July 5. Tank heater. 1,61,639; Sept. 6. Tank heater. 1,61,639; Sept. 6. Tank Leak-tight sectional. E. F. Black. 1,627,308; May 3. Tank lever. H. MacMillan. 1,621,122; Mar. 15. Tank lock. C. E. Halaby. 1,649,587; Nov. 15. Tank lock. Gasoline-. A. Knittel. 1,620,902; Mar. 15. Tank lock, Gasoline-. A. Knittel. 1,620,902; Mar. 15. Tank manhole arrangement. C. H. Folmsbee. 1,649,397; Nov. 15.

Tank mounting and multiple-unit tank car. V. Willoughby and A. Kassler. 1,649,432; Nov. 15.

Tank-operating lever, Flush. E. L. Delany. 1,653,799; Dec. 27.

Tank support, Gas. R. E. Tetens. 1,649,265; Nov. 15.

Tank vent. G. C. Schmidt and F. G. D. Muller.

1,628,069; May 10.

Tank vent. P. S. Shield. 1,651,971; Dec. 6.

Tank vent. fame arrester, and automatic snuffer, Combination.

1,628,199; May 10.

Tank vents, May arrester. And automatic snuffer, Combination.

1,628,199; May 10.

Tank vents, Attachment for. A. S. James. 1,627,095;

May 3. May 3.

Tanks and making the same, Dome for. R. M. Smith.
1,648,919; Nov. 15.

Tanks, Art and apparatus for welding transformer. F. S.

Smith. 1,613,061; Jan. 4.

Tanks, Attachment for oil. J. A. Butcher. 1,643,833;

Sept. 27.

Tanks, Automatic trip valve for storage. B. Gregory and
C. C. Mitchell. 1,645,480; Oct. 11.

Tanks, Batch feeding to glass. C. B. Kingsley. 1,623,057;

Apr. 5.

Apr. 6.

Apr. 6.

Apr. 6.

Apr. 6.

Apr. 6.

Apr. 7.

Apr. 7.

Apr. 7.

Apr. 7.

Apr. 8.

Apr. 8.

Apr. 8.

Apr. 9.

Apr. 1.

App. 1.

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A Tanks, Deck for oil. C. A. Glass. 1,650,340; Nov. 22. Tanks, Discharge device for. M. C. Blest. 1,643,054; Mar. 1. Filler cap for storage. H. N. Vickerman. 1,651,068; Nov. 29.
Tanks, Float valve for flush. E. L. Delany. 1,627,489; May 3.
Tanks, Fluid-pressure-operated means for indicating the quantity and specific gravity of the liquid contents of. Tanks, Gas-tight cable support for. S. H. Brooks. 1,630,826; May 31.
Tanks, Gas-tight cable support for. S. H. Brooks. 1,630,826; May 31.
Tanks, Hog conveyer for scalding. C. W. Caffee. 1,617,161; Feb. S.
Tanks, Hog conveyer for scalding. C. W. Caffee. 1,617,161; Feb. S.
Tanks, Hog conveyer for scalding. C. W. Caffee. 1,617,161; Feb. S.
Tanks, Klajuid-level gauge for gasoline. W. E. Mitchell. 1,636,752; July 28.
Tanks, Liquid-level gauge for gasoline. K. H. Klefer. 1,618,442; Feb. 22.
Tanks, Liquid-level gauge for gasoline. K. H. Klefer. 1,618,442; Feb. 22.
Tanks, Liquid-level gauge for gasoline. A. Fredericks. 1,614,175; Jan. 11.
Tanks, Liquid-level gauge for gasoline. A. Fredericks. 1,618,339; Mar. 1.
Tanks, Making hot-water. G. F. Schwartz. 1,624,983; App. 19.
Tanks, Liquid-measuring the for dushing. J. M. Teahen. 1,634,624; July 5.
Tanks, Schw-level alarm for gasoline. A. Fredericks. 1,614,317; Oct. 18.
Tanks, Reserve-supply device for. W. C. Hatfield. 1,636,711; Nov. 29.
Tanks, Rafety attachment for. J. Cohn. 1,626,721; May 3.
Tanks, Valve guide for flushing. C. M. Smith. 1,632,631; Tanks, affety attachment for Tanks, affety attachment for Janks, Valve guide for flushing. C. M. Smith. 1,632,631; June 14. June 14.

Tanks, vats, and stills, Closure for liquid-holding. A. H.

Noyes. 1,634,958; July 5.

Tanning. J. K. Tullis. 1,621,612; Mar. 22.

Tanning. John St. C. J. Glasel. 1,628,966; May 17.

Tann. S. W. Elstone. 1,613,224; Jan. 4; Sept. 6.

Tap. Canger. C. A. Roberts. 1,621,3036; Yan. 4.

Tap. grinder. H. E. Durkee. 1,624,933; Apr. 19.

Tape-affixing device. Gummed. R. Mason. 1,644,262; Oct. 4.

Tape. Affixing reenforcing. L. H. Hartman. 1,632,005; June 14.

Tape. arriers. Holding sheets in registers. June 14.

Tape carriers, Holding sheets in register on. H.

Barber, 1,645,175; Oct. 11.

Tape catter, C. G. Kromiller, 1,649,238; Nov. 15.

Tape-dispensing machine, Selective glummed. W.

Hanscom, 1,652,716; Dec. 13. 642,1152; Sept. 13.

Tape holder, W. Kaitschmidt, 1624,1152; Sept. 13.

Tape, Hook, D. Kilberman, 1,639,472; Aug. 16.

Tape measure, F. Switt, 1,623,133; App. 5.

Tape measures, Case for. E. J. Witchser, 1,038,2 1.638.227: Tape Method and apparatus for manufacturing glued binding. E. Ammann-Haberstich. 1,618,903; Feb. 22. Tape or ribbon working machine. W. F. Hosford. 1,625,469; Apr. 19. Tape ret. E. J. Witchger. 1,638,226; Aug. 9.

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Tape-serving device. T. H. Krueger. 1,638,815; Aug. 9.
Tape-serving device with inclined guide. T. H. Krueger.
1,638,316; Aug. 9.
Tape-serving machine, Gummed. W. A. Uttz. sr.
1,633,144; June 21.
Taper-gauging machine. P. Wallin. 1,627,360; May 3.
Taper-turning attachment. J. E. Lovely. 1,635,285;
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Taper-gauging machine. P. Wailin. 1,627,360; May 3.
Taper-gauging machine. T. J. E. Lovely. 1,635,285;
July 12.
Tapers, Instrument for gauging internal. B. M. Swanson. 1,637,757; Aug. 2.
Taping and seam-pressing machine, Combined. W. P.
Osgood. 1,646,212 Oct. Ja.
Taping machine. Veneer. H. G. Greenfield. 1,638,644;
Aug. 9.
Tappit and making same. R. Jardine. 1,649,409;
Tappet and making same. R. Jardine. 1,649,409;
Topet dearance gauge. F. A. Schmitz. 1,649,259;
Nov. 15.
Tapping machine. H. S. Bergen. 1,640,105; Aug. 23.
Tapping machine chuck. A. Burge. 1,630,254; May 31.
Tapping machine Euclideane. A. Burge. 1,630,254; May 31.
Tapping machine. H. S. Bergen. 1,640,105; Aug. 23.
Tapping machine. H. S. Bergen. 1,640,107; Aug. 23.
Tapping machine. Electric reversing device for. B. S. T.
Bishop and F. E. Dow. 1,640,177; Aug. 23.
Michie. and E. W. Muddiman. 1,626,588; Apr. 26.
Tar, Distillation of. J. S. Morgan and D. Rider. 1,635,809; July 12.
Target. E. C. Huff. 1,653,711; Dec. 20.
Target. J. F. Stauffer. 1,652,602; Dec. 6.
Target. J. F. Stauffer. 1,652,602; Dec. 6.
Target. J. F. Stauffer. 1,652,602; Dec. 13.
Target. gifter release mechanism. C. W. Dworack. 1,650,615; Nov. 29.
Target. Tifcher's practice. A. Hillstrom. 1,612,920; Target. Tifcher's practice. A. Hillstrom. 1,612,920; Target. 1,629,794; May 24.

Jan. 4.
Target-practice device. J. E. T. Jacquemin and M. P. C.
Före. 1,629,794; May 24.
Target, Tapeline. W. W. Wannamaker, jr. 1,649,764;
Nov. 15.
Target-throwing apparatus. E. F. Bahlmann. 1,638,283;
Aug. 9.

Target trap. G. W. Lorimer and J. McVicker. 1,650,633;

Nov. 29.
Tart-separating device. M. Poissant. 1,617,649; Feb. 15.
Tassel. A. Sacks. 1,618,110-11; Feb. 15.
Tassel fringe. D. M. Lending. Des. 72,521; Apr. 26.
Tattoo marking instrument, Animal. M. W. Meek.
1,630,303; May 31.
Taximeter. J. Gluck. 1,612,864; Jan. 4.
Taximeter. J. Gluck and R. R. Karich. 1,650,121;

Taximeter. Taximeter. Nov. 22.

W. G. Orth and G. H. Darst. 1,615,291; Jan. 25. Taximeter-fare-counter control. F. O. Gray. 1,615,541;

Jan. 25.
Taximeter, Recording, M. Blikstad and T. Martin.
1,616,213; Fieb. 1.
Taximeters, Driving means for. C. Anstotz and W. Saupe, 1,635,698; July 12.
Tea bag. S. Cooper. 1,625,612; May 24.
Tea-ball tags. Making. E. J. Ovington. 1,642,307; Sept. 13.

Teacup. H. Goldfield. 1,652,935; Dec. 13.
Tea-dispensing machine. J. Hardy. 1,636,910; July 26.
Teapot and like vessel for making beverages by infusion.
F. E. Barker. 1,642,222; Sept. 13.
Teapot construction. A. F. Saunders. 1,635,639; Tenpot construction. A. F. Saunders. 2,000,000. July 12. Tenpot construction. S. Forman. 1.619,065; Mar. 1. Tenpot or coffeepot. S. Forman. 1.619,065; Mar. 1. Tenpot or similar article. F. Schmidt. Des. 72,279; Mar. 22.

Feb. 8.

Tee. L. H. Broome. 1,614,843; Jan. 11.

Tee box. H. A. Fisher. 1,639,765; Aug. 23.

Teetre board, Child's. L. L. Henry and E. Hetherington. 1,640,150; Aug. 23.

Teetre terre 12,23; Terre 12,24; Aug. 30.

Teeth and improvements in dental filling materials, Composition of matter for capping pulps in. P. W. Kruger. 1,621,793; Mar. 22.

Teeth, Artificial. W. T. Smith. 1,621,643; Mar. 22.

Teeth, Artificial. W. T. Smith. 1,621,643; Mar. 22.

Teeth, Artificial. W. T. Smith. 1,621,643; Mar. 22.

Teeth-deaning device. E. L. Chott. 1,644,465; Oct. 4. Teeth, Method and apparatus for grinding. F. J. Hofschneider. 1,648,273; Nov. 8. Teeth, Root-canal filling. J. P. Carmichael. 1,649,508; teeth, Root-canal filling. J. P. Carmichael. 1,849,508; Nov. 15. Teeth. Stress-breaking attachment for. W. I. Lotze. 1,645,436; Oct. 11. Teething device. A. J. Hansen. 1,618,189; Feb. 22. Teething device for infants. J. A. Palmer. 1,623,969; Apr. 12.

Telautograph apparatus. A. N. Van Nostrand. 1,625,342; Apr. 15. Telautograph receivers, Field-magnet mechanism for. A. N. Van Nostrand. 1,640,384; Aug. 30.

Telautograph system. A. M. Van Nostrand. 1,623,220; Apr. 5.
Telautographic transmission. A. Korn. 1,615,015;
Jan. 18.

H. G. Resthelemen and M. L. D. Mc-

Tellegraph and telephone aystem, Wireless. C. Speaker. 1,623,921; Aug. 18.

Telegraph and telephone cables, Manufacture of. W. S. Smith and A. D. Shuter. 1,631,774; June 7.

Telegraph and telephone device, Noiseless intercommunities, and the speaker. 1,624,991; Apr. 19.

Telegraph and telephone aystem, Wireless. C. Speaker. 1,624,991; Apr. 19.

Telegraph apparatus, Electric. F. E. Pernot. 1,647,468; Nov. 1.

Telegraph able provided with loading coil. H. Salinger. 1,639,201; Aug. 16.

Shinger. 1,619,041; Mar. 1.

Telegraph cables, Diminishing the inductive disturbances in submarine. U. Meyer. 1,650,145; Nov. 22.

Telegraph cables, Duplex method for. H. Salinger. 1,653,971; Dec. 27.

Telegraph cables, Duplex method for. H. Salinger. 1,653,971; Dec. 27.

Telegraph cables, Duplex method for. H. Salinger. 1,653,971; Dec. 27.

Telegraph cables, Duplex method for. H. Salinger. 1,653,971; Dec. 27.

Telegraph cables, Duplex method for. H. Salinger. 1,653,971; Dec. 27.

Telegraph circuit, Carrier, R. W. Deardorff, 1,614,545; Jan. 18.
Telegraph circuits. J. Herman. 1,634,286; July 5.
Telegraph circuits. R. D. Parker, 1,634,289; July 5.
Telegraph circuits. Combined resonant shunt device for.
H. Nyquist. 1,621,557; Mor. 22.
Telegraph circuits, Measuring the margin of operation of.
R. E. Pierce. 1,616,607; Feb. 8.
Telegraph circuits, Switch for. J. D. Healea. 1,650,446;

Telegraph circuits, Switch for. J. D. Healea. 1,650,446; Nov. 22.
Telegraph distortion-measuring system. S. I. Cory. 1,627,633; May 10.
Telegraph distortion-measuring system. S. I. Cory. Telegraph distortion-measuring system. J. M. Fell. 1,635,209; July 12.
Telegraph distortion-measuring system. J. Herman. 1,618,704; Jan. 11.
Telegraph cxchange system, Printing. D. B. Perry. 1,641,230; Sept. 6.
Telegraph exchange system, Printing. G. S. Vernam. 1,619,897; Mar. 8.
Telegraph exchange system, Printing. G. S. Vernam. 1,619,877; Mar. 8.
Telegraph exchange system, Printing. G. S. Vernam. 1,645,474-5; Nov. 1,618,685; Jan. 11.
Telegraph machine. Happe. 1,648,270; Nov. 8.
Telegraph machine. Happe. 1,648,270; Nov. 8.
Telegraph machine. Printing. E. G. C. Lofgren. 1,647,456; Nov. 1.
Telegraphprinter system. J. P. Ferriter and E. E.

Oct. 11.
Telegraph-printer system. J. P. Ferriter and E. E.
Stradder I. (455.501; Oct. 18.
L. L. and H. L. Krum.
1.635.486; July 2.
Telegraph printers, Spacing mechanism for. C. E. Nelson. 1,652,320; Dec. 18.
Telegraph receiver, F. McKay. 1.650.997; Nov. 29.
Nov. 20.
Nov.

Telegraph receiver, Carrier, V. T. Inorth Lozzaber, Sept. 20.
Telegraph-receiving apparatus, Wireless. R. A. Weagant. 1,645,560; Oct. 18.
Telegraph receiving instrument. R. A. Grout. 1,627,030;

May 5.

Telegraph receiving system, Wireless-. H. J. Round.
1,622,000; Mar. 22.

Telegraph repeater. J. Herman. 1,652,242; Dec. 13.

Telegraph repeater, Alternating-current. J. P. Ferriter
and W. T. Guest. 1,631,675; June 7.

Telegraph repeater circuits, Carrier-. B. P. Hamilton.
1,632,663; July 19.

Telegraph set for duplex lines, Intermediate. J. Herman.
1,637,682; Feb. 16.

Telegraph signaling system. S. D. Wilburn. 1.631.174:

Bellescize. 1,639,686; Aug. 23.
Telegraph switching system. C. E. Lomax. 1,642,037;
Sept. 13.

Telegraph system.

A. A. Clokey. 1,624,303: Apr. 12.
Telegraph system.
C. S. Demarest. 1,653,089: Dec. 20.
Telegraph system.
C. L. Faries. 1,623,936; Apr. 19.
Telegraph system.
J. Herman. 1,618,193: Feb. 22.
Telegraph system.
Telegraph system.
J. Herman. 1,635,130: July 5.
Telegraph system.
C. F. Nelson. 1,616,326; Feb. 1.
Telegraph system.
J. Herman. 1,635,130: July 5.
Telegraph system.
Telegraph system.
J. Herman. 1,635,130: July 5.
Telegraph system.
J. Herman. 1,630,340: July 5.

Telegraph system, Carrier-frequency, J. Vopel. 1.634.000; June 28. L. J. H. Bell. 1,637,171; July 29. Telegraph system, Londed-submarine-cable. O. E. Buckley. 1,647,267; Nov. 1. Telegraph system, Printing- G. S. Vernam. 1,648,922; Nov. 15.

Telegraph system, Selective, H. L. Krum, 1,635,131; July 9. Telegraph system with magnitude discrimination, Multiplex, H. V. Hunter, 1,614,555; Jan. 18. Telegraph system with way stations, Printing. D. S. Hulish. 1,653,047; Dec. 20. reiegraph system with way stations, Frinting. D. 5. fish. 1,653,947; Dec. 20. Telegraph systems, Phase correction in synchronous. F. Parker and F. B. Bramball. 1,636,784; July 26. Telegraph, telephone, and electrical transmission Temporary stringer for. M. K. Sharp. 1,649,3 1,649,986; Telegraph transmitter, W. G. Fluharty. 1.640.541: Telegraph transmitter, C. L. and H. L. Krum. 1,635,129; Telegraph transmitter, C. L. and H. L. Krum July 5. Telegraph transmitter, J. R. Youngblood. May 10. Telegraph transmitting instrument. W. 1.632.273; June 14. Telegraphs, Printing. Apr. 5. 1.627.819; D. Cooper. 1.623,748; Apr. 5. elegraphs, Printing. H. Pfannenstiehl. Apr. 5. elegraphic receiving apparatus. F. G. Creed. 1.623,809; 1.639.213: Aug. 16. Aug. 16.
Telegraphic transmitting apparatus. F. G. Creed.
1.639.212; Aug. 16.
Telegraphy. F. McCormick. 1,627,444; May 3.
Telegraphy. Attenating-current. F. Lüschen and K.
Kupfmuller. 1,642,454; Sept. 13.
Telegraphy by plase discrimination, Multiplex. H. A.
Affel and K. W. Deardorff. 1,647,936; Feb. 15.
Telegraphy. Carrier current. L. Espenschied. 1,635,207; July 12.
Telegraphy, Carrier-wave. P. I. Wold. 1,652,549;
Dec. 13.
Telegraphy, Electric transmitter for use in automatic.
F. G. Creed. 1,632,274; June 14.
Telegraphy, Multiplex. H. A. Affel. 1,612,848; Jan. 4.
Telegraphy, Multiplex alternating-current. J. Vopel. 1,645,656; Oct. 18.
Telegraphy, Frinting. A. D. Dowd. 1,645,805; Oct. 18.
Telegraphy, Frinting. A. D. Dowd. 1,645,805; Oct. 18.
Telegraphy, Printing. E. Kelenschmidt. 1,632,297; June 14. Telegraphy, Printing. F. McCormick. 1,827
Telegraphy, Printing. F. McCormick. 1,827
Telegraphy, Printing. A. H. Reiber. 1,653.
Telegraphy, Printing. A. H. Reiber. 1,653. 1,627,445; 15; May 3. 1,653,606; Dec. 20. wireless, A. Meiss-Telegraphy, Frinting, A. H. Keiner, 1,605,000; bec. 20. Telegraphy, Recelving arrangement for wireless, A. Meissner, 1,628,676; May 17. Telegraphy with magnitude discrimination, Multiplex, R. W. Deardorff, 1,614,546; Jan. 18. Telemetric apparatus, W. P. Blanchard, 1,628,450; May 10.
Telemetric system. G. W. Sprenger. 1,620,405; Mar. 8.
Telemotor system. E. A. Sperry, jr. 1,633,463; June 21.
Telephone. F. T. Maley and E. A. Doddy. 1,617,216; Feb. 8. Telephone. B. G. Pohlmann. 1,645,773; Oct. 18 accessory. D. S. S. Steuart. 1, Telephone 1.654.193 : Telephone and cap therefor. F. Walter. 1.631.350: and wireless receiver, Combined. C. H. Allen. | Telephone and wireless receiver, Combined. C. H. Allen. 1,650,925; Nov. 29.
| Telephone apparatus. W. E. Perry. 1,640,721; Aug. 30.
| Telephone apparatus. Automatic. T. B. Willson. 1,619,554; Mar. 1. F. W. Hoban. Rel6,635; May 24.
| Telephone attachment. F. W. Hoban. 1,634,325; July 5.
| Telephone attachment. W. Marr. 1,639,525; Aug. 16.
| Telephone attachment. W. H. B. Redfield. 1,622,533; Aug. 16. Telephone attachment. W. M. Young. 1,640,227; Telephone Aug. 23.
Telephone cabinet. R. C. Bennett. Des. 73,276; Aug. 23.
Telephone cabinet. E. M. Trammell. Des. 73,718; Oct. 25.
Telephone cabinet, Bult-in. G. Evans. 1,620,637; hone ir. 15. Mill. 15.
Telephone casing. L. M. Grandin. Des. 73.910: Nov. 22.
Telephone circuit. W. T. Powell. 1,614,443; Jan. 11.
Telephone circuit, Substation. A. B. Smith. 1,636,330;
July 19. July 19. Telephone June 21. 1.633.286: circuits, Substation. A. J. Ray. Telephone construction: A. Nyman. 1,635,558; July 12. Telephone cond circuits. Testing system for J. F. Telephone (1648,079; Nov. 8. Telephone device. L. de Forest. 1,642,368; Sept. 18. Telephone device. L. de Forest. 1,642,368; Sept. 18. Telephone device. L. de Forest. 1,633,949; June 28. Telephone Device for use with. C. B. Kinkead. 1,620,287; Telephone, Dev. Apr. 26.
Telephone dial.
Telephone dia.
1,647,548; Martin Telephone dia.
July 19.
Telephone dia.
Aug. 30. ial. F. M. Geale. 1,646,996; Oct. 25. dial-setting apparatus. G. H. Revelle. diaphragm. L. T. Frederick. 1.636.410: diaphragm. C. G. Wieland. 1.640.915: Aug. 30.
Telephone equipment. M. D. Garner. 1.633.892; June 28.
Telephone exchange, Automatic. M. F. Hill. 1,638,578;

Telephone-exchange system. H. M. Bascom. 1.645.578 : Oct. 18. Telephone-exchange system. W. G. Blauvelt. 1.634.734: July 5. Telephone-exchange system. W. W. Carpenter. 1,623,777; Apr. 5.
Telephone-exchange system. W. W. Carpenter.
June 14. 1,632,056; Telephone-exchange system. W. W. Carpenter. 1,649,099: Nov. 15. Telephone July 19. exchange system. E. H. Clark. 1 636 171 • July 19, Telephone-exchange system. Jan. 4. Telephone-exchange system. Apr. 5. J. E. Dahl 1.612.965: F. W. Dunbar. Telephone-exchange system. B. G. Dunham. 1.619,250;
Telephone-exchange system. B. G. Dunham and W. T.
Haines. 1,620,012; Mar. S.
Telephone-exchange system. K. M. Fetzer and N. A.
Newell. 1,614,291; Jan. 11. Newell. 1.614.291; Jan. Telephone-exchange system. Feb. 1. Telephone-exchange system. Ö. C. From. E. S. Gibson. 1.618.423: Telephone-exchange system. J. W. Gooderham. 1,650,708; Telephone-exchange system. C. L. Goodrum. Nov. 29.
Telephone-exchange system. C. L. Goodrum. Nov. 8.
Telephone-exchange system. E. E. 1,648,122; Nov. 8.
Telephone-exchange system. E. Jacobsen. 1.647.990: -Hinrichsen. 1.623.118: Apr. 5.

Telephone-exchange system.
Roberts, 1,616,127; Feb. 1.
Telephone-exchange system.
Apr. 19
Telephone-exchange system. L. H. Johnson and T. H. W. C. Jordan, O. H. Kopp. Telephone-exchange system.
Jan. 11.
Telephone-exchange system.
1,638,540; Aug. 9.
Telephone-exchange system.
Nov. 29.
Telephone-exchange system.
Jan. 4. system. Α. Lundell D. MacKenzie. 1.650.763: H. W. O'Neill. 1.613.246: Telephone-exchange system. G. H. Peterson. 1.612.880: Telephone-exchange system. J. E. Rogers. 1.615.956: Telephone-exchange system.
May 17.
Telephone-exchange system.
Dec. 27.
Telephone-exchange system. E. R. Smith. 1 629 007 : R. L. Stokely. 1.653.789: Telephone-exchange system. R. L. Stokely. 1,603,489; Apr. 5.
Telephone-exchange system. S. B. Williams and E. S. Gibson. 1,615,971; Feb. 1.
Telephone-exchange system. S. B. Williams and E. S. Gibson. 1,615,971; Feb. 1.
Telephone-exchange system. S. B. Williams and E. S. Gibson. 1,623,769; Apr. 5.
Stokely. 1,613,624; Jan. 11.
Telephone exchanges, Selector for automatic. G. Alfani and L. Mazza. 1,626,629; Mar. 15.
Telephone exchanges, Selector for automatic. G. Alfani and L. Mazza. 1,620,629; Mar. 15.
Telephone exchanges, Sending impulses for automatic. K. Hersen and W. Hirschberg. 1,642,202; Sept. 13.
Telephone, Hand. H. Sengebusch. 1,642,851; Jan. 11.
Telephone, High-frequency trunk, Automatic. S. B. Williams, fr., and L. M. Clement. 1,619,228; Mar. 1.
Telephone high-frequency trunk, Automatic. S. B. Telephone Instrument attachment. A. Schlesinger. 1,627,419; May. 23.
Telephone instruments. Substation. J. Erickson and H. F. Telephone instruments. Cleening device for dials of. G. K. Thompson. 1,639,819; Aug. 23.
Telephone lack. S. T. Curran and E. C. Mucller, jr. 1,618,114; Feb. 1.
Telephone lines, Loading system for. H. Jordan. 1,637,044 Jul. 26.
G. Telephone lines. Loading system for. H. Jordan. 1,617,270; Feb. 16.
Telephone Loud-speaking. C. R. Hanna. 1,645,282; Oct. 11. J. F. Toomey. 1.623 139 -Oct. 11.
Telephone, Loud-speaking. J. S. Timmons. 1,650,474;
Nov. 22. Telephone, Löud-speaking, J. S. Timmons, Libuy.474; Nov. 22.
Telephone monthplece, E. Sortelle and V. C. Porter, Lic22,001; Mar. 22.
Telephone Party-line, E. R. Heath, L650,354; Nov. 22.
Telephone receiver, J. Erickson, L624,363; Apr. 12.
Telephone receiver, A. E. Hearne, 1.624,363; Apr. 12.
Telephone receiver, W. C. Jones, 1642,776; Sept. 20.
Telephone receiver, H. Koch and F. H. N. Wohlers, L622,965; Mar. 29.
Telephone receiver, W. E. and W. H. La Pearle, 1.622,965; Mar. 29.
Telephone receiver, R. Nordenswan, L631,978; June 14.
Telephone receiver, A. Nyman, 1.643,169; Sept. 20.
Telephone receiver, A. Nyman, 1.643,169; Sept. 20.
Telephone receiver, A. Pihl. Re16,547; Feb. 8.

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Telephone receiver. D. A. Reynolds, 1.633.194; June 21. Telephone receiver. D. R. Wallacc, 1.643.104; Sept. 20. Telephone receiver. A. P. Young, 1.628.383; May 10. Telephone receiver, Loud-speaking. H. Koch. 1,621,845; Mar. 22. Telephone receiver, Loud-speaking. A. A. Thomas. 1,614,327; Jun. 11. Telephone receiver, Loud-speaking. G. J. Zisch. Telephone receiver with detachable sound amplifier. E. A. Graham. 1,636,362; July 19. Telephone receiver and the like, Connector for. L. Foote. 1,643,269; Sept. 20. Telephone receivers, Diaphragm for. C. G. Wieland. Telephone receivers, Headband for. W. H. Edwards. 1,650,865; Nov. 29. Telephone receivers, Headband for. I. W. Green. 1,616,49; Feb. S. Telephone receivers, Headband for. I. W. Green. 1,616,49; Feb. S. Telephone receivers, Holder for. B. Kwartin. 1,647,833; Nov. 1.
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Telephone system, Automatic. G. E. Dustin. 1,632,025;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telephone system, Automatic. G. W. Engsberg, June 14. Telephone system, Automatic. R. W. Engsberg, 1,633,774; June 28. Telephone system, Automatic. O, A. Friend and G. E. Dustin. 1,639,799; Aug. 23. Telephone system, Automatic. H. M. Friendly, 1,627,844;
       Telephone receivers, Swivel for. H. F. Trompeter and
J. P. Brown. 1,620,703; Mar. 15.
Telephone receiving apparatus. S. G. Brown. 1,625,300;
July 12.
Telephone-record ticket pack, C. J. Gutberlet. 1,640,769;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telephone system, Automatic. H. M. Friendly. 1,627,844; May 10.
Telephone system, Automatic. H. M. Friendly. 1,628,358-9; May 10.
Telephone system, Automatic. J. E. Gardner. 1,621,503; Mar. 22.
Telephone system, Automatic. J. E. Gardner. 1,624,329; Apr. 12.
    Telephone repeater system. A. B. Clark. 1,619,058; Telephone repeater system. A. B. Clark. 1,615,259; Jan. 25. Telephone repeater system. B. G. Pohlmann. 1,650,723; Nov. 29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Apr. 12.
Telephone system, Automatic, J. E. Gardner. 1,626,034;
Apr. 26.
Telephone system, Automatic. J. E. Gardner. 1,626,807;
May 3.
    Nov. 29.

Telephone repeater system. A. F. Rose. 1,642,749;
Sept. 20.

Telephone relay. A. Deviatkoff. 1,640,267; Aug. 23.

Telephone services, Coin-collecting appartus for. F. W.

Hail. 1,627,700; May 10.

Telephone set, Substation. J. Erickson. 1,649,156;

Nov. 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             May 3.
lephone system, Automatic. J. E. Gardner. 1,646,399;
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Oct. 25.
Telephone set, Substation. J. Erickson and H. F. Oberg-
Telephone set, Substation. J. Erickson and H. F. Oberg-
Telephone set, Substation. J. Erickson and H. F. Oberg-
Telephone set, Substation. J. Erickson and H. F. Oberg-
Telephone set, Substation. J. Erickson and H. F. Oberg-
Telephone set and F. A. Ford. 1,630,119; May 24.
Telephone stand. F. A. Ford. 1,631,195; June 7.
Telephone stand. D. W. Ovaltt. 1,645,253; Oct. 11.
Telephone substation circuits. F. W. McKown and E.
Telephone switch. C. W. Wilkerson. 1,628,018; May 10.
Telephone switch. C. W. Wilkerson. 1,628,018; May 10.
Telephone switched cord terminal test connecter. J.
C. Franfield. 1,615,219; Jan. 25.
Telephone switched for the terminal test connecter. J.
W. MacDougall. 1,617,405; Feb. 15.
W. MacDougall. 1,617,405; Feb. 15.
Telephone switchen system. Automatic. H. W. MacDougall. 1,617,405; Feb. 15.
Telephone system. H. H. Abbott. 1,637,403; Aug. 2.
Telephone system. J. I. Bellamy. 1,623,230; Apr. 5.
Telephone system. J. I. Bellamy. 1,623,230; Apr. 5.
Telephone system. G. Deakin. 1,658,809; Dec. 27.
Telephone system. G. R. Eaton and M. B. Stazak.
Telephone system. G. R. Eaton and M. B. Stazak.
Telephone system. G. R. Eaton and M. B. Stazak.
Telephone system. C. B. Fowler. 1,621,904; May 17.
Telephone system. C. B. Fowler. 1,621,904; May 17.
Telephone system. C. B. Fowler. 1,622,003; Man. 17.
Telephone system. C. B. Fowler. 1,621,904; May 10.
Telepho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telephone system, Automatic. R. F. Gould. 1,640,568;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telephone system, Automatic. H. Hovland. Rel6,615; Telephone system, Automatic. H. Hovland. 1,614,958; Jan. 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telephone system, - Automatic. E. Jacobsen. 1,615,280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telephone system, Automatic. E. Jacobsen. 1,615,280; Jan. 25. Telephone system, Automatic. E. Jacobsen. 1,639,080; Aug. 16. Telephone system, Automatic. C. E. Lomax. 1,620,109; June 14. System, Automatic. C. E. Lomax. 1,620,2009; June 14. System, Automatic. V. Lubberger. 1,632,010.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telephone system, Automatic. F. Lubberger. 1,632,010;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telephone system, Automatic. F. Lubberger. 1,632,010; June 14.
Telephone system, Automatic. F. Lubberger and E. Habn. 1,632,343; June 14.
Telephone system, Automatic. T. G. Martin. 1,640,551; Aug. 30.
Telephone system, Automatic. T. G. Martin. 1,650,995; Nov. 29.
Telephone system, Automatic. T. G. Martin. 1,925,482; App. 10.
The control of the contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telephone system, Automatic. W. T. Powell. 1,614,441;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jan 11.
Telephone system, Automatic. W. T. Powell. 1,641,232;
Scpt. 6.
Telephone system, Automatic. W. T. Powell. 1,641,236;
Sept. 6.
  1,638,295; Aug. 9.

Telephone system. A. Fisher. 1,647,295; Nov. 1.

Telephone system. C. B. Fowler. 1,615,941; Feb. 1.

Telephone system. C. B. Fowler. 1,615,941; Feb. 1.

Telephone system. C. B. Fowler. 1,615,941; Feb. 1.

Telephone system. C. B. Fowler. 1,629,099; May 17.

Telephone system. H. M. Friendly. 1,614,293; Jan. 14.

Telephone system. H. M. Friendly. 1,627,843; May 10.

E. Vroom. 1,647,796; Nov. 1.

Telephone system. A. E. Hague. 1,632,066; June 14.

Telephone system. E. E. Hinrichsen. 1,643,452;

Sept. 27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telephone system, Automatic. W. T. Powell. 1,652,836;
Dec. 13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telephone system, Automatic. A. B. Preuss. 1,646,387;
Oct. 25.
Telephone system, Automatic. A. J. Ray. 1,646,421;
Oct. 25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oct. 25.
Telephone system, Automatic. A. J. Ray, F. T. Madsen, and H. F. Obergfell. 1,624,007; Apr. 12.
Telephone system. Automatic. R. G. Richardson. Telephone system, Automatic. R. G. Richardson. 1,627,929–30; May 10.
Telephone system, Automatic. R. G. Richardson. 1,629,533; May 24.
Telephone system, Automatic. M. Schwartz. 1,646,262; Oct. 18.
Oct. 1
  Telephone system. E. E. Hurrensen. 10.0., w. Sept. 27.
Telephone system. H. L. Hoffmann 1647.993; Nov. 8.
Telephone system. E. Horn. 1.615.200; Jan. 18.
Telephone system. E. Jacobsen and A. B. Sperry.
1.647.638; Nov. 1.
Telephone system. H. B. Johnson and L. L. Eagon.
1.639.133; Aug. 16.
Telephone system. R. E. King and W. M. Beaumont.
1.623.734; Apr. 5.
Telephone system. R. E. King and W. M. Beaumont.
1.623.734; Apr. 5.
Telephone system. E. W. Lincoin. 1.649.280; May 17.
Telephone system. E. W. Lincoin. 1.629.280; May 17.
Telephone system. E. W. Lincoin. 1.629.280; May 17.
Telephone system. E. E. Lonex. 1.629.280; May 17.
                                                                                                                                                                5. L. Ling and W. M. Deanmont.
5. H. Levis, fr. 1,641,228; Sept. 6.
E. W. Lincoln. 1,629,289; May 17.
C. E. Lomax. 1,615,305; Jan. 25.
C. E. Lomax. 1,641,391; Sept. 6.
A. M. Louis. 1,633,116; June 21.
C. E. Lomax. 1,641,391; Sept. 6.
A. M. Louis. 1,617,413; Feb. 15.
A. M. Louis. 1,617,413; Feb. 16.
A. M. Louis. 1,617,413; Feb. 17.
A. M. Louis. 1,617,413; Feb. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telephone system, Automatic. R. F. Stehlik. 1,653,313;
Aug. 9.
Telephone system, Automatic. D. L. Temple. 1,653,790;
Dec. 27.
Telephone system, Automatic. A. Thomas and C. Stew-
         Telephone system.
Telephone system.
Telephone system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dec. 27.
Telephone system, Automatic. A. Thomas and C. Stewart. 1,641,788; Sept. 6.
Telephone system, Automatic. J. Wicks. 1,616,402 feb. 1.
Telephone system, Automatic. J. Wicks. 1,622,405:
Telephone system, Automatic. J. Wicks. 1,632,351:
June 7.
June 7.
         Telephone system.
       Telephone system.
Telephone system.
Telephone system.
       Telephone system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telephone system, Automatic. J. Wicks. June 71.
Telephone system, Automatic. J. Wicks. July 19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.633.149:
       Telephone system.
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Telephones, loud speakers, acoustic apparatus, and the like, Scoud-box disphragm for use in. F. Jokel. Telephones, Mouthpiece attachment for. C. H. Monks. 1,633,491; June 21. Telephones, Muffler attachment for. F. J. Strobel. 1,028,073; May 10. Telephones, Recorder for dial. S. Mindlin. 1,647,142; Telephone Telephone Telephone Tet. 18. system, Automatic, J. Wicks. 1.643.797; system, Automatic. J. Wicks. 1 645 636 : Oct. 18.
Telephone system, Automatic. B. D. Willis. 1,650,409;
Nov. 22. Nov. 22.

Telephone system, Automatic and semiautomatic. R.
Mordin. 1,626,206; Apr. 26.

Telephone system, Automatic coin-service. H. Hovland.
Re16,616; May S.

Re16,616; May S.

Re16,616; May S.

Re16,616; May S.

Telephone system, Electromechanically-controlled. F.
Aldendorff. 1,625,779; Apr. 26.

Telephone system, Manual. R. C. Davis and R. D. Conway. 1,616,935; Feb. 1.

Telephone system, Manual. J. H. Levis, jr. 1,614,440;

Telephone system, Manual. W. T. Powell. 1,614,442; Telephones, Recorder for dial. S. Mindlin. 1,647,142; Nov. 1. Telephones, Recorder for dial. S. Mindlin. 1,647,142; Nov. 1. Telephonic and telegraphic repeater or relay. A. V. T. Day. 1,645,987; Oct. 18. Telephonic apparatus, Diaphragm for. G. Lakhovsky. 1,649,330; Aug. 23. 1,649,330; Aug. 24. 1,649,330; Aug. 25. 1,649,330; Aug. 25. 1,649,330; Aug. 27. Telephonic receiving apparatus. N. P. Hinton. 1,645,254; Oct. 11. Telephony, Light. L. W. Chubb. 1,642,011; Sept. 13. Telephony, Method and arrangement for high-frequency. Telephony, Two-way circuit arrangement for high-frequency. Telephony, Two-way circuit arrangement for wireless. O. Von Bronk. 1,650,250; Nov. 22. Telephotographic recording instrument. R. Hart. 1,615,979; Feb. 1. Telescope. R. W. Forter. 1,651,412; Dec. 6. Telescope all jet. F. Bedard. 1,624,384; Apr. 12. Telescope all jet. F. Bedard. 1,624,384; Apr. 12. Telescope apparatus. J. B. Henderson. 1,616,609; Feb. 8. Telescope apparatus. J. B. Henderson. 1,628,7777; May 17. Telescoping elements, Locking device for. J. Schade. 1,645,934; Oct. 18. Optical receiver for. D. Belin. Television, Apparatus for. R. A. Dallugge. 1,634,571; July 5. Television, Method and apparatus for. O. B. Blackwell Telephone system, Manual. W. T. Powell. 1,614,442; Jan. 11.
Telephone system, Manual. W. T. Powell, 1,641,234-5; Telephone system, Measured-service. R. G. Richardson and J. I. Bellamy. 1,645,662; Oct. 18.
Telephone system, Measured-service. J. Wicks. Telephone system, Measured service. J. Wicks. 1,628,093; May 10.
Telephone system, Measured-service, J. Wicks. 1,644,968; Oct. 11. Oct. 11.

Telephone system, Measured-service. J. Wicks. 1,649,430;
Nov. 15.

Telephone system, Measured-service. B. D. Willis.
1,628,381; May 10.

Telephone system, Multioffice. J. E. Gardner. 1,638,331;
Aug. 9.

Telephone system, Multioffice. M. L. Nelson. 1,614,678;
Jan. 18.

Telephone system, Multioffice. M. L. Nelson. 1,615,998;
Telephone system, Multioffice. B. D. Willis. 1,638,382;
Aug. 9. Television, Apparatus for. R. A. Dallugge. 1,634,571; Television, Method and apparatus for. O. B. Blackwell and J. Herman. 1,624,4918; Apr. 19. Television, System of. J. M. Fell. 1,649,819; Nov. 22. Telpher or overhead transporter system. C. W. Loveridge. 1,637,308; July 26. Temperature alarm, Abnormal-. L. H. Oberreich. 1,617,540; Feb. 15. Temperature and pressure regulator, Combined. F. C. Reeder. 1,635,508; Aug. 9. Television, System of the C. A. Moore. 1,643,346; Sept. 27. Temperature control. L. de Florez. 1,650,888; Nov. 29. Temperature control. L. de Florez. 1,650,888; Nov. 29. Temperature control. J. J. Schlosser. 1,633,661; June 28. Temperature control. Electric. C. B. Thwing. 1,651,236; Nov. 29. Telephone system, Multioffice B. D. Willis. 1,638,382; Relatione system, Multioffice automatic. A. J. Ray. 1,638,648; July 19. Telephone system, Multioffice automatic. A. B. Smith. 1,645,549; Oct. 18. Telephone system, Multioffice automatic. R. G. Richardson and J. L. Belhamy. 1,640,137; Aug. 23. Son and J. L. Belhamy. 1,640,137; Aug. 23. Son and J. L. Belhamy. 1,640,137; Aug. 23. Son and J. L. Belhamy. 1,640,137; Aug. 23. Telephone system, Semiautomatic. E. E. Hinrichsen. 1,623,931; Nov. 8. Telephone system, Semiautomatic. E. E. Hinrichsen. 1,623,931; Apr. 12. Telephone system, Semiautomatic or automatic graded-service. G. Heimnnn. 1,633,987; June 28. Telephone system, Wireless. A. Nyman. 1,628,905; Telephone system, Cone-metering. J. I. Bellamy. 1,650,410; Nov. 22. Telephone system, Cone-metering. F. T. Madsen. 1,650,300; Dec. 20. Telephone systems, Interoffice trunk circuits for. B. D. Willis. Rel6,637; May 24. Telephone systems, Service-observing apparatus for automatic. F. T. Madsen. 1,640,965; Aug. 23. Telephone systems, Service-observing equipment for. J. E. Ostilue. 1,641,633; Sept. 6. Telephone systems, Service-observing equipment for. J. E. Ostilue. 1,641,633; Sept. 6. Telephone systems, Service-observing equipment for. J. E. Ostilue. 1,641,633; Sept. 6. Telephone systems, Service-observing equipment for. J. R. Schwartz. 1,640,675; Aug. 30. Telephone systems, Service-observing equipment for. J. R. Schwartz. 1,640,675; Aug. 30. Telephone systems, Service-observing equipment for. J. R. Schwartz. 1,640,675; Aug. 30. Telephone systems, Trunk-selecting switch for C. J. Fracht. 1,625,425; Apr. 19. Telephone trunking arrangement for automatic. R. G. Richardson. 1,641,933; Sept. 6. R. Telephone trunking arrangement for automatic. R. G. Richardson. 1,641,933; Sept. 6. R. Telephone trunking arrangement for automatic. Relephone tru Temperature-control system. H. Milker. 1.630,755: May 31.

Temperature-control system, Magnetic. J. C. Woodson. 1,617,360; Feb. 15.

Temperature-controlled alarm. W. E. Fox. 1,642,649; Sept 13.

Temperature controlled fluid mixing device. A. A. Smith. 1,620,238; Mar. 8.

Temperature-controlling applaratus, Automatic. T. L. Jones. 1,618,828; Feb. 22.

Temperature-controlling applance. K. L. Seelbach. 1,633,498; June 21.

T. 633,498; June 21. May 3 May 3.
Temperature-controlling system. H. G. Gelssinger.
1.650,622; Nov. 29.
Temperature, Determining critical. G. F. Gerdts.
1,630,485; May 31.
Temperature-indicating device. W. M. Dann. 1,615,684; Jan. 25.
Temperature-indicating device. H. P. Sleeper. 1,626,633;
May 3.
Temperature-indicating instrument for motor vehicles. H.
H. Boyce. 1,647,171; Nov. 1.
Temperature-indicating means. K. A. Ferkel. 1,623,666;
Apr. 5. Telephone transmission, Two-way. H. S. Hamilton. 1,639,773; Aug. 23.
Telephone transmitter. H. H. C. Dunwoody. 1,638,188; Temperature indicator. G. W. Cisco. 1,617.897; Feb. 1b. Temperature indicator. R. Hill. 1,630,007; May 24. Temperature indicator. W. A. Rankin. 1,637,050; Aug. 9.
Telephone transmitter. C. E. Mitchell. 1,647,244; Nov. 1.
Telephone transmitter. C. R. Moore. 1,624,351-2;
Apr. 12. Temperature indicator. W. A. Rankin. 1,635,050; May 25.

Temperature indicator. W. A. Rankin. 1,637,050;

July 26.

Temperature indicator. H. R. Whittler. 1,617,975;

Feb. 15. Apr. 12.
Telephone transmitter, C. R. Moore, 1,628,898; May 17.
Telephone transmitter and receiver; A. F. Sykes, 1,637,397; Aug. 2.
Telephone transmitter mounting, G. R. Lum. 1,636,006; Telephone trunking scheme.

E. J. C. Rousseau.
1,645,972; Oct. 18.
Telephone, Wall. W. Kaisling. 1,627,393; May 3.
Telephone wall cabinet. H. D. Phoenix. Des. 71,926; Jan. 25.
Telephone wall cabinet. H. D. Phoenix. Des. 71,926; Jan. 25.
Telephone and Compactuated locking device for F. L. Lock.
Telephone Compactuated locking device for F. L. Lock. Feb. 15.
Temperature indicator and draft regulator, Combined.
H. W. Heyman. 1,649,827; Nov. 22.
Temperature indicator and inne-indicating attachment of the combined of the co Apr. 26.

Telephones, Coin-actuated locking device for, F. L. Lockwood. 1,614,677; Jan. 18.

Telephones, Device for use with. C. B. Kinkead. 1,633,816; June 28.

Telephones, Dial mechanism for automatic. A. Luckie and T. L. Mangum. 1,639,891; Aug. 28.

Telephones, listering tubes, and similar devices for improving the hearing, Holding or attaching means for ear. B. Langcubeck and A. Merten. 1,614,987; Jan. 18.

Dec. 13.
Temperature, Maintaining a predetermined. C. A. Stickney and A. B. Stickney. 1,637,756; Aug. 2.
Temperature, Method and apparatus for the control of.
L. de Florez. 1,650,887; Nov. 29.
Temperature of fluids, Device for measuring the.
Dykerhoff. 1,613,877; Jan. 11.
Temperature of the fluid in circulating systems. Maintaining the.
A. B. Modine. 1,645,338; Oct. 11.
Temperature of the fluid in circulating device.
A. B. L. Modine. 1,645,338; Oct. 17.
Temperature regulator. W. W. Carson, fr. 1,639,286;
Aug. 16.
Temperature regulator. G. B. Thorne. 1,621,816; Mar. 22.

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Temperature regulator, Feed-water-. B. Broido. 1,612,854;
       Jan. 4.
Temperature regulator, Oil-. R. B. Beisel. 1,617,433;
Feb. 15.
       Temperature-regulator system. H. R. Trotter. 1,645,263;
Oct. 11.
Temperature-regulator system. H. R. Trotter. 1,645,263; Oct. 11.
Temperature responsive apparatus. C. A. Martin. 1,645,362; Sept. 27.
Tor regulating. W. I. Twombly. 1,616,519; Feb. 8.
Temperatures, Measuring and controlling. R. T. Pierce. 1,617,416; Feb. 15.
Tempiate. J. F. Carroll. 1,653,450; Dec. 20.
Tempilate for laying out patterns, Master. S. Abrams and J. Martin. 1,635,300; July 12,1200.
Tempilate. J. G. J. O'Connell. 1,624,503; Apr. 12.
Tempilate. J. J. Connell. 1,624,503; Apr. 12.
Tempile. F. Cross. 1,644,636; Oct. 4.
Tempile. T. G. Connell. 1,624,503; Apr. 12.
Tempile. T. G. Connell. 1,624,503; Apr. 12.
Tempile. T. G. Construction of J. Neath. 1,628,679; May 17.
Tennis courts, Construction of. J. Neath. 1,628,679; May 17.
Tennis courts, Marking tape for. R. Moore. 1,632,799; June 21.
Tennis-net post, Adjustbile. A. Bassford. 1,641,246; Sept. 6.
Tennis-net post, Adjustable. A. Bassford. 1,641,246; Sept. 6.

Tennis nets and the like, Apparatus for supporting lawn-M. R. Lane. 1,632,553; June 14.

Tennis racket. L. G. Morten. 1,621,746; Mar. 22.

Tennis-racket. L. G. Morten. 1,621,746; Mar. 22.

Tennis-racket stringing, Controlling the tension of a.

W. A. Larned. 1,635,943; July 12.

Tennis-racket stringing, Controlling the tension of a.

W. A. Larned. 1,635,943; July 12.

Tennis-racket stringing, Controlling the tension of a.

W. A. Larned. 1,635,943; July 12.

Tennis-racket stringing, Controlling the tension of a.

W. A. Larned. 1,635,943; July 12.

Tennis-racket stringing, Controlling the tension of a.

W. A. Larned. 1,635,943; July 12.

Tennis-racket stringing, Controlling the tension of a.

Tennis for O. V. Forbes and W. M. C. Raber. 1,615,790; Jan. 25.

Tenping, Machine for setting. J. W. Bishop. 1,626,446;

Tenpins. Machine for setting. J. W. Bishop. 1,626,446;

Tenpins. Machine for trimming. C. O. Johnson. 1,644,530; Oct. 4.

Tenpins on the like, Machine for redressing. F. L.

Johnson. 1,644,530; Oct. 4.

Tension and tremolo effects, controlling. B. E. Mills.

Tension control. Method of and apparatus for. C. E.

Carpenter. 1,652,299; Dec. 13.

Tension device. M. B. Grout. 1,637,483; Aug. 2.

Tension device and the like. L. Pavia. 1,631,330; June 7.
  Tension device and the like. L. Pavia. 1,631,330; June 7. Tension differential, Measure of. O. Smith. 1,619,491; Tension-distributing means for machine-shear hand pieces. C. H. Davis. 1,617,436; Feb. 15. Tension mechanism. J. Derry. 1,630,876; May 31. Tension meter. W. D. Burton. 1,650,603; Nov. 29. Tension regulator for slashers. L. Gowan. 1,653,397;
Tension regulator for sasilers. L. L. Gowali. 1,005,031, Dec. 20. Cesting device, Rope. C. C. Sunderland. 1,619,038; Mar. 1.
Tensioning and locking device for wire-binding mechanism. E. Hoffmann. 1,636,777; July 26.
Tensioning and twisting wires, Tool for. L. F. Hintz. 1,621,588; Mar. 22.
Tensioning device, F. Harting, 1,836,833; July 19.
Tensioning device, F. Harting, 1,836,833; July 19.
Tensioning device, F. Harting, 1,836,833; July 19.
Tent. F. R. Barbour, 1,642,530; Sept. 13.
Tent. E. Byne. 1,650,111; Nov. 22.
Tent. G. H. Dickey. 1,635,736; July 19.
Tent. A. J. Goodman. 1,836,536; July 19.
Tent. A. J. Goodman. 1,836,536; July 19.
Tent. A. J. Heach. 1,635,736; July 12.
Tent. F. M. Leach. 1,635,736; July 12.
Tent. C. F. M. M. Doddridge. 1,642,648; Sept. 13.
Tent. clamp, Umbrella-. L. B., N., W., and J. M. Goldberg. 1,649,219; Nov. 15.
Tent., Foldable and rollable. E. Byars. 1,650,323; Nov. 22.
  Nov. 22.
Tent, Felding. J. K. Rush. 1,642,247; Sept. 13.
Tent, Folding. F. E. Thurtz. 1,622,507; Apr. 5.
Tent or shelter. C. E. Banbury. 1,644,664; Oct. 11.
Tent pole. D. T. Abercrombie. 1,623,153; Apr. 5.
Tent-pole shackle ring. M. L. McHugh. 1,622,600;
Mar. 29.
Tent, Quick-creeting. B. Pilskin. 1,638,802; Dec. 27.
Tent, Quick-creeting. B. Pilskin. 1,638,802; Dec. 27.
  Mar. 29.
Tent, Quick-erecting. B. Pliskin. 1,653,822; Dec. 27.
Tent structure. T. J. Long and J. L. Turtle. 1,619,740;
Mar. 1.
Tent support. B. H. Brooks. 1,622,232; Mar. 22.
Tent support. G. T. Thompson. 1,645,885; Det. 18.
Tent support, Collapsible. W. S. Rynearson. 1,627,546;
Tent, Tourist's auto. F. D. Frazee. 1,622,495; Mar. 29.
Tentering machine. C. H. Ramsey. 1,622,049; Mar. 22.
Terminal. E. A. Bohlman. 1,639,161; Aug. 16.
Terminal bank and constructing it. E. W. Gent. 1,650,766; Nov. 29.
Terminal clamp. C. F. Hellman. 1,613,104; Jan. 4.
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Terminal, Combination. J. J. Mucher.
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         Terminal Comonitation. 3. J. Aucuer. 1,621,421; May 3. Terminal connecter. A. J. Carter. 1,635,256; July 12. Terminal connecter. H. A. Douglas. 1,634,406; July 5. Terminal connecter, B. F. Oldmixon. 1,619,086; Mar. 1. Terminal; connecter, Bushings. C. F. Burgeson. 1,645,099.
       Oct. 11.
Terminal-difference gauge. C. H. Berry. 1,629,063;
May 17.
Terminal-protecting commutator case. J. E. Pertulsot.
1,647,929; Nov. 1.
Terminal protective apparatus. E. A. Seward and E. B.
Rodgers. 1,631,555; June 7.
Terminal puller. W. T. Moore.
1,615,717; Jan. 25.
Terminal, Storage-battery. E. E. Zastrow. 1,634,280;
July 5.
July 5.
       July 5.

Terminal support. E. E. Sutherland. 1,845,261; Oct. 11.

Termary gaseous mixtures, Separation of the constituents of. W. Wilkinson. 1,619,909; Mar. 8.

Terra-caoutchoue block. L. Cresson. 1,614,348; Jan. ITest bath, sample warmer and hot water reservoir. C.

W. Warnock. 1,638,116; July 19.

Test contact. J. Sachs. 1,651,554; Dec. 6.

Test device, Self-checking. T. E. Thompson. 1,644,160;

Test cause. J. W. Carthwy. 1,626,559; May. 3.
       Test gauge. J. W. Carthew. 1,626,599; May 3. Test measure. G. A. Sexton. 1,638,415; Aug. 9 Test, Obtaining sweet doctor. E. B. Miller. 1, Nov. 1.
    Table J. K. Hartline, 1,640,995; Aug. 30.
Tester, Overrun, W. J. McLaughlin, 1,642,212; Sept. 13.
Testing and deflating machine. S. Malke 1,628,168; May 10.
Testing and recording device. C. E. Cox. 1,638,657; Aug. 5.
Testing apparatus. K. L. Herrmann. 1,618,965; Feb. 22.
Testing apparatus. E. J. Lees. 1,634,328; July 5.
Testing apparatus. R. B. Marbury. 1,625,538; Dec. 13.
Testing apparatus. R. McDonald Jr. and J. W. Frilick. Testing apparatus. R. McDonald Jr. and J. W. Frilick. Testing apparatus. J. H. Moriarty. 1,631,159; Nov. 29.
Testing device. G. T. Anderson and C. V. Taplin. 1,632,507; June 14.
Testing device. G. T. Anderson and C. V. Taplin. 1,632,507; June 14.
Testing device. H. O. Hem. 1,619,122; Mar. 1.
Testing device. E. G. Thomas. 1,639,518; Aug. 22.
Testing device. E. G. Thomas. 1,639,518; Aug. 22.
Testing device. E. Wilson. 1,632,259; June 14.
Testing device. E. Wilson. 1,632,259; June 14.
Testing device. E. Wilson. 1,632,269; June 14.
Testing individe the stellar register senders. E. H. Clark. 1,624,540; Apr. 12.
Testing infantable articles, Device for. M. H. Pade. 1,622,252; Mar. 22.
Testing infantable articles, Device for. M. H. Pade. 1,622,252; Mar. 22.
Testing machine. W. J. Francke. 1,654,495; Dec. 27.
Testing machine. W. J. Francke. 1,654,495; Dec. 27.
Testing machine. W. J. Francke. 1,654,495; Dec. 27.
Testing of material, Mcthod and apparatus for the fa-
Testing system. L. H. Johnson. 1,632,896; Mar. 15.
Testing system. C. Ewing. 1,621,480; Mar. 15.
Testing system. L. H. Johnson. 1,632,902; June 21.
Testing system. L. H. Johnson. 1,632,902; June 21.
Testing system. E. E. Peoples. 1,650,721; Nov. 29.
Testing system. R. E. Peoples. 1,650,721; Nov. 29.
Testing system. R. E. Peoples. 1,650,721; Nov. 29.
Testing system. B. E. Peoples. 1,650,721; Nov. 29.
Testing system. B. E. Peoples. 1,650,721; Nov. 29.
Testing system. G. Ewing. 1,631,848; June 21.
Testing system. B. E. Peoples. 1,650,721; Nov. 29.
Testing system. G. Wils. Mchod and M. E. Canfield. 1,614,649; June 21.
Testing system. B. E.
       Aug. 9.
Testing apparatus, K. L. Herrmann,
Feb. 22.
                                                                                                                                                                                                                                                                                                                                                                                                   1,618,965;
  Testice-treating apparatus, D. B. Catlin, 1,640,479; Aug. 30.

Tetranitromethane from trinitrotoluene, Removing. R. H. Göttner. 1,632,595; June 21.

Textile and other materials, Waterproofing. C. J. Moreton, 1,625,672; Apr. 19.

Textile, Apparatus for treating. F. B. Vocgeli, 1,622,439; Apr. 26.

Textile article, Packaging, J. R. Freedman, 1,616,181; Feb. 1.

Textile colling machine. E. O. Roe and L. P. Frieder. Textile colling machine. E. O. Roe and L. P. Frieder. Textile colling device. H. H. Adler. Des. 71,998; Feb. 15.

Textile fabric. S. E. Blumenthal, Des. 74,046; Dec. 13.

Textile fabric. J. S. Boyd. Des. 71,948-53; Feb. 8.
                                                                                                                                L. Biva. Des. 72.750-3; May 31.
S. E. Blumenthal, Des. 74.046; Dec. 13.
J. S. Boyd. Des. 11.948-53; Feb. 8. 13.
J. S. Boyd. Des. 72.058-9; Feb. 25.
J. S. Boyd. Des. 72.058-9; Feb. 22.
J. H. Bunting. Des. 72.069-9; Rep. 22.
J. H. Bunting. Des. 72.760; May 31.
G. Caluori. Des. 73.063-66; July 19.
R. Cocking. Des. 72.953-87; July 5.
C. A. Cottaz. Des. 74.085-9; Dec. 20.
    Textile fabric.
Textile fabric.
Textile fabric.
Textile fabric.
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H. S. Day. Des. 73.590-600; Oct. 11.
H. S. Day. Des. 73.966-9; Nov. 29.
H. S. Day. Des. 74.141; Dec. 27.
H. S. Day. Des. 74.102; Dec. 20.
M. Dubost. Des. 72.475; Apr. 19.
J. A. Feather. Des. 73.691-2; Oct. 25.
J. A. Fox. Des. 72.671; May 17.
H. Hausman. Des. 73.376; Aug. 30.
B. Holmes. Des. 72.259-00; Mar. 22.
K. Jäger. Des. 72.657; May 3.
H. Katims and E. Weiner. Des. 74.056;
          Textile fabric.
Textile fabric.
Textile fabric.
Textile fabric.
Textile fabric.
          Textile fabric.
Textile fabric.
          Textile fabric.
Textile fabric.
Textile fabric,
          Textile fabric,
Dec. 13.
Dec. 13.

Textile fabric, E. Kirchhoff, Des. 71,916; Jan. 25.

Textile fabric, E. Kirchhoff, Des. 72,674; May 17.

Textile fabric, E. R. Nathan, Des. 73,575; Oct. 4.

Textile fabric, F. H. Fillsbury, Des. 72,442; Apr. 12.

Textile fabric, M. Rothschild, Des. 72,445—7; Apr. 12.

Textile fabric, M. Rothschild, Des. 72,779–89; May 31.

Textile fabric, W. H. Spowers, Des. 74,126; Dec. 20.

Textile fabric, M. Weeks, Des. 73,544; Sept. 27.

Lettle fabric and adding the same, H. M. Lipper, 1,615,205; Jan. 18.

Textile fabric, Embroidered, W. Schmid, Des. 72,037; Feb. 15.

Textile fabric, and spiriture and M. Schmid. Des. 72,037; Fextile fabric, and spiriture and M. Schmid.
          Textile fabric or similar article. L. Biva. Des. 72.305-6:
          Mar. 29.
Textile fabric or similar article. M. Cole. Des. 72,667;
May 17.
   May 17.

Pextile fabric or similar article. G. M. Hamilton and A. C. Webb. Des. 71,871; Jan. 18.

Textile fabric or similar article of manufacture. A. J. Heinke. Des. 72,316-17; Mar. 29.

Textile fabric or similar article of manufacture. A. J. Heinke. Des. 72,421-5; Apr. 12.

Textile fabric or similar article of manufacture. A. J. Heinke. Des. 72,421-5; Apr. 12.

Textile fabric or similar article of manufacture. W. B. Kirby. Des. 74,015; Dec. 6.

Textile fabric or similar article of manufacture. J. Lader. Des. 73,085; July 19.

Textile fabric or similar article of manufacture. J. Lader. Des. 73,015; Oct. 11.

Textile fabric or the like. H. Silberman. Des. 72,192; Mar. 8.

Textile fabric or the like. H. Silberman. Des. 72,192; Mar. 8.
      Textile fabrics, Manufacture of. H. Dreyfus. 1,614,832; Jan. 18, Textile fabrics, Printing upon. E. Ebersol. 1,639,218; Textile fabrics, Apparatus for drawing. G. C. Laurency. 1,633,029; June 21. Textile fabrics, Conditioning. R. B. Smith. 1,642,092; Sept. 13.
   Sept. 13-78.

Sept. 13-78.

Sept. 13-78.

Sept. 13-78.

Sept. 13-78.

Sept. 14-78.

Se
   Matthews, W. H. Love, and H. T. Ryder. 1,627,202; May 3.

Textile machines, Piece-up mechanism for. R. E. Naumburg. 1,626,964; May 3.

Textile machines, Trap motion for. S. Borovoy and W. Textile machines, Trap motion 9.

Textile machines, Steam tube and piping for. O. F. McEnaney. 1,637,337; Aug. 2.

Textile material and dyeing the same. C. B. White. 1,648,433; Nov. 8.

Textile material for worthle raw material. Manufacterial ender the materials. Conditioning. W. L. Conrad. 1,630,786; May 31.

Textile materials, Conditioning. W. L. Conrad. 1,630,786; May 31.

Textile materials, Drying. H. Krantz. 1,629,167; May 17.

Textile processing or finishing machine. G. J. McGann. 1,628,261; May 10.

Textile spindle, A. Meder. 1,632,798; June 21.

Textile spindle. A. Meder. 1,632,798; June 21.

Textile spindle and dumping apparatus. Combined. L. Buchler, fr., and N. M. Small. 1,628,947; May 17.

Thaving tank and dumping apparatus. Combined. L. Buchler, fr., and N. M. Small. 1,628,947; May 17.

Theater censor, Mechanical. H. C. Stockwell. 1,618,488; Feb. 22.

Theater chair, J. P. Satterlee. 1,649,546; Nov. 15.
                                  May 3.
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Theatrical illusions, Method of and apparatus for producing, H. Thurston and H. Jansen, 1.613.254:
             ducing.
 Jan. 4.
Theatricals, Mechanical miniature, C, T. Hunt.
1,628,628; May 10.
Thett alarm. C. P. Seltz. 1,648.067; Nov. 8.
Thett alarm. Automobile.
J. H. Sharp. 1,639,814;
Aug. 16.
Theeft preventing bolt. M. G. Kotler. 1,640,840; Aug. 30.
Theeft preventing device. T. E. Daugherty. 1,621,925;
Mar. 22.
Theft-preventing device. H. P. Hanson. 1,613,794;
 Theft-preventing device. J. Schlener, 1,6 Dec, 27, Therapeutic apparatus. M. W. Wentworth. 1,6 Sept. 27. Therapeutic appliance. J. W. Chesney, 1,615,828; Therapeutic appliances. R. H. Maxson. 1,6
                                                                                                                                                                                                                                                    1.654.017:
                                                                                                                                                                                                                                                  1.643.399;
   Aug. 9: Therapeutic device, G. S. White. 1,628,207; May 10. Therapeutic device, Electric. R. C. Mann. 1,634,373;
   July 5.
Therapeutic device, Ele 1.633,878; June 28.
Therapeutic instrument.
Nov. 29.
                                                                                                                    Electrical.
                                                                                                                                                                                                G. W.
                                                                                                                                                                                                                                                     Wallerich
                                                                                                                                              A. . Gaertner.
                                                                                                                                                                                                                                                    1.651.349:
Therapeutic instrument. A. Gaertner. 1,651,349; Nov. 29.
Therapeutic materials, Making. E. Silten. 1,626,562; Therapeutic treatment and dressing-room apparatus. J. J. Rekar. 1,617,028; Feb. 8.
Therapeutical and other purposes, Irradiation device for. F. Girard. 1,622,142; Mar. 22.
Therapeutical apparatus. L. Martignoni, 1,628,794; Therapy, Heat. G. W. Wallerich. 1,620,929; Mar. 15.
Thermal limit relay. G. H. Whittingham. 1,627,816; May 10.
Thermal relay. C. I. Hall. 1,631,679; June 7.
Thermal relay. H. D. Matthews. 1,642,039; Sept. 18.
Thermal responsive switch mechanism and protective systems of the proposition of the same. C. I. Hall. 1,640,447; Aug. 30.
Thermal switch. H. C. Hawkins. 1,615,582; Jan. 25.
Thermal switch. H. C. Hawkins. 1,615,582; Jan. 25.
   Thermal switch. H. C. Hawkins. 1.615,582; Jan. 25, Thermal switch. R. C. Malcon. 1.627,519; May 3. Thermal switch. B. H. Smith. 1.643,792; Sept. 27, Thermal translating device. W. A. Rhodes. 1630,312; May 31, Thermal translationers. L. H. Junken. 1,645,057; Thermal current transformer. L. H. Junken. 1,645,057;
May 31.
Thermionic-current transformer. L. H. Junken. 1,645,057; Thermionic device. H. M. Dowsett. 1,614,462; Jan. 18. Thermionic device. H. M. Ryder. 1,652,497; Dec. 13.
Thermionic device and evacuating the same. R. W. King. 1,622,987; May 17.
Thermionic indicating means responsive to light vibrations. J. J. Dowling. 1,631,021; May 31,52; Nov. 22.
Thermocometer. V. H. Todd. 1,638,894; Aug. 16.
Thermochemical treatment and apparatus therefor, Furnacing in. C. B. Jacobs. 1,625,810; Apr. 19.
Thermocouple. T. R. Harrison. 1,615,451; Jan. 25.
Thermocouple. O. Hermann. 1,637,822; Aug. 2.
Thermocouple. V. K. Zworykin. 1,643,734; Sept. 27.
Thermocouple, V. K. Zworykin. 1,643,634; Sept. 27.
Thermocouple, V. K. Zworykin. 1,644,836; Aug. 30.
   Thermoelectric cell and making the same. G. M. Little. 1.638.943: Aug. 16.
    Thermoelectric generator. N. H. Adams. 1,618,744-5; Feb. 22.
   Thermoelectric generator. T. S. Fuller and N. H. Adams. 1,618,755; Feb. 22. Thermoelectric heater. A. Torrianl. 1,651,644; Dec. 6. Thermoelectric indicator and safety device. W. A. Collins. 1,621,396; Mar. 15. Thermoelectric switch. F. S. Denison. 1,620,806; Mar. 16.
                                                                                                                                                                                                                                                 1,620,806;
    Thermoelectric units, Fabricating. N. H. Adams. 1.618,743; Feb. 22.
Thermoelectrical measuring arrangement. N. Lindblad.
 Thermoelectrical measuring arrangement. N. Lindblad. 1,643,668; Sept. 27. Thermoglue vessel. A. Tovalin. 1,623,763; Apr. 5. Thermometer. W. M. Chace. 1,637,805; Aug. 2. Thermometer. W. H. Fitts. 1,619,109; Mar. I. Thermometer. A. T. Hespe. 1,639,385; May 31. Thermometer. A. T. Hespe. 1,639,385; May 31. Thermometer. R. E. Mann. Des. 72,067; Feb. 22. Thermometer. R. E. Mann. Des. 72,067; Feb. 22. Thermometer. R. E. Mann. Des. 72,370; Apr. 5. Thermometer. R. E. Mann. Des. 72,370; Apr. 5. Thermometer. C. J. Manuel and W. H. Lentz. 1,635,680; July 12.
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Thermometer caps, Fastening means for clinical. W. E. Siewart. 1,614,807; Jun. 18.
Thermometer case. E. L. Bellows. 1,641,020; Aug. 30.
72,315; Mar. 29.
Thermometer case. I. Q. Gurnee and A. A. Smith. Des. 72,555; May 3.
Thermometer case. I. Q. Gurnee and A. A. Smith. Des. 72,555; May 3.
Thermometer, Clinical. C. E. Bredt. 1,637,760; Aug. 2.
Thermometer, High-temperature. G. W. W. Coruman and R. P. Brown. 1,615,505; Jan. 25.
Thermometer, High-temperature be support. J. B. Carroll. 1,635,174; July 12.
Thermometer, Oven. H. R. Whittier. 1,635,632; July 12.
Thermometer scale. E. V. Hill. 1,630,341; May 31.
Thermometer scale. E. V. Hill. 1,630,341; May 31.
Thermometers, Method of and device for mounting. F. W. Fall. 1,641,500; Sept. C. case for. G. B. Ireland and R. T. Soule. 1,634,028; June 28.
Thermosensitive relay. L. E. Spray. 1,631,836; June 7.
Thermostat. J. D. Carroy. 1,638,085; Aug. 9.
Thermostat. L. P. Hynes. 1,617,487; Feb. 15.
Thermostat. L. P. Hynes. 1,617,487; Feb. 15. Thermostat. E. F. Hynes and H. A. Wilmans. 1,630,942; Nov. 29.

Thermostat. E. J. Levy. 1,644,533; Oct. 4.
Thermostat. G. T. Newell, pr. 1,621,023; Mar. 15.
Thermostat. G. T. Newell, pr. 1,621,023; Mar. 15.
Thermostat. J. A. Spencer. 1,639,708; Aug. 23.
Thermostat. J. A. Spencer. 1,639,708; Aug. 23.
Thermostat. J. A. Spencer. 1,639,708; Aug. 24.
Thermostat. Gentrol. A. R. Baker. 1,638,907; Aug. 16.
May 31.
Thermostat, Electric. G. A. Robertshaw and H. T.
Hood. 1,638,410; Aug. 9.
Thermostat for motor vehicles. H. T. Woolson.
1,635,329; Dec. 20.
Thermostat material,
Bimetallic. P. H. Brace.
Thermostat switch. J. G. Myers. 1,642,742; Sept. 20.
Thermostat switch. I. B. Smith. 1,630,586; May 31.
Thermostate switch. I. B. Smith. 1,630,586; May 31.
Thermostate alarm. J. J. Comerford. 1,621,628;
Mar. 22. Nov. 29. Thermostat. | Thermostatic alarm. J. J. Comerford. 1,621,628, 78; Mar. 22.
| Thermostatic apparatus. J. W. Myers. 1,632,437; July 5, Thermostatic apparatus. J. Němec. 1,632,144; June 14. Aug. 23.
| Thermostatic apparatus. J. Němec. 1,632,144; June 14. Aug. 23.
| Thermostatic circuit controller. F. W. Wood. 1,642,284; Sept. 13, Thermostatic control. H. J. Sauvage. 1,619,636; Mar. 1,643,658; Sept. 27; Thermostatic control. W. I. Twombly. 1,623,566; Apr. 5.
Thermostatic control device. H. E. Reeve.
Dec. 27.
Thermostatic control device. E. Wilson.
May 24.
Thermostatic control mechanism. V. Wahar.
Price. 1 422 2522 1.653.659: Auy '24.
Thermostatic control mechanism. V. Weber and E. G.
Erice 1,632,355; June 14:
Thermostatic device. W. C. Lindemann and E. A. Rutenber. 1,635,602; Dec. 20.
Thermostatic gas regulator. H. J. Rockwell. 1,635,559;
July 12.
Thermostatic material. P. H. Brace. 1,650,979; Nov. 29.
Thermostatic material. H. D. Matthews. 1,650,961;
Nov. 29. Thermostatic material. V. G. Vaughan. 1,652,546; Dec. 13.
Thermostatic regulator. W. M. Bradshaw. 1,647,336; Nov. 1. Thermostatic signal. C. G. Schellenberger. 1.622.545: Thermostatic signal, C. G. Schellenberger, 1,622,545 Mar. 29.
Thermostatic switch, W. J. Hawkins. 1,639,848 Mug. 23.
Thermostatic switch, A. J. Mottlau. 1,645,829 c) cot. 25.
Thermostatic switch. F. W. Schwinn. 1,646,882 c) cot. 25.
Thermostatic switch. E. Stranssky, 1,640,257; Aug. 23.
Thermostatic switch. W. W. Williams. 1,612,258 c) 1,639,888; 1.612.958: Thermostatic switch. W. W. W. W. Britains. 1,621.606.7 Jan. 4.

The state trap. H. D. Fitzgerald. 1,621.774;
Mar. 22.

Thermostatic wafer. B. B. Preston. 1,633,958; Aug. 16.

Thermostatic wafer. J. F. Raleigh. 1,613.292; Jan. 4.

Thermostatically-controlled basin element. L. H.

Lamont. 1,635,589; June 28.

Thermostatically-controlled switch. G. W. Hart.

Thermostatically-controlled switch. G. W. Hart.

Thicknein and washing materials, Apparatus for. A. S.

Moses. 1,626,951; May 3.

Thimble. G. Pullen. 1,622,88; May 10,6225; Feb. 1.

Thimble. G. P. Caulkins. 1,620,996; Mar. 15.

Thimble. G. P. Caulkins. 1,620,996; Mar. 17.

Thimble. G. P. Caulkins. 1,620,996; Mar. 17.

Thimble. G. P. Caulkins. 1,620,996; Mar. 18.

Thimble. G. P. Caulkins. 1,620,996; Mar. 17.

Thimble. G. P. Caulkins. 1,622,996; Mar. 18.

Thimble. G. P. Caulkins. 1,622,996; Mar. 19.

Thimble. G. P. Caulkins. 1,622,181; Mar. 22.

Thrasher, Harvester. R. B. Hitchock. 1,646,453;

Oct. 25. 1,627,7882 Mary o. Thrasher, Harvester, R. B. Hitchcock. 1,040,200, Oct. 25. Thrasher, Standing-grain. H. T. Inghram. 1,625,865; Apr. 19. Thrashing concave and cylinder, Grain. P. A. Shorb. 1,643,683; Sept. 27.

72535-P-62

| Threshing machine. F. L. Elder. 1,621,194; Mar. 15. Threshing machine. Apr. 26. Threshing machine. Threshing machine. N. J. Noble. 1,629,294; May 17. Threshing machine. D. F. Unruh. 1,621,445; Mar. 15. Threshing machine. A. E. H. Wallenberg. 1,524,126; Threshing machine. D. F. Uhruh. 1,621,445; Mar. 15. Threshing machine. J. B. H. Wallenberg. 1,624,126; Threshing machines, Feeding device for. J. Mainland and S. C. Nyberg. 1,614,964; Jan. 18. Thrashing machines, Speed-regulating device for the feeding attachments for. S. Liaho. 1,617,129; Feb. S. Thread and cord cutter. M. Rosenblum. 1,620,572; Mar. 8. Mar. S. Mar. S. Daugert, H. Frey, and J. J. Dunleavy. 16,625,332; Apr. 19. Arread and cord cutter. M. Rosenblum. 1,620,572;
Mar. 8.

Mar. 8.

Mar. 8.

Mar. 9.

Mar. 9. Feb. 15.
Thread, Making. F. Rosenthal. 1,620,233; Mar. 8.
Thread or cord, Covered elastic. J. B. Smith. 1,627,255;
May 3.
Thread parter and clamp, Shuttle-feeler. H. A. Davis. Thread or cord, Covered elastic. J. B. Smith. 1,627,255; May 3.
Thread parter and clamp, Shuttle-feeler. H. A. Davis. 1,647,103; Oct. 25.
J. Shrum and H. A. Henigen. 1,640,970; Aug. 30.
Thread protectors. W. H. Westerman. 1,640,970; Aug. 30.
Thread protectors, Apparatus for forming. P. J. Schrum. 1,651,231; Nov. 29.
Thread protectors, Apparatus for forming. P. J. Schrum. 1,651,231; Nov. 29.
Thread tier. H. Boedker. 1,621,868; Mar. 22.
Thread tightener. A. Hennig. 1,624,893; Apr. 12.
Thread-using machine. C. M. Ferkins. 1,658,210; Aug. 9.
Thread-using machine. C. M. Ferkins. 1,658,210; Aug. 9.
Thread-using machine. The Method of and Apparatus for grinding. B. M. W. Hanson. 1,640,992; Aug. 30.
Threaded pins, Apparatus for producing. F. W. Hessmer. 1,630,793; May 31.
Threading machine. L. Sosdian. 1,616,294; Feb. 1.
Threading machine, Conduit. D. Kelleher. 1,645,285; Oct. 11.
The machine of the Method of and the Method of and paratus for producing. F. W. Hessmer. 1,630,793; May 31.
Threading machines and the like Steadying block for. L. S. Hall. 1,638,031; Aug. 9.
Threading mechanism. A. L. De Leeuw. 1,626,187; Apr. 26.
Threading tap, Collapsible. C. P. Wetmore. 1,643,264; Sept. 20.
Threads and filaments, Marufacture of artificial. H. Threading tap, Colaspanie. C. F. Welmore. 1,633,204; Sept. 20.

Threads and filaments, Manufacture of artificial. H. Dreys. 1,620,636; Mar. 15, Live and the production of the production of the Colement and C. Rivière. 1,634,980; July 5.

Threads, filaments, strips, or films from cellulose esters, Manufacture and production of the Clement and C. Rivière. 1,634,980; July 5.

Threads, From viscose, Producting. C. A. Huttinger. 1,645,538; Oct. 25.

Threads, Falmifacta and treatment of. F. Rosenthal.

Threads, Falmifacta and treatment of. F. Rosenthal.

Threads, Fibons, films, and the like of viscose, Precipitating artificial. A. Kämpf. 1,614,036; Jan. 11.

Threads, Spinning. H. P. Bassett and T. F. Banlgan. 1,642,299; Sept. 13.

Threshold and constructing same. F. J. Plym. 1,646,937; Oct. 25.

Throttle control, Automatic. W. J. Spiro. 1,646,937; Oct. 25.

Throttle control, Foot. W. H. Thomas. 1,619,319; Mar. 1.

Throttle-control mechanism. J. S. Payne. 1,625,563; Throttle-control mechanism, J. S. Payne. 1,625,563; Throttle-laive-control air beater for charge-forming devices. A. G. Redmond. 1,650,166; Nov. 22. Throttling device. J. B. MacNeill. 1,645,288; Oct. 11. Thumb-bole-cutting machine. J. A. Stock. 1,620,299; Mar. 8. Mat. 8.
Thumb-sucking preventive for bables. H. B. Rood.
1,638,037; June 21.
1,638,037; June 21.
Head. 1,634.188; June 28.
1,631,954; June 19.
1,631,954; June 19.
Ticket and securing means therefor, Price. M. B.
Behrman. 1,616,946; Feb. 8.
Ticket case. W. J. Schramm. 1,620,295; Mar. 8.

Ticket-delivering apparatus, G. E. Weber, 1,650,556; Ticket, Pin. M. B. Behrman. 1,635,568; Nov. 22.
Ticket, Folding pin. M. Rabinowitz. 1,650,538; Nov. 22.
Ticket, Folding pin. M. Rabinowitz. 1,650,538; Nov. 22.
Ticket, Folding pin. M. Rabinowitz. 1,617,053; Feb. 8.
Ticket holder. J. W. Henderson. 1,617,053; Feb. 8.
Ticket-holding device. H. Croom. 1,629,682; May 24.
Ticket, Marking. J. G. Moran. 1,640,006; Aug. 23.
Ticket, Marking. G. A. Wallin, 1,635,568; July 12.
Ticket, Pin. M. B. Behrman. 1,648,473; Nov. 8.
Ticket, Pin. M. B. Behrman. 1,648,473; Nov. 8.
Ticket, Pin. W. M. Kogers. 1,615,100; Jan. 18.
Ticket, Railway. W. M. Kogers. 1,615,100; Jan. 18.
Ticket, M. Railway. W. M. Kogers. 1,615,100; Jan. 18.
Ticket, M. Railway. W. M. Kogers. 1,615,100; Jan. 18.
Ticket, M. Railway. W. M. Kogers. 1,615,100; Jan. 18.
Ticket, M. Railway. W. M. Kogers. 1,615,100; Jan. 18. Ticket-dispensing apparatus. J. M. Fernandez. 1,641,884; Tides, Hydraulic works utilizing the power of. A. Huguenin, 1,648,848; Nov. 8.

The: See—

Bow tie.

Concrete tie.

Concrete tie.

Control tie.

Rail tie.
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Rail tie. Tie plate and rail brace. R. L. Sanders. 1,645,258; Oct. 11.

Tie plate and rail fastening. D. B. Stults. 1,613,142; Tan. 4 as appliance. S. Goodfellow. 1,651,884; Dcc. 6. Tie rod and bridging for joists. P. A. Gstalder. 1,649,226; Nov. 15.

Tie-rod construction. M. P. Grabam. 1,646,288; Oct. 18. Tie rod or the like. F. C. Crawford and M. P. Graham. 1,619,291; Mar. 1.

Tie spacer. F. M. Newman. 1,617,539; Feb. 15. Tie spacer. F. H. Schwerin. 1,637,459; Aug. 2. Tie straightener. E. R. Van Houten. 1,637,399; Aug. 2. Tille and concrete floor construction. Combined. G. H. Bugenhagen. 1,628,768; May 17.

Tile and making same, Terrazzo. G. N. Jeppson and C. L. Leafe. 1,619,734; Mar. 1.

Tile and making the same, Roof. F. A. Beale. 1,627,266; May 3. And 3 and 1 The Drying. C. B. Cushwa. 1,629,151; May 17.
The fattling machine. A. W. Christiani. 1,618,061; The fattling machine. M. J. Southwick. 1,648,966; Nov. 15.
The Flooring. G. C. Hannam and J. W. Schede. 1,643,301-2; July 26.
The fork. E. C. Went. 1,643,867; Sept. 27.
The partition of the fattlines of the fork. 1,643,661; 1,646,861; Oct. 18.
The machines, Mold plate for roofing. V. W. Schwarz. 1,619,490; Mar. 1.
The machines, Mold plate for roofing. V. W. Schwarz. 1,619,490; Mar. 1.
The machines, Mold plate for roofing. V. W. Schwarz. 1,619,490; Mar. 1.
The machines, Mold plate for roofing. V. W. Schwarz. 1,619,490; Mar. 1.
The machines, Mold plate for roofing. V. W. Schwarz. 1,619,490; Mar. 1.
The machines, Mold plate for roofing. V. W. Schwarz. 1,619,490; Mar. 1,719,490; Ma Tile press, Friction-drive, F. B. Yingling, 1,646,846; Oct. 25.
Tile-receiving machine, J. J. Semashko, 1,639,576; Aug. 16.
Tile structure, N. H. Cederquist, 1,649,890; Nov. 22.
Tile wall or floor, C. A. Lowry and F. H. Abel, 1,637,580; Aug. 2.
Tiles and anlogous objects, Machine for cleaning, H. D.
Tiles, Facing, F. P. Schemmel, 1,641,553; Sept. 6.
Tiles, Facing, F. P. Schemmel, 1,641,553; Sept. 6.
Tiles, Forlor for constructing drain and sewer, E. J.
Foster, 1,642,581; Sept. 13.
Tiles, Tool for marking, W. Rieser, 1,619,091; Mar. 1.
Tilli, C. A. Findall, 1,647,942; Nov. 1.

Tillage implement. W. J. and R. E. Dunham. 1,653,349; Tilling was piement. W. J. and R. E. Dunnam. 1,633,393; tillings unplement. C. T. Ray 1,642,519: Sopt. 27. Tilt finder, Resultant. L. J. R. Holet. 1,649,406; Nov. 15. Tilting carrier. B. D. Hays. 1,639,563; Aug. 19. Tilting washer. H. F. Kelfer. 1,629,274; May 17. Tilmber, Apparatus for drying and seasoning. A. M. Kobiolke. 1,625,548; Apr. 19. Tilmber-perforating mechanism. G. A. Colman. 1,646,188; Oct. 18. Timber preservation. H. C. Gardiner. 1,639,601; Aug. 16. The control of the Time-announcing system. G. K. Thompson. 1 618 949 • Fig. 22. Time-controlled device. E. Traub. 1,648,748; Nov. 8. Time-controlled device. E. Traub. 1,648,748; Nov. 8. Time-controlled regulating apparatus. H. Y. Norwood. 1,646,976; Oct. 25. Time-controlled switches, Base for. F. B. Somerstein. 1,629,591; May 24. Time-controlled switches, Base for. F. B. Somerstein. 1,629,591; May 24. Time-clement control and apparatus therefor. G. E. Stack. 1,638,372; Jau. 9. Time-element relay, Centrifugal frequency. R. V. Appleton. 1,650,176; Nov. 22. Time-imicating device. G. H. Brown. 1,628,948; May 17. Time-lock indicator. T. C. Adams, H. A. Noyes, and E. G. Lawrence. 1,633,657; June 28. Time-lock mechanism. W. T. Benham and J. E. Dwyer. 1,632,642; June 14. Timepiece. Ap. J. Gritton. 1,650,123; Nov. 22. Timepiece and support, Combined. W. Huber. Des. Timepiece with hand-driving extension. G. W. Toney. 1,626,170; Apr. 26. Timepiece with hand-driving extension. G. W. Toney. 1,626,170; Apr. 26. Timepiece with hand-driving extension. G. W. Toney. 1,626,170; Apr. 26. Timepieces, Regulator for. K. S. McEntire. 1,615,951; Time-recording indicator. H. Monnig. 1,618,774; Feb. 22. Time piecy and controlled of the piece Fen. 22. Time-controlled device, E. Traub. 1,648,748; Nov. 8. Time-controlled mechanism. A. E. Long. 1,650,994; Time-recording indicator. H. Monnig. 1,618,774; Feb. 22.
Time relays, Quick-acting mechanism for. W. H. Petersén. 1,641,643; Sept. 6.
Time switch. J. M. Andersen. 1,626,262; Apr. 26.
Time switch. N. Feinen. 1,638,265; Aug. 16.
Time switch. A. and B. Pike. 1,613,291; Jan. 4.
Time switch, Automatic electric. D. Zorgo. 1,619,777; Time switch, Automatic electric. D. Zorgo. Mar. 1. Time-switch mechanism. H. D. Thomas. 1.625.339: Apr. 19.
Timer. L. A. Alexander. 1,614,449; Jan. 18.
Timer. S. W. Hartley, 1,615,012; Jan. 18.
Timer. B. U. Hills. 1,625,806; Apr. 26.
Timer, P. H. Mathes. 1,625,268; Apr. 19.
Timer, A. E. Richards. 1,624,979; Apr. 19.
Timer. E. Sinner. 1,631,291; June 7.
Timer. E. Sundstrom. 1,650,729; Nov. 29.
Timer, Cam-operated. G. D. Lawson. 1,641,930; Sept. 6.
Timer, Injuition. W. H. Brown. 1,640,231; Aug. 23.
Timer, Rotary. J. H. Hobson. 1,641,972; Sept. 18.
Timer, Rotary. J. H. Hobson. 1,641,972; Sept. 18.
Timer, Spark. A. R. Mosler. 1,632,413; June 14.
Timer wires, Cover for. W. J. Peterson. 1,634,117; June 28. Apr. 19. Time: Stark. A. R. Mossif. 1,602-415; June 28; June 28; Cover for. W. J. Peterson. 1,634,117; June 28; Cover for. W. J. Peterson. 1,634,117; June 28; Lossope 29; July 5. Timing device. J. Mulder. 1,640,716; Aug. 30. Timing device and manufacturing same. B. U. Hills. 1,617,905; Feb. 15. Timing switch. J. H. Nelson. 1,626,475; Apr. 26. Tim for anchovies, sait meat, and preserved fish. J. A. Villar. 1,617,692; Feb. 15. Tin, Metallurgy of. E. A. C. Smith. 1,620,580; Mar. 8. Tin minerals. Concentration of. W. O. Snelling. 1,038,275; Aug. 9. The start of the start

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Tire. T. S. Caldwell. Des. 72,472-3; Apr. 19.

Tire. T. S. Caldwell. Des. 72,819; June 14.

Tire. P. O. Chambers. Des. 71,906; Jan. 25.

Tire. P. Deltenbeck. 1,648,218; Nov. 8.

Tire. F. D. Fowler. Des. 73,168; Aug. 2.

Tire. W. S. Galvin. Des. 72,558; May 3.

Tire. W. S. Galvin. Des. 72,558; May 3.

Tire. W. S. Galvin. Des. 72,554-1; Aug. 16.

Tire. W. S. Garrigues. Des. 73,254-5; Aug. 16.

Tire. W. S. Greer. Des. 73,289; Aug. 23.

Tire. W. C. Hoover. Des. 73,289; Aug. 23.

Tire. W. C. Hoover. Des. 73,289; Aug. 23.

Tire. W. C. Hoover. Des. 73,289; Aug. 23.

Tire. W. C. Martin. Des. 72,454-5; Apr. 19.

Tire. W. C. Martin. J. Des. 72,454-5; Apr. 19.

Tire. W. Martin. J. Bes. 72,454-5; Apr. 19.

Tire. A. S. Michelson. Des. 71,217; Mar. 8.

Tire. A. S. Michelson. Des. 72,179; Mar. 8.

Tire. J. R. Nevius. Des. 72,274; May 24.

Tire. J. R. Nevius. Des. 72,274; May 24.

Tire. J. L. Forter. Des. 73,263; May 10.

Tire. H. D. Reichard. Des. 25,263; May 10.

Tire. E. M. Sears. 72,240-1; Mar. 15.

Tire. L. C. Snyder. J. 625,750; Apr. 19.

Tire. L. T. Wester. Des. 72,759; May 24.

Tire. L. C. Snyder. J. 625,750; Apr. 19.

Tire. A. Molle. J. G. Mar. 15.

Tire and fender protector, Spare. B. H. Gerker J. 614,725; Jan. 18.

Tire and fender protector, Spare. B. H. Gerker J. 635,759; Apr. 21.

Tire and towline, Combined emergency. S. G. Jensen. 1,652,421; Dec. 13.

Tire and towline, Combined emergency. S. G. Jensen. 1,652,422; Dec. 13.

Tire and towline, Combined emergency. S. G. Jensen. 1,6
          Ure. 25. Tree atmostle. J. C. Mire. 1,622,161; Mar. 22. Tree, Automobile. P. P. Kostock. 1,628,790; May 17. Tree, Automobile. L. Lambert. 1,625,121; Nov. 29. Tree, Automobile. G. D. Pearson. 1,625,679; Apr. 19. Tree-beaf reenforcing element. A. C. Hopkins. 1,612,922;
                                  Jan. 4.
      Jan. 4.

Tire beads, Apparatus for covering, H. A. Denmire, 1,621,239; Mar. 15.

Tire beads, Machine for covering, W. C. Stevens. The beads, Machine for covering, W. C. Stevens. Tire beads, Manufacture of. S. W. Alderfer, 1,633,620; June 28.

Tire boot, G. A. Burrow, 1,653,388; Dec. 20.

Tire boot and fastener therefor, C. L. Johnson, 1,633,823; Apr. 5.
      Tire-building apparatus. J. R. Gammeter. 1,640,072; Aug. 23.
Tire-building apparatus. M. C. Scrote. 1,619,377; Mar. 1.
Tire-building core. B. De Mattla. 1,631,855; June 7.
Tire-building cores, Method and apparatus for applying fabric to. H. A. Denmire. 1,648,842; Nov. 8.
Tire-building drum, Collapsible. F. L. Johnson. 1,648,132; Nov. 8.
Tire-building form, Collapsible. F. L. Johnson. 1,618,153; Feb. 15.
      Tire-building form Collapsible F. L. Johnson. 1,636,055-6; July 19. Tire-building machine. H. A. Denmire. 1,647,104; Oct. 25. Tire-building machine. J. W. Kuhn. 1,637,195; July 26. Tire-building machine. J. E. Perrault. 1,645,397; Oct. 11
Tire-building machine. J. E. Perrault. 1,645,397; Oct. 11.

Tire-building machine. G. F. Wikle. 1,647,163; Nov. 1.

Tire-building machine. S. Trip-applying attachment for. C. W. Steele. 1632,151; June 14.

1618,019; Mar. 1.

Tire carrier. A. M. Bacon. 1,623,377; Apr. 5.

Tire carrier. W. E. Best. 1,652,296; Dec. 13.

Tire carrier. W. F. Clark. 1,629,478; May 24.

Tire carrier. J. S. Culb. 1,652,360; Dec. 13.

Tire carrier. J. S. Culb. 1,652,360; Dec. 13.

Tire carrier. G. P. Henry. 1,626,364; May 3.

Tire carrier. G. P. Henry. 1,626,384; May 3.

Tire carrier. J. N. Essle. 1,617,768; Feb. 15.

Tire carrier. J. N. Lesle. 1,617,768; Feb. 15.

Tire carrier and protector. C. Dall. 1,629,747; May 24.

Tire carrier and protector. C. Dall. 1,629,747; May 24.

Tire carrier and protector. C. Dall. 1,629,747; May 24.

Tire carrier and protector. C. Dall. 1,629,747; May 24.

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Tire carrier and protector. C. Dall. 1,629,747; May 24.

Tire carrier and protector. C. Dall. 1,629,747; May 24.

Tire carrier. Spare. B. J. Lattin. 1,624,728; May 17.

Tire carrier, Spare. B. J. Lattin. 1,624,728; May 17.

Tire carrier, Spare. B. J. Lattin. 1,624,728; May 17.

Tire carrier, Spare. B. J. Lattin. 1,624,728; May 17.

Tire carrier, Spare. E. Farker. 1,642,400; Sept. 13.

Jan. 18.

Tire casing. B. Omoto. 1,616,643; Feb. 8.
                                  Oct. 11.
      The Carrier, Jan. 18. B. Omoto. 1,616,543; Feb. 8.
Tire casing and similar article. F. Leopold, fr. Des.
72,102; Mar. 1.
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Tire casing and tube protector. R. D. Sarver. 1,642,897; Sept. 20.

Tire casing or similar article. F. Leopold, Jr. Des. 72,431; Apr. 12.

Tire casing repair patches, Making. F. J. Benson. Tire casings, Apparatus for building. F. H. Stewart. 1,627,212; May 3.

Tire casings, Apparatus for manufacturing. A. O. Arbobett, Jr. 1,618,794; Feb. 22.

Tire casings, Apparatus for repairing. E. A. Hubdister. F. L. 1,618,794; Feb. 22.

Tire casings, Transporter for repairing. E. A. Hubdister. 1,618,794; Feb. 22.

Tire casings for motor vehicles, Manufacturing. E. Hopkinson and W. J. Steinle. 1,625,122; Apr. 19.

Tire casings, inner tubes, and wheel rims, Interlock for pneumatic. W. J. P. Moore. 1,645,921; Oct. 18.

Tire casings, Making. T. C. Marshall. 1,629,517; May 24.

Tire casings, Making. T. Midgley. 1,624,615; Apr. 12.

Tire casings, Making. T. Midgley. 1,624,615; Apr. 12.

Tire chain. E. W. Bunger. 1,620,517; Mar. 8.

Tire chain. E. W. Bunger. 1,620,517; Mar. 8.

Tire chain. E. W. Bunger. 1,620,517; Mar. 8.

Tire chain. F. T. Gause. 1,627,555; May 10.

Tire chain. F. T. Sause. 1,618,020; Feb. 15.

June 21.

The A. Byan and F. L. Marksman. 1,633,277; June 21.

Tire chain. F. A. Smith. 1,631,296; June 7. Tire casing and tube protector. R. D. Sarver. 1,642,897; Sept. 20. Steinle. 1
Tire chain.
June 21.
Tire chain.
Tire chain.
Tire chain. F. A. Smith. 1,631,296; June 7. I. F. Stanley. 1,617,034; Feb. 8. applier. E. E. Cronenweth. Tire-chain applier. E. E. Cronenweth. 1,630,111;
Tire-chain applier. E. E. Cronenweth. 1,630,111;
May 24.
Tire-chain applier. E. E. Cronenweth. 1,642,921;
Sept. 20.
Tire-chain catch. W. H. Jones. 1,620,894; Mar. 15.
Tire-chain catch. W. H. Jones. 1,620,894; Mar. 15.
Tire-chain fastener. C. Strand. 1,642,701; Sept. 20.
Tire-chain fastener. C. Strand. 1,642,701; Sept. 20.
Tire-chain link. M. J. Frambach. 1,617,627; Feb. 15.
Tire-chain link. M. J. Frambach. 1,617,627; Feb. 15.
Tire-chain, Coupling for. W. T. Nardin. 1,635,075:
July 12. Tire-chain link. M. J. Frambach. 1,617,627; Feb. 16. Tire-chain-locking tightener. H. Collins. 1,651,512; The collins. Coupling for. W. T. Nardin. 1,635,575; July 12. Tire chains, Device for applying. J. F. Herring. 1,630,006; May 24. Tire chains, Instrument for applying. H. B. Holt. Tire chains, Instrument for applying. H. B. Holt. Tire chains, Tightener and holder for. G. J. Bowman. 1,626,179; Apr. 26. Tire changer. G. E. Weaver. 1,650,674; Nov. 29. Tire changer. G. E. Weaver. 1,652,088; Dec. 6, Tire construction. E. A. Brown. 1,652,088; Dec. 6, Tire construction. J. E. Hale. 1,618,823; Feb. 22. Tire construction. T. Midgler. 1,627,799; May 10. Tire construction. T. Midgler. 1,637,79; July 26. Tire construction. T. Midgler. 1,637,79; July 26. Tire construction. T. Midgler. 1,637,79; May 10. Tire construction. Fulley-band. T. Midgley. 1,633,342; June 21. Tire construction. Fulley-band. T. Midgley. 1,633,342; June 21. Tire covers and casings, Machines for making pneumatic. C. Macbeth. 1,613,519; Jan. 4. Tire, Cushion. W. A. Brubaker. 1,614,150; Sept. 6. Tire cover w. P. Hammond. 1,651,760; Dec. 6. Tire cushion. W. A. Brubaker. 1,614,150; Sept. 6. Tire, Cushion. W. A. Brubaker. 1,614,150; Sept. 6. Tire, Cushion. W. A. Brubaker. 1,614,150; Sept. 6. Tire, Cushion. M. C. Overman. 1,618,128–9; Feb. 15. Tire, Cushion. M. C. Overman. 1,618,128–9; Feb. 15. Tire, Cushion. M. W. Smill. 1,638,370; Aug. 9. Tire, Cushion. L. N. Southmand. 1,638,769; July 26. Tire, Cushion. L. N. Southmand. 1,638,769; July 26. Tire-Cushion. C. A. Snider. 1,617,170; Feb. 15. Tire, Cushion. C. A. Snider. 1,617,170; Feb. 15. Tire, Cushion. C. M. Snider. 1,617,170; Feb. 15. Tire, Cushion. M. W. J. Smill. 1,638,370; Aug. 9. Tire, Cushion. C. A. Snider. 1,617,170; Feb. 15. Tire, Cushion. C. M. Snider. 1,617,170; Feb. 15. Tire, Cushion. M. W. J. Smill. 1,638,370; Aug. 9. Tire, Cushion. A. W. Snider. 1,617,1 Aug. 16.
Tire-display holder. R. W. Clark. 1.628.306; May 10.
Tire-display holder. M. Metzger. 1,640,792; Aug. 30.
Tire, Double-fread pneumatic. J. E. Bove. 1,648,195; Sept. 20. Tree Flastic. C. Riesebeck. 1,633,999; June 28.
Tree Elastic. C. Riesebeck. 1,633,999; June 28.
Tree Elastic. A. J. Harpstrite. 1,646,480; Oct. 25.
Trie filler. G. F. A. Ochs. 1,634,626; July 5.
Trie filler. Nonpneumatic. J. P. Prall. 1,644,609; Oct. 4.
Trie-filler. Mongneumatic. J. E. McCreedy. 1,635,134;
July 5.
Trie fap. E. R. Dexter. 1,646,191; Oct. 18.
Trie fap. E. G. Hulse. 1,619,863; Mar. 8.
Trie fap. J. Jacobs. 1,620,318; Mar. 15.
Trie flap. F. V. Medynski. 1,621,021; Mar. 15.
Trie flap. G. J. Rossworm and S. H. Smith. 1,638,460;
Aug. 9.
Tries flap. or protector. R. H. Schwartz. 1,648,862; Aug. 9.
re flap or protector. R. H. Schwartz. Tire flap Nov. 22. Wire for n Nov. 22. Thre for motor vehicles. E. Hopkinson and J. P. Coe. 1.652,670; Dec. 13. Tire for motor vehicles and the like and manufacturing same. E. Hibbert. 1,643,848; Sept. 27.

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Tire for rockers. A. B. Fisher. 1,618,646; Feb. 22.
Tire for vehicle wheels. M. N. A. Develay. 1,619,812;
Mar. 8.
Tire gauge, Automatic. L. O. Van Riper. 1,622,688;
Mar. 29.
Tire holder. F. A. Lind. 1,620,478; Mar. 8.
Tire, Inflatable. F. Barcena. 1,649,092; Nov. 15.
Tire-inflating apparatus. W. C. Stepp. 1,628,813;
May 17.
Tire-inflating coupling and gauge. H. P. Kraft.
1,614,307; Jan. 11.
Tire-inflating device. P. I. Semak. 1,647,818; Nov. 1.
Tire-inflating gauge. A. B. Edwards. Des. 71,829;
Jan. 11.
            Tire for rockers. A. B. Fisher. 1,618,646; Feb. 22.
Tire for vehicle wheels. M. N. A. Develay. 1,619,812;
     The machines Card. T.W. Georgia 1,020,293, Mar. S. Tire machines. Knife bracket for. D. L. Williams. 1620,092 Mar. S. 1.637,794; Aug. 2. Thre-making machine. H. A. Denmire. 1,617,705; Feb. 15. Tire-making machines, Attachment for. H. A. Denmire. 1,648,447; Nov. S. Tire meters, Pressure-operated switch for. C. W. Aug. Tire moid. W. P. Henson. 1,643,712; Sept. 27. Tire moid. W. P. Henson. 1,649,169; Nov. 15. Tire moid. L. A. Laursen. 1,652,202; Dec. 6. Tire moid. T. Midgley. 1,615,472; Jan. 25. Tire moid. T. Midgley. 1,615,474; Jan. 25. Tire moid. T. Midgley. 1,615,474; Jan. 26. Tire moid. T. Midgley. 1,615,474; Jan. 26. Tire moid. T. Midgley. 1,615,474; Jan. 26. Tire moid and making the same. T. Midgley. 1,615,473; Jan. 29. Tire moid and making the same. T. Midgley. 1,615,473; Jan. 29.
          Jan. 25.
Tire molds, Flexible gasket for. H. O. Hutchens and C. A.
Kessler. 1,625,894; Apr. 26.
Tire molds, Making. T. Midgley. 1,615,471; Jan. 25.
Tire molding apparatus. J. G. Moomy. 1,649,843;
       Nov. 22. The mounting and demounting machine. J. McKenzie. 1.015.409; Jan. 25. The mounting and dismounting device. H. G. Giles. The mounting and dismounting device. H. G. Giles. 1.637.815; Aug. 2. The or similar article. R. W. Hutchens. Des. 72,263; Mar. 22.
Tire or similar article R. W. Hutchens. Des. 72,263; Mar. 22. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch. E. A. Mueller and C. C. Mueller, jr. Tire patch with application indicator. P. E. Hawkinson. 1.629,333; May 17.

Tire patch with application indicator. P. E. Hawkinson. L. P. Cherk. 1650,1023; Dec. 6. Tire-patching machine. J. P. Curls. 1650,1023; May 10. Tire-preparation. Jr. Curls. 1650,1023; May 10. Tire, Pneumatic. Jr. Clark. 1626,6512; Apr. 25.

Tire, Pneumatic. Jr. Cullen. 1,614,286; Jan. 11.

Tire, Pneumatic. F. L. Maila. 1.640,844; Aug. 30. Tire, Pneumatic. F. L. Maila. 1.640,844; Aug. 30. Tire, Pneumatic. F. L. Maila. 1.640,844; Aug. 30. Tire, Pneumatic. S. A. Steere. 1,632,201; June 14. Tire, Pneumatic. S. A. Steere. 1,632,201; June 14. Tire, Pneumatic. S. A. Steere. 1,632,3963; June 28. Tire, Pneumatic. D. M. Weigel. 1,633,963; June 28. Tire, Preumatic. D. M. Weigel. 1,633,963; June 28. Tire-pressure gauge. F. E. Welton. 1,648,332; Nov. 8. Tire-pressure tester. H. B. McNatt. 1,618,211; Feb. 22. Tire protective means, Pneumatic. A. J. la Pierre. 1,616,268; Feb. 1.

Tire-pressure tester. H. B. McNatt. 1,618,211; Feb. 22. Tire protective means, Pneumatic. A. J. la Pierre. 1,616,268; Feb. 1.

Tire-pressure tester. H. B. McNatt. 1,618,211; Feb. 22. Tire protective means, Pneumatic. A. J. la Pierre. 1,616,268; Feb. 1.

Tire-pressure tester. H. B. McNatt. 1,633,494; July 20. 1,633,978; July 26. 1,633,978; July 26. 1,634,679; July 26. 
       Tire-repair scraper. R. W. Fox. 1.632.544: June 14.
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Tire-repair tool. E. F. Pawsat. 1,619,538; Mar. 1. Tire-repair vulcanizer. H. K. Wheelock. 1,617,828; Tire-repair vulcanizer. H. K. Wheelock. 1,630,815; May 31. Tire, Resilient. A. E. Bauman. 1,624,856; Apr. 12. Tire, Resilient. H. Bonawitz. 1,630,776; May 31. Tire, Resilient. J. H. Burns. 1,616,02e; Feb. 1. Tire, Resilient. J. H. Burns. 1,647,455; Nov. 1. Tire, Resilient. C. W. Morss. 1,630,350; May 31. Tire, Resilient. C. W. Morss. 1,630,350; May 31. Tire, Resilient. C. W. Morss. 1,630,350; May 31. Tire rim. C. Berg. 1,618,403; Feb. 22. Tire rim. C. Berg. 1,618,403; Feb. 22. Tire rim. B. Freivogel. 1,649,678; Nov. 15. Tire rim. B. Freivogel. 1,649,678; Nov. 15. Tire rim. B. J. Zobel. 1,635,105; July 5. Tire rim. B. J. Zobel. 1,640,305; Aug. 23. Tire rim. B. J. Zobel. 1,640,305; Aug. 23. Tire rim. Demountable. J. Cruz and P. Noguera. 1,621,60; Marr. 1,921,460; Marr. 1,921,461. Marr. 1,921,461. Marr. 1,921,462,542; Sept. 27. Tire-rim expanding and collapsing device. W. E. Spring-Tire-repair tool. E. F. Pawsat. 1,619,538; Mar. 1. Tire-repair vulcanizer. H. K. Wheelock. 1,617,829; Tire rim, Dumountable, D. H. McGleiland, [643,672, Sept. 27]
Sept. 27
Tire-rim expanding and collapsing device. W. E. Spring-field and B. W. Frazier. 1,622,549; Mar. 29.
Tire rim, Telescoping. A. R. Parsons. 1,631,429; June 7.
Tire rim, Telescoping. A. R. Parsons. 1,631,429; June 7.
Tire rim, Telescoping. A. R. Parsons. 1,631,429; June 7.
Tire rims, Lock for. J. H. Radandt. 1,618,997; Mar. 1.
Tire-shaping apparatus. A. O. Abbott, jr. 1,635,242;
July 12.
Tire signal. C. W. Ostrom. 1,634,855; July 5.
Tire signal. C. W. Ostrom. 1,634,855; July 5.
Tire signal. C. W. Ostrom. 1,634,855; July 5.
Tire spreader. V. R. Goeller. 1,627,500; May 3.
Tire spreader. V. R. Goeller. 1,627,500; May 3.
Tire spreader. V. A. Mielke. 1,622,661; Mar. 29.
Tire spreader. C. F. Ficc. 1,647,061; Occ. 2,622,468; Mar. 29.
Tire spreader. C. F. Ficc. 1,647,061; Occ. 9,622,468; Mar. 29. Tire spreader. A. A. Trombley. 1,651,076; Nov. 29. Tire-spreading device. H. T. Hughes. 1,639,506; Tire-spreading device. H. T. Hubars. Aug. 16.

Tire-spreading device. O. Rule and J. A. Bennett. 1,652,414; Dec. 13.

Tire, Spring. A. Brewer. 1,618,168; Feb. 22.

Tire, Spring. O. Brewer. 1,618,168; Feb. 22.

Tire stocks, Splicing solid. G. W. Sieberling. C. A. Mook. 1,652,726; Dec. 13.

Tire stocks, Splicing solid. G. W. Sieberling. 1,622,546; Mar. 29.

Tire-stripping machine. A. H. Havir and H. V. Fletcher. 1,638,306; Aug. 9.

Tire-stripping machine. M. Kimmerling. 1,653,104; Dec. 20. 1.638.308; Aug. 9.
Tire-stripping machine. M. Kimmerling. 1,653,104; Dec. 20.
Tire structure. A. M. Lane. 1,637,753; Aug. 2.
Tire structure and applying to wheels, Cushion. F. R.
Kiluas. 1,638,310; A. F. McGovern. 1,614.892; Jan. 18.
Tire tape or the like, Machine for wrapping. H. D.
Stevens. 1,634,919; July 5.
Tire tester, Pocket. R. A. Ingham. 1,616.628; Feb. 8.
Tire-testing apparatus. J. G. Coffin. 1,638,111; Aug. 9.
Tire tool. J. A. Gagnon. 1,610,522; Feb. 1.
Tire traction device, Resilient. D. W. Ohaver.
1,620,384; Mar. 8.
Tire-tread. W. S. Galvin. Des. 73,169; Aug. 2.
Tire tread. H. D. Reichard. Des. 71,982; Feb. 8.
Tire-tread. Phenumatic. P. Graham. Des. 73,173; Aug. 2.
Tire treads, Method and apparatus for making. W. B.
Freeman, U. C. Haren, and F. P. Hartung. 1,653,356; Dec. 20. Freeman, U. C. Haren, and F. P. Hartung. 1,653,856; Dec. 20.

Dec. 20.

Tire-trimming apparatus. J. R. Gammeter. 1,622,440; Mar. 29.

Tire-trimming apparatus. J. R. Gammeter. 1,622,440; Mar. 29.

Tire-trimming apparatus. J. R. Gammeter. 1,622,440; Mar. 23.

Tire valve. J. W. Legullon, 1,628,517 and 1,628,517 and 1,628,517 and 1,628,911; May 24.

Tire valve. F. M. Ahearn. 1,629,901; May 24.

Tire valve. C. S. Preston. 1,628,904; May 19.

Tire-valve casings, Making. E. G. Oakley. 1,625,492; Apr. 10.

Tire-valve stems. Aukliary valve for pneumatic. W. R. Royer. 4,629,972; May 24.

Tire-valve stems. Cover for automobile. E. L. Boyd. 1,648,904; Nov. 22.

Tire-valve stems. Dust cap and rim nut connection for. T. Scott. 1,645,027; Oct. 11.

To T. Scott. 1,645,027; Oct. 11.

To T. Scott. 1,645,027; Oct. 11.

The valves, Dust cap for. J. E. Turrell and W. G. Thomas. 1,649,863; Aug. 30.

Tire, Vehicle. J. T. Clark. 1,626,511; Apr. 26.

Tire, Vehicle. N. Costmoo. 1,644,238; July 6.

Tire, Vehicle. N. L. Guvia. 1,623,940; Aug. 23.

Tire, Vehicle. R. Iredell. Des. 73,835; Nov. 15.

Tire, Vehicle. F. B. Rush. 1,622,248; Mar. 29.

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Tire vulcanizer. M. H. Gregg. 1,643,493; Sept. 27.
Tire-vulcanizing apparatus. E. W. Cotton. 1,616,076;
     Tire-vuice
Feb. 1.
     Tire-vulcanizing device. K. B. Kilborn and W. S. Wolfe.
1,633,587; June 28.
Tire-vulcanizing mold. P. De Mattla. 1,630,113;
May 24.
        May 24.
Tire, Wheel. N. Gherassimoff. 1,632,731; June 14.
Tire-wrapping machine. J. Derry. 1,630,834; May 31.
Tires and product resulting therefrom, Treating automo-
bile. H. H. Allyn and J. S. Williams. 1,614,024;
                                bile. H
Jan. 11.
  Jan. 11.

Thres and the like, Producing pneumatic tubes for vehicle.

W. L. Fairchild. 1,638,650; Aug. 9.

Pires and the like, Protective cover for pneumatic. J. L.

Delphil. 1,642,104; Sept. 13.

Tires and the like, Scaling composition for punctures in
pneumatic. G. G. Burton. 1,645,585; Oct. 18.

Tires, Antiskid chain for. W. H. Coad. 1,620,076;

Tires. Antiskid chain for.
  Mar. 8.

Tires, Antiskid chain for. W. H. Cond. 1,622,076; Mar. 8.

Tires, Antiskid device for automobile. F. J. Donat. 1,622,807; Sept. 20.

Tires, Apparatus for and process of making. H. F. Dumbleton. 1,636,535; July 19.

Tires, Apparatus for examining vehicle. H. C. Heyemann. Properties for examining the control of t
These, Bead cable for, A. C. Pratt. 1,614,206; Jan. 11.
These, Blow-out patch for bailoon. C. E. Ayers.
1,631,354; June 7.
Thres, Chain equipment for, F. H. Arnzen. 1,619,846;
Mar. 8.
Tires, Cushioning unit for vehicle. H. Zubrow and E.
Schomon. 1,631,447; June 7.
These, Demountable interlocking rim for vehicle. J. H.
Glidersleeve. 1,023,834; Apr. 5.
Thres, Demountable interlocking rim for vehicle. J. H.
Glidersleeve. 1,023,834; Apr. 5.
B. Austin. 1,646,677;
Thres, Demountable rim for. G. B. Austin. 1,646,677;
Thres, Demountable rim for. G. B. Austin. 1,646,677;
Thres, Device for indiating and deflating pneumatic. W.
A. Harris. 1,615,943; Feb. 1.
Trees, Deposite for the production on the surface of rubber for the productions on the surface of rubber. A. Benaglia. 1,653,835; Dec. 27.
Thres, Inner tube for automobile. C. H. Semple. 1,634,161; June 28.
These, Interliner for pneumatic. R. H. Mullineaux. 1,632,496; June 14.
Thres, Manufacture of teshion. G. F. Fisher. 1,625,644;
Thres, Manufacture of semisolid rubber. R. Gollert. 1,625,117; Apr. 19.
Thres, Manufacturing cushion. W. C. Martin. 1,632,490;
Thres, Patch for pneumatic. C. Forman. 1,653,162;
Dec. 27.
Thres, Patch for pneumatic. C. Forman. 1,653,162;
Dec. 27.
Thres, Patch for pneumatic. C. Forman. 1,653,162;
Dec. 27.
Thres, Patch for pneumatic. C. Forman. 1,653,162;
Dec. 27.
           Tieca Puncture-scaling composition for pneumatic. E. Serch. 1,638,509; June 21.

Tires. Repair shield for vehicle. J. H. Burrow. 1,645,441; Oct. 1.

Tires. Safety device for spare. H. H. Hanton. 1,618,924; Feb. 22.
           Tires, Securing means for pneumatic. H. P. Mack. 1,653,054; Dec. 20.
Tires, Traction device for vehicle. J. R. Vosburgh. 1,619,170; Mar. 1.
Tires, Trend grip for vehicle. C. L. Hoff. 1,638,034; Aug. 9.
        Aug. 32

Tires, Vacuum shaping machine for. A. O. Abbott, jr. 1,635,243; July 12

Tires, Vacuum shaping machine for straight-side. A. O. Tires, Vacuum straight for straight-side. A. O. 1,635,241; July 12.

Tires, Valual defiation signal for. J. E. and M. A. Kennedy. 1,644,193; Oct. 4.

Tires, Vulcanizing. S. Krall. 1,627,785; May 10.

Tires, Vulcanizing molding apparatus for rubber. P. Barret, 1,643,686; Krall. 1,627,785; May 10.

Tires, Vulcanizing molding apparatus for rubber. P. Barret, 1,643,686; July 12.

Tissue, measuring its length. and folding it, Machine for inspecting a piece of. J. Nanterme. 1,624,680; Abr. 12.

Titanic xolde, Manufacture of. N. Specht. 1,649,496; Nov. 15.

Titanic xolde, Manufacture of. N. Specht. 1,649,496; Nov. 15.

Titanium alloy. A. W. Clement. 1,621,523; Mar. 22.
                 Titanium alloy. A. W. Clement. 1,621,523; Mar. 22.
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Titanium-dioxide or rutile and a product thereof, Transforming. S. J. Lubowsky. 1,640,952; Aug. 80. Toaster. W. D. Bellamy. 1,615,366; Jan. 25.
Toaster. H. Ostermann. 1,632,192; June 14.
Toaster. S. F. Rebora. 1,624,182; Apr. 12.
Poaster. M. Wertheimer. 1,625,003; Apr. 19.
Toaster and grill, Electric. E. E. Sutherland. 1,624,445; Apr. 12.
Toaster and grill, Electric. E. E. Sutherland. 1,624,445; Apr. 12.
Toaster Electric. C. P. Randolph. Des. 72,495; Apr. 19.
Toaster, Electric. L. Reichold. 1,633,385; Aug. 16.
Toaster, Electric. L. E. Wolcott. 1,617,558-9; Peb. 15.
Toaster, Electric bread. J. E. Marsden. 1,624,893; Apr. 19.
Conster, Electric. I. Reichold. 1,639,385; Aug. 16.
Toaster, Electric. F. E. Wolcott. 1,617,558-9; Feb. 15.
Toaster, Electric bread. J. E. Marsden. 1,624,893;
Apr. 12.
Toaster, Rotatable. A. Guissart and E. H. Barbe.
1,612,509; Jan. 4.
Toasting and buttering machine, Automatic. I. Beskin.
Toasting and buttering machine, Automatic. I. Beskin.
Toasting and buttering piliance, Electric. H. J. Tannen-
baum and D. Brown. 1,652,745; Dec. 13.
Toasting apparatus, Sandwich. G. Lines. 1,649,963;
Nov. 22.
Toasting machine and the like. C. E. Carpenter.
1,621,234; Ma. 16.
Toasting machine. B. Koerner. 1,618,096; Feb. 15.
Tobacco case. W. Baehne. 1,622,407; Mar. 29.
Tobacco-eutting machine. B. Koerner. 1,618,096; Feb. 15.
Tobacco levice for feeding scrap. W. B. Bronander.
1,637,800; Aug. 2.
Tobacco bevice for feeding scrap. W. B. Bronander.
1,637,800; Aug. 2.
Tobacco leaves, Machine for stringing. G. W. Kennedy.
1,650,990; Nov. 29.
Tobacco leaves, Machine for stripping and cutting. D.
H. Simpson. 1,638,013; Aug. 9.
Tobacco leaves, Machine for stripping and cutting. D.
H. Simpson. 1,638,013; Aug. 9.
Tobacco pipe. F. Hoffman. 1,623,009; Mar. 29.
Tobacco pipe. W. H. Lewis. Des. 72,213; Mar. 15.
Tobacco pipe. W. H. Lewis. Des. 72,213; Mar. 15.
        Mar. 1.
Tobacco pipe. F. Hoffman. 1,623,009; Mar. 29.
Tobacco pipe. W. H. Lewis. Des. 72,213; Mar. 15.
Tobacco pipe. W. H. Lewis. 1,621,800; Mar. 22.
Tobacco pipe. H. Rapp. 1,653,608; Jac. 29.
Tobacco pipe. H. Rapp. 1,653,608; Jac. 29.
Tobacco pipe. H. Rapp. 1,653,608; Jac. 29.
Tobacco pipe. H. W. Taylor. 1,624,600; Apr. 12.
Tobacco pipe. G. H. Wilson. 1,624,600; Apr. 12.
Tobacco pipe. G. H. Wilson. 1,624,620; Mar. 8.
Tobacco-pipe. J. M. Wilson. 1,620,420; Mar. 8.
Tobacco-pipe attachment. J. J. O'Toole. 1,628,059;
May 10.
The complement of the co
        Tobacco-stemming machine, J. O. Morris. 1,612,938; Jan. 4.

Tobacco-stemming mechanism. W. B. Bronander. 1,637,801; Aug. 2.

Tobacco-stripping machine J. T. Dalton and B. W. Tobacco-stripping machine J. T. Dalton and B. W. Tobacco-training machine J. T. Dalton and B. W. Tobacco-training device. C. R. Redhefter and H. L. Mason. 1,619,614; Nov. 15.

Tobacco, Treating. M. Takeuchi. 1,617,727; Feb. 15.

Tobacco wax and producing the same. S. Amster. 1,624,163 Apr. 2.

Toe-in gauge. W. J. Kund. 1,623,378; Apr. 5.

Toggle and method. W. A. Hubener. 1,622,789; Apr. 5.

Toggle mechanism. C. S. Reiger. 1,634,684; July 5.

Toggle greas. J. Derry. 1,633,317; June 21.

Toggle spreader. E. S. Sargent. 1,628,615; May 10.

Toliet accessory. W. Friedman. 1,630,566; May 31.

Toliet accessory. W. Friedman. 1,630,666; May 31.

Toliet article. W. I. Bass. 1,639,622; Aug. 16.

Toliet article. W. Friedman. 1,630,927; May 3.

Toliet article. W. Friedman. 1,626,927; May 3.

Toliet article. W. Friedman. 1,626,927; May 3.

Toliet article. W. Friedman. 1,630,932; Aug. 16.

Toliet article. W. Friedman. 1,630,2402; Dec. 13.

Toliet article for haldressing. C. S. Hart. 1,650,710; 20let article for hald
                     Toilet article,
Nov. 22.
             Nov. 22.
Tollet article for halrdressing. C. S. Hart. 1,650,710;
Nov. 29.
Tollet articles or similar article. Receptacle for. F. M.
Oldet fridge or similar article. Receptacle for. F. M.
Oldet from. Des. 72,719. May 24.
Tollet box. A. S. Donaldson. Des. 72,798; June 7.
Tollet box. C. E. Kjetsan. 1,628,877; Apr. 5.
Tollet box. R. W. Wilson. 1,650,733; Nov. 29.
Tollet chair, Invalid's. G. B. Killen. 1,638,040; Aug. 9.
Tollet cover, Sanitary. W. Steler. 1,632,455; June 14.
Tollet cover, Sanitary. W. Steler. 1,632,455; June 14.
Dec. 201. C. C. France and F. F. Reichert. 1,653,005;
Dec. 201.
                     Toilet noat. C. C. France and F. F. Reicheld. Thousand, Dec. 20.

Toilet-flushing means. J. Moore. 1,621,737; Mar. 22.

Toilet-flushing mechanism. C. A. Wulf. 1,641,652;
                 Sept. 6.
Toilet for infants, Portable. L. Kuhn. 1,650,365;
Nov. 22.
Toilet inclosure. M. S. Hart and L. E. Page. 1,637,145;
                 July 26.
Toilet kit. M. H. Walker. 1,641,650; Sept. 6.
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Toilet, Marine. D. J. Mahoney. 1,650,370; Nov. 22.
Toilet novelty. W. F. Patten. 1,632,920; June 21.
Toilet or convenience, Portable. L. L. Roberts.
1,632,551; Dec. 13.
Toilet-paper fixture. C. Fisher. 1,614,112; Jan. 11.
Toilet-paper holder. O. R. Boynton. 1,651,567; Dec. 6.
Toilet-paper-vol Holder. O. R. Boynton. 1,623,190; Apr. 19. Toilet-paste-tube holder. G. Wolkenhauer. Joilet-powder shaker, E. A. Poillon, 1,625,092; Apr. 19. Toilet, Sanitary odorless, J. H. McCall, 1,629,401; May 17. May 17.
Toilet seat. A. J. Bruder. 1,630,524; May 31.
Toilet seat. E. L. Eckerlein. 1,639,219; Aug. 16.
Toilet seat. B. L. Eckerlein. 1,639,219; Aug. 16.
Toilet seat and cover. D. A. Wolf. 1,616,620; Feb. 1.
Toilet seat, Auxiliary. B. M. Noble. 1,633,222; June 21.
Toilet-seat cover. C. L. Mahoney. 1,643,413; Sept. 27.
Toilet-seat cover, Sanitary. A. de Luna. 1,633,072;
July 5. July 5.

Toilet-seat covers, Paper holder for. E. J. Douglas. 1,638,247; Aug. 9.

Toilet seat, Sanitary baby. C. A. Switzer. 1,648,791; Nov. 8.

Toilet, Sat, Sanitary baby. C. A. Switzer. 1,648,791; Nov. 8.

Toilet, Sufface. W. See. 1,615,775; Jan. 25.

Toilet, Ventilating device for. F. E. Lumley. 1,636,476; July 19.

Token system. W. S. Roberts. 1,632,246; June 14.

Tomb marker and decoration container, Combined. P. Johnson. 1,619,735; Mar. 1.

Tomb or grave closing device. H. J. Busey. 1,631,853; June 7.

M. Nystrom. Des. 73,979; Nov. 29. Tomb or grave closing device. H. J. Busey. 1,631,853; June 7.

Tone arm. M. Nystrom. Des. 73,979; Nov. 29.

Tone arm. J. N. Pepin. 1,653,410; Dec. 20.

Tone chamber. P. B. Armstrong. 1,615,434; Jan. 25.

Tone control operable successively in a predetermined manner. J. H. Hammond, jr. 1,645,648; Oct. 11.

Tone control, Successively-operated. J. H. Hammond, jr. 1,000; June 1,00 Apple of the control Tongs. G. W. Yanney and W. D. Ross.

Mar. 22.

Tongs and the like. G. E. Nix. 1,629,631; May 24.

Tongs and the like. G. E. Nix. 1,629,631; May 24.

Tongs, Galley-stove. A. Westlake. 1,645,466; Oct. 11.

Tongs, Ice-cream-can. S. B. Whiteside. 1,644,905; 162,7624; May 3. Mar. 22

Mar. 22

Mar. 23

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Mar. 29

Mar Tool, Automatic machine. L. G. Daniels. 1,651,948;

Tool, Automatic machine. L. G. Daniels. 1,651,949; Dec. 6.
Tool, Automobile. B. J. Catron. 1,647,343; Nov. 1.
Tool, Battery-repair. L. A. Costello. 1,647,395; Nov. 1.
Tool, Boiler. H. A. Lacerda. 1,637,949; Aug. 2.
Tool, Boyling and grinding. M. L. Williams. 1,646,892; Oct. 25. ool. Bottle capping. H. J. and R. W. Lebherz. 1,643,076; Tool, Bottle-capping, H. J. and R. W. Lebherz. 1,643,076; Sept. 20.

Tool. Bottle-capping. H. J. and R. W. Lebherz. 1,651,720; Dec. 6.

Tool box. A. Fiss. 1,652,619: Dec. 13.

Tool box. E. M. Hixon. 1,652,984; Dec. 13.

1,614,910; Jan. 1,911tition therefor. S. W. Yarder. 1,700 brace. R. D. Huxon. 1,623,541; Apr. 5.

Tool brace, Reversible. C. R. Polen. 1,634,300; July 5.

Tool, Brad driving and extracting. A. L. Kern. 1,635,533; June 21.

Tool. Busling-removing. C. R. Anderson. 1,649,437;

Tool, Carpenter's combination. T. M. Shearer. 1,641,831; Sept. 6. Sept. 6. Sept. 6. Ool, Carpenter's wrecking. G. W. Basore. 1,646,894; Tool, Combination. R. Klaboe, 1,620,262; Mar. 8.
Tool, Combination. A. Nowka and W. Livingston.
1,647,576; Nov. 1.
Tool, Combination. B. P. Perrin. 1,644,352; Oct. 4.
Tool, Combination. N. Vello. 1,625,064; Apr. 19.
Tool, Combination. O. Willman. 1,615,162; Feb. 1.
Tool, Combined. W. F. Loeffler. 1,655,722; Dec. 13.
Tool, Concrete-working. H. T. Rogers. 1,405,873; Oct. 18 Oct. 18.
Tool container. W. C. Clifford. 1.632,172; June 14.
Tool, Cotter-pin. P. J. Dandeneau. 1.649,513; Nov. 15.
Tool, Counterboring. E. Gairing. 1,648,802; Nov. 8.
Tool cross feeds, Automatic controlling mechanism for machine. C. H. Norton. 1,653,922; Dec. 27.
Tool, Cutring. C. D. Heilyer. 1,649,899; Nov. 27.
Tool, Cutring-off. E. F.-G. Gibbs. 1,647,989; Nov. 8.
Tool, Cylinder-head-lifting. J. V. Critchley. 1,685,259; July 12.
Tool, Cylinder-honing. W. A. Jennings. 1,647,133-4; Nov. I.
Tool, Demountable-rim. W. N. Booth. 1,652,161; Dec. 13. Dec. 13.
Tool, Drilling. P. Brunt. 1,641,113; Aug. 30.
Tool, Drilling. G. Dornes, jr. 1,544,322; July 5.
Tool, Drilling. G. Dornes, jr. 1,534,322; July 5.
Tool, Earth-boring. C. E. Reed. 1,636,668; July 19.
Tool, Earth-boring. T. C. Whisler. 1,640,687; Aug. 30.
Tool, Electric. W. Stumpf. 1,633,389; June 21.
Tool, Electric. C. S. Weyandt. 1,651,793; Dec. 6.
Tool, Electric-arc-welding. W. D. Christensen. 1,644,237; Oct. 4. Oct. 4.

Tool, Expanding. A. O. Starkin. 1,648,032; Nov. 8.

Tool-feed mechanism. H. B. Newton. 1,618,463; Feb. 22.
Tool, Fishing. R. I. Henderson. 1,835,622; July 12.
Tool, Fishing. F. H. Stafford. 1,645,461; Oct. 11.
Tool, Flexible handled. F. English. 1,653,395; Dec. 27.
Tool, Fluid-sheet. M. B. Roderick. 1,643,679; Sept. 27.
Tool, Fluid-actuated. A. H. Katterjohn. 1,643,560; Sept. 27.
Tool, Fluid-operated. A. H. Katterjohn. 1,637,601; Only 26.
Tool, Fluid-pressure. E. Penberthy. 1,629,117; May 17.
Tool, Fluid-pressure. E. Penberthy. 1,629,117; May 17.
Tool, Fluid-pressure. E. Penberthy. 1,652,637; Dec. 13.
Tool, Fluid-pressure. E. Penberthy. 1,652,637; Dec. 13.
Tool, Fluid-pressure-actuated. E. H. Shaff. 1,631,163; June 7. June 7. Tool, Fluid-pressure-operated. E. H. Shaff. 1,639,313; Aug. 16. pressure-operated. E. H. Shaff. 1,645,166; Oct. 11. 100. Fillio-pressure-operated. B. H. Saar. 1,645,106; Oct. 11.

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Tool for placing clearance wrappers on boiler tubes. J. A. MacDowell. 1,643,022; kept. 20. Tool for removing and replacing motor parts. N. St. Tool for removing collars and the like. F. A. Mitchell. Rel6,646; May 31. Tool for removing collars and the like. F. A. Mitchell. Sept. 6. Sept. 6. Sept. 6.
Tool for removing transmission bands, G. T. Schesvold and A. M. Johnson. 1,641,994; Sept. 13.
Tool for scraping bearings. R. O. Barnes. 1,640,175; Aug. 23. Tool for the best of the surfaces. A. O. Barnes. 1,640,175; Aug. 23.

Tool for separating adhering sheets. W. T. Scott. 1,633,640; July 12.

Tool for surfacing cylindrical bores. N. O. Allyn. 1,052,681 Dec. 13.

Tool for the wells, Joint and jointing. C. Day. 1,652,562; Dec. 13.

Tool for tube wells, Joint and jointing. C. Day. 1,652,562; Dec. 13.

Tool for use in leveling, plaining, and/or smoothing per 13.

Tool for use in old wells, Fishing. J. O. Johnson. 1,646,965; Oct. 25.

Tool for wrapping wire. J. Fisher. 1,633,401; June 21.

Tool for wrapping wire. J. Fisher. 1,633,401; June 21.

Tool for wrapping wire. J. Fisher. 1,633,401; June 21.

Tool for wrapping wire. J. Fisher. 1,633,401; June 21.

Tool for wrapping wire. J. Fisher. 1,633,401; June 21.

Tool garden. A. Hennan, 1,452,478; Pect. 20.

Tool garden. R. B. Woodall. 1,432,250; June 14.

Tool garder, Adjustable auto. R. W. Peterson. 1,647,248; Nov. 1. Tool grinder, Adjustable auto. R. W. Peterson. J.041,238; Nov. 1. Tool-grinding machine. y. L. Smith. 1,647,203; Nov. 1. Tool, Guide. J. P. Snapp. 1,638,332; July 19. Tool, Hand. W. A. Bernard. 1,627,307; May 3. Tool, Hand. W. A. Bernard. 1,636,088; July 19. Roi, Hand. E. O. Estwing. Re15,620; Dec. 20. Tool, Hand. F. H. Winslow and B. Reader. 1,642,569; P. Stander, P. H. Winslow and B. Reader. 1,642,569; P. Stander, Reader. 1,642, Tool, Hand. E. O. Estwing. Relfs, 20; Dec. 20.
Tool, Hand. F. H. Winslow and B. Reader. 1,642,569;
Tool bandle. T. L. Crook. 1,648,798; Nov. 8.
Tool handle. S. R. Enberg. 1,626,671; May 3.
Tool head. W. M. Brown. 1,650,422; Nov. 2.
Tool-head fastening. J. P. and H. P. Hebert. 1,642,814; Sept. 20.
Tool head fastening. J. P. and H. P. Hebert. 1,650,807; Tool header. H. Bildsoe. 1,633,239; June 21.
Tool holder. H. Bildsoe. 1,633,239; June 21.
Tool holder. G. M. Delany. 1,645,319; Oct. 11.
Tool holder. G. W. Dover. 1,645,330; Nov. 8.
Tool holder. M. E. Gorman. 1,647,441; Nov. 1.
Tool holder. M. E. Gorman. 1,647,441; Nov. 1.
Tool holder. M. E. Gorman. 1,647,441; Nov. 1.
Tool holder. G. F. Randolph and M. Marcalus. 1,637,785; Aug. 2. Tool bolder, M. E. Gorman, 1,647,441, Nov. 1.
 Tool bolder, L. W. Jones. 1,947,831, Nov. 1.
 Tool bolder, L. W. Jones. 1,947,831, Nov. 1.
 Tool bolder, C. F. Randolph and N. Marcalus. 1,637,785; Aug. 2.
 Tool bolder, Boring. T. B. Tiefenbacher. 1,647,590; Tool bolder, Boring. T. B. Tiefenbacher. 1,647,590; Tool bolder for cutting off pieces of work. E. Bugattl. 1,638,389; July 26.
 Tool bolder for planers. F. B. Cardullo. 1,615,787; Jan. 25.
 Tool bolder for planers. F. B. Cardullo. 1,615,787; Jan. 25.
 Tool bolder, Kitchen. F. W. Bleckley. 1,614,342; Tool bolder with side clamp. 0. Severson. 1,634,649; Oct. 25.
 Tool-bolding device. L. Hughes. 1,629,213; May 17.
 Tool-bolding device. L. Hughes. 1,629,213; May 17.
 Tool-bolding device. L. Hughes. 1,629,213; May 17.
 Tool, Impact. E. H. Shaff. 1,633,501; June 21.
 Tool, Impact. E. H. Shaff. 1,633,501; June 21.
 Tool, Jiny band. A. R. Schem. 1,448,004; Nov. 8.
 Tool, Jiny band. A. R. Schem. 1,448,004; Nov. 8.
 Tool Joint. E. C. Wilson, 1,618,253–41; Pob. 22.
 Tool Joint. E. C. Wilson, 1,618,253–41; Pob. 22.
 Tool Joint. E. C. Randolph, 1,634,384; July 5.
 Tool, Metal-cutting. S. M. Blanch and G. W. Fleming. Tool, Mining. C. B. W. Abbott. 1,634,321; Sept. 20.
 Tool, Mining. R. B. Metzner. 1,643,221; Sept. 20.
 Tool, Mining. R. B. Metzner. 1,643,221; Sept. 20.
 Tool, Mining. R. B. Metzner. 1,643,221; Sept. 20.
 Tool operating mechanism. G. E. Greenleaf, H. L. Blood, and R. H. Rausch. 1,640,761; Aug. 30.
 Tool operating mechanism. G. E. Greenleaf, H. L. Blood, and R. H. Rausch. 1,640,761; Aug. 30.
 Tool operator, Oli-well. C. T. Dougherty. 1,647,961; Tool. Percussive pneumatic. G. Elster. 1,636,813; July 26.
 Tool, Percussive pneumatic. G. Elster. 1,636,813; Mar. 8.
Tool, Percussive pneumatic. 6. July 26.
July 26.
Tool, Pipe-threading, L. I. Oblinger. 1,648,502; Nov. 8.
Tool, Piston. G. E. Weaver. 1,638,789; Aug. 9.
Tool, Piston-ring. W. A. Madden. 1,645,200; Oct. 11.
Tool, Piug-inserting. H. T. Hughes. 1,633,330; June 21.
Tool. Pneumatic. W. J. Guyer. 1,644,581; Oct. 4.

Tool, Pneumatic. K. T. Jasper. 1,613,172; Jan. Tool, Pnuematic. C. Saulia. 1,640,470; Aug. 30. Tool, Pneumatic. F. M. Slater. 1,641,357; Sept. Tool, Pneumatic clamping. C. P. Trimble. 1,65 Dec. 27. 1.653.827: Tool, Pneumatic percussive. E. W. Stevens. 1,629,845; May 24. Tool, Pneumatically-actuated. D. L. Oulton. 1,652,493; Ann. 184.

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196. Tool. Rotary drilling. F. L. O. Wadsworth. 1,000,001, Suly 12.

Tool. Rotary motor. J. J. N. Van Hamersveld and H. L. Cook. 1,683,748; Dec. 27.

Tool. Shaft-inishing. M. D. Maloney. 1,652,868; Dec. 13.

Tool. Sheet-metal-layout. G. F. Waelde. 1,636,025; July 19.

Tool-side mechanism. E. P. Bullard, Jr. 1,631,579; June 7.

Tool-steel-retaining device. G. H. Gilman. 1,642,948; Sept. 20.

Tool. Surfacing. C. Freni. 1,642,416; Sept. 13.

Tool. Tamping. W. C. Wolfe. Rel6,775; Oct. 18.

Tool. Tamping. M. C. Wolfe. Rel6,775; Oct. 18.

Tool. Tamping. C. P. Wetmore. 1,643,263; Sept. 20.

Tool. Tamping. C. P. Wetmore. 1,643,263; Sept. 20. Tool, Tappief - adjusting. A. J. Brown. 1,654,319; Dec. 27.
Tool, Tapping. C. P. Wetmore. 1,643,263; Sept. 20.
Tool, Threading. R. E. Flanders. 1,635,179; July 12.
Tool, Threading. C. A. Johnson. 1,640,941–2; Aug. 30.
Tool, Tire. F. D. Hite. 1,641,083; Aug. 30.
Tool, Tire and rim. R. H. Hatfield. 1,639,887; Aug. 23.
Tool, Tire-building. D. L. Williams. 1,645,081; Oct. 11.
Tool, Tire-regroving. J. A. Straits. 1,631,941; June 7.
Tool, Tire-reproving. J. A. Straits. 1,631,941; June 7.
Tool, Tire-repair. J. M. Gibb and J. M. Jobe. 1,645,101; Oct. 11. Oct. 11.
Tool, Tire-rim. G. W. Berry. 1,647,122; Nov. 1.
Tool, Tracing. L. J. Homan, fr. 1,643,802; Sept. 27.
Tool, Trap-placing. C. C. Curtis. 1,683,184; Aug. 9.
Tool, Trimming. J. J. Barry. 1,648,931; Nov. 15.
Tool, Universal and automatic machine. A. Schwob. 1,633,714; June 28.
Tool, Valve. H. M. Susdorf. 1,647,204; Nov. 1.
Tool, Valve-scat-refacing. L. O. Beard. 1,639,835; Tool. Valve-spring removing and replacing. C. Tool. Wals. 1,636,046; July 19.
Tool. Wals. 1,636,046; July 19.
Tool. Wals. 1,636,047, Duly 19.
Tool. Wals. 1,636,046; July 19.
Tool. Wals. 1,636,046; July 19.
Tool. Wals. 1,636,046; July 19. Feb. 15.
Tool, Waste-pipe. C. E. Dunham. 1,643,638; Sept 27.
Tool, Weeding. T. Gentsch. 1,644,426; Oct. 4.
Tool, Weeding. G. W. Duncan. 1,639,688; Aug. 23.
Tool, Welding. G. W. Duncan. 1,639,688; Aug. 23.
Tool, Welding. R. Mattice. 1,632,411; June 14.
Tool, Well-drilling. E. A. Robinson. 1,634,686; July 5.
Tool, Well fashing. Hess. T. F. 1,649,683; Nov. 15.
Tool, Wire and disk wheel split-ring. S. M. Clement. 1,630,635; Nov. 22.
1,630,635; Nov. 22.
Tool, Wire twisting and cutting. G. W. Mattson. 1,641,622; Sept. 6.
Tool, Wire-tying. F. W. Huempfner. 1,636,741; July 26.
Tool wire key pocket, Rotary. A. G. Decker. 1,647,396; Nov. 1. Nov. 1.

Tool with spindle latch and hand-operated chuck, Portable power-driven rotary. A. G. Decker. 1,649,060; Nov. 15.

Tool, Wrecking. J. E. Hoffman. 1,634,191; June 28.

Tools, Perice for exhibiting. E. Gairing. 1,638,928; ang. 16.

Tools. Device for lubricating pneumatic. O. Vetter. 1,650,856; Nov. 28.

Tools, Device for producing counterpressure in pressing. H. Skov. 1,614,404; Jan. 11.

Tools, Extendible chuck for boring. R. H. Henderson. 1,644,852; Oct. 11.

Sept. 20

Aug.

Tools, Feed mechanism for. B. M. W. Hanson. 1,613,350; Tools, Feed mechanism for. B. M. W. Hanson. 1,613,350; Jan. 4.
Tools, Governor for pressure-fluid-operated. E. H. Shaff. 1,640,620; Aug. 30.
Tools, Governor for pressure-fluid-operated. E. H. Shaff. 1,650,048; Nov. 22.
Tools, Handle for pneumatically operated. F. A. Jimerson. 1,614,130 shilling and drilling. C. T. Fleming. 1,653,033-4; Dec. 20.
Tools, Liner for cable-engaging. F. E. Crotto. 1,649,390; Nov. 15. Tools, Liner for cance-ngaging. F. B. Crotto. 1,033,304, Nov. 15. Tools, Making. K. Potschner. 1,639,269; Aug. 16. Tools, Reversing mechanism for machine. F. E. Phillips. 1,048,820; Nov. 8. 1001s, Rottable or the support for machine. C. A. Stickney, 1,633,318; C. Polic, 20. Tools, Rotton of the control of Aug. 23.
cols. Valve for pneumatic. W. A. Smith, jr. 1,636,651; July 19.
Tools, Way guard for machine. E. P. Burrell, and J. N. Van Hamersveld. Rel6,534; Jan. 11.
Tools, Wheel head for machine. J. A. Doane. 1,634,402; July 5. Tools, Wheel head for machine. J. A. Doane. 1,634,402; July 5
Tooth and bridge work, Artificial. H. D. Chipps. 1,633,660; June 28.
Tooth, Artificial. G. O. Burlew. 1,632,241; June 21.
Tooth, Artificial. E. P. Cressler. 1,646,232; Oct. 18.
Toothbrush. D. J. Beynon. 1,616,484; Feb. 8.
Toothbrush. J. B. Buthele. 1,638,939,148, Web. 29.
Toothbrush. B. L. H. Cosby. 1,631,013; May 31.
Toothbrush. F. L. Dalley. 1,646,082; Oct. 18.
Toothbrush. F. L. Dalley. 1,646,082; Oct. 18.
Toothbrush. S. E. Douglass. 1,650,200; Nov. 22.
Toothbrush. S. E. Douglass. 1,650,200; Nov. 22.
Toothbrush. S. E. Douglass. 1,623,330; Mar. 8.
Toothbrush. F. L. Guillekson. 1,625,537; Apr. 19.
Toothbrush. F. M. Krantz. 1,647,453; Nov. 1.
Toothbrush. G. Neumerkel. 1,645,965; Oct. 18.
Toothbrush. G. Neumerkel. 1,645,965; Oct. 18.
Toothbrush. A. R. L. Read. 1,618,475; Feb. 22.
Toothbrush. A. E. Straehly. 1,622,859; June 21.
Toothbrush. R. E. Straehly. Des. 73,249; Aug. 2.
Toothbrush. R. E. Straehly. 1,622,859; June 21.
Toothbrush. R. E. Straehly. 1,622,859; June 21.
Toothbrush. R. M. Withycombe. 1,644,049; Toothbrush. And paste holder. Combined. F. T. S. Cuiffe. Toethorush and paste holder, Combined. E. T. S. Cliffe.
Toethbrush and paste holder, Combined. E. T. S. Cliffe.
1,633,987; Dec. 27.
Toethbrush cover. T. W. Bigoney. 1,653,540; Dec. 20.
Toethbrush, Fountain. S. Perelman. 1,615,999; Feb. 1.
Toethbrush holder. J. P. Hainzigianis. 1,613,655; 1,613,655; Toothbrush holder. R. E. Jordan, Des. 72,998; July 5. Toothbrush holder. C. Vaitulis. 1,633,834; June 28. Toothbrush Moro-driven. G. W. Baird and A. Lamb. Toothbrush, Motor 1,631,3394; June 7.
Toothbrush, Novelty, S. A. Neederman. 1,619,212;
Mar. 1.
Toothbrush, Botary, B. V. Stoll, 1,631,897; June 7.
Toothbrushes and container for same. J. Magee.
1,619,946; Mar. 8.
Toothbrushes, Container for. H. M. Weinberg. 1,651,496; Toothbrushes, Container for. H. M. Weinberg. 1,601,430°; Dec. 6.
Tooth-cleaning device. B. Kuhne. 1,624,054; Apr. 12.
Tooth cutter, Baby's. R. A. Tonks. Des. 72,292; Mar. 22.
Tooth facing. G. Coutif. 1,638,830; Aug. 16.
Tooth guard. J. L. Shapiro. 1,644,244; Oct. 4.
Tooth, Interchangeable. B. P. Cressler. 1,613,744;
Jan. 11. Jan. 11.
Tooth-paste dispenser. R. B. Tracy. 1.642.797; Sept. 20.
Tooth-paste holder. H. Lillford. 1.632.087; June 14.
Tooth-paste holder. E. W. Price. 1.653.414; Dec. 20.
Toothpick. II. Zimmerman. 1.654.230; Dec. 27.
Toothpick dispenser. M. V. Derrick. 1.643.487 Nov. 8.
Toothpick dispenser. Sanitary. F. V. Huggins. 1.653.84; July 19.
Toothpick holder. F. F. Backstrom. 1.618.627; Feb. 22.
Toothpick holder. W. F. Gage. 1.636.598; July 19.
Toothpick holder. C. March. 1.635.947; July 12.
Toothpick holder. C. March. 1.635.947; July 12.
Toothpick holder. C. March. 1.635.947; July 12.
Toothpick holder. M. F. Gage. 1.643.185; Sept. 20.

Top spinner. M. Weinberg. 1.642.280; Sept. 13. Top, Spinning. W. A. Vinson. 1.629.135; May 17. Top, Walking. L. L. Mailard. 1.630.348; May 31. Torch. C. L. Bastian and J. Apstt. 1.639.450; Aug. 16. Torch. L. W. Close. 1,613.819; Jan. 11.

Aug. 16.
Torch. W. H. McNutt. 1,638,498; Aug. 9.
Torch. G. A. Morrison. 1,633,265; June 21.
Torch, Alcohol. W. Olsen. 1,642,260; Sept. 13.
Torch, Aseptic lighting. W. Geulen. 1,625,356
Torch Jurner, Welding. C. E. Chapman. Torch of exhaust machines, Tipping. H. D. Madden and J. J. Higgins. 1.644,644; Nov. 1.

Torch, Gasoline. G. G. Schmidt. 1,620,695; Mar. 15.

Torch Desoline. G. G. Schmidt. 1,620,695; Mar. 15.

Torch Phelating. H. A. Anderson. 1,614,646; Jun. 18.

Torch tips, Making. E. H. Smith. 1,644,157; Oct. 4.

Torch tips, Making. E. H. Smith. 1,651,232; Nov. 29.

Torch Welding. R. D. McIntosh. 1,625,123; Apr. 19.

Torch, Welding. A. Messer. 1,645,337; Oct. 11.

Torches, Turret tip for. C. J. Coberly. 1,633,328; Aug. 16.

Torches, C. D. B. Bach. Des. 72,136; Mar. 8. Aüg. 16.
Torchère. O. B. Bach. Des. 72,136; Mar. 8.
Torchère. O. B. Bach. Des. 72,331; Apr. 5.
Torchère. O. B. Bach. Des. 72,345; Apr. 5.
Torchère. O. B. Bach. Des. 73,467; Sept. 20.
Torchere. O. B. Bach. Des. 73,467; Sept. 20.
Torche articles, Packaging. E. H. Angier. 1,640,022; Torchere, O. B. Bach, Des. 73,467; Sept. 20.
Toric articles, Packaging, E. H. Angier, 1,640,022; Aug 23.
Toric-lens axis, Marking a. L. W. Bugbee, 1,642,575; Sept. 13.
Torpedo, J. J. Barry, 1,630,159; May 24.
Torpedo, J. H. Hammons, jr. 1,641,165; Sept. 6.
Torpedo, C. Kesses, 1,636,307; July 19.
Torpedo, Flying, Kesses, 1,648,804; Nov. 15.
Torpedo, Fallway signal, F. Dutcher, 1,631,857; June 7.
Torque arms or the like, Connection for, F. J. Shook, 1,629,173; May 17.
Torque-cushioning device, R. C. Wilson, 1,617,931; Feb. 15. Torque-cusnioning device. R. C. Wilson. 1,617,931; Feb. 15.
Torque-cushioning means. H. P. Troendly. 1,636,262; July 19.
Torque transmission mechanism. R. S. Miller. 1,636,009; July 19.

July 19.

Torque transmission mechanism. R. S. Miller. 1,636,009;

Torque transmitting member, Flexible. A. S. Macdonald. 1,647,114; Oct. 25.

Torsion balance, Eötvös's. S. Rybár. 1,617,823; Feb. 15.

Tortilla machine. R. Z. Ball. 1,613,867; Jan. 11.

Total and subtotal mechanism. A. Kottmann. 1,647,529;

Nov. 1.

Town 1, H. R. Benson. 1,649,654; Nov. 15.

Tow rope. A. P. Denis. 1,640,183; Aug. 23.

Town rope. G. M. and C. F. Pete. 1,633,702; June 28.

Towing and hauling device. C. Sagar. 1,632,922; June 21.

Towing device. J. B. Bockenogen and E. R. Ames.

Rei 16,575; Mar. 22.

Towing device. J. M. Brown. 1,650,599; Nov. 29.

Towing device. J. M. Brown. 1,650,599; Nov. 29.

Towing device. J. R. Brown. 1,650,599; Nov. 29.

Towing mechanism, Vehicle. A. S. H. Bender. 1,651,365; Dec. 6. Dec. 6.
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Dec. 72.349; Apr. 5.
Dec. 6.
Dec. 72.349; Apr. 5.
Dec. 73.349; Apr. 5.
Dec. 73.349; Apr. 5.
Dec. 73.349; Apr. 75.
Dec. 7 Tower, Baffle. C. M. Alexander. 1.651.354; Dec. 6. Tower, Cooling. F. M. Doyle. 1,647.281; Nov. 1. Tower. Extension. W. M. Baldwin. 1.638.611; Aug. 9. Tower, Extension. R. Royer and J. A. Sognis. 1,644.613; Oct. 4. Towers, Anchor footing for steel. J. W. May. 1,647,925; Nov. 1. NOV. I. Towers, Earth anchor for structural. E. E. Buechele and S. A. Martin. 1,619,651; Mar. 1. Towers, Joint for structural. B. W. Connely. 1,641,801; Sept. 6. Sept. 20.
Top. J. L. Kleinman. 1.616.224; Feb. 1.
Top. F. S. Upham. 1.629.326; May 17.
Top construction. J. H. Bourgon. 1.635.258; July 12.
Top construction. J. H. Bourgon. 1.646.592; Aug. 30.
Top construction. J. H. Bourgon. 1.645.529; Cet. 18.
Top construction. S. Smith. 1.630.54; May 31.
Top. Omnibus. R. T. Senter. 1.653.066; Dec. 20.
Top roll and covering same. H. S. Bristol. 1.616.108; Feb. 1. n. 6.
T. R. Arden. 1.652,137; Dec. 6.
H. C. Barker. 1.624,855; Apr. 12.
F. C. Bender. 1.612,794; Jan. 4.
J. J. Dahlstrom. 1.621,353; Mar. 15.
J. Dellinger. 1,627,319; May. 8.
G. W. Ferguson. 1.613,349; Jan. 4.
G. W. Ferguson. 1.613,349; Jan. 4.
G. W. Ferguson. 1.613,349; Dec. 13.
F. Brull 1.652,934; Dec. 13.
W. D. Groot. 1.635,835; July 12.
H. L. Holloway. 1,614,566; Jan. 11. Toy. Toy. Toy. Toy. Toy. Toy.

E. J. Engstrom and J. W. Benes. 1.639.169:

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Toy. C. W. Huckins. 1,649,533; Nov. 15.
Toy. C. A. Kenney. 1,636,371; July 19
Toy. S. K. Kotolidis. Des. 71,917; Jan. 25.
Toy. F. J. Lemieux. 1,641,175; Sept. 6.
Toy. F. J. Lemieux. 1,641,175; Sept. 6.
Toy. F. J. Lemieux. 1,641,175; Sept. 6.
Toy. W. D. McLaughlin and D. J. Wilkens. 1,646,791; Oct. 25.
Toy. W. Miller. 1,651,960; Dec. 6.
Toy. T. W. Miller. 1,651,960; Dec. 6.
Toy. T. W. Miller. 1,651,960; Dec. 6.
Toy. E. Mueller. 1,646,830; Oct. 25.
Toy. G. H. Parsons. 1,629,635; May 24.
Toy. G. E. Richardson. 1,632,465; June 21.
Toy. G. H. Parsons. 1,629,635; May 24.
Toy. C. E. Richardson. 1,632,465; June 21.
Toy. W. H. Sherrod. 1,634,755; July 5.
Toy. W. H. Sherrod. 1,634,755; July 5.
Toy. W. H. Sherrod. 1,634,285; Apr. 19.
Toy. W. T. Waliace. 1,641,269; Sept. 6.
Toy. O. T. Weuver. 1,634,228; June 28.
Toy. A. Cadde. 1,648,928; Nov. 15.
Toy. F. Zolka. Des. 73,886; Nov. 15.
Toy. Acrobatte. J. O. Cazes. 1,614,434; Jan. 18.
Toy. Acrobatte. J. O. Cazes. 1,614,345; Jan. 18.
Toy. Acrobatte. L. Khight. 1,615,980; Feb. 1.
Toy. Acronautic. L. H. Strayer. 1,625,167; Apr. 19.
Toy. Acronautic. L. Khight. 1,615,980; Feb. 1.
Toy. Acronautic. L. Khight. 1,615,980; Feb. 1.
Toy acroplane. K. C. Spatz. 1,641,607; Sept. 6.
Toy and exerciser, Combined. H. C. Smith. 1,648,745; Nov. 20.
Toy and exerciser, Combined. H. C. Smith. 1,648,745; Nov. 8.
Toy and making same, Mechanical. C. Zabel. 1,644,673; Sept. 6.
Toy. M. Monuming therefor. Wind-operated. E. Ischinger. Nov. 8.
Toy and serciser, Combined. H. C. Smith. 1,648,745; Nov. 8.
Toy and making same, Mechanical. C. Zabel. 1,641,653; Sept. 6.
Toy and mounting therefor, Wind-operated. E. Ischinger. 1,643,820; Ottal mechanism therefor. F. L. Thompson and C. A. Sloper. 1,621,140; Mar. 15.
Toy and sound-emission device, Combined hollow rubber. F. J. Maywaid. 1,615,664; Feb. 8.
Toy animal. R. A. Builer. 1,630,165; Jan. 18.
Toy animal. R. A. Builer. 1,620,165; Jan. 18.
Toy animal. R. B. Ellett. Des. 72,007; Feb. 15.
Toy, Animal. C. W. Mott. 1,621,803; Mar. 22.
Toy animal. R. D. Grove. Des. 73,374; Jan. 4.
Toy animal. R. D. Builett. Des. 73,374; Jan. 4.
Toy animal. R. D. Builett. Des. 73,374; Jan. 4.
Toy animal. R. D. Builett. Des. 73,374; Jan. 4.
Toy animal and rider. C. A. Wetzell. 1,613,425; Jan. 4.
Toy automobile. S. Budde. 1,622,670; Mar. 29.
Toy automobile. G. Hitt. Des. 72,624; June 14.
Toy balloon. J. F. Mulbolland. Des. 72,834; Apr. 5.
Toy balloon. J. F. Mulbolland. Des. 72,331; Apr. 5.
Toy balloon. J. F. Mulbolland. Des. 73,331; Apr. 5.
Toy balloon. J. F. Mulbolland. Des. 73,331; Apr. 5.
Toy balloon. J. F. Mulbolland. Des. 73,331; Apr. 5.
Toy balloon. Valve for. M. Perdue. 1,629,838;
    Toy baschall, Mechanical. 1. C. May 3. Toy baschall, McLandlato. 1.647,494; Nov. 1. Toy bicycle. M. Zanellato. 1.647,494; Nov. 1. Toy block. J. Srofe. 1.642,901; Sept. 20. Toy boat. G. Churus. 1.613,611; Jan. 11. Toy boat. H. L. Cullison. 1.615,611; Jan. 18. Toy boat and its manufacture. R. F. Feck. 1.614,967; Toy boat and the manufacture. R. F. Feck. 1.614,967; Toy boat. 18.
    Toy boat, G. Churus, 1,613,941; Jan. 11.
Toy boat, H. L. Cullison, 1,615,112; Jan. 18.
Toy boat and its manufacture, R. F. Feek, 1,614,967; Jan. 18.
Toy boats, Motor mechanism for, C. Arnold, 1,627,073; May 3, J. S. Machin, 1,630,762; Nov. 29.
Toy bomb, J. S. Machin, 1,630,762; Nov. 29.
Toy building, H. Chase, 1,619,101; Mar. 1.
Toy building, H. Chase, 1,619,101; Mar. 1.
Toy building blocks, G. Barger, 1,647,557; Nov. 1.
Toy, Cane, M. A. Sweet, 1,641,057; Aug. 30.
Toy case, G. R. G. Barger, 1,647,557; Nov. 1.
Toy, Cane, M. A. Sweet, 1,641,057; Aug. 30.
Toy case, G. R. Cudlipp, Des. 72,003; Feb. 15.
Toy, Changeable-feature figure, H. G. Hose, 1,618,710; Toy, Child's, A. E. Keeler, 1,622,198; Mar. 22.
Toy, Clown and animal, E. Bocchino, Des. 72,083; Mar. 1.
Toy, Combined walking and rocking, S. D. Partin, 1,652,132; Dec. 13.
Toy construction element, A. C. Gilbert, Des. 73,604; Oct. 10.
Toy, Dancing, H. K. H. Thomsen, 1,619,446; Mar. 1.
Toy, Dancing, Bure, S. M. Moore, 1,625,955; Apr. 26.
Toy, Dancing, L. K. H. Thomsen, 1,619,446; Mar. 1.
Toy, Onnothing, H. Foerster, 1,632,179; June 14.
Toy dog, P. De Lemme, Des. 72,291; Mar. 15.
Toy dog, W. W. Pioester, P. 22, 27; Mar. 1.
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Toy doll. W. Blackwell. 1,613,157; Jan. 4.
Toy, Drag. A. L. Higgins. 1,617,639; Feb. 15.
Toy, Educational. J. H. Jacobs. 1,634,194; June 28.
Toy, Educational and instructive. O. Zimmermann.
1,614,583; Jan. 18.
Toy, Electric. H. C. Evelyn. 1,637,479; Aug. 2.
Toy electric. H. C. Evelyn. 1,637,479; Aug. 2.
Toy electric railway. L. Caruso. 1,648,245; Jan. 18.
Toy electric railway. L. Caruso. 1,641,245; June 7,
Toy electric railway. L. Caruso. 1,641,712-3; Nov. 1.
Toy electric railway. E. Kosenig. 1,632,245; June 14.
Toy electric rails. Signal for. G. W. Taylor, jr.
Toy electric trains, Signal for. G. W. Taylor, jr.
Toy electric trains, Track for. L. G. Handy. 1,636,416; Tuly from the complex for the complex form of the c Loy, Figure wheel walking. F. R. 1,643,917; Sept. 27.

Toy, Figure wheeled. J. J. Becker. 1,643,917; Sept. 27.

Toy, Figure wheeled. H. W. Dyer. 1,628,309; May 10.

Toy, Figure wheeled. J. A. Ekelund. 1,633,809; June 28.

Toy, Figure wheeled. P. C. Fahlrodt. 1,649,519;

Nav. 15.

May 15. Toy, Figure wheeled. P. C. Fuhlrodt. 1,649,519;
Nov. 15.
Toy, Figure wheeled. L. Marx. 1,653,717; Dec. 27.
Toy, Figure wheeled. A. M. Smolens. Des. 72,194;
Mar. 8.
Toy, Figure wheeled. A. L. Higgins. 1,630,615; May 31.
Toy, Figure wheeled. E. A. Stier. 1,622,473; Mar. 20.
Toy, Figure wheeled. E. A. Stier. 1,622,473; Mar. 20.
Toy, Figure wheeled. B. L. Higgins. 1,630,615; May 31.
Toy, Figure wheeled. B. L. Higgins. 1,630,615; May 31.
Toy, Figure, B. E. Dowd. 1,652,519; Dec. 13.
Toy, Figure, R. E. Dowd. 1,652,519; Dec. 13.
Toy, Figure, S. C. Wilson. 1,644,362; Oct. 4.
Toy for playing with sand. K. Gotz. 1,649,221; Nov. 15.
Toy game board. I. Hagz. 1,627,173; May 57.
Toy Goa and darkie. W. D. Bludworth. Des. 72,470;
Toy, Gravity. B. M. Hawk. Rel.,911; Nov. 22.
Toy, Gravity. B. M. Hawk. 1,617,846; Feb. 15.
Toy, Gravity. Operated figure. F. B. Ruwwe. 1,630,137;
May 24.
Toy greyhound, Mechanical. P. De Lemme. 1,646,814;
Oct. 25.
W. F. Duwcoren 1,629,008; May 24. Oct. 28.
Toy gun. L. V. Aronson. 1,629.608; May 24.
Toy gun. E. E. Dunnegan. 1,652.892; Dec. 13.
Toy gun. E. E. Dunnegan. 1,652.892; Dec. 13.
Toy gun. D. W. Tolled. 1,644.638; Oct. 4.
Toy gun. D. W. Tolled. 1,122.545; Dec. 13.
Toy gun. O. W. A. Tidwell. 1,626.892; May 2.
Toy guns, Missile for. W. A. Tidwell. 1,646.122; Oct. 18.
Toy, Gymnastic. M. Alarcon. 1,629.945; May 24.
Toy, Gymnastic. P. Beser. 1,641.477; Sept. 6.
Toy, Gyratory pan. C. Zabel. 1,625.904; May 2.
Toy, Gyratory pan. C. Zabel. 1,625.904; May 3.
May 3. Briggs. 1,627.426;
May 3. Briggs. 1,627.426;
May 3. Briggs. 1,627.426;
May 3. Briggs. 1,627.426; Toy horse and novelty. A. M. Briggs. 1,627,426; May 3.

Toy horse device. F. Hossell. 1,615,383; Jan. 25.
Toy, Inflatable. R. B. Weimer. 1,632,356; June 14.
Toy, Inflatable. T. F. Winkler. 1,625,969; July 12.
Toy Inflatable. J. F. Winkler. 1,635,969; July 12.
Toy Inflatable. The Minkler. 1,635,969; July 12.
Toy Jointed figure. C. H. Pajeau. Des. 72,964; June 28.
Toy Jighthouse. L. L. Mallard. 1,616,384; Feb. 1.
Toy Loping-pony. C. P. Busha. 1,643,371; Sept. 27.
Toy, Mechanical. J. Berger. 1,619,179; Mar. 1.
Toy, Mechanical. J. Berger. 1,619,179; Mar. 1.
Toy, Mechanical. J. Berger. 1,619,179; Mar. 1.
Toy, Mechanical. J. D. Kroff. 1,625,040; Apr. 26.
Toy, Mechanical. L. D. Kroff. 1,625,040; Apr. 26.
Toy, Mechanical. L. D. Kroff. 1,648,352; Nov. 8.
Toy, Mechanical. L. E. McCoy. 1,620,772; Mar. 15.
Toy, Mechanical. L. E. McCoy. 1,620,772; Mar. 15.
Toy, Mechanical. L. E. McCoy. 1,620,772; Mar. 15.
Toy, Mechanical. L. P. Perey. 1,613,498; Jan. 4.
Toy, Mechanical. L. P. Perey. 1,613,498; Jan. 4.
Toy, Mechanical. L. W. B. Yates. 1,617,933; Feb. 15.
Toy, Mechanical. W. B. Yates. 1,617,933; Feb. 15.
Toy, Mechanical and Mech May 3. Toy, Mechanical golf playing. T. R. Arden. 1,636,117; July 19. Toy, Mechanical jigger. T. R. Arden. 1,614,912; Jan. 18.

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Toy, Mechanically-moved. B. E. 1, 647, 507; Nov. 1. Toy, Mechanically-operated. C. Cross. 1, 647, 507; Nov. 1. Toy, Mechanically-operated. L. Marx. 1, 625, 326; Apr. 19. Toy, Mechanically-operated figure. E. Agnelii. 1, 648, 001; Toy, Mechanicall
Toy, Mechanically-operated figure. E. Agnelli. 1,643,001;
To M. 19. Machanically-operated figure. A. W. Ankeny. 1,631,451; June 7. Toy, Mechanically-operated figure. G. W. Miller. 1,633,548; July 12. Toy, Mechanically-operated figure. H. L. Miller. 1,616,462; Feb. 8. Toy, Mechanically-operated figure. B. F. Morgan. 1,047,637; Nov. 1. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. A. H. and W. A. Fence. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,381; May 10. Toy, Mechanically-operated figure. H. L. Miller. 1,025,3
       Toy or similar article. G. L. Harrison. Des. 73,407; Sept. 6. Toy or similar article of manufacture. F. B. Wendel. Toy of the control of the 
Toy pistol. A. D. Pepin and F. P. W. Haack. 1,613,329; Jan. 4.

Toy plane. S. Harris. 1,618,925; Feb. 22.

Toy pump. J. A. Ross. 1,635,978; July 12.

Toy race course. M. B. Mills. 1,626,420; Apr. 26.

Toy Racing. H. E. McCoy. 1,641,639; Sept. 6.

Toy Racing. H. E. McCoy. 1,641,639; Sept. 6.

Toy Ratile. J. Cohn. 1,617,835; Feb. 15.

Toy Riding. D. Schaeffer. 1,624,627-8; Apr. 12.

Toy ratile. I. Cohn. 1,617,835; Feb. 15.

Toy Riding. D. Schaeffer. 1,624,627-8; Apr. 12.

Toy riding horse. N. W. Plooster. Des. 73,145; July 26.

Toy, Rocking. A. Sundbeck. Des. 72,874-5; June 14.

Toy, Rocking. A. Sundbeck. Des. 72,874-5; June 14.

Toy, Rocking. A. Sundbeck. Des. 72,874-5; June 14.

Toy, Tubber Shooter. H. E. Bell. 1,616,483 Feb. 8.

Toy, Salior. E. V. Babbitt. 1,623,039; Apr. 5.

Toy, Self-propelling. L. L. Weiss. 1,622,144; Apr. 5.

Toy, Self-propelling. W. Birrell. 1,614,227; Jan. 11.

Toy set. J. Forchheimer. 1,632,441; June 14.

Toy, Sille horse and cart. W. D. Bludworth. Des. 72,140; Mar. 8.

Toy, Solider. E. V. Babbitt. 1,621,574; Mar. 22.

Toy soldier. E. V. Babbitt. 1,625,784; Nov. 29.

Toy, Sounding. W. Bartholomae. 1,654,388; Dec. 27.

Toy, Sounding. M. Bartholomae. 1,654,388; Dec. 27.

Toy, Sounding. M. Bartholomae. 1,654,388; Dec. 27.

Toy, Sounding. M. Bartholomae. 1,654,288; Dec. 27.

Toy, Sounding. M. Bartholomae. 1,654,289; Dec. 27.

Toy, Sounding. M. Bartholomae. 1,654,389; Dec. 27.

T
               Nov. 29, Nov. 20, Nov
               Aug. 2.
Toy Structures, Roof-tile beam for. O. H. Straub.
1,62,1,78; Mar. 15.
Toy, Stuffed figure. E. M. Willey. 1,644,317; Oct. 4.
Toy talking machine. L. F. von Sazenhofen. 1,649,271;
Nov. 15.
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O. R. Starke. 1,635,770; July 12. F. Strauss and O. R. Starke.

Toy, Tail-wigging. O. R. Starke. 1,655,770; July 12, 1070; Tail-wigging. F. Strauss and O. R. Sta 1,639,442; Aug. 16. Toy, Target. S. L. Berger. Des. 72,664; May 17. Toy target. S. W. Trout. 1,652,643; Dec. 18. Toy telephone. C. H. Baker. 1,651,080; Nov. 29.

Toy, Tail-wagging.

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Toy telephone, Müsicai. H. Docestie B. Dec. 6. Dec. 7. Dec. 7.
   Aug. 16.
Toy torpedo casings, Composition for, J. Martelli.
1,627,101; May 3.
Toy tracks, Wire-terminal clip for. H. S. Becker.
Toy torpean Casings, Composition for, J. Marten, 1,627,101; May 3.

Toy tracks, Wire-terminal clip for. H. S. Becker, 1,620,428; Max. S. L. Cowen, Re16,589; Mar. 29.

Toy, Trick, J. Leary, 1,613,176; Jan. 4, 170; Trick, J. Leary, 1,613,176; Jan. 4, 170; Trick, J. Leary, 1,613,176; Jan. 7, 170; Trick, J. Leary, 1,613,176; Jan. 7, 170; Trunde, R. Recatti, 1,626,756; May 3.

Toy trunde, R. Recatti, 1,626,756; May 3.

Toy vehicle, A. S. Burke, 1,621,350; Mar. 15.

Toy vehicle, R. de Filippis, 1,627,150; May 3.

Toy vehicle, R. de Filippis, 1,627,150; May 3.

Toy, vehicle, S. M. Mourer, 1,623,208; June 14.

Toy vehicle, S. M. Mourer, 1,624,468; Sept. 18.

Toy vehicle, D. S. Staatt, 1,642,468; Sept. 18.

Toy, vehicle, D. R. Stuart, 1,642,468; Sept. 18.

Toy, vehicle, Hand-propelled, E. A. Calleson, 1,651,583; Dec. 6.

Toy Toy and the Walking, A. L. Whiteside, 1,633,146; Teverson 1,648,201; Sept. 13.
Toy vehicle, Hand-propelled. E. A. Calleson. 1,651,583; Dec. 6.

Toylor Saide walking. A. L. Whiteside. 1,633,146; Toylor Wagon. C. E. Morris. 1,642,591; Sept. 13.

Toy wagon. C. E. Morris. 1,642,591; Sept. 13.

Toy wagon, Body for a. R. Williamson. Des. 73,461; Sept. 13.

Toy, Walking. H. Allison. 1,617,698; Feb. 15.

Toy, Walking. H. Allison. 1,617,698; Feb. 15.

Toy, Walking. H. Allison. 1,632,147; June 21.

Toy, Walking. H. Allison. 1,632,147; June 21.

Toy, Walking. H. Allison. 1,633,147; June 21.

Toy, Wheeled. S. Kiper. 1,623,033; Mar. 29.

Toy, Wheeled. N. Madson. 1,630,192; May 24.

Toy, Wheeled. N. Madson. 1,630,192; May 24.

Toy, Wheeled. C. H. Pajeau Des. 72,778; May 31.

Toy, Wheeled. G. E. Frichett. 1,837,129; July 28.

Toy, Wheeled. G. E. Frichett. 1,837,129; July 28.

Toy, Wheeled. R. Troxell. 1,622,832; Mar. 29.

Toy, Wheeled. R. Troxell. 1,622,832; Mar. 29.

Toy, Wheeled R. Troxell. 1,622,832; Mar. 29.

Toy, Wheeled R. Troxell. 1,622,832; Mar. 29.
Dec. 13.
Track construction. B. H. Lampert. 1,634,835; July 5.
Track construction, Sectional. B. H. Lampert. 1,634,835; July 5.
Track construction, Sectional. W. F. Bossert and J. C.
Edwards. 1,615,186; Jan. 18.
Track detector. G. C. Cleveland. 1,633,572; June 28.
Track detector. G. C. Cleveland. 1,633,572; June 28.
Track detector. S. W. Mitchell, J. Maud, and C. F.
Goldman. 1,619,150; Mar. 1.
Track gauge. A. G. Berkebile. 1,649,550; Nov. 15.
Track gauge. A. G. Berkebile. 1,649,550; Nov. 15.
Track detector. S. Magaton. 1,616,714; Jan. 25.
T. 1,642,444; Oct. 18.
Track installation, System of. H. L. Rogers. 1,649,191; Nov. 15.
Track lagks. C. H. Shastean. 1,466,770, Oct. 15.
Nov. 15.
Track jack. C. H. Shasteen. 1.646.770; Oct. 25.
Track liner. F. R. Sinning. 1.645.825; Oct. 18.
Track-lining device. C. A. Disbrow and W. E. Gadd.
1.627,156; May 3.
Track links, Rubber-tread attachment for. R. H. White.
1.635.596; July 12.
Track portable. W. R. Zesinger. 1.650,254; Nov. 22.
Track roller. R. W. Runge. 1.627,413; May 3.
Track-scale trig loop. J. H. Brant. 1.621,150; Mar. 15.
Track-scale trig loop. J. H. Brant. 1.621,150; Mar. 15.
Track-scale trig loop. J. H. Brant. 1.621,150; Mar. 15.
Track-scale trig loop. J. H. Brant. 1.621,150; Mar. 15.
Track structure. V. Angerer. 1,629,372; May 17.
Track structure. W. L. Delker. 1,645,129; Oct. 11.
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Trackway. G. W. Ray. 1,650,041; Nov. 22.
Trackways, Hanger for overhead. R. S. Northmore.
1,643,749; Sept. 27.
Tracker bar. N. G. Baker. 1,619,690; Mar. 1.
Traction device. T. B. Campbell, jr. 1,614,873; Jan. 18.
Traction device. T. B. Campbell, jr. 1,614,873; Jan. 18.
Traction device. T. B. Campbell, jr. 1,614,873; Jan. 18.
Traction device. T. B. Campbell, jr. 1,614,873; Jan. 18.
Traction driving and power take-off mechanism. A. W.
Haiss. 1,652,476; Dec. 18.
Traction in tich, Automatic. V. H. Lambert. 1,618,714; Feb. 22.
Traction machine. O. J. Martingen. 1,622,034, Mar. 20.
          Traction hitch, Automatic. V. H. Lembert. 1,618,714; Feb. 22.
Feb. 22.
Feb. 23.
Feb. 23.
Feb. 24.
Feb. 25.
Feb. 25.
Feb. 25.
Feb. 26.
Feb. 27.
Fraction wheel. K. Frobst. 1,634,638; July 5.
Fraction wheel. K. Frobst. 1,634,638; July 5.
Fraction wheel. Feb. 26.
Fraction L. Blackmore. 1,651,367; Dec. 6.
Fractor. L. Blackmore. 1,651,367; Dec. 6.
Fractor. E. F. Childers. 1,644,978; Oct. 11.
Fractor. E. F. Childers. 1,644,978; Oct. 11.
Fractor. E. H. Dickmann. 1,643,378; Sept. 27.
Fractor. E. H. Dickmann. 1,643,378; Sept. 27.
Fractor. H. J. Heider. 1,652,958; Dec. 18.
Fractor. A. C. Johnson. 1,638,212; June 28.
Fractor. B. A. Johnson and P. H. Danly. 1,641,813; Sept. 2.
Feb. 26.
Feb. 26.
Feb. 26.
Feb. 26.
Feb. 27.
Fractor. E. A. Johnson 1,638,212; June 21.
Fractor. E. 
                    Tractor.
Tractor.
Sept. 6.
Tractor.
| Tractor. E. A. Johnston and P. H. Danly. 1,641,813;
| Sept. 6, |
| Sept. 6, |
| Tractor. M. Moncreiffe. 1,624,110; Apr. 12. |
| Tractor. W. F. Smith. 1,640,621; Aug. 30. |
| Tractor. L. D. Stripling. 1,643,098; Sept. 20. |
| Tractor. L. D. Stripling. 1,643,098; Sept. 20. |
| Tractor. C. J. Travers, 1,650,668; Nov. 29. |
| Tractor. S. T. Nourtee, 1,616,295; Feb. 1. |
| Tractor. S. T. Nourtee, 1,616,295; Feb. 1. |
| 1,645,224; Oct. 11. |
| Tractor and plow hitch, Automatic. P. M. Heffernan. 1,640,237; Aug. 23. |
| Tractor and plow hitch, Automatic. P. M. Heffernan. 1,640,237; Aug. 23. |
| Tractor attachment. R. Bollheimer and E. T. Wilkens. 1,634,446; July 8. |
| E. G. Calkins. 1,636,733; July 26. |
| Tractor attachment. N. D. and J. A. Newton. 1,641,006; Aug. 30. |
| Tractor attachment. B. F. B. Sewell. 1,622,815; Apr. 5. |
| Tractor brake. F. Mehline. 1,623,357; Aug. 9. |
| Tractor clutches, Device for releasing. L. Hofstad. |
| Tractor coupling device. C. R. Ashbaugh. 1,631,965; Aug. 2. |
| Tractor-cultivator combination. F. V. Donald. 1,641,158; Sept. 6. |
| Tractor-cultivator combination. F. V. Donald. 1,641,158; Sept. 6. |
| Tractor-cultivator combination. F. V. Donald. 1,641,158; Sept. 6. |
                                                        ractor-cultivator combination. F. V. Donald. 1,641,158; Sept. 6.
               Tractor drawbar. B. R. Benjamin and C. R. Raney. 1,636,276; July 19. Tractor drawbar coupling. C. M. Porter. 1,627,998; May 10.
               May 10.
Tractor-driven winches, Frame construction for, H. A. Clark, 1,638,243; Aug. 9.
Tractor, Four-wheeled. F. V. Donald. 1,638,350; June 28.
Tractor, Garden. F. V. Donald. 1,638,762; Aug. 9.
Tractor, Garden. F. V. Donald. 1,638,762; Aug. 9.
Tractor guide. G. R. Knotwell. 1,638,334; June 21.
Tractor guide. B. W. Skelton. 1,618,233; Feb. 22.
Tractor guide. J. E. Smid. 1,632,555; June 21.
Tractor hitch. B. E. Bashor and E. N. Wray. 1,620,937; Mar. 13.
               Tractor hitch.
Tracto
          Oct. 18.

Oct. 1
          Feb. 22.
Tractor mowers, Lifting device for. C. Pearson.
1,627,711; May 10.
Tractor, Roller. R. W. Keeler. 1,631,271; June 7.
Tractor, Roller. R. W. Frigs. 1,922,293; Mar. 22.
Tractor skidder. J. R. McCliffert. 1,639,806; Aug. 23.
Tractor skidder. J. R. McCliffert. 1,639,806; Aug. 23.
Tractor-supported plowing attachment. M. B. Monson.
1,630,676; May 31.
Tractor, Tracking June 2.
Tractor, Tracking June 2. L. Beet. 1,638,140; Aug. 9.
Tractor, Tracking June 2. L. Beet. 1,638,140; Aug. 9.
Tractor, Tracking June 2. B. Headelt. 1,641,531; Sept. 6.
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Tractor-track side plate. C. M. Rasmussen. 1,647,540;
Nov. 1.
Tractor trailer. C. H. Land. 1,621,592; Mar. 22.
Tractor trailer. C. H. Land. 1,621,592; Mar. 22.
Tractor trailer. C. H. Land. 1,627,510; May 10.
Jan. II. H. Land. 1,627,510; May 10.
Jan. II. Tractor trailer coupler. S. B. Winn. 1,631,847; June 7.
Tractor trailer coupler. S. B. Winn. 1,631,847; June 7.
Tractor trailer coupler. S. B. Winn. 1,631,847; June 14.
Tractor, Tractor-trailer coupling device. S. B. Winn.
Tractor, Trand-belt. E. Pearson. 1,632,674; June 14.
Tractor, Trand-belt. E. Pearson. 1,632,674; June 14.
Tractor, Trand-belt. E. W. Young. 1,640,792; Sept. 27.
Tractor wheel. S. R. Darby. 1,643,702; Sept. 27.
Tractor wheel. H. S. Ostdiek. 1,630,025; May 24.
Tractor wheel. W. E. Wine. 1,613,002; Jan. 4.
Tractors, Agricultural attachment for. H. P. Williams. 1,616,099; Feb. 1.
Tractors and other agricultural machinery, Wheel gclp of farm. G. A. McGlegor. 1,644,536; Oct. 4. or. J.
Tractors and their trailers, Coupling means between. J. and L. Coder. 1,626,184; Apr. 26.
Tractors and their trailers, Coupling means between. J. and L. Coder. 1,626,184; Apr. 26.
Tractors and their trailers, Coupling means between. J. and L. Coder. 1,626,184; Apr. 26.
Tractors, Attaching snowplows, back fillers and the like to the drawbars of. C. L. Hussey. 1,646,751; Oct. 25.
Tractors, Attaching snowplows, back fillers and the like to the drawbars of. C. L. Hussey. 1,646,751; Oct. 25.
Tractors, Attaching for the Section of Tractor-track side plate. C. M. Rasmussen. 1,647,540: to the drawbars of. C. L. Hussey. 1,646,751; Oct. 25. Tractors, Attachment for. R. E. Cuttis. 1,636,628; July 19.
Tractors, Attachment for. L. S. Phelps. 1,632,311; Tractors, Attachment for. L. S. Phelps. 1,632,311; Tractors, Brake attachment for. L. H. Judd. 1,636,231; July 19.
Tractors, Brake attachment for. L. H. Judd. 1,636,231; July 19.
Tractors, Children of the July 19.
Tractors, Clutch control for. H. A. Stewart and F. L. Hott. 1,629,530; May 24.
Holt. 1,629,530; May 24.
Tractors, Clutch-control mechanism for. F. O. Peasley. 1,621,427; Mar. 15.
Tractors, Cultivator attachment for. L. Hover. 1,621,427; Mar. 15.
Tractors, Cultivator attachment for. T. F. Rainsford. 1,618,464; Feb. 22.
Tractors, Derrick attachment for. T. F. Rainsford. 1,630,549; May 31.
Tractors, Differential lock for. G. C. Abbe. 1,626,374; Appl. 25.
Tractors, Drawbar attachment for. R. C. Hawkins. 1,632,970; June 14.
Tractors, Drawbar attachment for. R. C. Hawkins. 1,632,970; June 14.
Tractors, Drawbar attachment for. R. L. Tractors, Drive mechanism for. E. H. Lichtenberg, 1,626,680; May 3.
Tractors Tour-wheel-drive transmission for. R. L. Tolson. 1,635,236; July 12.
Tractors, Ladder attachment for Fordson. W. H. Nash. 1,619,788; Mar. 1.
Tractors, Loader attachment for. S. E. Anderson. 1,619,788; Mar. 1.
Tractors, Locamotive railway attachment for. H. E. Rester and G. B. Werckley. 1,618,028; Feb. 15.
Tractors, Locamotive railway attachment for. J. B. Raimer, and A. Rolfs. 1,633,271; June 21.
Tractors, Down taken for. J. H. Wilson. 1,644,765; Oct. 11.
Tractors, Rotary snow-sweeper attachment for. E. Westerman, 2001. 1,623,221; May 17.
Tractors, Rotary snow-sweeper attachment for. R. E. Westerman, 2001. 1,623,221; May 17.
Tractors, Rotary snow-sweeper attachment for. R. S. Westerman, 2001. 1,623,221; May 17.
Tractors, Rotary snow-sweeper attachment for. R. E. Westerman, 2001. 1,623,221; May 17. Raimer, and A. Rolfs. 1,633,273; June 21.
Tractors, Power take-off for, J. H. Wilson. 1,644,765; Oct. 11.
Toct. 11.
Toct. 11.
Toct. 12.
Toct. 12.
Toct. 13.
Tractors, Safety attachment for. E. E. Waterman. 1,625,005; Apr. 19.
Tractors, Safety attachment for. E. E. Waterman. 1,625,005; Apr. 19.
Tractors, Sawing attachment for. J. Mikottis. 1,645,066; Oct. 11.
1,626,371; Apr. 26.
Tractors, Steering attachment for. F. L. Willrodt. 1,639,246; Aug. 16.
Tractors, Steering mechanism for. J. E. Anthony and J. Tractors, Steering mechanism for creepers. L. P. Lipps. 1,620,668; Mar. 15.
Tractors, Steering attachment for. R. B. Otwell. 1,648,056; Nov. 8.
Tractors, Street-cleaning attachment for. R. B. Otwell. 1,648,056; Nov. 8.
Tractors, Street-cleaning attachment for. R. B. Otwell. 1,648,056; Nov. 8.
Tractors, Track chain for. T. C. Lecke. 1,630,089; May. 24.
Tractors, Track chain for. D. L. Gillilland. 1,635,403; July 12.
Tractors, Winch attachment for. J. D. Cummings. 1,650,039; Nov. 22.
Traffic-controlling apparatus, Railway-. G. W. Braughman. 1,644,513; Oct. 11.
Traffic. 10.
Traffic. 20.
Traffic. 10.
Traffic. 20.

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Traffic-controlling apparatus, Railway-. L. V. Lewis, 1,653,363; Dec. 20.

Traffic-controlling apparatus, Railway-. R. A. McCann. 1,632,189; June 14.

Traffic-controlling apparatus, Railway-. R. A. McCann. 1,043,344; Sept. 27.

Traffic-controlling apparatus, Railway-. R. A. McCann. 1,043,344; Sept. 27.

Traffic-controlling apparatus, Railway-. R. A. McCann. 1,649,967; Nov. 22.

Traffic-controlling apparatus, Railway-. R. A. McCann. 1,653,388; Dec. 20.

Traffic-controlling apparatus, Railway-. H. A. Thompson. 1,624,1769; Sept. 6.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,625,262; Apr. 12.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.

Traffic-controlling apparatus, Railway-. H. A. Wallace. 1,653,680; Dec. 27.
  Truffic-gate structure. M. H. Alberts. 1,639,157; Aug. 16.
Traffic governing apparatus, Railway- H. A. Wallace. 1,650,757; Nov. 22.
Traffic guide. C. Stewart and W. A. Russell. 1,651,301; Nov. 29.
Traffic indicator. H. Warburton and G. A. Sherwood. 1,622,932; Mar. 29.
Traffic indicator. A. J. Wehr, A. V. Ellot, and J. W. Sheres. 1,617,393; Feb. 15 ren. 1,636,653; July 19.
Traffic marker, A. R. Hunt. 1,640,830; Aug. 30.
Traffic mortor control, Universal. C. L. Bevan and J. R. Cullen. 1,628,707; May 17.
Traffic, Overcoming great differences of height with high-speed passenger. F. Kruckenberg. 1,633,214; June 21.
Traffic protective structure. W. T. Kyle. 1,643,123; Sept. 20.
  Truffic protective structure. W. T. Kyle. 1,643,123; Sept. 20.

Traffic rails, Treating. H. Karl. 1,626,285; Apr. 26.

Traffic-rails, system. B. S. Taylor and H. E. Young. 1,648,239; Nov. A. Traffic-rails, and the system. Traffic-rails and the system. Traffic signal. L. E. Baitzley. 1,632,211; June 14.

Traffic signal. L. F. Baitzley. 1,632,211; June 14.

Traffic signal. L. F. Barnes. 1,628,706; May 17.

Traffic signal. D. G. Bond. 1,619,562; Mar. 1.

Traffic signal. L. F. Brophys. 1,614,660; Feb. 8.

Traffic signal. L. C. Browning. 1,634,395; July 5.

Traffic signal. H. Cooke, in. 1,643,925; Sept. 27.

Traffic signal. F. F. Dendinger. 1,618,561; Feb. 22.

Traffic signal. F. F. Dendinger. 1,618,561; Feb. 22.

Traffic signal. H. Gross, 1,640,845; Ang. 36.

Traffic signal. A. J. Massey. 1,640,845; Ang. 36.

Traffic signal. C. T. Marton, Des. 74,116; Dec. 20.

Traffic signal. D. Moriss. 1,647,012; Oct. 25.

Traffic signal. C. T. Marton, Des. 74,116; Dec. 20.

Traffic signal. W. Larden, 1,624,900; Apr. 12.

Traffic signal. J. and H. W. Rank. 1,643,955; Oct. 4.

Traffic signal. J. E. Que. 1,638,706; Aug. 9.

Traffic signal. J. R. Seewater. 1,626,876; May 3.

Traffic signal. J. R. Seewater. 1,626,876; May 3.

Traffic signal. J. R. Seewater. 1,626,876; May 3.

Traffic signal. J. Seewater. 1,626,876; May 3.

Traffic signal. Automobile. A. Linctcome. 1,615,949; Traffic signal. L. E. Schmidt. 1,520,576; May 3.

Traffic signal. Automobile. A. Linctcome. 1,615,949; Traffic signal. Dec. 20.

Traffic signal. L. C. Schmidt. 1,520,576; May 3.

Traffic signal. L. C. Schmidt. 1,520,576; May 3.

Traffic signal. L. C. Dec. 1,616,161; Dec. 20.

Traffic signal. L. C. Dec. 1,616,161; Dec. 20.

Traffic signal. L. C. Dec. 1,616,161; Dec. 20.

Traffic signal. L. C. Dec. 1,638,706; Auc. 9.

Traffic signal. L. C. Dec. 1,616,161; Dec. 20.
        Traffic signal, Automobile.
        Traffic signal, Depressible. G. L. Estes. 1,615,576;
Jan. 25.
        Traffic-signal device, Street. J. E. Wright. 1,640,170;
     Trame-signal device, Street. J. E. Wright. 1,040,110; Aug. 23.
Traffic signal for motor vehicles. A. Addrer. 1,614,766; Jan. 18;
Traffic signal for motor vehicles. N. M. Butts, sr. 1,634,978; July 5.
Traffic signal for street crossings, Automatic. M. L. Crawford. 1,632,698; June 14.
Traffic signal for vehicles. J. E. Lock. 1,631,140; June 7.
        Traffic signal, Vehicle. S. A. L. Campagne. 1,653,984;
Dec. 27.
     Dec. 27.

Traffic signal, Vehicle. W. R. Hussar. 1,631,361; July 5.

Traffic signal, Vehicle. E. Kimura. 1,631,273; June 7.

Traffic signals, Anchoring base for. J. and H. W. Rank.

1,650,093; Nov. 22.

W. J. White. 1,635,915; July 12.

Trail connection. T. A. Coulon. 1,627,836; May 10.

Trailer. E. F. Hartwick. 1,630,425; May 31.

Trailer. J. F. Higbee. 1,625,209; Apr. 19.

Trailer. E. A. King. 1,618,094; Feb. 15.

Trailer. C. L. Schaelder and H. C. Fruehauf. 1,613,728;
        Jan. 11.

Trailer, J. F. White. 1.645.467; Oct. 11.

Trailer and power unit for soil pulverizers. H. A. Fretts.

Trailer, Automobile camp. F. Zagelmeyer. 1.650,253;

Nov. 22.

Trailer coupler. W. Mayer. Rei6,731; Sept. 6.

Trailer coupler and brake actuator. F. Cox. 1.613,086;

Jan. 4.
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Trailer coupling. H. P. Williams. 1,626,993; May 3.
Trailer coupling, Automatic. J. Schlagenhauf. 1,649,980;
Nov. 22.
          Nov. 22.
Trailer-coupling device. C. G. Ebert. 1,616,788; Feb. 8.
Trailer-coupling device. The state of the s
              Trailers, Automatic brake for. J. Schlagenhauf.
          Trailers, Steering coupling for. B. J. Murn. 1,644,264;
Oct. 4.
Trailers, Steering gear for. F. M. Reid. 1,637,456;
          Adverse Steering gear for, F. M. Reid. 1,087,480; Tash: control. A. R. Angus. 1,624,524; Apr. 1,22 Train control. C. S. Bushnell. 1,620,188; Mar. 8. Train control. C. S. Bushnell. 1,628,483; May 10. Train control. C. S. Bushnell. 1,628,483; May 10. Train control. C. A. Campbell and E. C. Yvoman. 1,630,234; May 24. Carter. 1,654,491; Dec. 27. Train control. P. E. Carter. 1,654,491; Dec. 27. Train control. O. H. Dicke. 1,654,116; Dec. 27. Train control. O. H. Dicke. 1,645,203; Jan. 18. Train control. O. H. Dicke. 1,654,116; Dec. 27. Train control. W. K. Howe. 1,628,319; May 10. 1,647,968; Nov. 1. Train-control apparatus. T. E. Clark. 1,619,290; Mar. 1.
              Aug.
          Mar. 1.
Train-control apparatus.
       Mar. 1.
Train-control apparatus. T. E. Clark. 1,646,683;
Train-control apparatus, Railway. P. H. Gelger. 1643,337 Sept. 27.
1644,338 Sept. 27.
1741 Control, Automatic. J. S. London. 1,652,948;
Dec. 13.
Train control, Automatic. D. H. Schweyer. 1,624,118;
Apr. 12.
Train-control, Automatic. D. H. Schweyer. 1,624,118;
Apr. 12.
Train-control device. T. H. Thomas. Re16,663; June 28.
Train-control device. T. H. Thomas. 1,644,561; Oct. 4.
Train-control device. Automatic. G. H. Sanborn. 1,634,191; June 28.
Train-control device. Automatic. G. F. Sanborn. 1,634,191; June 28.
Train-control device. T. H. Thomas. 1,644,561; Oct. 4.
Train-control device. Automatic. G. F. Sanborn. 1,634,191; June 28.
Train-control device. T. H. Thomas. 1,644,561; Oct. 4.
Train-control device. T. H. Thomas. 1,645,61; Oct. 4.
Train-control device. T. H. Thomas. 1,645,625; Oct. 4.
Train-control device. T. H. Thomas. 1,645,625; Oct. 4.
Train-control device. T. H. Thomas. 1,645,645; Oct. 4
                                                                                                                                                                                                                                                                                                                                                                         T. E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Clark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.646.683:
          Man. 1. 100 system. 1. D. and 3. D. Clark. 1,010,289; Train-control system. 1,626,833; May 3. Train-control system. A. B. Kendall and B. W. Meisel. 1,631,597; June 7. Train-control system. P. W. Mosher. 1,649,970;
Train-control system, P. W. Mosher. 1,649,970; Nov. 22.

Train-control system, Absolute-permissive block. W. W. Wenbolz. 1,623,023; Mar. 29.

Train-control system, Automatic. W. K. Howe. Train-control system, 1,614,403; Jan. 11.

Train-control system, Automatic. E. C. Stafford. 1,628,634; May 10.

Train-control system, Continuous. T. E. and J. E. Clark. 1,646,654; Oct. 18.

Train-control system, Continuous inductive. W. W. Salmon. 1,647,970; Nov. 1.

Train-control system, Intermittent inductive. W. R. McCathran. 1,645,655; Oct. 18.

Train-control system, Secular System, 1,631,361; June 7.

Train-control systems, Conductor for. T. E. Clark. 1,663,361; June 7.

Train-control systems, Conductor for. T. E. Clark. 1,646,654; Oct. 25.

W. H. Reichard. 1,654,487; Dec. 27.

Train-control systems, Train-carried receiver for automatic. H. O. Holte. 1,643,371; Sept. 27.

Train-control systems, Train-carried receiver for automatic. H. O. Holte. 1,643,571; Sept. 27.

Train-control systems, Train-carried receiver for automatic. C. H. Zlerdt. 1,628,269; May 10.

Train-lighting apparatus. E. Summer. 1,645,207; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,748; Train-control connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 connector. Automatic. J. Robinson. 1,642,769; Oct. 17 in 1910 control systems. In 1910 connector. Automatic. J. Ro
       Train-line connecter, Automatic. J. Robinson. 1,842,748; Sept. 20. Train-line switch, Electric C. C. Farmer. 1,841,071; Aug. 50. Train-pipe connecter. G. E. Baldwin. 1,830,998; May 31. Train-pipe connecter, Automatic. M. A. Barber. 1,844,975; Oct. 11. Train-pipe connecter, Automatic. C. A. Kothe. 1,829,578; May 24.
       Triting connecter, Automatic. E. A. Robinson. 1,645,655; Oct 11.
Triting pipe connecter, Automatic. J. Robinson. 1,631,551-2; June 7.
Train-pipe connecter, Automatic. J. Robinson. 1,632,531-32; June 21.
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Train-pipe connecter, Automatic. J. Robinson. 1,634,851; July 5.
                 July 5.
Train-pip connecter, Automatic. J. V. Robinson.
1,650,552; May 52.
1,650,555; Nov. 29.
Train-pipe coupler, R. T. Lowe.
Train-pipe coupling, C. Eichhorn. 1,659,464; Mar. 1.
Train-pipe coupling, Automatic. J. Robinson. 1,632,714;
June 14.
              Train-pile coupling, Automatic. J. Robinson. 1,633,679; Mne 28, Train-pipe coupling, Automatic. J. Robinson. 1,635,345; July 12. Train, Railway. L. Collis. 1,634,490; July 5. Train-signal system. E. C. Stafford. 1,614,400; Jan. 11. Train signaling and controlling system. J. Szuchy. 1,638,763; Aug. 3, speed-controlling spparatus, Automatic. W. A. Frowne. 1,642,976; Oct. 4. Train-stopping device, Automatic. F. Mignogne. 1,643,446; Oct. 4. Train-stopping device, Automatic. F. Mignogne. 1,644,346; Oct. 4. Train-strangenear to protect running. S. A. Spantaling apparatus. H. P. Olcott. 1,636,753; July 26. Trains, Arrangenear to protect running. S. A. Spantanis, Average-specific conding means for radiway. T. R. Mills. 1,627,52; May 3. Trains, Control of. A. R. Angus. 1,630,613; May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. Trains, Control of. A. R. Angus. 1,630,611, May 31. May 31. 
                     Train-pipe coupling, Automatic. J. Robinson. 1,633,679;
June 28.
                                                                                                      lesign. J. Moores. 1,623,357; Apr. 5.
device for invalids. E. Cole. 1,635,575;
                     Transfer mechanism.
Transfer mechanism.
Transfer medium for metallizing purpose.
1,627,088; May 3.
Transfer print and making the same. T. S. Reese.
1,627,088; May 3.
Transfer print and making the same. T. S. Reese.
Transfer select.
T. W. Morse. 1,620,981; Mar. 15.
Transformer. T. D. Adair, jr. 1,634,440; July 5.
Transformer. C. Bergman. 1,631,956; June 7.
Transformer. C. Bergman. 1,631,956; June 14.
Transformer. E. G. Danielson. 1,630,693; May 31.
Transformer. H. H. de. 1,652,203; Dec. 13.
Transformer. W. Kummerer. 1,635,794; July 12.
Transformer. E. Motter. 1,653,504; Dec. 13.
Transformer. T. J. Murphy. 1,629,836; May 24.
Transformer. T. S. Lames. 1,635,047; June 21.
Transformer. W. J. Schermerborn. 1,612,947; June 21.
Transformer. E. L. Transformer. E. L. Transformer. E. A. Wagner. 1,635,044; July 5.
Transformer. E. L. Trublen. 1,634,223 sury 5.
Transformer. E. A. Wagner. 1,635,064; Peb. 8.
Transformer. A. H. Wegner, 1, 1,616,645; Peb. 8.
                   Transformer, Ar. M. Wegner, Jr. 1,610,640; Pete 338,966; Transformer, Air core, E. B. Holman. 1,632,101; June 14.
Transformer, Amplifying. C. H. Thordarson. 1,632,101; June 14.
Transformer, And mounting therefor. W. Dumke. 1,647,612; Nov. 1.
Transformer, Aulo. K. Palueff. 1,640,424; Aug. 30.
Transformer, Aulo. K. Palueff. 1,640,424; Aug. 30.
Transformer, Dailo. S. Horelick. 1,641,270;
                 Transformer, Courter for electric-are utility and welding apparatus. F. C. Owen, 1.618,629; Mar. 1. Transformer for are cutting, repuiring, and welding apparatus. F. C. Owen, 1.618,629; Mar. 1. Transformer, Current J. F. Peters, 1.640,554; Aug. 30. Transformer for are cutting, repuiring, and welding apparatus. F. C. Owen, 1.618,629; Mar. 1. Transformer, F. C. Owen, 1.618,629; Mar. 1. Transformer, Frequency, T. J. Fay. 1.644,332; Oct. 4. Transformer, Frequency, T. J. Fay. 1.644,332; Oct. 4. Transformer, High-frequency, K. Schmidt, 1,613,772; Jan. 11.
                   Jan. 11.
Transforming machine with symmetrically subdivided flux for the control of traction motors or the like. A. D. Riccia. 1.645.066; Oct. 18.
Transformer, Single-phase. W. Köchling. 1.653.107; Dec. 20.
Transformer tank. R. V. Bingay. 1.641.248; Sept. 6.
Transformer-tap changer. S. Horelick. 1.641.271; Sont. 6.
                     Sept. 6. Transformer, the changing device. H. A. Travers. Transformer winding. S. Horelick. 1.641.272; Sept. 6. Transformer winding. J. F. Peters. 1.632.097; June 14. Transformer winding for. A. W. Thompson. 1.621.039; Mar. 15.
                     Arasionmer winding. J. F. Peters. Loo2097: June 14. Transformers. Angl. ring for. A. W. Thompson. Transformers, Arrangement for transporting large. A. Zelewski. 1,615,667; Jan. 25. Transformers, Treating liquid-insulated. E. Stenkvist. 1,626,213; Apr. 26.
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Transformers, Voltage regulator for. A. Rooth. 1,626,970; May 3. Transformers, Winding. G. F. Niemann. 1,639,145; Transformers, Whotings
Aug. 16.
Transforming system. H. K. Sandell. 1,634,853; July 5.
Transit system. P. Sachs. 1,616,554; Feb. 8.
Transit system. P. Sachs. 1,645,026; Oct. 11.
Translating apparatus. F. C. Willis. 1,654,062; Dec. 27.
Translating device. O. E. Buckley, 1,613,927; Jan. 11.
Translating device. T. W. Case. 1,638,472; Jan. 9.
Translating device. M. C. Hopkins. 1,630,009; May 24.
Translating device. E. C. Wente. 1,635,555; Aug. 9.
Translating device, E. C. Wente. 1,635,555; Aug. 9.
Translating device, Electric. W. M. Bruce, jr. 1,640,749; Translating device. E. C. Wente. 1.633.555; Aug. 9. Translating device, Electric. W. M. Bruce, jr. 1,640,749; Aug. 30. Translating device, Electric. W. M. Bruce, jr. 1,640,749; Aug. 30. Translation and A. Ereea. 1,441,15; Oct. 4. Ereea. 1,441,15; Oct. 4,41,15; Oct. 4,4
 Transmission case, Mar, 29.
 Transmission casing.
 C. R. Short.
 1,644,749;
 Oct.
 11.

 Transmission chock.
 N. W. Raphnel.
 1,051,227;

 Transmission circuits.
 D. F. Whiting.
 1,632,104;

 Transmission control.
 J. H. Butler.
 1,626,718;
 May 3.

 Transmission control.
 F. H. Graham.
 1,641,425;
 Sept. 6.
Transmission control. R. W. Keeler. 1.629
Transmission control. R. L. Wegel. 1.629,666; May 24. 1,613,422-3; Transmission control mechanism, C. Cotta, 1,638,149; Aug. 9.
Transmission cover for Fords, R. A. Linquist, 1,625,555; Apr. 19.
Transmission delay, Method and apparatus for measuring. H. Nyquist, 1,645,618; Oct. 18.
Transmission device, R. A. Burtholomew, 1,651,862; Transmission device, R. A. Burtholomew, 1,651, Transmission device. R. A. Derindomer.
Dec. 6.
Transmission. Equalization of. M. E. Strieby and C. H.
Fetter. 1,624,023; Apr. 12.
Transmission gearing. C. E. F. Ahim. 1,627,368; May 3.
Transmission-housing cover-locking means. C. L. Johnson. 1,632,656; June 14.
Transmission, Hydraulic. W. Ferris. 1,619,200; Mar. 1.
Transmission, Hydraulic. W. Ferris. 1,647,699; Nov. L.
Transmission, Hydraulic. W. Ferris. 1,647,699; Nov. L.
Transmission, Hydraulic. B. G. Jacker. 1,624,663;
Apr. 12. Apr. 12.
Transmission-level-control system. R. K. Potter. 1,644,745; Oct. 11.
Transmission line, Nongrounded. L. H. Crook. 1,645,643; Transmission lines, Apparatus and method for regulating attenuation and phase on. H. Nyquist. 1,615.911; attenuation and phase on. H. Nyquist. 1,019,311;
Feb. 1, 160 lock. R. N. Flint. 1,131,368; Jan. 11.
Transmission lock. W. M. Reason. 1,631,157; June 7.
Transmission lock. W. M. Reason. 1,641,992; Sept. 13.
Transmission lock. A. M. Wiswell. 1,643,480; Sept. 27.
Transmission lock. A. M. Wiswell. W. M. Reason. 1,162,319; Apr. 5.
Transmission lock. A. M. Wiswell. W. M. Reason. 1,162,319; Apr. 5.
Transmission lock. A. M. D. Phelan. 1,640,370; Transmission means, Rotary. M. D. Phelan. 1,640,370; Aug. 30.

Transmission mechanism. R. Beyer. 1.642.763; Sept. 20.

Transmission mechanism. R. A. Fontaine. 1,626,229;
Apr. 26.

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Transplanter. H. Synck. 1,651,851; Dec. 6
Transnitter. R. E. Vaughan and W. S.
1,634,967; July 5.
Transmitter apparatus. F. Lowenstein.
    Transmission mechanism.
                                                                                                                         J. C. Heyda.
                                                                                                                                                                                                    1,631,590;
    June 7.
Transmission mechanism. H. L Johnston.
                                                                                                                                                                                                    1.651.822:
                                                                                                                                                                                                                                                                                                                  apparatus.
             Dec. 6
                                                                                                                                                                                                                                                          Transmitter circuit. H. Paull. 1,647,659; Nov. 1.
Transmitter circuit. H. Paull. 1,647,659; Nov. 1.
Transmitter, Glow-discharge. J. Slepian. 1,626,636;
   Transmission
                                                                                                                           C.
                                                                                                                                           B. Kurtz.
                                                                                                                                                                                                    1,619,477;
                                                               mechanism.
    Mar. 1.
Transmission
                                                            mechanism
                                                                                                                                          R
                                                                                                                                                           Oliver
                                                                                                                                                                                                   1 624 968 .
    Apr. 19.
Transmission mechanism.
                                                                                                                      J.
                                                                                                                                           10.
                                                                                                                                                               Ovren.
                                                                                                                                                                                                   1,627,196;
                                                            mechanism.
                                                                                                                              I.
                                                                                                                                                Packard.
                                                                                                                                                                                                   1.613.190:
   Jan. 4.
Transmission mechanism. C. Pulliam.
Nov. 8.
Transmission mechanism. C. E. Starr. 1,62:
Transmission mechanism. J. M. Ulrich.
                                                                                                                                                                                                   1 648 027 .
                                                                                                                                                                       1,623,212; Apr. 5.
    July 5.
Transmission mechanism. J. B. Whitlow.
                                                                                                                                                                                                  1.645.841:
   Oct. 18.
Transmission mechanism, Fluid-. C. Potter.
                                                                                                                                                                                               1.623.206:
Transmission mechanism, Hydraulle power. T. F. Lilly. 1645,245; Oct. 11.

Transmission mechanism, Mcchanical shifting means for C. J. Trunck. 1,653,072; Dec. 20.

Transmission mechanism, Motor-vehicle. E. L. Harry. 1,623,724; Apr. 5.

Transmission mechanism, Motor-vehicle. J. A. Stumpen-Transmission mechanism, Motor-vehicle. J. A. Stumpen-Transmission mechanism, Fower. R. B. Butterbaugh. 1,651,371; Dec. 6.

Transmission mechanism, Selective. B. F. Schmidt. 1,637,093; Aug. 2.

Transmission mechanism, Selective. B. F. Schmidt. 1,637,093; Aug. 2.

Transmission mechanism, Transbe-speed. G. W. Dallimore. 1,644,188; June 28.

Transmission mechanism, Selective. J. A. Heany. 1,616,658; Feb. 8.

Transmission, Multiple-unit electric. J. A. Heany. 1,616,658; Feb. 8.

Transmission, Multiple-unit electric. J. A. Heany. 1,616,658; Feb. 8.

Transmission, Multiple-unit electric. J. A. Heany. 1,624,551; Apr. 12.
   Apr. 6.

Transmission mechanism, Hydraulic power. T. F. Lilly.
1,645,246; Oct. 11.

Transmission mechanism, Mechanical shifting means for.
                                                                                                                                                                                                                                                        Transportation means, Aerial cable.
1,628,827; May 17.
Transportation, System of. H. J. I
Nov. 15.
   Apr. 12.

Transmission of angular motion, System for the. E. M. Hewlett and W. W. Willard. 1,637,039; July 26.

Transmissions of automobiles, trucks, and other motor vehicles, Device for locking the, J. H. Corey. 1,653,549; Dec. 20.

Transmission of energy b high-frequency impulses, Method and apparatus for the. R. A. Fessenden. 1,617,241; Feb. 8.

Transmission of pictures by electricity. A. Weaver. 1,653,074; Dec. 20.

Transmission of pictures by electricity. A. Weaver. 1,653,074; Dec. 20.
                                                                                                                                                                                                                                                         Transportation system.
June 14.
Transportation unit.
Feb. 15.
                                                                                                                                                                                                                                                                                                                                                                         H.
                                                                                                                                                                                                                                                                                                                                                                                           E.
                                                                                                                                                                                                                                                                                                                                                                                 W.
                                                                                                                                                                                                                                                                                                                                                              H.
                                                                                                                                                                                                                                                          Transportation unit.
                                                                                                                                                                                                                                                                                                                                                              H.
    Oct. 4.
Transmission or brake band. W. F. Polson.
                                                                                                                                                                                                    1,638,211:
    Aug. 9.
Transmission or brake band. J. C. Webb. 1,622,477;
                                                                                                                                                                                                                                                          Trap : See
    Mar. 29.
Transmission regulation. J. S. Jammer.
                                                                                                                                                                                                                                                                    Animal trap.
                                                                                                                                                                                                    1,623,600;
                                                                                                                                                                                                                                                                   Ant trap.
Boiler-feed trap.
      Transmission regulation. J. S. Jammer.
                                                                                                                                                                                                    1,642,499;
                                                                                                                                                                                                                                                                   Boiler-feed trap.
Bucket trap.
Direct-return trap.
Double-acting trap.
Drain trap.
Drum trap.
Fish trap.
Flea and insect trap.
Game trap.
Game trap.
Greese trap.
Greese trap.
    Sept. 13.
Transmission, Speed-varying. J. M. Simpson. 1,631,939;
June 7.
    Transmission system.
                                                                                                                           M.
                                                                                                                                                   Bascom.
                                                                                                                                                                                                    1,632,817;
                                                                                                       H.
    Transmission system. H. M. Bascom, 1,632,817;
June 21.
Transmission system. F. G. Baum. 1,617,007; Feb. 8.
Transmission system. R. D. Evans. 1,640,539-40; Aug.
  Transmission system. R. V. L. Hartley. 1,629,100; May 17.
Transmission system. B. G. Polimann. 1,642,3480; Apr. 5.
Transmission system. B. G. Polimann. 1,644,393; Oct. 4.
Transmission system. E. Vroom. 1,615,967; Feb. 1.
Transmission system. E. Vroom. 1,615,967; Feb. 1.
Transmission system. W. V. Wolfe. 1,622,640; Apr. 26.
Transmission system. W. V. Wolfe. 1,622,646; Apr. 12.
Transmission system. W. V. Wolfe. 1,624,646; Apr. 12.
Transmission system.
      Transmission system.
                                                                                                           C
                                                                                                                             Τ,
                                                                                                                                           Fortescue.
                                                                                                                                                                                                    1.651.519:
                                                                                                                                                                                                                                                                  Game trap.
Grease trap.
Hammer-blow steam trap.
Impaling animal trap.
Impaling trap.
Insect trap.
Minnow trap.
Moisture trap.
   Trans.
Dec.
    Dec. 27.
Transmission system, Frequency selective. R. V. L. Hartley, 1,654,123; Dec. 27.
Transmission system, High-frequency sound. C. A.
Sprague, 1,616,639; Feb. 8.
Transmission tool. J. B. Des Rosters. 1,614,426;
    Transmission system, High-frequency sound. C. A. Sprague. 1,616,639; Feb. 8.
Transmission tool. J. B. Des Rosters. 1,614,426; Transmission tower, Universal. P. H. Thomas. 1,616,932; Feb. 8.
Transmission unit. Air vent for. G. W. Rydner. 1,639,670; Aug. 23.
Transmission, Variable. L. P. Erb. 1,617,380; Feb. 15.
Transmission, Variable Speed. J. L. Allen. 1,615,432; Transm
    Jan. 25.
Transmission wires. Spreader arm for. A. De Vries. Des. 73.496; Sept. 20.
Transmissions and the like, Casing for. E. R. Hewitt and A. H. Leipert. 1,631,201; June 7.
and A. H. Leipert. 1,631,201; June 7.
E. Winckler. 1,644,506; Oct. 11.
Transmissions, Lubricant control for. J. T. Wright. 1,645,504; Oct. 11.
Transmissions, Preventing chattering in. C. B. Epperson. 1,633,440; June 21.
Transmitter. J. G. Roberts. 1,650,740; Nov. 29.
Transmitter. J. Steplan. 1,626,635; May 3.
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Transmitter, Glow-discharge. P. Thomas. 1.626.645: May 3.
Transmitter, Glow-discharge. P. Thomas.
May 3.

May 3.

Twin-blade. C. F. Jenkins. Transmitter, Twin-blade, C. F. Jenkins, 1,644,382; Oct. 4.
Transmitter, Twin-light-cell. C. F. Jenkins. Sept. 20.

Transmitting apparatus utilizing the principle of the Wheatstone bridge. E. Schneider. 1,626,569 Apr. 26.

Transmitting coded currents, Apparatus for. A. J. Sorensen. 1,620,169; Mar. S. Transmitting device, Impulse. J. G. Blessing. 1,641,616-7; Sept. 6.

Transmitting device, Impulse. J. G. Blessing. 1,541,616-7; Sept. 6.

Transmitting mechanism, C. C. Balston. 1,631,672; June 7, June 7, 1.642,733: Transmitting or measuring variable conditions, System for. E. Boucka. 1,638,103; Aug. 9.
Transmitting or reproducing sound, Apparatus for. S. G. Brown. 1,639,588; Aug. 10.
Transmitting variable conditions. E. Roucka. 1,641,137-8; Sept. 6.
Transmitting variable conditions, System for. E. Roucka. 1,638,105; Aug. 9.
Transoms and fittings. L. C. Baugh. 1,654,400; Dec. 27.
Transoms, Actuating device for door and window. J. F. Clarke. 1,641,738; Sept. 6.
Transport stand. E. A. White. 1,638,693; Aug. 9.
Transport stand. E. A. White. 1,618,907; Mar. 8.
Transportation container. M. Gross. 1,641,030; Aug. 30. L. L. Custer. H. J. Liebl. 1 649 535 -Taylor. 1.617.852: Kirchner. W. Kirchner. 1.649.598: Transporting box, Motor-vehicle. E. S. Evans. 1,641,026; Transporting box, Motorvenice. E. S. Evaus. 1944,020, Aug. 30.
Transporting jack. T. C. Rowell. 1,614,764; Jan. 18.
Transporting sick and wounded, Device for. H. Friedmann. 1,618,873; Feb. 22. Mole trap. Mouse or rat trap. Mouse trap. Rat and mink trap. Rat trap. Radiator ret Return trap. Rodent trap. Sand trap. return trap. Sanitary bedbug Self-sealing trap bedbug trap. Snare trap.
Steam trap.
Target trap.
Thermostatic trap. Tilting trap Vermin trap Water-line t Trap. G. A. Abramson. 1,010,000.

Trap. S. M. Coffman and W. M. Eider. 1,020.

Trap. S. M. Coffman and W. M. Eider. 1,020.

Trap. H. J. Corson. 1,625,702; Dec. 13.

Trap. H. J. Corson. 1,625,702; Dec. 13.

Trap. G. C. Bransance: 1,645,005; Oct. 11.

Trap. F. Forlin. 1,630,419; May 31.

Trap. F. Forlin. 1,630,419; May 31.

Trap. S. C. Kinzer. 1,023,925; Apr. 5.

Trap. C. March. 1,629,402; May 17.

Trap. R. and O. L. Mueller. 1,638,545; Aug. 9.

Trap. H. Parris. 1,043,4315; Sept. 27.

Trap. W. S. Poe. 1,653,411; Dec. 20.

Trap. C. R. Rullson. 1,016,24,448; Apr. 12.

Trap. C. W. R. 11800.

Trap. J. E. Workman. 1,623,515; Apr. 5.

Trap. J. E. Workman. 1,623,515; Apr. 5.

Trap. J. E. Workman. 1,623,515; Apr. 5.

Trap. A. E. C. White. 1,658,244; Dec. 20.

Trap. J. E. Workman. 1,623,515; Apr. 5. Trap. G. A. Abramson. 1,616.882; Feb. 8. Trap. S. M. Coffman and W. M. Elder. 1,620,950; 1.634.463: Trap and strainer, Liquid. H. A. Hills. 1,002,200, July 5. Trapdoors, Operating mechanism for car-vestibule. A. A. Constantine. 1,631,307; June 7. Trap fitting, Sanitary. R. N. Murphy. 1,644,941; Oct. 11. Trap for catching crabs. C. H. A. Petersen. 1,619,866; Mar. 1. Trap for rodents. W. F. Carlton. 1,649,663; Nov. 15. Trap nest and front therefor. E. H. Mitchell. 1,637,005; July 26.

6. D. Leland.

Trap-nest attachment. M. J. Moore. 1,619,527; Mar. 1. Trap-nest door for poultry. A. R. Hoeft. 1,634,147; June 28.

Trap set. W. J. Simmons. 1,617,424; Feb. 15.
Traps, Door-controlling device for. A. T. Senecal.

Transb burner. R. P. Holman. 1,629,162; May 17.
Travel bag. M. C. Holbrook. 1,651,706; Dec. 6.
Traveling bag. L. N. Doud. 1,641,747; Sept. 6.
Traveling bag. L. N. Doud. 1,641,747; Sept. 6.
Traveling bag. H. L. Kennedy. 1,636,669; July 19.
Traveling bag. H. L. Kennedy. 1,636,669; July 19.
Traveling bag. H. L. Kennedy. 1,636,669; July 24.
Traveling bag. H. Yanovsky. 1,651,171; Nov. 29.
Traveling bag. H. Yanovsky. 1,651,171; Nov. 29.
Traveling bag. H. Yanovsky. 1,651,171; Nov. 29.
Traveling case. A. B. Deitsch. 1,614,108; Jan. 11.
Traveling case. A. B. Deitsch. 1,614,108; Jan. 11.
Traveling lawn sprinkler. W. C. Todd and J. W. Pomeroy. 1,616,769; Feb. S.
1,613,769; Feb. S.
1,614,734; Sept. 6.
Traveling structures, Safety device for. R. E. Brown. 1,642,988; Sept. 20.
Traveling structures, Safety stop for. A. F. Case. 1,641,734; Sept. 6.
Traverse shapers, Manufacturing quick. W. F. Zimmermann. 1,616,186; Jan. 18.
Tray. R. E. Clarke, 1,630,883; May 31.
Tray. F. M. Rosin. Des. 72,966; June 28.
1,644,734; Combined binder. R. R. Webb.
Tray and table, Combined. L. A. Phalon. 1,627,454; May 3.
Tray, Ash. A. Janer, Re16,628; May 24.
Tray, Ash. A. Janer, Re16,628; May 24.
Tray, Ash. J. R. Naugle. 1,624,621; Apr. 12. Trap-nest attachment. M. J. Moore. 1,619,527; Mar. 1. Trap-nest door for poultry. A. R. Hoeft. 1,634,147; May 3.
Tray, Ash. A. Janer, Rel6,628; May 24.
Tray, Ash. I. R. Naugle. 1,624,621; Apr. 12.
Tray, Bridge-table, L. Levien. Des. 74,016; Dec. 6.
Tray, Card-index. G. H. Dawson. 1,640,337; Aug. 30.
Tray, Card-index. G. H. Dawson. 1,640,337; Aug. 30.
Tray, Combined ash and pipe. G. W. Lilienthal. Des. 74,017; Dec. 6.
Tray cover or the like, Lace. S. N. Mallouk. Des. 72,226; Mar. 8.
Tray cover or the like, Lace. S. N. Mallouk. Des. 72,226; Tray, Desk. P. Mathewson. 1,645,151; Oct. 11.
Tray-discharging mechanism. S. Schiff. 1,639,061; Aug. 316. Tray-discharging mecanaman.

Aug. 16.

Tray, Filing. N. S. Welk. 1,653,937; Dec. 27.

Tray for gas and liquid contact apparatus. E. Jordan.

Tray for relish or the like, Service. W. L. Orme.

Des. 72,491; Apr. 19.

Tray or analogous article. P. Criccho. Des. 72,899;

July 5.

Tray be distillar article. R. R. Kintz. Des. 72,899; Tread grip. C. L. Hoff. Reif.689; July 19.
Tread grip. C. L. Hoff. Reif.689; July 19.
Tread wheel, Flexible-. W. C. Starr. 1,834,048; June 28.
Treads, System of making. G. W. Bulley. 1,624,826; Apr. 12.
Treadies, Adjustable extension for. A. S. Greenberg.
Treading, Adjustable extension for. A. S. Greenberg.
Treating a mixture such as chaff and cracked coffee.
Apparatus for. J. L. Kopf. 1,649,781; Nov. 15.
Treating animal tissue and products obtained therefrom.
F. W. Weber. 1,621,965; Mar. 22.
Treating articles, Apparatus for. H. M. Robertson.
1,628,742; May 17.
Jan. 18.
Treating freesh fruit, Method and apparatus for. E. M.
Treating freesh fruit, Method and apparatus for. E. M. Jan. 18.

Treating fresh fruit, Method and apparatus for E. M. Brogden. 1,641,112; Aug. 30.

Troating materials. H. G. Lykken. 1,613,042; Jan. 4.

Treating one fluid by another, Method of and apparatus for. S. J. Dickey. 1,652,389; Dec. 13.

for. S. J. Dickey. 1,652,389; Dec. 13.

Treating pasteboard. J. M. Brown. 1,614,869; Jan. 18.

Treating pattents by bodily movements, Apparatus for. V. J. Pearse. 1,641,033; Aug. 30.

Treating petroleum emulsions. C. C. Averill. 1,617,738; Feb. 15.

Treating products of fiber and making same, Composition for. C. R. Felix. 1,648,116; Sept. 20. Treating table. O. A. Miller. 1,626,471; Apr. 26. Treating the abdomen, Apparatus for. J. J. Cooper. 1,618,916; Feb. 22. Treating yarns for knitting. S. P. Ruff, jr. 1,615,234; Jan. 25. Jun. 20.
Treatment of hay fever, Product adapted for use in the. F. A. Csoula, H. S. Bernton, and D. B. Jones. 1.613,313; Jan. 4.
Treatment table. M. R. McBurney. 1,628,369; May 10.
Tree: See— Treatment table. M. R. McBurney. 1,628,369; May 10. Tree: See. Artificial tree.
Artificial tree.
Boot-tree.
Bo Treilis, Flowerpit. H. H. Verdery, 1,623,646; Apr. 5. Treilis, Knockdown. J. C. Farrington. 1,653,263; Dec. 20. Treilis knockdown. J. C. Farrington. 1,653,263; Dec. 20. Treilis work, Sheet-metal. H. Junkers. 1,619,518; Mar. 1, Treilises and the like, Structure for. J. S. Kirfman. 1,628,249; May 10 man. 1,619,522; Mar. 1. Tremolo device. B. E. Mills. 1,621,126; Mar. 15. Trench-cleaning device. F. E. Braswell and S. T. Ray. 1,633,311; June 21. Trestle. G. D. Butler. 1,634,7432; Nov. 1. Trestle. G. D. Butler. 1,644,638; Nov. 8. Trestle or sawhorse. E. J. Coffed. 1,648,638; Nov. 8. Triaryl-methane dyes from tetraalkyl-diamino-benzophenone and arylated-ethylene diamine. H. Pollkier and H. Hähle. 1,628,834; May 2. Trayl-methane dyestuffs from tetraalkyl-diamino-benzophenone and di-1-naphthyl-chylene-diamine. H. Pollkier and H. Hähle. 1,628,834; May 2. Trayl-methane dyestuffs from tetraalkyl-diamino-benzophenone and di-1-naphthyl-chylene-diamine. H. Pollkier and H. Hähle. 1,628,834; May 2. Trayl-methane dyestuffs from tetraalkyl-diamino-benzophenone and di-1-naphthyl-chylene-diamine. H. Pollkier and H. Hähle. 1,628,834; May 2. Trayl-methane dyestuffs from tetraalkyl-diamino-benzophenone and di-1-naphthyl-chylene-diamine. H. Pollkier and H. Halle. 1,628,334; Apr. 19. Tricycle. H. L. England. 1,623,404, Tp. 19. Tricycle. F. H. L. England. 1,623,404, Tp. 19. Tricycle. T. W. Shelley. 1,625,337; Apr. 19. Tricycle. T. Trimming machine, Upper-. H. A. Ballard. 1,652,694; Dec. 13. Trimming, Narrow woven. H. A. Philips. Des. 73,803; Nov. 8.

Trimming, Narrow woven. C. S. Wackerman. Des. 73,810-11; Nov. 8.

Trim-securing clamp. W. Wurdack. 1,648,927; Nov. 15.

Tripod. R. E. Kapps. 1,641,592; Sept. 6.

Tripod. R. E. K. W. Thalhammer. 1,650,747; Nov. 29.

Tripod mount. S. G. Green. 1,639,846; Aug. 23.

Tripod, Universal panoramic. F. E. Garbutt. 1,624,096; Apr. 12. Apr. 12.
Triturating machine. A. F. Files. 1,620,639; Mar. 15.
Triturating machine. A. F. Files. 1,620,639; Mar. 15.
Trolley. J. L. Fearing and H. F. Wellman. 1,618,072;
Trolley. H. W. Hoffmaster. 1,652,009; Dec. 6.
Trolley. Automatic safety. P. and D. Fasson. 1,628,536;
May 10.
Trolley base. E. A. Larson. 1,614,201; Jan. 11.
Trolley-base. E. A. Larson. 1,614,201; Jan. 11.
Trolley-base. T. May 51.
May 51.

984 INDEX OF PATENTS, 1927 Trolley construction. P. C. Richter. 1,646,217; Oct. 18. Trolley contact. C. S. Eppley. 1,644,013; Oct. 4. Trolley control. J. G. McMakin. 1,622,436; Apr. 5. Trolley guard. H. P. Chandler. 1,652,425; Dec. 13. Trolley harp and contact device. S. Maggio. 1,642,257 Trolley harp and contact device. S. Maggio. 1,642 Sept. 13.
Trolley pole. S. Pulaski. 1,643,751; Sept. 27.
Trolley-reel casing. E. Niksic. 1,613,288; Jan. 4.
Trolley retriever. J. W. Hurst. 1,645,585; Oct. 25.
Trolley-shee guard. W. Schaake. 1,628,917; May
Trolley shoe, Pantograph. O. M. Jorstad. 1,638
Aug. 16. 1.638.856: Aug. 16.
Trolley support. G. W. Packer. 1,644,268; Oct. 4.
Trolley switch. C. L. Moon. 1,632,557; June 14.
Trolley switch. J. Ruddick. 1,624,011-12; Apr. 12.
Trolley wheel. L. B. Harmon. 1,629,203; Mar. 8.
Trolley wheel. S. H. Noyes. 1,613,189; Jan. 4.
Trolley wheel. C. H. Schafer. 1,614,155; Jan. 11.
Trolley wheel. W. E. Specht. 1,611,085; Feb. 29.
Trolley wheel. W. E. Specht. 1,611,085; Feb. 29.
Trolley wheel. F. Thornton. 1,622,206; Mar. 2.
Trolley wheel. F. Thornton. 1,622,206; Mar. 2.
Aug. 23. Truck Trolley-wheel
Aug. 23.
Trolley wire rolley wires, Hanger for, F. A. Tice. May 17. 1.629.368: Trolley wires, Suspension of. M. J. Griffith. 1,643,209; Sept. 20. Sept. 20.
Trolling lure. J. E. Brown. 1,617,318; Feb. 15.
Trolling spoon. N. Rightmire. Des. 71,850; Jun. 11.
Trombone attachment. E. D. Coe. 1,647,402; Oct. 25.
Trombone, Silde. F. A. Busccher. 1,624,310; Apr. 27.
Tropical house. T. Monterubio. 1,620,776; Mar. 15.
Trouble-indicating system. E. B. Craft and L. Keller. 1,614,285; Jun. 11.
Trouble-indicating system. L. M. Potts. 1,620,286; Mar. 18.
This system of the property of Trouble-indicating system. L. M. Potts. 1,620,286; Mar. 8.
Trough, Animal drinking. J. Arkfeld. 1,644,660; Oct. 11.
Trough, Fox feed. C. C. Buck. 1,639,554; Aug. 16.
Trough, Mixing. A. Trutte. 1,614,436; Janv. 11.
Trough, Poultry-feed. R. E. Moelling. 1,644,263; Oct. 4.
Trough, Watering. H. Wieben. 1,633,150; June 21.
Trough, Watering. H. Wieben. 1,633,150; June 21.
Trough, For tied cattle, Division of feeding. W. Thompson. 1,652,068; Dec. 6.
Trough Grant support. P. Jantzen. 1,654,763; Dec. 27.
Trouser support. H. J. Lorang. 1,651,776; Dec. 27.
Trouser support. H. J. Lorang. 1,651,776; Peb. 22.
Trouser support. H. J. Lorang. 1,618,595; Feb. 22.
Trouser support. G. Siebert. 1,618,765; Feb. 28.
Trousers and making the same, Waistband for. M. Margolith. 1,614,965; Jan. 18.
Trousers Football. G. W. Cruden. 1,636,553; July 19.
Trousers support. M. S. Clawdwell. 1,691,776; Mar. 1.
Trousers support. M. S. Clawdwell. 1,635,633; July 5.
Trousers support M. S. Clawdwell. 1,636,503; July 5.
Trousers supporter M. S. Clawdwell. 1,636,766; Apr. 19.
Trousers, Supporting attachment for. A. J. Cummings. 1,638,921; Aug. 16.
Trousers, Waistband for. W. B. Foster. 1,652,567; Dec. 13. Truck, July Trousers, Waister, Dec. 13. Dec. 13.

Trousers, Waistband for. W. J. Stauss. 1,652,543;

Trousers, Waistband for. W. J. Stauss. 1,652,543; Trousers, Waistband for. W. J. Stauss. 1,602. Dec. 13.
Trousers while on wearer, Apparatus for pressing, Lambert and J. McCombs. 1,642,816; Sept. 20.
Towel, F. Benzing. 1,654,449; Dec. 27.
Towel, F. Benzing. 1,654,449; Dec. 27.
Trowel, Plumb. G. Kuhar. 1,647,125; Feb. 3n. 4.
Trowel, Plumb. G. Kuhar. 1,647,125; Feb. 3n. 4.
Truck. F. M. Bell. 1,623,298; Apr. 5.
Truck. A. J. Bentley. 1,638,469; Aug. 9.
Truck. J. W. Coates. 1,636,172; July 19.
Truck. F. Burgett. 1,640,263; Aug. 23.
Truck. F. D. Holdsworth. 1,614,029; Jan. 11.
Truck. W. J. Miller. 1,621,555; Mar. 22.
Truck. W. J. Miller. 1,621,555; Mar. 22.
Truck. W. H. Phillips. 1,664,188; Dec. 27.
Truck. E. L. Schellens and J. S. Coffin, jr. 1,62
Mar. 22. 1,621,606: Truck. E. L. Schellens and J. S. Coffin, jr. 1,648,964; Nov. 15. Truck and wagon dump, Combination. F. S. Harsh-barger, 1,621,779; Mar. 22.
Truck and weigher, Combination. E. L. Byrns, 1,633,761;
June 28. Truck attachment, Hand. H. M. Perry. 1,636,574; July 19. Truck, Barrel-emptying hand. C. G. Carlson. 1,636,682; July 26.

Truck, Barrel or drum. R. N. Sheldon. 1,615,919; Feb. 1.

Truck body. S. E. Travis, jr. 1,614,412; Jan. 11.

Truck body, Gravity-dumping. L. Crooke. 1,652,000;
Dec. 6.

Truck-body-locking mechanism, Removable. W. M. Baxter. 1.615.552; Jan. 25.
Truck-body mount. S. E. Travis, jr. 1,630,145; May 24.
Truck body, Side-rail. S. E. Travis, jr. 1,632,069; Dec. 6. Dec. 6.
Truck bolster. B. Haskell. 1,628,839; May 17.
Truck bolster. C. F. Huntoon. 1,619,675-6; Mar. 1.
Truck-bolster reenforcement saddle. S. F. Beasley.
1,647,767; Nov. 1.
Truck bolster with absorption mechanism. T. H. Symington and P. R. Drenning. 1,633,508; June 21.
Truck bolster with absorption mechanism. T. H. Syming-Truck Bolster with a syming-Truck Bolster with Truck. Booster-motor. H. M. Pflager. 1,642,890; Sept. 20. Truck Drake. Automatic stevedore-. A. J. Becker. Truck Drake, Warehouse-. J. H. Brown. 1,632,217; Truck Drake, Warehouse-. J. H. Brown. 1,632,217; Truck cab. J. P. Harrison, jr. 1,651,453; Dec. 6. Truck, Car. N. B. Akitt. 1,650,173-5; Nov. 22. Truck, Car. D. S. Barrows. 1,652,808; Dec. 13. Truck brake, Warehouse- J. H. Brown. 1,632,217; June 14.
Truck cab. J. P. Harrison, ir. 1,651,453; Dec. 6.
Truck, Car. N. B. Akitt. 1,650,173-6; Nov. 22.
Truck, Car. S. S. Barrows. 1,652,808; Dec. 13.
Truck, Car. S. S. Barrows. 1,652,808; Dec. 13.
Truck, Car. S. W. E. Fowler, ir. 1,644,325; Dec. 27.
Truck, Car. W. E. Fowler, ir. 1,644,325; Dec. 27.
Truck, Car. B. W. Kadel. 1,630,567-79; May 31.
Truck, Car. B. W. Kadel. 1,630,567-79; May 31.
Truck, Car. H. M. Pflager. 1,642,891; Sept. 20.
Truck, Car. H. M. Pflager. 1,646,214; Dec. 27.
Truck, Car. H. M. Pflager. 1,646,214; Dec. 27.
Truck, Car. H. M. Pflager. 1,646,214; Dec. 27.
Truck, Car. G. K. Thompson. 1,616,154; Feb. 1.
Truck, Car. G. K. Thompson. 1,616,154; Feb. 1.
Truck, Car. G. T. Westlake. 1,642,802; Sept. 20.
Truck, Car. G. T. Westlake. 1,642,802; Sept. 20.
Truck, Car. G. K. Thompson. 1,616,154; Feb. 1.
Truck, Car. G. T. Westlake. 1,642,809; May 17.
Truck, Delivery. C. A. Wartl. 1,649,630; Nov. 15.
Truck, Delivery. E. R. Whitney. 1,649,637,5; Mar. 1.
Truck, Dump. P. E. Barker. 1,618,629; Feb. 27.
Truck, Dump. G. R. Pennington. 1,628,807; May 17.
Truck, Dump. G. R. Pennington. 1,638,630; May 17.
Truck, Dump. G. R. Pennington. 1,638,630; May 17.
Truck, Dump. G. R. Pennington. 1,638,630; May 17.
Truck, Electric-locomotive. W. M. Sheehan. 1,634,308; Truck, Electric locomotive. W. M. Sheehan. 1,636,840; July 26.
Truck, Elevating, H. S. Germond, jr. and F. L. Eldmann.
1.646,729; Oct. 25.
Truck, Elevating platform. C. E. Cochran. 1,628,890; May 10.
Truck elevator. W. H. Heise. 1,628,880; May 17.
Truck elevator utilizing parallel motion. W. H. Heise.
1,620,265; Mar. 8.
Truck, Fiexible four-wheeled driving. A. R. Meister,
1,634,430; July S. Truck, Fiexible four-wheeled driving. A. R. Meister,
1,634,430; July S. W. W. Burpwatt. 1,643,268; Sept. 20.
Truck, Fielding. casket. C. M. Wickstrum. 1,649,203;
Nov. 18. Nov. 16.
Truck, Food conveying. C. E. Jenkins. 1,654,330; Dec. 27.
Truck for circuit-breaker tanks, Lifting. J. W. W. Ow. 1,624,361; Apr. 12.
Truck for motor vehicles, Four-wheel. E. S. Crocker. 1,647,437; Nov. 1.
Truck for railway rolling stock. F. F. Scoville. 1,616,511; Feb. 8.
Truck for self-propelled rail cars, Bogle. L. C. Josephs, ir. 1,617,715; Peb. 15.
Truck for transporting valuables, Armored. C. H. Wilson. Truck for the comotive engines. J. G. Blunt. 1,652,657; Dec. 13.
Truck frame. H. C. Priebe. 1,631,835: June 7. Truck frame. H. C. Priebe. 1,631.335; June 7. Truck, Freight-handler's. R. Krasberg. 1,642,502; Truck Frame. H. C. Friede. A. College, von. 1, 1642,502; Truck, Garbage. C. H. Hamilton. 1, 151,700; Dec. 6. Truck, Garbage. C. H. Hamilton. 1, 151,700; Dec. 6. Truck, Galding. C. Jablow. 1, 632,077; June 14. Truck, Hand. W. B. Grow. 1, 613,5942; Feb. 1, 1744, Hand. W. Henricks. 1, 637,640; Aug. 2. Truck, Hand. W. Henricks. 1, 1637,640; Aug. 2. Truck, Holsting. J. D. Herron. 1, 1641,1848; Sept. 6. Truck, House-moving. S. P. Griffin. 1, 1641,1848; Sept. 6. Truck, Honard car. D. S. Barrows. 1, 1649,377; Nov. 15. Truck, Industrial. C. B. Cochran. 1, 1628,389; May 10. Truck, Industrial. C. B. Cochran. 1, 1628,389; May 10. Truck, Industrial. E. H. Remde. 1, 1636,543; Nov. 8. Truck, Industrial. E. H. Remde. 1, 1636,547; Nov. 15. Truck, Industrial. E. H. Remde. 1, 1636,547; Nov. 15. Truck, Industrial. E. S. Schroeder. 1, 1648,262; Nov. 8. Truck Jack. H. C. Buffington. 1, 1647,268; Nov. 1. Truck Jack. G. B. Weever. 1, 1638, 790-1; Aug. 1910, Feb. 15. Feb. 15.
Truck, Kiln. H. M. Robertson. 1,636.073; July 19.
Truck-lever connection. S. Hansson. 1,625,805; Apr. 26.
Truck-lever connections, Making. S. Hansson. 1,625,804; Apr. 26
Truck, Lifting, A. M. Barrett, 1.633,390; June 21,
Truck, Lifting, V. C. Childress, 1.636,850; July 26,
Truck Lock, F. H. Langmuir, 1.654,179; Dec. 27,
Truck, Locomotive or car. A. F. Batchelder, 1.620,425;
Mar. 8. Truck, Log-loading. C. A. Siders. 1.624,285; Apr. 12. Truck, Mining-machine. C. B. Officer. 1,641,862; Sept. 6.

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Trunk holder, Removable. S. Sonin. 1,621,176; Mar, 15.
Trunk interlocking trimming, Wardrobe. J. Ritter, jr.
1,632,640; Dec. 13.
Trunk, Jobber's display. A. W. Winship. 1,630,879;
May 31.
Trunk lock. M. Rasmussen. 1,622,318; Apr. 5.
Trunk lock. M. Rasmussen. 1,622,318; Apr. 5.
Trunk lock. M. Rasmussen. 1,632,361; June 14.
1,613,056; Jan. 4.
Trunk-locking device. G. A. Schobert. 1,649,982;
Nov. 22.
      Truck-motor-frame suspension. C. Bethel. 1,626,662;
    Truck-motor-frame suspension. C. Bethel. 1,626,662; May 8.
Truck or trolley, Lifting. W. E. Kimber. 1,630,621; May 81.
Truck, Pig-lead. W. E. Newman. 1,626,350; Apr.,26;
Truck, Pole. H. R. Traphagen. 1,649,757; Nov. 15.
Truck, Power-clevated dumping. P. A. Brick. 1,636,621;
July 19.
      Truck, Pumping-engine. I. Marks. 1,640,417; Aug. 30.
Truck, Railway. B. V. H. Johnson. 1,615,802; Jan. 25
Truck, Railway. W. A. Mitchell. 1,639,348; Aug. 16.
Truck, Railway-car. T. V. Buckwalter. 1,640,179-80;
Aug. 23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nov. 22.

Trunk-lock mechanism, Interior. A. Rauchbach.
1,617,348; Feb. 15.

S. Klein. 1,623,190; Apr. 5.

Trunk, Motor-car. D. Wilbeck. 1,644,806; Oct. 11.

Trunk, Motor-car. D. Wilbeck. 1,644,806; Oct. 11.

Trunk runk. E. H. Specth. 1,651,974; Dec. 6.

Trunk, Wardrobe. I. R. Allen. 1,638,135; Aug. 9.

Trunk, Wardrobe. I. R. Allen. 1,638,135; Aug. 9.

Trunk, Wardrobe. O. G. Lemmer. 1,634,753, Aug. 9.

Trunk, Wardrobe. M. Stockov. 1,645,731-2; Jan. 11.

Trunking system. H. B. Johnson. 1,632,901; June 21.

Trunking system. H. B. Johnson. 1,632,901; June 21.

Trunking system. Straightforward. R. S. Balley.
1,641,218; Sept. 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nov. 22.
      Truck, Railway-car. G. S. Chiles. 1,615,616; Jan. 25.
Truck, Railway-car. W. C. Sanders. 1,640,963; Aug. 30.
Truck, Railway-car. W. C. Sleeman. 1,644,947; Oct. 4.
Truck, Railway motor. E. G. Hallquist. 1,650,069;
  Nov. 22.
Truck, Searchlight M. L. Patterson. 1,622,392; Mar. 29.
Truck, Searchlight M. L. Patterson. 1,622,392; Mar. 29.
Truck, Self-dumping. P. A. Brick. 1,633,515; June 21.
Truck Self-dumping. P. A. Brick. 1,633,515; June 21.
Truck side frame. G. A. Anderson. 1,623,036; Apr. 5.
Truck side frame. G. A. Anderson. 1,623,036; Apr. 5.
Truck side frame. D. S. Barrows. 1,622,300; May 10.
Truck side frame. Cast carr. G. T. Johnson and H. W.
Stertzbach. 1,635,751; July 12.
Truck structure. J. G. Truck side frame. Cast. Cast. 7, G. T. Johnson. 1,646,433;
Oct. 25.
Truck structure. J. G. Ritter. 1,650,960; Nov. 29.
Truck structure. J. A. Houston. 1,652,530; Dec. 13.
Truck, Tongue-supporting. H. B. Sperry. 1,635,803;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.641.218; Sept. Straightforward. R. S. Bailey.

Trunking system. Straightforward. R. S. Bailey and E.

Trunking system. Straightforward. H. M. Bascom and
C. B. Fowler. 1.650.663; Nov. 29.

Trunks, Caster attachment for. I. G. Sviageninov.

1.642.094; Sept. 13.

Trunks, Cashion top for wardrobe. W. C. Chesnut.

Trunks, Drawer-locking mechanism for wardrobe. S.

Silverman. 1.646.424; Oct. 25.

Trunks, Dustproof door for wardrobe. G. D. Jones.

1.617.911; Feb. 15.

Trunks, Ironing-loard attachment for wardrobe. G. D.

Jones. 1.626.463; Apt.

Trunks, Locking device-holding sections of wardrobe. H. Bauchbach. 1.646.492; Oct. 25.

Trunks, Locking device for. M. H. Luce. Re16,643;

May 31.

Trunss. D. O'Brien. 1,644.333; Sept. 6.
  Truck Support, Radial. H. A. Houston. 1,632,530; Dec. 13.
Truck Tongue-supporting. H. B. Sperry. 1,635,803; Truck Trailer. G. H. Cravens. 1,648,676; Nov. 8.
Truck, Trailer. G. H. Cravens. 1,648,676; Nov. 8.
Truck, Unit power. L. L. Cohen. 1,618,171; Feb. 22.
Truck, Unit power. L. L. Cohen. 1,618,171; Feb. 22.
Truck wheel attachment, Compensating. A. H. Fager.
Truck wheel, Dual-tired. L. D. Kay. 1,640,338; Aug. 23.
Trucks wheel, Dual-tired. L. D. Kay. 1,640,338; Aug. 23.
Trucks and automotive vehicles. Spring hanger for. G. A. Schacht. 1,617,031; Feb. 8.
Trucks and similar structures. Bearing for railroad. G. R. Moran. 1,635,635,401 July 12.
Trucks and the like. Direction indicator for motor. J. D. Stassart. 1,635,587; July 12.
Trucks, Dumping mechanism for motor. P. E. Barker. 1,651,988; Dec. 6.
1,633,953-4; July 12.
Trucks, Dumping unit for motor. J. C. Poth. 1,638,953-4; July 12.
Trucks, Final drive for motor. L. C. Huck. 1,636,819-20; Trucks, Final drive for motor. L. C. Huck. 1,636,819-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Trunks, Locking device for. M. H. Luce. Re16,643; May 31.
Truss. D. O'Brien. 1,641,339; Sept. 6.
Truss. W. D. Ray. 1,637,130; July 26.
Truss. W. D. Ray. 1,637,130; July 26.
Truss. G. Francis. G. Reiner, 1,637,130; July 26.
Truss. G. W. Welch. 1,618,648; Jun. 18.
Truss. G. W. Welch. 1,618,618; Feb. 22.
Truss. G. W. Welch. 1,618,618; Feb. 22.
Truss, Building. C. E. Fuller. 1,652,439; Dec. 27.
Truss, Building. C. E. Fuller. 1,652,439; Dec. 27.
Truss of Trupture. S. Futerman. 1,630,433; May 31.
Truss, Medical. R. H. Howard. 1,644,635; Oct. 11.
Truss member and making same. A. C. McCord. 1,615,307; Jan. 25.
Truss of Truss of Truss of Truss part and making the same. D. L. Chesterman. 1,651,183; Nov. 29.
Truss, Rupture or hernia. E. Giffnorn. 1,632,065; June 14.
Trucks, Plumping unit for motor. J. C. Folh. 1,633,873-4; July 12.

1063, 933-4; July 12.

1063, 933-4; July 12.

1063, 933-4; July 26.

1074, 933-4; July 26.

1074, 933-4; July 26.

1074, 933-4; July 26.

1074, 933-4; July 27.

1075, 933-4; July 28.

                                                                                                                                                                                                                                                                                                                                                                                                                                                 Truss, Pile D. J. A. Britan, Truss, Pile D. J. Britan, P. Ginnorn, S. J. Trusse, Suprime or hernia, E. Ginnorn, S. J. Trussed structure, G. H. Dawson and H. F. Frease, 1,613,788; Jan. 11.
Trusses, Adjustable securing device for, H. P. Baltzer, 1,640,229; Aug. 23.
Trusses, Pad for, I. M. Pease, 1,648,361; Nov. 8.
Trusses, Pad for hernia, G. R. E. Milligan, 1,650,641; Nov. 29.
Try cock, W. E. Williams, 1,628,566; May 10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Washing-machine tub.
Tub. B. H. Darrow. Re16.597; Apr. 19.
Tub bench. F. F. Pagel and C. E. Klawitter. 1,635,902;
July 12.
Tub cover and drainer, Kitchen H. Young. 1,641,061;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aug. 30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aug. 50.

Tub stand, Rolling, H. T. Stroop, A. F. Hauser, and J. Hanmer, 1,630.279; May 31.

Tubs or the like, Adjustable leg for.
1,621,250; Mar. 15.

Tubs, Wasbing attachment for. T. R. Frattallone.
1,625,306; Apr. 19.

Tubs, Washing attachment for. T. R. Frattallone.
1,125,306; Apr. 19.

Tubs, W. Brell. 1,618,973; Mar. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amplifying and detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hair-waving tube.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tube.
Circulating tube.
Collapsible tube.
      Trunk construction, Wardrobe-. E. B. Hanson, 1,621,321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paper tube.
Paste tube.
Pitot tube.
      Mar. 15.
Trunk cushion and retainer. W. C. Chesnut. 1,632,996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cop tine,
Dispensing tube,
Double tube,
Drain tube,
Electrical vacuum discharge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pitot static tube.
      Trunk-drawer attachment. J. Ritter, jr. 1,634,302;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Procumatic tube.
Thermionic tube.
Thermometer tube.
Vacuum or thermionic tube.
Vacuum tube.
    Trunced-awer and the Trunced and Trunced are the Trunced for automobiles, Detachable. W. R. Spaulding. 1,630,142; May 24. Trunck hasp. S. P. Darkins. 1,625,351; Apr. 19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tube.
Electron tube.
Fermentation tube.
Glow-discharge tube.
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Tube. R. M. Witt. 1,630,555; May 31.
Tube and manufacture of same, Röntgen. A. F. Wuromus.
1,648,526; Nov. 8.
Tube and tire saving device. T. P. Roth. 1,648,825;
Nov. 8.

Tube and tongue depressor, Combined suction. F. A. Beck. 1,613,373; Jan. 4.
Tube apparatus, Pneumatic. J. J. Stoetzel. 1,624,078;

Tube approach and the second of the second o

Apr. 12.
Tube boiler, Vertical fire. O. S. Bowman.
Apr. 19.
Tube cleaner. E. Bertone. 1,641,312; Sept. 6.
Tube cleaner. J. F. Grace. 1,644,935; Oct.
Tube circuits, Thermionic. B. Oiney.

1,652,148; Dec. 6.
Tube-cleaning apparatus for tinning purposes. C. D.
Dallas. 1,643,545; Sept. 27.
Tube-cleaning projectile. G. C. Cook and J. A. Coleman. 1,634,694; June 28.
Tube cleanue, Collapsible. J. D. Miller. 1,621,801;

Tipe closure, Collapsible. E. C. Van Valkenburg.
Tube collection. C. G. Hawley. 1,644,188; Oct. 4.
Tube connection. C. G. Hawley. 1,644,188; Oct. 4.
Tube connection. Circulating. J. F. Arthur. 1,639,251;

Aug. 16. abe connection, Double. R. H. Smickle. 1,616,146; Feb. 1. Tube construction, Electron- M. B. Forrester. 1,613,791;

Jan. 11.
Tube coupling. A. L. Parker. 1,619,755; Mar. 1.
Tube-cutting machine. E. M. Hawkins. 1,619,975;

Tube-cutting machine. C. R. Seymour. May 3. 1,626,878;

May 8.
Tube-end beveling and sealing device. C. E. Maynard.
1.642,456; Sept. 13.
Tube expander. J. Walker. 1,638,422; Aug. 9.
Tube for measuring the flow of water through closed conduits, Multiple Pittot and pizzometer. D. W. Proebstel. 1.645,449; Oct. 11.
Tube-forming machine. W. E. Barlow. 1,614,043;

Tube frame. E. F. Hathaway and C. Lea. 1,631,092;
Tube frame. E. F. Hathaway and C. Lea. 1,631,092;

Tube frame. E. F. Hathaway and C. Lea. 1,631,092; May 31.
Tube frame. E. B. Holmes and W. H. Wakefield.
1,616,497; Fb. Le. 1,631,101; May 31.
Tube-frame bracket. A. A. Gordon. 1,654,122; Dec. 27.
Tube frames, Spool-supporting means for. E. F. Hathaway. 1,631,095; May 31.
Tube frames, Tuft tube for. E. F. Hathaway. 1,635,671;
July 12.
Tube frames, Tuft tube for. E. F. Hathaway and W. 1,635,671;
July 12.

July 12.
Tube frumes, Yarn spool for. E. F. Hathaway and W. Bixby. 1,631,093; May 31.
Tube frames, Yarn spool for. E. F. Hathaway and W. Bixby. 1,631,096; May 31.
Tube holder and paste ejector. F. P. Drohan. 1,620,955;

ube holder and passes.

Mar. 15.

When holder, Collapsible. A. Kassler. 1,652,862;
Dec. 13.

Dec. 13.

Dec. 13.

Leavin. 1,617,917;
Feb. 15.

Collapsible. A. G. Leake. 1,631,275;

Tube holder, Collapsible. B. Feb. 15.
Tube holder, Collapsible. A. G. Leake.
June 7.
Tube holder, Collapsible. C. A. Perkins.
Tube holder, Collapsible. C. A. Perkins.

Tube holding and compressing device, Collapsible. E. R. Tube holding and compressing device. R. J. Jauch. 1,625,471; Apr. 19. gripping device. R. J. Jauch. 1,625,471; Apr. 19. Tube-making method and apparatus. J. V. James. 1,626,412; Apr. 26. Tube manufacture. C. E. Maynard. 1,615,992; Feb. 1. Tube mill and process. O. Bamberger. 1,617,936;

Tube mills, etc., Liner for. P. T. Lindbard. 1,631,971;
June 14.
Tube mills, Liner for. P. T. Lindbard. 1,631,972; Tube min. June 14.

June 14.

Tube paste filler and closer, Collapsible. R. Taub. 1,853,322; Dec. 20.

Tube press, Hydraulic. L. Löwy. 1,654,134; Dec. 27.

Tube repairing claup. R. Santmyer. 1,640,376; Aug. 30.

Tube selder Arrangement for controlling. A. Sema and Tube selder Arrangement for controlling. A. Sema and Tube sekiving apparatus. A. E. Falor. 1,635,710; July 12.

Tube socket. M. Guett. 1,633,404; June 21.

Tube socket. Vacuum. R. Schur. 1,622,501; May 10.

Tube-sorting machine, Automatic cut. H. D. Madden Tube-splicing device. A. Huetter. 1,616,958; Feb. 8.

Tube-splicing device. A. Huetter. 1,616,958; Feb. 8.

Tube-splicing device. A. Huetter. 1,616,958; Feb. 8.

Tube spring, Bourdon-. J. C. Shaw. 1,632,749; June 14. Tube-stock-cutting apparatus. H. D. Stevens. 1,622,257; Mar. 22.

Tube vulcanizer. O. J. Kuhlke. 1,652,366; Dec. 13.

Tubing bleeder. E. D. Smyser. 1,643,908; Sept. 27. Tubing catcher. S. V. Dillon. 1,640,756; Aug. 30. Tubing catcher for wells, Automatic. R. A. Wilson.

Tubing catcher, S. V. Dillon. 1,640,756; Aug. 30. Tubing catcher for wells, Automatic. R. A. Wilson. 1,642,136; Sept. 13. Tubing cleaner. A. E. Neumeyer. 1,639,660; Aug. 23. Tubing, Composite. H. W. Bundy. 1,650,321; Nov. 22. Tubing, Fexible. H. Cooper. 1,637,141; July 26. Tubing from separate reels of skelp, Apparatus for manufacturing continuous. J. W. Moom. 1,622,333; Mar. 29. Tubing hanger, Rotatable. S. P. Tschappat. 1,650,102; Nov. 22. Expect for sweething despite and property of the control of the contro

Tecturing continuous. J. W. Moom. 1,022,303; Mar. 29.
Nov. 22.
Tubing ger, Rotatable. S. P. Techappat. 1,650,102;
Tubing machine. V. Royle. 1,618,026; Feb. 15.
Tubing machine. V. Royle. 1,618,026; Feb. 15.
Tubing machine. V. Royle. 1,645,157; Oct. 11.
Tubing machine. V. Royle. 1,645,157; Oct. 11.
Tubing machine. V. Royle. 1,632,026; Feb. 15.
Tubing machine. V. Royle. 1,634,631; June 7.
Tubing machine. V. Royle. 1,631,651; June 7.
Tubing Making. C. Skoglund. 1,631,651; June 7.
Tubing, Making. C. Skoglund. 1,631,651; June 7.
Tubing, Method and apparatus for covering. W. B.
Jaquith. B. A. Evans, and G. Foerstner. 1,639,408;
Tubing, Method and apparatus for manufacturing.
A. Laugblin, jr., 1,616,861; Feb. 8.
Tubing, Method of and apparatus for manufacturing.
A. Laugblin, jr., 1,616,861; Feb. 8.
Tubing, Method of and apparatus for making. C. D.
Tubing stripper. L. C. Bell. 1,639,209; Aug. 16.
Tubes and ike devices, Exhausting thermionic, H. E.
Metcaif, 1,651,65; Nov. 29.
Tubes and similar articles, Machine for making. G. A.
Folsy, 1,641,222; Sept. 6.
Tubes and similar articles, Machine for making. G. A.
Folsy, 1,641,222; Sept. 6.
Tubes, Apparatus for deflating. H. D. Stevens.
1,629,128; May 17.
Tubes, Apparatus for producing pneumatic, W. L. Fairchild. 1,632,394; June 14.
Tubes, Apparatus for general for machine for rubber or the
Tubes, Cap pravatus for producing pneumatic, W. L. Fairchild. 1,632,394; June 14.
Tubes, Cap pravatus for collapsible. A. E. Smith. 1,660,966-7; Nov. 29.
Tubes Connecting. J. A. Taylor, 1,633,798; June 28.

Nov. 29.

Nov. 29.
Tubes, Connecting. J. A. Taylor. 1.633.798; June 28.
Tubes, Connection for. F. Kusterle. 1.630.492; May 31.
Tubes, Container for collapsible. I. T. Kahn. 1.643.81; Sept. 27.
Tubes, Cutting-off device particularly for. P. Gedien and K. Schwade. 1.625.80; Apr. 26.
1.638.159; Aug. 9.
Tubes, Device for holding collapsible. C. Hopewell. Gedien and K. Schwade. 1.625.524; Apr. 26.
Tubes, Device for the electrical welding of seamed. P. F. A. Hubbard. 1.632.076; June 14.
Tubes, Making. L. T. Frendarick. 4.664.49; Cod. 28.

The state of the s

Aug. 30.

Tubes, Process and apparatus for forming. A. M. Bates.
1.634,007; June 26.

Tubes, Process and machine for making fiber. H.

Tubes, Rolling. J. Roeder and W. Wellmann. 1,626,481;
Apr. 26.

Tubes, Support for collapsible container. B. C. Blackmon. 1,628,813; Aug. 9.

Tubes, Terminal connection for removable. A. Cotton. 1,651,016; Nov. 29.
Tubular articles from pulpous material, Producing. C. H. Franks. 1,632,398; June 14.
Tubular articles, Method and apparatus for making. C. C. Cadden, F. Slusher, and B. A. Evans. 1,649,808; Tubular. Titles, Slicing. A. F. Thener. 1,654,021; Dec. 27.
Tubular bodies in holes of other bodies, Fastening. G. J. Hartnett. 1,647,447; Nov. 1.
Tubular coupling. R. A. Wilson. 1,614,815; Jan. 18.
Tubular dispenser. F. McLaughlin. 1,637,955; Aug. 2.
Thoular coupling. R. A. Wilson. 1,614,815; Jan. 18.
Tubular sibenser. F. McLaughlin. 1,637,955; Aug. 2.
Tel6,517; Jan. A. Chine for forming. P. Gardner. Tubular members, Shearing. W. E. Amberg. 1,635,807; July 12.
Tubular or tubelike articles, Machine for manufacturing. R. S. Setten. 1,652,912; Dec. 13.
Tubular spoked wheel. W. E. Williams. 1,636,541; Tubular-spoked wheel. W. E. Williams. 1,636,541; Tubular-spoked wheel. W. E. Williams. 1,636,541; Tubular-spoked wheel. W. E. Williams. 1,638,741; Jan. 25.
Tuffing machine. B. W. Steinbeck. 1,614,576; Jan. 18.
Tugs, Reversible hame. T. W. Owens. 1,615,477; Jan. 25.
Tumbler on the control of Tumblers, Air supply for. A. Anfossi. 1,624,650; Apr. 12.
Tumbling mill. H. W. Titgen. 1,642,632; Sept. 13.
Tungsten contact-breaker arm. A. J. Liebmann.
Tungsten contact-breaker arm. A. J. Liebmann.
Tungsten filaments, Apparatus for forming. W. L. Müler. 1,038,698; Aug. 16.
Tuning forks, Temperature-compensating means for maintraining constant frequency in. H. A. Whitehorn. 1,655,794; Dec. 27.
Tunger of the construction of the contact o Sept. 27.

Tunneling device. H. M. Watchorn. 1,650,103; Nov. 22.

Tunnels, Constructing underground. J. J. Kennedy. 1,644,476; Oct. 4.

Tunnels, Smoke-extracting device for. P. Wagich, 1,631,442; June 7.

Turbine. T. K. Corless. 1,633,391; Dec. 20.

Turbine. D. C. Davis. 1,634,897; July 5.

Turbine. D. C. Davis. 1,634,897; July 5.

Turbine. P. Hodgkinson. 1,623,999; Apr. 12.

Turbine. A. T. Kasiey. 1,620,662–3; Mar. 15.

Turbine. H. T. Werber. 1,630,151; May 24.

Turbine and condenser connection. 1,638,944; Aug. 16.

Turbine and condenser connection. Expansion joint for. J. F. Grace. 1,639,220; Aug. 16.

Aug. 30. Turbine and utilizing high-pressure steam therein, High-pressure steam. F. Losel. 1,632,907; June 21. Turbine, Annular-jet. H. B. Taylor. 1,613,971; Jan. 11. Turbine, Back-pressure or noncondensing steam. O. A. Wilberg, 1,647,421; Nov. 1. Turbine back and protection means for. E. H. McFar-Turbine-blade R. C. Allen. 1,621,618; Mar. 22. Turbine-blade R. C. Allen. 1,621,618; Mar. 22. Feb. 22. Feb. 22.
Turbine-blade fastening, H. R. Trotter and H. F. Schmidt. 1,638,648; Aug. 9.
Turbine-blade lashing, H. A. Meissner. 1,618,292; Turbine-blade lashing. H. A. Meissner. 1,618,292; Feb. 22.
Turbine-blade lashing. J. L. Ray. 1,618,296; Feb. 22.
Turbine-blade shrouding. H. F. Schmidt. 1,625,433; Apr. 19. Turbine, Bleeder. H. T. Herr. 1,647.176; Nov. 1.
Turbine (Beeder. I. F. Johnson. 1,619.129; Mar. 1.
Turbine (Beeder. I. F. Johnson. 1,619.129; Mar. 1.
Turbine (Beeding. R. Marsland. 1,638.639; Aug. 9.
Turbine, Combustion. C. N. Koch. 1,633.217; Dec. 20.
Turbine, Darit. W. S. Coleman. 1,633.217; Dec. 20.
Turbine, Elastic-duid. W. H. Atkinson. 1,617.190; Feb. 8.
Turbine, Elastic-duid. B. F. Halliwell. 1,615,697; Turbine, Elastic-duid. R. F. Halliwell. 1,615,697; Turbine, Elastic-fuid. R. F. Halliwell. 1,618.818; Nov. 8.

Turbine, Elastic-fluid. R. F. Halliwell. 1,648,681; Nov. 8 Turbine, Elastic-fluid. H. T. Herr. 1,646,861; Oct. 25.

Turbine, Elastic-fluid, Apr. 19. F. Hodgkinson. 1 625 541 : Turbine, Elastic-fluid. O. Junggren. 1,640,451; Aug. 30.
Turbine, Elastic-fluid. F. Lösel. 1,925,263; Apr. 19.
Turbine, Elastic-fluid. G. B. Warren. 1,631,660; June 7.
Turbine, Elastic-fluid. G. B. Warren. 1,651,655; Turbine engine. W. H. Belknap. 1,615,622; Jan. 18. Turbine engine. W. H. Belknap. 1,615,622; Jan. 18. Turbine, Free-jet. G. and F. Trefz. 1,650,475; Nov. 22. Turbine-generator set. E. J. Blake. 1,645,411; Oct. 11. Turbine gland. F. Hodgkinson. 1,622,237; Apr. 26. Turbine, gland with more than one pipe connection, Turbine, Hydraulic. E. Gross and E. J. Brikner. 1,641,755; Sept. 6. Turbine, Hydraulic. A. Pfau. 1,629,443; May 17. Turbine, Hydraulic. R. V. Terry. 1,647,156; Nov. 1. Turbine, Hydraulic. W. M. White. 1,641,363; Sept. 6. Turbine, Hydraulic. W. M. White. 1,623,463; Sept. 6. Turbine installation, Elastic-duid. P. Hösel and G. Pagel. 1,614,128; Jan. 11. Turbine Internal-combustion. L. L. Ardin. 1,616,646; Turbine, Internal-combustion. F. Wondra. 1,632,157; June 14. Turbine, internal-combustion. F. Wondra. 1,632,157;
Jurbine, internal-combustion. F. Wondra. 1,632,157;
Jurbine lubrication. J. W. Saybolt. 1,616,829; Feb. 8.
Turbine lubrication. J. W. Saybolt. 1,616,829; Feb. 8.
Turbine rotor. S. A. Moss. 1,614,145; Jan. 11.
1,614,092; Aug. 23.
Turbine rotor. M. Almasy and A. J. Smith. 1,613,093; Jan. 4.
Turbine, Steam. A. W. Bennett. 1,652,085; Dec. 6.
Turbine, Steam. A. W. Bennett. 1,652,085; Dec. 6.
Turbine, Steam. F. Lösel. 1,618,596-7; Feb. 22.
Turbine, Vertical-shaft. A. Hollander. 1,644,4130; Oct. 4.
Turbine, Water. J. Loopold. 1,640,783; Aug. 30.
Turbine, Water. J. Loopold. 1,640,783; Aug. 30.
Turbines and gas turbines, Rotor blading for rotary of the state 1,635,494; Aug. 16.
Turbines, Control for steam. C. R. Waller. 1,625,004; Apr. 19.
Turbines, Control for steam. C. R. Waller. 1,625,004; Apr. 19.
Turbines, Controlling the flow of elastic fluid in. R. Birmann. 1,613,868; Jan. 11.
Turbines, Governing means for. C. R. Waller. Turbines, Governing means for. C. R. Waller. Turbines, Governing mechanism for elastic fluid. W. L. R. Emmet. 1,620,528; Mar. 8.
Turbines, Governing mechanism for steam. W. B. Flanders. 1,622,100; Mar. 25.
Turbines, Manufacturing. G. Klenk. 1,620,974; Mar. 15.
Turbines, Manufacturing. G. Klenk. 1,620,974; Mar. 15.
Turbines, Manufacturing. G. Klenk. 1,620,974; Mar. 15.
Turbines, Regulating means for elastic fluid. R. G. Standerwick. 1,629,318-9; May 17.
Turbines, Runner for. G. A. Biggs. 1,613,816; Jan. 11.
Turbines, Statlonary guide-nozie construction and assembly for. F. Lösel. 1,632,448; June 14.
Turbones, Statlonary guide-nozie construction and assembly for. F. Lösel. 1,632,448; June 14.
Turbones, Manufacturing. Two Karmán and K. Fromm. 1,622,930; Mar. 29.
Turbo machine. T. Von Karmán and K. Fromm. 1,622,930; Mar. 29.
Turboles, Apparatus for and method of creating. P. L. Scott. 1,623,704; Apr. 5.
Turbock apparatus. R. J. Bartholomew. 1,652,998; Dec. 20.
Turbock States, Dec. 27. L. Scott. 1.623,704; Apr. 5.
Turnback apparatus. R. J. Bartholomew. 1,652,998; Dec. 20.
Turn indicators, Support for gyroscopic. P. Schilovsky. 1.654,385; Dec. 27.
S. Nelson. 1,639,856; Aug. 23.
Turning declare. D. Turcott. 1,650,669; Nov. 29.
Turn-page clamp. E. S. Costa. 1,646,747; Oct. 25.
Turnstile. D. R. Baccon. 1,646,078; Oct. 18.
Turnstile. D. R. Baccon. 1,646,078; Oct. 18.
Turnstile. F. J. McLaughlin. 1,623,744; Apr. 5.
Turnstile. F. J. McLaughlin. 1,623,744; Apr. 5.
Turnstile. A. L. Roberts. 1,652,958; Dec. 13.
Turnstile. A. L. Cresci. 1,640,982; Aug. 30.
Turntable. M. L. Cresci. 1,640,982; Aug. 30.
Turntable. W. M. Layton. 1,617,063; Feb. 8.
Turntable. K. Mayer. 1,620,273; Mar. 8.
Turntable-bearing device. J. D. Rauch. 1,635,689;
July 12.
Turntable center. C. M. Goodrich. 1,634,417; July 5.
Turntable center. C. M. Goodrich. 1,634,938; July 26.
Turntable center. C. M. Goodrich. 1,633,993; July 26.
Turntable center. C. M. Goodrich. 1,633,993; July 26.
Turntable center. C. M. Goodrich. 1,633,993; July 26.
Turntable Transfer. R. Craig. 1,633,990; June 28.
Turntable Transfer. R. Craig. 1,633,990; June 28.

Turpentine, Manufacture of a substitute for.
Odom. 1,625,622; Apr. 19.
Tuyer structure, H. L. Beers, 1,620,056; Mar.
Tuyère structure, Side, R. L. Beers, 1,62
Mar. 8. 1,620,057 : Tuyère structure, Side. R. L. Beers. 1,622,005′; Mar. 8.

Tweszers, finger-nnii file, and cleaner, Combined. R. P. Considine. 1,616,355′; Feb. 1.

Twine and rope cutter. D. S. Dillenbach. 1,621,357′; Mar. 15.

Twine ball, cross wound bobbin, or the like, Spoolless. W. Hoos. 1,628,244′; May 10.

Twine holder. C. C. March. 1,626,545′; Apr. 26.

Twine holder. C. V. Woolman. 1,618,901′; Feb. 22.

Twine machines, Stop and brake for. J. B. Crawford. 1,633,477′; June 21.

Twister rings, Traveler for. G. H. Gilligan. 1,636,992′; Twister traveler and making same. P. C. Wentworth. 1,642,472′; Sept. 13.

Twisting device. O. G. J. S. de Roysnncour. 1,618,519′; Feb. 22.

Twisting machine. S. A. Reed. 1,635,009′; July 5.

Twisting machine. S. A. Reed. 1,635,009′; July 5. Twisting device. O. G. J. S. de Roysancour. 1,618,619; Feb. 22.

Twisting machine. S. A. Reed. 1,635,009; July 5.

Twisting machine. W. Siebenmorgen. 1,615,524; Jan. 25. Twisting machinery. C. Smith and F. Yorke. 1,642,218; Sept. 13. Type-cleaning compound. E. L. Faber. 1,622,862; May 24, Type-comosing machines, Justification mechanism for. Type-distributing machine. F. H. Poeppelmeier. 1,618,350; Feb. 22. Type-forming machines, Mold for. J. C. Norwood and E. B. Hallauer. 1,615,031; Jan. 18. 436,633; Aug. 30. Type langer. R. C. Smith. 1,643,538; Oct. 11. Type inductance coil, Sectional. W. W. Brown and J. E. Love. 1,621,465; Mar. 15. Type lifting and lowering device for portable typewriters. Automatic. G. B. Vergarn. 1,650,750; Nov. 29. 1,613,972; Jan. 11. Type-line setting and casting machine. E. Uthtoff. 1,618,598; Feb. 22. Type-setting and casting machine. E. Uthtoff. 1,618,598; Feb. 22. Type-setting and casting machine. E. Uthtoff. 1,618,598; Feb. 22. Type-setting and casting machine. Price for cleaning Type-setting apparatus. C. A. H. Bullock. 1,631,518; June 7. Type-string apparatus. C. A. H. Bullock. 1,631,518; June 7. Type-string apparatus. C. A. H. Bullock. 1,631,518; June 7.

Typesetting machines, Keyboard attachment for. C. A.
Stopple, 1,613,679; Jan. 11.

Typewriter, L. Brasa. 1,620,942; Mar. 15.

Typewriter, C. U. Carpenter. 1,644,108; Oct. 4.

Typewriter, S. A. Dean. 1,627,016; May 3.

Typewriter, J. Hilgert, 1,633,685; June 28.

Typewriter, V. Hriský, 1,633,655; June 28.

Typewriter, V. Hriský, 1,630,299; Nov. 22.

Typewriter, J. C. Reddick. 1,650,299; Nov. 22.

Typewriter, J. C. Reddick. 1,650,299; Nov. 22.

Typewriter of Typewriter, O. Tyberg, 1,652,463; Sep. 13.

Typewriter accessory, O. Tyberg, 1,647,674; Nov. 1.

Typewriter attachment, J. W. A. Elmess, 1,650,866;

Nov. 29. Typewriter attachment. J. H. Rand. 1,643,997; Oct. 4.
Typewriter carriage curn mechanism. A. Gruich.
Typewriter keyboard. O. Tyberg. 1,652,464; Dec. 13.
Typewriter-key remover. P. P. Dunn and G. Shoenfeld.
1,623,912; Apr. 5.

Typewriter keys and the like. Apparette for making caps for D. L. Basterlin. 1.524.224; Ar. 1.2.
Typewriter machine. Weider 1.526,699; May 3.
Typewriter, Mechanically, driven type-rod. T. Stiebel. 1.538,602; Aug. 9.
Typewriter, Noiseless. J. A. Ruffin. 1,630,765; May 31. Typewriter, Power-actuated. O. A. Hokanson, 1,614,475: Jan. 18. Typewriter, Power-operated. O. A. Hokanson. 1,614,472-3; Jan. 18. Typewriter ribbons, Inking roller for. A. H. Kennedy. 1,638,340; Aug. 9. Typewriter stand. J. E. Neahr. 1,623,196; Apr. 5. Typewriter word counter. S. J. Smith. 1,617,774; Feb. 15. 18 Feb. 15.
Typewriter word register, F. C. Ursbruck. 1,646,799;
Oct. 22.
Typewriters and adding machines, Carriage-moving mechaTypewriters and the life. 1,640,764; Aug. 30.
Typewriters and the lee, Mounting for. W. F. Gillespie.
1,622,713; Mar. 29.
Typewriters and the like, Ribbon guide for. C. I. Kephart. 1,621,167; Mar. 15.
Typewriters, Attachment for. J. K. Burllegh. 1,616,885;
Feb. 3.
Typewriters, Automatic line indicator for. C. N. Alwestie. Typewriters, Attachment for. J. K. Burliegh. 1,616,885; Feb. 8.

Typewriters, Automatic line indicator for. G. N. Alworth. 1,640,337; Aug. 23.

Typewriters, Back spacer for. O. A. Hokanson and J. F. Koca. 1,640,123; Aug. 23.

Typewriters, Back-spacing mechanism for. H. Peeters. 1,631,199; Aug. 16.

Typewriters, Case-shift mechanism for. O. A. Hokanson and J. F. Koca. 1,621,726; Mar. 22.

Typewriters, Copybolder for. G. E. Marlatt. 1,637,384; Aug. 2.

Typewriters, Copybolder for. G. E. Marlatt. 1,637,384; Aug. 2. Aug. 2. Typewriters, Escapement mechanism for. O. A. Hokan-son. 1,625,890; Apr. 26. Typewriters, Letter-spacing mechanism for. O. A. Hokan-son. 1,629,623; May 24. Son. 1,629.623; May 24.
Typewriters, Manifolding attachment for. H. M. Armistead. 1,632.362; June 14.
Typewriters, Paper guide for. V. Gage. 1,637,022; July 26. Typewriters, Paper guide for. V. Gage. 1,637,022; July 26.
Typewriters, Power-operated back spacer for. O. A. Hokanson. 1,614,74; Jan. 18.
Typeratus for driving. T. E. Buschmann. 1,623,995; Apr. 12.
Typewriters, Removable carriage for. O. A. Hokanson. 1,627,399; May 3.
Typewriters, Ribbon-carrying arm for manifolding. H. M. Armistead. 1,634,605; July 5.
Typewriters, Shift-lock release for. F. A. Warner. 1,652,334; Dec. 13.
Typewriters, Shift-lock release for. R. G. Daniel. 1,619,602. Mar. 1,619,603. Mar. 1,619,603. Mar. 1,619,603. Mar. 1,619,603. Mar. 1,79pewriting machine. G. Aichele. 1,642,266; Sept. 20.
Typewriting machine. F. H. A. Avery. 1,621,488; Mar. 22.
Typewriting machine. C. C. Balston. 1,619,603; Mar. 1. H. A. Avery. 1,621,488; Mar. 22, C. C. Balston. 1,619,691; Mar. 1, B. F. Barker. 1,623,642; Apr. 5, E. E. Barney. 1,622,276; Mar. 29, E. E. Barney. 1,625,974; Apr. 26, E. E. Barney. 1,646,271; Oct. 18, E. E. Barney. 1,647,850; Nov. 1, E. A. Baskerville. 1,638,138; Typewriting machine. Typewriting machine. Typewriting machine.
Typewriting machine.
Typewriting machine.
Typewriting machine.
Typewriting machine machine. Aug. 9.
Typewriting machine.
Feb. 8. J. H. S. Bates. Typewriting machine. F. Becker. G. K. Blo 7. Becker. 1,626,779; May 3. 3. K. Block. 1.620,004; Mar. 8. H. E. Bridgwater. 1,647,852; Typewriting machine.
Typewriting machine.
Nov. 1. Typewtiting machine.

Nov. 1.

Typewtiting machine.

Sept. 27.

Typewtiting machine. W. O. Bryant, 1.614,599; Jan. 18. C. E. Burns, 1,647,854-5; Nov. 1. G. W. Campbell, 1,628,029; 1.643.005: B. Crews. 1.647.274; Nov. 1. Cripe. 1.621.106; Mar. 15. Davis. 1.617,326; Feb. 15. A. Dobson. 1.614.604; M. Crews. E. Cripe. W. Davis. 1,642,196; W Dobson. W Typewriting machine.
Typewriting machine.
Typewriting machine.
Typewriting machine.
Oct. 18.
Typewriting machine.
Oct. 25.
Typewriting machine.
Typewriting machine.
Typewriting machine. 1.643.654; Α. W. A. Dobson, 1,646,952; Oct. 25 W. A. Dobson, 1,647,125; Nov. 1, J. W. Engelslepen, 1,646,237; J. W. Engelsiepen. Oct. 25.
Typewriting machine.
Typewriting machine.
Typewriting machine.
Typewriting machine.
Typewriting machine.
Typewriting machine. G. G. Going. 1,615.540; Jan. 25. G. G. Going. 1,615.694; Jan. 25. G. G. Going. 1,615.835; Feb. 1. G. G. Going. 1,615.876; Feb. 1. G. G. Going. 1,622.640; Mar. 29 G. G. Going. 1,631,197; June 7.

Typewriting machine. G. G. Going. 1,636,120; July 19.
Typewriting machine. G. G. Going. 1,636,120; July 19.
Typewriting machine. G. F. Handler. 1,647,827; Nov. 1.
Typewriting machine. G. F. Handley. 1,635,408;
July 12.
Typewriting machine. F. A. Hart. 1,650,351; Nov. 22.
Typewriting machine. F. A. Hart. 1,650,351; Nov. 22.
Typewriting machine. E. B. Hess. 1,635,411–12;
Typewriting machine. R. M. Jones. 1,646,407; Oct. 25.
Typewriting machine. R. M. Jones. 1,646,407; Oct. 25.
Typewriting machine. A. G. F. Kurowski. 1,614,003;
Jan. 11.
Typewriting machine. A. G. F. Kurowski. 1,614,003;
Typewriting machine. A. G. F. Kurowski. 1,621,74;
Typewriting machine. A. G. F. Kurowski. 1,623,841–2; Typewriting machine.
Apr. 5.
Typewriting machine.
Apr. 12. A. G. F. Kurowski. 1,623,481-2; A. G. F. Kurowski. 1.624.747: Typewriting machine. A. G. F. Kurowski. 1,625,321; Typewriting machine. A. G. F. Kurowski, 1,636,695-6; Typewriting machine. Aug. 16.
Typewriting machine. Aug. 30.
Typewriting machine. Sept. 6.
Typewriting machine. Sept. 27.
Typewriting machine. Oct. 4.
Typewriting machine. Oct. 25.
Typewriting machine. Oct. 25.
Typewriting machine. A. G. F. Kurowski. 1.639.302: A. G. F. Kurowski. 1.640.841: 1.641.929: A. G. F. Kurowski. A. G. F. Kurowski. 1.642.248: A. G. F. Kurowski. 1,643,664; A. G. F. Kurowski. 1,643,987; A. G. F. Kurowski. 1,646,966; A. G. F. Kurowski, 1,653,362; E. G. Latta. 1,629,514; May 24, R. J. Lewis. 1,681,970; June 14, J. Lindburg. 1,614,510; Jan. 11, J. Lindburg. 1,648,529; July 12, G. H. Murphy, 1,623,063; Apr. 5, L. C. Myers. 1,619,530; Mar. 1, L. C. Myers. 1,627,058; May 3, L. C. Myers and G. F. Handley. L. C. Myers and G. F. Handley. Typewriting machine. Typewriting machine. Typewriting machine. Typewriting machine. Typewriting machine.
Typewriting machine Typewriting machine. Typewriting machine. Typewriting machine.
1,614,252; Jan. 11.
Typewriting machine.
Typewriting machine.
Typewriting machine. C. E. Norin. 1,643,583; Sept. 27. H. L. Pitman. 1,624,068; Apr. 12. H. L. Pitman. 1,625,331; Apr. 19. W. F. Rothermund. 1,631,223; Typewriting machine.
Feb. 8.
Typewriting machine.
Apr. 5. J. A. B Smith. 1.623,445: Apr. 5.
Typewriting machine.
Apr. 19.
Typewriting machine.
May 3.
Typewriting machine.
May 24. J. A. В. Smith. 1,625,338; 1,627,123: B. Smith. J. A. J. A. B. Smith. 1.629.546: Typewriting machine. J. B. Smith. 1,636,792; Typewriting machine.
Aug. 16.
Typewriting machine.
Sept. 13.
Typewriting machine.
Oct. 25. 1,639,235; J. A. B. Smith. B. Smith. 1,642,271-72; J. A. B. Smith. 1,646,936; Oct. 25.
Typewriting machine.
Nov. 29.
Typewriting machine.
Dec. 6.
Typewriting machine.
Dec. 20. Smith. 1.651.002: J. B. Smith. 1,651,415; A. A. B. Smith. 1,653.025; Typewriting machine. B. C. Stickney. 1,626,124; Apr. Typewriting machine. B. C. Stickney. 1,626,641: May 3. Typewriting machine. B. C. Stickney. 1,629,129; The Typewriting machine. B. C. Stickney. 1,651,419; Dec. 6. Typewriting machine. B. C. Stickney. 1,651,739-40; Dec. 6.

Typewriting machine. O. Thieme. 1,617,728; Feb. 15. Typewriting machine. O. Thieme. 1,623,217; Apr. 5. Typewriting machine. O. Thieme. 1,649,329; Nov. 15. Typewriting machine. F. C. Ursbruck. 1,618,317; Typewriting machine. G. Thieme, Typewriting machine. F. C. Feb. 22. Typewriting machine, H. H. May 10. Vickers. 1,628,081; May 10.
Typewriting machine.
Typewriting machine.
Typewriting machine.
Typewriting machine.
J. Waldheim.
Typewriting machine.
J. Waldheim. 1,646,073; Oct. 18. 1,617,468; Feb. 15. 1,617,695; Feb. 15. 1,617,930; Feb. 15. 1,619,045; Mar. 1. 1,620,988; Mar. 15. 1,621,613; Mar. 22. Typewriting machine. J. Waldheim. 1,617,930; Feb. 1b. Typewriting machine. J. Waldheim. 1,620,985; Mar. 15. Typewriting machine. J. Waldheim. 1,620,985; Mar. 15. Typewriting machine. J. Waldheim. 1,624,697; Apr. 12. Typewriting machine. J. Waldheim. 1,624,697; Apr. 12. Typewriting machine. J. Waldheim. 1,636,989; May 8. Typewriting machine. J. Waldheim. 1,635,194; Dec. 20. Typewriting machine. J. Waldheim. 1,635,194; Dec. 20. Typewriting machine. J. Waldheim. 1,635,194; Dec. 20. Typewriting machine. S. L. Walsee and J. P. Hill. Typewriting machine. S. L. Walsee and J. P. Hill. Typewriting machine. J. Waldheim. 1,693,194; Dec. 20. Typewriting machine 1,639,761; Aug. 23. Typewriting machine 1,622,102; May 10. Typewriting machine, Child's. L. Reischl. 1,634,725-6; July 5. Typewriting machine, Child's. L. Reischl. 1,634,725-6; July 5. Typewriting machine, Child's. L. Reischl. 1,634,725-6; July 5. July 5.
Typewriting machines, Adding attachment for. G. O.
Degener. 1,624,318-19; Apr. 12.
The production of the product Typewriting machines, Frame for. O. Fischer. 1,627,773;
Typewriting machines, Frame for. O. Fischer. 1,627,773;
Typewriting machines, Frame for. M. Garbell. Des. 74,052; Dec. 13.
Typewriting machines, Frame for. M. Garbell. Des. 74,052; Dec. 13.
Typewriting machines, Key mechanism for. L. Reischl. 1,613,195; Jan. 4.
Typewriting machines, Paper guide for. V. Gage. Typewriting machines, Ribbon-operating mechanism for. J. Alexander. 1,613,19174; Mar. 1.
Typewriting machines, Ribbon-operating mechanism for. J. Alexander. 1,613,19174; Mar. 1.
Typewriting machines, Work magazine for. J. Waldheim. 1,613,684; Feb. 1.
Typewriting machines, Work-web feeder for. J. Waldheim. 1,613,684; Feb. 1.
Typewriting machines, Devices for distributing the matrices, patrices, and the like for. W. Buswell. 1,613,623; Jan. 4, 11,633,278; June 21.
Typographical assembling machines, Space-band-releasing means for. G. E. Mariatt. 1,651,213; Nov. 29.
Typographical composing machine. C. A. Albrecht. 1,613,638; Nav. 8.
Typographical composing machine. D. S. Kennedy. 1,648,133; Nov. 8.
Typographical composing machine. J. G. McNamara. Typographical composing machine. J. G. McNamara. Typographical distributing machine. D. S. Kennedy. 1,649,798; Nov. 22.
Typographical distributing machine. D. S. Kennedy. 1,630,023; May 24.
Typographical distributing machine. J. G. McNamara. 1,630,023; May 24.
Typographical distributing machine. D. S. Kennedy. 1,629,639; May. 8.
Typographical distributing machine. J. G. McNamara. 1,630,023; May 24.
Typographical machine. J. G. McNamara. 1,622,630; May. 29.
Typographical machine. M. C. E. Ireland. 1,638,036; May. 29.
Typographical machine. W. C. Redfield. 1,624,434; App. 12. Typographical machine. H. Petersen. 1,622,291; Mar. 29.
Typographical machine. W. C. Redfield. 1,624,434; Apr. 12.
Typographical machine. J. R. Tomlin. 1,650,552; Nov. 22.
Typographical machines. J. R. Tomlin. 1,650,552; Typographical machines. Attachment for. F. Y. Barba. 1,621,305; Mar. 13.
Typographical machines, Attachment for. F. Y. Barba. 1,621,305; Mar. 13.
Typographical machines, Attachment for. F. Y. Barba. 1,621,305; Mar. 13.
Typographical machines, Magazine mounting for. T. S. Kohn. 1,684,136; Nov. 2.
Typographical machines, Magazine mounting for. T. S. Homans. 1,650,448; Nov. 22.
Typographical machines, Matrix for. H. R. Freund. 1,653,0175; May 24.
1,654,585; Dec. 27.
Typographical sug-casting machine. G. E. Marlatt. 1,651,241; Nov. 29.
Umbrella. L. A. Capaldo. 1,650,933; Nov. 29.
Umbrella. L. A. Capaldo. 1,650,933; Nov. 29.
Umbrella. A. Moser. 1,613,287; Jan. 4.

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Umbrella, J. Reid. 1,619,217; Mar. 1.
Umbrella and package carrier, Combined. E. Greenberg.
1,652,667; Dec. 13.
Umbrella attachment. E. B. Sweeting. 1,633,961;
      1.632/007, tumbrella attachment, June 28.
Umbrella, Collapsible, G. Friedrichs, 1,642/336; Sept. 10.
Umbrella, Collapsible, G. Orsik, 1,616/276; Feb. 1.
Umbrella, cover and garment, D. Weiss, 1,613/688;
Umbrella cover and garment, D. Weiss, 1,613/688;
     Umbrella, Cover and garment. D. Weiss. 1,613,688; Jan. 11.
Umbrella cover, rib, and stick connection. F. Fabbrin. 1,638,764; Aug. 9.
Umbrella, Duplex. W. G. Grey. 1,628,539; May 10.
Umbrella, Folding. G. Rail-Osterwalder. 1,643,724; Sept. 27.
Umbrella hadde. J. M. Dellinger. 1,643,497; Oct. 12.
Umbrella, Focket. A. Weiss. 1,632,639; June 14.
Umbrella, Stormproof. R. Goldberger. 1,646,144; Oct. 18.
Umbrellas, Handie for. J. M. Dellinger. 1,645,376; Oct. 11.
     Umbrellas, Handle for. J. M. Dellinger. 1,645,376; Oct. 11.
Umbrellas, Protector spreader for. P. M. Willis, 1,648,095; Nov. 8.
Uncoupling device. F. H. Kayler. 1,647,636; Nov. 1.
Uncoupling device. J. McMullen. 1,637,148; July 20.
Uncoupling device. J. McMullen. 1,637,148; July 20.
Uncoupling device. T. N. Connor. 1,625,143; Apr. 19.
Uncoupling device. T. N. Russell. 1,618,228; Feb. 22.
Underbelt. Interlocking. J. Sauer. 1,642,646; Sept. 13.
Underbelt. Interlocking. J. Sauer. 1,642,646; Sept. 13.
Underbelt. 1,628,146; Ed. 8.
      Undergarment.
                                                               H. Cohen. 1.616,440; Feb. 8.
T. E. and O. E. Cunningham. 1,638,922;
      Undergarment.
Aug. 16.
     Aug. 16.
Undergarment. S. B. Hanes. 1,650,207; Nov. 22.
Undergarment. S. T. McKair. 1,644,844; Oct. 11.
Undergarment. S. T. McKair. 1,648,949; Mar. 1.
Undergarment. S. T. McKair. 1,630,815; May. 1.
Undergarment. A. M. Schneider. 1,630,815; May. 31.
Undergarment. H. F. Stephens. 1,628,483; Dec. 20.
Undergarment, C. McKair. 1,620,814; Apr. 12.
Undergarment, Combination. G. L. Nickerson. 1,624,558;
     Undergarment, Combination.
Apr. 12.
     Undergarment, Ensemble. S. E. B. Shepard. 1,628,475;
May 10.
    May 10.
Undergarment, Form - supporting.
1,616,018; Feb. 1.
Undergarment support. J. E.
Dec. 20.
                                                                                                                                                        Ħ.
                                                                                                                                                                                         Winter.
                                                                                                                                                                                   1,653,550;
                                                                                                         J. E. Deimel,
    Dec. 20. Undergarment, Union. A. T. Berry. 1,633,972; June 28. Undergarment, Union or one-piece. O. A. Hoeglund. 1,629,704; May 24. Undergarment, Woman's. H. L. Redmond. 1,643,568; Sept. 27.
     Undergarment, Women's.
                                                                                                               A. Rosenthal.
    Undergarments, Lady's. M. M. Marquis.
                                                                                                                                                                                    1,649,315;
   Ondergarments, Lady's, M. M. Marquis, 1,649,315;
Nov. 15.
Underground support, J. Schenker, 1,652,415; Dec. 13.
Underlift, A. Broadmeyer, 1,631,618; Jun 7.
Underpinning, J. V. Ferry and A. P. Miller, 1,644,572;
 Undervanner. C. T. Mapes. 1,619,984; Mar. S. Underranner. C. T. Mapes. 1,619,984; Mar. S. Underranner. J. M. Miller. 1,654,468; Dec. 27. Underreamer. J. Olson. 1,618,294; Feb. 22. Underreamer. E. Timbs. 1,634,001; June 28. Underreamer. E. Timbs. 1,634,001; June 28. Underreamer. W. R. Wilber. 1,623,453; Apr. 5. Underreamer bit or cutter, F. Swan. 1,620,700; Mar. 15. Underreamer, Rotary. M. C. Hazard. 1,625,208; Apr. 19. Underwear, Making elastic bands for. S. B. Hanes. 1,650,208; Nov. 22. Undervear. Making elastic bands for. S. B. Hanes. 1,632,003; Nov. 22. Undervear. C. S. Hanes. 1,642,867; Sept. 20. Union, Apparatus for permanent. G. E. Björkman. 1,642,867; Sept. 20. Union, Adjustable. E. Price and W. A. Pfister. 1,632,042; June 14.
    Oct. 4.
Underreamer.
Underreamer.
Unit heater for air spaces. A. A. Blomfeldt. 1,638,083;
Aug. 9.
 Unit heater for air spaces.

Aug. 9.

Unit indication for filing and other purposes, Selective.

I. Whetstone. 1,659,058; Nov. 22.

Unit-measuring machines, Receptacle-bandling means for.

C. N. Gergmann and E. Z. and C. Taylor. 1,643,367;

Sept. 27.

Sept. 27.
 Sept. 24.
Universal coupling. G. H. Hufferd. 1.641.385; Sept. 6.
Universal coupling. G. H. Hufferd. 1.643.017; Sept. 20.
Universal coupling. R. C. Stlefel. 1.643,353; Sept. 27.
Universal follow rest. F. B. Cockburn. 1,622,822;
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Universal joint. N. W. Amdur. 1,635,164; July 12.
Universal joint. A. Y. Dodge. 1,632,121; June 21.
Universal joint. W. H. Douglas. 1,617,016; Feb. 8.
Universal joint. W. H. Douglas. 1,631,379; Dec. 6.
Universal joint. W. S. Dwyer. 1,622,425; Mar. 29.

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H. M. Fuunell. 1,649,460: Nov. 15.
E. Gruenfeldt. 1,621,447; Mar. 15.
L. Harper. 1,520,649; Mar. 8.
F. A. Hayes. 1,621,667; Mar. 22.
R. L. Henry. 1,642,775; Sept. 20.
H. Hughson. 1,617,908; Feb. 15.
A. F. Kaptuller. 1,638,338; June 21.
G. B. Kinsler. 1,638,400; Aug. 9.
S. L. Laughlin. 1,630,898; May 31.
A. F. Masury and A. H. Leipert.
7,16.
                                                                                                                                                                                                                      joint.
joint.
joint.
                                           Universal
Universal
                                           Universal joint.
Universal joint.
                                      Universal joint.
Universal joint.
Universal joint.
Universal joint.
Universal joint.
                                  Universal joint. A. F. Masury and A. H. Leipert. 1,638,947; Aug. 16.
Universal joint. D. P. Owens. 1,623,199; Apr. 5.
Universal joint. F. B. Pedersen and H. P. Andersen.
Universal joint. F. B. Pedersen and H. P. Andersen.
Universal joint. A. F. Pieper. Des. 72,802; June 7.
Universal joint. A. F. Pieper. Des. 72,802; June 7.
Universal joint. A. F. Schultz. 1,643,634; Nov. 8.
Universal joint. A. J. Slonecker. 1,646,330; Feb. 1.
Universal joint. G. E. Swenson. 1,615,317; Jun. 25.
Universal joint. G. L. Tarbox. 1,643,647–8; Sept. 27.
Universal joint. G. J. Tarbox. 1,643,648; Nov. 15.
Universal joint. G. J. Tarbox. 1,643,647–8; Sept. 27.
Universal joint. G. J. Tarbox. 1,643,648; Nov. 15.
Universal joint. G. J. Tarbox. 1,643,648; Nov. 15.
Universal joint. Ball-bearing. W. Scott. 1,627,982; Universal multiple-operation greater.
                        May 1. Ma
              Dec. 27.

Upholstery panel and making the same. J. A. Wilson. 1,634,107; Sept. 27.

Upholstery panel and making the same. J. A. Wilson. 1,643,400; Sept. 27.

Upholstery plaits, Instrument for inserting continuous bats into. M. J. Stack. 1,628,927; May 17.

Upsetting machine. K. Auerbach. 1,633,430; June 21.

Upsetting mechanism. R. L. Wilcox. 1,619,494-5;

Man. I.

Uranium in a coherent mass, Preparing. H. C. Rentsch-
Uranium in a coherent mass, Preparing. H. C. Rentsch-

Uranium in a coherent mass, Preparing. H. C. Rentsch-

Urea and of for Marden. 1,645,962; Nov. 15.

Urea from cyanimide, Manufacture of the condensa-

tion products of. H. 2005. May 24.

Urea, Preparing. J. M. A. Stillesen. 1,614,698; Jan. 18.

Ureides, Sedative and hypnotic. F. Boedecker. 1,633,392;

Urethoscope. F. Cerbo. 1,624,716; Apr. 10.
Ureas, Preparing. J. M. A. Stillesen. 1,014.098; Jan. te. Ureides, Sedative and hypnotic. F. Boedecker. 1,633,392; June 21. Ureinal for automobiles and the like. G. N. Randle. Urin, H. H. Schott., Des. 72,872; June 14. Urin, Coffee. J. L. Shroyer. 1,648,699; Nov. 8. Urin. H. H. Schott., Des. 72,872; June 14. Urin, Coffee. J. L. Shroyer. 1,648,699; Nov. 8. Urin. H. H. Schott., Simmons. 1,620,495; Mar. 8. Urin or similar article, Beverage. S. Kuriloff. Des. 72,165; Mar. 8. Urin. Schott, Similar article, Beverage. S. Kuriloff. Des. 72,165; Mar. 8. Urin. 12,165; Mar. 19. Urin. 12,165; Mar. 19. Urin. 19. E. Shaw. 1,621,758; Mar. 22. Utensil, Cocking. L. Caskin. 1,631,422; Dec. 6. Utensil, Baking. B. R. Kraik. 1,637,617; Aug. 2. Utensil, Cocking. L. Caskin. 1,631,422; Dec. 6. Utensil, Biectrically-heated. E. S. Preston. 1,650,999; Nov. 29. Urin. 19. Urin. 19
    Feb. 1.

Vacuum chuck for bearing cones. W. A. Hatcher.

1,618,378; Feb. 22.

W. L. Acosta 1,639,876; Aug. 23.

Vacuum cleaner. E. Ragonot. 1,635,484; July 12.

Vacuum cleaner. E. Ragonot. 1,635,484; July 12.

Vacuum cleaner. G. W. Minuth. 1,624,586; Mar. 22.

Vacuum cleaner. F. J. Oslus. 1,624,969; Apr. 19.

Vacuum cleaner. F. P. Pease. 1,631,549; June 7.

Vacuum cleaner. M. H. Spielman. 1,613,250; Jun. 4.

Vacuum cleaner. N. A. Throop. 1,642,518; Sept. 19.

Vacuum-cleaner. N. A. Throop. 1,642,518; Sept. 2.

Vacuum-cleaner attachment. F. A. Voos. 1,638,654; Aug. 9.
    vacuum cleiner. N. A. Thropp. 1,642 518; 301; 311; 34; Vacuum cleiner. H. Wieckhorst. 1,637,697; 311; 28; Vacuum-cleiner attachment. F. A. 700a. 1,638,554; Aug. 9; Vacuum-cleiner device. S. McClatchie. 1,633,598; June 28.
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Vacuum cleaner, Dirt-ejecting. T. Drew. 1,633,561; June 21.

Vacuum cleaners, Adjustable handle structure for. I. J. Vacuum cleaners, June 21.

Vacuum cleaners, Adjustable handle structure for. I. J. Vacuum cleaners, Brush gear for. J. Keller, sr. 1,613,396; Jan. Vacuum cleaners, Floor, May 24.

Vacuum cleaners, Floor, Pully 24.

Vacuum cleaners, Floor, Pully 24.

Vacuum cleaners, Floor, Vally 24.

Vacuum cleaning systems, Combined switch-box and vacuum-ine-seal mechanism for. I. W. Melcher. 1,618,667; Feb. 22.

Vacuum cleaning tool. G. E. Kent and F. W. Yutzler. 1,631,894; Dec. 06.

Vacuum-ceaning tool. G. E. Kent and F. W. Yutzler. 1,634,649; Dec. 07.

Vacuum-containers, Seal, Joint, and the like of. E. Y. Robinson. 1,639,575; Aug. 16.

Vacuum-controlled fuel-supply system. M. C. Bright. 1,636,469; July 19.

Vacuum-ceating device. F. V. Winters. 1,638,365; Aug. 9.

Vacuum-creating device. F. V. Winters. 1,638,365; Aug. 9.

Vacuum creating device. F. V. Winters. 1,638,384; Peb. 16.

Vacuum device for heating bodies, High- J. E. Lillienfeld. 1,016,312; Feb. 8.

Vacuum discharge apparatus. S. Dushman. 1,631,672; June 7.

Vacuum discharge tube. A. P. Nickel and J. J. Spanner. 1,644,601; Oct. 4.

Vacuum decu. A. P. Plaut. 1,642,122; Sept. 13.

Vacuum decu. A. P. Plaut. 1,642,122; Sept. 13.
           Vacuum
                                                                                                cleaner, Dirt-ejecting. T. Drew. 1,633,561;
        June 7, Vacuum discharge tube. A. P. Nickel and J. J. Spanner. 1,644,601; Oct. 4, Vacuum feed. A. P. Plant. 1,642,129; Sept. 13. Vacuum feed system. J. L. Van Pelt. 1,621,817; Mar. 22.
        Vacuum filers, Cake-washing means for rotary. W. Manss. 1,646,663: 0ct. 25.
Vacuum floor scrubbing and washing machine. W. L. Keefer. 1,647,005: 0ct. 25.
Vacuum fuel-feed tank. W.Em. Hart. 1,639,181; Aug. 16.
Vacuum fuel-feeding system. W. O. Chase. 1,647,174;
        Nov. 1.

Vacuum gauge. J. W. Legg. 1.652.555; Dec. 13.

Vacuum jacketed flask. G. H. Stock. 1.648.512; Nov. 8.

Vacuum means for conserving lubricating oil of internal-combustion engines. C. S. Clark. 1,618.601; Feb. 22.

Vacuum or thermionic tube. A. G. Thomas. 1,636,261; July 19.

Vacuum packing apparatus. F. W. L. Peebles. 1,631,885; June 7.
     June 7

Vacuum pan. A. Gräntzdörffer. 1,650,122; Nov. 22.

Vacuum preserver. A. B. Briggs. 1,635,815; July 12

Vacuum-producing apparatus. C. F. Ames. 1,628,083;

Apr. 5.

Vacuum-producing apparatus. R. H. Frederick. 1,623,103;

Apr. 6.

Vacuum-producing apparatus. A. M. Kobiolke. 1,622,155;

Mar. 22.

Vacuum seturn boller feed. L. K. Ascher. 1,635,600;

Vacuum seal and apparatus. O. Minton. 1,633,121;

June 21.

Vacuum space discharge device and gas accumulator therefor, High. F. S. McCullough. 1,615,003; Jan. 18.
        Value 21 page discharge device and gas accumulator church, High. F. 8. McCullough. 1615.089, Jan. 18. Vacuum tank. W. E. Hart. 1.616.045; Feb. 1. Vacuum tank. C. S. Nelson. 1,627.293; May 3. Vacuum tank. H. Rabezzana. 1,642,461; Sept. 13. Vacuum tank feeder. C. J. Ferguson. 1,641,076;
           Aug. 30.
Vacuum tube,
Vacuum tube,
Vacuum tube.
Vacuum tube.
                                                                                                                                               J. L. Brown. 1.616.214; Feb. 1
F. C. Chaffee I. J. 649.810; Nov. 22.
F. H. G. Komeann. 1.642.210; Sept. 13.
H. H. Komeann. 1.642.210; Sept. 13.
H. E. Metcalf, 1.636.838; May 3.
H. E. Metcalf, 1.636.239; July 19.
H. E. Metcalf, 1.646.626; Oct. 25.
L. E. Mitchell and A. J. White. 1.632.615;
                                                                  m tube.
           Vacuum tube.
Vacuum tube.
Vacuum tube.
Vacuum tube.
June 14.
Vacuum tube.
Vacuum tube.
Vacuum tube.
        June 14.
Vacum tube. H. J. Round. 1,649,489; Nov. 15.
Vacum tube. P. M. Watroux. 1,613,680; Jan. 11.
Vacum tube. P. M. Watroux. 1,613,680; Jan. 11.
Vacum tube. H. W. Weinhart. 1,624,451; Apr. 12.
Vacum tube. L. Winkelmann. 1,650,921; Nov. 29.
Vacum tube and tube circuits. A. G. Thomas. 1,652,880; Dec. 13.
Vacum—tube circuit. M. Latour. 1,615,808; Jan. 25.
Vacum—tube circuits. K. M. Maclivain. 1,614,482;
Vacum—tube agha.
             Vacuum-tube-echo suppressor. G. Crisson. 1,647,212;
        Nov.: New Superson Comments of Crisson Average Nov.: Nov.: New New York New
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Vacuum-tube structure and assembling the same. M. H. Ryder. 1,615,654; Jan. 25.
Ryder. 1,615,654; Jan. 25.
Ryder. 1,650,954; Nov. 29.
Vacuum tubes, Arrangement for feeding. E. Pürschel. 1,615,098; Jan. 18.
Ryder. 1,615,098; Jan. 18.
Ryder. 1,615,098; Jan. 18.
Ryder. 1,615,098; Libration dependence of C. C. Langit. Mar. 29. Support 107. M. Alden. 1,622,267; Vacuum tubes, Vibration-damping means for. C. C. Lauritsen. 1,631,100; May 31.

1.638,930; Aug. 16.

1.638,930; Aug. 16.

1.638,930; Aug. 16.

1.638,930; Aug. 16.

1.640,014; Aug. 23.

Valonce for window draperies. J. Derk. Des. 71,783; Vallse, J. J. Gels. 147,2700. Vallance for Window draperies. J. Derk. Des. 14,155; Valles. J. Le Gale. 1,617,629; Feb. 15.
Values, Indicating and also recording various. H. N. Packard, 1,614,635; Jan. 18.
Valve. A. B. Antisell. 1,647,823; Nov. 1.
Valve. W. Baumgartner, 1,633,061; June 21.
Valve. C. J. Erkang. 1,631,402; Dec. 6.
Valve. C. J. Erkang. 1,631,402; Dec. 6.
Valve. S. C. Caldara. 1,641,141; Aug. 30.
Valve. F. F. Couch. 1,624,218; Apr. 12.
Valve. F. S. Cravens. 1,627,486; May 3.
Valve. F. S. Cravens. 1,627,486; May 3.
Valve. T. W. Demarest. 1,632,220; June 14.
Valve. C. L. Dult, and W. E. Neston, 1,650,494; Nov. 22.
Valve. C. L. Duncan, 1,643,900; Oct. 18.
Valve. C. E. Duncan, 1,643,900; Oct. 18.
Valve. C. F. Eisenhauer. 1,633,406; June 7.
Valve. C. F. Eisenhauer. 1,633,406; June 7.
Valve. H. Feldmeier and C. F. Wray. Des. 74,144; Dec. 27. Valve.
Valve.
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Valve. H. Feldmeier and C. F. Wray. Det 2. W. M. Fleming. 1494.724; Sept. 20. W. M. Fleming. 1494.724; Sept. 20. A. C. Gaines. 1,631.563, June 7. A. C. Gaines. 1,631.563, June 7. A. C. Gaines. 1,630.732; Aug. 6. G. Gradinberger. 1,645.751; Oct. 18. T. F. Gray. 1,642.24; Sept. 13. T. F. Gray. 1,642.84; Sept. 13. T. F. Gray. 1,642.84; Sept. 13. T. F. Gray. 1,643.763; July 19. J. E. Hall. 1,634.74; July 19. J. E. Hall. 1,634.74; July 19. J. E. H. Hehemann. 1,625.632; Apr. 24. F. H. Hehemann. 1,634.44; June 7. F. Hofmann. 1,634.305; July 5. O. H. Hosmer. 1,648.126; Nov. 8. L. C. Huf. 1,619.937; Mar. 8. L. C. Huf. 1,619.937; Mar. 8. L. VICKER. 1,649.235; Apr. 27. P. M. Johnson. 1,622.733; Mar. 29. V. B. Jones. 1,649.235; Nov. 15. C. S. Kellum. 1,680.797; Nov. 29. L. H. Kennon and L. J. Lungdon. Valve. 1.625.367: Apr Valve. Valve. Aug. Valve. Valve. Valve. Valve. Valve. Valve. Valve. Valve. Valve. 19 F. Key. 1,620,108; Mar. 8. Kirschbraun and R. T. Pollock. 1,638.162; 1. Airschoffun and K. T. Pollock, 1,638.162;
14. T. Kraft, 1,615.016; Jan. 18.
3. D. Lalor, 1,644.305; Sept. 27;
15. T. Lane, 1,641.892; Sept. 6.
17. C. W. Larner, 1,636.662; July 19.
18. C. Larsen, 1,634.675; June 28.
19. Larsen, 1,634.675; June 28.
19. Larsen, 1,634.675; June 21.
19. C. Larsen, 1,644.846; Nov. 8.
19. E. Littlefield, 1,639.247; June 21.
19. C. Larsen, 1,645.474; July 26.
19. Larsen, 1,645.743; July 26.
19. Larsen, 1,638.483; June 21.
19. L. A. A. McCree, 1,638.550; Dec. 27.
19. J. McGinn, 1,633.488; June 21.
19. E. Mitton, 1,626.045; Apr. 26.
19. C. W. Murray, jr. 1,652.453; Dec. 13.
19. J. Nordstrom, 1,634.4721-2; July 5.
19. L. Olofsson and R. E. Peterson, 1,640,247;
28. Valve. Valve. Valve. Valve. Valve. Valve. Valve.
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Valve. B. L. Olofsson and R. E. Peterson. 1,640,247: 23. F. J. O'Stroske, 1,616,386; Feb. 1.
J. F. Parker, 1,635,287; July 12.
F. A. Perrenot, 1,619,033; Mar. 1.
A. F. Pieper, 1,631,643; June 7.
C. F. Prescott. 1,634,339; July 5.
A. Reinecke. 1,616,225; Feb. 1.
J. P. Richmond. 1,644,050; Oct. 25.
C. F. Richmond. 1,644,050; Oct. 25.
C. L. Rowe, 1,645,156; Oct. 1,0ec. 6.
J. J. Ryan. 1,624,186; Apr. 12.
A. W. Rybeck. 1,623,567; Apr. 5.
E. J. Steele. 1,624,850; Apr. 12.
W. S. Sutton. 1,639,362; May 31.
A. Thomson and J. W. Estholme. 1,621,910; 22. Mar. 22.

Valve. L. P. Upboff and F. A. Sims. 1,650,855; Nov. 29.

Valve. L. P. Upboff and F. A. Sims. 1,650,855; Nov. 29.

Valve. F. A. Vogt, E. Fleisch, and H. Goldsmith.
1,630,040; May 24.

Valve. C. Wilhjelm. 1,622,406; Mar. 29.

Valve. H. E. Williams. 1,638,077; Aug. 9.

Valve. W. I. Williams and R. Reeder. 1,618,034;

Vec. W. G. Wilson. 1,654,516-17; Dec. 27.

Valve. P. D. Wright. 1,633,618; July 19.

Valve accelerating device, Dry-pipe-. E. Tyden.
1,615,056; Jan. 18.

Valve, Valve accelerator, Dry-pipe-. L. M. Lewis. 1,646,618; Brake. I. O. G. Drolshammer. 1.653.842 . Valve accelerator, Dry-pipe-, L. M. Lewis. 1,040,018, Oct. 25.
Valve, Acid-proof. J. J. W. Kenan. 1,623,056; Apr. 5.
Valve, Acknowledgment. J. F. Webb, jr. 1,635,804;
July 12. Valve, Brake-control. N. A. Christensen. 1.613.021: Jan. 4. Valve, Breather. J. Kuhl. 1,637,489; Aug. 2. Valve, Butterfly. D. W. Stattery. 1,643,753; Sept. 27. Valve cap. 6. F. Keerples, 26,635; Jan. 4. Valve cap. 6. F. Keerples, 26,635; Jan. 4. Valve cap. E. J. Murphy. 1,631,050; May 31. Valve, Charging, G. E. Maier. 1,627,448; May 3. Valve, Charging, G. E. Maier. 1,627,448; May 3. Valve, Check. L. C. Beck and J. Lamascus. 1,652,341; Dec. 13. Valve-actuating device, Toilet-. T. Shimo. 1,615.523: Jan. 29.
Valve-actuating means for fire-extinguishing systems. H.
M. Minnis. 1,618,462; Feb. 22.
Valve-actuating mechanism. M. E. Crandall. 1,614,830;
Jan. 18. Valve cap. G. F. Keena. 1,627,908; May 10.
Valve cap. E. J. Murphy, 1,631,000; May 31.
Valve Charging. G. E. Maier. 1,627,443; May 3.
Valve, Check. J. C. Beek and J. Lamascus. 1,652,341;
Dec. 13.
Valve, Check. W. Bird. 1,613,076; Jan. 4.
Valve, Check. J. Hirshstein. 1,633,542; July 12.
Valve, Check. J. Hirshstein. 1,633,542; July 12.
Valve, Check. J. Micholson. 1,623,5342; July 12.
Valve, Check. L. M. Wicholson. 1,629,631; May 24.
Valve, Check. L. M. Wicholson. 1,629,631; May 24.
Valve, Check. L. M. Wicholson. 1,629,631; May 24.
Valve, Combined on P. W. Willans. 1,637,924; May 24.
Valve, Combined on P. W. Willans. 1,637,924; May 24.
Valve, Combined on P. W. Willans. 1,637,977; Aug. 2.
Valve, Combined on Vacuum and pressure relief. C. P.
Walve, Combined organization vacuum and pressure relief. C. P.
Walve, Combined cylinder cock and relief. V. P. McVoy.
Valve, Combined cylinder cock and relief. V. P. McVoy.
Valve, Combined cylinder cock and automatic. D. E. Jackson. 1,663,372; Dec. 20.
Valve, Combined relief and vacuum. F. Henneböhle.
1,617,711; Feb. 15.
Valve, Combined trip and throttle. E. H. Wright. 1,617,711; Feb. 15.
Valve, Combined trip and throttle. E. H. Wright. 1,648,710; Nov. 8.
Valve, Combression. F. J. Heideman. 1,637,241; Jan. 28.
Valve, Compressor discharge. W. Wishart. 1,636,888; July 26.
Valve connection. Standing. R. W. Gunn and W. A. S.
Valve, Compressor discharge. W. Wishart. 1,636,888; July 26.
Valve construction. J. Schmidt. 1,630,973; May 31.
Valve construction. J. Schmidt. 1,630,973; May 31.
Valve construction. J. Schmidt. 1,630,973; May 31.
Valve contruction for inflatable articles. W. J. Voit. 1,644,969; Oct. 4.
Valve contruction for inflatable articles. W. J. Voit. 1,644,969; Oct. 4.
Valve contruction for inflatable articles. W. J. Voit. 1,644,969; Oct. 4.
Valve contruction for inflatable articles. W. J. Voit. 1,644,969; Oct. 4.
Valve contruction for inflatable articles. W. J. Voit. 1,644,969; Oct. 4.
Valve contruction for inflatable articles. W. J. Voit. 1,644,969; Oct. 4.
Valve contru All Allins (10.16.402; Peb. 22.

Valve-actuating mechanism. M. E. Crandall. 1,614,830;
Valve-actuating mechanism. J. Holle. 1,644,059; Oct. 4.
Valve-actuating mechanism. C. R. Kinkaid and E. T.
Shreve. 1,634,198; June 28.
Valve adjuster and silencer, Automatic. E. H. McAllister.
1,624,497; Apr. 12.
Valve, Air; Apr. 12.
Valve, Air; H. Erown and G. R. Uhl. 1,628,819; May 17.
Valve, Air, H. Erown and G. R. Uhl. 1,628,819; May 17.
Valve, Air, M. G. Hubbard. 1,614,613; Jan. 18.
Valve, Air, T. J. Stokes. 1,624,021; Apr. 12.
Valve, Air-compressor. J. Le Valley. 1,629,789; May 24.
Valve, Air-compressor. J. Le Valley. 1,629,789; May 24.
Valve, Air-compressor. J. Le Valley. 1,630,471; Mov. 31.
Valve and cage puller. H. Blume and G. B. Streitz.
1,627,477; May 3.
Valve and float for drinking troughs and the like, Automatic. A. Mendizabal. 1,619,481; Mar. 1.
Valve and float for drinking troughs and the like, Automatic. A. Mendizabal. 1,619,481; Mar. 1.
Valve and operating device therefor. M. Dean.
1,640,537; Aug. 30.
Valve and applied by the same, Adjusting. A. Green.
1,638,640; u.g.
Valve and valve gearing for steam and other fluid-pressure engines. Rotary distributing. W. M. Coward.
1,647,561; Nov. 1.
Valve and valve gearing for steam and other fluid-pressure engines. Rotary distributing. W. M. Coward.
1,647,561; Nov. 1.
Valve apparatus. I. W. Knight. 1,633,108-9; June 21.
Valve, Apparatus for controlling the Color of fluid to a.
Valve apparatus. Pressure-operated. B. Welcker.
1,638,402; July 19.
Valve apparatus. Pressure-operated. B. Welcker.
1,1038,402; July 19. W. G. Wilson. 1,622,016; Mar. 22.

Valve apparatus, Pressure-operated, B. Welcker. 1,636,402; July 19.

Valve apparatus, Remote gas-control. H. K. Caldwell 1,644,171; Oct. 4.

Valve, Automatic. L. L. Cherry. 1,648,756; Nov. 8.

Valve, Automatic. C. Hartmann. 1,644,127; Oct. 4.

Valve, Automatic. L. Kalkbrenner. 1,022,448; Mar. 29.

Valve, Automatic. A. Moser. 1,626,147; Apr. 26.

Valve, Automatic arand gas check. J. M. Fotch. 1,619,066; Mar. 1.

Valve, Automatic cut-off. J. F. Currivan. 1,620,876; Mar. 15.

Valve, Automatic cut-off. J. F. Currivan. 1,620,876; Mar. 15.

Valve, Automatic cut-off and drainage. G. A. Moore. 1,638,052; Aug. 9. Valve, Automatic cut-off and drainage, G. A. Moore. 1,638,052; Aug. 9. Valve, Automatic differential expansion. G. F. Kno. 1,616,129; Feb. 1. Valve, Automatic gas. C. M. Lee. 1,625,323; Apr. 19. Valve, Automatic measuring. F. M. Gunn. 1,641,287; Sept. 6 Valve, Automatic pressure-controlled, C. H. Nickell. 1,643,682; Sept. 20. Valve, Automatic reducing and cut-off, W. C. McKeown. 1,653,811; Dec. 27. Valve, Automatic relief. L. W. Brownet. 1,620,321; Mar. 8. Valve, Automatic relief. A. F. Habenicht. 1,619,469; Mar. 1. Valve, Automatic sand. Oct. 25. E. A. Lansrud. 1,646,753; Valve, Automatic self-closing. O. A. Price. 1,620,131; Mar. 8. alve, Automatic self-closing, O. A. Price. 1,629,637; alve, Automatic self-closing. O. A. Price. 1,631,059; May 31. Valve, Automatic shut-off. L. D. Lovekin. 1,628,675; May 17. Valve Automatic stop. W. B. Flanders. May 3 May 3.

Valve, Automatic temperature-actuated refrigerant-regulating. E. E. Snader. 1.636.874; July 26.

Valve, Automatic timing. G. E. Lundberg and I. Jeppsson. 1.645.763; Oct. 18.

Valve, Automatic weight opening. J. W. Casey. 1.633.923; June 28.

Valve, Back-pressure. L. M. Pearce. 1.615.811; Jan. 25.

Valve, Back-water. D. Forfar. 1.623.586; Apr. 5.

Valve, Balanced pileg. J. Kruttschnitt. 1.614.800;

Jan. 18.

Jan. 18 Valve, Ball and seat. J. F. Larkin. 1,621,889; Mar. 22, Valve, Ball-cock. E. F. Donnelly. 1,612,857; Jan. 4. Valve body. H. D. Rahling. Des. 78,226; Aug. Valve bracket, Retaining. S. H. Campbell. 1,640,819; Aug. 30.

Valve-control mechanism. G. D. Kaiser. 1,629,627; May 24. Valve-control mechanism. G. D. Kaiser. 1,629,627; May 24. Valve-control mechanism for power actuators. C. S. Bragg and V. W. Kliesrath. 1,630,326-7; May 31. Valve control, System for automatic. J. S. Kennedy. 1,632,905; June 21. Valve-controlling means, Knee-operated throttle-. A. S. Martin. 1,627,102; May 3. Valve-controlling mechanism. R. J. Buehler. 1,621,870; Mar. 22. Martin. 1.627,102; May 8. Valve-controlling mechanism. R. J. Buehler. 1,621,870; Mar. 22. Valve-corrolling mechanism. R. J. Buehler. 1,621,870; Mar. 22. Valve-core extractor. J. R. C. Smith. 1,630,976; May 31. Valve, Cut-off. W. Goode. 1,613,194; Jan. 4. Valve cut-off and speed indicator. V. Z. Caracristi. 1,627,076; May 3. B. M. Shannon. 1,663,737; Dec. 27. Valve, Cyrawell emergency. K. M. Brogdon and C. L. Howser. 1,648,107; Nov. 8. M. Brogdon and C. L. Valve device. E. Tyden. 1,635,295; July 12. Valve device, Emergency. T. H. Thomas. 1,812,892; Jan. 4. Valve device, Emergency. T. H. Thomas. 1,612,892; Jan. 4. Valve device, Feed. C. C. Farmer. 1,633,728; June 28: Valve device, Release. C. C. Farmer. 1,644,671; Oct. 4. Valve device, Retaining. F. P. Livingston. 1,626,618; May 3. Valve device Retarded release. C. C. Farmer. 1,633,777; June 28. Valve device, Safety pressure. H. S. Williams. 1,616,775; Feb. 8. Aug. 30.

Valve bracket, Retaining- F. H. Pietzsch. 1,640,804; Aug. 30.

Valve, Draining. J. L. Hutchings. 1,921,165; Mar. 15. Valve, Dritting. J. E. Pruitt. 1,041,804. Sept. 6. Valve, Drypine. T. W. Cundle. 1,024,815. Apr. 12. Valve, Drypipe. T. W. Cundle. 1,024,815. Apr. 12. Valve, Drypipe. L. M. Lewis. 1,628,674; May 17. Valve, Drypipe. E. Tyden. 1,636,263; July 19. Valve, Duplex throttle. F. N. Poignand. 1,627,997; May 10. Walve Drypine. E. Tyden. 1,636,263; July 19. Valve, Duplex throttle. F. N. Poignand. 1,627,997; May 10. The property of Valve, Electrically-actuated. R. E. Davis. 1,638,325; Valve, Electrically-operated. C. T. Hibbard. 1,640,324; Aug. 23. Valve, Electrically-operated. H. J. Sauvage. 1,643,523; Sept. 27. Sept. 27.

Valve, End-train-pipe. E. H. Gold and E. A. Russell.

Valve, Engine. 25.

Loid-18456; Feb. 22.

Loid-18450; Loid-18 Jan. 4. Valve for dry-pipe valves, Drip. E. E. Clark. 1,630,783; May 31. Nay 31.

Valve for dry-pipe valves, Drip. E. E. Clark. 1,630,783; May 31.

Valve for dry-cossive-pressure vagor ranks and lines, Relief. Valve for diushing cisterus, Discharge. J. B. Christie. 1,618,268; Feb. 22.

Valve for diushing cisterus, Discharge. J. B. Christie. 1,618,268; Feb. 22.

Valve for internal-combustion engines, Rotary. H. Dock. Valve for internal-combustion motors, Spark-plug. C. A. Rudqvist. 1,622,349; Mar. 29.

Valve for internal-combustion motors, Spark-plug. C. A. Rudqvist. 1,622,349; Mar. 29.

Valve for internal-combustion motors, Spark-plug. C. A. Rudqvist. 1,622,349; Mar. 29.

Valve for internal-combustion motors, Spark-plug. C. A. Christian C. C. Christian C. C. Christian C. C May 31.

Valve for oil burners and the like, Safety. C. B. Buerger.
1,623,160-1; Apr. 5.

Valve for oil burners, Quick-acting shut-off. R. D. McIntosh. 1,651,034; Nov. 29.

Valve for oil tanks, Automatic vapor take-off. C. P. Buck.
1,620,718; Mar. 15.

Valve for pipe lines, Rotary. J. Schnyder. 1,646,631;

Valve for piping of large diameter. K. Schlagenhauff.
1,632,04; Dec. 6.

Valve for playing balls. H. Goldsmith. 1,641,382;

Sept. 6. Valve for playing balls. H. Goldsmith. 1,641,382; Sept. 6. Valve for refrigerating apparatus. M. H. Loughridge. 1,625,324; Apr. 19. Valve for refrigerating system. G. F. Knox. 1,616,130; Feb. 1. Valve for rock drills, Disk. L. C. Bayles and F. M. Slater. 1,633,471; June 21. Valve for soda fountains. Carbonated-water cut-off. O. Sasser. 1,632,626; June 14. Valve for sport balls or fluid containers. M. B. Reach and W. W. MacDonald. 1,618,676; Feb. 22. Valve for tanks. J. Harris. 1,631,372; June 7.

72535-P-63

Valve for the train lines of air-brake Systems, Safety. C. C. Cousins, 1,647,953; Nov. 1. Valve for foliet-fushing mechanism, Inlet. C. A. Wulf. Valve for foliet-fushing mechanism, Inlet. C. A. Wulf. 1,622,696; Mar. V. Stemen engines, Auxiliary exhaust. F. F. Pettzer. 1,616,667; Feb. S. Valve for use in fish stalls and like places, Automatic. F. M. Spurr. 1,632,2516; June 14. Valve for water tanks, Automatic. O. Lintsatt, 1,632,636; May 31. 449, 500 minus mechanism, Bag-. M. J. Davis. 1,623,170; Appl. 1,632,636; May 31. 449, 500 minus mechanism, Bag-. M. J. Davis. 1,623,170; Valve, Frostproof drain. A. L. Wertz. 1,640,475; Valve, Oate. J. J. Davis. 1,622,110; Valve, Gate. J. J. Synor and T. S. Spear. 1,613,538; Valve, Gate. J. J. Synor and T. S. Spear. 1,613,538; Valve, Gate. L. J. Spear. C. C. Hansen. 1,614,124; Jan. 11. Valve, Gas. C. C. C. Hansen. 1,614,124; Jan. 11. Valve, Gate. L. J. Black. 1,624,446; Apr. 12. Valve, Gate. J. J. Duffy. 1,043,033; Sept. 20. Valve, Gate. J. J. Duffy. 1,043,033; Sept. 20. Valve, Gate. A. K. Morrison. 1,636,427; July 19. Valve, Gate. J. H. Seymour and T. S. Spear. 1,613,138; Valve, Gate. J. H. Seymour and T. S. Spear. 1,617,503; Feb. 15. Valve, Gate. J. H. Seymour and T. S. Speär. 1,617,503; Feb; 15. Valve, Gate. S. W. Sparks. 1,648,071; Nov. 8. Valve, Gate. G. C. Thoman. 1,650,963; Nov. 29. Valve, Gate. G. C. Thoman. 1,650,963; Nov. 29. Valve, Gate. G. C. Thoman. 1,650,964; Nov. 29. Valve, Generator arrangement. A. Meissner. 1,621,992; Mar. 22. Valve, Generator arrangement. A. Meissner. 1,621,992; Mar. 29. Valve, Grease-cup. A. B. Fairchild, 1,625,717; Apr. 19. Valve-guide bushing. W. A. Disch. 1,641,963; Sept. 13. Valve, Ingar foor. M. Q. Corbett. 1,634,983; Sept. 13. Valve, Indicating. J. Sandilands. 1,635,349; July 12. Valve, Inner fire. D. Marrazzo. 1,622,322; Mar. 29. Valve, Internal-combustion turbine with rotary slide. May 31. Valve, Internal-combustion turbine with rotary slide. K. Enders. 1,654,119; Dec. 27. Valve lifter. W. L. Allen. 1,621,820; Mar. 22. Valve lifter. W. L. Allen. 1,621,820; Mar. 22. Valve lifter. G. Blum. 1,613,015; Jun. 4. Valve lifter. G. Blum. 1,613,015; Jun. 4. Valve lifter. J. Cottrell and J. Marker. 1,627,957; Valve lifter. G. Blum. 1,613,015; Jun. 4. Valve lifter. J. Cottrell and J. Marker. 1,627,957; Valve lifter. J. Cottrell and J. Marker. 1,627,957; Valve lifter. J. Avalva 1,614,350; Jun. 11. Valve lifter. May 10. Valve lifter. Valve lifter. E. A. Davalos. 1,614,350; Jan. 1 F. L. Fraizer. 1,613,450; Jan. N. E. Gough. 1,619,669; Mar. 1. F. C. Jewell and H. S. Jewell. 1 Valve litter. F. L. Fraizer. 1,613,450; Jan. 4. Valve litter. N. E. Gough. 1,619,689; Mar. 1. Valve litter. F. C. Jewell and H. S. Jewell. 1,629,708; May 24. Valve litter. E. E. Rainey. 1,623,732; Apr. 5. Valve litter. J. C. Roberts. 1,623,835; Mar. 15. Valve litter. N. J. Strodel. 1,619,162; Mar. 1. Valve litter. Sezandrowsky. 1,615,653; Jan. 18. Valve litter. Self-adjusting. B. J. Tbomas. 1,623,506; Valve-lifting apparatus. H. C. Hughes. 1,615.701; Jan. 25.
Valve-lifting device. W. E. Greene and A. E. Morong. 1,632.844; June 21.
Valve-lifting tool. W. F. Hobbs and J. A. Anderson. 1,614,800; Jan. 11.
Valve, Liquid-fuel-burner. J. W. Booth. 1,616,778; Feb. 8.
Valve, Liquid-Scaled vacuum and pressure relief, J. H. Valve, Liquid-Scaled vacuum and pressure relief, J. H. Valve, Liquid-Scaled vacuum and pressure 7, 1,650,481; Nov. 29.
Valve-locking attachment. J. Balzano. 1,650,481; Nov. 29. Valve lock. R. 1. substant. Valve locking attachment. J. Balzano. 1,000,201, Nov. 22. Valve McGiller, and the substant of the Auto, 511; Feb. 8. Valve mechanism, Choke-. W. Schmid. 1,634.437; July 5. Valve mechanism, Control-. N. A. Christensen. 1,616,606; Feb. 8. Valve mechanism, Control. N. A. Christensen. 1,650,063; Nov. 22.

Valve mechanism, Electrically-operated. E. A. Hammett. 1,626,817; May 3. Valve mechanism, Flushing- P. Haas. 1,620,964; Mar. 16- Valve mechanism, Flushing- P. Haas. 1,623,109; Apr. 5. Valve mechanism, Flushing- P. Haas. 1,633,895; Aug. 8. Valve mechanism, Flushing. P. Haas. 1,622,109; Apr. 5. Valve mechanism for dispensing fluids. N. M. Patrick Valve mechanism for dispensing fluids. N. M. Patrick Valve mechanism for internal-combustion engines, W. H. Bahan and B. H. Boyter. 1,618,945; Feb. 15. Valve mechanism for internal-combustion engines, Stide. C. H. Matthiessen, ir. 1,617,019; Feb. 8. Valve mechanism for internal-combustion engines, Stide. C. H. Matthiessen, ir. 1,617,019; Feb. 8. Valve mechanism, Hydraulically operated flushing. P. Haas. 1,614,668; Jan. 18. Valve mechanism, Inlet. P. Haas. 1,629,914; May 24. Valve mechanism, Inlet. P. Haas. 1,629,914; May 24. Valve mechanism, Phermostatic. C. F. Stoddard. 1,648,075; Nov. 8. Valve mechanism, Thermostatically-controlled. W. W. Carson, Ir. 1,644,325; Oct. 4. Valve mechanism, Thermostatically-controlled. H. W. Valve member for two-stroke-cycle internal-combustion engines. H. Schneider. 1,616,993; Feb. 8. Valve, Mixing. C. C. Cochran. 1,614,437; Jan. 11. Valve, Mixing. G. J. Morris. 1,632,450; June 14. Valve, Mixing. G. J. Morris. 1,632,781; May 31. Valve, Muttiway, G. A. Burman. 1,630,781; May 31. Valve, Muttiway, G. M. Burman. 1,630,781; May 31. Valve, Muttiway, G. M. Burman. 1,630,781; May 31. Valve, Multiway. G. A. Burman. 1,630,781; May 31. Valve, Nonrevoluble. W. G. Wilson. 1,633,690; June 28, Valve-operating device. G. B. Duffield. 1,629,449; Valve-operating device, H. Duncan, May 17.
Valve-operating device, Gas-Burner. A. J. Fraser, 1,637,143; July 26.
Valve-operating machine. H. T. Bennett, J. McIntosh, and T. M. McNelly. 1,618,633; Feb. 22.
Valve-operating means. E. A. Basel. 1,650,590; Nov. 29.
Valve-operating means. C. R. Short. 1,644,750; Oct. 11.
Valve-operating means. A. C. Whidden. 1,641,560-1; Sont. 6. Sept. 6. Variable. C. J. Bassler. 1,637,850; Aug. 2. Valve-operating means for flush tanks. W. U. Griffiths. 1,620,647; Mar. 15. Valve-operating means, Flush-, C. J. Kirk. 1,638,161; Aug. 9. Valve-operating mechanism. D. F. Asbury. 1,612,792; Jan. 4. Valve-operating mechanism. E. M. Ballot. 1,633,882; June 28. Valve-operating mechanism. E. Brown. 1,623,048; Valve-operating mechanism. E. Brown. 1,623,948; Apr. 5.
Valve-operating mechanism. L. Coatlanen. 1,622,492; Mar. 29.
Valve-operating mechanism. A. H. R. Fedden and L. 97.
Valve-operating mechanism. G. B. A. Hallett. 1,619,974; Mar. 8. July 5.

July 5. 1,634,764; July 5.

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July 7.

Jul Dec. 27.
Valve, Outlet. G. N. Manison and I. E. Colvin.
1,654,298; Dec. 27.
Valve, Outlet. G. G. Reeves. 1,626,969; May 3.
Valve, Packless. W. D. Cashin and M. P. Miller. 1,054,298; Dec. 27.
Valve, Outlett. G. G. Reeves. 1,626,969; May 3,
Valve, Packless. W. D. Cashin and M. P. Miller.
1,648,260; Nov. 8.
Valve, Packless. W. M. Fulton. 1,644,773; Oct. 11.
Valve, Packless. W. M. Fulton. 1,644,735; Oct. 11.
Valve, Packless. M. M. Fulton. 1,644,739; Oct. 18.
Valve, Packless. Ball. H. Brown. 1,645,790; Oct. 18.
Valve, Packless ball. H. Brown. 1,645,790; Oct. 18.
Valve, Packless ball. H. Brown. 1,645,790; Oct. 18.
Valve, Packless ball. H. Brown. 1,645,790; Oct. 18.
Valve, Piston In T. K. Koons. 1,633,110; June 21.
Valve, Piston. D. R. Murphy. 1,635,110; June 21.
Valve, Piston. D. R. Murphy. 1,635,120; Dec. 20.
Valve, Piston blde. K. Bubla. 1,653,202; Dec. 20.
Valve, Piston blde. K. Bubla. 1,653,202; Dec. 20.
Valve, Piston blde. K. Bubla. 1,632,9357; May 24.
Valve, Preumatic. E. W. Gent. 1,018,346; Jan. 14.
Valve, Preumatic. G. M. O. Jenkins. 1,622,079;
June 14.
Valve, Preumatically-controlled light. C. F. Jenkins.
Re16,818; Dec. 13. June 14.
Valve, Pneumatically-controlled light. C. F. Jenkins. Re16.818; Dec. 15.
Valve, Pneumatic-tire. J. A. Overlander. 1,649,321; Valve, Poppet. R. E. Bissell. 1,615,211; Jan. 25.
Valve, Poppet. J. F. Burleson. 1,623,826; Apr. 5.
Valve, Poppet. E. S. MacPherson. 1,616,538; Feb. 8.
Valve, Pressure. P. A. Myers. 1,648,499; Nov. 8.
Valve, Presure. A. M. Polisen. 1,616,549; Peb. 22.
Valve, Presure. A. Myers. 1,648,499; Nov. 8.
Valve, Presure. A. Myers. 1,648,499; Nov. 8.
Valve, Presure. A. Myers. 1,648,499; Nov. 8.
Valve, Presure. A. Myers. 1,620,322; Mar. 8.

Valve, Pressure-operable. July 6.

Pressure-regulating. W. C. Heydecker, jr. 1,632,406; June 14.

Valve, Pressure-regulating. W. C. Heydecker, jr. 1,632,609; June 14.

Valve, Pressure-regulating. A. R. Miller. 1,636,919; July 26.

Valve Pressure-regulating. E. F. Wentworth and N. W. Valve puller, Protected standing. R. C. McKown. 1,614,747; Jan. 18.

Valve puller, Standing. R. C. Hawkins. 1,640,406; Aug. 30.

Valve, Pump. W. R. Hamilton. 1,634,141; June 28.

Valve, Ruler, Standing. R. C. Hawkins. 1,640,406; Aug. 30.

Valve, Pump. W. R. Hamilton. 1,634,141; June 28.

Valve, Radiator application and release. F. R. Forman. 1,621,866; Mar. 2.

Valve, Radiator, W. A. Colburn. 1,636,461; July 19.

Valve, Radiator vent. R. T. Warring and G. W. Stultz. 1,619,863; Mar. 1.

Valve, Radiator vent. E. Jacobus. 1,635,790; July 12.

Valve, Radiator vent. E. Jacobus. 1,635,790; July 12.

Valve, Reducing. A. J. and I. F. Fausek. 1,638,300; Valve, Reducing. A. J. and I. F. Fausek. 1,638,300; Valve, Reducing. A. J. and I. F. Fausek. 1,638,300; Valve-regulating device. A. Dickerson. 1,616,078; Feb. 1.

Valve, Rellef. H. D. Bingham. 1,652,231; Dec. 13.

Valve, Remote control. C. Atherton. 1,637,004, Feb. 8.

Valve, Revolving-disk. F. Cavenagh. 1,633,161; June 21.

Valve, Revolving-disk. F. Cavenagh. 1,633,161; June 21. Pressure-operated. O A. Freeze. Valve-reversing mechanism. H. L. Herzig. 1,652,624; Dec. 13.
Valve, Revolving-disk. F. Cavenagh. 1,633,161; June 2, Valve rocker-arm attachment. T. H. Cadwell. 1,623,853; App. 5.
Valve, Rotary. E. M. Bournonyille. 1,646,949; Oct. 25.
Valve, Rotary. C. C. Foss and D. D. De Loncb. Rel6,816; Dec. 13.
Valve, Rotary. L. E. Lawrence. 1,613,466; Jan. 4.
Valve, Rotary. G. F. Rathbun. 1,635,767; July 12.
Valve, Rotary. G. F. Rathbun. 1,635,767; July 12.
Valve, Rotary. G. F. Rathbun. 1,635,121; Dec. 20.
Valve, Rotary. W. Trinks. 1,645,631; Oct. 18.
Valve-rotating mechanism. M. O. Anthony. 1,626,067; Apr. 26. Valve-rotating mechanism. Al. U. Anturoy.
Apr. 26.
Valve, Safety. C. L. Bastian. 1,649,210; Nov. 15.
Valve, Safety. B. Noble. 1,644,265; Oct. 4.
Valve, Safety control. F. L. Buff. 1,644,170; Oct. 4.
Valve, Safety gas. C. Ferrari. 1,622,044; Apr. 12.
Valve, Safety gas. C. Ferrari. 1,622,044; Apr. 12.
Valve, Safety vent. W. Jones. 1,613,307, Mar. 1.
1,637,076; July 26.
Valve, Screw-down. F. E. Owen. 1,618,544; Feb. 22.
Valve, Scaled. J. J. Cavett. Rela.604; Apr. 26.
Valve seat and head. J. E. Pyne. 1,634,512; July 5.
Valve-seat and liner puller. R. F. Maxwell. 1,650,024;
Nov. 22.
Valve-seat and liner puller. R. F. Maxwell. 1,650,024;
Nov. 22. Valve-seat and liner puller, R. F. Maxwell. 1,650,024; Nov. 22. Valve-seat cutter. E. Tyden. 1,632,354; June 14. Valve-seat puller. E. E. Grevell. 1,625,221; Apr. 26; Valve-seat puller. E. E. Grevell. 1,602,821; Apr. 26; Valve-seat puller. E. E. Grevell. 1,603,801; Sept. 6. Valve-seat-reconditioning machine. O. E. Houser. 1,654,219; Dec. 27. Valve-seat retainer. G. E. Putnam. 1,634,081; June 28. Valve seating and aligning tool. O. G. Simmons. 1,621,471; Mar. 16. Valve seats, Device for cleaning gas. G. G. Reis. Valve, Self-cleaning. G. M. Kelly, 1,647,734; Nov. 1. Valve, Self-cleaning flushing. P. Mueller and A. C. Schuermann. 1,647,148; Nov. 1. Valve, Self-cleaning flushing. P. Mueller and A. C. Schuermann. 1,647,148; Nov. 1. Valve shield. M. Sullivan. 1,631,438; June 7. Valve silencer. W. G. Dunn. 1,650,823; Nov. 29. Valve, Single-seat throttle. S. W. Taylor. 1,646,289; Valve, Sileg-seat throttle. S. W. Taylor. 1,646,289; Valve, Sileg-pump overflow. J. Rice. 1,651,778; Dec. 6. Valve snap action. F. G. Schweisthal. 1,635,682; July 12. L. Kooperstein. 1,626,839; May 3. Valve, Soap. Journal of scheme. 1, R. Lenker. 1,630,947; July 120. L. Kooperstein. 1,626,839; May 3. Valve, Soap. Journal of scheme. 1,678,694; E. Soap. Journal of scheme. 1,678,694; July 20. July 2 vaive snap action. F. G. Schwelsthal. 1,635,692; July 12. Vaive, Soap. L. Kooperstein. 1,626,939; May 3. Vaive, Soda-fountain draft-arm. C. R. Jenks. 1,630,947; May 31. Valve-spring compressor, Mar. 15. G. S. Davis. 1,621,237; Valve-spring compressor. C. Hays and W. M. Thomas. 1,632,288; June 14. Valve-spring compressor. R. J. Kirkpatrick. 1,619,870; Valve-spring compressor. R. J. Rinsputica. Avance. Mar. 8.
Valve-spring compressor. J. Nelson. 1.613.475; Jan. 4.
Valve-spring lifter. O. Blomberg. 1.641.618; Sept. 6.
Valve-spring lifter. B. Cerico. 1.638.980; July 20.
Valve-spring lifter. D. Cerico. 1.638.980; Dec. 6.
Valve-spring lifter. H. C. O. Wiswell. 1.648.097; Nov. 8.
Valve-spring lifter, Compound-lever. W. F. Hobbs. 1.614.301; Jan. 11.

1.631.263:

S. Greenhouse.

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Valve springs of internal-combustion engines and for like purposes, Device for compressing. H. C. Jenkins. 1,622,319; Mar. 29.
Valve. Sprinkler-system control. F. H. Johnson. 1,636,370; July 19.
Valve, Standing. J. W. House. 1,626,649; Apr. 26.
Valve, Standing. A. N. Miller. 1,626,649; Apr. 26.
Valve, Steam P. Pascale. 1,647,465; Nov. 1.
Valve-stem cap. A. I. Woolsey. 1,621,300; Mar. 15.
1639,303; Aug. 16.
Valve stems, Making. A. W. Limont. Ref6,610-20; May 10.
Valve stems, Making. A. W. Limont. Ref6,730; Sept. 6.
1,698,303; Aug. 16.

Valve stens, Making. A. W. Limont. Re16,619-20; May 10.

Valve stens, Making. A. W. Limont. Re16,730; Sept. 6.

V1,617,299; Feb. S. Scening dust caps for. F. W. Benton. S. Scening dust caps for. F. W. Benton. Color of the state of 
                 Aug. 2.
Valve tester. V. Willoughby. 1,616,728; Feb. 8.
Valve, Thermionic. A. C. Bartlett and R. Le Rossignol. 1,632,870; June 21.
Valve, Thermostatic. H. S. Fahey. 1,630,929; May 31.
Valve, Thermostatic. J. L. Ferris, 1,621,660; Mar. 22.
Valve, Thermostatic. M. G. Hubbard. 1,633,410;
            June 21.

Valve, Thermostatic, L. W. Schnepp, 1,617.548; Feb. 15.

Valve, Thermostatic, C. R. Short, 1,644,751; Oct. 11.

Valve, Thermostatic, L. W. Schnepp, 1,683,968;

June 28.

Valve, Thermostatic, H. R. Whittier, 1,644,501; Oct. 4.

Valve, Thermostatic-controlled, J. Gordon, 1,651,817;
Dec. 6.
        Valve, Thermostatic gasoline, A. Grudzinski, 1,619,617, Dec. 6, Valve, Thermostatic gasoline, A. Grudzinski, 1,619,617, Mar. Thermostatically-controlled gas. C. H. Morrow, Valve, Throttle. E. M. Shannon, 1,618,113; Feb. 15. Valve timer, Rotary, C. T. Litton, 1,650,082; Nov. 22, Valve-timing system, J. N. Bartlett, 1,614,861; Jan. 18. Valve timer, Rotary, C. T. Litton, 1,650,082; Nov. 22, Valve-timing system, J. N. Bartlett, 1,614,861; Jan. 18. Valve tool, E. C. Cooley, 1,627,886; May 10. Valve, Train-pipe end. E. H. Gold, 1,643,500; Sept. 27. Valve, Tulpe, C. J. Campoll, C. S. Griffor, Jan. 14. Valve, Triple, C. J. Campoll, C. G. Graphell, 1,621,944; Mar. 22. Valve, Tube, H. A. Jones, 1,616,506; Feb. S. Valve, Tube-cleaner, H. L. Stuley, 1,630,677; May 31. Valve, Tubing-release, C. A. Wilson, J. B. Gocke, and C. F. De Corse, 1,614,908; Jan. 18. Valve, Tubo-way, K. O. Nelson and H. J. Nunnemacher, 1,640,093; Aug. 23. Valve, Two-way drain, A. L. Mitchell, 1,639,954; Aug. 23. Valve, Two-way drain, H. B. Lee, 1,645,601; Oct, 18. Valve, Two-way drain, H. B. Lee, 1,645,601; Oct, 18. Valve, Two-way drain, H. B. Lee, 1,645,601; Oct, 18. Valve, Valve, Velocity-reducing, H. B. Lee, 1,645,601; Oct, 18. Valve, Velocity-reducing, H. B. Lee, 
        1,640,093; Aug. 23.

Valve. Two-way drain. A. L. Mitchell. 1,639,954; Aug. 23.

Valve, Velocity-reducing. H. B. Lee. 1,645,601; Oct. 18.

Valve, Unloading. J. Le Valley. 1,632,841; June 21.

Valve, Vacuum. E. F. Donnelly. 1,627,840; May 10.

Valve, Vaterum. E. F. Donnelly. 1,627,840; May 10.

Valve, Vater and air relief. W. D. Cashin and M. P. Miller. 1,644,109; Oct. 4.

Valve, Water and air relief. W. D. Cashin and M. P. Valve, Water-discharge. F. Gfeller. 1,631,482; June 7.

Valve, Water relief. H. A. Thrush. 1,620,582; Mar. 8.

Valve, Water shut off. F. Gfeller. 1,631,481; June 7.

Valve, Christine of Stature, Shut-off. L. Bloch, Oct. 20.

Valve within body of fasture, Shut-off. L. Bloch, Valve water bine body of fasture, Shut-off. L. Bloch, Valve within body of fasture, Shut-off. L. Bloch,
        Oct. 25.
Valve within body of fixture, Shut-off. L. Bloch.
1.020.186; Mar. 8.
Valved ventilator inlet. J. B. Olson and J. G. Shodron.
1.048.822; Nov. 8.
Valves, Accelerating the opening of dry-pipe. E. E. Clark.
1.013.643; Jan. 4.
        1,013,326; Jan. 4.
Valves, Actuating flush-tank. W. U. Griffiths. 1,620,648;
Mar. 15.
Valves and making the same, Roller tappet for poppet.
R. Jardine. 1,633,331; June 21.
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Valves, and other valves, Lock for gas-stove. C. Smith, 1.633,233; June 21, Valves and such, Water-tight seating for butterfly. E. C. Hutchinson and C. V. Foulds. 1,624,891; Apr. 12. Valves and the like, Lock joint for standing. W. C. Perry. 1,632,542; Dec. 13. Valves and 11,630,213; May 24 Operating device for. N. A. Petry. 1,632,513; May 24. Operating device for. N. A. Petry. 1,630,203; May 24. Valves, Assembling radiator relief. E. O. H. Poeppel. 1,633,926; Dec. 27. Valves, Automatic sequence-control for. J. S. Kennedy. Valves, Sall-unseafung device in line. R. M. Manning. 1,643,818; Sept. 27. Valves, Eall-unseafung device in line. R. M. Manning. 1,648,818; Sept. 27. Valves, Bracket for retaining. V. H. Harbert. 1,652,127; Valves, faucets, and the like, Silencer or flow regulator for. R. E. Bletcher and E. H. Bucknell, 1,625,589; Apr. 19. Vapp. 18. Holing-down mechanism for rotary. R. F. Barker. [616,022; Feb. 1.
Valves, Indicator for setting steam-engine. S. B. Musselman. 1,631,285; June 7.
Valves, Latch-releasing device for dry pipe. H. G. Carlson. 1,621,872; Mar. 22. son. 1,621,872; Mar. 22. Valves, Machine for grinding. June 7. F. S. Simpson. 1,631,760; Valves, Making. L. Iversen. 1,629,504; May 24.
Valves, Making poppet. W. S. Knudsen. 1,644,021;
Oct. 4.
Valves, Making two-piece. W. H. Washburne. 1,619,901;
Mar. 8. MRI. S. Annufacturing seats for butterfly. C. V. Foulds. Valves, Mr.; Nev. 22.
Valves of air compressors for a plurality of pressures, Mechanism for automatically controlling the unloading. M. Riesner. 1,015,039; Jan. 18.
Valves of heating systems, Lock for air. A. J. Ortseifen. 1,013,344; Jan. 11.
Valves or the like, Regulating device for controlling the operation of. P. C. P. Booty. 1,623,616; Apr. 5.
Valves, Packing for gate. W. H. Barton. 1,625,698; Valves, Pa Apr. 19 Valves, Pa Jan. 4. Packing ring for. W. G. Wilson. 1,613,072; Valves, Jan. 1 Pedal operator for flush. J. Coret. 1.614.346: Valves, Repacking. G. F. Merrill 1,637,026; July 26. Valves, Safety device for gas. R. Pieczonka. 1,618,307; Valves, Repactable Valves, Repactable Valves, Streety device for gas. R. Pieczonka. 1,020,001 Valves, Satety device for automatic. J. S. Kennedy. 1,648,052; Nov. S. Valves, Spring seat for spring-loaded. F. H. Hopkins. 1,648,124; Nov. S. Valves, Supplying power to thermionic. G. M. Wright. 1,642,526; Sept. 13. Valves Wrist-phr assembly for meter. G. D. Wilson. 1,647,598; Nov. 1. Valves, Wrist-phr assembly for meter. G. D. Wilson. 1,647,598; Nov. 1. Van, Moving. R. Ario. 1,627,135; May 3. Vanadium compound and making same. A. C. Reed. 1,651,967; Dec. 6, 1061,967; Dec. 6, 1061,967; Dec. 6, 1061,967; Dec. 6, 1061,967; Dec. 7, 1061,967; D Vanadium from petroleum hydrocarbons, Recovering. A. Oberie. 1,683,057; Aug. 9.
Vanadium Recovering. K. B. Thews. 1,621,038; Vane or shovel, Fuel-throwing. L. K. Gillson. 1,627,381; May 3.
Vanily. Manufacturing. R. H. Bots. 1,643,804-5; Sept. 27.
Vanily box. C. E. Cook. 1,620,399; Mar. 16.
Vanily box. C. E. Cook. 1,620,399; Mar. 16.
Vanily box. C. F. Cook. 1,620,399; Mar. 16.
Vanily box. J. Fingerman. Des. 73,907; Nov. 22.
Vanily box. T. Fingerman. Des. 73,907; Nov. 22.
Vanily box. F. Goertz. 1,638,183; July 26.
Vanily box. N. Kasdan and D. Pollack. 1,651,132;
Vanily box. A. S. Lybne. 1,618,598; Feb. 22.
Vanily box. A. S. Lybne. 1,618,598; Feb. 22.
Vanily box. A. S. Lybne. 1,642,962; Sept. 20.
Vanily box. A. S. Lybne. 1,642,962; Sept. 20.
Vanily box. A. S. Lybne. 1,642,962; Sept. 20.
Vanily box. A. S. Lyhne. 1,642,962; Sept. 20.
Vanily box. A. S. Lyhne. 1,642,962; Sept. 20.
Vanily box. A. S. Lyhne. 1,642,962; Sept. 20.
Vanily box. J. L. McAtree. 1,639,001; Aug. 16.
Vanily box. J. L. McAtree. 1,639,001; Aug. 16. A. S. Lyhne. 1,618.598; Feb. 22. A. S. Lyhne. 1,632.410; June 14. A. S. Lyhne. 1,642.962; Sept. 20. A. S. Lyhne. 1,651.722; Dec. 6. J. L. McAtree. 1,639,001; Aug. 1 J. Ross and E. A. Schuelke. Vanity box.
Oct. 11.
Vanity box.
Dec. 27.
Vanity box, 1,645,351: Vanity box. Dec. 27.
Vanity box, Oct. 25.
Vanity case.
Vanity case. E. A. Schuelke and J. Ross. 1,654,271; Loose-powder. B. P. Hyde, J. F. Babbitt. 1,844,704; Oct. 11. E. R. Barany. 1,620,002; Mar. 8. M. C. de Botelno. Des 72,941; Jun R. T. Brewster. Des. 73,024-5; Jul R. T. Brewster. Des. 73,024-5; Jul R. T. Brewster. Des. 73,024-5; Jul R. T. Brewster. Des. 73,024-5; Apr. 19. C. N. Coryell. 1,625,435; Apr. 19. C. N. Coryell. 1,626,023; Apr. 26. C. L. Coyle. Des. 72,602; May 10. F. A. Fairbair. 1,626,088; Mar. 8. A. Fraca. Des. 72,656; May 10. June 28. July 12.

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Vapors, Process and apparatus for the condensation of. D. G. Brandt. 1,618,016; Jan. 4.
Variable high resistance and making same. W. A. Smith. 1,649,990; Nov. 22.
Variable inductive device. J. O. Gargan. 1,636,178; July 19.
Variable instruments. Control unit for. K. Rottgardt. Variable instruments. Control unit for. K. Rottgardt. Variable instruments. E. C. Hatcher. 1,624,835; App. 12.
Variable-resistance device. C. E. Bonine. 1,614,774; Jun. 18.
Variometer. C. D. Tuska. 1,630,873; May 31.
Variometers, Mold for. C. D. Tuska. 1,630,873; May 31.
                                                                                                                                               L. J. Greenwald. 1,631,588; June 7.
W. A. Heard. Des. 73,258; Aug. 16.
W. A. Heard. Des. 74,108-9; Dec.20.
N. Kasdan. 1,631,136; June 7.
N. Kasdan and D. Pollack. 1,631
                  Vanity case.
Vanity case.
                  Vanity case.
                                                                                                                                                                                                                                                                                                                                                                                                                                           1.631.964:
             June 14
Vanity cas
                                                                           case.
                                                                                                                                                          N. Kasdan and D. Pollack. 1,635,326;
                July 12.
Vanity case.
                                                                                                                                         W. G. Kendall. 1,613,798; Jan. 11.
W. G. Kendall. 1,616,374-5; Feb. 1.
W. G. Kendall. 1,617,448; Feb. 15,
L. L. Kole and E. Loeffer. 1,642,780;
                Vanity case.
Vanity case.
                Vanity case.
Sept. 20
     Sept. 20.

Vanity case.
Vanity case compact holder and catch.
Vanity-case compact holder and catch.
Vanity-case compact holder and catch.
Vanity-case compact mobiles.
Vanity-case for automobiles.
Vanity-case for automobiles.
Vanity-case frame.
F. J. Quigna. 1824-262.
Vanity-case frame.
F. J. Quigna. 1824-263.
Vanity-case frame.
F. J. 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Variometers, Mold for. C. D. Tuska. 1,630,873; May 31.
Variometers, Mold for. C. D. Tuska. 1,630,874; May 31.
Varnish, Chlorinated-rubber. N. Boehmer. 1,635,812;
July 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Varnish, Chlorinatea-Fupper, N. Becamer, 1,640,562; Varnish, Condensation product. A. L. Brown. 1,640,562; Varnish, Condensation product. A. L. Brown. 1,640,562; Valley, S. Berger, C. B. Goggin. 1,638,845; Aug. 16. Varnish, Making a phenolic resin. 1, M. Rossi. 1,613,724; Jan. 11. Varnish, Method of and apparatus for applying and treating. G. R. Clover. 1,646,010; Oct. 18. Varnish, Nonfammable. H. C. Weber. 1,635,667; July 12. Mar. 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Varnisa, Robbindingler. 1. C. Vecer. 1,000,001; July 12. Varnish, Preparing a. F. Schwartz. 1,621,438; Mar. 15. Varnish, Preparing a. F. Schwartz. 1,621,438; Mar. 15. Feb. 2. Vase. 1. K. Green and J. W. Jennings. Des. 73,373; Aux. 30. Vase. P. Viggiano. 1,617,280; Feb. 8. Vase, Ground. J. D. Berger. 1,616,647; Feb. 8. Vase, Ground. J. D. Berger. 1,616,647; Feb. 8. Vase or receptacle, Metal. J. M. Merrill. 1,616,057; Feb. 6. Pauly. 1,633,271; June 21. Vat dyesturfs of the anthraquinone series. M. Kugel. 1,651,461; Dec. 6. Pauly. 1,633,271; June 21. Vat dyesturfs of the anthraquinone series. M. Kugel. 1,651,461; Dec. 6. Pauly. 1,630,606; Nov. 29. Vats, Valve for milk. D. A. Maanum. 1,639,853; Aug. 23. Vault. Burial. O. D. Clay. 1,650,606; Nov. 29.
  Ang. 16.

Vanity case frame. F. J. Quigan. 1,624,070; Apr. 12.

Vanity case or similar article, Cover for. P. J. Callow-
hill. Des. 73,224; Aug. 9.

Vanity cases, Compact ejector for. W. G. Kendall.
1,616,376; Feb. 1.

Vanity cases, Compact ejector for. W. G. Kendall.
1,635,891; July 12.

Vanity cases, Compact ejector for. W. G. Kendall.
1,647,917; Nov. 1.

Vanity cases, Compact ejector for. W. G. Kendall.
1,647,917; Nov. 1.

Vanity cases, Compact ejector for. W. G. Kendall.
1,632,663; June 21.

Vanity cases, Fastening member for. A. Weber.
1,632,663; June 21.

Vanity chest. T. J. Pilliod. 1,639,963; Aug. 23.

Vanity chest. T. J. Pilliod. 1,639,963; Aug. 23.

Vanity chest. T. J. Pilliod. 1,639,963; Aug. 8.

Vanity chempact and ejector combined. S. Q. Lupo.
1,614,374; Jan. 11.

Vanor burner. T. Nagel. 1,620,123; Mar. 8.

Vapor burner. Automatic fuel-oil. W. F. La Rose.
1,618,717; Feb. 22.

Vapor burner, Automatic fuel-oil. W. F. La Rose.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Varis, Valve for milk, D. A. Maanum. 1,639,853;
Aug. 23.
Vault, Burial, O. D. Clay. 1,650,606; Nov. 29.
Vault, Burial. E. H. Pinkerton. 1,635,904; July 12.
Vault doors, Attachment for. N. Z. Smith. Rel6,675;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vault uoute, Valt July 12. Vault handle, C. J. Ledwidge, 1,620,770; Mar. 15. Vault lights, Form for setting, E. J. Alfieres, 1,624,304; Apr. 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vault lights, Form for setting.

Apr. 12.

Vault lock, Safety, M. L. Canott. 1,646.138; Oct. 18.

Vault or casket, Safety burial. J. Q. Clarke. 1,637,471;

Vault or safe doors and the like, Construction of. G. M.

Goldsmith and C. Bartels. 1,622,255; Mar. 29.

Vault, Safe-deposit. E. W. Anderson. 1,624,305; Apr. 12.

Vaults, Alarm system for. E. G. Lawrence. 1,629,347;

May 17.

May 17.

May 17.

Balkenbush.
     Vapor butner, Automatic fuel-oil, W. F. La Rose. 1.16.8,717; Feb. 22.
Vapor butners, Electric preheater for. G. A. Hoffman. 1.630,940; May 31.
Vapor cooling system. L. P. Bariow. 1,632,580; Vapor cooling system. L. V. Grantier. 1,632,596; June 14.
Vapor device, Metallic. E. Weintraub. 1,627,070; May 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vanits, Aiarm system for. E. G. Lawrence, Absolver, May 17, revoctive device for. J. J. Balkenbush. Walls, 368; Oct 11.
Vid.s, 689; Oct 11.
White, 189; Oct 11.
White, 189; Oct 11.
White, 189; Oct 11.
White, 189; Oct 11.
Wegetable and fruit crusher. G. R. Catoldo. 1,638,618; Aug. 9.
Vegetable, animal, or artificial fibers with dyes or other liquids. Apparatus for treating. J. Schlumpf. Vegetable, 200; Oct 11.
Vegetable cutter, J. Kushnier. 1,618,935; Feb. 22.
Vegetable cutter, J. Kushnier. 1,618,935; Feb. 22.
Vegetable cutter, F. H. Miller. 1,626,550; Japr. 26.
Vegetable cutter, Green. F. W. Burpee. 1,623,089; Apr. 5.
     May 3.

Vapor generator. R. H. Collingham. 1,628,391; May 10.

Vapor generator. R. H. Collingham. 1,648,699; Oct. 11.

Vapor lamp. A. U. G. Brandon. Des. 71,998; Feb. 15.

Vapor recovery. C. L. Voress and N. C. Turner. 1,616,242; Feb. 1.

Vapor rectifier, Mercury. L. Wimberger. 1,652,921; Dec. 13.
  Dec. 13.

Vapor-utilizing device. I. J. Hunter. 1,637,941; Aug 2 Vapor-utilizing device. II. J. Hunter. 1,637,941; Aug 2 Vapor-utilizing equilibrium. C. E. Parsons and R. Stevenson. 1,632,748; June 14.

Vapor-utilizer. R. M. Anderson and S. M. Udale. 1,635,808; July 12.

July 12.

July 12.

T. Duffy 1,649,392; Nov. 15.

Vapor-utilizer. F. Law, 1,625,534; Apr. 19.

Vapor-utilizer. F. Law, 1,649,536; July 1,644,937; Oct. 11.

Vapor-utilizer. A. Sacchitti. 1,613,537; Jun. 4.

Vapor-utilizer. C. H. Taylor and S. M. Udale. 1,648,515; Nov. 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vegetable cutter, F. H. Miller. 1,626,630; Apr. 20. Vegetable cutter, Green. F. W. Burpee. 1,623,089; Apr. 5. Vegetable fiber, Cooking. S. D. Wells. 1,626,171; Apr. 26. Vegetable fibers, Loosening. J. Billwiller. 1,649,281; Vegetable fibers, Loosening. J. Billwiller. 1,649,281; Vegetable matters of unlimited durability, Apparatus for the production of preserves of. A. Faitelowits. 1,647,089; Oct. 25. Vegetable-packaging machine. Feed mechanism in a. A. Mallinson. 1,648,336; Nov. 8. Vegetable bear toward derivative and a method for the vegetable theory of the control of 
        Vaporize
Nov.
Nov. 8.

Vaporizer J. 8. Wight. 1,623,452; Apr. 5.

Vaporizer and burner, Oll. G. A. Humason and C. G. Lambert. 1,621,509; Mar. 22.

Vaporizer, Fuel. A. T. Taecker. 1,642,705; Sept. 20.

Vaporizer, Heavy-oll. P. C. Lindsey. 1,637,004; July 26

Vaporizer, Heavy-oll. D. T. Scott. 1,626,551; Apr. 26.

Vaporizer, Kerosene. J. A. Matthes. 1,624,270; Apr. 12.

Vaporizer, Eversume. M. Bruelle. Des. 71,861; Jan. 18.

Vaporizer-temperature control. G. Wirrer. 1,646,779; Oct. 25.

Vaporizing a getter in an evacuated vessel. W. H. T. Holden. 1,626,722; May 3.

Killiam. 1,626,732; May 3.

Vaporizing a gaptaratus. G. W. D'Arcy. 1,640,484; Aug. 30.

Vaporizing a paparatus. G. W. D'Arcy. 1,640,484; Aug. 30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vehicle. E. Curran and J. J. Hickey. 1,634,021; June 28. Vehicle. T. J. Fay. 1,633,062; May 24. Vehicle. T. J. Fay. 1,633,803; June 7. Vehicle. T. J. Fay. 1,642,946; Sept. 20. Vehicle. T. J. Fay. 1,642,946; Sept. 20. Vehicle. A. W. Harrison. 1,632,406; June 14. Vehicle. A. W. Harrison. 1,632,406; June 7. Vehicle. O. F. Huntt. 1,631,206; June 7. Vehicle. C. F. Kettering and C. R. Short. 1,618,439; Feb. 22.
     Vaporizing
Aug. 30.
  Aug. 30.

Vaportizing liquids. Apparatus for. A. Schneider. 1.624.014; Apr. 12.

Vapors, Apparatus for condensing. E. W. Isom and J. E. Bell. 1.627.544; May 3.

Vapors from gases, Recovering condensable. H. H. Armstrong. 1.621.821; Mar. 22.

Vapors or gases. Detecting, indicating, and recording the presence of inflammable. H. T. Ringrose. 1.616.404; Oct. 11.
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C. Pirquet. 1.651.727; Dec. 6.
B. Sauni, 1.646.664; Oct. 25.
A. Scala. 1.632.729; June 21.
W. O. Shadbolt. 1,629.543; May 24.
J. T. Shoup, 1,652.894; June 21.
J. T. Shoup, 1,652.894; June 22.
N. C. Storey, 1,622.214; Apr. 5.
Amphibious, S. M. Cede, 1,646.611; Oct. 25.
anchorage device. C. A. Goodspeed. 1,628,660; 17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vehicle bumpers, S
1,617,903; Feb. 15.
Vehicle cab. C. J. C.
Vehicle check. J.
            Vehicle.
Vehicle.
Vehicle.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Support for. M. B. Hammond.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cropp. 1,623,830; Apr. 5.
J. Van Koolbergen. 1,653,420;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Vehicle cab. C. J. Cropp. 1,623,830; Apr. 5. Vehicle check. J. J. Van Koolbergen. 1,653,420; Dec. 20. Vehicle, Child's. H. W. Dyer. Des. 72,361; Apr. 5. Vehicle, Child's. C. D. Higginson. Des. 73,377; Nov. 29. Vehicle, Child's. C. D. Higginson. Des. 73,377; Nov. 29. Vehicle, Child's. E. M. Higginson. Jes. 73,377; Nov. 29. Vehicle, Child's. E. M. Higginson. Jes. 73,377; Nov. 29. Vehicle, Child's. E. M. Mayer. 1,620,663; Mar. 8. Vehicle, Child's. E. M. Mayer. 1,620,663; Mar. 8. Vehicle, Child's. W. B. Milles. 1,648,161; Oct. 18. Vehicle, Child's. W. R. Parson. 1,633,363; Dec. 20. Vehicle, Child's. W. R. Parson. 1,633,363; Dec. 20. Vehicle, Child's. W. R. Parson. 1,633,363; Jan. 20. Vehicle closure. J. H. Bourgon. 1,614,086; Jan. 22. Vehicle closure. J. H. Bourgon. 1,615,366; Feb. 1. Vehicle closure. J. H. Bourgon. 1,623,364; Apr. 5. Vehicle construction. G. B. Ingersoll. 1,644,333; Sept. 20. Vehicle construction. G. B. Ingersoll. 1,644,333; Sept. 20. Vehicle construction. Cushion connection for. E. R. Grarey. 1,612,810; Jan. 4. Vehicle construction, Cushion connection for. A. H. Leipert. 1,622,729; Mar. 29. Vehicle construction, Cushion connection for. A. F. Vehicle construction, Cushion connection for. A. F. Wehicle construction, Cushion connection for. A. F. Masury. 1,621,766; Mar. 22. Vehicle construction, Cushion connection for. A. F. Masury. 1,621,766; Mar. 22. Vehicle construction, Motor. H. E. Curtis, 1,647,084; Oct. 25. Vehicle construction, Motor. H. E. Hull. 1,619,421; Mar. 1. Vehicle courture on Motor. J. G. Utz. 1,641,242; Sept. 2001, Motor. H. E. Hull. 1,619,421; Mar. 1. Vehicle courture on Motor. H. E. Hull. 1,619,421; Mar. 1. Vehicle courture on Motor. H. E. Hull. 1,619,421; Mar. 1. Vehicle courture on Motor. H. E. Curtis, 1,647,084; Oct. 25. Vehicle construction, Motor. H. E. Hull. 1,619,421; Mar. 1. Vehicle coupling. H. P. Jensen. 1,650,838; Nov. 29. Vehicle coupling. H. P. Jensen. 1,650,838; Nov. 29. Vehicle coupling. H. P. Jensen. 1,650,838; Nov. 29. Vehicle coupling. H. P. Jensen. 1,650,838;
                Vehicle.
        Vehicle anchorage device. C. A. Goodspeed. 1,628,660; May 17.
Vehicle anchorage device. W. H. Lanning. 1,617,400; Feb. 15.
Vehicle and casket coach, Convertible passenger. H., A. Chandler. 1,627,833; May 10.
Vehicle and engine control, Motor. C. M. F. Friden. 1,618,865; Feb. 22.
Vehicle and trailer, Auto marine. A. E. Cook. 1,631,248; June 7.
June 
    June 7.

Vehicle and window therefor, Motor. J. H. Sherts.
1,645,355; Oct. 11.

1,645,355; Oct. 12.

1,645,635; Oct. 13.

1,645,635; Oct. 14.

1,646,635; Oct. 14.

Wehicle antifriction spring bearing, H. C. Harris.

1,646,128; Oct. 16,648,128; 
vehicle. Automobile. F. W. Lanchester. 1,636,673; July 19. Vehicle, Automobile. F. W. Lanchester. 1,636,673; July 19. Vehicle, Automobile. R. W. Balley. 1,628,350; May 10. Vehicle bodies. Construction of motor road. F. J. Barnes. 1,622,899; Mar. 29. Vehicle bodies. Hoisting device for. W. B. Engler. 1,636,555; July 19. connection for. L. I. Heintz. 1,629,271; May 17. Vehicle bodies. Post connection for. L. I. Heintz. 1,629,278; May 17. Vehicle bodies. Post construction for. L. I. Heintz. 1,632,438; Sept. 13. Vehicle bodies. Post construction for. W. N. Amory. Vehicle bodies. Sestion support for. W. N. Amory. Vehicle bodies. Stidling window for. H. H. Buggie. 1,633,449; July 5. Vehicle body. M. H. Bennett. 1,641,877; Sept. 6. Vehicle body. W. H. Bennett. 1,641,877; Sept. 6. Vehicle body. J. Ledwinka 1,643,744 Sept. 2. Vehicle body and hood, Combined motor. A. S. Freed. Des. 73,603; Oct. 11. Vehicle body construction. V. A. Noble. 1,644,892; Vehicle body construction. V. A. Noble. 1,644,892; Vehicle body Convertible. F. A. Best. 1,619,182; Mar. 1. Vehicle body, Convertible. C. A. Marwahn. 1,629,403; 1629,403; Convertible. C. A. Marwahn. 1,629,403; 1629,403; Convertible. C. A. Marwahn. 1,629,403; 1629,403; Convertible. C. A. Marwahn. 1,629,403; Convertible. C. A. Marwah
    Vehicle body, Convertible. F. A. Best. 1,619,182; Mar. 1.
Vehicle body, Convertible. C. A. Marwahn. 1,629,403;
May 17.
Vehicle body, Convertible. F. N. Vapier. 1,640,905
    Nov. 8.
Vehicle body door. J. Morrison. 1,621,802; Mar. 22.
Vehicle body, Flexible. C. Froesch. 1,650,203. Nov. 22.
Vehicle body, Motor. A. S. Freed. Des. 73,602; Oct. 11.
Vehicle body removing and replacing device. S. Carnes.
1,631,915; June 7.
Vehicle body, Sectional. A. F. Masury.
Mar. 22.
Vehicle body structure, Closed. J. Ledwinka. 1,652,902;
Dec. 13.
    Dec. 13.

Vehicle body support. W. D. Harper. 1.652,357; Dec. 13.

Vehicle brake. F. A. Bower. 1,651,368; Dec. 6.

Vehicle brake. H. C. Chase. 1.631,70; June 7.

Vehicle brake. H. C. Chase. 1.631,70; June 7.

Vehicle brake. T. P. Chase. 1.613,692; Jan. 11.

Vehicle brake. T. P. Chase. 1.612,692; Jan. 11.

Vehicle brake. C. J. Cuppett. 1.638,901; June 21.

Vehicle brake. C. J. Cuppett. 1.638,901; June 21.

Vehicle brake. G. J. Cuppett. 1.638,951; June 21.

Vehicle brake. W. T. Norton. Jr. 1.620,485; Mar. 8.

Vehicle brake. G. F. Craker and A. H. Stahlhuth. 1.631,406; Dec. 6.

Vehicle brake. T. H. Reeder. 1.621,378; Mar. 15.

Vehicle brake. T. H. Reeder. 1.621,378; Mar. 15.

Vehicle brake. T. H. Der byk. 1.621,912; Mar. 22.

Collins. 1.654,821; Dec. 27.

Vehicle brake device. H. S. Clark. 1.622,420; Mar. 29.

Vehicle brake device. H. S. Clark. 1.622,420; Mar. 29.

Vehicle brake device. H. S. Clark. 1.622,420; Mar. 29.

Vehicle brake device. H. S. Clark. 1.622,420; Mar. 29.
    Mar. 8.
Vehicle h
June 28
Vehicle b
                                                                                                                             brake mechanism. J. F. Craig.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 633 773 -
                                                                                                                         brake mechanism. E. R. Evans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1,648,168;
        Vehicle brake, Traction-. L. H. Hershfield. 1,651,524;
Dec. 6.
    Dec. o. Vehicle brakes. Relay mechanism for. F. G. Parneil. 1.637,349; Aug. 2. Vehicle bumper. L. Amato. 1.622,754; Mar. 29. Vehicle bumper. H. S. Jandus and E. R. Keelor. Des. 73,608; Oct. 11 Vehicle bumper. F. J. Laher. 1.625,550; Apr. 19. Vehicle bumper. F. Renzulli. 1.622,050; Mar. 22. Vehicle bumper. C. A. Schmidt. Des. 73,510; Sept. 20.
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Vehicle construction, Motor. J. G. Utz. 1,641,242; Sept. 6.
Vehicle control pedal, Motor. H. E. Hull. 1,619,421; Vehicle control pedal, Motor. H. E. Hull. 1,619,421; Vehicle coupling. H. P. Jensen. 1,650,838; Nov. 29. Vehicle dash. E. R. Curney. 1,633,038; June 21.
Vehicle coupling. H. P. Jensen. 1,650,838; Nov. 29. Vehicle dash. E. R. Curney. 1,633,038; June 21.
Vehicle direction and stop signaling means. J. W. Brenkert. 1,649,887; Nov. 22.
Vehicle direction indicator. F. W. Chadwick. 1,630,608; M. Brenkert. 1,649,887; Nov. 22.
Vehicle direction indicator. F. W. Chadwick. 1,630,608; M. S. Vehicle direction indicator. F. W. Chadwick. 1,630,608; M. S. Vehicle direction indicator. F. W. Chadwick. 1,630,608; M. S. Vehicle doron construction. A. L. Lambert. 1,620,614–15; Mar. 8.
Vehicle doors. Connecter plate for. M. R. Hull. 1,644,018; Oct. 4.
Vehicle dors. Connecter plate for. M. R. Hull. 1,644,018; Oct. 4.
Vehicle drivers. Weather protector for motor. H. E. Wedge. 1,654,393; Dec. 27.
Vehicle drivers. Weather protector for motor. H. E. Wedge. 1,654,393; Dec. 27.
Vehicle, Dumphody. C. E. Packard. 1,625,496; Apr. 19.
Vehicle drivers. Weather protector for motor. H. E. Wedge. 1,654,393; Dec. 27.
Vehicle, Dumphogy. L. da C. Carvalho. 1,633,364; May 31.
Vehicle drivers. Weather protector for motor. H. E. Wedge. 1,654,393; Dec. 27.
Vehicle, Dumping. A. W. Osborn. 1,619,628; Mar. 1.
Vehicle drivers. Weather protector for motor. H. Childe of gett. G. F. Allison. 1,635,536; Nov. 8.
Vehicle fleeterically-propelled. P. D. Ionides. 1,619,616; Mar. 1.
Vehicle drivers. Weather protector for motor. H. Childe of gett. C. F. Allison. 1,635,163; July 12.
Vehicle freder. G. F. Egan. 1,620,196; Mar. 2.
Vehicle freder. G. F. Egan. 1,620,196; Mar. 2.
Vehicle freder. Extensible G. Lolli. 1,632,280; June 21.
Vehicle from weather from the supervision of sugar cane and the like. Vehicle from weather and children and exhibition. W. P. Chase. Vehicle from weather and children and exhibition. We p. Chase. Vehicle from weather and children an 25.
Vehicle having four-wheel brakes. D. E. Anderson. 1.634,131; June 28.
Vehicle headlights dirigible, Mechanism for rendering. H. J. Dodds. 1.650,115; Nov. 22.
Vehicle heater, Motor. L. O. Hjerke. 1.650,077; Nov. 29.
Vehicle heater, Motor. E. W. Leaby. 1.623,879; Apr. 5.
Vehicle heater, Motor. E. W. Leaby. 1.623,879; Apr. 5.
Vehicle hood cover, Motor. C. Wilhelm. 1,631,663; June 7. Venicle inclosure heating and ventilating means. W. G. Dunn. 1.622.498; Mar. 29.
Vehicle jack. J. H. Burkholder. 1,635,397; July 12.

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Vehicle Jack. R. S. Fox. 1,617,753 Feb. 15.
Vehicle, Jurenile. J. M. Howe. 1,640,357; Aug. 30.
Vehicle leveling device. H. N. Berry. 1,636,620; July 19.
Vehicle lift, Motor. L. Scholler. 1,647,935; Nov. 1.
Vehicle lifting device. E. A. Longgood. 1,649,904;
  ally-propelled. T. J. Riley. 1,629,308
W. H. Barnes. 1,644,708; Oct. 11.
L. Blackmore. 1,644,708; Oct. 11.
J. S. Booth. Rel6,679; Mar. 29.
H. D. Church. 1,639,881; Aug. 23.
D. D'Amato. 1,613,443; Jan. 4.
W. H. Ewend. 1,645,822; Oct. 11.
W. R. Gordon. 1,634,828; July. 5.
W. R. Griswold. 1,645,823; Oct. 11.
W. H. Griswold. 1,645,823; Oct. 11.
W. Hartman. 1,650,272; Nov. 22.
E. A. Hellstrand. 1,651,888; Dec. 6.
E. Herds. 1,623,726; Apr. 5.
G. E. Johanson. 1,638,854; Aug. 16.
W. F. Kennedy. 1,619,478; Mar. 8.
K. Klein. 1,619,823; Mar. 8.
K. Klein. 1,619,823; Mar. 8.
J. Le Kingp. 1,638,896; Aug. 23.
J. Ledwinka. 1,619,478; Mar. 1.
J. C. M. Massey. 1,621,942; Mar. 2.
M. W. McConkey and F. E. Jone, 9,
                       enicle, Motor.
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Vehicle, Motor. J. C. M. Massey, and F. E. Jones, Vehicle, Motor. M. W. McConkey and F. E. Jones, 1,683,563; Aug. 9. Melanowski. 1,647,974; Nov. 1. Vehicle, Motor. L. Melanowski. 1,620,731; Mar. 15. Vehicle, Motor. A. Moorhouse. 1,620,731; Mar. 15. Vehicle, Motor. J. Riise. 1,635,588; July 12. Vehicle, Motor. J. Riise. 1,635,688; July 12. Vehicle, Motor. M. Tibbetts. 1,620,744; Mar. 15. Vehicle, Motor. M. Tibbetts. 1,620,744; Mar. 15. Vehicle, Motor. M. Tibbetts. 1,620,744; Mar. 15. Vehicle, Motor. L. M. Woolson. 1,637,471; Feb. 15. Vehicle, Motor. L. M. Woolson. 1,635,673; July 12. Vehicle, Motor. L. M. Woolson. 1,635,673; July 12. Vehicle, Motor. L. M. Woolson. 1,635,673; July 12. Vehicle motor cases, Fitting for draining lubricant from. L. S. Bessonett. 1,613,738; Jan. 11. Vehicle-porated gate. D. C. Funcheon. 1,617,680;
  Feb. 15.

Vehicle parking apparatus, Unitary selective drive device for. V. P. Williams. 1,612,846; Jan. 4.

Vehicle parking device, Combined mechanical and fluid pressure. V. P. Williams. 1,615,861; Feb. 1.

Vehicle parking system. M. Miller. 1,619,330; Mar. 1.

Vehicle, Passenger. H. A. Benedict. 1,629,904; May 24.

Vehicle, Plastic-concrete-delivery. W. M. Walker. 1,641,913; Sept. 6.

Vehicle power attachment, Motor. D. L. Wolf. 1,622,566; May 24.

1,622,566; May 24.

1,622,566; May 24.

1,623,566; May 24.

1,623,566; May 24.

1,623,566; May 24.

1,623,566; May 24.

1,623,567; May 3.

Vehicle propelling mechanism. V. D. White. 1,635,870; July 12.
      Vehicle props, Making. G. E. Wheeler and C. Oppe. 1.654.061; Dec. 27.
Vehicle-raising apparatus. G. F. Meyers. 1,653,813; Dec. 27.
      Dec. 27. Vehicle rim. J. Wallace, 1,621,614; Mar. 22. Vehicle road springs, Attachment of motor., D. Robertson, 1,634,158; June 28. Vehicle runner, Retractable. D. De Wald. 1,627,151;
    son. 1,634;110; vehicle runner, Retractable. D. De ha.
May 2, Vehicle running gear. A. H. Fager. 1,620,809; Mar. 15.
Vehicle running gear. A. H. Fager. 1,620,809; Mar. 15.
Vehicle seat, Convertible. G. D. Howith. 1,626,340;
Vehicle seat, Convertible. G. Johnston. 1,649,702;
      Vehicle seat, Convertible. G. D. Howith. 1,626,340;
Apr. 26.
Vehicle seat, Convertible. G. G. Johnston. 1,649,702;
Nov. 15.
    Vehicle seat, Convertible. G. G. Johnston. 1,643,02; Nov. 15.

Vehicle, Self-propelled. L. Saives. 1,639,536; Aug. 16.

Vehicle shipping Jack or bracket. I. L. Friedhaender.

Rel 6,98; Aug. 9.

Rel 6,98; Aug. 9.

Rel 6,98; Aug. 9.

Rel 1,000 and 
      Vehicle signal
Aug. 2.
Vehicle signal,
June 28.
                                                                            signal, Motor-. S. L. Brafman. 1,634,014;
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Vehicle signaling device. C. A. Godshalk. 1,640,700;
Aug. 30.
Vehicle signaling system. M. Juhasz. 1,629,342; May 17.
Vehicle signaling window. R. D. Parker. 1,620,166;
Mar. 8.
Vehicle signaling window. E. A. Offet. 1,628,801;
Vehicle speed limit indicating and control means. L. R.
Cordray, 1,634,069; June 28.
Vehicle spring. A. P. Brush. 1,632,993; June 21.
Vehicle spring. A. P. Brush. 1,632,993; June 21.
Vehicle spring. A. G. Geistert. 1,635,360; July 12.
Vehicle spring. F. D. Farker. 1,641,009; Aug. 30.
Vehicle spring. F. D. Farker. 1,641,009; Aug. 30.
Vehicle spring. W. Wood. 1,265,996; May 3.
Vehicle spring. G. W. Wood. 1,265,996; May 3.
Vehicle spring. W. W. Wood. 1,265,996; May 3.
Vehicle spring with manger. W. R. Gardner. 1,625,023;
Apr. 19.
Vehicle spring snubber. J. W. Barnes. 1,620,424; Mar. 8.
Vehicle spring subber. J. W. Barnes. 1,620,424; Mar. 8.
Vehicle spring subpension. T. Franzen. 1,644,408;
Off.
        Oct. 4.

Vehicle springs, Attachment for. T. S. Hamilton. 1,613,097; Jan. 4.

Vehicle springs, Attachment for. T. S. Hamilton. 1,618,705; Feb. 22.

Vehicle springs, Clips for. T. Purdle. 1,648,566; Nov. 8.

Vehicle springs, End connection and shock absorber for. H. T. Ayres. 1,623,651; Apr. 5.

Vehicle springs, End connection for. A. W. Kogstrom. Vehicle springs, End connection for. W. K. Riley. 1,630,581; May 31.

Vehicle springs, Lubricating device for. W. K. Riley. 1,630,581; May 31.

Vehicle springs, Lubrication of. F. G. Hirst. 1,635,413; July 12.

Vehicle springs, Machine for making lubricating means
        July 12.
Valies springs, Machine for making lubricating means for, R. White. 1,019,838; Mar. S.
1,639,125; May. 24 oct. absorber for, J. T. Lenn. Vehicle springs, Saubber attachment for, W. Blackmore. 1,628,868; May 10.
Vehicle stay block. C. L. Michod. 1,628,854; May 17.
Vehicle, Steering apparatus for, W. Gehrig. 1,647,404; Nov. I.
        Vehicle suspension spring. C. S. Woell. 1,504,202; Dec. 27. Vehicle Tank-equipped. R. R. Weaver. 1,621,182; Vehicle top. M. J. Forrester. 1,630,739; May 31. Vehicle top. J. T. Hamilton. 1,613,273; Jan. 4. Vehicle top. C. A. Rotthouse. 1,629,588; May 24. Vehicle top, Collapsible. H. G. Miller. 1,625,551; Apr. 26. Vehicle top construction. L. Laven. 1,645,433; Oct. 11. Vehicle top construction. L. Laven. 1,645,433; Oct. 11. Vehicle top construction.
     Mar. 1.
Vehicle, Trackless. H. A. Knox. 1,629,079; May 17.
Vehicle trailer connection, Motor. A. Feigelson. 1,636,814; July 26.
Vehicle transmission. M. Braen. 1,612,799; Jan. 4.
Vehicle transmission, Electric. H. K. Whitehorn. 1,635,589; July 12.
Vehicle transmission, Motor. H. D. Church. 1,652,699;
Vehicle turning simal. P. A. Warner. 1,650,251; Nov. 22.
Vehicle turniable. P. J. Lunati. 1,644,785; Oct. 11.
Vehicle Wow-wheeled. E. Prochaska. 1,615,403; Jan. 25.
Vehicle underbody construction. E. A. Wetzel. 1,624,903; Apr. 12.
Vehicle ventilator. W. Lintern. 1,623,789; Apr. 5.
Vehicle washing pit. J. P. Nicholson. 1,633,280; June 21.
     Vehicle washing pit. J. P. Nicholson. 1,053,260 June 21.
Vehicle, Water. J. Zäh. 1,464,3173; Oct. 13.
Vehicle, Water. J. Zäh. 1,663,2427; June 14.
Vehicle wheel. C. Eallen. 1,632,427; June 14.
Vehicle wheel. O. d. Arnujo. 1,638,821; Aug. 9.
Vehicle wheel. H. N. Atwood. 1,652,511; Dec. 13.
Vehicle wheel. H. N. Atwood. 1,652,511; Dec. 20.
Vehicle wheel. E. K. Baker. 1,627,369; May 3.
Vehicle wheel. E. K. Baker. 1,627,369; May 3.
Vehicle wheel. E. M. Baker. 1,627,369; May 3.
Vehicle wheel. W. N. Booth. 1,625,879; Apr. 26.
Vehicle wheel. W. N. Booth. 1,625,578; May 10.
Vehicle wheel. C. W. Clark. 1,622,578; May 10.
Vehicle wheel. C. B. Dudley. 1,653,348; Dec. 20.
Vehicle wheel. C. B. Fariweather. 1,619,607; Mar. 1,
Vehicle wheel. C. F. Fariweather. 1,619,607; Mar. 1,
Vehicle wheel. C. F. Frenud. 1,654,367; Dec. 27.
Vehicle wheel. C. S. Johnson. 1,621,932; Mar. 22.
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Vehicle wheel. E. W. Kemoe and W. G. Price. 1,650,452; Nov. 22. Vehicle wheel. E. Landon. 1,622,593; Mar. 29. Vehicle wheel. A. A. D. Lang. 1,639,570; Aug. 16. Vehicle wheel. J. McGinniess. 1,638,741; Aug. 9. Vehicle wheel. J. McGinniess. 1,638,741; Aug. 9. Vehicle wheel. J. W. Holman. 1,635,634; Aug. 6. Vehicle wheel. J. W. Pepple. 1,635,874; Aug. 6. Vehicle wheel. J. W. Pepple. 1,646,887; Oct. 25. Vehicle wheel. J. W. Pepple. 1,646,887; Oct. 25. Vehicle wheel. J. W. Pepple. 1,663,872; Dec. 20. Vehicle wheel. J. W. Pepple. 1,635,872; Dec. 20. Vehicle wheel. A. L. Putnam. Des. 74,023-4; Dec. 6. Vehicle wheel. A. L. Putnam. Des. 74,023-4; Dec. 6. Vehicle wheel. A. L. Putnam. Des. 74,023-4; Dec. 6. Vehicle wheel. A. L. Putnam. Des. 74,023-4; Dec. 6. Vehicle wheel. A. L. Wagenhorst. 1,628,622; May 10. Vehicle wheel. R. Riehl. 1,633,606; June 28. Vehicle wheel. J. H. Wagenhorst. 1,628,622; May 10. Vehicle wheel. J. H. Wagenhorst. 1,628,622; May 31. Vehicle wheel. C. C. Wais, 1,645,698; Oct. 25. Vehicle wheel. E. C. Winters. 1,622,527; June 14. Vehicle wheel. J. R. Winter. 1,640,623; Aug. 30. Vehicle wheel. J. R. Winter. 1,640,623; Aug. 30. Vehicle wheel. J. R. Winter. 1,640,623; Aug. 30. Vehicle wheel, J. R. Winter. 1,640,623; Aug. 30. Vehicle wheel. J. R. Winter. 1,640,623; Aug. 30. Vehicle wheel, Mar. 31. W. M. Trout and C. B. Des Jar-Vehicle wheel, Mar. 31. W. M. Trout and C. B. Des Jar-Vehicle wheel, Resilient. W. Kroll. 1,644,689; Oct. 25. Vehicle wheel, Resilient. P. A. Dunkel. 1,638,801; Vehicle wheel, Resilient. P. A. Dunkel. Vehicle wheel. E. W. Kemoe and W. G. Price. 1,650,452; New York of the Control of the Control of the Control of the Control of Contr

Vehicles, Brake applying mechanism for motor. H. V. Ludwick, 1,620,265; Mar. 8.
Vehicles, Brake for. N. Kuchen. 1,625,777; Apr. 19.
Vehicles, Brake for. Notor. S. Glovannini. 1,614,119; January Brake for motor. S. Glovannini. 1,614,119; January Brake mechanism for. E. D. Brown. 1,645,125; Oct. 11.
Vehicles, Brake mechanism for. N. A. Christensen. 1,644,635; Oct. 4.
Vehicles, Brake mechanism for automotive. C. S. Bragg and V. W. Kliesrath. 1,648,291; Nov. 8.
Vehicles, Brake mechanism for automotive. C. S. Bragg and V. W. Kliesrath. 1,648,291; Nov. 22.
Vehicles, Brake mechanism for motor. O. E. Hunt. Vehicles, Brake mechanism for motor. O. E. Hunt. Vehicles, Brake mechanism for motor. O. E. Hunt. Vehicles, Brake mechanism for Mitchell and J. C. G. Cossey. 1,624,752; Apr. 12.
Vehicles, Braking device for. E. M. Ballot. 1,640,919; Aug. 30.
V. 10,00; Mar. 8.
Vehicles, Braking mechanism for motor. T. J. Schuetz. 1,642,898; Sept. 20.
Vehicles, Braking motor. M. D. Beach. 1,624,525; Vehicles, Braking motor. M. D. Beach. 1,624,574; Apr. 12.
Vehicles, Braking motor. M. D. Beach. 1,624,574; Apr. 12.
Vehicles, Braking motor. M. D. Beach. 1,624,574; Apr. 12.
Vehicles, Braking motor. M. D. Beach. 1,624,525; Vehicles, Braking motor. M. D. Beach. 1,624,527; Vehicles, Braking motor. M. D. Beach. 1,624,574; Apr. 12.
Vehicles, Braking motor. M. D. Beach. 1,624,527; Vehicles, Braking of the steering wheels of. H. Perrot. 1,642,084; Sept. 13.
Vehicles, Butter for motor. F. Hanel. 1,640,320; Aug. 23. 23.

Vehicles, Bumper for motor, W. A. and T. H. Guenther.

1,622,542; Mar. 29.

Vehicles, Eumper structure for, H. W. Tinker.

1,614,503; Jan. 18.

Vehicles, Cab for motor, P. Carlson, 1,641,117; Aug. 30.

Value, S.

Va Vehicles, Collision shield for. W. W. Marsh. 1,624,418; Apr. 12. Vehicles, Combination rear light for. C. E. Godley, 1,631,678; June 7. Vehicles, Combined bumper and brush attachment for. T. O'Brien. 1,638,641; Aug. 9. Vehicles, Combined engine stop motion, visual alarm, and condenser for motor-driven. A. Antunes. 1,633,156; condenser for motor-driven. A Antunes. 1,633,156; June 21.
Vehicles, Combined radiator and hood for motor. A. F. Masury. Des. 72,104; Mar. 1.
Vehicles, Compressed-air brake apparatus for motor. H. Sauveur and T. Kollinek. 1,653,785; Dec. 27.
Vehicles, Connecting rod for the suspension of. G. H. E. De Ram. 1,647,488; Nov. 1.
Vehicles, Controlling device for motor. J. H. Pace. 1,641,779; Sept. 6.
Vehicles, Convertible seat for. F. L. Girard. 1,652,124; Dec. 6. Dec. 6.

Vehicles, Convertible seat for motor. T. G. Johnson.

1.632.233; June 14.

Vehicles, Cooling system for motor. C. M. Anderson.

1.632.302; Apr. 5.

Vehicles, Coupling for. T. Franks. 1,627.430; May 3.

Vehicles, Coupling for. T. Franks. 1,627.430; May 3.

Vehicles, Coupling for. T. Franks. 1,627.430; May 3.

Vehicles, Devine for motor. L. K. Snell.

1.638.593; Aug. 9.

Vehicles, Devine for power unit for. E. G. Griese.

1.648.875; Nov. 8.

preventing abnormal flexure of the springs of motor. G. Fornaca. 1,620.093; Mar. 8.

Vehicles, Device for preventing retrograde movement of motor. J. L. Gonard. 1,651.270; Nov. 29.

Vehicles, Differential drive for. M. H. Wolff. 1,638,222; Aug. 9. Aug. 9.

Vehicles, Differential gear for motor, H. Föttinger. 1,646,020; Oct. 18.

Vehicles, Direction-indicating and warning device for motor road. H. A. Widmer. 1,641,720; Sept. 6.

Vehicles, Direction-indicating device especially for. A. Maršik. 1,623,880; Apr. 5.

Vehicles, Direction-indicator attachment to motor. M. Vehicles, Direction indicator for motor. H. Leach. 1,648,353; Nov. 8.

Vehicles, Direction signal device for. J. G. Frieman and W. A. Rankin. 1,615,791; Jan. 25.

Vehicles, Direction signal for motor. F. F. Gentsch. 1,637,444, Aug. 2.

Vehicles, Direction signal for motor. J. McEntee. 1,635,427; July 12.

Vehicles, Direction signal for motor. C. B. Mitchell. 1,620,879; Mar. 8.

Vehicles, Disappearing step for. W. C. Goss. 1,616,793; Feb. 8.
Vehicles, Disappearing window for, A, A. Towers, 1656,994; July 19.
Vehicles, Disk wheel for, A. Campos and P. H. Becerra, 1654,035; Dec. 27.
Vehicles, Draft attachment for, T. Torkelson, Re16,756; Oct. 4. Venicles, Drive for. C. Froesch. 1,616,617; Feb. 8.
Vehicles, Drive for automotive. C. G. Adsit. 1,652,083;
Dec. 6.

Dec C. C. A. Aust. 1,642,665; Dec. 6. Drive mechanism for. H. A. Miller. 1,649,361; Vehicles, Driving mechanism for track-laying. J. H. Mosel. 1.646,652; Oct. 25.

Nosel. 1.646,652; Oct. 25.

Vehicles, Drive of three-axled motor. H. Blumer. 1,636,657; July 12.

Vehicles, Driver's compartment for. R. F. Blair and G. Hind. 1,631,357; June 7.

Vehicles, Durning mechanism for motor. L. W. Davis. 1,633,316; June 21.

Vehicles, Dumping mechanism for. J. M. Howe.

Vehicles, Durning mechanism for. J. M. Howe. Vehicles, Electric lighting apparatus for motor, H. C. Proteer, 1,623,700; Agr. S. Bugatti. 1,020,020, Vehicles, Elastic support system for, F. L. O. Wadsworth. 1,624,643; Apr. 12. Vehicles, Elastic suspension system for, F. L. O. Wadsworth. 1,622,892; Mar. 29. Vehicles, Electric burgiar alarm for motor. L. Haddow. 1,640,603; Aug. 30. Vehicles, Electric lighting apparatus for motor, H. C. Procter, 1,623,700; Apr. 5. Vehicles, Electric signal for, R. T. Bain. 1,614,706; Vehicles, Electric signal for motor. H. L. Mason. Vehicles, Electric-lighting apparatus for motor. H. C. Procter. 1,623,700; Apr. 5.
Vehicles, Electric spanal for. R. T. Bain. 1,614,706; Jan. 18.
Vehicles, Electric spanal for. R. T. Bain. 1,614,706; Jan. 18.
Vehicles, Electric spanal for. R. T. Bain. 1,614,706; Jan. 18.
Vehicles, Electric spanal for R. T. Bain. 1,614,706; Jan. 19.
Vehicles, Electric spanal for automotive. C. F. Kettering and J. H. Hunt. 1,622,154 Mar, 22.
Vehicles, Electrical system for automotive. C. F. Kettering and J. H. Hunt. 1,622,154 Mar, 22.
Vehicles, Emergency door apparatus for. R. D. Conklin. 1,627,728; May 10.
Vehicles, Emergency door apparatus for. R. D. Conklin. 1,627,728; May 10.
Vehicles, Endless supporting and driving flexible belt for motor and other. A. Kegresse. 1,627,287; May 3.
Vehicles, Endless supporting and driving flexible belt for motor and other. A. Kegresse. 1,627,287; May 3.
Vehicles, Endless supporting and driving flexible belt for motor and other. A. Kegresse. 1,627,287; May 3.
Vehicles, Finds from for for motor. J. W. Harvey.
Vehicles, Finds frive for G. Wirrer. 1,631,996; June 14.
Vehicles, Find frive for G. Wirrer. 1,631,996; June 14.
Vehicles, Find frive for G. Wirrer. 1,631,996; June 14.
Vehicles, Find for for motor. A. Meyer. 1,613,237;
Jan. 4.
Vehicles, Folding top for. J. H. Teachout. 1,627,716;
Vehicles, Foot rest for motor. A. Meyer. 1,613,237;
Jan. 4.
Vehicles, Frome for. A. F. Masury and E. R. Gurney. 1,618,506; Jan. 8.
Vehicles, Freil-reserve supply systems for motor. F. Bracke. 1,618,506; Jan. 8.
Vehicles, Gear shifting mechanism for. F. J. Straub and T. Weillers, Gear shift for motor. A. P. Tredway. 1,648,464; Oct. 11.
Vehicles, Gear shifting mechanism for. F. J. Straub and F. Weillers, Gear shifting mechanism for. F. J. Straub and F. Weillers, Gear shifting mechanism for. F. J. Straub and F. Weillers, Gear shifting mechanism for. F. J. Straub and F. Weillers, Hinge for motor. V. M. Allen. 1,617,981; Feb. 15.
Vehicles, Hinge for motor. A. L. Knapp. 1,648,647; Oct. 28. Oct. 25. Vehicles, Heating apparatus for. E. P. Chase. 1,631,469; June 7. Vehicles, Hinge for motor. A. L. Knapp. 1,613,279; Jan. 4. vehicles, Hinge for motor. A. L. Knapp. 1,613,279; Jan. 4.

Jan. 4

Vehicles, Light mechanism for. R. W. Berry and G. W. Bird. 1,621,920; Mar. 22; Vehicles, Lighting magneto for. F. Bovard. 1,624,775; Apr. 12; Vehicles, Liquid-fuel consumption and distance indicator of or register for motor. J. Higginson. 1,652,896; Diec. 13. venicies, Lignting magneto for. F. Bovard. 1,624,775; Apr. 12.
Vehicles, Liquid-fuel consumption and distance indicator between the consumption and distance indicator for motor. J. Higginson. 1,652,896; Dec. 13.
Vehicles, Load indicator for motor. F. J. Troll. 1,621,093; Mar. 15.
Vehicles, Loading and unloading device for. P. Ducondu. 1,630,473; May 31.
Vehicles, Locking device for motor. O. Albanese. 1,613,637; Jan. 11.
Vehicles, Locking device for motor. D. B. Williams. 1,648,093; Nov. 20.
Vehicles, Low-fuel slarm for motor. D. B. Williams. 1,648,093; Nov. 8.
Vehicles, Making rear-axle housings for motor. E. C. Mogford and F. W. Burger. 1,652,636; Dec. 13.
Vehicles, Making rear-axle housings for motor. E. C. Mogford and F. W. Burger. 1,652,636; Dec. 13.
Vehicles, Motor suspension for electrically-driven. H. P. Reilly. 1,651,153; Nov. 29.
Vehicles, Motor suspension for electrically-driven. H. P. Reilly. 1,651,153; Nov. 29.
Vehicles, Multiwheel propelling mechanism for motor. J. M. Thorp. 1,643,476; Sept. 27.
Vehicles, Multiwheel propelling mechanism for motor. J. M. Thorp. 1,643,476; Sept. 27.
Vehicles, Observation apparatus for. F. A. Volgt. 1,644,302; Oct. 11.
Vehicles, Posternam paparatus for. F. A. Volgt. 1,644,302; Oct. 11.
Vehicles, Posternam paparatus on motor driven. Peticles, Observation apparatus for. F. A. Volgt. 1,644,302; Oct. 11.
Vehicles, Posternam paparatus on motor driven. Peticles, Parking device for motor. J. Myers. 1,622,802; Mar. 29.
Vehicles, Parking device for motor. J. Myers. 1,622,802; Mar. 29.
Vehicles, Parking device for motor. J. Myers. 1,622,802; Mar. 29.
Vehicles, Parking device for motor. J. Myers. 1,622,802; Mar. 29.
Vehicles, Parking device for motor. J. Myers. 1,622,802; Mar. 29.
Vehicles, Parking device for motor. J. Myers. 1,622,802; Mar. 29.
Vehicles, Parking device for motor. J. Myers. 1,622,802; Mar. 29. Vehicles, Parking device for motor. J. Myers. 1,622,802; Mar. 29.
Vehicles. Pneumatic steering device for. B. J. Martin. 1,627,638; May 10.
1,628,638; May 10.
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1,638, venicies, Fower-transmitting device for motor. J. S. Brown. 1,615,613; Jan. 25.

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Venicles provided with two motors. Transmission device for. P. Donon. 1,641,253; Sept. 6.

Vehicles. Removable closure for. I. P. Ferguson. 1,637,812; Aug. 2.

Vehicles. Removable closure for. I. P. Ferguson. 1,637,812; Aug. 2.

Vehicles. Resilient wheel for. J. F. P. Coste. 1,640,349; Aug. 30.

Vehicles. Retailing the dumping elements of. J. S. Curtis. 1,631,018; May 31.

Vehicles. Retailing the dumping elements of. J. S. Curtis. 1,631,018; May 31.

Vehicles. Retailing the dumping elements of. J. S. Curtis. 1,632,794; Apr. 5.

Vehicles. Running-board luggage carrier for. W. Klamroth. 1,623,794; Apr. 5.

Vehicles. Safety apparatus for. J. E. Jufe. 1,640,336; Vehicles. Safety apparatus for. J. E. Jufe. 1,640,336; Vehicles. Safety apparatus for. W. W. Tew. 1,637,133; July 26.

Vehicles. Safety device for. W. W. Tew. 1,637,133; July 26.

Vehicles. Seart for. F. Kohlberger. 1,655,216; Dec. 20.

Vehicles. Seart graph device for. W. W. Blakely. 1,617,368; Feb. 15.

Vehicles. Self-supporting device for. W. W. Blakely. 1,617,368; Feb. 15.

Vehicles. Self-supporting device for. W. W. Blakely. 1,617,368; Feb. 15.

Vehicles. Self-supporting acting body for motor-driven. A. Ortoff. 1,634,433; July 5.

Vehicles. Self-supporting carriage body for motor-driven. A. Ortoff. 1,634,433; July 5.

Vehicles. Self-supporting ack for motor. A. Schnitzler. 1,626,630; May 3.

Vehicles. Shock absorber for supended. A. Roelandts. 1,616,505; Jan. 25.

Vehicles. Shock absorber for supended. A. Roelandts. 1,616,505; Jan. 25.

Vehicles. Shock absorbing means for. A. J. Cormier. 1,632,005; June 28.

Vehicles. Shock absorbing means for. E. Cantono. 1,625,378; May 17.

Vehicles. Shock-absorbing device for. E. Cantono. 1,625,378; May 17.

Vehicles. Shock-absorbing device for. E. Cantono. 1,626,369; June 14. Mar. 29. Vehicles, Lifting device for. F. G. Brochu. 1,650,182;

Vehicles, Side windshield for. C. A. Sayers. 1,632,564; June 14. June 14.
Vehicles, Signal device for. S. Lippert. 1,635,372;
July 12.
Vehicles, Signal device for. S. G. Richards. 1,641,504;
Sept. 6. Vehicles, Signal device for S. G. Richards. 1,641,504; Sept. 6.
Vehicles, Signal device for motor. H. Legendre Vehicles, Signal for control of the Vehicles, Signal for S. B. Bednarz. 1,623,903; Apr. 5.
Vehicles, Signal for T. E. Bednarz. 1,623,903; Apr. 5.
Vehicles, Signaling apparatus for motor. S. A. Hoge. 1,633,262; June 21.
Vehicles, Signaling apparatus for motor. S. A. Hoge. 1,633,262; June 21.
Vehicles, Snubber for. G. C. Pearson. 1,627,113; May 3.
Vehicles, Snubber for. G. C. Pearson. 1,627,113; May 3.
Vehicles, Speed-changing mechanism for motor. E. G. Keeling. 1,635,484; July 12.
Vehicles, Speed-controlling device for motor-driven. F. O. Gray. 1,640,149; Aug. 23.
Vehicles, Spring sharger for. J. A. Mullins. 1,615,340; Jen. 28.
Vehicles, Spring-shackle construction for. R. M. Lovej.y. 1,614,480; Jan. 18.
Vehicles, Spring suspension for. W. S. Austin. 1,646,130; Oct. 18. Hoboles Criping suspension for. C. L. Bardin. 1,644,224; Oct. 4. Vehicles, Spring suspension for. D. Brown. 1,641,472; Sept. 6. Spring suspension for. W. Hesslink. 1,629,868; Vehic. Sept. 6. Vehicles, 8 May 24 Sept. 6.

Vehicles, Spring suspension for. W. Hesslink. 1,629,868;

Vehicles, Spring suspension for. H. W. Hyde. 1,643.811;

Sept. 27.

Vehicles, Spring suspension for. A. H. Leipert. 1,644,755; Oct. 23.

Vehicles, Spring suspension for. R. M. Lovejoy.

Vehicles, Spring suspension for. F. M. Lovejoy.

Vehicles, Spring suspension for. F. L. O. Wadsworth. 1,622,562; Mar. 29.

Vehicles, Spring suspension for. F. L. O. Wadsworth. 1,622,562; Mar. 29.

Vehicles, Spring suspension of. F. S. Farnsworth. 1,632,933; June 28.

Vehicles, Spring suspension system for motor. F. L. O. Wadsworth. 1,622,891; Mar. 29.

Vehicles, Stake pocket for. T. D. Kennedy. 1,645,196; Oct. 11.

Vehicles, Stake pocket for. T. D. Kennedy. 1,645,196; Oct. 11.

Vehicles, Stake pocket for. T. D. Kennedy. 1,645,196; Oct. 11.

Vehicles, Stationary hub for. I. L. Kalatzky. 1,644,339; Vehicles, Stake pocket for. T. D. Kennedy. 1,645,196; Oct. 11.
Vehicles, Stationary hub for. I. L. Kalatzky. 1,644,339; Oct. 4.
Vehicles, Steering attachment for. J. A. Felton. 1,625,886; Apr. 26.
Vehicles, Steering by driving means for. J. Loyd. 1,642,232, Apr. 3.
Land 1,642,278; Land Jan. 11.

Vehicles. Steering device for motor. C. Schaeffer.
1.638.750; Aug. 9.

Vehicles. Steering mechanism for. O. F. Warhus.
1.622.460; June 14.

Vehicles. Steering mechanism for automotive. C. S. Bragg and V. W. Kilesrath. 1.639.284; Aug. 16.

Vehicles. Steering mechanism for road. F. W. Lanchester. 1,621,159; Mar. 15.

Vehicles. Suction-operated circuit closer for motor. P. Schindler. 1,620.493; Mar. 8.

Vehicles. Suspension for. E. M. Ballot. 1,614,598; Vehicles. Suspension for. E. M. Ballot. 1,654,447; Dec. 27.

Vehicles. Suspension for. J. W. Myers. Sept. 6.

Vehicles. Suspension for. J. W. Myers. 1,641,640; Sept. 6.

Vehicles. Telescopic side inclosure for. M. Racz. 1,644.794; Oct. 25. Vehicles, Telescopic side inclosure for. M. Racz. 1,946,794; Oct. 25. Vehicles, Tongue support for. M. B. Ewald. 1,654,072; Dec. 27. Vehicles, Torque-shaper for. M. B. Ewald. 1,634,012; Dec. 27.
Vehicles, Torque-shaperholm spring construction for. R. M. Linder, 1,623,422; Apr. 5.
Vehicles, Traction devining means for. C. H. Hyatt. 1,625,028; Apr. 10
Vehicles, Traction driving means for. H. E. Pearson. 1,637,533; Aug. 2.
Vehicles, Traction driving means for. G. B. Ferro. 1,644,424; Oct. 4.
Linder, 1,619,523; Mar. 1, 1,619,619; Mar. 1,619,619; Mar. 1,619,619; Mar. 1,623,725; Apr. 5.
Vehicles, Transmission mechanism for motor. E. L. Harry, 1,623,725; Apr. 5.
Vehicles, Turning, signal for road. A. Roberts. 1,624,981; Apr. 19.
Vehicles, Variable-speed gear for motor. J. Bethune. Vehicles, Variable-speed gear for motor. J. Bethune. 1.634.091; June 28. Vchicles, Ventilating and heating system for motor. D. K. Swartwout. 1.622,359; Mar. 29.

Vehicles, Vision shield for, F. L. Phillips. 1,649,418; Nov. 15.

Vehicles, Weatherproof antitheft attachment for motor. L. W. Wolfson. 1,622,060; May 17.

Vehicles, Weather shield and glare visor for. W. C. Wehicles, Wheel brake for. J. V. Pugh. 1,648,821; Nov. 8.

Vehicles, Wheel brake for. J. V. Pugh. 1,648,821; Nov. 8.

Vehicles, Wheel brake for. J. V. Pugh. 1,648,821; Nov. 8.

Vehicles, Wheel construction for motor. W. H. Rapeport. 1,637,160; July 26.

Vehicles, Wheel for road. C. Green. 1,617,210; Feb. 8.

Vehicles, Wheel for road. C. Green. 1,617,210; Feb. 8.

Vehicles, Wheel for road. C. Green. 1,617,210; Feb. 8.

Vehicles, Wheel for motor. A. W. Herrington. 1,618,431; Feb. 22.

Vehicles, Window for motor. H. Austin. 1,626,129; August 1,616,122; Feb. 1.

Vehicles, Vielding barrier for. J. B. Strauss. 1,652,186; Dec. 13.

Vehicles, Yielding barrier for stopping. E. D. Sawyer. 1,638,670; Dec. 27.

Vehicular, John Leaf spring. A. P. Koebcke. 1,622,727; Mar. 29.

Vehing. Approal 168, Vincent Testament of varicose. S. Vehicular leaf spring. A. P. Koebcke. 1,622,727; Mar. 29.
Veins, Apparatus for the treatment of varicose. S. Lake. 1,620,108; May 17.
Velocimeter. W. C. Palmer. 1,620,224; Mar. 8.
Velocipede. P. Kuhnel. 1,625,244; Apr. 19.
Velocipede. G. N. Madsen. 1,652,254; Dec. 13.
Velocipede. W. W. and W. V. Morrill. 1,632,002; June 14. Viune 14.
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Viune Vending apparatus. R. G. Clark. 1,652,816; Dec. 13.
Vending apparatus. H. B. Cooley. 1,627,837; May 10.
Vending apparatus. O. F. Roberts. 1,615,885; Feb. 1.
Vending apparatus. S. W. Wilkinson. 1,651,857-8; C. H. Bookout. R. Robinson. W. C. De Armond R. B. Win-F. I. du Pont. Vending device, Luquar, Aug. 9.
Vending machine. A. D. Antoine and A. E. Gebert. 1,627,547; May 10.
Vending machine. P. Boals. 1,649,658; Nov. 15.
Vending machine. P. Boart. 1,640,396; Aug. 30.
Vending machine. W. F. Donathan. 1,619,248; Mar. 1.
Vending machine. W. F. Donathan. 1,619,248; Mar. 1.
Vending machine. A. H. Du Grenier. 1,648,476; Vending Vending Vending machine Nov. 8. Vending machine. Vending machine. Vending machine. Vending machine. Vending machine. Vending machine. W. Hedlind. 1,945.236; Oct. 11. C. A. Johnson. 1,648.812; Nov. 8. J. B. Johnson. 1,648.812; Nov. 8. J. B. Johnson. 1,641.359; Sept. O. N. Kelly. 1,648.049; May 31.24. O. N. Kelly. 1,648.734; Nov. 8. O. N. Kelly. 1,648.813; Nov. 8. V. H. Kelley. 1,644.331; July 5. L. V. Kuhn and F. H. Vog Vending machine. Vending machine. Vending machine.
Vending machine.
1.651,605-6; Dec.
Vending machine.
Vending machine.
Vending machine. 1. V. Faull and F. H. Vog. 1. C. V. Faull and F. H. Vog. 1. C. V. Faull and F. H. Vog. 1. C. V. F. V. V. L. Linton. 1.624, 263; Apr. 12. M. Marrolith. 1.630,195; May 24. G. Marrolith. 1.630,195; May 24. G. Marrole 1.641,861; Sept. 6. L. H. Morin. 1.632,540; Dec. 13. V. H. Murphy. 1.632,540; Dec. 13. V. H. Murphy. 1.632,540; Dec. 13. C. F. Mixon. 1.641,860; July 5. D. Oxarort. 1.640,851; Aug. 30. C. E. Parker. 1.620,914; Mar. 15. C. J. Paulson. 1.617,496; Feb. G. N. Poling and H. L. Dilli 15. June 21 Vending machine. Vending machine. Vending machine. Vending machine. Vending machine. Vending machine.
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Vending machine. Vending machine. Vending machine. Vending machine. 1.649.365; Nov. Vending machine. Vending machine. 1.621.960; Mar. 15. F. Ruoff, 1,626,429; Apr. 26. D. H. Stewart and G. W. vending machine. A. R. Varble. 1,656,679: Dec. 27. Vending machine. J. B. Watting. 1,626,599; May 3. Vending machine. J. B. Watting. 1,626,599; May 3. Vending machine. J. B. Watting. 1,642,134; Sept. 13. Vending machine. J. B. Watting. 1,642,134; Sept. 13. Vending machine. J. Zsoldos. 1,635,451-2; July 12. Vending machine. And game, Combined. F. L. Mills. Vending machine. Automatic. J. Proceedings. Machine. Automatic. J. Proceedings. Machine. Automatic. J. Proceedings. Machine. Machine. Machine. Machine. Automatic. J. Proceedings. Machine. Machin Sept. 27.
Vending machine, Automatic gasoline. E. T. Hess.
1.633 327 : June 21.
Vending-machine case, C. F. Kurtz, Des. 73.528; Sept. 27.
Vending-machine casing. F. L. Mills. Des. 73.753;
Nov. 1.

Vending-machine casing. C. E. Parker. Des. 73,621; Oct. 11. dding-machine casing. M. Perciabosco. Des. 73,622; Vending machine casing. M. Perciabosco. Des. 73,622; Oct. 11.
Vending machine, Central-discharge selective. W. C. Cutier. 1,633,347; Dec. 20.
Vending machine, Coin carrier for multiple. W. C. Cutier. 1,634,535; July 5.
Vending machine, Coin-controlled. W. F. Donathan. 1,619,246; Mar. 1, Vending machine, Coin-controlled. U. G. Grandbois. 1,643,068; Sept. 20.
Vending machine, Coin-controlled. D. Lazar. 1,652,021; Dec. 6. machine. Coin-controlled. C. Nadworney. Poes State Concontrolled C. Nadworney, Vending machine, Coin-controlled. C. Nadworney, 1,625,138; Apr. 19.
Vending machine, Coin-controlled. H. W. Ramsey. 1,617,689; Feb. 15.
Vending machine, Coin-controlled. R. Vaughan. 1,619,068; Mar. 1.
Lift Coin-controlled liquid. J. Zsoldos. 1,638,477; Aug. 23.
Vending machine, Coin-operated. A. A. Fagen. 1,621,244; Mar. 15.
Vending machine, Coin-operated. E. Schultz. 1,638,413; Aug. 9.
Vending machine, Eskimo-pie. A. Probst. 1,627,865; Vending machine for stacked articles, Selective. W. C. Vending machine for stacked articles, Selective. W. C. Cutler, 1,619,292; Mar. 1.
Vending machine, Fruit. M. Redlinger, 1,616,824; Vending machine, Handkerchief-. A. Probst. 1,646,314; Oct. 18.

Hermachine mechanism. N. P. Petersen. 1,616,822;
Feb 8. Vending machine, Merchandise-. A. Cantrell. 1,625,845; Apr. 26. Vending machine, Newspaper-. A. A. Meyer. 1,645,442; Oct. 11. Vending machine, Assistant straw. W. H. Delano. 1,637,767; Aug. 2. Vending machine, Sanitary-tollet-seat-paper. J. Mortka. 1,640,285; Aug. 23. Vending machine Concontrolling mechanism for. A. P. Vending machines, Cola-controlling mechanism for. A. P. Vending machines, Cola-receiving mechanism for. R. B. and L. G. Sherburne and M. Hansen. 1,629,006; May 17. Vending machines, Coin-slot mechanism for. N. P. Pevending machines, Coin-slot mechanism for. N. P. Pevending machines, Coin-slot mechanism for.

Vending machines, Coin-receiving mechanism for. R. B. and L. G. Sherburne and M. Hansen. 1,629,006; May 10.

Vending machines, Coin-slot mechanism for. N. P. Petersen. 1,628,062; May 10.

Vending machines, Coin-slot mechanism for. N. P. Petersen. 1,628,062; May 10.

Chuld C. Cutler. 1,619,298; May 10.

Vending machines, Rotary selecting device for. D. L. Chuld C. Cutler. 1,619,294; Mar. 1.

Vending machines, Rotary selecting mechanism for. W. C. Cutler. 1,619,294; Mar. 1.

Vending rack or stand. C. T. Hatch. 1,634,573; July 5.

Veneer and making same, Scored. G. W. Talbot. 1,651,164; May 26.

Veneer does and making the same. H. N. Gibson. 1,642,066; Sept. 13.

Veneer core. A. W. Schorger. 1,649,983; Nov. 22.

Veneer-cutting machine. S. Madsen. 1,635,149; July 5.

Veneer dreier. F. Kershaw. 1,637,945; Aug. 2.

Veneer dreier. F. Kershaw. 1,637,945; Aug. 2.

Veneer machines, Driven pressure bar for. G. H. Osgood. 1,641,452; Sept. 6.

Veneer wall. J. J. Fitz Gerald. 1,621,877; Mar. 22.

Veneers, Treating. A. A. Dennis. 1,636,141; May 24.

V. W. Randall. 1,613,903; Jan. 1,14; May 24.

Venetian blind. W. E. Duncanson. 1,630,114; May 24.

Ventilating and humidifying device. D. Handelan. 1,646,243; Oct. 18.

Ventilating and humidifying device. D. Handelan. 1,646,243; Oct. 18.

Ventilating apparatus. J. M. Frank and A. G. Sutcliffe. 1,635,519; June 28.

Ventilating apparatus. F. W. W. Pickance. 1,618,530; Aug. 2.

Ventilating apparatus. F. W. W. Pickance. 1,618,530; Jan. 18.

Ventilating apparatus. F. W. W. Pickance. 1,618,530; Jan. 12.

Ventilating apparatus. F. W. W. Pickance. 1,618,530; Aug. 30.

Ventilating apparatus. F. W. W. Pickance. 1,618,50; Ventilating apparatus. Vehicle. E. B. Hurshins

Feb. 22 Ventilating apparatus. A. G. Schuck. 1,624,016; Apr. 12. Ventilating apparatus, Vehicle. E. B. Hutchins. 1,618,152; Feb. 15. Ventilating closet. E. H. and C. E. Raper. 1,639,966;

Ventilating device. W. H. Rose. 1,650,724; Nov. 29. Ventilating, heating, and humidifying apparatus. C. A. Moore. 1,643,345; Sept. 27. Ventilating motor, Propeller. F. Charavay. 1,646,578;

Oct. 25.

Ventilating or skylight constructions, Operating mechanism for the closure means of. A. R. Blacki. 1,4647.262; Nov. 1.

Ventilating screen. H. H. Everhard. 1,614,191; Jan. 11, Ventilating system. O. G. Crannell. 1,642,606; Sept. 13.

Ventilating systems, Air control for, J. L. Strahan, 1,623,286; Apr. 5. Casing for the discharge mouth of building. I. C. Sternberg. Des. 73,949; Nov. 22. Ventilating systems, Unit for. R. A. Ig. 1,616,379;

Suitiding. I. C. Sternberg. Des. 73,949; Nov. 22. Ventilatior, gystems, Unit for. R. A. lig. 1,618,379; Feb. 22. Ventilation-controlling apparatus, Automatic. H. J. Wood and F. L. Eastgate. 1,618,792; Feb. 22. Ventilation, Reversible. L. C. Albrecht. 1,648,796; Nov. 8. Ventilator, Reversible. L. C. Albrecht. 1,648,796; Nov. 8. Ventilator. Car ventilator. Car ventilator. Car ventilator. Car ventilator. Car ventilator. Cowl ventilator. Carlotte and Carlotte an

Ventilator and the like. A. B. Anderson. 1,032,04., Oct. 11.
Ventilator and the like. R. L. Crosthwaite. 1,630,691; May 31.
Ventilator canopy. R. E. Peck. 1,632,381; June 14.
Ventilator for automobiles, Cowl. L. Ortinger. 1,639,309; Ventilator for busses and other vehicles. M. M. Garland. 1,641,166; Dec. 27.
Ventilator for closed vehicles. A. J. Norris. 1,650,570; Nav. 29.

Ventilator for cases.

Nov. 22.

Ventilator installation, Wall-louver- R. J. Miller.

1,613,047; Jan. 4.

Ventilators for wearing apparel, Machine for making.

W. I. Silverstein. 1,631,773; June 7.

Ventilators for wearing apparatus for. J. H. Young
1,640,477; Aug 80.

Vermifuge and insecticide. W. J. Dennis. 1,621,240;

1,699,395; May 17.

Mar. 15.
Vermin-destroying henroost. J. Kyle. 1,629,368; May 17.
Vermin trap. G. O. Helvig and O. G. Munsen.
1,613,227; Jan. 4.
Vernier device. T. F. W. Mewer. 1,634,676; July 5.
Verrier dial. H. J. Kasch. 1,636,233; July 19.
Vertical cooler. A. R. Thompson. 1,631,612; Dec. 6.
Versele cooler. A. R. Thompson. 1,631,612; Dec. 6.
Vessele imprying of filling appliance. C. W. Meggenhofen.
1,643,025; Sept. 20.
Vessels, Air-circulating system for cargo. J. Hudson.
1,623,622; Apr. 5.
Vessels, Blank for conical. C. F. Dawson. 1,637,252;
Vessels, Elank for conical. C. F. Dawson. 1,637,252;

Vibrating device. A. M. Curtis. 1,641,251; Sept. 6. Vibrating machine. A. E. R. Blomquist. 1,613,377; Jan. 4. Vibrating machine. R. C. Stubbs. 1,615,052; Jan. 18. Vibrating machine. Rull. E. D. Church. 1,644,175;

Oct. 4.

Vibrating screen. G. A. Overstrom. 1,621,949; Mar. 22.

Vibrating screen. H. S. Woodward. 1,649,883; Nov. 22.

Vibrating screen. H. S. Woodward. 1,649,883; Nov. 22.

Vibration absorber. C. R. Soderberg. 1,638,968; Aug. 16.

Vibration absorber. W. Hahnemann, H. Beebt, H. Lichte, and L. Adelmann. 1,622,507; Mar. 28.

and L. Adelmann. 1,622,507; Mar. 28.

Vibration dampener. K. R. Masury. 1,627,917; May 10.

Vibration dampener. A. F. Masury. 1,647,788; Aug. 30.

Vibration responsive device. H. C. Harrison. 1,648,120; Nov. 8.

Nov. 8.
Vibrations, Apparatus and system for detecting. R. V. L.
Hartley. 1,648,121; Nov. 8.

Vibrations by means of a continuous stream of fuid, Device for the production of mechanical. W. Hahnemann, Rudolph, and E. Wilckens. 1.618,982; Mar. 1. Vibrator. L. J. Wahl. 1.622,987; Apr. 1.623,987; Apr. 1.623,987; Mar. 1. Vibrator. L. J. Wahl. 1.623,987; Apr. 1.622,988; Mar. 29. Vibratory converter. O. M. Lelch. 1.615,766; Jan. 26. Vibratory mixer. F. W. Wallace. 1,632,718; June 14. Vibratory mixer. F. W. Wallace. 1,632,718; June 14. Vibratory mixer. F. W. Wallace. 1,632,718; June 14. Vibratory motion into rotary motion, Apparatus for converting. H. L. Stringer. 1,616,339; Peb. 1. R. Vibratory structures. Supporting. T. C. Roberts. 1,641,602; Sept. 6. Vibratory system, Mechanical. H. C. Harrison. 1,645,139; Oct. 11. Leg. 1,635,071; July 5. Vine lifter. G. S. Agee. 1,626,712; May 3. Vinyl esters; Manufacturing. F. W. Skirrow and O. W. Herzberg. 1,638,713; Aug. 9. Viol machines. Tremolo device for. H. S. Mills. Violin. J. Dopyera. 1,647,510; Nov. 1. Violin. M. Redilinger. 1,635,502; July 12. Violin bows, Finger grip for. J. Gaynor. 1,632,003; June 14. Violin. M. Redilinger. 1,635,622; July 12. Violin mandolin. H. Miller. 1,647,312; Nov. 1. Violin mandolin. H. Riller. 1,647,312; Nov. 1. Violin. M. Respective for M. Morris. 1,647,312; Nov. 1. Violin mandolin. H. Miller. 1,64 Viscosie-treating apparatus. S. A. Neidich. 1,616,918; No. 82. No. 82. Neidich. 1,616,918; Viscosimeter. C. M. Larson. 1,635,231; July 12. Viscosimeter. E. H. Penbody. 1,639,057; Aug. 16. Viscosity gauge. W. C. Sproesser. 1,651,416; Dec. 6. Viscosity of matter, Method of and apparatus for testing the. R. A. McWald. 1,614,565; Jan. 18. Viscosity of matter, Method of and apparatus for testing the. R. A. McWald. 1,614,565; Jan. 18. Viscosity of the property of the control of the contr Vise tand. O. S. Lee. 1,634.837; July 5. Vise, Warchmaker's hand. O. A. Bettum. Vise stand. O. S. Loe. 1,634,837; July 5.

Vise, Watchmaker's hand. O. A. Bettum. 1,653,335;
Dec 20.

Vise to posts, poles, or the like, Apparatus for securing.
J. E. Kenerson. 1,625,319; Apr. 19.

J. E. Kenerson. 1,625,319; Apr. 19.

J. E. Kenerson. 1,625,319; Apr. 19.

Vise to posts, poles, or the like, Apparatus for securing.
J. E. Kenerson. 1,625,319; Apr. 19.

Vision. J. E. Kenerson. 1,625,319; Apr. 19.

Vision. Device for determining the field of. L. Maggiore. 1,618,291; Feb. 22.

Vision glasses, Antifrost. W. C. Nash. 1,638,505; Aug. 9.

Vision. J. Berg. 1,645,246; Oct. 11.

Vision. Automobile. W. E. Kempton and J. Rucker. 1,627,975; May 10.

Visor, Automobile. H. E. West. 1,637,842; Aug. 2.

Visor, Automobile. H. E. West. 1,637,842; Aug. 2.

Visor, Automobile. H. E. West. 1,637,842; Aug. 2.

Visor, Automobile. W. E. C. Grigsby. 1,632,474; Aug. 2.

Vision. J. May 10.

Vision. J. Preparing concentrated. P. Cacia. 1,617,702; Feb. 15.

Vistmin B. Preparing concentrated. P. Cacia. 1,617,702; Feb. 15.

Vision. J. School, Product and method. R. K. Prince. 1,632,717; June 22.

Vitamine and product. Obtaining. C. Funk and H. E. Dublin. 1,649,520; Nov. 15.

Vitamines and product. Obtaining. C. Funk and H. E. Dublin. 1,649,520; Nov. 15.

Vitamines Transferring. S. Grönningsaeter. 1,629,618; Vitreous articles in place, Securing. C. J. Rukenbrod. 1,652,052; Dec. 6. May 24. Vitreous articles in place, Securing. C. J. Rukenbrod. 1.682.052; Dec. 6. Vocalizer mechanism. S. Spalletta. 1.652.501; Dec. 13. Volce device. H. W. Munro. 1.649.722; Nov. 15. Volce devices, Post structure for. A. Konoff. 1.635,330; July 12. Volce objects, Post structure for. A. Konoff. 1.635,330; July 12. Volce mechanism. L. V. Aronson. 1.630.250; May 31. Volce-operated relay equipment. S. B. Wright. 1.636,031; July 19. Voice placer. E. Keller. 1,621,207; Mar. 15. Voice-reproducing device. M. DeCesare. 1,642.768; Volce-reproducing device. An Decease.
Sept. 20.
Volle fabric. Flocked. E. B. Vandergaw and J. Heinrich.
Des. 72.293-300; Mar. 22.
Volatile liquids. Apparatus for the extraction and recorter of. E. A. Ironside. 1.631,036; May 31.
Volume matter of powertus for extracting. K. E. ClaytonKennedy. 1,647,243, Nov. 1.

Volatile matter into lamps and the like, Introducing. C. C. Van Voorbis. 1,623,823; Apr. 5.
Volatile organic solids, Recovery of. J. H. Brégeat,
Volatile products from carbonaceous material, Apparatus
for recovering the M. J. Trumble. 1,661,647; Dec. 6.
Volatile solvents, Recovery of. R. Oertel. 1,631,052;
May 31.
Volatile substances, Recovery of. J. Jannek, G. Wietzle,
Volatile substances, Recovery of. J. Jannek, G. Wietzle,
Mar. 22.
Voltamper-hour meter. G. A. Cheetham. 1,637,370;
Volt-amper-hour meter. G. A. Cheetham. 1,637,370; Volt-ampere-hour meter. G. A. Cheetham. 1,637,370; Aug. 2. Volt-ampere meter. Vector-sum. D. J. Angus. 1.647.332; Volt-ampere meter, vector-sum. D. J. Angus. 1,041,002; Nov. 1. Volt amperes in an alternating circuit, Method and ap-paratus for measuring. R. A. Warner. 1,614,219; Jan. 11. amperes. Measuring. L. A. Paine. 1,649,851; Nov Voltage-balancing regulator. J. H. Ashbaugh. 1,654,317; Voltage-limiting device. F. E. Field. 1,651, Voltage-limiting device. G. A. Persons. Jan. 11. 1,651,021; Nov. 29. ersons. 1.614.254; Jan. 11.
Voltage-regulating system, Transformer-. P. M. Currier.
1.620,619; Mar. 8.
Voltage regulation of exciters. R. M. Wilson. 1,637,887;
Aug. 2. Aug. 2.
Voltage regulator. E. F. W. Alexanderson. 1,652,923;
Dec. 13.
Voltage regulator. A. F. Brotz. 1,647,266; Nov. 1.
Voltage regulator. J. Sleplan. 1,624,370; Apr. 12.
Voltage regulator J. B. Trevor, F. 1,621,434; Mar. 15.
Voltage regulator J. B. Trevor, F. 1,621,434; Mar. 15.
Voltage-regulator J. B. Trevor, F. 1,621,434; Mar. 15.
Voltage-regulator system. W. M. Bradshaw. 1,640,560;
Aug. 30.
Voltage stress, Apparatus for indicating. F. C. Doble.
1,644,421; Oct. 4.
Voltage stress, Apparatus for indicator, Combined. H. W.
Hall. 1,641,757; Sept. 6.
Voltage-regulator system. Voltage stress, Apparatus for indicator, Combined. H. W.
Hall. 1,641,757; Sept. 6.
Voltage-regulator System. Voltage stress, Apparatus for indicator, Combined. H. W.
Mar. 29. Voltmeier and phase-rotation indicator, Combined. H. W. Hall. 1,641,757; Sept. 6.

Voltmeter, Vacuum-tube. L. C. F. Horle. 1,622,756; Mar. 29.

Volume control. W. A. Loomis. 1,640,842; Aug. 30.

Volume indicator. A. Bailey. 1,653,082; Dec. 20.

Voting machine. F. G. Diago. 1,654,467; Dec. 27.

Voting machine. F. G. Diago. 1,654,467; Dec. 27.

Voting machine. F. G. Diago. 1,654,467; Dec. 27.

Vulcanization. G. H. Ellinwood. 1,642,541; Sept. 13.

Vulcanization. D. E. Hennessy. 1,923,183; Apr. 5.

Vulcanization. D. E. Hennessy. 1,923,183; Apr. 5.

Vulcanization process and product. P. I. Murrill. 1,622,535-6.

Mar. 29.

Vulcanization process and product. P. I. Murrill. 1,622,535-6.

And C. Wurtenberg. 1,623,208; Apr. 5.

Vulcanizer. A. A. Baffetti. 1,619,231; Mar. 1.

Vulcanizer. A. A. Baffetti. 1,619,231; Mar. 1.

Vulcanizer. W. S. Galvin. 1,632,473; Dec. 13.

Vulcanizer. W. S. Galvin. 1,652,473; Dec. 13.

Vulcanizer. F. M. A. Fontana. 1,620,597; Mar. S.

Vulcanizer. G. W. Lewis. 1,631,042; May 31.

Vulcanizer. C. C. Marbe. 1,640,281; Aug. 23.

Vulcanizer. C. C. Marbe. 1,640,281; Aug. 23.

Vulcanizer. C. C. Marbe. 1,640,281; Aug. 23.

Vulcanizer. T. C. C. Marbe. 1,640,281; Aug. 23.

Vulcanizer. T. O. Snare. 1,621,958; Mar. 22.

Vulcanizer. To Snare. 1,621,958; Mar. 23.

Vulcanizer. To Snare. 1,621,958; Mar. 23.

Vulcanizer. To Sn dicanizer for pneumatic tubes. 1.1618,406; Feb. 22. 1.1618,20; Tire-repair. C. M. 1.16211, Tire-repair. C. M. 1.16211, Tire-repair. C. M. 1.16211, Tire-repair. C. M. 1.628.899; May 11. M. Brundidge. Vulcanizer, C. M. Semler. 1 637 879 -Vulcanizing apparatus. W. L. Fairchild. Re16.542: Feb. 8.
Vulcanizing apparatus. R. D. Fritz. 1,631,806;
Vulcanizing apparatus. R. D. Fritz. 1,647,0 June 7. 1,647,040; Vulcanizing apparatus. R. Hansen. 1,640,500; Aug. 30. Vulcanizing apparatus. J. C. Heintz. 1,623,677; Apr. 5. Vulcanizing apparatus. L. A. Laursen. 1,650,078; Vulcanizing apparatus. L. A. Laursen. Dec. 6.
Vulcanizing apparatus. J. F. Mincher. 1,621,595;
Vulcanizing apparatus. H. K. Wheelock. 1,4
May 31.

H. K. Wheelock. 1,4 5; Mar. 22. 1.630.457; May 31.

May 31.

Vulcanizing apparatus. H. K. Wheelock. 1.647,596; Nov. 1.

Vulcanizing apparatus, Automatically-controlled, electrically-heated. R. A. Brooks. 1.628,766; May 17.

Vulcanizing, Apparatus for electrical. J. Ledwinka. 1.645,704; Oct. 18.

Vulcanizing articles, Process and apparatus for. J. L. G. Dykes. 1.616,954; Feb. 8.

Vulcanizing material. Method of and apparatus for. C. D. Hart. 1.633,592; June 28.

Vulcanizing method and apparatus. J. D. Tew. 1.631,707; June 7.

Vulcanizing method and apparatus. J. D. Tew. 1.631,707; June 7.

Vulcanizing mold. E. Hopkinson. 1,634,106; June 28.

Vulcanizing rubber and compound resulting therefrom. N. A. Shepard and S. Krall. 1,647,754; Nov. 1. Vulcanizing under fluid pressure, Apparatus for. R. D. Fritz. 1,622,488; Mar. 29. Valcarian and the state of the Wall boards composed of rice hulls and plaster, Manufacturing, T. Nishi, 1,634,079; June 28.
Wall boards, Erecting machine for. F. J. Pfiffner. 1,639,962; Aug. 23.
Wall bracket. M. Klein. Des. 72,835; June 14.
Wall bracket. M. Klein. Des. 72,835; June 14.
Wall bracket. M. Klein. Des. 72,840; June 14.
Wall bracket. M. Klein. Des. 72,840; June 14.
Wall bracket. M. Klein. Des. 72,848; June 14.
Wall bracket. M. Klein. Des. 72,848; June 14.
Wall bracket. M. Klein. Des. 72,850-1; June 14.
Wall bracket. M. Klein. Des. 73,900; July 50,000; Wall-building apparatus. M. C. Schweinert.

Wall-building device. G. J. Seiler. 1,632,514; June 14.

Wall-building device. G. J. Seiler. 1,632,514; June 14.

Wall colinter, Flush-type. A. H. Cook. 1,631,393; Aug. 2.

Wall construction. C. Collins. 1,652,701; Dec. 13.

Wall construction. W. F. Gaudian. 1,623,917; Apr. 5.

Wall construction. B. J. Klausen. 1,619,300; Mar. 1.

Wall construction. J. McKenzie. 1,627,986; May 10.

Wall construction. E. C. McWane. 1,642,481; Nov. 15.

Wall construction. E. Rhodes. 1,629,304; May 17.

Wall construction. E. Rhodes. 1,629,304; May 17.

Wall construction. C. F. Woight. 1,629,310; May 17.

Wall construction. G. F. Voight. 1,629,310; May 17.

Wall construction. R. G. F. Voight. 1,629,303; May 2.

Wall construction. R. G. Wallace. 1,631,659; June 7.

Wall construction. H. F. Weiss. 1,634,803; July 5.

Wall construction. H. F. Weiss. 1,634,803; July 5.

Wall construction. Acoustic. G. P. Little. 1,655,796; July 2. Wagon and sled, Convertible, A. J. Kelly. 1,654,465; Dec. 27. Dec. 27.

Wagon and the like, Tipping. J. E. F. Cambessédès.
1,638,009; Aug. 9.

Wagons and wegon trains, Draft mechanism for. H. J.
Clark. 1,652,700; Dec. 13.

Wagon body, Coaster. O. L. Lewis. 1,642,961; Sept. 20.

Wagon body, Juvenile. J. Weber. 1,620,931; Mar. 15.

Wagon-box support. B. G. Rademacher. 1,621,655;
Mar. 22. Wall construction. H. F. Weiss. 1,634,898; July 5, Wall construction Acoustic. G. P. Little. 1,635,796; July 12. Wall construction and block therefor, Concrete. J. H. Serra. 1,624,369; Apr. 12. Wall construction and building block. R. F. Greene. 1,618,281; Feb. 22. Wall construction and metal member therefor. J. Strand. 42. Wall construction, Building. G. L. Bennett. 1,631,787; June 7. Want, 22, was a proper of the 1.619.059: Mar. 1.

Wagon gate closer, Dump. S. W. Friggs. 1,622,084; Mar. 22.

Wagon, Tank. G. W. Sawyer. 1,644,090; Oct. 4.

Wagon, Tractor dump. A. C. Thomas. 1,619,094; Mar. 1.

Wagons, Adjustable bolster standard for. J. V. Cizek.

Wagons and the like, Tipping apparatus for. A. W. Biles. 1,615,737; Jan. 25.

Wagons, Grain-dumping end gate for grain. W. A. Orendorff. 1,634,798; July 5.

Wagons, Powder-distributing attachment for. F. E. Flack. 1,613,988; Jan. 11.

Wagons, Etunning gear for. F. M. Kennedy. 1,647,047; Wagons, Steering mechanism for coaster. F. S. Showers. will construction, Building, 6. L. Bennett. 1,034,161, Will construction, Building hollow. H. A. Duchemin, 1,619,570; Mar. 1, Wall construction, Concrete. F. M. Barton, 1,641,147; Sept. 6. Wall construction, Concrete. W. E. Keller. 1,638,583; Wall construction, Concrete. W. E. Keller. 1,638,583; Aug. 9. Wall construction, Hollow fire. M. Liptak. 1.643,280; Wall construction, Hollow fire- M. Liptak. 1.943,280; Sept. 20.
Wall construction, Horizontal. H. S. Ashenburst, 1,654,029; Dec. 27.
Wall construction, Marine. J. P. Ball. 1,629,470; May 24.
Wall construction, Metallic. W. H. Barnes. 1.653,197; Dec. 20. Oct. 25.

Wagons, Steering mechanism for coaster. E. S. Showers.
1.632,384; June 14.

Waistbands and the like, Preparing. J. Overbeke.
1.651,039; Nov. 29.

Walst pattern, Adjustable. J. J. Walsh. 1,628,343;

May 10.

Wall. E. Berliner. 1,622,351; May 10.

Wall. Air-cooled. H. J. Kerr. 1,634,291; July 5.

Wall. Air-cooled. H. J. Kerr. 1,634,291; July 5.

Wall. 21,623,094; Apr. 6.

Wall and constructing the same. J. Riegel. 1,637,657;

Aug. 2. Dec. 20.
Wall construction, Retaining, S. W. Traylor and C. H.
Ruggles, 1.637,065; July 26.
Wall construction, Stoker-sider, H. E. Preston,
1,620,488; Mar. 8.
Wall covering, H. Langer, 1,651,332; Nov. 29.
Wall covering, Composition, F. Brandt, 1,646,809;
Oct. 25. Wall covering, Preparing. A. C. Dodman, jr. 1,623,620; Aug. 2. Wall and constructing the same. H. F. Weiss. 1,642,282; Apr. 5. Wall coverings, Fastening for. R. Dorn. 1,650,117; Nov. 22. Sept. 13.
Wall and floor joint, Bathtub. W. B. Lucke. 1,615,881; Nov. 22.

Wall decoration. A. Labram. 1.648.020-1; Nov. 8.

Wall form, Concrete. O. L. Engstrom. 1.616.357; Feb. 1.

Wall form, Poured. O. Strom. 1.638.256; July 19.

Wall-form tie. J. H. Bauschard. 1.638.256; July 19.

Wall-form tie. J. H. Andrews. Res. 1.00.1313; Nov. 29.

Wall-form tie. J. A. Andrews. Res. 2.683; June 4.

Wall-form tie. J. B. Baus. 1.640.065; Aug. 23.

Wall furnace, H. T. Dykes. 1.644.3705; Sept. 27.

Wall inght. M. I. Kost. 1.642.339; Sept. 13.

Wall inght ing faxture. Bracket back for. G. E. Villaret.

Des. 73.152; July 20.

Des. 73.162; July 21.

Wall-mold. G. Hutchins. 1.652.480; Dec. 13.

Wall-molding. apparatus. W. T. Fels. 1,630,080;
May 24. Wall and floor joint, Bathtub. W. B. Lucke. 1,615,831; Feb. 1.
Wall and floor joints, etc., Sealing. W. R. Gillies. 1,643,984; Oct. 4.
Wall and making the same, Tubular corrugated. W. M. Tulton. 1,648,94; Nov. 8.
Wall and making the same or the like. D. Calarco. Des. 73,642; Oct. 18.
Wall board. C. T. B. Wall, Baffle. J. E. Muhlfeld. 1,622,283; Mar. 29.
Wall board. P. T. Beygrau. 1,635,922; July 12.
Wall board. R. N. Jensen. 1,635,214; July 5.
Wall board. H. F. Weiss. 1,634,809; July 5.
Wall board. H. F. Weiss. 1,634,809; July 5.
Wall board. H. F. Weiss. 1,634,809; July 5.
Wall board and forming the same. H. F. Weiss. 1,634,109; Oct. 4.
Wall board and forming the same. H. F. Weiss. 1,634,109; May 31.
Wall-board and Boundedge plaster. C. W. Utzman. 1,631,108; May 31.
Wall-board edge. J. Schumacher. 1,653,474; Dec. 20.
Wall-board amachine. A. L. Frederickson and B. C. Pitcher. 1,646,464; Oct. 25.
Wall board, Manufacturing. S. C. Clark. 1,639,128; Aug. 16. Wall mold. C. Hutchins. 1,652,480; Dec. 18. 1,630,080; Mall-molding apparatus. W. T. Fels. 1,630,080; May 24. Wall pramentation. J. Koberling. 1,647,181; Nov. 1. Wall panel. R. M. Brown. 1,632,431; June 14. Wall paner. A. C. Dodman, fr. Des. 73,829; Nov. 15. Wall paper. O. Sutezo. Des. 74,637; Dec. 6. Wall-paper machine. E. C. F. Ernst. 1,546,282; Oct. Wall board, Manufacturing, S. C. Clark. 1,639,128; Aug. 16.
Wall-board. Nail-penetrable, M. K. Armstrong, Wall-board or the like, Apparatus for shaping the edges of. J. J. Turner. 1,654,024; Dec. 27.
Wall board or the like, Clamping means for. A. W. Twier. 1,629,555; May 24.
Wall-board-etaining member. J. Strand. 1,619,994; Wall-board-etaining member. J. Strand. 1,619,994;

May 3. Wall plate, Corrugated. V. E. Sisson. 1.653,067; Dec. 20.

Mar. 8. Wall-board support. R. T. Ruth. 1,653,824; Dec. 27.

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Washer drums, Fluid-tight closure member for. H. W. Mitchell. 1,636,192; July 19. Washer-feeding apparatus. W. D. Kmentt. 1,619,075;
   Wall plate, Lighting-fixture. F. H. Trimble. Des. 72,196;
    Wall pocket or similar article. R. De Boer. Des. 72,548;
                                                                                                                                                                                                                                                                                                                              Mar. 1.
Washer for nails, Soft-metal. E. V. Swangren. 1,652,648;
                 all pocket or similar article. R. De Boer. Des. 72,892;
June 21.
                                                                                                                                                                                                                                                                                                                              Mashing and drying apparatus. G. W. Aldeen.
1,647,763; Nov. 1.
Washing and drying machine. S. J. Boughton. 1,629,856;
May 24.
Will tack or similar article. A. Tucek. Des. 74,038; Dec. 6; Vall seat. A. M. Freise. 1,617,901; Feb. 15. Wall seat. E. Nelson. 1,622,125; Sept. 13. Wall shield, Radiator. H. G. Sweitzer. 1,624,997; Apr. 19. Wall shield, Radiator. H. G. Sweitzer. 1,624,997; Apr. 19. Wall slabs, Mold board for the formation of. J. H. Delancy. 1,648,874; Nov. 28. Wall shield, Radiator. H. G. Sweitzer. 1,624,997; Apr. 19. Walls witch, Flush. M. Guett. 1,650,871; Nov. 29. Walls witch, Flush. M. Guett. 1,650,871; Nov. 29. Walls witch, Flush. M. Guett. 1,650,871; Nov. 29. Walls and other surfaces, Facing or preservation of. J. W. Dougal. 1,636,629; July 19. Walls, Constructing. E. J. Frewen. 1,652,305; Dec. 13. Walls. Constructing cement. F. Knaust. 1,646,263; Par. 1,649,313; Nov. 15. Walls, Constructing plaster-the. J. F. Makowski. 1,649,313; Nov. 15. Walls, Constructing in the state of the state o
                                  rack or similar article. A. Tucek. Des. 74,038;
                                                                                                                                                                                                                                                                                                                                Washing and polishing device. E. C. Joseph. 1,641,494;
Sept. 6.
                                                                                                                                                                                                                                                                                                                              Sept. 6, W. C. Flintham and E. H. Bridenbaugh. 1,640,401; Aug. 30. Washing and stirring apparatus. H. L. Hess. 1,653,281; Dec. 20.
                                                                                                                                                                                                                                                                                                                            Dec. 20.

Washing and wringing machine. J. Hutchinson. 1,627,438; May 3.

Washing apparatus, Vegetable. J. W. and T. J. Bell. 1,617,096; Feb. 8.

Washing, clenning, waxing, and polishing sheet material, Machine for. J. Flockhart. 1,619,925; Mar. 8.

Washing clothes, Apparatus for. W. B. Reeves and M. J. Foole. 1,629,154; Apr. 26.

Washing clothes or other fabrics, Composition for. C. B. Washing conductors of the fabrics, Composition for C. B. Washing conductors. S. Weisher. 1,628,015; May 10.

Washing device. H. van Zandt and B. Eyman. 1,636,022; July 19.

Washing device. M. M. Weiss. 1,644,908: Oct. 11.
                                                                                                                                                                                                                                                                                                                                Washing device. M. M. Weiss. 1,644,903; Oct. 11.
Washing device. Automobile. J. Gerken. 1,612,913:
 Mar. 22.
Wallet. M. Kanzel. 1,635,940; July 12.
Wallet. File. E. F. Ahlquist. 1,634,064; June 28.
Wallet File. E. F. Ahlquist. 1,634,064; June 28.
Walnut dehydrator. J. C. Welles. 1,641,716; Sept. 6.
Ward-Leonard drive. B. D. Mickey. 1,615,643; Jan. 25.
Wardrobe. F. Addition. 1,647,931; Oct. 25.
Wardrobe. F. Addition. 1,647,931; Oct. 25.
Wardrobe and dresser, Combined. C. G. Morrow and S. H. Oakes. Des. 72,718; May 24.
S. H. Oakes. Des. 72,718; May 24.
Wardrobe, Foliable. N. M. Robert. 1,629,362; May 17.
Wardrobe, Foliable. C. H. Woodruft. 1,615,430; Jan. 25.
Wardrobe rack. E. Hassa. 1,652,571; Dec. 13.
Wardrobe rack. E. Hassa. 1,652,571; Dec. 13.
Wardrobe reperator. C. A. Stoll 1,632,250; June 14.
Wardrobe reperator. C. A. Stoll 1,632,250; June 14.
Wardrobe reperator. C. A. Stoll 1,632,250; June 14.
                                                                                                                                                                                                                                                                                                                                Washing device, Milking-machine-. O. J. Bork. Re16,839;
                                                                                                                                                                                                                                                                                                                                                                                                                                  A. W. Altorfer. 1.628.064; Apr. 26.
A. W. Altorfer. 1.632.866; June 21.
A. W. Altorfer. 1.649.348; Aug. 30.
R. C. Beekman. 1.635.356; July 12.
F. L. Bickel. 1.647.261; Nov. 1.
C. Boyd. 1.622.130; Mar. 22.
O. Briadli. 1.635.245; July 12.
A. W. Burke. 1.613.787; Jun. 11.
B. P. and W. J. Churchill. Rel6,758;
                                                                                                                                                                                                                                                                                                                              Washing machine.
Washing machine.
Washing machine.
                                                                                                                                                                                                                                                                                                                              Washing machine,
Washing machine,
Washing machine,
                                                                                                                                                                                                                                                                                                                              Washing machine.
Washing machine.
Washing machine.
   Wein 10 generator. C. A. $totol 1,632,250; June 14. Waining device. R. S. Blair and B. D. Wells. 1,630,419; Nov. 22. Warp beams, Warp-end holder for. A. A. Gordon, 1,632,472; June 14. Warp-drawing machine. H. D. Colman. 1,624,928;
                                                                                                                                                                                                                                                                                                                                Washing machine.
                                                                                                                                                                                                                                                                                                                                                                                                                                       R. J. Clark, jr. 1,640,232; Aug. 23.
E. R. Cooper and A. Larson.
                                                                                                                                                                                                                                                                                                                                                                                     machine.
                                                                                                                                                                                                                                                                                                                                            1,614,284; Jan. 11
                                                                                                                                                                                                                                                                                                                                                                                                                                   11. A. Daniel. 1,639,491; Aug. 16.
J. M. Deagle. 1,630,112; May. 24.
F. H. Ehnts. 1,627,730; May 10.
F. L. Furbush. 1,642,147; Sept. 13.
F. G. Sept. 1,642,147; Sept. 13.
F. G. Gies. 1,632,273; Dec. 13.
A. H. Grauer. 1,644,481; Sept. 6.
A. R. Haag. Rel6,746; Sept. 27.
L. W. Hamilton. 1,639,180; Aug. 16.
W. C. Hasha. 4,631,266; June 7.
H. Joseph. 1,617,526; Peb. 15.
C. T. Kemp and N. E. Ryckman. 17.
                                                                                                                                                                                                                                                                                                                                Washing machine.
Washing machine.
      Apr. 19.

Apr. 19.

Warp-heddling machine. W. Hammer. 1,645,088; Oct. 18.

Warp-knitting machine. I. Springthorpe. 1,623,603;
                                                                                                                                                                                                                                                                                                                                 Washing machine.
                                                                                                                                                                                                                                                                                                                                Washing machine
Washing machine
   Warp-knitting machine. I. Springuorpe. 1,020,000, Apr. 5.
Warp, Method and apparatus for making tapered. O. S.
Lawton. 1,648,905; Nov. 15.
Warp stop motion. I. H. Verry. 1,652,591; Dec. 13.
Warp-t-us-ion equalizer. T. C. Demers. 1,646,446; Oct.
                                                                                                                                                                                                                                                                                                                                Washing machine.
                                                                                                                                                                                                                                                                                                                                Washing machine.
                                                                                                                                                                                                                                                                                                                                         ashing machine.
                                                                                                                                                                                 1,652,591; Dec. 13.
Demers. 1,646,446; Oct.
                                                                                                                                                                                                                                                                                                                                Washing machine.
Washing machine.
Washing machine.
   Warp threads, Apparatus for selecting and separating.
J. B. Moore. 1,652,816; Dec. 13.
Warper attachment. W. P. Hornbuckle and R. F. Craig.
1,626,829; May 3.
Warper or section beam head. J. Wilkinson. 1,644,099;
                                                                                                                                                                                                                                                                                                                                Washing machine.
                                                                                                                                                                                                                                                                                                                              Washing machine.
1,629,391; May 17
Washing machine.
Washing machine.
Washing machine.
Washing machine.
Washing machine.
Washing machine.
                                                                                                                                                                                                                                                                                                                                                                                                                                     17. H. F. Kuhns. 1,621,548; Mar. 22. C. Lichterman. 1,622,227; Mar. 22. C. McLean. 1,641,344; Sept. 6. H. R. Merseles. 1,620,671; Mar. 15. H. W Mitchell. 1,629,958; May 24. H. W. Mitchell. 1,646,972; Oct. 25. F. B. Morehouse and F. Hasse. F. B. Morehouse and F. Hasse.
 Warper or section beam head. J. Wilkinson, 1,644,09a; Oct. 4.
Warpers having an oscillatory detector bar, Quick-acting warp stop mechanism for. 1,646,362; Oct. 18.
Warpers, Quick-acting warp stop mechanism for. A. E. Rhoades, 1,646,362; Oct. 18.
Warpers, Quick-acting warp stop mechanism for. A. E. Rhoades, 1,646,363; Oct. 18.
Warships, Power plant for. W. Schmidt. 1,632,925; June 21.
                                                                                                                                                                                                                                                                                                                                Washing machine.
Washing machine
                                                                                                                                                                                                                                                                                                                            Washing machine.

1,627,053; May 3.
Washing machine.
                                                                                                                                                                                                                                                                                                                                                                                                                               6. B. Morenouse and F. Hanse.
C. A. Murdoch. 1845,869: Oct. 18.
J. H. Nlesen. 1,623,548; Apr. 5.
H. W. Routson. 1,625,596; Apr. 19.
G. W. Rynders. 1,622,548; Mar. 29.
C. G. Sinclair. 1,633,796; June 28.
G. G. Sinclair. 1,633,739; June 28.
G. F. Stapler. 1,615,443; June 28.
H. F. Fort. 1,643,430; July 5.
C. F. Staples. 1,634,800; July 5.
B. A. Stocking. 1,633,140; June 21.
C. F. Staples. 1,634,800; July 5.
B. A. Stocking. 1,633,144; June 21.
O. E. Stockes. 1,642,700; Sept. 20.
N. E. Strawn. 1,638,714; Aug. 9.
C. E. Stockely. 1,647,803; Nov. 1
A. G. Wanker. 1,639,872; Aug. 23.
D. B. Woodrow. 1,629,761-2;
 Warships, Power plant for. W. Schmidt. 1,632,925; June 21.

Washbasin and foot tub, Combined. A. J. Farmer 1,616,313; Feb. 1.

1,616,313; Feb. 1.

Washbasin and the like, Screw connection of the line of the like of the lik
                                                                                                                                                                                                                                                                                                                            Washing machine. Washing machine.
                                                                                                                                                                                                                                                                                                                              Washing machine.
Washing machine.
   Washer: See-
                                       wash
                                                                                                                                                                     Photograph
                                                                                                                                                                                                                                  washer.
                                                                                                                                                                                                                                                                                                                              Washing machine.
May 24.
              Clothes washer.
Dish washer.
Gas washer.
Glass washer.
Gold washer.
Lock washer.
                                                                                                                                                                   Press-ring washer,
Sand and gravel washer.
                                                                                                                                                                                                                                                                                                                           Mashing machine. E. R. Zademach. 1,628,818; May 17. Washing machine and wringer. F. G. and M. P. Marbach. 1,654,182; Dec. 27. Washing machine attachment for purpose of making lee cream. M. J. Morris. 1,649,668; Nov. 22. Washing machine, Automatic. E. J. Carroll. 1,639,024; Aug. 16.
                                                                                                                                                                   Smoke washer.
Surface washer.
Tilting washer.
              Nut lock or fastener washer. Vegetable
              Nut-locking washer.
                                                                                                                                                                                                                                                                                                                           Aur. 10.

Washing machine, Automatic. E. J. Carroll. 1,639,368;
Aug. 16.

Aug. 16.

Washing machine, Bottle. S. H. Marsh. 1,651,925;
Dec. 6.
   Washer, J. R. Fisher, 1,638,251; Aug. 9,
Washer, R. T. Hosking, 1,615,382; Jan. 25,
Washer and sterilizer, Can. H. Nystuen,
Nov. 8.
                                                                                                                                                                                                                                                      1,648,501;
 Nov. 8. Washer attachment, Air. S. J. Morrison. 1,615,337; Vasher-drive mechanism. H. W. Mitchell. 1,632,991; Washer-drive mechanism. H. W. Mitchell. 1,632,991; Washing machine, Bottle. W. H. Paulson. 1,642,824; Sept. 20. Washing machine, Bottle. W. C. Sheffield. 1,648,743; Nov. 8.
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Washing-machine cabinet. C. W. Swanson. Des. 72.458; Apr. 12. Washing-machine casing. A. J. Fisher. 1,636,176; July 19. Washing-machine casing. F. C. Sebulske, jr. Des. 74,028; Dec. 6. Washing machine, Filter-cell. J. J. Preble. 1,644,082; Washing machine, Household. 1,645,816; Oct. 18. Washing machine, Jet. I. H. Aug. 30. C. A. Murdoch. I. H. Kendall. 1.640.835; Aug. 30.

Mashing-machine mechanism. A. G. Larson and E. R.
Cooper. 1629,218; May 17.

Washing-machine plungers, Resilient mounting for. E.
F. Beebe. 1,622,943; June 21.

Washing machine, Power. F. E. Bowers. 1,630,587; F. Beebe. 1.632,940; or. F. E. Bowers.
Aug. 16.
Washing machine, Rotary. A. F. McNaughton.
1.642.123; Sept. 13.
Washing machine, Spray head for boiler. D. A. Hegerty.
1.612,631; Apr. 26.
Washing machine, Sprout. L. C. Peters. 1.644,488;
Oct. 4.
Oct. 4.
Washing machine, Mac Washing machine tub. S. E. Schroeder. 1,627,931; Washing machine, Tumbier. S. C. Benjamin. 1,644,628; O.C. Washing machine, Vogetable. C. C. Daniels. 1,633,437; June 21. June 21. Marking with folding wringer. H. D. Payne, W. De Clerque, and S. T. Sjoberg. Re16,776; Oct. 18. Washing machine wringer mechanism. J. Rocke. 1,642,130; Sept. 13. Washing machines, Agitator for. J. H. Fedler. 1,613,318; Jan. 4. Mashing machines, Agitator for. J. Rocke. Re16,743; Washing machines, Agitator for. J. Rocke. 1,617,030; 19th. Str. 1,619,037; Mar. 1, Washing machines, Brush attachment for. M. Iseman. 1,637,418; Aug. 2. Washing machines, Cleaning-material feeder for. N. W. Halsey. 1,640,319; Aug. 23. Washing machines, Clothes wringer for. W. K. Howe. 1,640,713; Aug. 30. Musch mechanism for. J. L. Coffeed Mashing machines, Clutch mechanism for. O. B. Woodrow. 1,629,763; May. 24. Washing machines, Conveyer for. H. D. Lathrop and W. H. Paulson. 1,649,069; Nov. 15. Washing machines, Conveyer for. H. D. Lathrop and W. H. Paulson. 1,649,069; Nov. 15. Nov. 22. Washing machines, Cylinder for. G. II. Deln. 1,650,195; Nov. 22. Washing machines, Cylinder for. G. II. Deln. 1,650,195; Nov. 22. Washing machines, Agitator for. J. Rocke. Re16,743; Sept. 20. Nov. 22.

Washing machines, Door mechanism for, F. Balzer, 1,630,513; May 31.

Washing machines, Drain guard for, L. W. Tilt, 1,626,125; Apr. 26.

Washing machines, Drainage valve for clothes. P. E. Washing machines, Driving mechanism for, F. Maus. 1,641,770; Sept. 6.

Washing machines, Driving mechanism for, O. B. Woodrow, 1,635,450; July 12.

Washing machines, Eccentric triving mechanism for sow, 1,635,450; July 12.

Washing machines, Eccentric triving mechanism for 3bishing michines, Holder for, F. A. Hoffer, 1,632,735; June 14.

Washing machines, Holder for, F. A. Hoffer, 1,632,735; June 14.

Washing machines, Holder for, F. A. Hoffer, 1,615,952; June 14. Washing machines, Hydrodisk for. J. Nelson. 1,615,952; Feb. 1. Feb. 1.

Washing machines of the spray type, Cleaning-material feeder for. N. W. Halsey. 1,640,318; Aug. 23.

Washing machines, Fower-operated wringer for. W. K.

Howe. 1,626,531; May 3.

1,641,680; Aug. 30.

Washing machines, Stap door for. E. J. Perry.
1,627,603; May 2.

Washing machines, Stand for. A. A. Clark. 1,649,571;

Nov. 15.

Nov. 15. Washing machines, Steam jet for. L. Mandry. 1,646,299; Oct. 18. Oct. 18.
Washing machines, Tub for. F. M. and A. Fairgrieve. 1,630,478; May 31.
Washing mechanism. Lubricating system for power-driven. F. E. Geldhof. 1,616,852; Feb. 8.
Washing or cleaning table forks or forked articles.
Appliance for. R. M. Hamilton. 1,653,703; Dec. 27.
Washers, Drum controller for. M. E. Dely. 1,652,768; ashers. Dec. 13. Dec. 13.

Washers, drying tumblers, and the like, Door-locking device for. W. O. Olson. 1.647,713; Nov. 1.

Washers on upstanding pins, Machine for placing, W. H. Williams, and the pins of rubber-heel moids, Machine for placing, J. H. Kintzele, 1.626,039; Apr. 26.

Washtub-cover-holding device, Stationary. J. H. Barrett, 1.627,467; May 3.

Washtubs, Body rest for. E. H. Senger. 1,639,113; Aug. 16.

Washtubs, etc., Enameled-metal cover for. J. Foster, Jr. 1.614.464; Jan. 1.8.
Washtubs, table tops, and the like, Stand for supporting.
H. A. Hansen. 1.643.271; Sept. 20.
Waste and dust, Suction device for removing. K. Schmid. 1.630,972; May 31.
J. F. Geibel. 1.633,992; Aug. 28.
Waste connections and the like, Spud for. K. A. Wernie. 1.637,365; Aug. 2.
Waste-hast boiler. H. S. Bennett. 1.636,979; July 26.
Waste material and utilizing components thereof, Disposing of, A. Engle. 1.633,678-1; June 21.
Waste-pipe cleaner, Flexible. F. E. Grosvold. 1,638,766;
Waste reviewer. M. W. Thanke. 1.823,688, Lune. 29.
Waste reviewer. M. W. Thanke. 1.823,688, Lune. 29. Waste material and utilizing components thereof, Disposing of. A. Engle. 1,633,078-81; June 21.

Waste-pipe cleaner, Flexible. F. E. Grosvold. 1,638,766; Aug. 9.

Waste receiver. M. W. Thaete. 1,633,688; June 28.

Waster receiver. M. W. Thaete. 1,633,688; June 28.

Waster receiver. M. W. Thaete. 1,633,688; June 28.

Waster. J. B. Kilsinger. Des. 73,823; Aug. 23.

Watch. J. B. Kilsinger. Des. 73,823; Aug. 28.

Watch. W. E. Wakefield. 1,645,633; Oct. 18.

Watch. J. B. Kilsinger. Des. 73,856; Aug. 29.

Watch. W. E. Wakefield. 1,645,633; Oct. 18.

Watch. Des. 74,134-5; Dec. 27.

Watch. Des. 74,134-5; Dec. 27.

Watch. Des. J. II. Beckman. Des. 74,134-5; Dec. 27.

Watch. Des. J. II. Beckman. Des. 74,134-5; Dec. 27.

Watch. Des. Des. 74,134-6; Apr. 12.

Watch. Des. Des. 72,356-60; Apr. 5.

Watch. Des. J. Dinhofer. Des. 72,413-16; Apr. 12.

Watch. Des. Des. 73,536; Oct. 4.

Watch. Des. J. Dinhofer. Des. 72,413-16; Apr. 12.

Watch. Des. J. Dinhofer. Des. 73,536; Oct. 4.

Watch. Des. J. Dinhofer. Des. 73,546; Oct. 18.

Watch. Des. F. G. Gruen. Des. 73,546; Oct. 18.

Watch. Des. F. G. Gruen. Des. 73,561; Apr. 27.

Watch. Des. F. G. Gruen. Des. 73,561; Apr. 27.

Watch. Des. B. Levy. Des. 72,024; Feb. 15.

Watch. Des. B. Levy. Des. 72,024; Feb. 15.

Watch. Des. B. Levy. Des. 72,024; Feb. 15.

Watch. Des. P. G. Gruen. Des. 71,778; Jan. 4.

Watch. Des. 71,778; Jan. 4.

W Wath fobs, Safety catch for. C. H. Cross. 1,648,217;
Watch folder. E. Edelstein. Des. 71,785; Jan. 4.
Watch holder. L. B. Thompson. 1,613,492; Jan. 4.
Watch holder. L. B. Thompson. 1,613,492; Jan. 4.
Watch holder. L. B. Thompson. 1,613,492; Jan. 4.
Watch movements, Manufacturing process of blanks for. H. Colomb. 1,621,235; Mar. 15.
Watch movements, provided with jewel-insetting or plug holes, Manufacturing process of making blanks for.
Watch movements, Rest and holder for. J. I. Nasett. 1,621,805; Mar. 22.
Watch. Stem-winding and stem-setting. W. E. Porter. 1,625,498; Apr. 19.
Watch strap, Wrist. W. Hankinson and J. J. Knebel. 1,629,339; May 17.
L. G. M. Kesteman. 1,633,381; June 21.
Watch straps, Connecter for wrist. W. A. Davis. 1,632,217; June 14.
Watch straps, Fastener for. A. A. Goldstein. 1,658,457; Dec. 20. Watch fobs, Safety catch for. C. H. Cross. 1,648,217; Dec. 20.

Watches and making same, Jewel setting for. H. Colomb. 1.642.102; Sept. 13.

Watches, clocks. and other devices, Determining the error in. E. Wolf. 1,628,214; May 10.

Watches, Dust guard for. I. Sonnenthal. 1,633.351; June 21.

Watches, Manufacturing blank movements of. H. Co-Watches, Manufacturing blank movements of. H. Co-Watches or clocks, Dial for. J. J. Guillarmod. Des. 73,227; Aug. 9.

Watches or the like, Bracelet chain for wrist. A. Person. 1,630,498; May 31.

Watches, Setting and winding mechanism for. C. H. H. Rodenet, 1043,633, Sept. 27.

Berger, 1,635,898; Feb. 1.

Water and air tube connection. W. A. Smith. 1,653,071; Dec. 20.

Water and other impurities from mineral or other olls Dec. 20.

Water and other impurities from mineral or other oils or liquids, Separating. H. J. Holford. 1,635,845; July 12.

Wester and the form of filtering and parifying. C. H. Ferry. 1,628,510; May 10.

Water bag. J. R. Moler. 1,629,722; May 24.

Water barrier. W. H. Gillen. 1,632,545; June 14.

Water barrier. W. H. Gillen. 1,632,545; June 14.

Water-bottle stopper. H. P. Kraft. 1,641,594; Sept. 6.

Water-carbonating apparatus. W. C. De Armond and W. Ray H. Watt. 1,645,520; Oct. 11.

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Water circulating systems, Composition for stopping leaks in hot. G. 1. Kay. 1,613,055; Jan. 4. Water-closet. G. R. Bell. 1,620,429; Mar. 8. Water-closet. W. Fröblich. 1,654,520; Dec. 27. Water-closet. U. F. Karlsson. 1,628,887; May 17. Water-closet bend. E. W. N. Boosey. 1,624,653; Apr. 12. Water-closet, Marine, U. G. Lee. 1,625,950; Apr. 26. Water-closet pans, Ventilation of. S. R. Habault. 1,632,791; June 21. Eastburn. 1,628,830; May 17. Water-closet seat. S. L. Eastburn. 1,628,830; May 17. Water-closet structure. E. Richardson. 1,636,649;
       July 19.
Water-closets, Flush device for. R. Stickdorn, 1,629,421;
   May 17.

Water-closets, Sact for. J. K. Lang. 1,648,485; Nov. 8.

Water-closets, Saction device for. J. D. Cameron.

1622,993; Mar. 29.

Hollow J. J. D. Cameron.

Waterous. 1,644,622; Oct. 4.

Water coils, Apparatus for preventing incrustation of.

E. I. Ingles. 1,642,640; Sept. 13.

Water-collecting device. C. W. Armbrust. 1,648,438;
Water-collecting device. C. W. Armbrust. 1,684,848; Nov. 8.
Water-column alarm. W. H. Kuhn. 1,620,729; Mar. 15.
Water cooler. F. A. Phillippi. 1,627,574; May 10.
Water cooler. H. Weiss. Des. 72,508; Apr. 19.
Water Cooler. H. Weiss. Des. 72,508; Apr. 19.
Water M. Posey. 1,622,603; Apparatus. E. A. Haas Posey. 1,622,149; Mar. M. Posey. 1,622,149; Mar. 1,624,149; Mar. 1,624,149; Mar. 1,624,149; Mar. 1,624,149; Mar. 1,637,596; Aug. 2.
Water-cooling systems, Heater for automobile. E. A. Turner. 1,637,596; Aug. 2.
Water, Dearrating. G. H. Gheson. 1,618,424; Feb. 22.
Water, Dearsting. D. S. Jacobus. 1,650,122; Nov. 22.
Water-distribution control, Automatic. E. Walker. 1,628,698; May 17.
Water-elevating apparatus. T. E. Crockett. 1,642,990; Sept. 20.
1.023,033, May 17.

Water-cvc. Img apparatus. T. E. Crockett. 1,642,990; Sept. 20.

Water feder, Boller. C. B. Haines. 1,636,559; July 19.

Water feder, Boller. C. B. Haines. 1,636,559; July 19.

Water feder, Boller. C. B. Haines. 1,636,559; July 19.

Water from peat and the like, Removal of. O. Soderlund, T. Boberg, and N. Testrup. 1,624,769; Apr. 12.

Frean. 1,619,713; Mnr. 1.

Water gate. A. M. Amend. 1,654,476; Dec. 27.

Water gate. A. M. Amend. 1,654,476; Dec. 27.

Water gauge. M. Pekich. 1,630,632; May 31.

Water gauge. Connection, Self-adjusting. W. Rigney.

Water gauge. Safety. W. M. Myers. 1,642,467; Sept. 27.

Water heater. A. E. Ania. 1,643,633; Sept. 27.

Water heater. A. E. Ania. 1,643,633; Sept. 27.

Water heater. T. P. Cronin. 1,641,532; Sept. 6.

Water heater. J. Ellis. 1,634,704; July 5.

June 21.

Water heater. J. Ellis. 1,638,624; Aug. 9.

Water heater. J. E. Breanbrack. 1,615,831; Feb. 1.

Water heater. J. E. Breanbrack. 1,615,831; Feb. 1.

Water heater. A. E. Hall. 1,636,907; July 26.

Water heater. A. E. Hall. 1,636,907; July 26.

Water heater. A. E. Hall. 1,636,907; July 26.

Water heater. A. E. Hodges and C. E. Owen. 1,621,013; Mar. 15.

Water heater. B. D. Hodges and C. E. Owen. 1,621,013; Mar. 15.

Water heater. B. D. Hodges and C. E. Owen. 1,621,013; Mar. 15.

Water heater. H. S. Humphrey. 1,618,434; Feb. 22.

Water heater. G. C. Kitzeman. 1,643,503; July 5.

Water heater. G. C. Kitzeman. 1,643,610; Nov. 15.
       Matr. 16: 5. D. Honges and C. E. Owen. 1,621,013; Water heater. Water heater. Water heater. Water heater. Water heater. Water heater. G. C. Kitzeman. 1,617,601; Feb. 15. Water heater. Water heater. W. E. O'Brien. 1,643,03; July 5. Water heater. F. J. McGuane. 1,649,610; Nov. 15. Water heater. W. E. O'Brien. 1,643,854; Sept. 27. Water heater. G. F. Reichman. 1,615,486; Jan. 25. Water heater. G. F. Reichman. 1,615,486; Jan. 25. Water heater. F. W. Schnepp. 1,616,143; Feb. 1, Water heater. J. W. Schnepp. 1,616,143; Feb. 1, 
          Water heater. W. J., E., and G. M. Towles, *1,628,341; May 10, Water heater G. C. Vennum. 1,652,188; Dec. 13. Water heater and terrillzing apparatus, Combined. A. 1630,449; J. G. May 11,630,400; May 31. Water heater arrangement, Feed. N. T. McKee. 1,630,400; May 31. Water heater arrangement, Feed. N. T. McKee. 1,633,947; June 28. Water heater arrangement, Feed. N. T. McKee. 1,633,947; June 28. Water heater, Electric. L. W. Armstrong. 1,615,517; Feb. 1.
          Feb. 1.
Water heater, Electric. F. J. Cld. 1,845,277-8; Oct. 11.
Water heater, Electric. A. Cote. 1,632,821; June 21.
Water Legier, Electric. E. E. Ellittricke, J. A. Forster,
Water heater, Electric. G. N. Madsen.
Mar. 8.
Water heater, Electric. S. W. Malcolm. 1,620,117;
Mar. 8.
Water heater, Electric. S. W. Malcolm. 1,618,101;
Feb. 15.
              Water heater, Electric. A. Martin. 1,613,714; Jan. 11.
Water heater, Electric. A. Martin. 1,621,800; Mar. 22.
Water heater, Electric. T. H. McQuinn. 1,624,843;
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Water heater, Electric. S. D. Nesmith. Reluy/12-20, Aug. 23.
Water heater, Electric. E. C. Steere. 1,630,909; May 31.
Water heater, Electric. J. J. Underwood. 1,627,875; May 10.
Water heater, Electric. W. W. Wainwright. 1,620,745; Mar. 15.
Mar. 15.
Mar. 16.
Mar. 16.
Marer heater, Electrical. H. W. Woodgate and F. W. Slade. 1,617,891; Feb. 15.
Water heater, Electrically-operated. S. E. Nesmith. 1,640,048; Aug. 23.
Water heater, Feed. M. F. Cox. 1,627,595; May 10.
Water heater, Feed. M. F. Cox. 1,627,595; May 10.
Water heater, Feed. A. L. Penniman, jr. 1,621,268; Mar. 15.
Water heater, Feed. W. Phillips. 1,646,491; Oct. 25. Water heater, Electric. S. D. Nesmith. Re16,715-16; Water heater, Feed. H. J. Sternberg. 1,621,289; Mar. 15. Water heater, Immersible. S. M. Kass. 1,640,943; Aug. 30. Aug. 30.
Water heater of the storage type, Electric. A. E. Lewis. 1,622,951; Mar. 29.
Water heater unit. L. R. Mendelson. 1,639,002; Aug. 16.
Water heater, Unrestricted-return. J. E. Ercanbrack. Mater neater unit. L. R. Mendelson. 1,639,002; Aug. 16.
Water heater, Darestricted-return. J. E. Ercanbrack.
1,631,875; Dec. 6.
Water heater, Manual Water heaters, Latch for electric. C. Vandenberghe. 1,646,225; Oct. 18.
Water-heating apparatus. F. W. Shuell. 1,637,395; Aug. 2.
Water heating and deaerating. G. H. Gibson. 1,636,361;
July 19.
Water-heating device. T. J. Farrington. 1,651,450; Water-heating system. H. W. O'Dowd, 1.643,223: Sept. 20.
Water-heating system. J. A. Powell. 1,621,853; Mar. 22.
Water-heating system. Thermostatically-controlled. M. Ressek. 1,621,601; Mar. 22.
Water-heating unit, Electrical. M. Nerew. 1,648,588; Water-hearing min, Nov. 8. Water in oil emulsions, Resolving. E. E. Ayres, jr. 1,636,339; Oct. 18. Water-level-controlling means. E. L. Martin. 1,619,356; Tater heater, G. C. Kitzeman. 1,617,601; Feb. 15.
Tater heater, G. C. Kitzeman. 1,622,75; Dec. 27.
Tater heater, G. C. Kitzeman. 1,635,003; July 5.
Tater heater, W. E. O'Frien. 1,643,854; Sept. 27.
Tater heater, W. E. O'Frien. 1,643,854; Sept. 27.
Tater heater, W. E. O'Frien. 1,643,854; Sept. 27.
Tater heater, L. W. Schnepp. 1,616,143; Feb. 1.
Tater heater, E. E. Spletter. 1,628,847; Dec. 27.
Tater heater, F. Stot. 1,629,844; May 24.
Tater heater, F. Stot. 1,629,844; May 24.
Tater heater, J. W. Storey. 1,616,735; Feb. 22.
Tater heater, J. W. Storey. 1,616,735; Feb. 22.
Tater heater, G. C. Vennum. 1,652,185; Dec. 12.
Tater heater, G. C. Vennum. 1,652,137; Dec. 27.
Tater heater, G. C. Vennum. 1,652,137; Dec. 27.
Tater heater, Electric. G. N. Macsen. 1,629,341; Mar. 1.
Tater heater, Electric. F. J. Cid. 1,645,277-8; Oct. 11.
Tater heater, Electric. L. W. Armstrong. 1,615,819; Feb. 1.
Tater heater, Electric. A. Martin. 1,623,821; June 21.
Tater heater, Electric. G. N. Madsen. 1,620,117; Mar. 22.
Tater heater, Electric. G. N. Madsen. 1,620,117; Mar. 22.
Tater heater, Electric. G. N. Madsen. 1,620,117; Mar. 22.
Tater heater, Electric. A. Martin. 1,623,809; Mar. 22.
Tater heater, Electric. A. Martin. 1,623,809; Mar. 22.
Tater heater, Electric. A. Martin. 1,623,809; Mar. 22.
Tater heater, Electric. A. Martin. 1,623,821; June 21.
Tater heater, Electric. A. Martin. 1,623,809; Mar. 22.
Tater heater, Electric. B. W. Malcolm. 1,618,101; Mar. 22.
Tater heater, Electric. C. W. Malcolm. 1,618,101; Mar. 22.
Tater heater, Electric. B. W. Malcolm. 1,623,141; Mar. 23.
Tater heater, Electric. A. Martin. 1,623,1800; Mar. 22.
Tater heater, Electric. A. Martin. 1,623,1800; Mar. 22.
Tater heater, Electric.

1008 Water, Purifying, W. H. Green and A. S. Behrman, 1,653,272; Dec. 20.
Water-purifying apparatus. H. B. Hartman. 1,613,998; Jan. 11. Jan. 11.

Water regulator. J. Müller. 1,638,053; Aug. 9.
Water, Rotating endless screen belt for the mechanical purification of. E. Geiger. 1,622,572; May 24.
Water ski. T. J. Lease. 1,628,368; May 10.
Water schener. N. E. Brice and H. G. Snyder. 1,620,717;
Water softener. C. P. Eisenhauer. 1,634,409; July 5.
Water softener. C. P. Eisenhauer. 1,634,6381; Oct. 25.
Water softener. O. W. Johnson. 1,628,541; May 10.
Water softener. O. W. Johnson. 1,628,122; Dec. 27.
Water softener. V. L. Tannehill. 1,624,005; Apr. 26.
Water softener. Automatic. C. P. Eisenhauer. 1,625,198;
Apr. 19. neer, Automatic. C. P. Eisenhauer. 1,625,198; Water softener, Anomance, Apr. 19.

Apr. 19.
Water softener, Two-flow base exchange. C. T. McGill. 1,624,614; Apr. 12.
Water softeners, Automatic control mechanism for. A. C. Hougland and L. G. Lindsay. 1,627,903; May 10.
Water softeners, Control mechanism for. L. G. Lindsay. 1,622,610; June 14.
Water-softening apparatus. K. W. Bartlett. 1,624,382; Apr. 12. Water-softening apparatus. C. P. Eisenhauer. 1,623,399; Apr. 5. Apr. 12.

Apr. 12.

Apr. 5.

Apr. 5.

Apr. 5.

Apr. 5.

C. P. Eisenhauer. 1,623,399;

Apr. 5.

C. P. Eisenhauer. 1,644,714;

Get. 11.

Water-softening apparatus. C. P. Eisenhauer. 1,625,197;

Apr. 19.

Water-softening material, Preparing. G. W. Prather. 1,635,942; July 26.

Water-softening reagent and preparing same. A. S. Behrman. 1,642,717;

Word. 13.

Word. 13.

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Word. 14.

Word. 15.

Water-soluble neutral derivatives of dihydroxydiamino-arsenobenzol. Manufacture of. H. M. Wuest. 1,648,262; Nov. 15.

Water. Sounding or measuring distance in. A. Behm. 1,649,378; Nov. 15.

Water. Sounding or measuring distance in. A. Behm. 1,649,378; Nov. 15.

Water still. 2. V. Oliver. 1,629,307; May 24.

Water still. 2. V. Oliver. 1,629,307; May 24.

Water still. 2. V. Oliver. 1,629,307; May 24.

Water-supply connection. W. J. Fennell. 1,642,672; Sept. 20.

Water-supply system and valve therefor. J. H. Masters. 1,631,142; June 7.

Water system for making ice, Raw. J. A. Martocello. 1,627,776; May 10.

Water tower for fire-lighting purposes. J. Zeitter. 1,644,972; Oct. 11.

Water trup, Automatic. P. C. Ribes. 1,628,430; May 10.

Water, Treating hard. G. Petroff and P. Shestakoff. 1,638,203; Aug. 9.

Water, Treating hard. G. Petroff and F. Shestakoff. 1,638,203; Aug. 9.

Water, Treatment of boiler, R. E. Hall. 1,613,701; Jan. 11. Water, Treatment of boiler. R. E. Hall. 1,613,701; Jan. 11. Water-tube boiler. A. C. Danks. 1,614,948; Jan. 18.
Water-tube boiler. A. H. Egsieker. 1,615,006; Jan. 18.
Water-tube boiler. K. Endo. 1,638,024; Aug. 16.
Water-tube boiler. W. Hopf. 1,614,839; Jan. 18.
Water-tube boiler. W. D. Hopf. 1,614,839; Jan. 18.
Water-tube boiler. G. Lasker. 1,645,330; Oct. 25.
Water-tube boiler. C. L. Koszak. 1,648,933; Oct. 27.
Water-tube boiler. C. L. Roszak. 1,648,933; Oct. 27.
Water-tube boiler. G. L. Stomel. 1,627,571,137; July 10.
Water-tube boiler. G. C. Vennum. 1,618,141; Feb. 15.
Water waver. P. H. Watson. 1,635,065; July 5.
Water waver. P. H. Watson. 1,635,065; July 5.
Water waver. Aug. 2.
Water waver. A. J. Greenwich. 1,637,818;
Aug. 2.
Water whole B. J. March. 18. Aug. 2.

Water wheel. F. L. McQuiston. 1,645,996; Oct. 18.
Waterer, Hog. F. F. Petrick. 1,640,292; Aug. 23.
Waterer, Poultry. A. D. Lantz. 1,642,694; Sept. 13.
Waterer, Stock. H. G. Zachte. 1,649,099; Nov. 15.
Waterer, Stock. H. G. Zachte. 1,649,099; Nov. 15.
Watering areas of land, Apparatus for. D. Eld.
1,617,749; Feb. 15.
Watering areas of land, Apparatus for. D. Eld.
1,637,413; Aug. 2.
Watering device, Animal., G. E. Hazard. 1,646,24
Oct. 18. 1,640,649; D. Elder. D. Elder. Watering tank, Stock. F. E. Pierson. 1,629,883; May 24. Wave analysis, System for. F. X. Rettenmeyer. 1,636,436; Wave and tide motor. N. Hoshafian, 1,620,258; Mar. 8.
Wave apparatus, Permanent-Marcel. E. Perry. Wave and tide motor. N. Hoshafian. 1,620,286; Mar. 8. Wave apparatus. Permanent-Marcel. E. Perry. 1,636,967; July 26. Wave-bath machine. J. B. Wanko. 1,621,819; Mar. 22. Wave energy, System for determining the direction of propagation of F. A. Hubbard. 1,641,432; Sept. 6. Wave filter. T. E. Shea. 1,643,152; July 19. Wave filter. F. E. Shea. 1,636,152; July 19. Wave filter. Flortrien K. S. Johnson. 1,647,634; Nov. 1 Nov. 1, 1,644,047; Dec. 27. Wave filter, Electrical. O. J. Zobel. 1,616,252; Jan. 25. Wave filter, Electrical. O. J. Zobel. 1,644,004; Oct. 4.

Wave filter receiving circuits. P. Welch and A. Murphy. 1,638,608; Aug. 9. Wave length, Device for altering the. S. Loewe. 1,643,782; Sept. 27. Wave lengths, Adjustment of. G. H. Clark. Re16,651; Hold, 182; Sept. 21.

Wave lengths, Adjustment of. G. H. Clark. Re16,651;

Wave lengths, Changing. G. Hill and G. H. Clark. 1,638,699; Aug. 28.

Wave meter. J. O. Mauborgne and G. Hill. 1,632,982; June 21.

Wave modulation. J. W. Horton. 1,633,960; Aug. 18.

Wave modulation. J. W. Horton. 1,633,960; Aug. 18.

Wave modulation. J. W. Horton. 1,633,960; Aug. 18.

Wave modulation. J. W. Horton. 1,632,193 and their auxiliary machinery, Utilizing. T. R. Bean and R. E. Taudevin. 1,622,173; Mar. 22.

Wave motor. W. G. Bloss. 1,617,568; Feb. 15.

Wave motor. H. L. Booth. 1,623,519; Apr. 19.

Wave motor. S. B. Caldwell. 1,617,571; Feb. 15.

Coverden. 1,623,439; Apr. 12.

Wave motor. F. Stich. 1,647,025; Oct. 25.

Wave signaling system. L. A. Hazeltine. 1,648,808; Nov. 8. Nov. 3. Wave signaling system. L. A. Hazeltine. 1,650,353; Nov. 22. Nov. 22.

Nov. 22.

Nov. 23.

Nov. 24.

Nov. 25.

Nov. 27.

Nov. 2 and J. Moore. 1,654,232; Dec. 27.

Wave-transmission system. R. V. L. Hartley. 1,632,069;
June 14.

Wave transmission system. E. L. Norton. 1,642,506;

Wave transmission system and apparatus. A. S. Curtis. 1,632,676; July 26.

Wave transmission system, Two-way. J. F. Farrington. 1,632,625; June 14.

Waving hair. F. Parker. Re16,546; Feb. S.

Waving hair. F. Parker. Re16,546; Feb. S.

Waving hair. Apparatus for. A. O'Brien. 1,646,831;

Waving hair, Method of and apparatus for. M. Clemence. 1,637,605; Aug. 2.

Waves in hair, Device for placing. C. S. Ackley. 1,652,751; Dec. 13.

Waves in radiofrequency circuits, Arrangement for eliminating distributing. M. Osnos. 1,621,988; Mar. 22.

Waves, Receiving system for compressional. H. G. Dor
Wax and the products resulting from same, Treating. O. E. Enell. 1,646,280; Oct. 18.

Wax-applying tool. H. L. Gibson. 1,619,817; Mar. 8.

Wax enulsion. L. Davis and E. W. Bennett. 1,637,475;
Aug. 2. Apparatus to the product of the pro Wax enulsion. L. Davis and B. W. Bennett. 1,637,475; Aug. 2.

Wax, Finish remover containing. O. E. Enell. 1,646,281; Oct. 18.

Wax from 611, Process and apparatus for removing. S. H. Wax from 611, Process and apparatus for removing. S. H. Wax sweating and crystallizing apparatus. H. L. Alian. 1,658,337; Dec. 27.

Wax-sweating systems. Apparatus for regulating. S. S. Amdursky. 1,636,730; July 26.

Wax, Transparent sealing. J. Prikelmayer. 1,638,960; Wax, Transparent sealing. J. Prikelmayer. 1,638,960; Waxer and polisher. J. S. Judge. 1,632,481; June 14.

Waxer, Floor. J. H. Milholland. 1,638,500; Aug. 9.

Waxing machine and the like. S. J. Blum. 1,618,799; Feb. 22.

Wenner, Caff. R. B. Sidders. 1,616,203; Feb. 1.

Wenner, Caff. R. B. Sidders. 1,616,203; Feb. 1.

Wenner, Caff. R. B. Sidders. 1,616,203; Feb. 1.

Wenrecompensating bolt. G. C. Monckmeier. 1,624,499; Apr. 12. went-compensating boit. G. C. Monckmeier. 1,624,499; Apr. 12.

Why C. 12.

May 2.

May 3.

Wearing apparel. R. J. O. Simpson. 1,648,153; Nov. 8.

Wearing apparel. Collar and like article of. E. Higgins. 1,652,131; Dec. 6.

Weather shield and glare visor. O. E. Grigsby. 40,615,078; J. J. Burroughs. 1,629,017; May 17.

Weather strip. J. G. S. Hall. 1,629,017; May 17.

Weather strip. J. G. S. Hall. 1,628,665; May 17.

Weather strip. J. G. S. Hall. 1,628,665; May 17.

Weather strip. W. Marshall 1,613,044; Jan. 4.

Weather strip. C. A. Pipenhagen. 1,642,176–7; Sept. 18.

Weather strip. A. C. Schnake. 1,629,842; May 24.

Weather strip. A. C. Schnake. 1,629,842; May 24.

Weather strip. A. C. Schnake. 1,642,176–7; Sept. 18.

Weather strip. A. J. and A. R. P. Spanjers. 1,648,787; Nov. 8. Weather strip.
Weather strip.
Weather strip.
Weather strip.
Weather strip.
Nov. 8. Nov. 8.
Weather strip. O. C. Watkins. 1,624.295; Apr. 12.
Weather strip and guide. F. W. and O. W. Brazell.
1,619.915; Mar. 8.
Weather strip, Automatic. A. Wonsowicz. 1,618.496; Jan. 4.

Weather strip, Automatic. R. Lerch. 1,649,070; Nov. 15.

Weather strip for automobile doors, J. Ledwinka.

1,644,682; Oct. 11.

Weather strip for inswinging casements. F. Reese.

1,619,037; Mar. 1.

Weather strip for silding closures. E. J. Cook. 1,641,157;

Sept. 6. Weather-strip unit, D. Kulage. 1,646,155; Oct. 18.

Weather stripping. M. E. Bosley. 1,625,764; Apr. 19. Weaving. J. R. Lister. 1,643,817; Sept. 27. Weaving. device. H. Zenker. 1,615,805; Jan. 25. Weaving, Heddle for jacquard. R. A. Machon. 1,648,139; Nov. 8. Weaving narrow width ware and machine for carrying Weaving, Nipper for tuft. E. F. Hathaway. 1,635,670; July 12. Weaving, Tube frame for tuft. E. F. Hathaway. 1,618,167; Feb. 22. Weaving, Tube frame for tuft. E. F. Hathaway. 1,618,167; Feb. 22. Web-coating apparatus. C. C. Colbert and G. E. Preston. 1,632,855; June 21. Web-feeding and cutting mechanism. G. A. Bresett. Web-feeding mechanism. J. S. Coldwell. 1,640,532; Aug. 30. Web-feeding mechanism. J. S. Coldwell. 1,640,532; Aug. 30.
Web-feeding mechanism. L. Jensen. 1,627,995; May 13.
Web-feeding mechanism. J. E. Meyer. 1,630,713; May 31.
Web-feeding mechanism. J. K. Robertson and S. Duerden. 1,617,419; Feb. 15.
Web of flexible material while changing from one web roll to another. Uninterruptedly feeding a. W. C. Web-rell 1,623,227; Apr. 6.
Web-rell 1,623,227; Apr. 6.
Der 6. Dec. 6.
Web-roll tension devices, Brake for. H. W. Wood and C. Nordfors. 1,623,992; Apr. 12.
Web rolls, Wrinkle remover for. E. G. Beveridge. 1,638,500; Aug. 9.
Web-supplying system. J. S. Coldwell. 1,640,533; Web-supplying system. J. S. Coldwell. 1,640,538; Aug. 30.

**Aug. 30.

**Web with the lengths, Mechanism for severing moving. W. E. Molins. 1,651,069; Nov. 29.

**Wedge T. L. E. Haug. 1,637,771; Aug. 2.

**Wedge T. L. E. Haug. 1,637,771; Aug. 2.

**Weed and grass cutter. P. J. Haas. 1,625,081; Apr. 19.

**Weed and root extractor. J. R. Kovar. 1,647,832. Weed and grass cutter. P. J. Haas. 1,625,081; Apr. 19. Weed and root extractor. J. R. Kovar. 1,647,822: Nov. 1. Weed cutter and cultivator, Combined. G. M. Carkey. 1,632,838; June 21. Weed-cutting device. W. L. Paul. 1,628,422; May 10. Weed-destroying composition. H. E. Hughes. 1,629,819; May 24. May 24. Weed-catting device. W. L. Paul. 1,624,422; May 10. Weed-catting composition. H. E. Hughes. 1,629,819; May 24. Weed eradicator. J. Hanson. 1,613,997; Jan. 11. Weed killer. W. D. Barnard. 1,624,033; Apr. 12. Weed puller. G. R. Simpson. 1,640,732; Aug. 30. Weeder. J. W. Gibbs. 1,641,032; Aug. 30. Weeder. J. H. Imus. 1,637,862; Aug. 2. Weeder. B. Fatterson. 1,627,241; Sepp. 13. Weeder. F. Patterson. 1,627,241; Sepp. 13. Weeder. J. A. Talbot. 1,625,168-9; Apr. 19. Weeder. C. A. Warren. 1,644,098; Oct. 4. Weeder and the like. D. W. Bartlebaugh. 1,634,606; July 5. Weederling and cultivating implement. D. E. Richardson. July 5.

Weeding and cultivating implement. D. E. Richardson. 1,645,115; Oct. 11.

Weeding, cultivating, and like purposes, Tool for. J. F. Raymond. 1,640,084; Aug. 28.

Raymond. 1,640,084; Aug. 28.

Receding informent. B. A. L627,038; May 8.

Receding machine. A. Christensen and A. W. Warsen. 1,620,534; Mar. 8.

Weeding machine. A. Christensen and A. W. Warsen. 1,620,544; Mar. 8.

Weeding machine. O. R. Saunders. 1,635,098; July 5.

Weeds, Composition for Killing certain. R. T. Holmes. 1,625,608; Apr. 19.

L1625,608; Apr. 19.

Thomastering mechanism, Combined. A. J. Chevette. 1,664,112; Dec. 27.

Wett-detecting mechanism. A. A. Gordon. 1,647,728; Nov. 1. Weft-detecting mechanism. W. H. Wakefield. 1,647,718; Welt-detecting mechanism. W. H. Wakefield. 1,647,718: Nov. 1.

Welt detector, Box-motion-controlled electromagnetic. W. H. Wakefield. 1,639,822; Aug. 23.

Welt detector controlled by box motion, Electrical. W. H. Wakefield. 1,647,720; Nov. 1.

Welt detector controlled by box motion, Peumatic. W. H. Wakefield. 1,647,719; Nov. 1.

Welt detector controlled by box motion, Yarn-impinging lay-actuated. W. H. Wakefield. 1,639,823; Aug. 23.

Welt detector controlled by pattern mechanism. W. H. Wakefield. 1,639,824; Aug. 23.

Welt detector controlled by pattern mechanism. W. H. Wakefield. 1,639,824; Aug. 24.

Welt detector controlled by pattern mechanism. W. H. Wakefield. 1,639,824; Aug. 24.

Welt detector controlled by pattern mechanism. W. H. Wakefield. 1,639,824; Aug. 24.

Welt detector controlled by pattern mechanism. W. H. Wakefield. 1,639,824; Aug. 24.

Welt detector, Multiple-medile. O. V. Payne. 1,651,100; Nov. 29.

Welt detectors, Withdrawing means for side-slips. W. H. Welt detectors, Withdrawing means for side-slips. west detectors, Withdrawing means for side-slips. W. H. Wetf detectors, Withdrawing means for side-slips. W. H. Wakefield. 1825,293; Dec. 13.
Wetf exhaustion, Device to delay transmission of an indication of. A. A. Gordon. 1,639,345; Aug. 23.
Wetf fork and grid cleaner, Combined. W. H. Nix and Wetf fork and grid cleaner, Combined. W. H. Nix and 1.619,191; Mar. 1.
Weigh McDamille, Manufacture of an. M. Castricum. 1,619,191; Mar. 1.
Weigh pan. J. P. Vogel. 1,622,984; Mar. 29.
Weighing and filling machine. L. D. Nelson. 1,628,178; Weighing and filling machine. L. D. Nelson. 1,628,178; Weighing apparatus. W. A. Fenton. 1,634,444; July 5.
Weighing apparatus. W. H. Rees. 1,615,405; Jan. 25.

Weighing apparatus. W. H. Rees. 1,615,485; Jan. 25. Weighing apparatus. F. C. C. Vogel. 1,615,248; Jan. 25. Weighing apparatus and the like. Stay connection for E. L. Blick. 1,631,358; June 7. Weighing apparatus, Continuous, A. F. Cooke, 1,638,244; Aug, 9. Weighing apparatus, Liquid- J. M. Rowland. 1,625,825; Apr. 26. Weighing apparatus Liquite. 3. M. Rownense. Apr. 26.

Weighing apparatus with tare weighing, Automatic. B. Boulogne. 1,633,622; June 28.

Weighing apparatus with weighing carrier, Automatic. B. Boulogne. 16,4407 Dec. 27.

B. Boulogne. 16,4407 Dec. 27.

B. Boulogne. 16,1617,301; Feb. 8.

Weighing device. H. Allison. 1,628,762; May 17.

Weighing device. H. C. Schaper. 1,628,762; May 17.

Weighing device. H. C. Schaper. 1,628,762; May 17.

Weighing device. H. C. Schaper. 1,628,762; May 17.

Weighing machine. J. B. Van Deren. 1,613,634; Jan. 11.

Weighing machine. G. H. Bent. 1,631,117; June 7.

Weighing machine. A. Bousheld. 1,632,810; Dec. 13.

Weighing machine. J. L. Echaniz and F. G. Mansille. 1,644,688; Oct. 25. Weighing machine. A. Bousnein. 1,632,810; Dec. 13. Weighing machine. J. L. Echaniz and F. G. Mansilla. 1,647,038; Oct. 25. L. Echaniz and F. G. Mansilla. Weighing machine. M. H. Starr. 1,627,124; May 3. Weighing machine, Automatic. P. Durand. 1,625,799; Weighing machine, Automatic. J. Markman. 1,644,260; Oct. 4. Weighing machine, Automatic. R. R. West. 1,623,820; Adv. 5. Oct. 4.

Weighing machine, Automatic. R. R. West. 1,623,820;
Apr. 5.

Meighing machine, Automatic liquid. J. J. Fortier.
Meighing machine, Fur. F. P. Mansbendel. 1,623,629;
Apr. 5.

Weighing machine, Tin-plate. J. M. Hothersall.
1,649,231; Nov. 15.

Weighing mechanism. H. L. Merrick. 1,616,503; Feb. 8.

Weighing mechanism. H. L. Merrick. 1,632,178; Dec. 13.

Weighing mechanism. H. L. Merrick. 1,632,178; Dec. 13.

Weighing mechanism. Recording. J. Holm. 1,632,006;
June 14.

Weighing Method and apparatus for. J. Lundgren.
1,647,923; Nov. 1.

Weighing moving material. M. Castricum. 1,646,950;
Oct. 25.

Weighing sheet material, Device for. E. G. Thomas.

Weight and buffer, Combined whip. C. W. Lewis.
1,623,552; Apr. 19.

Weight-changing device for top-roll-saddle mechanism.

W. H. Brigman. 1,613,557; Jan. 4.

Weight indicator. A. A. Caille. 1,638,524; Aug. 9.

Weight dand are welding with the same. J. C. Miller. Mar. Adjustance. F. A. and J. A. animin. 1,630,102; Mar. A. Wold rod and are welding with the same. J. C. Miller. 1,644,254; Sept. 20. Welded beam. C. Schenek. 1,620,293; Mar. 8. Welded spring structure. H. A. Houston and V. J. Shepard. 1,619,346; Mar. 1. Welded structure and making same. G. O. Carter. Welding. 6. H. Escholtz. 1,615,686; Jan. 25. Welding. E. A. Nelson. 1,624,561; Apr. 12. Welding. E. A. Nelson. 1,624,561; Apr. 12. Welding. G. A. Welson. 1,624,561; Mar. 4. Welding and article produced thereby. W. Dishong. 1,622,636; May. 24. Welding and cutting apparatus. F. W. Becker. 1,633,359; Welding and cutting system. Electric-arc. C. J. Holslag. 1,621,668–70; Mar. 15. Welding and cutting system. Electric-arc. C. J. Holslag. 1,645,893; Oct. 18. Welding and cutting apparatus. W. C. Bucknam. 1645,893; Oct. 18. Welding and product thereof. W. G. Allan. 1,626,774; May. 3. Welding and product thereof. W. G. Allan. 1,626,774; May. 3. Welding and the like, Electric. L. H. Hoffer. 1,620,206; Welding apparatus. A. Krebs. 1,618,326; Jan. 4. Welding apparatus. Automatic arc. O. H. Eschholz. 1,615,687; Jan. 25. Welding apparatus, Electric. E. V. Gibbons. 1,618,080; Feb. 15. Welding apparatus, Electric. E. J. von Henke. 1,626,769; May 3. Welding apparatus, Electric. L. H. Hoffer. 1,648,177; Nov. 8. Welding apparatus, Electric. F. P. McBerty. 1,640,244; Aug. 23. Welding apparatus, Electric. R. Mack. 1,636.676; July 19. July 13. apparatus Electric. J. W. Meadowcroft. Welding. apparatus. Electric-arc. J. H. Ezendam. 1,635,203; July 12. Welding apparatus, Electric-arc. J. H. Ezendam. 1,635,203; July 12. Welding apparatus, Electric arc. H. P. Himes. 1,623,344; Apr. 5. Welding apparatus, Electric-arc. H. D. Morton. 1,648,563; Nov. 8. Welding apparatus, Electric-spot. J. Ledwinka. 1,645,705; Oct. 18. Welding apparatus, Electric-spot. 3, Lecumina, 1,040,100; Oct. 18, Welding, Apparatus for arc. H. D. Morton. 1,648,561; Nov. 8, Welding apparatus, Metallic-arc. F. C. Owen. 1,634,882; Dec. 27, Welding apparatus, Pipe. F. P. Ofner and W. H. Nourse. 1,523,434; Apr. 5.

Welding apparatus Truck for supporting electric. R. Mattice. 1,612,980; Jan. 4
Welding appliance, Electric. J. W. Wilkinson. 1,636,266; July 19.
Welding, Arc. G. T. Herald. 1,648,683; Nov. 8.
Welding, Arc. E. B. Paxton. 1,635,764; July 12.
Welding, Arc. R. Stressu. 1,638,862; Aug. 16.
Helneman. 1,653,565; Dec. 20.
Welding, Control method and means Electric-arc. H. D. Morton. 1,648,562; Nov. 8.
Welding copper and aluminum. J. V. Capicotto. 1,636,565; July 19.
Welding, Electric. P. J. Capicotto. 1,636,665; July 19.
Welding, Electric. R. Mattice. 1,634,662; July 5.
Welding, Electric. R. Mattice. 1,634,667; July 5.
Welding, Electric. R. Thomson. 1,637,063; July 26.
Welding, Electric. H. W. Tobey. 1,637,003; July 26.
Welding, Electric. H. W. Tobey. 1,637,003; July 26.
Welding, Electric. A. Mattice. 1,634,675; July 5.
Welding, Electric. R. L. Shipman. 1,616,145; Feb. 1.
Welding, Electric-arc. R. L. Shipman. 1,616,145; Feb. 1.
Welding, Electric-arc, R. L. Shipman. 1,616,145; Feb. 1.
Welding is electrodes, Holder for electric. C. J. Kotchi. 1,621,512; Mar. 22.
Welding fixture. F. J. Jarecki. 1,642,649; Sept. 13.
Welding fixture. F. J. Jarecki. 1,642,649; Sept. 13.
Welding machine, Arc. G. C. Hubble. 1,628,148; May 10.
Welding machine, Arc. G. C. Hubble. 1,628,148; May 17.
Welding machine, Arc. G. C. Hubble. 1,628,148; May 17.
Welding machine, Arc. H. R. Woodrow. 1,638,024; July 28. Wedding machine, Arc. H. R. Woodrow. 1,685,024; Welding machine, Electric. J. W. Meadow-croft. 1,620,274; Mar. 8. Welding machine, Electric. J. Kahn. 1,623,249; Apr. 5. Welding machine, Electric. J. W. Meadoworft. 1,685,582; July 12. Welding machine, Electric, J. W. Meadoworft. 1,645,710; Oct. 18. Mar. 22.
Welding machine, Electric tube-. G. V. Johnston.
1,652,481; Dec. 13.
Welding, Machine for use in. F. J. Jarceki. 1,642,548;
Sept. 13. Sept. 13.
Welding machine, Tube-. D. W. Chisholm. 1,637,679;
Aug. 2.

Floringle operating means for. E. Welding machine, Tube. D. W. Chisholm. 1,637,679;
Welding machines, Electrode-operating means for. E. Schroder. 1,617,779; Feb. 15.
Welding machines, Electromagnetic current control for. J. B. Borgadt. 1,651,438; Dec. 6.
Welding machines, Torch mechanism for. C. L. Stancille, 1,023,503; Apr. 61,408; Dec. 6.
Welding machines, Torch mechanism for. C. L. Stancille, 1,023,503; Apr. 61,409; M. Fay and C. Wales. 1,639,653; Aug. 23.
Welding, Method and apparatus for. J. F. Lawson. 1,643,207; Sept. 27.
Welding, Method and apparatus for. J. F. Lawson. 1,643,207; Sept. 27.
Welding, Method and machine for electric, H. D. Madden. 1,613,957; Jan. 11.
Welding, Method of and apparatus for. P. E. Hunter. Welding, or soldering device, Electric. R. E. Gearhart. 1,638,301; Aug. 9.
Welding, Resistance-line. E. M. Hewlett. 1,640,449; Aug. 30.
Welding rod. J. B. Green. 1,632,546; June 14. Welding, Resistance-line. E. M. Hewlett. 1,640,449; Aug. 30.

Welding rod. J. B. Green. 1,632,546; June 14.

Welding rod. O. L. Mills. 1,650,905; Nov. 29.

Welding rod below C. M. Miller. 1,621,745; Mar. 22.

Welding rod below C. M. Miller. 1,621,745; Mar. 22.

Welding sheet-metal panels, Jig for electric. J. W. Meadowcroft. 1,645,711; Oct. 18.

Welding, soldering, or the like, Machine for electric. J. E. J. Languepin. 1,622,792; Mar. 29.

Welding structural members. F. H. Moyer. 1,646,974;

Welding swstem. Alternating-current. J. R. Brueckner. Öct. 2s.
Welding system, Alternating-current. J. R. Brueckner.
1.640.877; Aug. 30.
Welding system, Arc. A. K. Harford. 1.645.049; Oct. 11.
Welding system, St. C. A. K. Harford. 1.645.049; Oct. 11.
Welding systems. St. C. S. C. Welding transformer. C. B. Watters. 1.618.497; Feb. 22.
Welding transformer. C. B. Watters. 1.618.497; Feb. 22.
Welding, Tungsten. C. W. Balke. 1.651.662; Dec. 6.
Welding, Tunitine butted edges of metal parts by. J.
Clark. 1.654.037; Dec. 27.
Welding. Weld rod for arc. C. B. Langstroth and G. G.
Welding, Wing. 440.274; Sept. 20.
Welding, Wing. 440.274; Sept. 20.
Welding, Weig. 450.274; Sept. 20.
Nov. 22. Welding wire-rope ends. A. S. Rairden. 1,649,855; Nov. 22.
Well. F. R. Hyer. 1,647,630; Nov. 1.
Well-boring apparatus, Rotary deep. C. E. Reed. 1,653,928; Dec. 27.
Well casing machine. C. Wild. 1,643,731; Sept. 27.
Well casing. D. D. Doty. 1,647,907; Nov. 1.
Well casing. A. C. Helm. 1,613,105; Jan. 4.
Well-casing cutter. E. Ventesca. 1,632,015; June 14.
Well-casing cutter. E. Ventesca. 1,632,015; June 14.
Well-crib. W. V. McClure. 1,636,610; July 19.
Well crib. W. V. McClure. 1,636,610; July 19.
Well drill. O. M. Carter. 1,617,043; Feb. 8.
Well drill. C. Wild. 1,643,730; Sept. 27.

Well drill, Rotary. E. S. Hutton. 1,638,337; Aug. 9. Well drill, Rotary. O. E. Murphy. 1.647,740; Nov. 1. Well drill, Rotary. J. T. Phinos. 1,615,598; Jan. 25. 5. Well drill, Soft-formation. H. W. Fletcher. 1,638,253; Well drilling. W. Sheldon. 1,633,134; June 21. Well-drilling apparatus, Deep. C. A. Butler. 1,650,426; Nov. 22.
Well-drilling apparatus. T. S. Dietle. 1,629,024; May 17.
Well-drilling apparatus. J. W. MacClatchie. 1,633,945; June 28.
Well-drilling apparatus. F. A. Philbrick. 1,642,628; June 28.

Well-drilling apparatus. F. A. Philbrick. 1,642.628;
Sept. 13.

Well-drilling apparatus. W. Sheldon. 1,628,282; May 10.

Well-drilling apparatus. C. L. Skinner. 1,652,059;

Well-drilling apparatus, Rotary. E. A. Reed. 1,632,713;
June 14.

Well-drilling apparatus, Welght-indicating device for. G. A. Montgomery. 1,616,194; Feb. 1.

Well-drilling machine. H. G. Parr. 1,650,534; Nov. 22.

Well drilling, Making production tests in. G. A. Macready. Rel0,563; Mar. 1 or. E. Timbs, L. E. Zerbe, Well drilling, Indercramer for. E. Timbs, L. E. Zerbe, Well drilling, Indercramer for. E. A. Hardison. 1,615,379; Jan. 25.

Well drilling, Reamer for rotary. L. Aldrin. 1,640,341; Aug. 30.

Well point. T. F. Moore. 1,648,587; Nov. 8.

Well point, Making. T. C. Thomas. 1,625,340; Apr. 19.

Well-pumping apparatus. J. Fitzpatrick. 1,649,454; Well-pumping apparatus. J. Fitzpatrick. 1,641,329; Sept. 6. well-pumping apparatus. J. B. Hawley, jr. 1,641,329; Sept. 6.

Well-production apparatus. F. B. Vaughn and I. Thomas. 1,626,057; Apr. 26.

Well rigging. W. D. Giles. 1,621,009; Mar. 15.

Well screen. H. E. Hanson. 1,638,731; Aug. 9.

Well screen. H. E. Witt. 1,648,925; Avg. 13.

Well screen. H. E. Witt. 1,648,925; Avg. 13.

Well-scaling advice. H. H. Brenen. 1,632,271; June 14.

Well straing device. H. H. Brenen. 1,632,271; June 14.

Well traing, Automatic catching device for. S. V. Dillon. 1,622,261; May 17.

Well-water-lifting device. W. E. Franklin. 1,616,219; Feb. 1. Feb. 1. Wells, Apparatus for measuring depths of. C. E. Van Orstrand. 1,639,973; Aug. 23.
Wells, Apparatus for plugging. M. M. Kinley. 1,631,419; June 7. June 7.

Wells, Apparatus for sinking and cleaning oil and water.

M. A. King. 1,639,852; Aug. 23.

Wells. Automatic tubing catcher for. R. A. Wilson,
1,642,635; Sept. 13.

Wells, Casing for artesian. A. Paulsen. 1,645,719;
Oct. 18.

Wells, Device for cementing. A. Boynton. 1,641,915; Wells, Device for cementing.
Sept. 6.
Wells, Gas anchor for oil. F. P. Jones. 1,639,734;
Wells, Gas anchor for oil. E. V. Crowell. Sept. 6as anchor for oil. F. P. Jones. 1,639,734; wells. 6as. Sept. 13.
Wells. Gas-energy-control head for oil. E. V. Crowell. 1,625,883; Apr. 26.
Wells. Making and maintaining. P. S. Judy. 1,642,245; Sept. 13.
Wells. Helmod and apparatus for drilling. E. Smith. 1,625,889; Jan. 4.
Wells. Method of and apparatus for pumpings. I. B. Winsor. 1,637,629; Ang. 2.
Wells. Oil-flowing device for. W. R. Hauswirth. 1,633,325; June 21.
Wells. General device for. W. D. Egenhoff. 1,623,869; Apr. 5.
Wells. Separating apparatus for. C. H. M. Roberts. 1,631,968; Apr. 6.
Welt and metal container, Combined finishing. R. C. Schemmel. 1,651,910; Dec. 6.
Welt and metal container, Combined finishing. R. C. Schemmel. 1,651,910; Dec. 6.
Welt. Finishing. B. A. Emery. 1,617,581; Feb. 15.
Welt-rolling machine. A. H. Havir. 1,622,281; Mar. 29. Welting. E. W. Arnold. 1,654.204; Dec. 27. Welting, Apparatus for use in handling. G. E. Warren. 1,620,790; Mar. 15. Wheaten cereals, Heat treatment of. R. Hutchinson. 1,634,259; July 5. Wheel: See— Abrasive wheel, Auto wheel.

Cushion wheel. Demountable wheel. Demountable wheel Die-cutting wheel. Disk wheel. Dressing wheel. Driving wheel. Dual-tired wheel. Elastic wheel. Fin wheel. Fifth wheel. Figure wheel.

Auto wheel.
Automobile wheel.
Band-saw wheel.
Bicycle wheel.
Buffing wheel.

Car wheel. Cast wheel. Caster wheel. Compound wheel.

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Wheel: See—
Flexible wheel.
Grinding wheel.
Gyral wheel.
Last-scouring wheel.
Last-scouring wheel.
Metal wheel.
Polishing or buffer wheel.
Power wheel.
Power wheel.
Fyrotechnic wheel.
Fyrotechnic wheel.
Reenforced wheel.
Reenforced wheel.
Resilient disk wheel.
Riin wheel
Road 
Wheel. E. R. Jacobi and F. H. Le Jeune. 1,650,794; Nov. 29, Wheel. G. E. Jones, sr. 1,643,480; Sept. 27, Wheel. W. F. Kasper. Re15,520; Jan. 4, Wheel. W. F. Kasper. Re15,520; Jan. 4, S. Wheel. W. F. Kasper. Re15,520; Jan. 4, S. Wheel. B. J. Keelan. 1,620,897; Mar. 15, Wheel. B. J. Keelan. 1,620,897; Mar. 15, Wheel. F. L. Lawrence. 1,643,248; Sept. 20, Wheel. P. L. Ladwick. 1,637,527; Jan. 2, Wheel. H. V. Ludwick. 1,632,535; July 19, Wheel. H. V. Ludwick. 1,634,289; July 19, Wheel. H. P. Nielsen. 1,634,381; July 19, Wheel. H. P. Nielsen. 1,634,381; July 19, Wheel. H. P. Nielsen. 1,636,483; July 19, Wheel. H. P. Nielsen. 1,636,364; Aug. 9, Wheel. F. C. Schoenthal. 1,638,364; Aug. 9, Wheel. C. A. Saith. 1,649,552; Nov. 15, Wheel and brake drum. T. E. Murray. 1,624,112; Mheel and brake drum. structure, Vebicle. P. A. White. 1,641,309; Sept. 6, Wheel and demountable rim. J. G. Swain. 1,643,188; Sept. 20, Wheel and demountable rim. J. G. Swain. 1,643,188; Sept. 20, Wheel and demountable rim. J. G. Swain. 1,643,188; Sept. 20, Wheel and demountable rim. J. G. Swain. 1,643,772; Wheel and demountable rim. J. G. Swain. 1,649,772; Wheel and demountable rim. C. S. Watkins. 1,612,987; Wheel and demountable 
        Nov. 15.
Wheel and demountable rim. C. S. Watkins. 1,612,957;
                                      Jan. 4.
        Williams and rim therefor, Disk. W. E. Williams. 1,639,322; Aug. 16. Wheel and throttle lock, Ford. R. V. Behning. 1,623,029; Mar. 29. Wheel assembly, Fifth- G. C. Henderson. 1,627,176; May 3.
Wheel assembly, Fitth- G. C. Heuterson, Apartico, May 3.
Wheel-attaching device. W. P. Shuffleton, 1,635,889;
July 12.
Wheel-attaching device. W. P. Shuffleton, 1,635,889;
July 12.
Wheelbarrow, J. H. Nussel, 1,616,329; Feb. 1,
Wheelbarrow, J. R. Smith, 1,622,254; Mar. 29,
Wheelbarrow, I. R. Smith, 1,645,666; Oct. 18.
Wheelbarrow I. R. Smith, 1,645,666; Oct. 18.
Wheelbarrow attachment, L. A. Knight, 1,618,443;
Reb. 22.
Wheelbarrow. I. R. Smith. 1,645,666; Oct. 18.
Wheelbarrow attachment. L. A. Knight. 1,618,443;
Feb. 22.
Wheelbarrow, Garden. B. Privat. 1,631,333; June 7.
Wheelbarrow, Garden. B. Privat. 1,631,333; June 7.
Wheelbarrows, Combined wheel scraper and brace for. L.
W. Walker. 1,648,374; Nov. 8.
Wheelbarrows, Combined wheel scraper and brace for. L.
Wheelbark. W. W. Blakely. 1,617,369; Feb. 15.
Wheelbark. W. W. Blakely. 1,617,369; Feb. 15.
Wheelbark. A. Patus and L. Nagy. 1,629,407; May 17.
Wheel brake. A. Patus and L. Nagy. 1,629,407; May 17.
Wheel brake. F. R. Rorie. 1,617,276; Feb. 6.
Wheel brake. F. M. Garff. 1,617,276; Feb. 15.
Wheel chair, Foldable. E. Fargon. 1,650,826; Nov. 29.
Wheel chair, Foldable. E. Fargon. 1,650,826; Nov. 29.
Wheel chock. C. H. Fennell. 1,617,839; Feb. 15.
Wheel chock. C. W. Turnbungh. 1,623,895; Apr. 5.
Wheel cleat. M. M. Yore. 1,617,282; Feb. 8.
Wheel cleat. Traction- W. C. Anderson. 1,636,731;
July 26.
Wheel construction, Cast. N. S. Reed. 1,626,211;
Wheel construction, Cast. N. S. Reed. 1,626,211;
July 5.
    Apr. 26.
Wheel construction, Fifth- I. H. Judd. 1,634,945;
July 5.
Wheel construction, Front- E. R. Gurney. 1,641,224;
Sept. 6.
Wheel construction, Metal. E. E. Einfeldt. 1,627,772;
May 10.
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Wheel construction, Steerable. B. H. Remde. 1,623,554; Apr. 5. heel counterbalance, Band-, R. R. Bloss. 1,651,944; wheel counterbalance, Band. R. R. Bloss. 1,631,944; Dec. 6.
When the counterbalance of t Wheel guard, Safety, C. F. Orrick, 1,623,849; Apr. 5. Wheel-bub construction, J. Bingham, 1,632,214; June 14. Wheel hubs, Flask for casting metallic. F. A. Thomann, 1,643,140; Sept. 20. Smith and R. Munce. 1,653,516; Dec. 10. Smith and R. Munce. 1,653,516; Dec. 1,647,110; Oct. 25. Wheel lock, Spare. J. Sokolov. 1,635,229; July 12. Wheel lock, Spare. J. Sokolov. 1,635,229; July 12. Wheel lock, Spare. J. Sokolov. 1,635,229; July 12. Wheel modern 1,637,330; Aug. 2. Wheel-making machine. H. Flick. 1,629,692; May 24. Wheel-making machine. H. Flick. 1,629,692; May 24. Wheel mount, Front. C. C. Goode. 1,652,780; Dec. 13. Wheel mounting. H. Perrot. 1,613,768; Jun. 1,627,499; May 3. Wheel mounting. H. Perrot. 1,613,768; Jun. 14. Wheel mounting. H. Perrot. 1,613,768; Jun. 14. Wheel or tire handling apparatus. F. Rogers. 1,640,297; Aug. 23. Wheel pressure of vehicles, Weighing serew jack for determining the. A van L. van den Heuvell. 1,621,911; Wheel puller. A. L. Cornwell and L. R. Grames. 1,633,314; June 21. Wheel puller. F. A. Luthy. 1,639,140; Aug. 16. Wheel puller. A. J. Meduckin. 1,643,896; Sept. 27. Wheel puller. A. J. Meduckin. 1,643,896; Sept. 27. Wheel puller. A. J. Merten. 1,643,600; Dec. 13. Wheel-removing device. F. C. Hersee. 1,618,195; Feb. 22. Wheel-rims, Device for expanding. W. A. Anderson. 1,632,643; June 14. Wheel rims, Vacuum clamping fixture for. W. A. Anderson. 1,632,514; M. Harbeck, 1,625,721; Apr. 19. Wheel-shaping strap. E. T. Esterbrook. 1,640,890; Aug. 30. Wheel-spoke bar. W. E. Williams. 1,639,068; Aug. 16. Wheel-spoke bar. W. E. Williams. 1,650,016; Aug. 30. Wheel-spoke bar. W. E. Williams. 1,639,068; Aug. 16. Wheel-spoke bar. W. E. Williams. 1,650,016; Aug. 16. Wheel-spoke bar. W. E. Williams. 1,650,016; Aug. 30. Wheel-spoke bar. W. E. Williams. 1,650,016; Aug. 30. Wheel-spoke bar. W. E. Williams. 1,639,068; Aug. 16. Wheel-straightening machine. E. S. Ingham. 1,650,216; Nov. 22. Wheel-straightening machine. E. S. Ingham. 1,650,216; Nov. 22. Wheel structure. W. A. Hutchinson. 1,643,379; Sept. 27. Wheel-truing device. A. M. Drake. 1,638,623; Aug. 9. Wheel with brake disk. L. E. La Brie. 1,635,088; July 5. Wheeled supporting device. A. C. Berg. 1,613,155; Jan. 4. Manual Superior State of the Control Wheels, Device for aligning, J. H. Gray. 1,639,604; Aug. 16.
Wheels, Device used for controlling the speed of water. H. V. Carpenter. 1,622,763; Mar. 29.
Wheels, Double nut for dual. J. P. Tarbox. 1,637,666; Aug. 2. Aug. 2.

Wheels for road vehicles, Construction of, G. Turner and J. E. Bishop. 1,624,771; Apr. 12.

Wheels, Hub construction for demountable. E. K. Baker. 1,000 and 1,000 and

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Wheels, Manufacture and truing of built-up. G. Mc-Kenzie. 1,637,345; Aug. 2.
Kenzie. 1,637,345; Aug. 2.
Kenzie. 1,637,345; Aug. 2.
Kenzie. 1,637,345; Aug. 2.
Kenzie. 1,640,432;
Kenzie. 1,640,432;
Kenzie. 1,640,432;
Kenzie. 1,640,432;
Kenzie. 1,632,640;
Kenzie. 1,641,641,641;
Kenzie. 1,641,641;
Kenzie. 1,641,6
              Wheels, Manufacture and truing of built-up. G. Mc-
Kenzie. 1,637,345; Aug. 2.
Wheels, Manufacturing gear. H. E. Warren. 1,640,432;
         June 28

June 28

Whipstock, F. I. Getty, 1,625,600; Apr. 19.

Whipstock, F. Kinzbach, 1,634,582; July 5.

Whirligis, E. R. Jenkins, 1,621,784; Mar. 22.

Whirligis, G. M. Larrair, 1,631,539; June 7.

Whirligis, F. M. Pierce, 1,612,882; Jan. 4.

Whirligis, Sounding, F. M. Pierce, 1,612,881; Jan. 4.

Whirligis, Coller, 1,635,885; July 1,612,881; Jan. 4.

Whistle pin wheel, I. E. Cohn, 1,613,982; Jan. 11.

Whistling ball, C. J. Diebold, 1,632,825; June 21.

White lead, Manufacture of, G. F. Lloyd and F. H.

Campbell, 1,635,769; July 12.

Whitting, Manufacture of, P. M. McHugh, 1,634,877;

Whitting, Manufacture of, P. M. McHugh, 1,634,877;

Whitting, Manufacture of, P. M. McHugh, 1,634,877;
         July 5.

Wick adjustant. E. F. McGerzor. 1.614,429; Jan. 11.

Wick adjustand the like, Splice for. R. T. Pearce. 1.646,104; Oct. 18.

Wiener and making the same, Skinless. W. A. Schmelz. 1.651,472; Dec. 6.

Wir. L. A. Seilaz. 1,635,099; July 5.

Wilting of leaves and flowers, Preventing the. W. W. Winch, J. C. Smaitz. 1.623,021; Mar. 29.

Winch J. C. Smaitz. 1,623,021; Mar. 29.

Winch for barbed-wire spools. M. Stoffel. 1,648,568; Nov. 8.
              Winch for barbed-wire spools. M. Stonet. 1,543,000 Nov. 8. Wind and tide motor. W. O. Miller. 1,647,461; Nov. 1 Wind and water motor. A. Erickson. 1,550,618; Nov. 29 Wind dreflector. W. P. Hammond. 1,633,368; June 21 Wind-driven motor. J. H. Wilson. 1,614,268; Jan. 11 Wind indicator for night aviation. H. G. Smith Wind indicator for night aviation. H. G. Smith Wind a statement of the statement 
    Wind indicator for night aviation. H. G. Smith. 1644.547; Oct. 4.
Wind instruments, Control valve for sheet metal. C. Lehmann. 1,642,783; Sept. 20.
Wind instruments, Metal reed for. D. G. Horton. 1,616.748; Feb. 8.
Wind instruments, Valve pad for. A. Ciccone. 1,621.395; Mar. 15.
H. 621.395; Mar. 15.
H. 621.395; Mar. 16.
H. 632.395; Mar. 16.
H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Smith
              Windmills, Automatic control for. P. J. Nolan. 1,627,990; Windmills, Automatic control for. L. C. Weaver. 1,639,545; Aug. 16. Windmills, Pump-rod lift for. W. G. Reid. 1,654,093; Dec. 27.
              Windmins: Tunpion mechanism for. O. E. McCaskill. 1,630,092; May 24.
1,630,092; May 24.
Wind motor. O. T. Adams. 1,636,449; July 19.
Wind motor. G. R. Bishop. 1,633,842; June 28.
Wind motor. W. Lemke. 1,652,022; Dec. 8.
Wind motor. O. J. Nitardy. 1,651,067; Nov. 29.
Wind motor. J. A. Pinaud. 1,636,434; July 19.
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Wind motor. E. E. De Vore. 1,645,855; Oct. 18. Wind motor. N. L. Wood. 1,617,888; Feb. 15. Wind motor, Automatic. S. Zgliczynski. 1,633 June 21. 1,633,428: June 21.
Wind-propelled device.
Nov. 29.
Wind rotor. H. Ellison
Windshield. J. Bauer. W. F. Folmer. Nov. 29:

Nov. 29:

Wind rotor.

H. Ellison. 1,640,269; Aug. 23.

Windshield.

J. Bauer. 1,624,906; Apr. 19.

Windshield.

A. B. Beitman. 1,649,799; Nov. 22.

Windshield.

F. A. Dillingham. 1,630,330; May 31.

Windshield.

W. E. B. Hasselkus. 1,616,6619; Feb. 8.

Windshield.

W. E. B. Hasselkus. 1,616,6619; Leb. 8.

Windshield.

W. S. Pritchard. 1,644,691; Oct. 11.

Windshield.

W. H. Rose. 1,644,973; Oct. 4.

Windshield.

E. H. Wortbargon. 1,630,322; Nov. 29.

Windshield.

E. H. Wortbargon. 1,630,322; Nov. 29.

Windshield.

L. M. Wrags. 1,626,997; May 3.

Windshield adjuster. G. W. Wells. 1,618,121; Feb. 15.

Windshield attachment. J. E. Red. 1,635,906; July 12.

Windshield attachment. F. R. Rbodes. 1,632,679;

June 14. Windshield attachment. J. E. Reed. 1,003,006; July 1. Windshield attachment. F. R. Rbodes. 1,632,679; June 14. Windshields, Attachment for. C. A. Updegrave and W. R. Shollenberger. 1,647,943; Nov. 1. Windshield, Automobile. E. J. Madden. 1,645,438; Oct. 11. Windshield, Automobile. J. P. McCullough. 1,631,046; June 21. Windshield, Automobile. J. F. McCullough. 1,631,046; May 31.
Windshield cleaner. R. G. Arey. 1,638,976; Aug. 16.
Windshield cleaner. B. G. Arey. 1,638,976; Aug. 16.
Windshield cleaner. B. T. Barber. 1,638,235; Sept. 20.
Windshield cleaner. J. Baylin. 1,613,263; Jan. 4ay 31.
Windshield cleaner. H. R. Burton. 1,622,416; Mar. 29.
Windshield cleaner. H. E. Burton. 1,612,046; Mar. 29.
Windshield cleaner. F. G. and W. M. Folberth. 1,616,037; Feb. 1.
Windshield cleaner. F. G. and W. M. Folberth. 1,631,629; Windshield cleaner. F. G. and W. M. Folberth. 1,631,629; Windshield cleaner. F. G. and W. M. Folberth. 1,631,629; Windshield cleaner. F. G. and W. M. Folberth. 1,631,629; June 7. Windshield cleaner. F. G. and W. M. Folberth. 1,045,592; Oct. 18. Windshield cleaner. T. B. Klapper. 1,641,336; Sept. 6. Windshield cleaner. T. Levett. 1,613,280; Jan. 4. Windshield cleaner. W. Luxmore. 1,654,005; Dec. 27. Oct. 18.

Windshield cleaner. T. B. Klapper. 1,641,336; Sept. 6.

Windshield cleaner. T. Levett. 1,613,280; Jan. 4.

Windshield cleaner. W. Luxmore. 1,654,005; Dec. 27.

Windshield cleaner. W. Luxmore. 1,634,005; Dec. 27.

Windshield cleaner. E. F. Pierce. 1,615,290; Jan. 28.

Windshield cleaner. E. F. Pierce. 1,614,688; Jan. 18.

Windshield cleaner. E. F. Pierce. 1,615,697; Mar. 1.

Windshield cleaner. W. F. Ridge. 1,615,915; Feb. 1.

Windshield cleaner. M. F. Ridge. 1,615,915; Feb. 1.

Windshield cleaner. M. T. Ruckel. 1,618,888; Mar. 8. Dec. 20. Windshield Windshield cleaner, Automatic. L. A. Barett and C. Hunt. 1,628,028; Mar. 29. Windshield cleaner, Automatic. B. I. Malouf. 1,639,043; Windshield cleaner, Automatic. B. I. Malouf. 1,639,043; Aug. 16. Windshield cleaner, Automatic. J. L. Nilson and J. F. Prince. 1,627,989; May 10. Windshield-cleaner installation. R. Beringer. 1,616,648; Windshield-cleaner motor. F. G. Folberth. 1,635,401; July 12.
Windshield cleaner, Motor-driven. S. Lippert. 1,624,264; Apr. 12.
Windshield construction. C. E. Dawson. 1,629,439; Windshield cutter, Portable. G. W. Aldeen. 1,651,353; Windshield cutter, Portable. C. W. Anters. Dec. 6.
Windshield J. Got, J. G. W. W. W. Johnson. 1,644,837; Oct. 11.
H. P. Thompson. 1,622,068; Mindshield of automobiles, Electric warmer and wiper for. C. V. Davis. 1,640,887; Aug. 30.
Windshield pivot. A. T. Potter. 1,644,689; Oct. 11.
Windshield-regulating device L. A. Mulligan. 1,634,592; July 5. Windshield regulator. T. P. Archer nud F. M. Edgar. 1,653,877; Dec. 27. Windshield regulator. W. A. Proctor. 1,652,638; Dec. 13. Windshield regulator. C. S. Whidden. 1,614,416; Jan. 11. Windshield regulator. W. A. Proctor. 1,632,638; Dec. 13. Windshield regulator. C. S. Whidden. 1,614.416; Windshield screen. P. G. Wood. 1,627,760; May 10. Windshield screen. Automobile. G. J. Schweiser. 1,164,985; Nov. 22. Windshield-wing mounting. L. R. Scott. 1,628,200; May 10. Windshield wiper. J. Bornstein. 1,643,919; Sept. 27. Windshield wiper. J. Demand. 1,623,308; Apr. 5. Windshield wiper. J. Demand. 1,623,308; Apr. 5. Windshield wiper. F. G. Goodman. 1,643,067; Sept. 20. Windshield wiper. F. G. Goodman. 1,643,067; Sept. 20. Windshield wiper. F. G. Gray. 1,633,840; July. 8,28. Windshield wiper. L. T. Nixon. 1,649,848; Nov. 22. Windshield wiper. L. T. Nixon. 1,649,848; Nov. 22. Windshield wiper. B. O. Sather. 1,628,198; May 24. Windshield wiper. G. G. Sayre. 1,626,629; May 3. Windshield wiper. H. Schulfs, and A. W. and B. F. Windshield wiper. H. Schulfs, and A. W. and B. F. Windshield wiper. H. Y. Chulfs, and A. W. and B. F. Windshield wiper. H. Schulfs, and A. W. and B. F. Windshield wiper. H. Schulfs, and A. W. and B. F. Windshield wiper. Electrically-heated. R. P. Mitchell. 1,642,786; Sept. 20.

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Windshield wiper, Electrically-heated. J. W. Wood and O. C. Giauque. 1.642,570; Sept. 12. Windshield-wiper-operating mechanism. F. L. Gerke. 1.641,753; Sept. 6. Windshield-wiper-operating mechanism. F. L. Gerke. 1.641,753; Sept. 6. Weatherproof joint for. H. Bernard. 1.646,748; Oct. 25. Weatherproof joint for. H. Bernard. 1.646,748; Oct. 25. Windshields, Window attachment for. E. T. Norbeck. 1.630,268; May 24. Wind stackers, Blower pipe for. H. B. Sperry. 1,630,588; Windowan esight. Manually-adjustable. C. L. Paulus. 1.650,648; Nov. 29. Windownel. W. Bender. 1,616,675; Jan. 25. Wind wheels, propellers, and the like, Blade or vane applicable to. A. Bunkenburg. 1,649,637; Nov. 15. Winders. B. A. Peterson. 1,644,946; Oct. 11. Winders. Stop motion for. E. H. Ryon. 1,632,507; June 14. Winding, and Weyling apparatus. R. G. Jennings.
                June 14.
Winding and dyeing apparatus. R. G. Jennings.
1,627,849; May 10.
Winding and measuring machine, Automatic. G. Ritter.
1,622,254; Mar. 22.
Winding drums, Lubricator for. A. H. Skaer and E. J.
Downing. 1,654,100; Dec. 27.
Winding engine. T. S. Miller. 1,621,554; Mar. 22.
Winding machine. G. Adsit and D. Davis. 1,647,681;
Nov. 1.
        Downing 1.654.100; Dec. 27.

Winding engine. T. S. Miller. 1,621,554; Mar. 22.

Winding machine. G. Adsit and D. Davis. 1,647,681; Nov. 1.

Winding machine. G. Adsit and D. Davis. 1,647,681; Nov. 1.

Winding machine. G. Adsit and D. Davis. 1,647,681; Nov. 1.

Winding machine. J. A. Cameron and G. B. Birch.

Winding machine. J. A. Heany. 1,621,723; Mar. 22.

Winding machine. J. A. Heany. 1,621,723; Mar. 22.

W. G. Houskeeper. 1,632,075; June 14.

Winding machine. J. O. McKean. 1,620,267; Mar. 8.

Winding machine. J. O. McKean. 1,620,267; Mar. 8.

Winding machine. J. F. Parks, C. A. Brink, and G. N.

Taylor. 1,651,099; Nov. 29.

Winding machine. A. D. Scott. 1,630,720; May 31.

Winding machine. A. D. Scott. 1,630,720; May 31.

Winding machine. A. D. Scott. 1,632,020; May 31.

Winding machine. D. Stone. 1,627,213; May 3.

Winding machine. D. Stone. 1,627,213; May 3.

Winding machine. D. Stone. 1,627,213; May 3.

Winding machine. A. Van Veen. 1,638,774; Aug. 9.

Winding machine. Builder mechanism for. G. F. Albach, The Control of the Control of
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Window V. Pastrengo. 1,626,479; Apr. 26.
Window J. Folachek, J. Jepsen, and E. Peremi.
Ref6,800; Nov. 29.
Window. J. Polachek, J. Jepsen, and E. Peremi.
1,636,241; July 19.
Window. W. D. Redrup. 1,639,148; Aug. 16.
Window. W. D. Redrup. 1,639,148; Aug. 16.
Window. H. W. Switzer. 1,643,277; July 5.
Window. D. E. Whister. 1,643,042; Sept. 20.
Window. D. E. Whister. 1,643,042; Sept. 20.
Window. J. Williams. 1,643,042; Sept. 20.
Window. J. Williams. 1,643,042; Sept. 20.
Window J. Williamson and F. M. Williamson.
1,636,762; July 26.
Window adjuster, Friction casement. E. J. Sibley.
1,625,915; Apr. 26.
G. Butcher. 1,643,871; Sept. 27.
Window and justernet construction, Casement. G. Butcher.
1,643,921; Sept. 27.
Window and balancing sheet-metal sashes, Sheet-metal.
G. W. Lancaster. 1,627,653; May 10.
Window and door frame. F. C. Andersen. 1,648,712;
Window and door remme. F. C. Andersen. 1,648,712;
And M. O. Dowell. 1,648,336; Nov. 8.
Window and operating means therefor. B. J. Goldsmith and E. Koeb. 1,639,455; Aug. 16.
Window and wind screen. H. Austin. 1,618,746;
Window and wind screen. H. Austin. 1,618,746;
Window attachment. C. M. Heublein. 1,619,256; Mar. 1.
Window attachment. C. M. Heublein. 1,619,256; Mar. 1.
Window attachment. C. M. Heublein. 1,619,256; Mar. 1.
Window Automobile. D. H. Donachy. 1,614,189;
Window Automobile. D. H. Donachy. 1,614,189;
Window Awnlag casement. J. G. Dudley. 1,633,377.
June 21.
Window Awnlag casement. J. G. Dudley. 1,633,377.
June 21.
Window Awnlag casement. J. G. Dudley. 1,633,377.
June 21.
Window barrier. L. Dandridge. 1,638,348; June 28.
Window barrier. L. Dandridge. 1,638,348; June 28.
    Mar. 29. Window catch. H. Sebell. 1,645,354; Oct. 11. Window-channel strip. H. Faurot. 1,619,923; Mar. 8. Window cleaner. J. H. Cook. 1,640,924; Aug. 30. Window cleaner. S. Fuchs. 1,613,319; Jan. 4. Window cleaner. R. Greenberg. 1,623,004; Mar. 29. Window cleaner. K. Horlhata. 1,644,642; Oct. 4,536,692; Window cleaner, Metannical. J. Bernhard. 1,565,692;
      Window cleaner, Mechanical.
Dec. 27.
      Window-cleaner's safety device. C. Mallon.
Nov. 22.
                                                                                                                                                                                                                                                          1 650 371 :
    Nov. 22.
Window-cleaning device. H. T. Barlow.
May 31.
Window-cleaning device. M. Christeler.
Window-cleaning device. H. M. Davis.
May 3.
Window-cleaning device. S. De Rosa.
                                                                                                                                                                                                                                                           1.630.463:
                                                                                                                                                                                                                                                           1.629.201:
                                                                                                                                                                                                                                                           1,627,318;
    June 21.
Window-cleaning device.
Window-cleaning device.
1,628,699; May 17.
Window-cleaning device.
1,628,699; May 17.
Window-cleaning device.
2, Window-cleaning device.
3, C. Jensen, W. Moloney, and G. Biltgen. 1,628,783; May 17.
Window-cleaning device.
W. I. Katow. 1,637,258;
July 26.
    Window-cleaning device, E. E. Shipley. 1,624,284; Apr. 12.
Window-cleaning device, Automatic. F. Saghy. 1,652,734; Dec. 13.
Window-cleaning device, Power-operated. H. C. Robertson. 1,644,645; Oct. 4.
Window-cleaning device, Safety. H. P. Chieffo. 1,621,626; Mar. 22.
Window-cleaning device, Safety. H. P. Chieffo. 1,621,626; Mar. 22.
Window-cleaning device, Electric. F. Dzierzenga. 1,637,740; July. 22.
Window- Combination. H. J. Schlacks. 1,625,872; Apr. 26.
      Window-cleaning device. E. E. Shipley.
                                                                                                                                                                                                                                                        1.624.284:
      Window, Combined sliding and swinging. C. A. Lewls. 1,633,769; June 28. Window, Combined swinging and sliding. C. A. Lewls. 1,617,128; Feb. S. Window construction. R. T. Axe. 1,616,248; Feb. I. Window construction. A. Entenman. 1,629,264; May 17.
      Window construction R. T. Axe. 1,616,248; Feb. 1. Window construction A. Entenman. 1,629,264; May 17. Window construction. W. Farley. 1,632,700; June 14. Window construction. F. C. Ferguson. 1,645,282; Oct. 11. Window construction. J. J. Gillman. 1,628,873; May 17. Window construction. J. J. Amb B. T. Mesker. 1,625,220;
      Window construction.
Apr. 19.
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Window construction, Ventilating J. A. Glass. 1,643,554; Sept. 27. Window control and silencer. J. H. Londick. 1,642,162; Sept. 13. Window-control device. W. Quick, S. E. Thomas, and F. W. Berwick. 1,614,629; Jan. 18. Window-control mechanism. S. W. Nicholson. 1,644,485; Window-control mechanism. S. W. Nicholson. 1,644,485; Oct. 4.
Window-control mechanism. H. M. and C. M. Tichenor. 1501,003; Nov. 29.
Window-control mechanism, Mounting for. S. W. Nicholson. 1,622,603; Mar. 29.
Window-control mechanism to windows, Retaining device for operatively connecting. E. J. Cook. 1,616,527; Feb. 8. Window-controlling device, S. W. Nicholson. 1,619,633; Window-controlling derivatives Mar. 1.
Window cornice and the like. H. A. Kretschmer, 1,652,365; Dec. 13.
Window, Curtain. R. Calpin. 1,643,942; Oct. 4.
Window, Curtain. R. Calpin. 1,643,979; Oct. 4.
Window-curtain protector. M. E. Wheeler. 1,619,280;
Window-curtain protector. Mar. 1.
Window-decorating device, F. A. Cylkowski. 1,646,190;
Window-decorating device, F. A. Cylkowski. 1,646,190;
Window device, Safety, J. J. Bartak. 1,620,749;
Mar. 16.
Window display Refrigerator case for. L. E. Chambers, 1,613,372; Sept. 27.
Window, Double-bung, S. U. Barr. 1,644,814; Oct. 11.
Window draperies, Valance for. F. W. Oehrle. Window, Double-hung, S. U. Barr. 1,644,814; Oct. 11. Window draperies, Valance for. F. W. Oehrle. 1,625,329; Apr. 19. Window fastener. B. Jahn and E. E. Kahl. 1,653,011; Dec. 20. Window fastener. W. E. Morrison. 1,637,910; Aug. 2. Window fastener. J., Jr., and P. Ostrosky. 1,619,031; Mar. 1. Window fastener. V. J. Whitney. 1,618,617; Feb. 22. Window fastener. V. J. Whitney. 1,618,617; Feb. 22. Window fastener. W. J. A. Cyr. 1,617,670; Feb. 15. Oct. 4.

Window fixture. W. A. Cyr. 1.617,670; Feb. 15.
Window fixture. W. A. Cyr. 1.617,670; Feb. 15.
Window frame. H. C. Malse. 1,624,608; Apr. 12.
Window frame. G. Rupp. 1,623,496; Apr. 5.
Window frame. G. L. Whipps. 1,643,142; Sept. 20.
Window frame and sash construction. H. E. Campbell. 1,638,506; July 26.
Window frame and sash construction. H. E. Campbell. 1,637,670; July 26.
Window frame and sash construction. H. E. Campbell. 1,637,701–3; Aug. 2.
Window-glass guide. E. W. M. Bailey. 1,635,570: Mar. 22.

Window-glass guide, E. W. M. Balley. 1,635,570;
July 12.

Window-glass shawls, Flattening. H. L. Halbach and
J. A. Sweet. 1,620,017; Mar. 8.

Window, Grated. R. C. Porras. 1,618,224; Feb. 22.

Window guard. F. Benca. 1,635,601; July 12.

Window guard. B. A. Rowles. 1,638,724; Aug. 9.

Window guard. B. A. Rowles. 1,638,724; Aug. 9.

Window guard. B. A. T. Rowlane. 1,638,601; Feb. 5.

Window Lunger, A. T. McWane. 1,636,691–3; July 5.

Window-hanging device. H. B. Stein. 1,625,689; Apr. 1,9. Window Insulated. L. J. Fedder. 1,484,887,119,15 Window, Insulated. L. J. Fedder. 1,634,987, July 5. Window incl. S. Mennelley. 1,630,026; May 31. Window leather strip, Casement.- I. W. Fisher. 1,621,361; Mar. 15. Window light frame. W. J. Bossemeyer. 1,638,284; Aug. 9.
Window-lighting system. E. Vinogradov. Window lock. J. E. Bergouzonl. 1.654,207; Dec. 27. Window lock. O. E. Shostrom. 1.622,978; Mar. 29. Window lock. Waitch. 1,622,078; Mar. 19. Window lock. J. Waitch. 1,620,705; Mar. 19. Window lock, Antiratte. L. Hill. 1,623,343; Apr. 5. Window, Metallic. J. Brogden. 1,631,949; June 7. Window, Metallic. J. Brogden. 1,631,949; June 7. Window, Metallic. J. Brogden. 1,640,006; Oct. 16,519; July 19. July 19. Caement. E. W. Cummings. Window mounting, Casement-. E. W. Cummings. 1.640.483; Aug. 30. Window mounting, Casement-. M. D. Skinner, 1,648.744; Nov. 8. Window mounting, Swinging. V. J. Whitney. 1,614,166; Jan. 11. Jan. 11.
Window of motor and other vehicles, Sliding. J. M. Strachan. 1,631,775; June 7.
Window opening and closing mechanism. J. Saoutchik. 1.631,892; June 7.
Window-operating device. W. Vaughan. 1.638,897; Aug. 16.
W. Oct. 18.
W. Oct. 18.
Window operator. 3. 6. Oct. 18. Control alternation. J. H. Roethel. 1,646,218; Control and Control an

Window panes, Support for. C. G. Nelson. 1,649,915; Nov. 22. Window platform. J. F. Peckenpaugh. 1,625,423; Apr. 19. Window portal. P. J. Murphy. 1,641,044; Aug. 30. Window-raising device. W. F. Fredericks. 1,627,697; May 10, Window, Rear. J. H. Webber. 1,622,933; Mar. 29. Window-regulating mechanism. A. R. Clas. 1,651,870; Dec. 6. Window regulator. T. P. Archer and E. E. Heintz. 1,625,186; Apr. 19. Window regulator. J. H. Bourgon. 1,617,195; Feb. 8. Window regulator. A. A. Craig. 1,613,022; Jan. 4. A. Craig. 1,613,022; Jan. 4. 1.625.186; Apř. 19.
Window regulator. J. H. Bourgon. 1,617,195; Feb. 8.
Window regulator. A. A. Craig. 1,613,022; Jan. 4.
Window regulator. B. J. Goldsmith and E. Koeb.
1,624,098; Apř. 12.
L. J. Goldsmith and E. Koeb.
1,624,020-1. Sept. 13.
Window regulator. B. J. Goldsmith and E. Koeb.
1,645,193; Oct. 11.
Window regulator. E. E. Heintz. 1,638,197; Aug. 9.
Window regulator. E. Koeb. 1,629,277; May 17.
Window regulator. P. J. Kurscheidt and H. E. Norwood.
Window regulator. P. J. Kurscheidt and H. E. Norwood.
Window regulator. P. J. Kurscheidt and H. E. Norwood.
Window regulator. M. Lee. 1,649,459; Aug. 30.
Window regulator. M. Lee. 1,649,459; Aug. 30.
Window regulator. J. H. Parsons. 1,646,617; Oct. 18.
Window regulator. J. H. Parsons. 1,646,617; Oct. 18.
Window regulator. J. H. Parsons. 1,646,617; Oct. 25.
Window regulator. J. H. Parsons. 1,646,679; Oct. 25.
Window regulator. Automatic storm. C. A. Christofferson. 1,652,949; June 21.
Graff. Des. 73,783; Nov. 8.
Window-regulator handle. A. L. Knapp. Des. 73,787; Nov. 8.
Window-regulator handle assembly. W. Schnell. 1,648,283; Nov. 8.
Window-regulator handle or similar article. W. Schnell. Des. 73,624; Oct. 11.
Window-regulator handle or similar article. Plate for Mindow-regulator handle or similar article. W. Schnell. Des. 72,624; Oct. 11.
Window-regulator handle or similar article. W. Schnell. Des. 72,624; Mar. 22.
Window-regulator, Automatic gear lock for. H. A. Myers. 1,652,006; Jun. 4.
Window regulators, Automatic gear lock for. H. A. Myers. 1,652,006; Dec. 13.
Window-Reversible. O. Matterney. 1,622,350; May 17.
Window Reversible. O. Matterney. 1,622,350; May 17.
Window-Reversible. O. Matterney. 1,622 J. H. Bourgon, 1,617,195; Feb. 8. A. A. Craig, 1,613,022; Jan. 4. B. J. Goldsmith and E. Koeb. Window-sash construction. R. T. Axe. 1,637,723; Aug. 2. Window-sash construction. D. R. Canny. 1,621,828; Mar. 22. Window-sash fastener, W. J. Collins. 1,638,085; Aug. 9. Window-sash-fastening device, Adjustable. A. Ingman. 1,633,861; June 28. Window-sash holder. F. H. Stowell. 1,643,614; Sept. 27. Window-sash holder. F. H. Stowell. 1,643,614; Sept. 27. Window-sash-securing means. C. Thompson. 1,648,371; Nov. 8. Window-sash scuring means. C. Thompson. 1,648,371; Nov. 8. Window-sash starter. M. J. Hoffenberg. 1,625,941; Window-sash starter. M. J. Hoffenberg. 1,625,941; Window-assh starter. M. J. Hoffenberg. 1,625,941; Apr. 26.
Window sashes, Device for removing putty from. A. J. Dwyer. 1,648,610; Nov. 8.
Window sashes, Locking mechanism for. W. W. Myers. 1,638,547; Aug. 9.
Window sashes, Pulley for balanced. A. W. Goldman. 1,648,698; Oct. 25.
Window sashes, Stop for sliding. G. E. Wood. 1,627,300; May 3. May 3.

Window screen. L. G. Abrams. 1,617.316; Feb. 15.

Window screen. J. A. Chewning. 1,624,634; Apr. 12.

Window screen. J. T. Cook. 1,632,022; June 14.

Window screen. R. W. Evans. 1,653.361; Dec. 20.

Window screen. J. P. Hamel. 1,615,830; Jan. 25.

Window screen. J. Kolumbus. 1,653,131; Dec. 20.

Window screen. T. B. Laycock. 1,634,371; July 5.

Window screen. E. Scheller. 1,634,3371; July 5.

Window screen. E. Scheller. 1,634,3371; July 5.

Window screen. R. P. Willig. 1,628,485; May 10.

Window-screen halder. F. A. Stickle. 1,636,255; July 19.

Window screen, Rolling. J. G. Stewart. 1,613,967;

Jan. 11. indow : Jan. 11. Window screen, Sheet-metal. A. F. Otto. 1.646.832; Oct. 25. Window screen, Storm. W. B. Kinnear. 1,615,632; Jan. 25. Jan. 25.

Window seal. A. C. Enochs. 1,635,076; July 5.

Window seat. P. Alles. 1,650,315; Nov. 22.

Window seat. J. D. Orlowski. 1,634,888; July 5.

Window seat. E. Sonntag. 1,642,792; Sept. 20.

Window seat. E. Sonntag. 1,642,792; Sept. 20.

Window shade and curtain holder, Combination. G. E.

Hoffman. 1,651,525; Dec. 6.

Window-shade and curtain-rod holder. S. Constantine. 1,646,011; Oct. 18.

Window-shade bracket. D. M. Parkinson. 1,638,742;

Window-shade bracket. V. C. Rafty. 1,638,707; Aug. 9.

Window-shade holder. J. P. Olson. 1,620,736; Mar. 15.

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Window stop. C. T. Hansen. 1,632,132; June 14.
Window stop, Adjustable, R. C. Piscator. 1,615,554;
Jan. 25.
Window stop and weather strip, Combined. W. Friedman.
1,625,674; May 3.
W. Vinz. 1,631,777; June 7.
Window Storme. E. W. Vinz. 1,631,777; June 7.
Window Storme. E. J. S. Berry. 1,644,507; Oct. 4.
Window structure. C. F. Boueck. 1,630,522; May 2.
Window structure. O. W. L. Buss. 1,612,047; Jan. 4.
Window structure. O. W. L. Buss. 1,612,046; Apr. 26.
Window structure. T. L. Jurasinski. 1,632,833; June 14.
Window structure. T. E. Hansen. 1,632,833; June 14.
Window structure. T. E. Jurasinski. 1,632,878; July 12.
Window structure. T. E. Jurasinski. 1,632,878; July 12.
Window structure. T. E. Jurasinski. 1,632,878; July 12.
Window structure. T. C. Alber. 1,662,297; Peb. 1.
Window ventilator. W. Deissler. 1,616,297; Peb. 1.
Window ventilator. V. M. Alien. 1,630,594; May 31.
Window ventilator. V. M. Boueck. 1,616,297; Peb. 1.
Window ventilator. W. J. Lapin. 1,644,851; Nov. 8.
Window ventilator. W. H. Rose. 1,644,399—400; Oct. 4.
Window ventilator. W. H. Rose. 1,644,399—400; Oct. 4.
Window ventilator. Automatic. D. J. De Grasse. 1,651,259; Nov. 29.
Window ventilator. Automatic. D. J. De Grasse. 1,651,259; Nov. 29.
Window ventilator. Automatic. D. J. De Grasse. 1,653,529; Dec. 20.
Windows and doors ways, Sound-screening attachment for. Windows and doors Ways, Sound-screening attachment for. Windows and the like, Fastener for storm. C. R. Moore. 1,632,532; June 14.
Windows and the like, Fastener for storm. C. R. Moore. 1,633,591; Jul 14.
Windows Attachment for. E. H. Berg. 1,646,522; Windows, Combined shade roller and holding means for. D. A. Batts. 1,637,798; Aug. 2.
Windows, Combined shade roller and holding means for. D. A. Batts. 1,637,798; Aug. 2.
Windows, Attachment for. E. H. Berg. 1,646.522; Oct. 25.
Windows, Combined shade roller and holding means for. D. A. Batts. 1,637.798; Jau. 2.
Windows, Brame for automobile curtain. E. W. Hornung. 1,618,709; Fcb. 22.
Windows, Frame for automobile curtain. E. W. Hornung. 1,618,709; Fcb. 22.
Windows, Erame for automobile curtain. E. W. Hornung. 1,618,709; Ed. 27.
Windows, Lifting and retaining device for sliding. J. Ledwinka. 1,634,333; Device for Sliding. J. Ledwinka. 1,630,494; May 31.
Windows, Roller-blind support for casement. O. F. C. Ewart and A. Ewart. 1,620,596; Mar. 8.
Windows, Runway for. C. J. McKinney. 1,634,878;
Windows, Runway for. C. J. McKinney. 1,634,878;
Windows, Suntrers, and similar appliances, Device for opening and closing. J. L. Stowers. 1,637,550; May 10.
Windows, Swinging double-hung. R. L. Christenson 1,649,665; Nov. 15.
Wing skid. H. C. Mummert. 1,613,842; Jan. 11.
Wiper, D. C. Brees. 1,615,612; Jan. 25.
Wiper, McLaipot-mouthpiece. S. E. Sperry. 1,654,488;
Wiper, McLaipot-mouthpiece. S. E. Sperry. 1,654,488;
Wire and the like, Metal coating. E. L. Watrous. 1,650,730; Nov. 29.
Wire attachment. Electric. A. E. Chapman and C. R. Cook. 1,645,474; Oct. 11.
    Mar. 8. Wire attachment, Electric. A. E. Chapman and C. R. Cook. 1,645,474; Oct. 11. Wire-banding machine. J. S. McChesney. 1,650,843;
       Nov. 29.
Wire-bending machine. W.
                                                                                                                                                                                                                                                                            L. Clouse.
                                                                                                                                                                                                                                                                                                                                                                                                         1.639,397:
       Aug. 16.
Wire-bending machine. A. Van Veen.
Nov. 22.
                                                                                                                                                                                                                                                                                                                                                                                                    1.650.248:
    Nov. 22.

Wire, Borating Dumet. R. D. Hall. 1,647,620; Nov. 1.

Wire-cable cutter. J. E. Butcher and H. B. Harris. 1,623,044; Apr. 5.

Wire circuits, Suppression of echoes and singing in four-th. C. Silent. 1,635,738; Dec. 27.

Wire clamp. W. J. Carley, Relio.704; Aug. 16.

Wire clamp. F. N. Clark. 1,638,918; Aug. 16.

Wire clamp caparatus. C. B. Youngchild. 1,637,169;

Wire-clamp caparatus. C. B. Youngchild. 1,637,169;

Wire-clamp caparatus. 1,638,918; Aug. 16.

Wire-clamp caparatus. 1,638,918; Aug. 16.

Wire-clamp caparatus. 1,638,918; Aug. 16.
    Wire-cloth-stretching machine. W. P. Jones. 1,649,350;
Nov. 15.
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Wire connecter. W. R. Sommer, R. Ree, and C. Kerkhof.
Wi. 1,635,293; July 12.
Wire connecter.
Wire connecter.
Wire connecter.
Wire connecters, Device for handling. F. A. Brown.
1,648,635; Nov. 8.
Wire connection. C. K. Jackson. 1,631,821; June 7.
Wire connection. C. K. Jackson. 1,631,821; June 7.
Wire connection for grand-plano actions, Adjustable
damper. H. Sandner. 1,653,590; Dec. 20.
Wire, Corn-planter. W. H. Borgers. 1,614,453; Jan. 18.
Wire-covering machine. A. J. Trenck. 1,616,068; Feb. 1.
Wire-covering tool. A. W. Miller. 1,616,064; Feb. 1.
Wire cutter and making it, File. M. B. Behrman.
1,625,072; Apr. 19.
Wire cutter, Pile. M. B. Behrman. 1,647,600; Nov. 1.
Wire cutting and stripping device. F. Smitak. 1,618,734;
Feb. 22.
Wire-cutting machine. J. F. Hidzick. 1,637,824; Aug. 2. Feb. 22.
Wire-cutting machine. J. F. Hidzick. 1,637,624; Aug. 2.
Wire-cutting machine. E. F. Shuster. 1,629,643; May 24.
Wire drawing and take-up method. F. Honig. 1,653,461;
Dec. 20.
Wire-drawing apparatus. H. Blount and J. W. Hernlund.
1,621,309; Mar. 15.
Wire-drawing apparatus. F. Murphy. 1,649,912; Wire-drawing apparatus. F. Murphy. 1,649,912; Wire-drawing bench. L. G. and F. A. Bréguet. 1,646,892; Wire-drawing die. F. Vollmer. 1,624,027; Apr. 12. Wire-drawing dies, Manufacture of. K. B. Lewis and F. H. Ellsworth. 1,635,945; July 12. Wire drawing, etc., Die for. F. Honig. 1,637,109; July 26. Wire drawing, etc., Die for. F. Hönig. 1,637,109; July 26.
Wire-drawing machine. A. Kreidler. 1,648,052; Oct. 11.
Wire-drawing machine. A. Kreidler. 1,648,814; Nov. 8.
Wire-drawing machine. Multiple continuous. H. W. Hodgson. 1,653,097; Dec. 20.
Hodgson. 1,653,097; Dec. 20.
Flower of the continuous. H. W. Hodgson. 1,653,291; Sept. 27.
Wire fabric, Sulletproof woven. C. A. Scheeler. 1,649,548; Nov. 15.
Wire fabric, Coating. N. S. Harter. 1,623,593; Apr. 5.
Wire fabric, Sven. for woven. A. W. Harris. 1,632,964; Wire fabrics, Seam for woven. A. W. Harris. 1,632,964; Wire fabrics, Seam for woven. A. W. Harris. 1,632,964; Wire fastener. G. F. Voight. 1,618,133; Feb. 15.
Wire-fence tool. B. L. Coleman. 1,613,871; Jan. 11.
Wire glass, Method and apparatus for making. J. A. Reece. 1,641,932; Sept. 6.
Wire handle. W. B. Wils. 1,640,016; Aug. 23.
Wire holder. L. B. Barrett. 1,631,510; June 7.
Wire in dental chapters, Machine for deforming. W. F. Wire-line belt guide. H. W. Kerr. 1,619,793; Mar. 1.
Wire-line belt guide. H. W. Kerr. 1,619,793; Mar. 1.
Wire-line belt guide. W. E. Wiesenthal. 1,647,266; Nov. 1.
Wire, Machine for manufacturing nails from. J. Wikschine, Mr. 1, Wikschine for manufacturing nails from. J. Wikschine. Wire-line spudding snoe. W. E. Wiesenthal. 1,647,206; Nov. 1. Wire, Machine for manufacturing nalls from. J. Wikschtröm. 1,642,597; Sept. 13. Wire, Machine for treating. B. F. Steel and H. D. Kelly. 1,617,637; Feb. 8. Wire, Making bimetallic. B. F. Steel. 1,653,378; Dec. 20. Wire. Making bimetallic. B. F. Steel. 1,653,378; Dec. 20.
Wire-measuring device. H. H. Johnson. 1,652,407; Dec. 13.
Wire, Method and apparatus for drawing. F. H. Null-Wire. Mischemetal. 1,628,244; May. 24.
Wire. Mischemetal. 1,628,244; May. 24.
Wire. Mischemetal. 1,633,367; Dec. 20.
Wire-netting machines, Mesh-aligning device for. C. W. Hawthorne. 1,617,052; Feb. 8.
Wire or ord hanger. W. H. Lawrence. 1,647,008; Wire or ord hanger. W. H. Lawrence. 1,647,008; Wire or rods, Machine for pickling coils of, H. A. Staples and H. K. Beach. 1,643,186; Sept. 20.
Wire or rods, Machine for pickling coils of, H. A. Staples and H. K. Beach. 1,643,186; Sept. 20.
Wire or rods, Machine for pickling coils of, H. A. Staples and H. K. Beach. 1,643,186; Sept. 20.
Wire or rods, Machine for pickling coils of, H. A. Staples and H. E. Beach. 1,643,186; Sept. 20.
Wire pickling. 1,624,000; Apr. 12.
Wire pickling. F. A. Atkinson and F. and O. J. Pickard. 1,653,755; Dec. 27.
Wire, Pile. J. Bagley. 1,625,783; Apr. 26.
Wire, Pile. J. Bagley. 1,625,783; Apr. 26.
Wire-pulling head. H. E. Waltz. 1,649,937; Nov. 22.
Wire reducer. W. A. Murphy. 1,62,577; Dec. 13.
Wire rope and producing the same, Attachment for. A. J. Briggs. 1,643,110; Sept. 20.
Wire-rope fitting. 12, Allen. 1,642,573; Sept. 13.
Wire-rope sawled socket. W. H. Stainbrook. 1,614,407; Wire-screen, Fourdrinier. H. R. Harrigan. 1,616,222; Feb. 1. Wire screen, Fourdrinier-. Feb. 1. H. R. Harrigan. Wire-seaming machine. F. F. Schmiege. Oct. 25. 1.646 709: Wire-shaping apparatus. G. G. Henderson. 1,613,170; Jan. Jan. 4. (2) Wire splice. A. J. Slonecker. 1,616,337; Feb. 1. Wire splicer. W. F. Kersey. 1.651,210; Nov. 29 Wire-splicing machine. D. T. May. 1,645,152; Oct. 11. Wire-splicing tool or wrench. A. J. Lewis. 1,637,226; July 26. Wire-spoke wheel. F. W. Baker. 1,653,612; Dec. 27.

Wire speel and carrier. H. de Jong. 1,637,037; July 26. Wire-straightening machine. H. Frym. 1,645,072; October 1,000 and producing the same, Attachment for. E. A. Conner. 1,643,150; Sept. 20. Wire-strapping tool. W. N. Lurcott. 1,616,912; Feb. 8. Wire stretcher. G. W. Martin. 1,653,866; Dec. 27. Wire stretcher. E. L. Pelts. 1,637,587; Aug. 2. Wire stretcher. E. L. Pelts. 1,637,587; Aug. 2. Wire stretcher. C. Wartin. 1,632,693 and 1,643,109; Sept. 20. Wire, 1,643,109; Sept. 20. Sept. 2 Wire terminal, Conductor. G. A. Childs. 1,617,373; Wire-te clamp. D. D. Pesqualle. 1,634,347; July 5. Wire-te for bundles of various kinds. S. C. Cary. 1,624,531; Apr. 12. Wire tier for bundles of various kinds. S. C. Cary. 1,624,531; Apr. 12. Wire tier, Bailing. J. O. Carroll. 1,624,157; Apr. 12. Wire tier, Bailing. J. O. Carroll. 1,624,157; Apr. 12. Wire ties, Apparatus for stringing. H. B. Foulder. 1,642,850; Sept. 20. Wire-ties, Tool for twisting. H. B. Foulder. 1,642,850; Sept. 20. Wire-twisting machine. A. J. Gerrard and P. Wright. 1,620,404; Apr. 26. A. J. Gerrard and P. Wright. 1,620,404; Apr. 26. A. J. Gerrard and P. Wright. 1,620,404; Apr. 26. A. J. Gerrard and P. Wright. 1,621,4376; Jan. 25. Wire-webbing anchoring device. J. L. Griswold. 1,644,015; Oct. 4. Wire-webbing anchoring device. J. L. Griswold. 1,644,015; Oct. 4. Wire-working machine. S. C. Cary. 1,624,925; Apr. 19. Wire-working machine. S. C. Cary. 1,624,926; Apr. 19. Wire-working machine. S. C. Cary. 1,624,925; Apr. 19. Wire-working m Nov. 1.

Wireless directive signaling. R. A. Fessenden. 1,617,240;
Feb. 8.

Wireless installation on vehicles such as automobiles
N. H. Clouch. 1,649,510; Nov. 15.

N. H. Clouch. 1,649,510; Nov. 15.

Sept. 13.

Sept. 13.

Wireless receiving direuits. H. J. Round. 1,624,185;
Apr. 12.

Wireless receiving or transmitting apparatus. Equipment for. S. Loewe. 1,634,296; Dec. 27.

Wireless receiving system. F. B. Falknor. 1,633,932;
Wireless receiving system. F. B. Falknor. 1,633,932;
Wireless receiving system. J. Slepian. 1,621,034; Wireless receiving system. J. Slepian.
Mar. 15.
Wireless sending and receiving system, C 1.621.034: Mar. 15.

Wireless sending and receiving system, Combined. A.

Myman. 1,615,645; Jan. 25.

Wireless signaling. M. Osnos and L. Kasarnowsky.
1,624,005; Apr. 12.

Wireless signaling. Aerial system employed in. S. B.

Smith and G. M. Wright. 1,618,209; Feb. 22.

Wireless signaling system. W. C. White. 1,617,074; Feb. 10.
Wircless signaling systems, Coll holder for. A. H. Curtis,
S. R. Wright, and A. H. Mackley. 1,613,222; Jan. 4.
Wircless signals, System of facsimile telegraphy by. E.
Bellin. 1,642,637; Sept. 18.
Wircless decigraph apparatus. F. Lowenstein. 1,618,017; Wireless telegraph apparatus. F. Lowenstein. 1,618,011; Wireless ticlegraphy, Receiving arrangement for. G. G. Von Arco. 1,649,499; Nov. 15. Wireless telephony. W. T. Dircham. 1,629,685; May 24. Wireless telephony and other purposes, Loud speaker for. P. Grassmann. 1,632,287; June 14.

Wireless telephony, System of secret. F. W. Kranz. 1,628,411; May 10.
Wireless trunsmission and reception. R. A. Fessenden. 1,617,242; Feb. 8.
Wireless transmission system. D. G. Little. 1,622,654; Mar. 29.
Wireless transmistion system. V. K. Zworykin.
Wireless transmitting system. V. K. Zworykin. 1918,539 (et al., 2018); July 5.
Wood and product obtained by said process, Manufacture of artificial. T. Surdi. 1,634,346; July 5.
Wood and solutions therefor, Preserving. L. P. Curtin. 1,620,152; Mar. 8.
Wood and the like, Preserving. C. Schantz. 1,632,508; June 14.
W. M. G. S. S. S. Wood and the like, Preserving. T. R. Coolidge, 3d. 1,642,295; Nov. 8.
Wood, Artificially graining. E. E. Spargo. 1,653,481; Dec. 20.
Wood-Darthically graining. E. E. Spargo. 1,653,481; Dec. 20. Dec. 20.

Wood-burning device. H. E. Woolery. 1,636,161;
July 19.

Wood. Composition for impregnating. B. Wurzschmitt.
1 654,229; Dec. 27.

Let a series of the series of Nov. 8.

Wood impregnation. A. M. Howald. 1.650.274; Nov. 22.

Wood, Method and machine for shredding. F. J. Moore. 1.623.261; Apr. 5.

Wood pulp, Manufacture of chemical. A. Peetz. 1.653.730; Dec. 27.

Wood preservation. A. M. Howald. 1.638.440; Aug. 9.

Wood, Preservation. G. J. Johnston. 1.617.447; Feb. 15.

Wood preservative. L. P. Curtin. 1.624.930; Apr. 19.

Wood preservative. K. H. Handy. 1.633.095; June 21.

Wood preservative. K. H. Wolman, F. Peters, and H. Pfug. 1.622.751; Mar. 29.

Woods, Preservatively treating. E. B. Fulks. 1.652.109; Dec. 6. Wood-preserving composition. F. Raschig. Wood-preserving system. J. R. Pfister. May 17. Wood-preserving system. J. R. Pister. 1,023,002; May 17, Wood pulp. Apparatus for bleaching. F. G. Sherbondy and M. E. Boehm. 1,638,965; Aug. 16.

1,638,881; Aug. 16.

1,638,881; Aug. 16.

1,638,881; Aug. 16.

1,638,783; June 28.

Wood pulp, Process and apparatus for manufacturing ground. F. K. Fish, ir. 1,633,733; June 28.

Wood pulp, Process and apparatus for the production of. C. J. Sternkopf. 1,619,004; Mar. 1.

Wood separator and preparing same. W. H. Grimditch. 1,638,765; Aug. 9.

Wood separator and preparing same. W. H. Grimditch. 1,638,765; Aug. 9.

Wood shaperator and preparing same. V. H. Grimditch. 1,614,916; Jan. F. Wagner. 1,615,893; Feb. 1.

Wood shapers. Tool spindle for. J. W. Ostman. 1,644,442; Oct. 4.

Wood-shaping machine. P. Klieber. 1,615,088; Jan. 18

Wood-shaping machine. W. M. Whitney. 1,647,028; Oct. 25.

Wood-splitting machine. C. Rasmussen. 1,626,152; Apr. 26. May Wood-plitting machine. C. May and H. L. Becher. 1.651.388; Dec. 6.
Wood Substitute. H. C. Harvey and H. L. Becher. 1.651.388; Dec. 6.
Wood. Treating. J. Himmelsbach. 1.613.459; Jan. 4.
Wood, Treating. J. Hoskins. 1.631.728; June 7.
Wood, Treating. A. H. van der Werff. 1.644.801; Oct. 11.
Wood-treating apparatus. G. B. Shipley. 1.623.979; J. C. May 1.623.979; J. May 1.623.979; J. May 1.623.979; J. C. May 1.623.979; J. May 1.623.9 June 7.
Wood wind and like musical instrument. J. W. McAvoy.
1,643,463; Sept. 27.
Wood with sheet metal. Machine for covering. W. B.
Hewlit. 1,646,533; Oct. 25.
Wooden articles, Producing. M. B. Llovd. 1,644,195; Hewitt. 1,646,533; Oct. 25, Wooden articles, Producing. M. B. Llovd. 1,644,195; Oct. 4. Wooden container. J. H. Proctor. 1,625,280; Apr. 19. Wooden panels from mill clippings and the like. Rapid production of, J. L. Herzoz. 1,632,252; Ang. 9. Woodworking apparatus. M. Skolnik. 1644,646; Sept. Woodworking machine. J. T. Dowse. 1,615,575; Jan. 28, Woodworking machine. S. W. Green. 1,623,724; May. 17. Woodworking machine. S. W. Green. 1,623,724; May. 17. Woodworking machine. M. Hutchinson. 1,617,211; Feb. 8. Feb. 8.
Woodworking machine. C. W. Jackson.
May 17.
Woodworking machine. E. Stauder. 1,651. Woodworking machine. E. Stauder. 1.651,846; Dec. 6. Woodworking machine. Combination. J. D. Pierce. Woodworking machine. Combination. J. Schimmelpfennig. 1.619,158; Mar. 1. Woodworking machine. Control guard for dado. J. F. Wilson. 1.632,254; June 14. Woodworking machine. Cutter guard for dado. J. F. Woodworking machine. Portable. J. L. Weaver. 1.643,325; Sept. 27.

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Woodworking machines, Sectional feed roller for. W. R.

Buss and M. E. Dick. 1,625,881; Apr. 26.

Buss and M. E. Dick. 1,625,881; Apr. 26.

Wool. Blowing mineral. A. Koberie. 1,650,136; Nov. 22.

Wool. Blowing mineral. A. Koberie. 1,650,136; Nov. 22.

Wool. Blowing mineral. A. Koberie. 1,650,136; Nov. 22.

Wool feel and making same, Ornamental. J. Robinson.

J. Gilly 631; Marc I.

J. Gilly 631; Marc I.

J. T. Denton. 1,653,096; Dec. 20.

Wool washers and the like, Press roll for. F. L. Furbush. 1,628,835; May 17.

Work clamp. C. A. Vidinghoff. 1,637,134; July 26.

Work Molder. B. K. Hullerton. 1,619,340; Mar. 1.

Work holder. H. S. Fullerton. 1,619,340; Mar. 1.

Work holder. H. S. Fullerton. 1,619,340; Mar. 1.

Work holder. B. S. Warner. 1,622,285; Mar. 21.

Work holder. B. S. Warner. 1,622,285; Mar. 21.

Work holder. B. S. Warner. 1,622,285; Mar. 21.

Work holder. B. S. Warner. 1,621,632; Feb. 12.

Work-holding means. F. A. Bailey. 1,617,562; Feb. 15.

Work-holding means. F. A. Bailey. 1,617,562; Feb. 15.

Work rest. H. J. Cook. 1,624,888; Apr. 12.

Work support. S. J. Teller and J. J. Thacher. 1,616,150; Feb. 1.

Work off. Work off. Warner. 1,624,888; Apr. 12.

Work off. Warner. 1,624,888; Apr. 12.
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Wrench.
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July 5.
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Wrench.
              Feb. 1.

Worm and worm-wheel transmission. H. Austin. 1,622,987; Mar. 29.

Worm-grinding machine. H. E. Durkee. 1,622,628; Mar. 15.

Wound machine with additional excitation in bridge connection, Series. W. Fetersen. 1,621,429; Mar. 15.

Wound package and producing the same. J. O. McKean Woven fabric. J. E. Fefel. 1,634,411-2; July 5.

Woven fabric. E. Meyer. Des. 72,487; Apr. 19.

Woven fabric. E. Meyer. Des. 72,487; Apr. 19.

Woven fabric. E. Meyer. Des. 72,487; Apr. 19.

Woven wire fabric. C. C. Wickwire. Des. 74,041; Dec. 6.

Wrapper. E. H. Radford. 1,628,429; May 10.

Wrapper. E. H. Radford. 1,628,429; May 10.

Wrapper anxing machine. B. Heinriebs. 1,619,615; Mar. 11.
                        Wrapping device for irregularly-shaped delicate objects.
O. Lauenstein. 1,626,543; Apr. 26.
Wrapping machine. H. Y. Armstrong. 1,626,378-9;
Apr. 26.
              Apr. 20.
Wrapping machine.
E. L. Smith and F. B. Fuller.
Wrapping machine.
Wrapping machine.
E. L. Smith and F. B. Fuller.
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E. L. Smith and F. B. Fuller.
Wrapping machine.
E. Betro. 1,629,934; May 24.
Wrapping machines.
Wrapping machines.
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Wrapping machines.
Wrapping machines.
Wrapping shachine.
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Wrapping shachines, Work Supporting and rotating means for. J. Derry. 1,650,199; Nov. 22.
Wrapping station.
Central-package.
Wrapping station.
Central-package.
Wrapping station.
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Wrapping station.
Central-package.
Wrapping station.
Lotation according to the contral-package.
Wrapp
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                             Wrapping machine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ringer: See-
Clothes wringer.
                        Wreck-lifting device. H. Wrench: See—
Adjustable wrench.
Cap wrench.
Chain pipe wrench.
Chain wrench.
Conduit-bushing wrench.
Double wrench.
End wrench.
Headlight-rim wrench.
                   Wrench Stewarts Stewa
Wrench. W. B. Bellows. 1922.
Wrench. W. S. Bellows. 1922.
Wrench. G. Browning and P. J. Bonan.
Wrench. G. Browning and P. J. Bonan.
Sept. 6.
Wrench. L. T. Broyles. 1,624,922; Apr. 19.
Wrench. L. A. Burch. 1,047,349; Nov. 1.
Wrench. Wrench. L. A. E. Carbeill. 1,623,945; Apr. 5.
Wrench. A. E. Carbeill. 1,615,440; Jan. 25.
Wrench. J. Cottrell. 1,615,440; Jan. 25.
Wrench. J. M. De Vilbiss. 1,682,977; Dec. 13.
Wrench. J. M. De Vilbiss. 1,682,977; Dec. 13.
Wrench. J. H. Dodds. 1,616,612; Feb. 8.
Wrench. J. Dickie. 1,646,140; Oct. 18.
Wrench. J. Dickie. 1,646,140; Oct. 18.
Wrench. J. M. Eiliett. 1,638,990; Aug. 16.
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J. H. Ellis. 1,615.169; Jan. 18.
P. A. Forsdahl. 1,635,930; July 12.
W. F. Gourley. 1,639,177; Aug. 16.
P. Hammer. 1,652,355; Dec. 13.
M. Harman. 1,644.84; Sept. 6.
J. H. Horsburgh. 1,628,842; May 17.
J. H. Ivey. 1,630,348; May 3.
H. C. Jahn. 1,627,035; May 3.
H. C. Jahn. 1,627,035; May 3.
N. A. Johnson. 1,617,448; Feb. 15.
J. E. Kenerson. 1,613,229; Jan. 4.
W. H. Kewish. 1,641,634; Sept. 6.
W. S. Lawyer. 1,627,441; May 8.
C. H. Leongraft 1,627,441; May 8.
C. H. Leongraft 1,627,441; May 8.
C. H. Leongraft 1,627,441; Aug. 2.
E. E. Lynch and H. A. Mead. 1,63 Wrench. C. H. Leonard. 1,653,861; Dec. 27.
Wrench. E. E. Lynch and H. A. Mead. 1,634,908;
Wrench. S. Mandl. 1,614,039; Jan. 11.
Wrench. S. Mandl. 1,614,039; Jan. 11.
Wrench. J. McDonald. 1,628,467; May 10.
Wrench. J. W. McDonough. 1,656,085; Nov. 22.
Wrench. J. L. McDonald. 1,648,653; Nov. 8.
Wrench. J. L. McDonald. 1,634,554; Jan. 13.
Wrench. J. J. Panle. 1,634,1989; Sept. 13.
Wrench. M. H. Robinson 1,637,559; Aug. 2.
Wrench. N. H. Robinson 1,637,559; Aug. 2.
Wrench. N. H. Robinson 1,637,559; Aug. 2.
Wrench. N. H. Robinson 1,637,199; Aug. 26.
Wrench. W. M. Stovall. 1,638,719; Feb. 8.
Wrench. W. M. Stovall. 1,638,719; Aug. 16.
Wrench. W. M. Stovall. 1,638,501; Aug. 16.
Wrench. W. M. Stovall. 1,638,501; Aug. 16.
Wrench. L. E. Watson 4,648,559; Nov. 8.
Wrench. L. S. Whitchead. 1,648,559; Nov. 8.
Wrench. L. S. Whitchead. 1,648,559; Nov. 8.
Wrench. J. Zilliox. 1,626,906; May. 3.
Wrench adjustment. J. McConville. 1,621,123; Mar. 15.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. Wahl and O. McIzer. 1,652,846; Dec. 13.
Wrench and inflating mechanism. Combined. J. 1.634.908: Clothes wringer.

Wringer. A. W. Altorfer. 1,637,630; Aug. 2. Wringer. P. E. Barker. 1,638,312-3; Aug. 9. Wringer. W. G. Beatty. Rel6 627; May 17. Wringer. F. P. Cowan. 1,652,427; Dec. 13. Wringer. W. Gehrlein. 1,636,225-6; July 19. Wringer. W. Robertson. 1,622,736; May 24. Wringer. S. E. Schroeder. 1,624,073; Apr. 12. Wringer. S. E. Schroeder. 1,624,073; Apr. 12. Wringer. S. E. Schroeder. 1,645,297; Oct. 11. Wringer. L. Sweningson. 1,646,627; Aug. 30. Wringer and pail, Combined mop. J. M. Eiffe. 1,64 Jan. 4. Wringer. R. Schroeder. 1,645,1516; Sept. 6. Wringer and pail, Combined mop. J. M. Eiffe. 1,65 Jan. 4. Wringer. 8, 248,250; Wringer and pail, Combined mop. J. M. Eiffe. 1,65 Jan. 4. Wringer. 8, 248,250; Wringer and pail, Combined mop. J. M. Eiffe. 1,65 Jan. 4. Wringer. 8, 248,250; Wringer and pail, Combined mop. J. M. Eiffe. 1,65 Wringer and pail, Combined mop. 3, 248,250; Wringer and Pail Market Ma 1,613,267: | Jan. 4. |
| Wringer attachment, F. B. Schuyler. 1,625,101; |
| Apr. 19. |
| Wringer construction. S. E. Schroeder. 1,644,041; |
| Wringer construction. S. E. Schroeder. 1,646,601; |
| Oct. 25. |
| Wringer-frame construction. F. L. Chamberlain. 1,638,241; |
| Apr. 3. |
| Wringer mechanism. Safety. S. E. Schroeder. 1,623,707; |
| Apr. 3. |
| App. 4. |
| App. 4. |
| App. 5. |
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| App. 6. |
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| App. 8. |
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| App. 8. |
| App. 9. | Apr. 5.

Wringer roll. G. R. Keltie. 1,630,086; May 24.

Wrineer roll and making the same. J. J. Rathers. 1,640,216; Aug. 23.

Wrincer-foll guard. G. W. Smith, jr. 1,643,475; Sept. 27.

Wrincers. Adjustable drain board for. E. C. Rocke. 1,634,799; July 5.

Wringers, Safety device for. T. Adams. 1,624,706; Apr. 12.

Wringers, Safety device for feeding clothes to. H. L. Morin. 1,651,615; Dec. 6.

Wringers, Supporting device for. F. L. Chamberlain, 1,638,242; Aug. 9.
1,638,242; Aug. 9.
1,638,242; Aug. 9.
1,632,839; June 21.
Wrist of the control of the

writing instrument. A. B. W. Bartholomew. 1,636,207; July 19.
Writing machine. K. A. Sundquist. 1,652,988; Dec. 13.
Writing table Multiple L. Nagy. 1,632,792; Dac. 13.
Writing table Multiple L. Nagy. 1,632,792; Dac. 13.
Writing table Multiple L. Nagy. 1,632,792; Dac. 13.
X-ray apparatus. C. E. Campbell. 1,629,690; May 24.
X-ray apparatus. P. A. Isherwood. 1,630,181; May 24.
X-ray apparatus. P. A. Isherwood. 1,630,181; May 24.
X-ray apparatus. M. Morrison. 1,617,267; Feb. 8.
X-ray apparatus. J. B. Wantz. 1,628,014; May 10.
X-ray apparatus. F. H. Wappier and C. Fayer 1,628,699; May 17.
X-ray-beam generator. F. S. Smith. 1,647,477; Nov. 1
X-ray-beam generator of high power. F. S. Smith.
X-ray beams of short duration, Producing intense periodic. F. S. Smith. 1,647,478; Nov. 1.
X-ray dental films, Machine or device for labeling.
R. Torpin. 1,632,154; June 14.
X-ray examination and X-ray photographing, Apparatus for. M. Pohlmann. 1,646,055; Oct. 18.
X-ray machine. M. B. Adrian. 1,619,962; Mar. 8.
X-ray machine. Convertible. A. Mutscheller. 1,625,328;
X-ray machines. Radiographic attackment for. F. Irwig.

X-ray machine, Convertible. A. Mutscheller. 1,625,328; Apr. 19.
X-ray machines, Radiographic attachment for. F. Irwig. 1.651.707; Dec. 6.
X-ray operating table. J. J. Grobe. 1,628,043; May 10.
X-ray photography. Make-up frame for. A. H. Honey. 1.629,104; May 17.
X-ray screen. H. S. Sawford. 1,621,814; Mar. 22.
X-ray screen. To taking skiagrams. R. Mannl. 1,633,706; June 28.
June 28.

H. D. Garretson. 1, 189,338; May 17.

X-ray system. H. D. Garretson, 1.629,338; May 17.
X-ray system, Therapy. A. Mutscheller. 1,620,732;
Mar. 15.

X-ray tables, Attachment for. F. H. Wappler and A. C. Koenitz. 1,623,567; Apr. 5. X-ray tube. U. Fujimoto. 1,621,926; Mar. 22. X-ray tube. G. Holst. 1,843,453; Sept. 27. X-ray tube. G. Holst and A. Bouwers. 1,626,465; Apr. 26. X-ray tube. G. Holst and A. Bouwers. 1,632,230; X-ray tube. G. Holst and A. Bouwers. 1,632,230; X-ray tube June 14.

Yarn balls, Core for. E. H. Newton. 1.614,759; Jan. 18. Yarn cleaner. H. E. Van Ness. 1.625,692; Apr. 19. Yarn cleaner. V. Waitkus. 1,628,523; May 10.

Yarn-control mechanism. W. P. Drumheller. 1,636,409;

Yarn-control mechanism. W. P. Drumheller. 1,636,409; July 19.
Yarn-dyeing machine. H. M. Van Alstyne and W. Bell. 1,651,167; Nov. 29.
Yarn-impinging detector controlled by active shuttle. W. H. Wakefield. 1,651,108; Nov. 29.
Yarn-mass support. H. D. Colman. 1,641,661; Sept. 6.
Yarn, Method and apparatus for cleaning. L. B. Hass-brouck. 1,630,381; May 31.
Yarn-olling device. J. K. Altemus. 1,621,303; Mar. 15.
Yarn on bobbins, Coloring. J. S. Johnston. 1,613,707; Jan. 11.

Jan. 11.

Yarn or thread feeding mechanism for spring-needle machines. G. P. Bosworth. 1,626,781; May 3.

Yarn reel X. Brügger, 1,626,325; Apr. 26.

Yarn-tensioning device. A. M. Pigeon. 1,648,190; Nov. 8.

Yarn-tensioning device. A. Wetzel. 1,623,608; Apr. 5.

Yarn to remove the kinks therefrom. Power-driven device for automatically untwisting. J. O. McKean.

Yarn to remove the kinks therefrom. Self-driven device for automatically untwisting. J. O. McKean. 1,650,901; Nov. 29.

Yarn to remove the kinks therefrom. Self-driven device for automatically untwisting. J. O. McKean. 1,650,901; Nov. 29.

Yarn, Varjning. H. D. Clinton. 1,639,927; Aug. 23.

Yarn, Warping. H. D. Clinton. 1,639,927; Aug. 23.

Yarn. whiding machine. J. K. Altemus. 1,644,973;
Yarn. whiding machines, Tension device for. H. A. Davis. 1,618,699; Feb. 22.
Yarns, Dyeing. O. Hoffmann. 1,615,124; Jan. 18.
Yarns in hanks with liquid, Machine for treating. J. Schlumpf. 1,639,438; Aug. 16.
Yarns, Spinning, twisting, cabling, and proofing of. J. E. Moore. 1,647,303; Nov. 1.
Yeast and activator for yeast, Increasing the activity of. A. W. Hixson and A. R. Balls. 1,641,027; Nov. 29.
Yarns, Spinning, twisting, and proofing of. J. E. Moore. 1,641,676–7; Sept. 8, C. B. Hill and M. H. Yeast and the product thereof, Treating and preparing. F. M. Hidebrandt. 1,625,121; Apr. 19.
Yeast, Drying. A. K. Balls. 1,643,047; Sept. 20.
Yeast foam malted milk and product thereof, Manufacturing. C. B. Hill and M. H. Givens. 1,638,653; July 19.

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turing. C. B. Hill and M. H. Givens. 1,636,563; July 19.
Yeast, Improvement of flavor of. E. B. Brown. 1,642,537; Sept. 13.
Yeast, Improvement of flavor of. E. B. Brown. 1,642,537; Sept. 13.
Yeast, Improvement of flavor of. E. B. Brown. 1,625,941; May 17.
Yeasts, Propagating. A. K. Balls. 1,642,192; Sept. 13.
Yieldable coupling. W. Minier. 1,629,941; May 17.
Yoke, F. M. Jackson. 1,613,109; Jan. 4.
Yoke, Steel. F. O'Dell. 1,630,447; May 31.
Zeottes and Sept. 1,630,447; May 31.
Zeottes and the like, Apparatus for regeneration of. W. H. Green. 1,620,886; Mar. 15.
Zeottes, Manufacture of precipitated. H. Kriegsheim and W. Vaughan. 1,642,880; Sept. 20.
Zeidles, Process and apparatus for utilizing. W. H. Zine bars with lead, Apparatus for ocating. A. H. Rossbach. 1,638,882; Aug. 16.
Zinc-bearing ores and metallurgical products, Treatment of H. W. Gepp. H. Hey, G. Rigg, R. H. Stevens, and R. Laug. 30.
Zinc from blue powder, Making Hquid. F. Tharaldsen. 1,647,381; Nov. 1,
Zine gold slimes and apparatus therefor, Treatment of C. E. Meyer. 1,622,960; Mar. 29.
Zinc oxide, Recovering. C. A. H. de Saulies. 1,647,279; Nov. 1.

Nov. 1.

Nov. 1.

Zinc oxide, Treatment of furnace gases to recover.

J. F. Cregan. 1,628,952; May 17.

Zinc, Process and apparatus for extracting. J. Skogmark.

1,652,184; Dec. 13.

Zinc, Rolling. O. Gerlach. 1,616,038; Feb. 1.

Zirconium and hafnium, Separating. D. Coster and G.

Von Hevey, 1,618,960; Feb. 22.

Zirconium comprund and making same. C. J. Kinzle.

Zirconium comprund and making same. C. J. Kinzle.

Zirconium composite and making same. C.

J. Kinzle. 1,618,288; Feb. 22.

Zirconium sulphate, Manufacture of pure. H. Trapp.

1,648,569; Nov. 8.

LIST OF DISCLAIMERS ARRANGED BY INVENTIONS.

Accelerator, Vulcanization. M. L. Weiss. No. 1,411,231; date of patent Mar. 28, 1922; disclaimer filed Aug. 9, 1927; v. 831; p. 894.
Armatures, Apparatus for making. R. H. Ahlers and E. M. Polk. No. 1,556,891; date of patent Oct. 13, 1925; disclaimer filed Aug. 9, 1927; v. 364; p. 8.
Paraket for lamps. B. A. Benson. No. 1,551,533; date of patent Sept. 1, 1925; disclaimer filed Apr. 7, 1927; v. 357; p. 790.

Buoy, Aviatory life. S. L. Van Meter, Jr. No. 1.192,479; date of patent July 25, 1916; disclaimer filed Oct. 15, 1927; v. 364. p. 7. Cable Joints, Protective device for electric. P. Torchio. No. 1,172,322; date of patent Feb. 22, 1916; disclaimer filed Feb. 11, 1927; v. 366; p. 1. Calculating machine. M. Teetor. No. 1,344,191; date of patent June 22, 1920; disclaimer filed Oct. 31, 1927; v. 364; p. 780.

Caoutchouc substance and vulcanization product thereof. F. Hofmann and K. Gottlob. No. 1,149,580; date of patent Aug. 10, 1915; disclaimer flied Feb. 11, 1927; v. 356; p. 1.
Carburetor. R. Abell. No. 1,158,359; date of patent Oct. 26, 1915; disclaimer filed Oct. 14, 1927; v. 364; p. 7.

p. 7. Clipper, L. J. Wahl. No. 1,487,189; date of patent Mar. 18, 1924; disclaimer filed Aug. 29, 1927; v. 362; p. 235. Cover, Receptacle. J. I. Russakov. No. 1,458,955; date 10,232, disclaimers filed June 6,

emt Feb. 9, 1925; disclaimer hied Mar. 21, 1927; v. 35/; p. 1. Genr. Flexible. C. Bethel. No. 1,602,298; date of patent Oct. 5, 1926; disclaimer filed July 19, 1927; v. 361; p. 210.

Lubricating means. A. V. Gullborg. No. 1,807,734; date of patent June 24, 1919; disclaimer filed Aug. 29, 1927; v. 862; p. 235.
Machine for placing springs in casings. C. P. Read. No. 1,218,314; date of patent Mar. 6, 1917; disclaimer filed Dec. 5, 1927; v. 365; p. 655.
Meter, C. R. Houghton and J. T. Wilkin. No 1,528,728; date of patent Mar 3, 1925; disclaimers filed June 20, 1927; v. 360; p. 299; and 1,528,728; date of patent Mar. 3, 1926; filed July 18, 1927; v. 361; p. 1. (Two cases.)

cases.)

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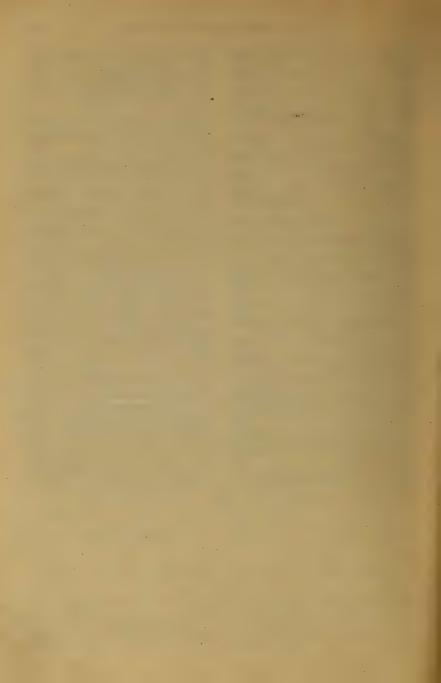
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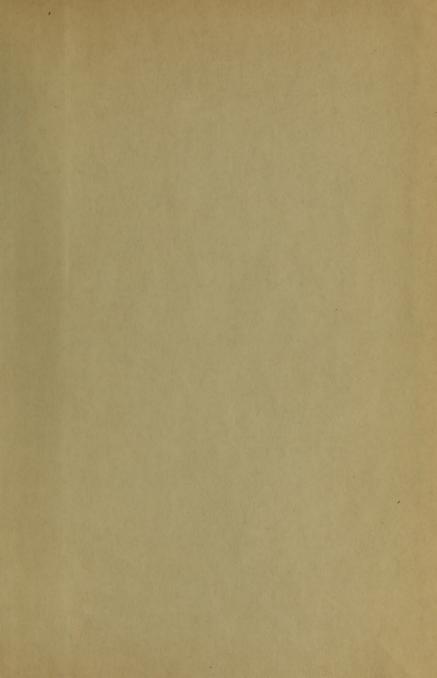




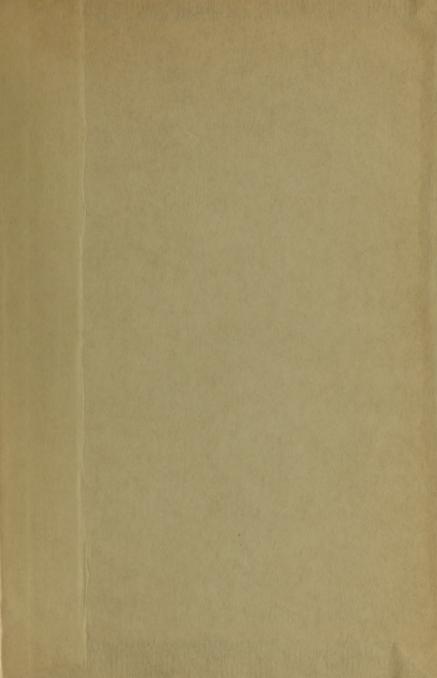












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